

POWERTOOLS

EN



Automotive | Construction | Industry | Assembly | Offshore

2020



INTRODUCTION 3

POWERTOOLS	3
Brands	4

ASSEMBLY TOOLS 9

Ibt, Att & Epr.....	9
Selection Guide	10

YOKOTA IMPULSE WRENCHES	14
Pneumatic Shut-Off	28
Pneumatic Non Shut-Off.....	29
Pneumatic System Wrenches.....	16
Electric System Wrenches.....	20
Cordless System Wrenches.....	22
Cordless Impulse Wrenches.....	24
Poka Yoke+ System.....	26

RED ROOSTER ASSEMBLY TOOLS	32
Pneumatic Impulse Wrenches.....	34
Custom Made Products.....	41
Cordless Impulse Wrenches.....	42
Pneumatic Shut-Off Screwdrivers	46
Cordless Screwdrivers.....	50

CORDLESS WRENCHES	53
Angle wrenches.....	54
Impact wrenches	57
Riveters	58

ACCESSORIES FOR ASSEMBLY TOOLS	61
---	----

INDUSTRIAL AIRTOOLS 69

Full program overview	70
Impact wrenches.....	72
Ratchet wrenches.....	79
Drills.....	83
Grinders	86
Vibration reduction.....	96
Hammers.....	87

ACCESSORIES 125

Balancers	126
Blow guns.....	128
Spiral air hoses	129
Oil, Regulator, Swivel joints.....	130

AIR CHAIN HOISTS & TROLLEYS 137

TCR, TCS, TMH Series	138
Air Trolleys.....	140

AIR TREATMENT EQUIPMENT 140

IMPACT SOCKETS 160

Contents	160
Hex Drive For Screwdrivers	161
Square Drive	162
Adaptors	192
Sleeve Drive Sockets.....	197
Sets	204

SERVICE 210

Maintenance and warranty	211
Training	212
Support.....	213

INDEX 214

POWERTOOLS

Rami Yokota is a family owned trading business from the Netherlands, founded in 1896 and is now managed by the fourth generation. From selling bicycles, sewing machines and later on automotive and motor parts in the early 1900's, the company moved on to importing high quality air tools from Japan in the early 60's. Through continuous development, innovation and attention to service and building of technical skills, Rami Yokota grew to become a highly valued air tool supplier in Western Europe. Today the focus also includes Eastern Europe as well as Scandinavia. From industrial assembly tools to industrial air tools and air hoists, Rami Yokota caters for a large number of requirements in a large variety of industries.

CONTINUITY

We have been providing service and quality for over 120 years always aiming to help our customers achieve the highest productivity in the most cost effective way. Our strong network of suppliers and distributors, combined with our knowledge and expertise, means we are able to support end-users in finding the most effective solution in any given environment, thus guaranteeing a problem free, continuous operation for our users.

RELIABILITY

Every application requires a different solution, whether you require a heavy industrial tool, an electric, cordless or air assembly tool, we can help you to make the best choice. We do this by demonstrating and testing the tool with both our customers and our distributors. In our well-equipped service

workshop we carry out the maintenance of all our tools, we have trained our partners to carry out maintenance for you and can also offer training to your own staff at our purposely built training facility in Amsterdam or at your own works. Our highly trained team are able to offer advice to ensure that you get the best performance out of your equipment.

CERTAINTY

The brands Yokota and Toku are known for their high Japanese standards and quality products. The precision in the production process guarantees the long lifetime of the equipment. Red Rooster is Rami Yokota's own brand of tools and hoists, developed in cooperation with our technical team and leading industrial manufacturers. We hold extensive stock in our large warehouses in Belgium and the Netherlands and

can be certain to deliver Europe-wide within 24-48 hours.

PRODUCTIVITY

Rami Yokota will help you to increase the efficiency of your production processes. Our assembly tools are known for their accuracy and speed. The impulse technology that characterizes the majority of our tools, ensures better bolt connections and higher productivity. Improved ergonomics, low vibration and no kick-back enable long periods of stress-free continuous operation for your employees. Our air chain hoists are the fastest on the market and due to the 100% duty rating, your production process can be far more efficient.

BRANDS



PRODUCTIVITY AND ERGONOMICS

Yokota industrial and Yokota assembly tools are of the highest quality standards imaginable. Yokota's tools are manufactured to last a lifetime with a specific focus on high productivity and ergonomics. Yokota impulse wrenches are used all over the world for tightening applications where accuracy, quality and speed are required. Yokota offers its impulse tools in air, battery and electric versions. A connection to all varieties of communication protocols is also available.



MAKING THE RIGHT IMPACT

Toku delivers high quality air tools for construction and demolition, material handling, automotive and industrial applications. Toku's focus lies on developing the most powerful, reliable and durable air power tools available in the market. With their powerful impact wrenches, hammers, breakers and other air tools you can be assured of the right impact with a Toku tool.



OPTIMAL AIR QUALITY

SMC is the world's leading manufacturer of air treatment equipment and pneumatic components. Improper conditioning of compressed air leads to costly production failures, higher maintenance costs and an unnecessarily shorter lifetime of your tool. With an, often, reasonable investment in obtaining good air quality (according to ISO standards), SMC's air treatment equipment can make a large difference.



INDUSTRIAL TOOLS

Red Rooster industrial tools, recognizable by a black logo, have been developed to deliver the highest quality and precision. Their durability and the ability to perform under continuous operation, makes these tools ideal for industrial settings. The Red Rooster line of impulse wrenches is highly regarded and recognized as such by a large variety of (car and truck) manufacturers in Europe.



BRANDS



SERVICE TOOLS

Red Rooster is Rami Yokota's brand of high quality service tools. This powerful range of air tools with a red logo is ideal for use in car workshops, shipyards, or any kind of environment where strong and durable tools are required.



RELIABLE LIFTING POWER

Red Rooster is one of the market leaders in air chain hoists and trolleys. With capacities ranging between 125kg and 100 tonne Red Rooster hoists are ideal for industrial and offshore applications. In extreme conditions, explosion prone or very moist areas, the use of Red Rooster hoists is highly recommended. With tailor-made solutions from our factory in the UK we can respond to most requirements in the market.



INDUSTRIAL IMPACT SOCKETS

Action is the world's largest manufacturer of impact sockets. Its impact sockets are durable, of high quality and competitively priced. According to the European EN/ISO 11148-6 standard it is compulsory to use impact sockets on power tools. Action impact sockets can be used for air, electric, hydraulic and battery power tools in a large variety of industries.



ASSEMBLY TOOLS



ASSEMBLY TOOLS

In this catalogue we combine the best of both worlds. Yokota Industrial and Red Rooster Assembly offer you a full range of assembly tools. From 100% accuracy and traceability for a 'Zero Fault Production', to plain and simple solutions that accurately tighten threaded fasteners. Time efficient and with maximum ergonomic benefits; we offer you a perfectly fitting solution!

EFFICIENT ASSEMBLY SOLUTIONS 

ASK FOR YOUR SOLUTION


CUSTOMISED


MAINTENANCE


DURABILITY


PRODUCTIVITY

EFFICIENT ASSEMBLY SOLUTIONS

Reliability, speed and durability are essential for any assembly line. According to our Efficient Assembly Solutions concept, we focus on the best tool, both for the job and for your environment. This EAS concept combines the choice of power - battery, electrical or air - with design and ergonomic features up to cost and time efficient maintenance.

Together with our specialists you can be certain that your production is efficient, reliable and durable. In the end, we are convinced that our customers are able to assemble according to the highest standards required, with the lowest possible costs and lowest environmental footprint.

IBT

Intelligent Bolting Technology

INTELLIGENT BOLTING TECHNOLOGY

The Intelligent Bolting Technology makes it possible to program your Assembly tool to the specific application. By programming the tool, the operator is assured that speed, torque and assembly time is correct.

- Adjustable speed
- Slow start function (BA-serie)
- Programmable direction for error free starting
- Reverse can be blocked
- LED Signal for OK of NOK
- Early trigger release judgement

ATT

Advanced Torque Technology

ADVANCED TORQUE TECHNOLOGY

The Red Rooster Battery Impuls tools are equipped with Advanced Torque Technology. This feature makes it possible to adjust torque time needed for the application. The number of impulses can be programmed in 9 steps, depending how hard of soft the joint is. This assures the operator that an optimum clampforce is reached, with the lowest relaxation.

- Hard joints: Steps 1-3
- Middle soft joints: Steps 4-6
- Soft joints: Steps 7-9

EPR

Efficient Power Regulation

EFFICIENT POWER REGULATION

Efficient Power Regulation optimizes battery life by:

- Early battery warning
- Battery discharge warning
- Battery shut off, when battery discharged



SELECTION GUIDE

Guideline values for tightening torques

















The below guidelines for relations between bolt size, strength class and required torque levels are meant for guidance only.

VDI 2230*		STEEL				STAINLESS STEEL		
Strength classes		5.8	8.8	10.9	12.9	50	70	80
Bolt	Dimension of bolt head mm	Torque Nm	Torque Nm	Torque Nm	Torque Nm	Torque Nm	Torque Nm	Torque Nm
M1.6	-	0,11	0,17	0,24	0,29	0,10	0,20	-
M2	-	0,22	0,35	0,49	0,58	0,25	0,30	-
M2.2	-	0,29	0,46	0,64	0,77	-	-	-
M2.5	-	0,44	0,70	0,98	1,20	0,45	0,60	-
M3	-	0,77	1,20	1,70	2,10	1,00	1,10	-
M3.5	-	1,20	1,90	2,70	3,30	-	-	-
M4	7	1,9	2,9	4,1	4,9	0,9	2	2,7
M5	8	3,7	6	8,5	10	2	4	5,3
M6	10	6,4	10	14	17	3,2	7	9
M8	13	16	25	35	41	8	17	23
M10	17/16	31	49	69	83	16	33	45
M12	19/18	54	86	120	145	27	58	77
M14	22/21	86	135	190	230	43	93	124
M16	24	130	210	295	355	66	142	190
M18	27	180	290	405	485	93	198	265
M20	30	255	410	580	690	130	278	371
M22	32	345	550	780	930	174	374	499
M24	36	440	710	1000	1200	224	480	640
M27	41	650	1050	1500	1800	331	708	-
M30	46	880	1450	2000	2400	450	964	-
M33	50	1200	1900	2700	3250	609	-	-
M36	55	1550	2450	3450	4150	782	-	-
M39	60	2.000	3.200	4.500	5.400	1.013	-	-
M42	65	2.450	3.950	5.550	6.650	-	-	-
M45	70	3.100	4.950	6.950	8.350	-	-	-
M48	75	3.750	5.950	8.400	10.100	-	-	-
M52	80	4.800	7.650	10.800	12.900	-	-	-
M56	85	5.950	9.550	13.400	16.100	-	-	-
M60	90	7.400	11.900	16.700	20.000	-	-	-
M64	95	8.950	14.300	20.100	24.100	-	-	-
M68	100	10.800	17.300	24.300	29.100	-	-	-

* These torque values are only guide lines and are calculated with friction factor 0,125.

SELECTION GUIDE

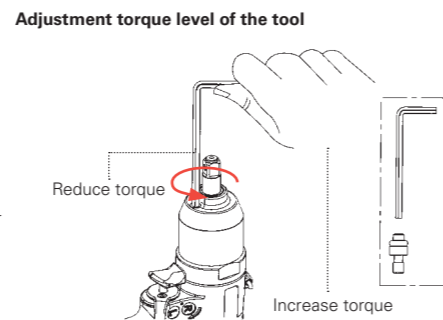
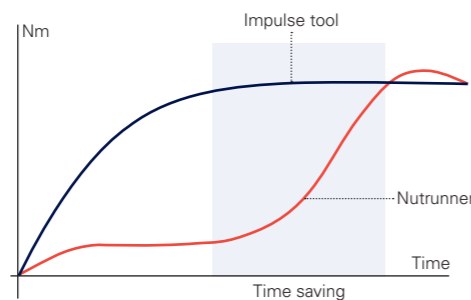
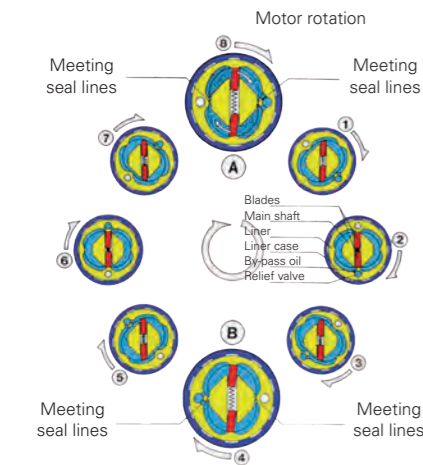
Guideline values for tightening torques

	M1,6	M2	M2,2	M2,5	M3	M3,5	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
	0,17	0,35	0,46	0,70	1,20	1,90	2,9	6	10	25	49	86	135	210	290	410	550	710	1050Nm
Yokota air impulse wrenches shut-off	4,5 – 210 (PAGE 28) → 																		
Yokota Air impulse wrenches non shut-off	6 – 490 (PAGE 29) → 																		
Yokota Air impulse wrenches Poka Yoke	6 – 47 (PAGE 26) → 																		
Yokota Cordless impulse wrench shut-off	5 – 60 (PAGE 24) → 																		
Yokota Cordless impulse wrench non shut-off	8 – 65 (PAGE 25) → 																		
Yokota Cordless system wrench torque control angle monitoring	7 – 60 (PAGE 22) → 																		
Yokota Electric system wrench torque control angle monitoring	3 – 90 (PAGE 20) → 																		
Yokota Air system wrench torque control	4,3 – 600 (PAGE 18) → 																		
Yokota Air system wrench torque control angle monitoring	11 – 220 (PAGE 17) → 																		
	M1,6	M2	M2,2	M2,5	M3	M3,5	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
	0,17	0,35	0,46	0,70	1,20	1,90	2,9	6	10	25	49	86	135	210	290	410	550	710	1050Nm
Red Rooster Cordless impact wrenches Shut-off	6 – 120 (PAGE 57) → 																		
Red Rooster Air impulse wrenches Shut-off	6 – 450 (PAGE 35) → 																		
Red Rooster Air impulse wrenches Non shut-off	6 – 390 (PAGE 38) → 																		
Red Rooster Cordless impulse wrenches Shut-off	7 – 65 (PAGE 42) → 																		
Red Rooster Air shut-off screw driver Straight/pistol/angle	0,4 – 10 (PAGE 46) → 																		
Red Rooster Cordless screw driver Shut-off	0,8 – 12 (PAGE 50) → 																		
Red Rooster cordless Shut-off angle wrenches	3 – 90 (PAGE 54) → 																		

SELECTION GUIDE

Specified torques ranges

With an impulse wrench, you bring optimal clamp force into the bolt connection which helps to reduce assembly time to a minimum. When it comes to accurate and fast assembly to the highest ergonomic standards, impulse technology is indispensable in the automotive industry, in the production of transport equipment and mechanical and plant engineering. The tools are quiet, lightweight and responsive.



HIGH ACCURACY

Impulse wrenches have a twin blade impulse mechanism for sealing oil which gives a high repeatability. The mechanism is designed so that the liner, rotated by the air motor gives an equal torque on both blades and instant rotation torque on the mainshaft (see figure above). A by-pass is designed in the liner so that the oil can escape from the area of high pressure to the area of low pressure at the moment of creating a pulse and the amount of oil flow can be adjusted by the relief valve to control the torque output. Depending on model and setting, the impulse wrenches give 10 - 40 impulses per second. The power is transmitted by oil pressure and therefore the impulse wrenches have a very low noise and vibration level.

SAVE TIME - SAVE MONEY

Because of the principal of using hydraulics to reach a certain torque, impulse tools can run at a high RPM. The required torque is reached in a split second. All YOKOTA and RED ROOSTER impulse wrenches can be used for hard and soft joints, and give a high accuracy/ repeatability and a low relaxation.

SPECIFIED TORQUE RANGE

The torque ranges are specified at a dynamic air pressure of 0,6 MPa, lower air pressure will result in lower torque. Please take note that these impulse wrenches are developed for a dynamic air pressure of 0,63 MPa maximum.

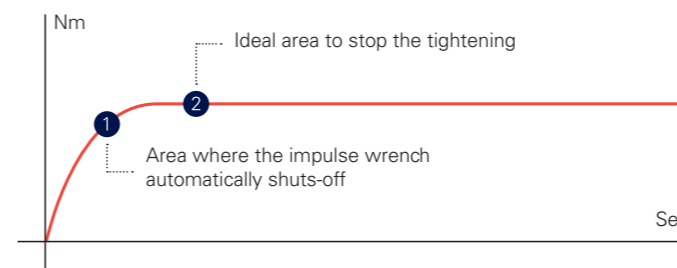
NOTE

The specified torque range is measured in the laboratory under ideal conditions. Therefore these torque figures are only to be used as a guideline. The actual torque range depends on a variety of working conditions, eg: air pressure, joint hardness, used accessory.

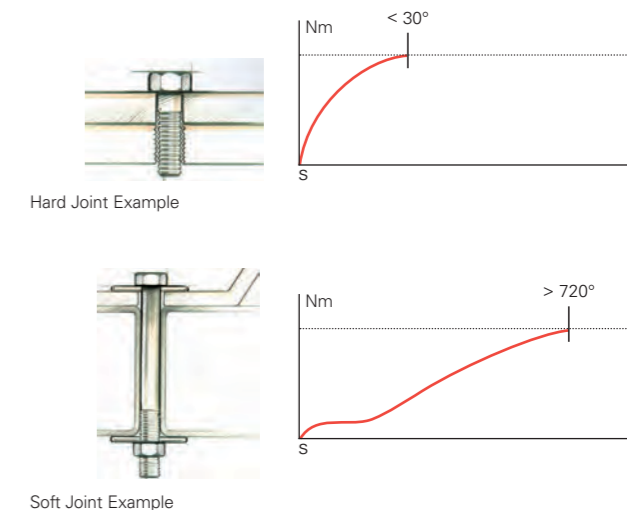
SELECTION GUIDE

Specified torques ranges

Impulse wrenches with and without shut-off



Hard joint and soft joint



IMPULSE WRENCHES WITHOUT SHUT-OFF ②

Impulse wrenches achieve the highest quality joint if the tightening is finished in this area (horizontal part of the torque curve):

- Highest clampforce with smallest tolerances
- Smallest torque tolerances

IMPULSE WRENCHES WITH MECHANICAL SHUT-OFF ①

- Shorter operating time
- Operator knows when the tightening is finished
- Highest clamp force with smallest tolerances
- Smallest torque tolerances

IMPULSE WRENCHES WITH POKA YOKE+ SYSTEM ② IMPULSE WRENCHES WITH CONTROLLED SHUT-OFF:

- Highest clamp force with smallest tolerances
- Smallest torque tolerances
- Shortest optimum operating time
- Operator knows when the tightening is finished
- Operator is informed about OK-NOK of the tightening
- OK joints are counted, no missed tightenings

IMPULSE WRENCHES WITH INTEGRATED TORQUE TRANSDUCER ②

- Highest clamp force with smallest tolerances
- Smallest torque tolerances
- Shortest optimum operating time
- Operator knows when the tightening is finished
- Operator is informed about OK-NOK of the tightening
- OK joints are counted, no missed tightenings
- Actual tightening torque is measured
- Full documentation
- Zero fault production

We advise to use the impulse wrench up to 80% of its capacity for the highest productivity, accuracy and durability.

SHUT-OFF IMPULSE WRENCHES SELECTION:

- Hard joint: torque levels up to 95% of the specified torque range
- Soft joint: torque levels up to 85% of the specified torque range

NON SHUT-OFF IMPULSE WRENCHES SELECTION:

- Hard joint: torque levels up to 100% of the specified torque range
- Soft joint: torque levels up to 90% of the specified torque range

ACCESSORIES

The size and shape of impact sockets influence the torque result. Extension bars, depending on the length, can lower the torque range with 5-30% inner torx and inner hexagon can lower the torque range with 5-20%.

FOR THE BEST RESULT OF THE IMPULSE WRENCH, USE:

- Constant stabilized air pressure
- Sleeve drive sockets, impact quality (see pages 197 - 203)
- Impact quality accessories with the correct dimensions
- Accessories in good condition
- Correct inner diameter and length hose
- Lubricated air

YOKOTA IMPULSE WRENCHES

Speed · Precision · Quality



PNEUMATIC SYSTEM & IMPULSE WRENCHES

SYSTEM WRENCHES PAGE 16-19
IMPULSE WRENCHES PAGE 26-31



CORDLESS SYSTEM & IMPULSE WRENCHES

PAGE 22-25



ELECTRIC SYSTEM WRENCHES

PAGE 20-21

YOKOTA IMPULSE WRENCHES

Intelligent Assembly Solutions

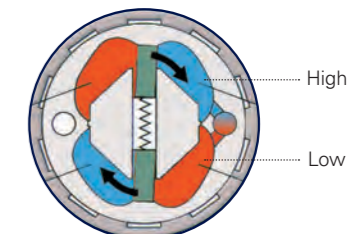
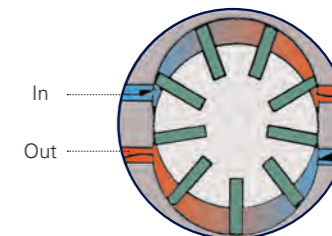
Yokota International is a leading manufacturer of impulse based assembly tools for high-end production facilities. Yokota developed the first impulse air tools over 45 years ago and the benefits of impulse based assembly tools are well-known all over the world these days: fast, light and with the highest clamping force, free from reaction forces. As an expert in the development, design and manufacturing of assembly tools, Yokota also embraces the opportunities of battery technology and has developed a wide range of intelligent electrical and battery system wrenches with Torque & Angle Control.

FASTER

YOKOTA impulse wrenches are widely used for tightening jobs in the assembly industry, where accurate torque tolerances are necessary. Impulse tools are light, powerful, small and very importantly, have no kick-back. The YOKOTA range of impulse tools is increasing fast, starting at 6 Nm to tighten small joints, and goes up to 600 Nm. Evaluation of tightening processes in car assembly shows that tightening joints uses 10% of the total assembly time. Working with faster tools therefore can speed up assembly lines substantially.

DOUBLE CHAMBER AIR MOTOR

The YOKOTA Y, YLa, YLT, YED and TKa Series impulse wrenches with double chamber air motor reach the required torque very quickly. The tools have a high number of impulses per second, and therefore very accurate torques can be realized, resulting in increased production speed. The twin blade impulse unit is patented. YOKOTA's unique impulse mechanism reduces noise and vibration!



SYSTEM WRENCHES

Control Units

Yokota developed its first system wrench more than 30 years ago. The purpose being the tightening of threaded fasteners at a high speed and accuracy, with the possibility of counting bolts in a group, detecting errors during tightening and interacting with the production line control systems, including the exchange of tightening data for traceability purposes. The latest developments are not only with a torque transducer on the main shaft but also with an angle encoder. By controlling the torque and monitoring angle, all errors that can occur during tightening are detected and can be acted upon.

OPTIONAL ON TKA SYSTEM WRENCHES:



● Red = NOK
● Green = OK
Visible from every angle: left, right, from the top and behind.

HIGH ACCURACY

Product liability is essential to car manufacture. All tightened joints have to be correct. For this reason critical joints must be counted, documented and, of course, tightened with the right clamp force. In order to do this, you need an impulse wrench (with a built-in transducer) connected to a controller. This system ensures that only OK joints are counted resulting in "Zero Fault Production". This fail-safe system fits perfectly in the Poka Yoke strategy.

CHARACTERISTICS

- Easy to program, according to application specifications
- Torque calculation over several impulses
- Compensation impulses to compensate the relaxation (soft joint)
- Poka Yoke proof, line management
- 2-step tightening optional
- 8 setting programs
- 2-way communication through RS-232
- Automatic program change (sequence programmable)
- Build-in timer for group control
- Several input signals
- Several output signals
- Statistics inside CP / CPK
- Memory for 10.000 cycles
- Transducer integrated, direct measurement
- Compact angle encoder
- Torque transducer non - contact type
- Torque and angle curve on PC
- Easy torque adjustment on the tool
- LED or acoustic signal on the tool
- High efficiency air motor
- Shut-off by external solenoid valve



SYSTEM WRENCHES

TKa Series: Electronic torque control & Angle monitoring



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Dimensions A mm	B mm	Vibration m/s2	Noise-level dB(A)
TKa600A	1/4" Hex	6	6.000	11-16	4,5	5,1	1,34	189	21	2,1	71
TKa600	3/8" Sq.	6	6.000	14-20	4,5	5,1	1,34	189	21	2,1	71
TKa700A	1/4" Hex	6-8	7.000	24-33	5,3	6,9	1,34	189	21	2,1	75
TKa700	3/8" Sq.	6-8	7.000	24-33	5,3	6,9	1,34	189	21	2,1	75
TKa800	3/8" Sq.	8	7.000	32-46	5,3	7,1	1,34	196	22	2,1	75
TKa900	3/8" Sq.	8-10	6.500	47-60	6,8	10,5	1,50	204	23	2,1	78
TKa1110	1/2" Sq.	10-12	5.500	65-95	8,8	13,5	1,97	220	25,5	2,2	80
TKa1200	1/2" Sq.	12	5.900	85-130	10	17,2	2,4	223	28	2,2	82
TKa1400	1/2" Sq.	14	5.200	100-160	13	19	3,00	246	29	2,2	84
TKa1500	1/2" Sq.	14-16	4.200	150-220	13,2	18,1	3,4	242	32	2,4	84

TRANSDUCER FOR THE YEX, YED AND TKa SERIES



TRANSDUCER FOR THE YEX, YED AND TKa SERIES

The strain gauges are positioned on the main shaft, picking up the twisting torque on the main shaft at each impulse as close as possible to the socket. The electric signals are transmitted by induction through the internal and external coils. Due to this principle the YOKOTA transducer is very reliable, accurate and without wear. The angle sensor is also mounted on the main shaft.

POSSIBLE ERROR DETECTIONS

- Detection insufficient torque and over torque
- Detection friction out of tolerances
- Detection of too long / too short bolt
- Detection of cross threaded threads
- Detection of crooked threads
- Detection of damaged threads
- Detection of double tightening
- Detection of blind holes

SYSTEM CONFIGURATION



YETC-230ER

- Torque control
- Angle monitoring version
- One channel controller
LAN version optional



YETC-330ER2-L

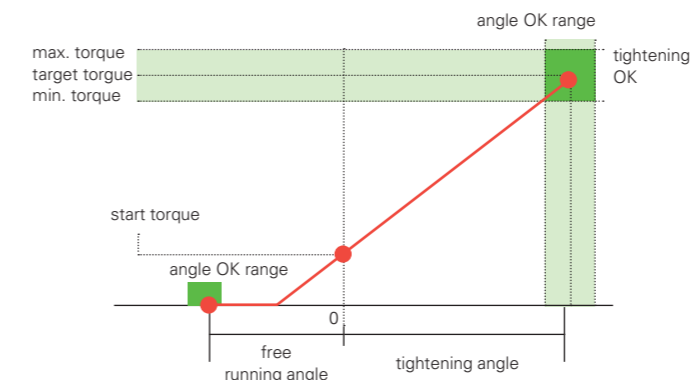
- Torque control
- Angle monitoring version
- Two channel controller
- Two tools can be operated simultaneous
- LAN standard, two IP addresses



ANALYSING SOFTWARE

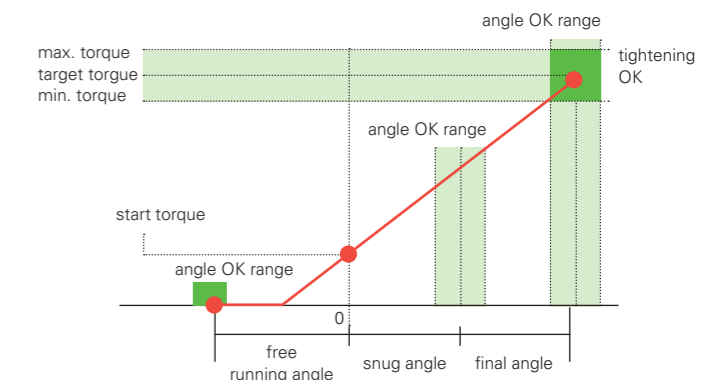
YETC-230ER

Torque control & angle monitoring



YETC-330ER2-L

Torque control & angle monitoring (including snug torque)



SYSTEM WRENCHES

TKa/YED Series: Torque controlled



Pistol type



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise-level dB(A)
TKa60A	1/4" Hex	6	6.000	11 - 16	4,5	5,1	1,3	PT 1/4"	6,5	179	22	2,1	71
TKa70A	1/4" Hex	6 - 8	7.000	20 - 27	5,3	6,9	1,3	PT 1/4"	6,5	179	22	2,1	75
TKa80A	1/4" Hex	8	7.000	24 - 33	5,3	7,1	1,3	PT 1/4"	6,5	186	22	2,1	73
TKa60	3/8" Sq.	6	6.000	14 - 20	4,5	5,1	1,3	PT 1/4"	6,5	179	22	2,1	71
TKa70	3/8" Sq.	6 - 8	7.000	20 - 35	5,3	6,9	1,3	PT 1/4"	6,5	179	22	2,1	75
TKa80	3/8" Sq.	8	7.000	32 - 46	5,3	7,1	1,3	PT 1/4"	6,5	186	22	2,1	73
TKa90	3/8" Sq.	8 - 10	6.500	47 - 70	6,8	10,5	1,5	PT 1/4"	9,5	195	24	2,1	78
TKa111	1/2" Sq.	10 - 12	6.000	65 - 105	8,8	13,5	1,9	PT 1/4"	9,5	210	26	2,2	80
TKa120	1/2" Sq.	12	5.900	85 - 130	10,0	17,2	2,4	PT 1/4"	9,5	223	28	2,2	82
TKa140	1/2" Sq.	14	5.200	100 - 160	13,0	19,0	2,9	PT 1/4"	9,5	235	30	2,2	84
TKa150	1/2" Sq.	14 - 16	4.200	150 - 220	13,2	18,1	3,4	PT 1/4"	9,5	242	32	2,4	84
YED-200	3/4" Sq.	20	3.400	155 - 360	18,3	32,2	6,8	PT 1/2"	12,7	309	40	4,2	86

Straight type



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise-level dB(A)
YED-240S	1" Sq.	24	3,000	250-600	28,3	52,2	11,2	PT 1/2"	12,7	452	52,5	15,0	92

* Torque specifications
All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

MULTI FASTENING CONTROLLER FOR THE TKA, YED, YEX SERIES



YETC-230EA
One channel controller



YETC-230EA4
Four channel controller, several tools can be used at one time



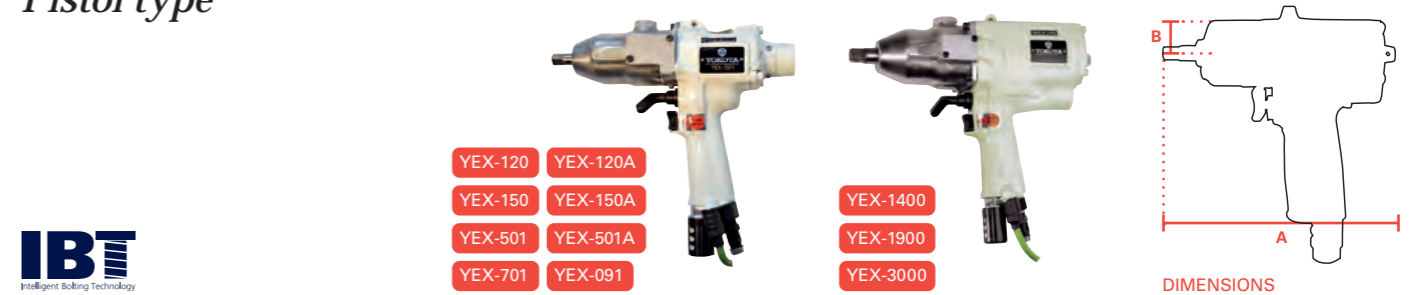
YETC-330EA2
Two channel controller, two tools can be operated simultaneously

SYSTEM WRENCHES

YEX Series: Torque controlled



Pistol type



Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise-level dB(A)
YEX-120	3/8" Sq.	4 - 5	9.000	13 - 17	4,2	5	1,43	PT 1/4"	6,5	222	23	3	72
YEX-120A	1/4" Hex	4 - 5	9.000	11 - 15	4,2	5	1,43	PT 1/4"	6,5	223	23	3	72
YEX-150	3/8" Sq.	5 - 6	9.000	19 - 27	4,2	7,8	1,43	PT 1/4"	6,5	222	23	3	72
YEX-150A	1/4" Hex	5 - 6	9.000	14 - 22	4,2	7,8	1,43	PT 1/4"	6,5	223	23	3	72
YEX-501	3/8" Sq.	6 - 8	8.200	25 - 52	5,3	9,6	2,0	PT 1/4"	9,5	234	26,5	1,6	68
YEX-501A	1/4" Hex	6 - 8	8.200	23 - 49	5,3	9,6	2,0	PT 1/4"	9,5	227	26,5	1,6	68
YEX-701	3/8" Sq.	8 - 10	8.000	45 - 75	6,7	13,5	2,2	PT 1/4"	9,5	246	26,5	1,6	71
YEX-901	1/2" Sq.	10	6.100	61 - 104	6,7	12,5	2,7	PT 1/4"	9,5	257	33,5	2,3	73
YEX-1400	1/2" Sq.	10 - 12	5.900	92 - 142	8,3	16,5	3,5	PT 1/4"	9,5	266	34	3	80
YEX-1900	1/2" Sq.	12	5.800	115 - 183	8,3	16,5	4,1	PT 1/4"	9,5	277	39	3	80
YEX-3000	3/4" Sq.	16	4.000	186 - 284	10,0	20,5	6,4	PT 1/4"	12,7	309	40	4	82

Straight type



- YEX-100SA YEX-150S YEX-300S YEX-500S
- YEX-120SA YEX-150SA YEX-300SA YEX-500SA YEX-700S

Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise-level dB(A)
YEX-100SA	1/4" Hex	5	8.000	4,3 - 12	3,6	4,4	1,2	PT 1/4"	6,5	285	23	3	77
YEX-120SA	1/4" Hex	4 - 5	7.000	11 - 15	4,2	5	1,38	PT 1/4"	6,5	279	23	3	72
YEX-150S	3/8" Sq.	5 - 6	8.000	19 - 27	4,2	7,8	1,35	PT 1/4"	6,5	275	23	3,3	73
YEX-150SA	1/4" Hex	5 - 6	8.000	14 - 22	4,2	7,8	1,35	PT 1/4"	6,5	276	23	3,3	73
YEX-300S	3/8" Sq.	6	8.000	25 - 33	5,0	9,1	1,8	PT 1/4"	6,5	312	27	5,3	71
YEX-300SA	1/4" Hex	6	8.000	21 - 29	5,0	9,1	1,8	PT 1/4"	6,5	313	27	5,3	71
YEX-500S	3/8" Sq.	6 - 8	7.800	23 - 49	5,0	9,1	2,1	PT 1/4"	9,5	333	27	6,6	71
YEX-500SA	1/4" Hex	6 - 8	7.800	21 - 47	5,0	9,1	2,1	PT 1/4"	9,5	334	27	6,6	71
YEX-700S	3/8" Sq.	8	7.500	33 - 61	5,8	11,2	2,3	PT 1/4"	9,5	333	27	6,6	72

* Torque specifications: All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

FOR A SYSTEM YEX, YED OR TKA YOU NEED:

1 x Controller YETC-230 or YETC-330, 1 x Impulse wrench YEX, YED or TKA [& 1 Solenoid valve YETC-2 SVD and 1 Tool cable which you can find on pages 18 and 63]

SYSTEM WRENCHES

E-M Series, Electric



The YOKOTA electric system wrenches with integrated torque transducer and angle sensor offer a large reduction of energy consumption, a high degree of speed, accuracy and fantastic work efficiency.

ELECTRIC DRIVE

- Reduction of energy consumption Lean and Green.
- No need for pneumatic installation with compressor, air piping, hose and solenoid valves.
- No need for lubrication of the tool. Good for the working environment, especially near paint shops.
- Due to the newly developed outer rotor servo motor and the composite body, the YOKOTA system e-wrench has the lightest weight in its class.

RELIABLE AND ACCURATE TIGHTENING

- Faulty tightening detection with maximum accuracy due to the use of an integrated torque transducer and also an integrated angle sensor.
- During the tightening process, four different variables are measured and monitored: Torque - Angle - Time - N°. of Impulses.
- Torque transducer and angle sensor located directly at the front of the main shaft, giving the best accuracy of measurement.
- Torque transducer measures directly and transmits the signals contactless.
- The angle sensor is an extremely compact (PAT) rotary encoder that detects both angle as well as direction by 1 degree, signal transmission contactless.
- Detects cross threads, double hits, contamination, etc.

DURABILITY

- The impulse unit is supported on both ends by ball bearings (PAT.P).
- The impulse unit has a check valve mechanism (PAT.P) to reduce the oil pressure on the main shaft.
- For heat suppression of the impulse unit it is equipped with a separate cooling fan.
- For heat suppression of the motor it is equipped with a cooling fan that reduces motor size (and weight at the same time).

OPERATOR COMFORTABILITY

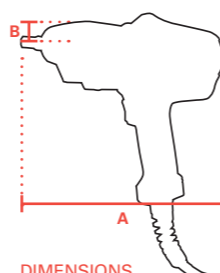
- The reaction forces are close to zero due to the use of the oil impulse mechanism, even at high torque bolt tightening. Compared with older models, the number of bolt tightening is improved to 20 bolts/minute.
- Special feature to prevent cross threaded tightening: reversely rotating a bolt to a preset angle at the start of tightening.
- High speeds: Free speed (bolt run down) of 4800 RPM.
- High intensity LED light to project on the bolt.
- Combinations of buzzers and LED (Green / Red) for operator feedback on OK / NOK tightenings.
- Motor speed freely adjustable in the controller. For three different speed stages: Start of trigger / Run down / Final tightening.

CONTROLLER FEATURES

- 20 different parameter settings possible, for a variety of different work pieces.
- Touch screen LCD color display, showing graphs, torque, angle, impulses and more.
- Group management function (counting).
- Result of tightening output through various interfaces: USB, RS-232C, I/O and Ethernet connector.
- Simultaneous use of two tools on one controller is possible.



New developed outer rotor motor



DIMENSIONS

Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm	Weight kg	Noise level dB(A)	Dimensions	
							A mm	B mm
E-M500	3/8" Sq.	M5 - M6	300-4.800	3 - 10	2,10	75	236	32,5
E-M700	3/8" Sq.	M6 - M8	300-4.800	7,5 - 35	2,18	75	236	32,5
E-M900	3/8" Sq.	M8 - M10	300-4.800	30 - 60	2,25	78	236	32,5
E-M1100	1/2" Sq.	M10 - M12	300-4.800	50 - 90	2,52	80	248	32,5

SYSTEM WRENCHES

YETC-500 controller



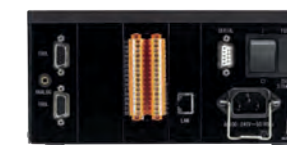
For electric system wrenches with built-in angle and torque sensor. Also available with **open protocol, profinet** and **ethernet-IP** communication and others upon request. Please contact us for details.



CONTROLLER
One channel controller



CONTROLLER FRONT PANEL
1 Touch panel type LCD
2 RS-232C serial connector
3 USB connector



CONTROLLER BACK PANEL
1. Ethernet connector (option)
2. I/O terminal board
3. Tool connector 1
4. Tool connector 2

CONTROLLER

Description	Order number
LAN Ethernet-Version	YETC-500-10SL
Serial communication	YETC-500-10SO

AMPLIFIER

Order number	
E-PDA-4	

EXTENSION TOOLCABLE

Length	Order number
5m	7906-1591-00-01
10m	7906-1591-00-02

CONTROLLER LINK UP CABLE

Length	Order number
30cm	7906-1592-00-01

SYSTEM WRENCHES

YS-e Series: cordless



Yokota cordless impulse wrenches are powerful, very accurate and have no kick-back. With a battery power source the tool allows for the highest operational flexibility. This cordless impulse wrench has a built-in torque transducer and angle-sensor on the main shaft and a wireless connection to its controller. Each controller can connect with up to 4 operating cordless system wrenches. The Yokota cordless system wrench is the perfect solution for applications where cables or hoses are disruptive yet still all tightening data requires documentation and traceability.

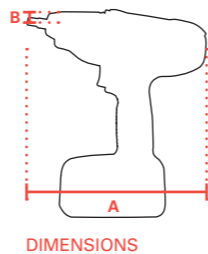
CHARACTERISTICS

- One controller connects 4 tools
- Complete freedom of movement by use of batteries
- Very low weight / torque ratio
- High speed fastening
- Acoustic and LED signals for tightening status indication
- No kick-back
- Electric (brushless) servo drive, freely RPM adjustable
- Hybrid technology
- 100% check on tightening abnormalities like cross thread, double hit, etc.



Type	Volt. V	Battery type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm	Weight (inclu. battery) kg	Vibration m/s ²	Noise level dB(A)	Dimensions A mm	Dimensions B mm
YS-e600	18 V	Li-ion 2 AH	3/8" Sq.	6	1.200-4.800	7- 20	1,75	<2,5	72	214	26
YS-e800	18 V	Li-ion 2 AH	3/8" Sq.	8	1.200-4.800	15- 35	1,80	<2,5	76	214	26
YS-e900	18 V	Li-ion 2 AH	3/8" Sq.	8-10	1.200-4.800	30-50	1,90	<2,5	78	226	26
YS-e950	18 V	Li-ion 2 AH	3/8" Sq.	10	1.200-4.800	40-60	1,94	<2,5	78	226	26

* Battery and charger have to be ordered separately.



ACCESSORIES



Type	
Wireless unit	WU-1
Display	DS-1
Programming console	PC-1
Li-ion-Battery (0,41 kg) 18V 2 Ah	BPL-1820
Charger 18 Volt (40 Min.)	BC0075G

Rubber protection covers
YOKOTA rubber protection covers that are supplied as standard but can also be ordered separately.

Rubber protection cover		
	YS-e600	0444-0029-00-00
	YS-e800	0445-0029-00-00
	YS-e900	0446-0029-00-00
	YS-e950	0447-0029-00-00
	for battery	0446-0029-00-01

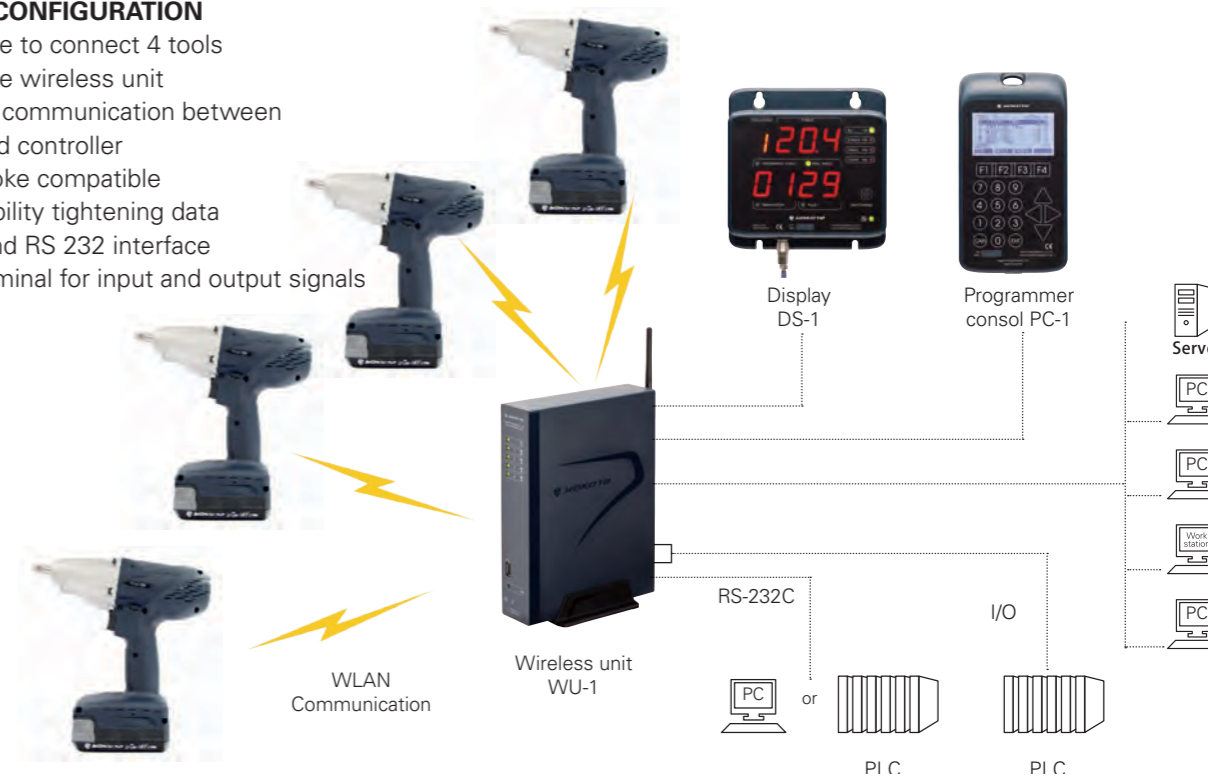
SYSTEM WRENCHES

YS-e Series: cordless



SYSTEM CONFIGURATION

- Possible to connect 4 tools with the wireless unit
- WLAN communication between tool and controller
- Poka Yoke compatible
- Traceability tightening data
- LAN and RS 232 interface
- I/O terminal for input and output signals



WIRELESS UNIT WU-1

- Parameter input with PC-1 or computer
- USB: setting data back up and restore, memory read out.
- Memory for 10.000 cycles per tool
- Tightening results on DS-1 and/or PC-1
- 4 display connection
- Optional: open protocol



DISPLAY DS-1

- Display shows: tool number, program, torque, OK/NOK, angle, number of pulses, remaining tightenings.



Upper row: tool number/Program/Torque
Lower row: tightening angle

Lower row: free run angle

Lower row: tightening number and number of impulses

PROGRAMMING CONSOL PC-1

- Display shows: tool number, program, torque, OK/NOK, angle, number of pulses, remaining tightenings.



Parameters

Tightening OK

Tightening NOK

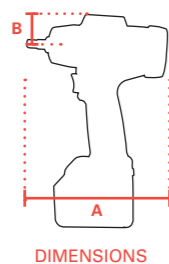
SHUT OFF IMPULSE WRENCHES

YZ-T Series: cordless

YOKOTA YZ-T cordless impulse wrenches with shut-off are powerful, very accurate and most important, have no kick-back. The very compact design offers great accessibility to the joint. Tightening bolts with torque levels up to 60 Nm with very high speed and remarkably low reaction forces. Adjusting the tool settings for the specific bolted joint is done by Programming Console PC-1-YZ-T and cable CC-1. Auditory and visual feedback on the result of the screwing process.

CHARACTERISTICS

- With built-in retention in the square drive
- No kickback
- High speed fastening
- Hybrid technology
- Servo drive brushless motor



Type	Square Drive / Hexagon	Bolt capacity mm	Speed 1 RPM ⁽¹⁾	Speed 2 RPM ⁽²⁾	Speed 3 RPM ⁽³⁾	Torque Nm	Weight with battery	Dimensions A mm	Dimensions B mm	Vibration m/s ²	Noise level dB(A)
YZ-T600A	1/4" Hex	6	1.200 - 1.500	1.500 - 3.000	1.500 - 4.800	5 - 18	1,4	161	29,5	<2,5	67
YZ-T600E	3/8" Sq.	6	1.200 - 1.500	1.500 - 3.000	2.000 - 4.800	7 - 20	1,4	161	29,5	<2,5	67
YZ-T800A	1/4" Hex	6 - 8	1.200 - 1.500	1.500 - 3.000	2.000 - 4.800	10 - 30	1,5	166	29,5	<2,5	68
YZ-T600E	3/8" Sq.	6 - 8	1.200 - 1.500	1.500 - 3.000	2.000 - 4.800	15 - 35	1,5	166	29,5	<2,5	68
YZ-T900E	3/8" Sq.	8 - 10	1.200 - 1.500	1.500 - 3.000	2.000 - 4.800	30 - 50	1,6	173	29,5	<2,5	69
YZ-T950E	3/8" Sq.	8 - 10	1.200 - 1.500	1.500 - 3.000	2.000 - 4.800	40 - 60	1,65	173	29,5	<2,5	70

⁽¹⁾ From the first stage of the trigger ⁽²⁾ From the second stage of the trigger ⁽³⁾ From shifting level

ACCESSORIES

Delivery is including battery and excluding charger



Li-Ion-battery 18 V/2.0 Ah



Charger AC100~240 Volt ±10% 50/60Hz



Programming console



Cable

Type	Order number
Li-Ion-Battery (0,41 kg) 18V 2 Ah	BPL-1820
Charger 18 Volt (40 Min.)	BC0075G

Type	Order number
Programming console	PC-1-YZ-T
Cable (2mtr)	CC-1

NON SHUT OFF IMPULSE WRENCHES

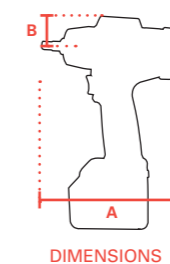
YZ-N Series: cordless

YOKOTA cordless non shut-off impulse wrenches are powerful, very accurate and most important, have no kick-back. The very compact design offers great accessibility to the joint. Tightening bolts M6 up to M10 with torque levels up to 65 Nm with very high speed and remarkably low reaction forces. The combination of adjustment of the relief valve and speed setting of the motor gives a great fit-for-purpose adaptation to the specific bolted joint.



CHARACTERISTICS

- No kick-back
- High speed fastening
- Hybrid technology
- Servo drive brushless motor
- Torque adjustment
- Mechanical relief valve adjustment
- 4 RPM settings, 2000/3000/4000/4800 RPM, to be set according application/joint conditions



*Battery and charger have to be ordered separately

Type	Volt. V	Battery type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm	Weight kg without battery	Weight kg with battery	Vibration m/s ²	Noise level dB(A)	Dimensions A mm	Dimensions B mm
YZ-N600A	18 V	Li-ion 2 AH	1/4 Hex	6	2000-4.800	7-20	1	1,41	<2,5	72	152	29,5
YZ-N600E	18 V	Li-ion 2 AH	3/8" Sq.	6	2000-4.800	8-25	1	1,41	<2,5	72	152	29,5
YZ-N800A	18 V	Li-ion 2 AH	1/4 Hex	6-8	2000-4.800	7-30	1,05	1,46	<2,5	75	157	29,5
YZ-N800E	18 V	Li-ion 2 AH	3/8" Sq.	6-8	2000-4.800	9-35	1,05	1,46	<2,5	75	157	29,5
YZ-N900E	18 V	Li-ion 2 AH	3/8" Sq.	8-10	2000-4.800	16-60	1,20	1,61	<2,5	77	164	29,5
YZ-N950E	18 V	Li-ion 2 AH	3/8" Sq.	8-10	2000-4.800	20-65	1,25	1,66	<2,5	78	164	29,5

ACCESSORIES



Li-Ion-battery 18 V/2.0 Ah



Charger AC100~240 Volt ±10% 50/60Hz

Type	Order number
Li-Ion-Battery (0,41 kg) 18V 2 Ah	BPL-1820
Charger 18 Volt (40 Min.)	BC0075G

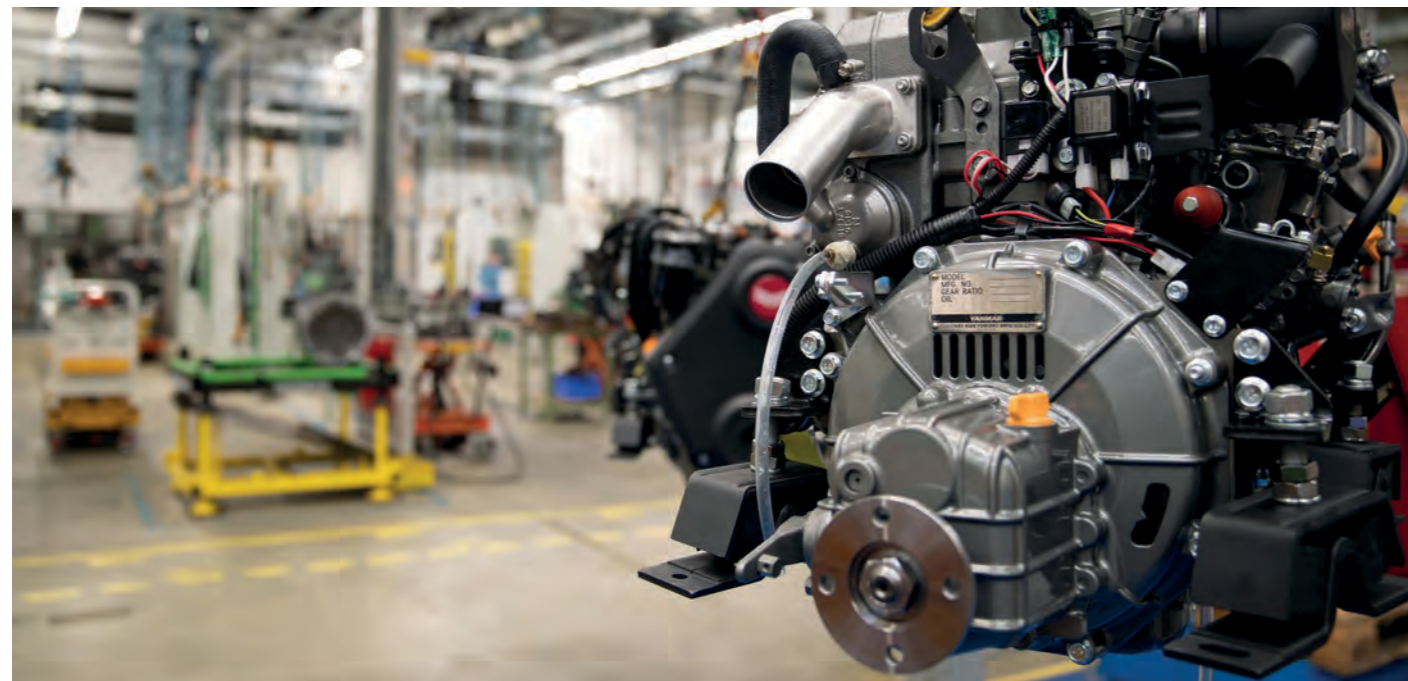
RUBBER PROTECTION COVERS

YOKOTA offers a seamless integration in the 'anti-scratch' policy with rubber protection covers that are supplied as standard but can also be ordered separately.

Type	Order number
YZ-N600A	0454-0029-00-00
YZ-N600	0454-0029-00-00
YZ-N800A	0455-0029-00-00
YZ-N800	0455-0029-00-00
YZ-N900	0456-0029-00-00
YZ-N950	0457-0029-00-00

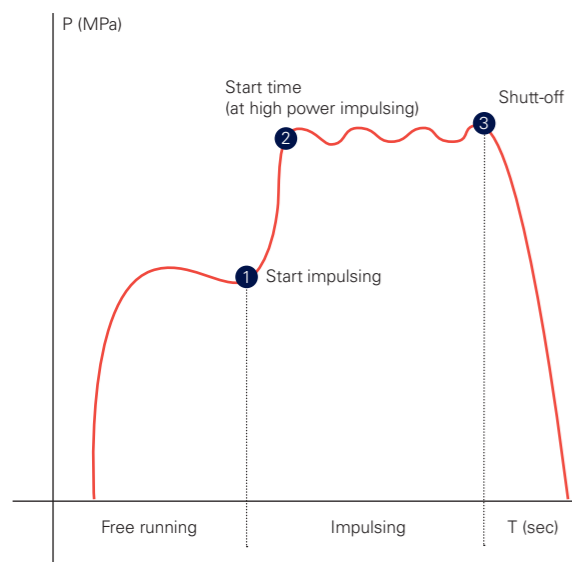
POKA YOKE⁺SYSTEM

YLa-JQ & Y-JQ Series



POKA YOKE⁺: FUNCTIONING PRINCIPLE

The system is controlled by measuring the air pressure at the inlet side of the air motor. This air pressure varies from free running to impulsing. By this measured air pressure the controller detects contact of the bolt head (point 2). Upon contact, the adjustable timer gives the shut-off signal (point 3). Adjustability of the timer takes care of adoption to either hard or soft joints. Similar, the controller detects double hits and trigger release before shut-off.



The system is more accurate than shut-off or standard impulse wrenches.

SUPERIOR CLAMP FORCES

In conventional shut-off tools point 2 is the shut-off point. Due to the above mentioned principle of the Poka Yoke+ controller, the relaxation is minimized and the correct torque and clampforce are achieved. This system is more accurate than shut-off or standard impuls wrenches. The torque is adjusted at the impulse mechanism. In combination with the parameters in the controller YTC-3, the most reliable shut-off is achieved.

CONTROLLER YTC-3



- Power supply: 100 - 240V AC
- Input: 8
- Relay output: 4 opening and shutting capacity: Max. DC-48W, AC-220VA)
- Output for solenoid valve: 1(DC24V 2W)

SYSTEM FEATURES



- Group control
- Controlled shut-off
- Double tightening detection
- Interlock with assembly line
- Error judgement on trigger release
- Teach-in mode for programming
- Oil deterioration indication

POKA YOKE⁺SYSTEM

YLa - JQ & Y-JQ Series



Lightweight YLa-JQ series



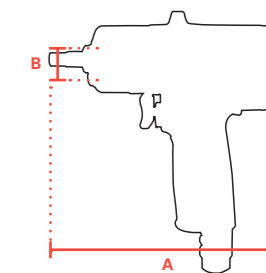
Type	Square/Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise-level dB(A)
YLa60A-JQ	1/4" Hex	6	4.000	11-20	5,0	5,5	0,78	PT 1/4"	6,5	130	22	1,4	71
YLa60E-JQ	3/8" Sq.	6	4.000	13-22	5,0	5,5	0,78	PT 1/4"	6,6	130	22	1,4	71
YLa70A-JQ	1/4" Hex	6 - 8	7.000	20-28	5,5	6,1	0,80	PT 1/4"	6,5	132	22	1,4	74
YLa70E-JQ	3/8" Sq.	6 - 8	7.000	20-35	5,5	6,1	0,80	PT 1/4"	6,5	132	22	1,4	74
YLa80A-JQ	1/4" Hex	8	7.000	24-35	5,8	9,0	0,90	PT 1/4"	6,5	139	22	1,2	75
YLa80E-JQ	3/8" Sq.	8	7.000	33-50	5,8	9,0	0,90	PT 1/4"	6,5	139	22	1,2	75
YLa90E-JQ	3/8" Sq.	8 - 10	6.500	47-70	6,7	11,8	1,00	PT 1/4"	10	148	24	1,2	78
YLa110E-JQ	1/2" Sq.	10 - 12	6.000	65-105	9,6	13,1	1,40	PT 1/4"	10	164	26	1,8	81
YLa120E-JQ	1/2" Sq.	12	6.600	80-130	10,0	15,6	1,80	PT 1/4"	10	172	28	2,2	82
YLa140E-JQ	1/2" Sq.	14	6.000	100-160	13,0	18,9	2,20	PT 1/4"	10	190	30	2,4	84

YJQ SERIES

Type	Square/Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm	B mm	Vibration m/s ²	Noise-level dB(A)
Y-41A-JQ	1/4" Hex	4 - 6	9.300	6-12	5,0	8,8	0,73	PT 1/4"	6,5	141	17	2,1	72
Y-46E-JQ	3/8" Sq.	5 - 6	8.000	16-30	5,8	9,6	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-140JQ	3/4" Sq.	16	3.300	160-270	13,1	18,4	3,20	PT 1/4"	13	226	36	3,3	82

* Torque specifications: All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

Rubber protection covers for YLa-JQ and Y-JQ impulse wrenches are included in the box. Accessories for impulse wrenches on pages 61-65.



DIMENSIONS

SHUT OFF IMPULSE WRENCHES

YLTX-Series



0,5-0,6 MPA SERIES

Type	Square/hex drive	Bolt capacity mm	RPM	Torque Nm* 0,5-0,6 MPA	Load aircons. l/s	No-load aircons. l/s	Inlet-thread	Weight kg	Hose diameter mm	Dimensions A mm B mm	Vibration m/s ²	Noise level dB(A)
YLTX50A	1/4" Hex	5	4.300	4,5-8	4,2	4,6	PT 1/4"	0,95	6,5	164 22,5	1,1	70
YLTX60A	1/4" Hex	6	5.300	6-13	5,5	5,6	PT 1/4"	0,95	6,5	164 22,5	1,4	72
YLTX70A	1/4" Hex	6-8	6.800	13-28	6,0	8,8	PT 1/4"	1,01	6,5	177 23	1,8	74
YLTX50E	3/8" Sq.	5	4.300	4,5-8	4,2	4,6	PT 1/4"	0,95	6,5	164 22,5	1,1	72
YLTX60E	3/8" Sq.	6	5.300	7-15,5	5,5	5,6	PT 1/4"	0,95	6,5	164 22,5	1,4	72
YLTX70E	3/8" Sq.	6-8	6.800	15-32	6,0	8,8	PT 1/4"	1,01	6,5	177 23	1,8	74
YLTX80E	3/8" Sq.	8	6.800	30-55	7,3	9,2	PT 1/4"	1,12	9,5	187 24,5	1,9	78
YLTX110E	1/2" Sq.	10-12	5.800	50-85	8,3	13,5	PT 1/4"	1,51	9,5	194 28,5	1,8	81
YLTX120E	1/2" Sq.	12	5.400	70-115	8,6	14,6	PT 1/4"	1,79	9,5	201 31	2,2	83
YLTX140E	1/2" Sq.	14	5.200	110-150	11,8	16,6	PT 1/4"	2,08	9,5	214 32,5	5,2	85
YLTX150	3/4" Sq.	16	4.400	140-210	11,8	17	PT 1/4"	2,95	9,5	237 38,5	5,3	84

0,4-0,5 MPA SERIES

Type	Square/hex drive	Bolt capacity mm	RPM	Torque Nm* 0,4-0,5 MPA	Load aircons. l/s	No-load aircons. l/s	Inlet-thread	Weight kg	Hose diameter mm	Dimensions A mm B mm	Vibration m/s ²	Noise level dB(A)
YLT60AL	1/4" Hex	6	4.500	5-11,5	5,5	4,8	PT 1/4"	0,95	6,5	164 22,5	1,4	72
YLT70AL	1/4" Hex	6-8	6.300	11-25	6,0	7,8	PT 1/4"	1,01	6,5	177 23	1,8	74
YLT60EL	3/8" Sq.	6	4.500	6-13,5	5,5	4,8	PT 1/4"	0,95	6,5	164 22,5	1,4	72
YLT70EL	3/8" Sq.	6-8	6.300	13-28	6,0	7,8	PT 1/4"	1,01	6,5	177 23	1,8	74
YLT80EL	3/8" Sq.	8	6.600	25-48	7,3	8	PT 1/4"	1,12	9,5	187 24,5	1,9	78
YLT110EL	1/2" Sq.	10-12	5.600	45-75	8,3	11,8	PT 1/4"	1,51	9,5	194 28,5	1,8	81
YLT120EL	1/2" Sq.	12	5.200	60-100	8,6	12,3	PT 1/4"	1,79	9,5	201 31	2,2	83
YLT140EL	1/2" Sq.	14	4.900	80-125	11,8	14,1	PT 1/4"	2,08	9,5	214 32,5	5,2	85

* Note: Torque values are to be used as guidance only.

FEATURES

- Maximum accuracy: extremely accurate and fast
- Maximum ergonomics: ergo touch / ergo grip / ergo trigger / low noise / low vibration
- Minimal environmental impact: reduction of CO2 emission
- Double chamber air motor: compact high efficiency
- Oil-free: can be used with non lubricated air

* Rubber protection covers for all YLT-series impulse wrenches are included in the box.

YLTX-J



All YLTX models are also available as J-version: signal hose for detecting shut-off, to connect to counting systems (PLC), line control etc.

NON SHUT OFF IMPULSE WRENCHES

YLa-Series



Type	Square/Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions A mm B mm	Vibration m/s ²	Noise-level dB(A)
YLa60A	1/4" Hex	6	4.000	9-20	5	5,5	0,78	PT 1/4"	6,5	130 22	1,4	71
YLa70A	1/4" Hex	6 - 8	7.000	20-28	5,5	6,1	0,8	PT 1/4"	6,5	132 22	1,4	74
YLa80A	1/4" Hex	8	7.000	24-35	5,8	9	0,9	PT 1/4"	6,5	139 22	1,2	75
YLa60E	3/8" Sq.	6	4.000	13-22	5	5,5	0,78	PT 1/4"	6,5	130 22	1,4	71
YLa70E	3/8" Sq.	6 - 8	7.000	20-35	5,5	6,1	0,8	PT 1/4"	6,5	132 22	1,4	74
YLa80E	3/8" Sq.	8	7.000	33-50	5,8	9	0,9	PT 1/4"	6,5	139 22	1,2	75
YLa90E	3/8" Sq.	8 - 10	6.500	47-70	6,7	11,8	1,0	PT 1/4"	9,5	148 24	1,2	78
YLa110E	1/2" Sq.	10 - 12	6.000	65-105	9,6	13,1	1,4	PT 1/4"	9,5	164 26	1,8	81
YLa120E	1/2" Sq.	12	6.600	80-130	10	15,6	1,8	PT 1/4"	9,5	172 28	2,2	82
YLa140E	1/2" Sq.	14	6.000	100-160	13	18,9	2,2	PT 1/4"	9,5	190 30	2,4	84

* Note: Torque values are to be used as guidance only.

FEATURES

- Maximum accuracy: extremely accurate and fast
- Maximum ergonomics: ergo touch / ergo grip / ergo trigger / low noise / low vibration
- Minimal environmental impact: reduction of CO2 emission
- Double chamber air motor: compact high efficiency
- Oil-free: can be used with non lubricated air

* Rubber protection covers for all YLa-series impulse wrenches are included in the box.

CUSTOM MADE IMPULSE WRENCHES



For any application where access to the joint is difficult, we are able to provide tailor made impulse wrenches.

Contact us for more information.

NON SHUT OFF IMPULSE WRENCHES



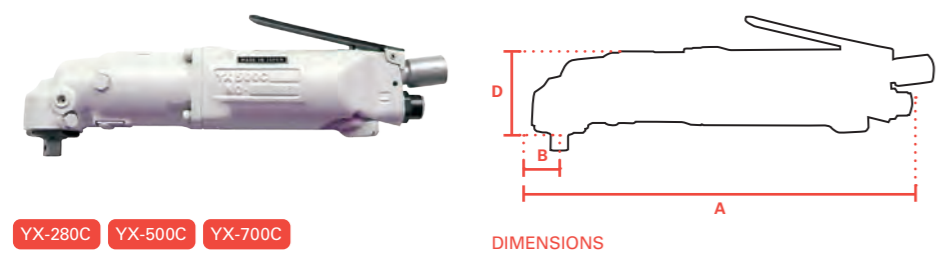
Y-Series, YX-Series



Type	Square/hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Dimensions		Vibration m/s ²	Noise level dB(A)
										A mm	B mm		
Y-40SA ¹⁾	1/4" Hex	4 - 6	10.000	6 - 12	5,0	7,6	0,84	PT 1/4"	6,5	229	17	4,6	69
Y-41A	1/4" Hex	4 - 6	9.300	6 - 12	5,0	8,8	0,73	PT 1/4"	6,5	141	17	2,1	72
Y-46E	3/8" Sq.	5 - 6	8.000	16 - 30	5,8	9,6	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-46A	1/4" Hex	5 - 6	8.000	16 - 26	5,8	9,6	0,87	PT 1/4"	6,5	158	18	1,0	80
Y-140	3/4" Sq.	16	3.300	160 - 270	13,1	18,4	3,20	PT 1/4"	12,7	226	36	3,3	82

¹⁾ The Y-40SA is a straight model, all other types are pistol models.

* Torque specifications
All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.



ANGLE MODELS

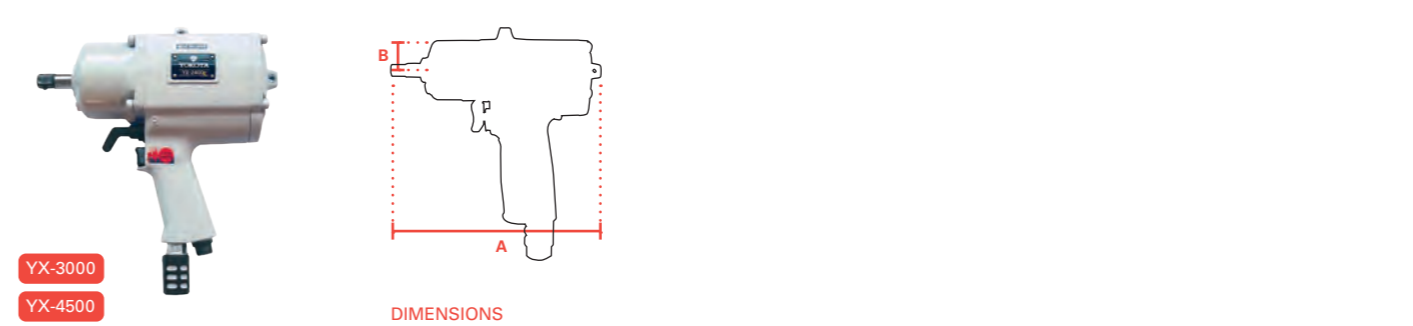
Type	Square / Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions			Vibration m/s ²	Noise-level dB(A)
										A mm	B mm	D mm		
YX-280C	3/8" Hex	4 - 6	10.000	15 - 24	5,0	7,8	1,40	PT 1/4"	6,5	257	16	50	4	83
YX-500C	3/8" Hex	6 - 8	7.500	30 - 45	5,0	8,6	1,50	PT 1/4"	6,5	266	18	66	10	73
YX-700C	3/8" Hex	8 - 10	5.000	36 - 50	5,8	10,8	1,80	PT 1/4"	6,5	289	18	70	8,6	72

* Torque specifications
All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

NON SHUT OFF IMPULSE WRENCHES



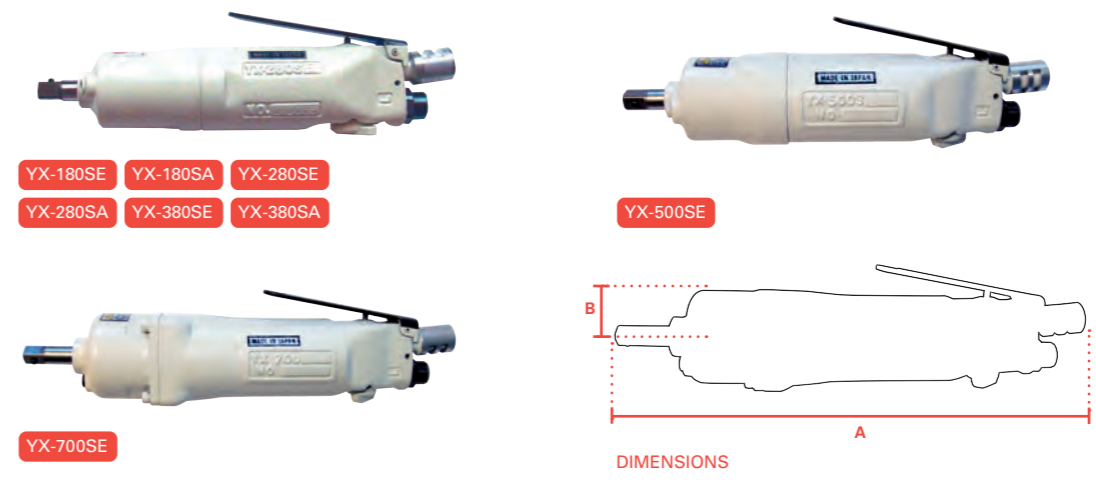
YX-Series



PISTOL MODELS

Type	Square/Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s ²	Noise-level dB(A)
										A mm	B mm		
YX-3000	3/4" Sq.	16 - 18	4.700	200 - 304	10,0	20,5	4,60	PT 1/4"	12,7	246	40,0	3,9	80
YX-4500	3/4" Sq.	18 - 20	3.400	392 - 490	11,6	24,0	9,80	PT 3/8"	12,7	300	65,0	3,9	87

* Torque specifications
All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.



STRAIGHT MODELS

Type	Square/Hex drive	Bolt capacity mm	RPM	Torque Nm*	Load aircons. l/s	No-load aircons. l/s	Weight kg	Inlet thread	Hose diameter mm	Dimensions		Vibration m/s ²	Noise-level dB(A)
										A mm	B mm		
YX-180SE	3/8" Sq.	4 - 6	10.500	19 - 31	4,2	7,8	0,96	PT 1/4"	6,5	220	23	3,3	73
YX-180SA	1/4" Hex	4 - 6	10.500	18 - 30	4,2	7,8	0,96	PT 1/4"	6,5	220	23	3,3	73
YX-280SE	3/8" Sq.	6 - 8	10.500	25 - 38	5,0	9,1	1,02	PT 1/4"	6,5	232	23	4	73
YX-280SA	1/4" Hex	6	10.500	20 - 34	5,0	9,1	1,02	PT 1/4"	6,5	232	23	4	73
YX-380SE	3/8" Sq.	8	10.000	32 - 47	5,0	9,1	1,18	PT 1/4"	6,5	232	25,5	3,3	75
YX-380SA	1/4" Hex	6 - 8	10.000	29 - 44	5,0	9,1	1,18	PT 1/4"	6,5	232	25,5	3,3	75
YX-500SE	3/8" Sq.	8 - 10	7.500	31 - 55	5,0	11,2	1,25	PT 1/4"	6,5	241	25,5	6,6	74
YX-700SE	3/8" Sq.	8 - 10	5.000	35 - 62	5,8	13,5	1,50	PT 1/4"	6,5	262	26,5	6,6	72

* Torque specifications
All specified torques are measured on the YOKOTA testers, Series YET, at a dynamic airpressure of 0.63MPa. The YOKOTA testers have a static transducer, the specified torques are therefore to be used as a guidance only. In general the torque range will be lower in case of using lower airpressure, extension bars, torx or hexagon inset sockets, soft joints, etc.

RED ROOSTER ASSEMBLY TOOLS

Productivity · Flexibility · Accuracy



PNEUMATIC
IMPULSE
WRENCHES

PAGE 34-41



CORDLESS
IMPULSE
WRENCHES

PAGE 42-44



PNEUMATIC
SCREW-
DRIVERS

PAGE 46-49



CORDLESS
SCREW-
DRIVERS

PAGE 50-52



CORDLESS
WRENCHES

PAGE 53-57



PNEUMATIC
RIVETERS

PAGE 58-59

RED ROOSTER ASSEMBLY TOOLS

Productivity · Flexibility · Accuracy

Red Rooster Assembly offers you a full range of high quality assembly tools. With years of experience in the assembly industry and through intensive cooperation with our customers, we have developed an extensive and complete range with specific attention for ergonomics, efficiency and durability. The assortment of Red Rooster Assembly tools is often complemented when new developments take place. The possibilities offered by improved battery technology have resulted in an extensive cordless range of tools. The combination of cordless tools and air tools offers the customer the opportunity to implement the most optimal solution. Whether a sustainable set up for a permanent workplace is required, or more flexibility for the operator, your productivity matters to us.



PNEUMATIC IMPULSE WRENCHES



Pneumatic Impulse Wrenches

Main Features

Twin drive roller blades reduce noise, vibration and improve impulse efficiency.

X-Shape Sealing improves durability.

1 Piece design front end plate and cylinder improves motor efficiency.

EASY TORQUE ADJUSTMENT
The required torque can be easily adjusted by turning the adjust screw.

DOUBLE CHAMBER AIR MOTOR
9 Vanes motor design for smallest dimensions with highest power and acceleration results in a short time to reach the set torque and highest productivity.

Low noise exhaust, 360° adjustable.

One hand reverse operation for Right or Left handed operators.

Conventional Impact Wrench vs **Adjustable range of Oil-Pulse Wrench** graph showing Torque vs Time (0,2-1 sec).

Speed RPM vs **Torque** graph comparing **Conventional Motor** and **Double-Chamber Motor**.

Reduce torque / **Increase torque** diagram showing the adjust screw mechanism.



SHUT OFF IMPULSE WRENCHES



Pneumatic Impulse Wrenches

RRI-T Series: Pistol Models



1/4" Hexdrive

Type	Square / Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30AT	1/4" Hex	6	4.600	6 - 12,5	3,7	0,89	PT 1/4"	6,5	78
RRI-40AT	1/4" Hex	6-8	4.600	10 - 18	3,7	0,92	PT 1/4"	6,5	78
RRI-50AT	1/4" Hex	8	7.200	16 - 26	5,3	0,92	PT 1/4"	6,5	80
RRI-60AT	1/4" Hex	8	6.200	20 - 30	6,2	1,0	PT 1/4"	8	82
RRI-70AT	1/4" Hex	10	7.200	32 - 47	7	1,35	PT 1/4"	8	82



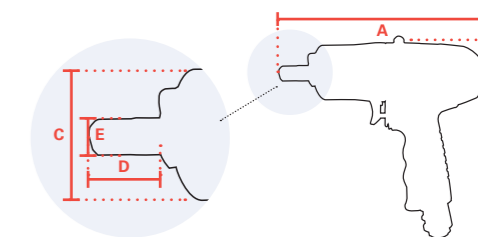
3/8"-1/2"- 3/4" Squaredrive

Type	Square / Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30T	3/8" Square	6	4.600	7 - 12,5	3,7	0,89	PT 1/4"	6,5	78
RRI-40T	3/8" Square	6-8	4.600	11 - 19	3,7	0,92	PT 1/4"	6,5	78
RRI-50T	3/8" Square	8	7.200	16 - 27	5,3	0,92	PT 1/4"	6,5	80
RRI-60T	3/8" Square	8-10	6.200	22 - 35	6,2	1	PT 1/4"	8	82
RRI-70T	3/8" Square	10	7.200	37 - 57	7	1,35	PT 1/4"	8	82
RRI-80T	3/8" Square	10-12	5.100	40 - 68	9,3	1,21	PT 1/4"	8	82
RRI-90T	1/2" Square	12	5.400	64 - 90	8,3	1,55	PT 1/4"	8	83
RRI-100T	1/2" Square	12-14	5.300	85 - 120	8,7	1,87	PT 1/4"	8	84
RRI-130T	1/2" Square	14-16	3.600	123 - 148	11,6	2,26	PT 1/4"	11	86
RRI-150T	3/4" Square	16	3.700	165 - 210	11,6	3,10	PT 1/4"	11	86
RRI-180T	3/4" Square	16-18	2.700	180 - 255	12,2	3,8	PT 1/4"	11	86
RRI-200T	3/4" Square	18-20	3.000	230 - 450	26	4,25	PT 3/8"	12,7	88

DIMENSIONS

Type	A mm	B mm	C mm	D mm	E mm
RRI-30AT	163	168	Ø46	21	Ø17,5
RRI-40AT	170	168	Ø46	27	Ø17,5
RRI-50AT	170	168	Ø46	27	Ø17,5
RRI-60AT	181	168	Ø46	27	Ø17,5
RRI-70AT	194	172	Ø53,5	28	Ø17,5
RRI-30T	163	168	Ø46	24	Ø12
RRI-40T	167	168	Ø46	24	Ø12
RRI-50T	167	168	Ø46	24	Ø12
RRI-60T	178	168	Ø46	24	Ø12
RRI-70T	194	172	Ø53,5	25	Ø12
RRI-80T	194	170	Ø53,5	25	Ø12
RRI-90T	200	192	Ø53,5	31	Ø16

Type	A mm	B mm	C mm	D mm	E mm
RRI-100T	209	195	Ø59	32	Ø16
RRI-130T	216	204	Ø64	31	Ø16
RRI-150T	239	215	Ø72	40	Ø25
RRI-180T	263	232	Ø78	41	Ø25
RRI-200T	250	239	Ø80	41	Ø25



SHUT OFF IMPULSE WRENCHES



RRI-T Series: Straight Models



1/4" Hexdrive

Type	Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30STA	1/4"	6	4.200	6 - 11,5	3,7	0,77	PT 1/4"	6,5	78
RRI-40STA	1/4"	6-8	4.200	10 - 17	3,7	0,8	PT 1/4"	6,5	78
RRI-50STA	1/4"	8	6.800	15 - 25	5,3	0,8	PT 1/4"	6,5	80
RRI-60STA	1/4"	8	6.000	20 - 30	6,2	0,86	PT 1/4"	8	80
RRI-70STA	1/4"	8-10	5.000	28 - 40	6,2	0,97	PT 1/4"	8	80

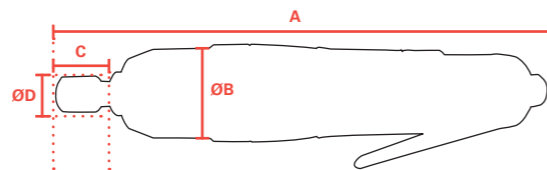


3/8" Square drive

Type	Square drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30ST	3/8"	6	4.200	7 - 12,5	3,7	0,8	PT 1/4"	6,5	78
RRI-40ST	3/8"	6-8	4.200	11 - 19	3,7	0,8	PT 1/4"	6,5	78
RRI-50ST	3/8"	8	6.800	16 - 27	5,3	0,8	PT 1/4"	6,5	80
RRI-60ST	3/8"	8-10	6.000	22 - 35	6,2	0,86	PT 1/4"	8	80
RRI-70ST	3/8"	10	5.000	31 - 47	6,2	0,97	PT 1/4"	8	80
RRI-80ST	3/8"	10-12	6.100	40 - 68	9,3	1,15	PT 1/4"	8	82

DIMENSIONS

Type	A mm	B mm	C mm	D mm
RRI-30STA	219	Ø46	21	Ø17,5
RRI-40STA	224	Ø46	27	Ø17,5
RRI-50STA	224	Ø46	27	Ø17,5
RRI-60STA	225	Ø46	27	Ø17,5
RRI-70STA	244	Ø48	27	Ø17,5
RRI-30ST	219	Ø46	24	Ø12
RRI-40ST	221	Ø46	24	Ø12
RRI-50ST	221	Ø46	24	Ø12
RRI-60ST	231	Ø46	24	Ø12
RRI-70ST	244	Ø48	25	Ø12
RRI-80ST	244	Ø53,5	25	Ø12



SHUT OFF IMPULSE WRENCHES



RRI-T Series: Angle Models



1/4" Hexdrive

Type	Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-50RTA	1/4"	6-8	4.300	9,5 - 16	4,8	1,2	PT 1/4"	6,5	80
RRI-60RTA	1/4"	8	4.700	15 - 22	6,2	1,3	PT 1/4"	8	80
RRI-70RTA	1/4"	8	4.500	20 - 29	6,2	1,4	PT 1/4"	8	80

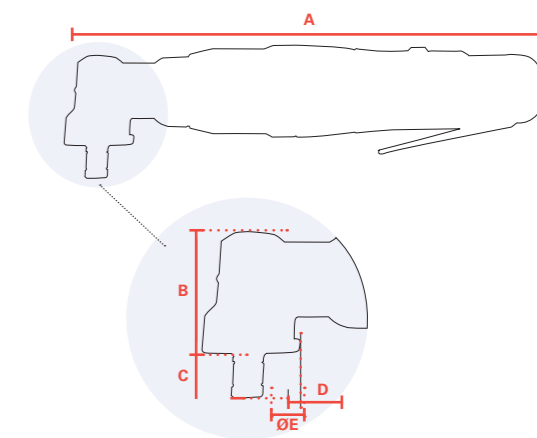


3/8" Square drive

Type	Square drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-50RT	3/8"	6-8	4.300	10,5 - 17	4,8	1,2	PT 1/4"	6,5	80
RRI-60RT	3/8"	8	4.700	16 - 24	6,2	1,3	PT 1/4"	8	80
RRI-70RT	3/8"	8-10	4.500	22 - 31	6,2	1,4	PT 1/4"	8	80
RRI-70RGT	3/8"	10	2.000	32 - 45	6,2	1,6	PT 1/4"	8	82
RRI-70RHT	3/8"	10-12	2.200	46 - 60	6,2	1,6	PT 1/4"	8	82
RRI-80RHT	3/8"	10-12	2.800	50 - 70	9,3	1,7	PT 1/4"	8	82

DIMENSIONS

Type	A mm	B mm	C mm	D mm	E mm
RRI-50RTA	253	45	16	16	Ø11
RRI-60RTA	264	45	16	16	Ø11
RRI-70RTA	272	45	16	16	Ø11
RRI-50RT	253	45	14	16	Ø12
RRI-60RT	264	45	14	16	Ø12
RRI-70RT	272	45	14	16	Ø12
RRI-70RGT	281	47	14	21	Ø16
RRI-70RHT	281	47	21	21	Ø16
RRI-80RHT	281	47	21	21	Ø16



NON SHUT OFF IMPULSE WRENCHES



RRI Series: Pistol Models



1/4" Hexdrive

Type	Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30A	1/4"	6	4.600	6 - 12,5	3,7	0,87	PT 1/4"	6,5	78
RRI-40AX	1/4"	6-8	4.600	10 - 18	3,7	0,74	PT 1/4"	6,5	78
RRI-50AX	1/4"	8	7.200	16 - 26	5,3	0,9	PT 1/4"	6,5	80
RRI-60AX	1/4"	8	6.200	20 - 30	6,2	0,81	PT 1/4"	8	82
RRI-70A	1/4"	10	7.200	32 - 47	7	1,33	PT 1/4"	8	82

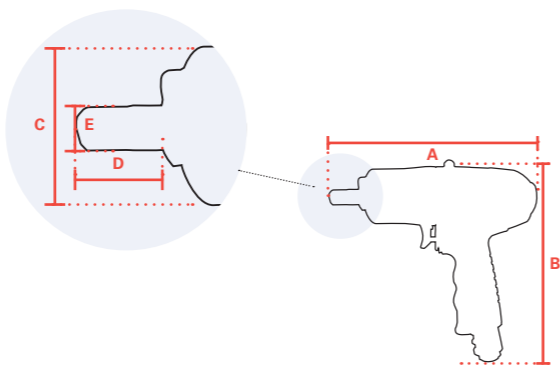


3/8" - 1/2" - 3" Square drive

Type	Square drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30	3/8"	6	4.600	7 - 12,5	3,7	0,87	PT 1/4"	6,5	78
RRI-40X	3/8"	6-8	4.600	11 - 19	3,7	0,74	PT 1/4"	6,5	78
RRI-50X	3/8"	8	7.200	16 - 27	5,3	0,74	PT 1/4"	6,5	80
RRI-60X	3/8"	8-10	6.200	22 - 35	6,2	0,81	PT 1/4"	8	82
RRI-70	3/8"	10	7.200	37 - 57	7	1,33	PT 1/4"	8	82
RRI-80	3/8"	10-12	5.100	40 - 70	9,3	1,19	PT 1/4"	8	82
RRI-90	1/2"	12	5.400	64 - 90	8,3	1,53	PT 1/4"	8	83
RRI-100	1/2"	12-14	5.300	85 - 120	8,7	1,85	PT 1/4"	8	84
RRI-130	1/2"	14-16	3.600	123 - 148	11,6	2,22	PT 1/4"	11	86
RRI-150	3/4"	16	3.700	165 - 210	11,6	3,05	PT 1/4"	11	86
RRI-180	3/4"	16-18	2.700	180 - 255	12,2	3,8	PT 1/4"	11	86
RRI-200	3/4"	18-20	3.000	220 - 390	26	4,25	PT 3/8"	13	88

DIMENSIONS

Type	A mm	B mm	C mm	D mm	E mm
RRI-30/30A	167	168	Ø46	24	Ø12
RRI-40X/40AX	147	168	Ø46	24	Ø12
RRI-50X/50A	147	168	Ø46	24	Ø12
RRI-60X/60AX	158	168	Ø46	24	Ø12
RRI-70/70A	194	192	Ø53,5	25	Ø12
RRI-80	194	170	Ø53,5	25	Ø12
RRI-90	200	192	Ø53,5	31	Ø16
RRI-100	209	195	Ø59	32	Ø16
RRI-130	216	204	Ø64	31	Ø16
RRI-150	238	215	Ø72	40	Ø25
RRI-180	263	232	Ø78	41	Ø25
RRI-200	250	239	Ø80	41	Ø25



NON SHUT OFF IMPULSE WRENCHES



RRI Series: Straight Models



1/4" Hexdrive

Type	Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30SA	1/4"	6	4.200	6 - 11,5	3,7	0,77	PT 1/4"	6,5	78
RRI-40SA	1/4"	6-8	4.200	10 - 17	3,7	0,8	PT 1/4"	6,5	78
RRI-50SA	1/4"	8	6.800	15 - 25	5,3	0,8	PT 1/4"	6,5	80
RRI-60SA	1/4"	8	6.000	20 - 30	6,2	0,86	PT 1/4"	8	80
RRI-70SA	1/4"	8-10	5.000	28 - 40	6,2	0,97	PT 1/4"	8	80



1/4" Squaredrive

Type	Square drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-30S	3/8"	6	4.200	7 - 12,5	3,7	0,8	PT 1/4"	6,5	78
RRI-40S	3/8"	6-8	4.200	11 - 19	3,7	0,8	PT 1/4"	6,5	78
RRI-50S	3/8"	8	6.800	16 - 27	5,3	0,8	PT 1/4"	6,5	80
RRI-60S	3/8"	8-10	6.000	22 - 35	6,2	0,86	PT 1/4"	8	80
RRI-70S	3/8"	10	5.000	31 - 47	6,2	0,97	PT 1/4"	8	80

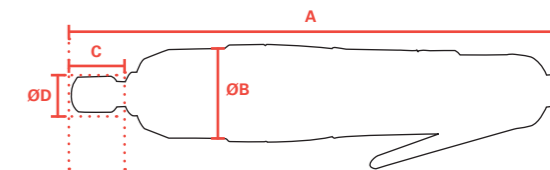


CUSTOM MADE PRODUCTS

See page 41 for impulse wrenches tailored to your specific needs.

DIMENSIONS

Type	A mm	B mm	C mm	D mm
RRI-30SA	219	Ø46	21	Ø17,5
RRI-40SA	224	Ø46	27	Ø17,5
RRI-50SA	224	Ø46	27	Ø17,5
RRI-60SA	235	Ø46	27	Ø17,5
RRI-70SA	244	Ø48	27	Ø17,5
RRI-30S	219	Ø46	24	Ø12
RRI-40S	221	Ø46	24	Ø12
RRI-50S	221	Ø46	24	Ø12
RRI-60S	221	Ø46	24	Ø12
RRI-70S	244	Ø48	25	Ø12



NON SHUT OFF IMPULSE WRENCHES



RRI Series: Angle Models



1/4" Hex drive

Type	Hex drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-50RA	1/4"	6-8	4.300	9,5 - 16	4,8	1,2	PT 1/4"	6,5	80
RRI-60RA	1/4"	8	4.700	15 - 22	6,2	1,3	PT 1/4"	8	80
RRI-70RA	1/4"	8	4.500	20 - 29	6,2	1,4	PT 1/4"	8	80



1/2" - 3/8" Square drive

Type	Square drive	Bolt capacity mm	RPM	Torque range Nm	Air consumption l/sec	Weight kg	Inlet-thread	Hose diameter mm	Noise-level dB(A)
RRI-50R	3/8"	6-8	4.300	10,5 - 17	4,8	1,2	PT 1/4"	6,5	80
RRI-60R	3/8"	8	4.700	16 - 24	6,2	1,3	PT 1/4"	8	80
RRI-70R	3/8"	8-10	4.500	22 - 31	6,2	1,4	PT 1/4"	8	80
RRI-70RG	3/8"	10	2.000	34 - 50	6,2	1,6	PT 1/4"	8	82
RRI-70RH	1/2"	10 - 12	2.200	46 - 60	6,2	1,6	PT 1/4"	8	82

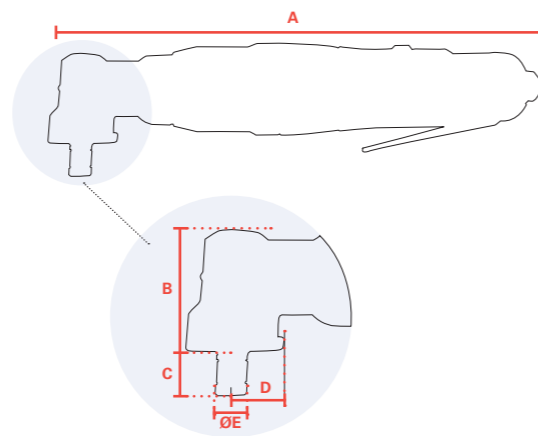


CUSTOM MADE PRODUCTS

See page 41 for impulse wrenches tailored to your specific needs.

DIMENSIONS

Type	A mm	B mm	C mm	D mm	E mm
RRI-50RA	253	45	16	16	Ø11
RRI-60RA	264	45	16	16	Ø11
RRI-70RA	272	45	16	16	Ø11
RRI-50R	253	45	14	16	Ø12
RRI-60R	264	45	14	16	Ø12
RRI-70R	272	45	14	16	Ø12
RRI-70RG	281	47	14	21	Ø12
RRI-70RH	281	47	21	21	Ø16



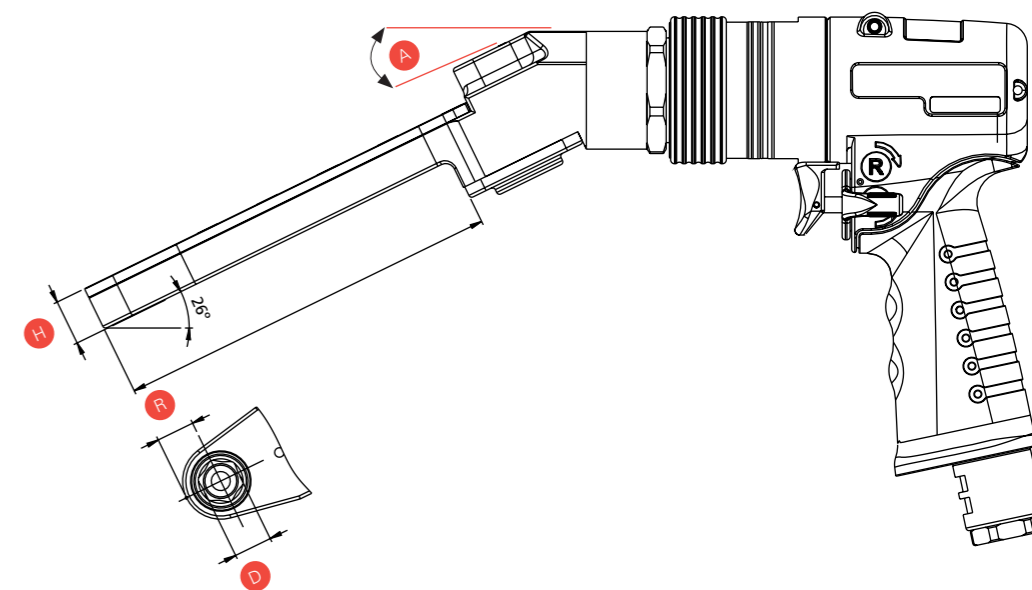
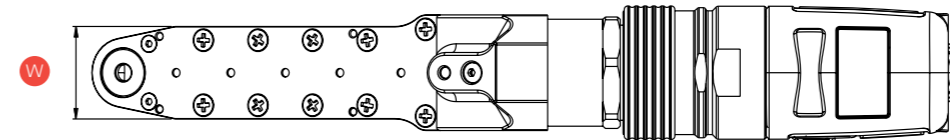
IMPULSE WRENCHES



Custom Made Products

For narrow space applications we offer geared offset tools with a torque range of 6-300 Nm.

- Installation in places where access is restricted.
- Flat output with non shut-off impulse wrench



Please fill this form and contact us with your request for a tailor-made solution

Torque Nm	Pistol model Straight model Angle model	W*	A	D* Hexagon dimension	H*	L*	R*
	<input type="checkbox"/> Pistol <input type="checkbox"/> Straight <input type="checkbox"/> Angle mm	<input type="checkbox"/> 0° <input type="checkbox"/> 26° <input type="checkbox"/> 90° mm mm mm mm

* Maximum dimensions

EXAMPLES

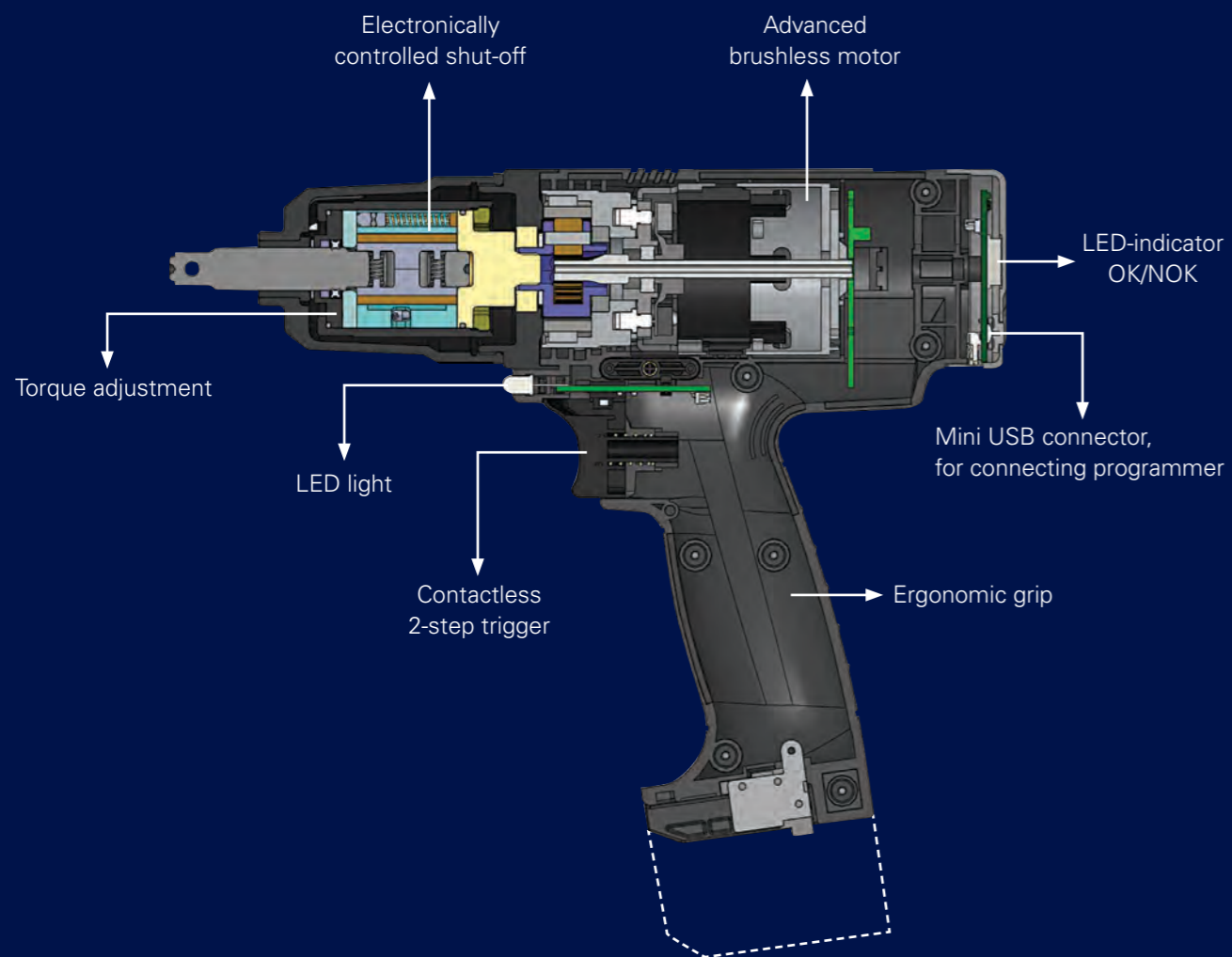


CORDLESS IMPULSE WRENCHES



Cordless Impulse Wrenches

Main Features



SHUT OFF IMPULSE WRENCHES



Cordless Impulse Wrenches

RRI-BIM Series: Cordless

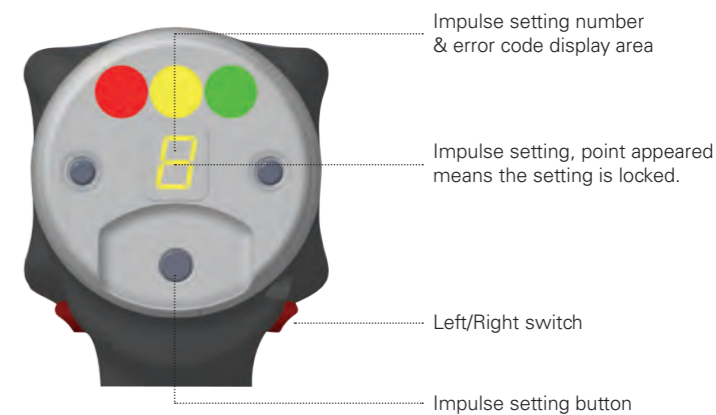
LED INDICATOR OK/NOK

BLOCKING ADJUSTMENT OF THE SHUT-OFF

- Remove battery
- Mount battery and simultaneously push trigger and L/R
- Switch until sound signal (5 seconds), then release trigger and L/R Switch.
- Deblocking = same

BLOCKING UN-TIGHTENING

- Remove battery
- Mount battery and simultaneously push trigger and L/R
- Switch until sound signal (5 seconds)
- Deblocking = same



FLASHING YELLOW + FLASHING GREEN reverse operation



GREEN tightening OK



RED tightening NOK



FLASHING YELLOW low battery warning

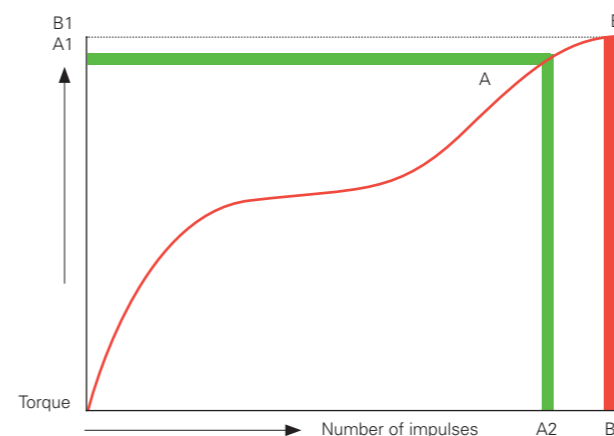


YELLOW change battery



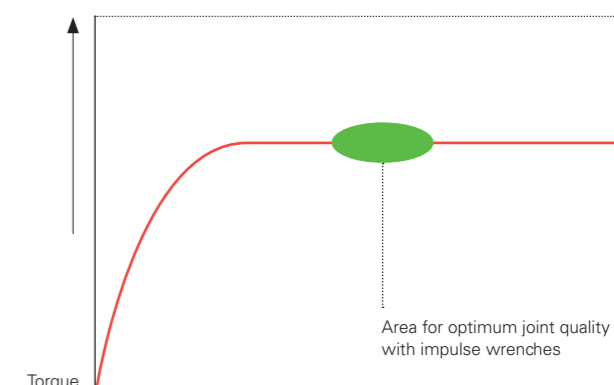
ALUMINIUM COVER FOR EXTRA PROTECTION See accessoires on page 30.

MECHANICAL SHUT-OFF OR ELECTRONIC CONTROLLED SHUT-OFF IMPULSE WRENCHES



A: shut-off area of mechanical shut-off impulse wrenches
 B: shut-off area of electronic controlled shut-off impulse wrenches. Optimum tension with lower relaxation.

JOINT QUALITY



For hard joints: numerical setting: (2-3-4)
 For middle soft joints: numerical setting: (4-5-6)
 For soft joints: numerical setting: (6-7-8-9)

SHUT OFF IMPULSE WRENCHES



Cordless Impulse Wrenches

RRI-BIM Series: Cordless

These cordless shut-off impulse wrenches combine high tightening speeds with high accuracy and no reaction force. The no tightening functionality when the battery charge is low improves the process safety. Very well suited for areas where cables and hoses impede handling flexibility of tools, such as interiors of cars, coaches and trains.

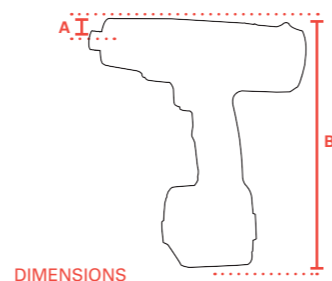
CHARACTERISTICS

- Brushless motor
- 18 Volt Lithium-Ion battery (choice for 2,0 Ah or 4,0 Ah capacity)
- LED status indicates: Reverse, OK, NOK, Battery low
- Torque adjustable
- Fine-tuning on hardness of the joint, electronically
- Non-contact trigger with 2 steps
- Run-down speed up to 4.500 RPM



Battery, charger, programmer and power cord have to be ordered separately. See page 52.

Type	Square/Hex drive	Torque Nm	RPM	Weight kg	Dimensions A mm	B mm
RRI-BIM15AT	1/4" Hex	7-15	4.500	1,16	29	227
RRI-BIM15T	3/8" Square	8-15	4.500	1,16	29	224
RRI-BIM25AT	1/4" Hex	14-23	4.500	1,18	29	237
RRI-BIM25T	3/8" Square	15-25	4.500	1,18	29	234
RRI-BIM35T	3/8" Square	22-35	3.500	1,36	29	234
RRI-BIM45T	3/8" Square	32-45	3.500	1,42	29	244
RRI-BIM65T	1/2" Square	45-65	3.200	1,90	29	244



CHARACTERISTICS



ACCESSORIES



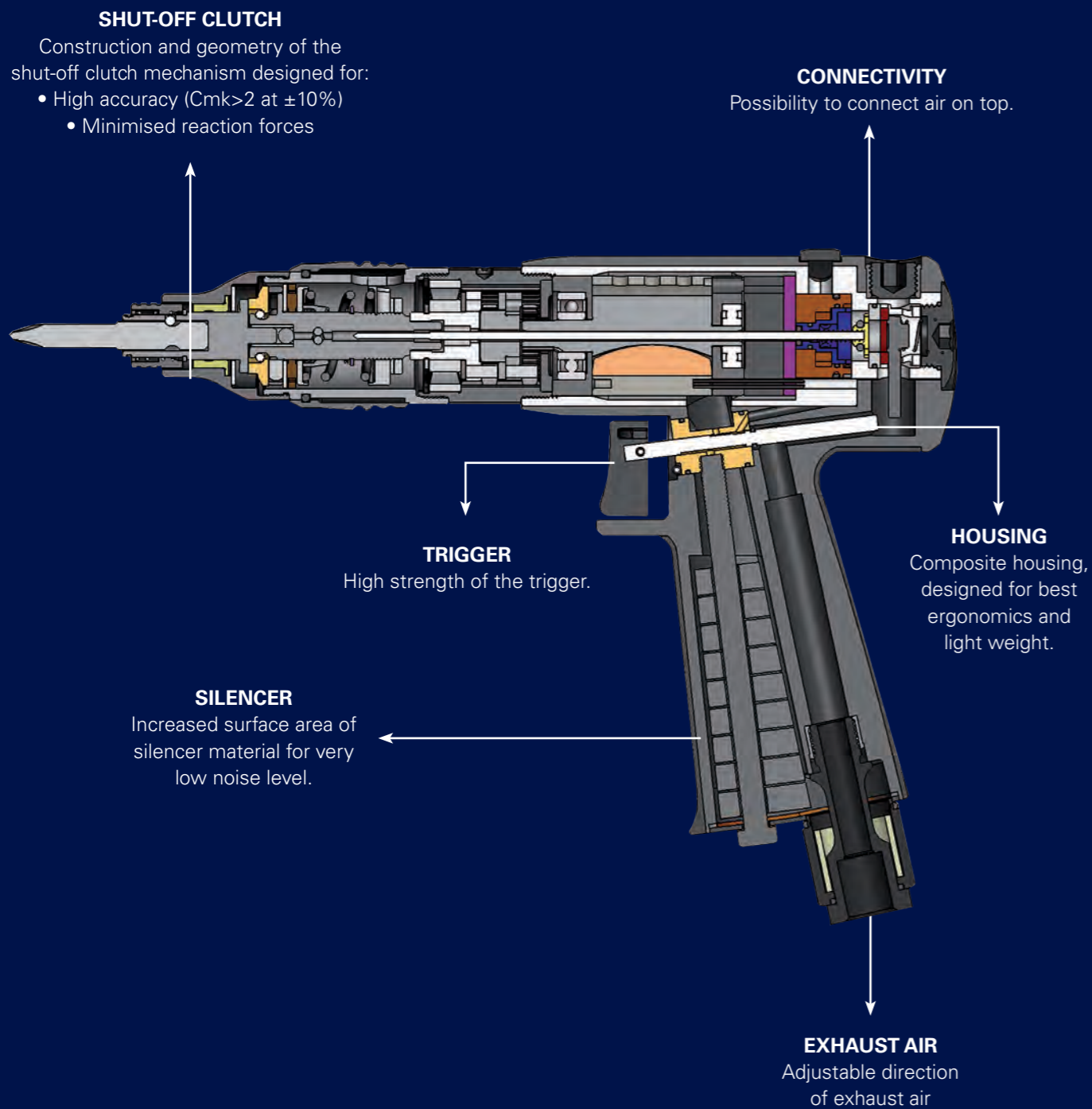
Rubber protection cover	Order number
RRI-BIM15T (AT)	C16PW-15
RRI-BIM25T (AT)	C16PW-25
RRI-BIM35T	C16PW-25
RRI-BIM45T	C16PW-45
RRI-BIM65T	C16PW65
Aluminium cover	Order number
RRI-BIM serie	B10PW15
Service Kits:	Order number
RRI-BIM15T (AT)	I40RK
RRI-BIM25T (AT)	I70RK
RRI-BIM35T	I70RK
RRI-BIM45T	I80RK-YO
RRI-BIM65T	32399-001



PNEUMATIC SCREWDRIVERS



Main features



SHUT OFF SCREWDRIVERS



RRI-S Series: Pistol Models

These RED ROOSTER shut-off screwdrivers have a large torque-range, are highly accurate, have a low vibration and noise level and a very ergonomic design. The special design of the clutch combines low reaction forces with a high repeatability of the torque. This air tool is designed for the assembly industry, where threaded fasteners are used. The wide range of different speeds always allows the best choice for the application. Low speed for plastics and hose clamps, high speeds for machined screws.



CHARACTERISTICS

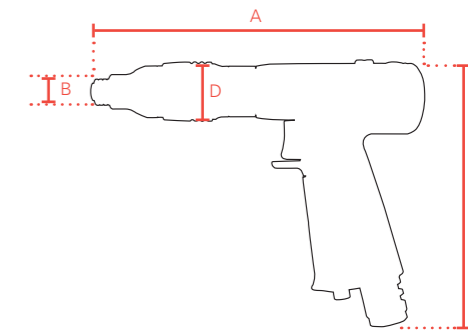
- Composite housing
- Reversible
- Rear-exhaust, silenced
- Ergonomic grip, trigger start
- Easily adjustable
- Pistol model air on top
- Large torque range
- Delivery includes hanger
- Side grip delivered with size 3 tools

Type	Brand	Hex drive	Bolt capacity mm	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-SP10502	RRI	1/4" Hex	4	550	1,0 - 2,5	8	0,77	1/4"	6,5	<2,5	68
RRI-SP11602	RRI	1/4" Hex	4	1.600	0,4 - 1,8	8	0,77	1/4"	6,5	<2,5	68
RRI-SP10902	RRI	1/4" Hex	4	900	0,4 - 2,2	8	0,77	1/4"	6,5	<2,5	68
RRI-SP21704	RRI	1/4" Hex	4	1.700	1 - 3,5	10	0,98	1/4"	6,5	<2,5	72
RRI-SP21104	RRI	1/4" Hex	4	1.100	1,5 - 4	10	0,98	1/4"	6,5	<2,5	72
RRI-SP20705	RRI	1/4" Hex	4	700	1,5 - 4,5	10	0,98	1/4"	6,5	<2,5	72
RRI-SP31706	RRI	1/4" Hex	5	1.700	3,5 - 5,2	12	1,1	1/4"	6,5	<2,5	72
RRI-SP31108	RRI	1/4" Hex	5	1.100	3,5 - 6,3	12	1,1	1/4"	6,5	<2,5	72
RRI-SP30710	RRI	1/4" Hex	6	700	3,5 - 8,2	12	1,1	1/4"	6,5	<2,5	72
RRI-SP30511	RRI	1/4" Hex	6	550	3,5 - 10	12	1,1	1/4"	6,5	<2,5	72

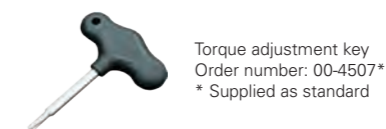
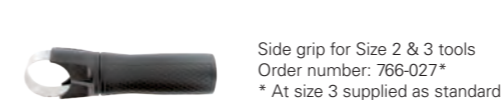
* The indicated torque levels are measured on hard joints.

DIMENSIONS

Type	A mm	B mm	C mm	Ø D mm	Size
RRI-SP10502	198	16	157	31	1
RRI-SP11602	198	16	157	31	1
RRI-SP10902	198	16	157	31	1
RRI-SP21704	209	18	157	34,5	2
RRI-SP21104	209	18	157	34,5	2
RRI-SP20705	209	18	157	34,5	2
RRI-SP31706	238	18	156	34,5	3
RRI-SP31108	238	18	157	34,5	3
RRI-SP30710	238	18	157	34,5	3
RRI-SP30511	238	18	157	34,5	3



ACCESSORIES



SHUT OFF SCREWDRIVERS



RRI-S Series: Straight Models

CHARACTERISTICS

- New straight design with soft grip
- Reversible
- Rear-exhaust, silenced
- Ergonomic grip, lever start or push start
- Easily adjustable
- Delivery includes hanger
- Large torque range
- Side grip delivered with size 3 tools



SHUT-OFF SCREWDRIVERS PUSH START TYPE

Type	Brand	Hex drive	Bolt capacity mm	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-SD11602	RRI	1/4" Hex	4	1.600	0,4 - 1,8	8	0,54	1/4"	6,5	<2,5	68
RRI-SD10902	RRI	1/4" Hex	4	900	0,4 - 2,2	8	0,54	1/4"	6,5	<2,5	68
RRI-SD21704	RRI	1/4" Hex	4	1.700	1 - 3,5	10	0,77	1/4"	6,5	<2,5	72
RRI-SD21104	RRI	1/4" Hex	4	1.100	1,5 - 4	10	0,77	1/4"	6,5	<2,5	72
RRI-SD20705	RRI	1/4" Hex	4	700	1,5 - 4,5	10	0,77	1/4"	6,5	<2,5	72
RRI-SD31706	RRI	1/4" Hex	5	1.700	3,5 - 5,2	12	0,89	1/4"	6,5	<2,5	72
RRI-SD31108	RRI	1/4" Hex	5	1.100	3,5 - 6,3	12	0,89	1/4"	6,5	<2,5	72
RRI-SD30710	RRI	1/4" Hex	6	700	3,5 - 8,2	12	0,89	1/4"	6,5	<2,5	72
RRI-SD30511	RRI	1/4" Hex	6	550	3,5 - 10	12	0,89	1/4"	6,5	<2,5	72

SHUT-OFF SCREWDRIVERS LEVER START TYPE

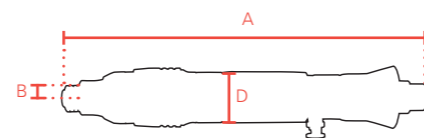
Type	Brand	Hex drive	Bolt capacity mm	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-SL11602	RRI	1/4" Hex	4	1.600	0,4 - 1,8	8	0,59	1/4"	6,5	<2,5	68
RRI-SL10902	RRI	1/4" Hex	4	900	0,4 - 2,2	8	0,59	1/4"	6,5	<2,5	68
RRI-SL21704	RRI	1/4" Hex	4	1.700	1 - 3,5	10	0,84	1/4"	6,5	<2,5	72
RRI-SL21104	RRI	1/4" Hex	4	1.100	1,5 - 4	10	0,84	1/4"	6,5	<2,5	72
RRI-SL20705	RRI	1/4" Hex	4	700	1,5 - 4,5	10	0,84	1/4"	6,5	<2,5	72
RRI-SL31706	RRI	1/4" Hex	5	1.700	3,5 - 5,2	12	0,93	1/4"	6,5	<2,5	72
RRI-SL31108	RRI	1/4" Hex	5	1.100	3,5 - 6,3	12	0,93	1/4"	6,5	<2,5	72
RRI-SL30710	RRI	1/4" Hex	6	700	3,5 - 8,2	12	0,93	1/4"	6,5	<2,5	72
RRI-SL30511	RRI	1/4" Hex	6	550	3,5 - 10	12	0,93	1/4"	6,5	<2,5	72

* The indicated torque levels are measured on hard joints.

DIMENSIONS

Type	A mm	B mm	Ø D mm	Size
RRI-SD11602	228	16	31	1
RRI-SD10902	228	16	31	1
RRI-SD21704	244	18	34,5	2
RRI-SD21104	244	18	34,5	2
RRI-SD20705	244	18	34,5	2
RRI-SD31706	276	18	34,5	3
RRI-SD31108	276	18	34,5	3
RRI-SD30710	276	18	34,5	3
RRI-SD30511	276	18	34,5	3

Type	A mm	B mm	Ø D mm	Size
RRI-SL11602	244	16	31	1
RRI-SL10902	244	16	31	1
RRI-SL21704	263	18	34,5	2
RRI-SL21104	263	18	34,5	2
RRI-SL20705	263	18	34,5	2
RRI-SL31706	263	18	34,5	3
RRI-SL31108	309	18	34,5	3
RRI-SL30710	309	18	34,5	3
RRI-SL30511	309	18	34,5	3



For torque adjustment key and side grip for screwdrivers with size 3 see page 47.

SHUT OFF SCREWDRIVERS



RRI-S Series: Angle Models

CHARACTERISTICS

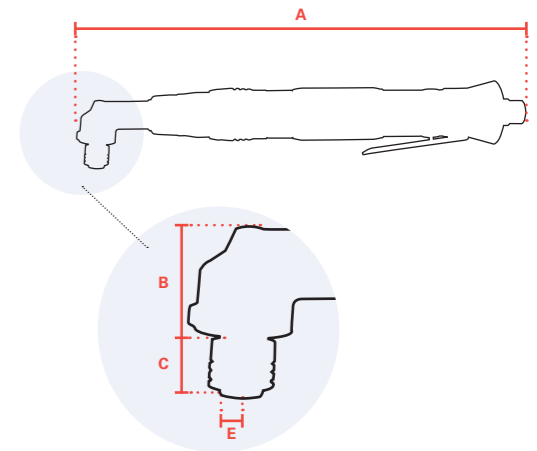
- New angled body-design with soft grip
- Reversible
- Rear-exhaust, silenced
- Ergonomic grip, lever start
- Easily adjustable
- Delivery includes hanger
- Large torque range



Type	Brand	Square/Hex drive	Bolt capacity mm	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-SA11602	RRI	1/4" Hex	4	1.600	0,4 - 1,8	8	0,82	1/4"	6,5	<2,5	68
RRI-SA10902	RRI	1/4" Hex	4	900	0,4 - 2,2	8	0,82	1/4"	6,5	<2,5	68
RRI-SA21704	RRI	1/4" Hex	4	1.700	1 - 3,5	10	1,02	1/4"	6,5	<2,5	72
RRI-SA21104	RRI	1/4" Hex	4	1.100	1,5 - 4	10	1,02	1/4"	6,5	<2,5	72
RRI-SA20705	RRI	1/4" Hex	4	700	1,5 - 4,5	10	1,02	1/4"	6,5	<2,5	72
RRI-SA31108	RRI	1/4" Hex	5	1.100	3,5 - 6,3	12	1,36	1/4"	6,5	<2,5	72
RRI-SA30710	RRI	1/4" Hex	6	700	3,5 - 7,2	12	1,36	1/4"	6,5	<2,5	72
RRI-SA30511	RRI	1/4" Hex	6	550	3,5 - 10	12	1,36	1/4"	6,5	<2,5	72
RRI-SA31108W	RRI	3/8" Square	5	1.100	3,5 - 6,3	12	1,36	1/4"	6,5	<2,5	72
RRI-SA30710W	RRI	3/8" Square	6	700	3,5 - 8,2	12	1,36	1/4"	6,5	<2,5	72
RRI-SA30511W	RRI	3/8" Square	6	550	3,5 - 10	12	1,36	1/4"	6,5	<2,5	72

DIMENSIONS

Type	A mm	B mm	C mm	E mm
RRI-SA11602	294	29	16,1	12
RRI-SA10902	294	29	16,1	12
RRI-SA21704	314	29	16,1	12
RRI-SA21104	314	29	16,1	12
RRI-SA20705	314	30,5	15,8	13,5
RRI-SA31108	350	30,5	15,8	13,5
RRI-SA30710	350	30,5	15,8	13,5
RRI-SA30511	350	30,5	15,8	13,5
RRI-SA31108W	350	30,5	15,8	13,5
RRI-SA30710W	350	30,5	15,8	13,5
RRI-SA30511W	350	30,5	15,8	13,5



ACCESSORIES



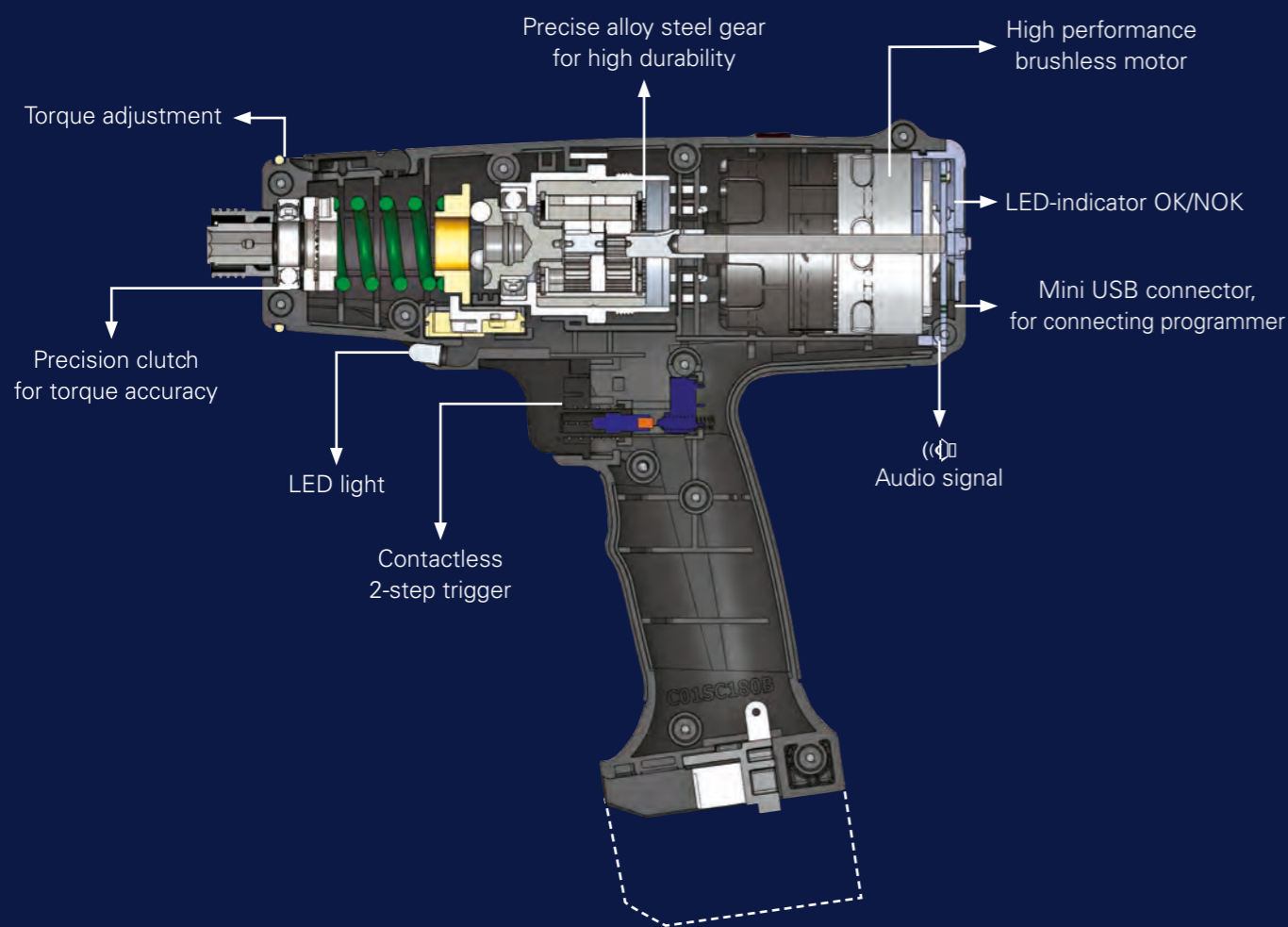
Torque adjustment tool
Order number: 00-4507*
* Supplied as standard

CORDLESS SCREWDRIVERS



Cordless Screwdriver

Main features



SHUT OFF SCREWDRIVERS



Cordless Screwdriver

RRI-BS Series: Cordless

The Red Rooster cordless shut-off screwdriver is very well suited for assembly applications with a need for good torque accuracy. Especially in areas where cables and hoses impede handling flexibility, such as interiors of cars, coaches and trains.

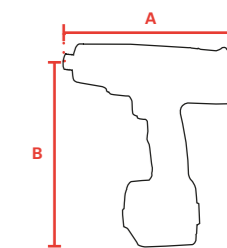
CHARACTERISTICS

- Torque accuracy: meet ISO 5393 Cmk>2 at ±10% tolerance.
- Precision clutch with low reaction forces.
- Trigger repeat protection avoids "double hits".
- Brushless motor: ensures low maintenance.
- Highly durable gear: ensures low maintenance.
- Precision shut-off clutch: ensures quality in tightening.
- Ergonomic rubber grip: ensures operator performance.
- Delivery includes hanger bracket.



Type	Volt V	Drive size	Screw size mm	Torque range Nm	RPM	Weight (w/o battery) kg	Dimensions A mm	B mm
RRI-BS3	18 V	1/4" Hex	M3 - M4	0,8-3	500-1550	0,95	203	238
RRI-BS6	18 V	1/4" Hex	M3 - M5	1-6	300-900	0,95	203	238
RRI-BS9	18 V	1/4" Hex	M3 - M5	1,5-9	300-700	0,95	203	238
RRI-BS12	18 V	1/4" Hex	M4 - M6	2-12	250-550	0,95	203	238

Battery, charger, programmer and power cord have to be ordered separately, see page 52.



DIMENSIONS

PROGRAMMER



FEATURES

- One programmer fits all RRI-BS series tools
- Easy to set the tool speed:
 - high speed for metallic assemblies
 - medium speed for plastic assemblies
 - low speed for special assemblies
- Total used time memory function
- Total count memory function
- Operation count memory function
- Tool identification number

- A green light tells the operator that the preset torque is reached and the tightening is OK.
- A red light and one long "beep" sound tells the operator that the preset torque is not reached, tightening must be performed again.
- A flashing yellow light and five short "beep" sounds give an early warning when it is time to recharge the battery.
- A yellow light and one long "beep" sound means the battery is empty and the tool can't operate. A fully charged battery should be placed to continue working.

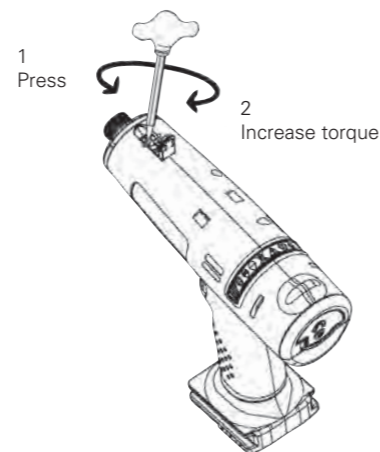
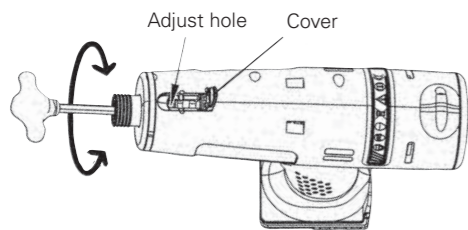
SHUT OFF SCREWDRIVERS



Cordless Screwdriver

RRI-BS Series: Cordless

TORQUE ADJUSTMENT



1. Lift the torque adjustment over. Take the torque adjust tool and insert it to the quick change holder and turn until the adjust hole shows up.

2. Use the torque adjust tool to turn clockwise to increase torque and turn counter clockwise to decrease torque.

NOTE

To avoid danger during the adjustment process, the battery pack must be removed before adjusting the torque.

APPLICATIONS

- Assembly applications where torque accuracy is required.
- Areas where pneumatic or electric tools are impractical to use due to hoses/cables.
- Especially used on car interior assembly.
- Attaching components to the dashboard.
- Hose clips on turbo chargers and air intakes, heating and climate systems and coolant circuits.
- Assembly of components in switch cabinets.

ACCESSORIES



Torque adjustment tool
Order number 00-4507*
* Supplied as standard



Rubber protection cover
Order number C16SC180B

LI-ION BATTERY, CHARGER, PROGRAMMER, POWER CORD & RUBBER PROTECTION COVER FOR BATTERY



Charger



Li-ion battery



Rubber protection cover for battery



Programmer



Power cord

Type	Order number
Charger (40 min.)	B84192B
Li-Ion battery 18V 2 Ah	BB180C-320
Li-Ion battery 18V 4 Ah	BB180C-340
Rubber protection cover for battery 18V 2 Ah	C16180C-20
Rubber protection cover for battery 18V 4 Ah	C16180C-40

Type	Order number
Programmer	B74SC180B
Power cord European style	E86B-VD
Power cord English style	E86B-UK

CORDLESS WRENCHES



Cordless Impact Wrenches

Main Features



SHUT OFF ANGLE WRENCHES



RRI-BA Series: Cordless

These RED ROOSTER cordless angle wrenches with automatic shut-off are very well suited for assembly applications with a need of good torque accuracy. Especially for applications in areas where cables and hoses impede handling flexibility, such as interiors of cars, coaches and trains.



Custom made angle wrenches
See page 55 for cordless angle wrenches tailored to your specific needs.

CHARACTERISTICS

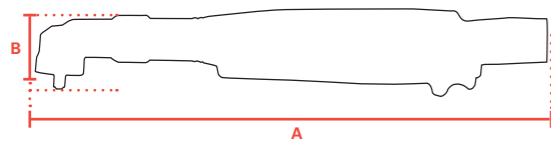
- Brushless motor
- 18 Volt Lithium-Ion battery
- LED status indicates OK - NOK - REVERSE - BATTERY LOW
- Adjustable torque
- Speed 90 to 1000 RPM
- Compact and light weight
- Color ring for torque setting indication

Type	Battery voltage	Battery type	Square drive	Bolt capacity mm	RPM	Torque Nm	Weight kg	Vibration m/s ²	Noise level dB(A)
RRI-BA10S3	18 V	Li-Ion 2 AH / 4 AH	3/8"	4-5	400-1000	3-12	1,50	<2,5	<75
RRI-BA16S3	18 V	Li-Ion 2 AH / 4 AH	3/8"	5-6	300-600	5-18	1,50	<2,5	<75
RRI-BA30S3	18 V	Li-Ion 2 AH / 4 AH	3/8"	6-8	250-450	8-30	1,50	<2,5	<75
RRI-BA35S3	18 V	Li-Ion 2 AH / 4 AH	3/8"	6-8	200-350	10-35	1,60	<2,5	<75
RRI-BA50S3	18 V	Li-Ion 2 AH / 4 AH	3/8"	6-10	200	10-50	2,00	<2,5	<75
RRI-BA70S3	18 V	Li-Ion 2 AH / 4 AH	3/8"	8-12	170	20-70	2,50	<2,5	<75
RRI-BA90S4	18 V	Li-Ion 2 AH / 4 AH	1/2"	8-12	90	30-90	2,50	<2,5	<75

Battery, charger, programmer and power cord have to be ordered separately, see page 52.

DIMENSIONS

Type	A mm	B mm
RRI-BA10S3	441	76
RRI-BA16S3	441	76
RRI-BA30S3	446	76
RRI-BA35S3	446	76
RRI-BA50S3	521	76,3
RRI-BA70S3 / 90S4	535	76,3



ACCESSORIES

Rubber protection cover for type	Order number	
RRI-BA10S3	C16WR	
RRI-BA16S3		
RRI-BA30S3		
RRI-BA35S3		
RRI-BA50S3	C16WRB50	
RRI-BA70S3 / 90S4	C16WRB70	

SHUT OFF ANGLE WRENCHES



Custom Made Products, Cordless, Angle Model

Angle Wrench with geared offset heads



Angle model closed



Angle model open

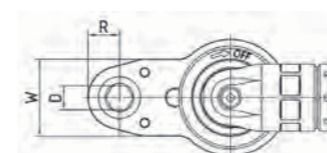


ANGLE MODEL

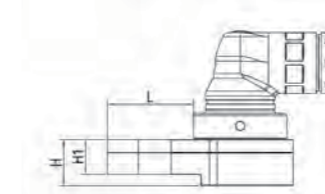
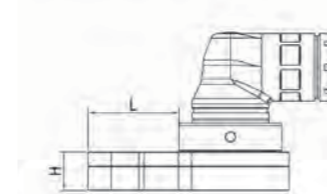
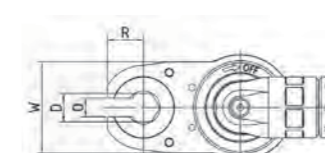
Type	Type	Volt. V	Hex Dimension Max (mm)	Weight kg	Vibration m/s ²	Noise level dB(A)	RPM	Torque range
RRI-BA10BCA	closed	18	12	2	<2.5	<75	950	3-8
RRI-BA16BCA	closed	18	12	2	<2.5	<75	600	5-13
RRI-BA30BCA	closed	18	12	2	<2.5	<75	450	8-18
RRI-BA35BCA	closed	18	12	2	<2.5	<75	350	10-24
RRI-BA10BOA	open	18	19	2,1	<2.5	<75	950	3-7
RRI-BA16BOA	open	18	19	2,1	<2.5	<75	600	5-12
RRI-BA30BOA	open	18	19	2,1	<2.5	<75	450	8-17
RRI-BA35BOA	open	18	19	2,1	<2.5	<75	350	10-23

Battery, charger, programmer and power cord have to be ordered separately, see page 52.

BC (closed)



BO (open)



Please specify your Hex dimension when ordering

DIMENSIONS

Model	W	D	O	R	L	H	H1
BC	32	11	-	13,1	37,7	16	-
BO	40	13	10,2	17	40	21	16

CUSTOM MADE PRODUCTS

Please fill in the below form and contact us for your desired geared offset heads type power tool

Model	Torque range Nm	W	D	O	R	L	L1	H	H1
<input type="checkbox"/> BC									
<input type="checkbox"/> BO									

SHUT OFF ANGLE WRENCHES



Custom made products, Cordless, In-line Model

Angle Wrench with geared offset heads



In-line model closed



In-line model open



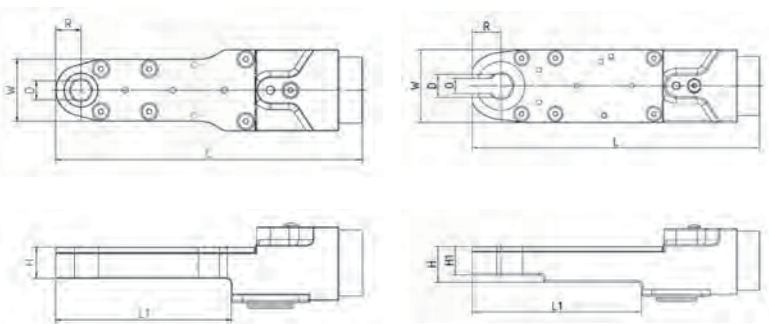
IN-LINE MODEL

Type	Type	Volt V	Hex Dimension Max (mm)	Torque range Nm	RPM	Weight w/o Batt. kg	Vibration m/s2	Noise level dB(A)
RRI-BA10ICA	closed	18	12	5 ~ 11	620	2,2	<2,5	<75
RRI-BA16ICA	closed	18	12	8 ~ 17	380	2,2	<2,5	<75
RRI-BA30ICA	closed	18	12	11 ~ 23	300	2,2	<2,5	<75
RRI-BA35ICA	closed	18	12	14 ~ 31	220	2,2	<2,5	<75
RRI-BA10IOA	open	18	19	7 ~ 13	420	2,3	<2,5	<75
RRI-BA16IOA	open	18	19	10 ~ 22	270	2,3	<2,5	<75
RRI-BA30IOA	open	18	19	13 ~ 28	200	2,3	<2,5	<75
RRI-BA35IOA	open	18	19	16 ~ 38	160	2,3	<2,5	<75

Battery, charger, programmer and power cord have to be ordered separately, see page 52.

IC (closed)

IO (open)



Please specify your Hex dimension when ordering

DIMENSIONS

Model	W	D	O	R	L	L1	H	H1
IO	40	13	10,2	17	166,7	98,7	20	16
IC	32	10	-	13,1	159	91	16	-

CUSTOM MADE PRODUCTS

Please fill in the below form and contact us for your desired geared offset heads type power tool

Model	Torque range Nm	W	D	O	R	L	L1	H	H1
<input type="checkbox"/> IC									
<input type="checkbox"/> IO									

SHUT OFF IMPACT WRENCHES



RRI-BI Series: Cordless

The Red Rooster cordless impact wrench with electronic adjustable shut-off is very well suited for assembly applications with a need of good torque accuracy. Especially in areas where cables and hoses impede handling flexibility.

CHARACTERISTICS

- Brushless motor
- 20 Volt Lithium-Ion battery
- Dynapact impact mechanism
- LED status indicates OK - NOK - REVERSE - BATTERY LOW
- Adjustable torque (50 steps)
- Two step trigger
- Adjustable speed 1500 - 2000 - 2400 RPM
- Compact and light weight



50 programmable stage settings



Type	Battery voltage	Battery type	Square drive	Bolt capacity mm	Max. RPM	Torque Nm	Weight kg	Vibration m/s2	Noise level dB(A)
RRI-BI32T	20 V	Li-ion 2 AH	3/8" Square	6	2.400	6-32	1,0	7,8	93
RRI-BI55T	20 V	Li-ion 2 AH	3/8" Square	8	2.400	15-55	1,1	10,5	94
RRI-BI100T	20 V	Li-ion 2 AH	1/2" Square	8-10	2.400	25-100	1,1	16,4	94
RRI-BI120T	20 V	Li-ion 2 AH	1/2" Square	8-12	2.400	30-120	1,3	13,9	90

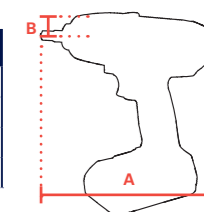
*Battery and charger have to be ordered separately

CHARACTERISTICS



DIMENSIONS

Type	A mm	B mm
RRI-BI32T	193	29
RRI-BI55T	193	29
RRI-BI100T	198	29
RRI-BI120T	198	29



ACCESSORIES



Type	Order number
Charger (40 min.)	31084-200E
Li-Ion battery 20V 2.0Ah	BB200E-320
Li-Ion battery 20V 4.0Ah	BB200E-340
Protection cover RRI-BI serie	3116-IWCP-01
Protection cover battery 2.0 Ah	33116-B180E-01
Protection cover battery 4.0 Ah	33116-B180E-02

RIVETERS

Main Features



Pneumatic
Riveters

RIVETERS

RRI Series



Pneumatic
Riveters



RRI-PR40740



RRI-PR40948



RRI-PR41764



RRI-4010



RRI-4011

CHARACTERISTICS

- Fast and powerful
- Low air consumption
- Ergonomic and lightweight
- Nose pieces for 4.0 and 4.8 mm
- With vacuum for vertical work
- Including keys, oiler, and rubber stand

Rivet Nut Setter



RRI-PRN41612M

CHARACTERISTICS

- fast and powerful
- low air consumption
- ergonomic and lightweight
- adapters for M4, M5, M6, M8, M10 and M12
- Including case, keys, oiler and rubber stand

RIVETERS

RRI Series

PNEUMATIC-HYDRAULIC RIVETERS WITH COLLECTOR

Type	Brand	Traction (kg)	Capacity rivets diameter	Air cons. l/stroke	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-PR40740	RRI	700	4,0	1,50	1,7	PT 1/4"	9,5	1,0	83
RRI-PR40948	RRI	920	4,8*	1,2	1,9	PT 1/4"	9,5	1,0	82
RRI-PR41764	RRI	1.700	6,4*	1,6	2,5	PT 1/4"	9,5	1,0	82
RRI-4010	RRI	900	until 4,8	1,15	1,5	PT 1/4"	6,5	1,5	76
RRI-4011	RRI	1.045	until 6,4	1,80	2	PT 1/4"	6,5	0,4	76

* all materials

PNEUMATIC-HYDRAULIC RIVET NUT SETTER

Type	Brand	Traction (kg)	Capacity rivets diameter	Air cons. l/stroke	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-PRN41612M	RRI	1.600	M4-M12 (M12 at 7 bar)	1,5	2,2	PT 1/4"	10	1,0	82

ACCESSORIES

RRI-PR40740

Accessory	Order number
Nose piece for:	
3/32 (2,4mm)	CP612703
3/16 (3,2mm)	CP612704
5/32 (4,0mm)	CP612705
Service kit	CP0715SK

RRI-PR41764

Accessory	Order number
Nose piece for:	
4,8 mm	CP612706 *
6,4 mm	CP612708 *
4,8 mm (Monobolt)	CP612746 *
6,4 mm (Monobolt)	CP612748 *
Backen	CP819303 *

RRI-4011

Accessory	Order number
Nose piece for:	14463 *
2,4 mm	14464 *
3,2 mm	14465 *
4,0 mm	14466 *
4,8 mm	14468 *
6,4 mm	612716 *
4,8 mm T-Rivet Female inlet body	922A18 *
Rivet deflector	14470 *
Multi-wrench A	612904 *
Set key B	918905 *

* Supplied as standard

RRI-PR40948

Accessory	Order number
Nose piece for:	
4,0 mm	CP612705 *
4,8 mm	CP612706 *
4,8 mm (Monobolt)	CP612746 *
Backen	CP12303 *

RRI-4010

Accessory	Order number
Nose piece for:	
- 3,2 mm	10416-1 *
- 4,0 mm	10416-2 *
- 4,8 mm	10416-3 *
Bottle for spent	
Rivets	10448 *
Wrench	10447 *

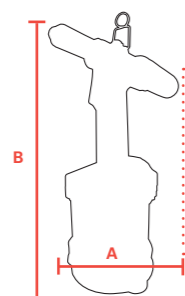
RRI-PRN41612M

Accessory	Order number
Bolt M4:	CP258A12 *
Bolt M5:	CP258A13 *
Bolt M6:	CP258A14 *
Bolt M8:	CP258A15 *
Bolt M10:	CP258A16 *
Bolt M12:	CP258A17 *

* Supplied as standard

DIMENSIONS

Type	A mm	B mm
RRI-PR40740	301	274
RRI-PR40948	290	320
RRI-PR41764	329	350
RRI-PRN41612M	298	345
RRI-4010	159	299
RRI-4011	198	315



ACCESSORIES

Rubber protection covers & Service sets



RUBBER PROTECTION COVERS

Type	Order number			
RRI-30	RRI-30T	RRI-30A	RRI-30AT	I40-109-A05
RRI-40	RRI-40T	RRI-40A	RRI-40AT	
RRI-50	RRI-50T	RRI-50A	RRI-50AT	
RRI-40X	RRI-40X	RRI-50X	RRI-50AX	I40X-109
RRI-60X	RRI-60AX			I60X-109
RRI-60	RRI-60T	RRI-60A	RRI-60AT	I60-109-A05
RRI-70	RRI-70T			I70-109-A05
RRI-80	RRI-80T			I80-109
RRI-90	RRI-90T			I90-109-A05
RRI-100	RRI-100T			I100-109-A05
RRI-130	RRI-130T			I130-109-A05
RRI-150	RRI-150T			I150-109-A05
RRI-180	RRI-180T			I180-109-A05
RRI-200	RRI-200T			I200-109

SERVICE SETS

You will need service sets with spare parts if you are going to change the oil. For quick service we advise you to use a vacuum pump (Y EVP-1*) and oil tank (Y EVP-1T*)

Always use oil with the right specifications when changing oil. Only then you will have an optimal tool power and a minimum oil consumption. We recommend RED ROOSTER oil for impulse wrenches: 01-0507. (p.130)

SERVICE SETS CONTAINING

O-rings, back up rings and springs for impulse mechanisms for oil change

SERVICE SETS

Type	Order number	Type	Order number	Type	Order number
RRI-30(X)	I30RK	RRI-30A(X)	I30RK	RRI-30T	IS30RK
RRI-40(X)	I40RK	RRI-40A(X)	I40DRK	RRI-40T	IS40RK
RRI-50(X)	I50RK	RRI-50A(X)	I50DRK	RRI-50T	IS50RK
RRI-60(X)	I60RK	RRI-60A(X)	I60DRK	RRI-60T	IS60RK
RRI-70	I70RK	RRI-70A	I70DRK	RRI-70T	IS70RK
RRI-80	I80RK	RRI-30SA	I30SDRK	RRI-80T	IS80RK
RRI-90	I90RK	RRI-40SA	I40SDRK	RRI-90T	IS90RK
RRI-100	I100RK	RRI-50SA	I50SDRK	RRI-100T	IS100RK
RRI-130	I130RK	RRI-60SA	I60SDRK	RRI-130T	IS130RK
RRI-150	I150RK	RRI-70SA	I70SDRK	RRI-150T	IS150RK
RRI-180	I180RK	RRI-50R	I50RRK	RRI-180T	IS180RK
RRI-200	I200RK	RRI-60R	I60RRK	RRI-200T	IS200RK
RRI-30S	I30SRK	RRI-70R	I70RRK	RRI-30ST	IS30SRK
RRI-40S	I40SRK	RRI-70RG	I70RGRK	RRI-40ST	IS40SRK
RRI-50S	I50SRK	RRI-70RH	I70RHRK	RRI-50ST	IS50SRK
RRI-60S	I60SRK	RRI-80RH	I80RHRK	RRI-60ST	IS60SRK
RRI-70S	I70SRK	RRI-50RA	I50RDRK	RRI-70ST	IS70SRK
		RRI-60RA	I60RDRK	RRI-80ST	IS80SRK
		RRI-70RA	I70RDRK		

ACCESSORIES

Tool Holder



Order number	Ø	For type
61022-TH001	42 mm	RRI-SP11602, RRI-SP10902, RRI-SP21704, RRI-SP21104, RRI-SP20705, RRI-SP31706, RRI-SP31108, RRI-SP30710, RRI-SP30511, Y41A(JQ), Y46A(E)(JQ), Y56A(E)(JQ), Y61A(E)
61022-TH002	47 mm	YS-E600, YS-E800, YS-E900, YS-E950, Tka60(A), Tka70(A), Tka80(A), YEX120(A), YEX150(A), RRI-30T(AT), RRI-40T(AT), RRI-50T(AT), RRI-60T(AT), RRI-30(A), RRI-40X(AX), RRI-50X(A), RRI-60(AX), YLTX50A, YLTX60A, YLTX50E, YLTX60E, YLT60AL(EL), YLTX70A(E), YLT70AL(EL), YLa60A(JQ), YLa70A(JQ), YLa80A(JQ), YLa60E(JQ), YLa70E(JQ), YLa80E(JQ)
61022-TH003	58 mm	RRI-BS3, RRI-BS6, RRI-BS9, RRI-BI32T, RRI-BI55T, RRI-BI100T RRI-BI120T, Tka600(A), Tka700(A), Tka800, Tka900, Tka90, Tka110, Tka120, RRI-70T(AT), RRI-80T, RRI-90T, RRI-70(A)/80/90, YLTX80E, YLT80EL, YLTX110E, YLT110EL, YLa90E, YLa110E, YLa120E, Y70E(JQ)
61022-TH004	73 mm	E-M500, E-M700, E-M900, E-M1100, Tka1110, Tka1200, Tka1400, Tka1500, Tka150, YEX-1400, RRI-100T, RRI-130T, RRI-150T, YLTX120E, YLT120EL, YLTX140E, YLT140EL, YLa140E, Y140(JQ)

Order number	For type
61022-TH005	RRI-BIM series RRI-BS series RRI-BI series RRI-BA series



ACCESSORIES

ACCESSORIES

For YZ-N and YZ-T series cordless tools



Li-Ion-battery
18 V/2.0 Ah



Charger
AC100~240 Volt ±10%
50/60Hz

Type	Order number
Li-Ion-Battery (0,41 kg) 18V 2 Ah	BPL-1820
Charger 18 Volt (40 Min.)	BC0075G

Programming accessories for YZ-T series cordless tools



Programming console



Cable

Type	Order number
Programming console	PC-1-YZ-T
Cable (2mtr)	CC-1

YOKOTA TORQUE MEASURING EQUIPMENT

YOKOTA torque measuring equipment (YET Series) is especially designed to check and test the functioning and performance of impulse wrenches. All specified torque figures in this brochure are measured on a YOKOTA torque tester (YET series), with 0,63 MPa air pressure (dynamic). This is a static torque tester. Torque values may differ with other measuring equipment and/or joints (hard/soft).

For type	Range
YET-501C	5-50 Nm
YET-2001C	20-200 Nm
YET-5001C	100-500 Nm



VALVES FOR SYSTEM WRENCHES

Description	Order number
3/8" NC	VP542-5Y01-03FA
3/8" NO	VP542-5Y01-03FB
1/2" NC	VP742-5Y01-04FA
1/2" NO	VP742-5Y01-04FA



2 STEP VALVE SET

Description	Order number
3/8" NC	YETC-2 SVD 3/8
1/2" NC	YETC-2SVD 1/2



ELECTRONIC VALVE FOR TWO STEP TIGHTENING

Description	Order number
1/2" NC	ITV3050-404BS3-CPL



TOOL CABLE FOR YOKOTA SYSTEM WRENCHES

Tool cable	Order number
7 meter, 2 connectors, female	7802-1581-00-06
10 meter, 2 connectors, female	7802-1581-00-08
12 meter, 2 connector, female	7802-1581-00-09
15 meter, 2 connector, female	7802-1581-00-10
10 meter extension cable (f/m)	7802-1580-00-09
Connection cable, 50 cm	7802-1579-00-01

SPECIAL JOINT FOR YTC-3 CONTROLLER

For type	Order number
Special joint for 3/8" tool	7671-0077-00-97
Special joint for 1/4" bigger size tool	7671-0077-00-98
Special joint for 1/4" smaller size tool	7671-0077-00-99



ACCESSORIES

Rubber Protection Cover for impulse- & system wrenches



For type	Order number
E-M500	0368-0029-00-01
E-M700	0368-0029-00-01
E-M900	0368-0029-00-01
E-M1100	0378-0029-00-01

For type	Order number
YED-200	0409-0029-00-00
YEX-120	0093-0029-00-00
YEX-150	0093-0029-00-00
YEX-501	0260-0029-00-w00
YEX-701	0143-0029-00-00
YEX-901	0261-0029-00-00

For type	Order number
YZ-N600A	0454-0029-00-00
YZ-N600E	0454-0029-00-00
YZ-N800A	0455-0029-00-00
YZ-N800E	0455-0029-00-00
YZ-N900E	0456-0029-00-00
YZ-N950E	0457-0029-00-00

TKa60	0186-0029-00-00
TKa70	0186-0029-00-00
TKa80	0193-0029-00-00
TKa90	0181-0029-00-00
TKa110	0187-0029-00-00
TKa120	0342-0029-00-00
TKa140	0341-0029-00-00
TKa150	0343-0029-00-00
TKa600	0358-0029-00-00
TKa700	0358-0029-00-00
TKa800	0360-0029-00-00
TKa900	0355-0029-00-00
TKa1110	0356-0029-00-00
TKa1200	0388-0029-00-00
TKa1400	0357-0029-00-00
TKa1500	0384-0029-00-00

YEX-1400	0323-0029-00-00
YEX-1900	0321-0029-00-00
YEX-3000	0407-0029-00-00

YZ-T600A	0458-0029-00-00
YZ-T600E	0458-0029-00-00
YZ-T800A	0459-0029-00-00
YZ-T800E	0459-0029-00-00
YZ-T900E	0460-0029-00-00
YZ-T900E	0461-0029-00-00

YLa60	0189-0029-00-00
YLa70	0189-0029-00-00
YLa80	0191-0029-00-00
YLa90	0188-0029-00-00
YLa110	0190-0029-00-00
YLa120	0345-0029-00-00
YLa140	0346-0029-00-00

YLT50	0371-0029-00-00
YLT60	0371-0029-00-00
YLT70	0372-0029-00-00
YLT80	0373-0029-00-00
YLT110	0379-0029-00-00
YLT120	0380-0029-00-00
YLT140	0381-0029-00-00
YLT150	0382-0029-00-00

YS-e600	0444-0029-00-00
YS-e800	0445-0029-00-00
YS-e900	0446-0029-00-00
YS-e950	0447-0029-00-00

Y-41	0161-0029-00-00
Y-46	0160-0029-00-00
Y-56	0159-0029-00-00
Y-61	0158-0029-00-00
Y-70	0135-0029-00-00
Y-90	0141-0029-00-00
Y-100	0334-0029-00-00
Y-130	0335-0029-00-00
Y-140	0412-0029-00-00
Y-T40	0169-0029-00-00
Y-T45	0164-0029-00-00
Y-T55	0164-0029-00-00
Y-T70	0166-0029-00-00
Y-T90	0167-0029-00-00

YX-180	0089-0029-00-00
YX-280	0081-0029-00-00
YX-380	0086-0029-00-00
YX-500	0077-0029-00-01
YX-700	0129-0029-00-01
YX-900	0237-0029-00-01
YX-1100	0241-0029-00-00
YX-1400	0322-0029-00-00
YX-1900	0320-0029-00-01
YX-2400	0406-0029-00-01
YX-3000	0405-0029-00-00

YBX-50	0928-0029-00-00
YBX-600T	0351-0029-00-00
YBX-800T	0352-0029-00-00

ACCESSORIES

Service Set

You will need these service sets with spare parts if you are going to change the oil. For quick service we advise you to use a vacuum pump (YEVP-1*) and oil tank (YEVP-1T*)

Service sets containing: O-rings, back up rings and springs for impulse mechanisms for oil change.



PLEASE NOTE!

Always use oil with the right specifications when changing oil. Only then you will have an optimal tool power and a minimum oil consumption. We recommend NOBP oil for the impulse unit.

For type	Order number
E-M500	0377-0991-00-99
E-M700	0377-0991-00-99
E-M900	0368-0991-00-99
E-M1100	0378-0991-00-99

For type	Order number
YEX-120	0089-0991-01-99
YEX-150	0089-0991-01-99
YEX-300S	0086-0991-01-99
YEX-500S	0077-0991-02-99
YEX-701	0143-0991-00-99
YEX-901	0237-0991-01-99
YEX-1400	0323-0991-00-99
YEX-1900	0320-0991-00-99
YEX-3000	0405-0991-00-99

For type	Order number
YX-80	0095-0991-00-99
YX-180	0089-0991-01-99
YX-280	0089-0991-01-99
YX-380	0086-0991-01-99
YX-500S (C)	0086-0991-01-99
YX-500	0077-0991-02-99
YX-700 (S)	0129-0991-00-99
YX-700C	0281-0991-01-99
YX-900	0237-0991-01-99
YX-1100	0237-0991-01-99
YX-1400	0322-0991-00-99
YX-1900	0320-0991-00-99
YX-2400	0320-0991-00-99
YX-3000	0405-0991-00-99
YX-4500	0722-0991-00-99

TKa-60	0186-0991-00-99
TKa-600	0186-0991-00-99
TKa-70	0186-0991-00-99
TKa-700	0186-0991-00-99
TKa-80	0193-0991-00-99
TKa-800	0193-0991-00-99
TKa-90	0181-0991-00-99
TKa-900	0181-0991-00-99
TKa-110	0187-0991-00-99
TKa-1110	0187-0991-00-99
TKa-120	0342-0991-00-99
TKa-140	0341-0991-00-99
TKa-1400	0341-0991-00-99
TKa-150	0343-0991-00-99
TKa-1500	0343-0991-00-99

YLa60	0199-0991-01-99
YLa70	0189-0991-00-99
YLa80	0191-0991-00-99
YLa90	0188-0991-00-99
YLa110	0190-0991-00-99
YLa120	0345-0991-00-99
YLa140	0346-0991-00-99

Y-41	0095-0991-00-99
Y-46	0273-0991-01-99
Y-56	0158-0991-01-99
Y-61	0158-0991-0ç1-99
Y-70	0135-0991-03-99
Y-90	0141-0991-01-99
Y-100	0334-0991-01-99
Y-130	0335-0991-00-99
Y-140	0412-0991-02-09

YLT50	0383-0991-01-99
YLT60	0371-0991-01-99
YLT70	0372-0991-01-99
YLT80	0373-0991-01-99
YLT110	0379-0991-01-99
YLT120	0380-0991-01-99
YLT140	0381-0991-01-99
YLT150	0382-0991-01-99

YBX-1	0158-0991-01-99
YBX-50	0158-0991-01-99
YBX-600T	0189-0991-00-99
YBX-800T	0191-0991-00-99

YLTX50	0389-0991-00-99
YLTX60	0390-0991-00-99
YLTX70	0391-0991-00-99
YLTX80	0392-0991-00-99
YLTX110	0395-0991-00-99
YLTX120	0396-0991-00-99
YLTX140	0398-0991-00-99
YLTX150	0399-0991-00-99

YED-200	0409-0991-00-99
YED-240S	0411-0991-02-99

YS-e600	0193-0991-00-99
YS-e800	0193-0991-00-99
YS-e900	0181-0991-00-99
YS-e950	0181-0991-00-99

YZ-N600A	0193-0991-00-99
YZ-N600E	0193-0991-00-99
YZ-N800A	0193-0991-00-99
YZ-N800E	0193-0991-00-99
YZ-N900E	0181-0991-00-99
YZ-N950E	0181-0991-00-99

YZ-T600A	0193-0991-00-99
YZ-T600E	0193-0991-00-99
YZ-T800A	0193-0991-00-99
YZ-T800E	0193-0991-00-99
YZ-T900E	0181-0991-00-99
YZ-T950E	0181-0991-00-99

INDUSTRIAL AIRTOOLS



INDUSTRIAL AIR TOOLS

The Industrial air tool program we offer consists of three quality brands; Yokota, Toku and Red Rooster. Yokota and Toku are both Japanese brands of the highest, most durable quality. Red Rooster black is a high quality series that have optimal ergonomic characteristics and are suitable for highly intensive use, accompanied by a black Red Rooster logo. The Red series, recognizable by a red logo, are for general applications and situations where the intensity of work is lower yet quality is required. The combination of these three brands offer the user the security of finding the right tool for each application. With a sharp focus on ergonomics, productivity, sustainability and reliability of both your tools and processes.

The assortment of Industrial Air Tools varies from a large variety of impact wrenches to ratchet wrenches, drills, breaking hammers, long needle scalers to saws, grinders and sanders. Air tools are very sustainable due to their robustness, extremely long lifetime and easy maintenance.

In order to maintain the long lifetime of the tools and full operational capacity it is crucial to ensure clean and sufficient air. The right air quality determines the lifetime and stable performance of the tool. We advise SMC air treatment components. Please refer to pages 144-145 for the full range of SMC Air Treatment equipment.



INDUSTRIAL AIR TOOLS



IMPACT WRENCHES

An impact wrench is the most used and known compressed air tool. It is used almost everywhere there is a need to tighten and loosen bolts and nuts. In car and truck workshops, construction, shipyards, the petrochemical industry to name but a few. Our impact wrenches are available in a variety of shapes and sizes. Pistol, straight and angle, starting with a square drive of 3/8" up to 2 1/2". On the following pages more information can be found regarding the various operating mechanisms.

PAGE 72-78



RATCHET WRENCHES

Our Red Rooster and Toku ratchet wrenches are used for light workshop applications to assemble or disassemble bolts and nuts in limited spaces. The Yokota ratchet wrenches are used for industrial assembly, where accurate torque is required while accessibility is limited. By turning the wrench 180 degrees the joint can be loosened.

PAGE 79-80



SCREWDRIVERS

Our screwdrivers are available in 1-hammer, 2-hammer, direct drive and clutch mechanisms. The 1-hammer system makes 1 impact per rotation which causes a higher energy per blow. The 2-hammer system makes 2 impacts per rotation and has a higher frequency at less force per blow. The direct drive screwdrivers are suitable for self-tapping screws and wood screws. Screwdrivers with a clutch type mechanism, with adjustable torque, are used for general applications. When the torque is reached, the mechanism slips.

PAGE 81-82



DRILLS

Our drills are suitable for a large number of applications. Both for use in the industry, steel and aluminium processing, car/truck manufacturing, but also the general workshop-use is covered. Yokota drills are executed with a 2-step trigger. The first step is used for placing the drill correctly in the workpiece, the second step is used for drilling at high speed. The silencers can be turned 360 degrees. Please take care to choose the right capacity drill. Capacity and RPM of these tools are matched.

PAGE 83-84



TAPPING MACHINE

The Red Rooster universal tapping machine has been developed for thread tapping with a hand-held tool. The direction of rotation and speed are easily adjusted with the rocker switch. An ergonomically developed tool that fits well in the hand. Thanks to the quick-change holder, different sizes of tap holders can be changed quickly and easily.

PAGE 85



GRINDERS AND SANDERS

We offer a large variety of grinders in straight, angle and vertical versions. Our grinders are suitable for numerous grinding, fettling and finishing applications. Most are equipped with a safety handle, lever and silencer. Our Sanders are suitable for metal finishing and woodworking applications and also equipped with a silencer. All belt sanders are equipped with an adjustable silencer and safety lever. They are suitable for nearly all materials.

PAGE 86-95



AIR HAMMERS

Air hammers are extremely strong and compact tools. Due to the simple construction these lightweight tools offer power and high impact force. They can be used safely and continuously in places where electric hammers should not be used. Various possible applications: cleaning of welding seam, finishing of castings, removal of tiles or breaking of concrete.

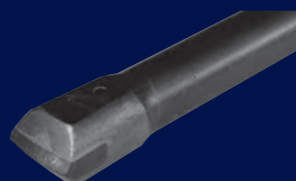
PAGE 97-98



BREAKERS & ROCK DRILLS

Our breakers and rock drills have been developed for a wide range of heavy duty applications. Breaking or removing concrete, drilling in concrete or natural stone and opening up asphalted streets are some of the most common applications. The power and high impact force is unbeatable, and they are highly useful in areas where electric tools are unsafe or not strong enough.

PAGE 99-100



CHISELS AND DRILLS FOR HAMMERS

We offer a sizeable range of chisels and drills in numerous shank sizes and versions. We largely focus on our own range of pneumatic hammers but we also have a program of chisels and drills for (electric) hammers of other brands.

PAGE 101-107



NEEDLE AND LONG REACH SCALERS

Our program of needle scalers consists of straight and pistol versions. We also offer sets that include a chisel holder and anvil and a vibration-reduced model. The needle scalers can be used to remove rust, old paint-layers or concrete from horizontal and vertical surfaces or the removal of welding flux from a welding seam. We also have a range of long needle scalers that offer great ergonomics.

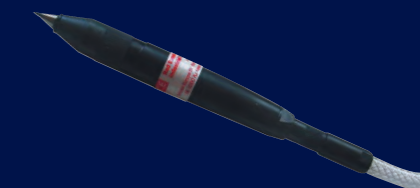
PAGE 108-110



SAWS

Our program contains three different types of saws. Our lightweight reciprocating saws are suitable for use in metal sheet work, but also for other materials like aluminium, plastics, wood and steel. Our pipe saw is ideal for heavy industrial use and for cutting pipes up to a diameter of 530mm. Our chain saw can be used to saw embankments and when electric or petrol engines are not suitable for the working environment.

PAGE 111-112



ENGRAVING PEN

The Red Rooster engraving pen enables you to write smoothly on various materials, such as steel, bronze, alloy and copper, through its high frequency. It can also be used on stainless steel, as the tip is tungsten carbide. Three sizes of tips are available with medium size delivered as standard. With the engraving pen you can mark your tools and produce nameplates.

PAGE 113



POWER CUTTERS

Power cutters for round materials have simplified the process of cutting and pressing in mass production. Versatile applications of the power cutter by selecting suitable blades, make it possible to increase production. We offer a large variety of different types of blades. These power cutters operate at a pressure of 0,4-0,5 MPa.

PAGE 114-115



TIP DRESSERS & HOG RINGERS

Yokota tip dressers are used for reshaping spot-welding electrodes. Blades for these tip dressers are separately available and can be custom made according to tip specifications. Yokota hog ringers are used to clamp upholstery on mesh with the help of C-shaped rings.

PAGE 116



DOWEL PIN PULLERS

The Yokota dowel pin puller is used in matrix, casting and press-moulding industries, for setting and removing dowel pins in moulds or presses. The dowel pin puller is an easily operated air tool that simplifies the pulling or hammering operation of threaded dowel pins, saving time and improving work efficiency.

PAGE 117



MULTICUTTER

Our Red Rooster multi cutter with sawblade is ideal for cutting steel plate. If needed, the cutting can be started in the middle of the plate. The multi cutter can also be used for the removal of urethane bonded windows and as a sander with a triangle sanding pad.

PAGE 118



BARREL AND SUMP PUMPS

The Yokota YP pumps are high quality sump pumps for use on board of ships. The pumps are made of bronze and especially suitable to use in acid environments. The Yokota barrel pump is developed to pump liquids from barrels such as fuel, oil, water or chemicals.

PAGE 119

IMPACT WRENCHES

THE RIGHT CHOICE!

Most makes of impact wrenches look very similar. Prices may however differ. This is mostly due to the quality of the impact mechanism. If the tool is only used sporadically, then it is advisable to buy a low cost model, if the tool is going to be used frequently then the industrial quality models become interesting. Manufactured with stronger materials and better quality impact mechanisms, they guarantee a longer, more durable and trouble free lifetime. Low cost tools are mostly executed with the single hammer impact mechanism. The industrial ones however, have a pin-clutch (Dynapact) or twin hammer system. Noise, vibration and weight also influence the price. An industrial wrench has a better silencer and less vibration. In tyre workshops where impact wrenches are used continuously, these are the most important factors. Nowadays modern impact wrenches are executed with a rear exhaust (outgoing airflow through the hand grip), while many of the conventional wrenches have an exhaust situated at the front of the tool. This can cause brake dust in the face of the operator during the process of untightening wheel nuts. Highly uncomfortable!

TORQUE

Often people think that the specified torque level of an impact wrench equals the performance of the tool, this is not correct. Impact wrenches can not be compared on the specified torque only, as there is no standard for measuring the torque. The specified torque depends on various influences: the impact mechanism, weight, air consumption and quality.

CAUTION WHEN TIGHTENING!

Impact wrenches are designed to disassemble bolts and nuts. In practice they are also used for tightening nuts and bolts. But be aware that bolts and nuts can easily be damaged by the high power of an impact wrench. This could have serious consequences when it comes to the legal product responsibility regulations and the ISO certification. The tightening of nuts and bolts should be done by torque adjustable tools (see chapter one: assembly tools).

AIR CONSUMPTION

To choose the right compressor one needs to know how much air l/min a tool uses and how the tool will be used, continuously or intermittently. There are 2 ways to estimate the air consumption of air tools:

Method 1

Measure air consumption with continuous operation

Method 2

Measure with intermittent operation

CONTINUOUS OPERATION

The total consumption when the trigger is pulled for a period of one minute (this is what you will find in this catalogue). If you use our tool like this you need a compressor with the capacity stated.

INTERMITTENT OPERATION

The air consumption is measured when the trigger is pulled intermittently for say 25% of a minute, which gives 25% intermittence. If you use your tool like this you need a compressor with 25% of the capacity stated.

INTERMITTENCE

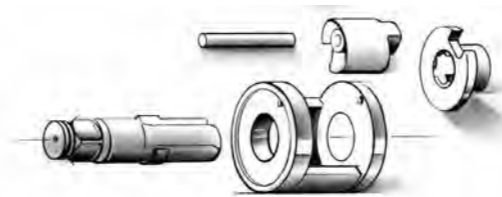
The average time that a tool is calculated to be used during a normal working cycle (1 min.). Intermittence varies between different types of tools, for example a grinding tool is normally in use for a long period and therefore has a high intermittence. An impact wrench is normally used in short bursts and therefore has a lower intermittence.

EXAMPLE

If at 100% intermittence, the air consumption is 800 l/min then at 25% intermittence the air consumption would be 200 l/min i.e. 25% of 800 l/min.

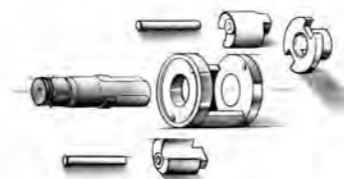
IMPACT WRENCHES

Mechanisms



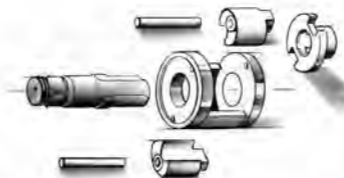
1-HAMMER SYSTEM

The 1-hammer system makes 1 impact per rotation at 1 side of the anvil. This causes a higher energy per blow. The impact wrenches with the 1-hammer system are especially suitable for disassembly jobs.



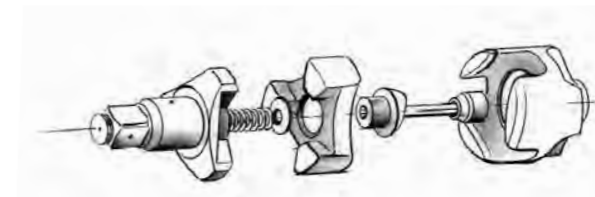
2-HAMMER SYSTEM

The 2-hammer system makes 2 impacts per rotation at both sides of the anvil.



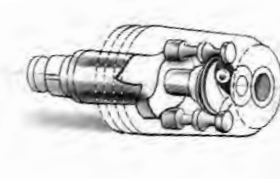
2-HAMMER SYSTEM

The twin-hammer system makes 2 impacts per rotation at both sides of the anvil. Same principal as the 2-hammer system, manufactured differently.



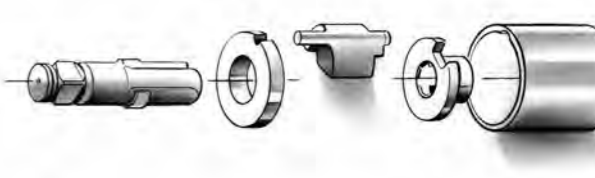
3-JAW SYSTEM

The 3-jaw system gives, per rotation, one impact on all 3 jaws of the anvil. This gives a high torque output. Impact wrenches with the 3-jaw system are only suitable for hard joints.



DYNAPACT IMPACT SYSTEM

The Dynapact impact system has two pins hammering on the anvil, making 1 impact per rotation at both sides of the anvil at the same time. This system give high torque output and is well balanced.



CLOSED HAMMER SYSTEM

The closed hammer system. This construction, without loose hammerpin, will prevent breakage. The working principle is based on the 1-hammer system.

IMPACT WRENCHES

Angle and pistol models

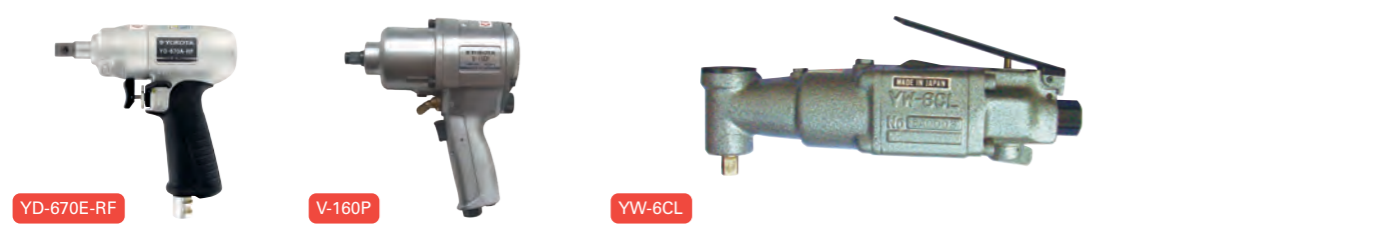
Red Rooster



Toku



Yokota



IMPACT WRENCHES

Angle and pistol models

PISTOL MODEL

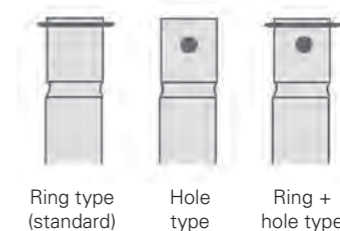
Type	Brand	Square drive ⁴⁾	Type	Bolt capacity mm	Impact-mechanism	RPM	Torque Nm	Power adjustment ⁵⁾	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
YD-670E-RF	YOKOTA	3/8"	E	6	Twin-hammer	7.500	90	R/L 4 levels	6,1	0,98	PT 1/4"	6,5	1,5	75
MI-12	TOKU	3/8"	R	12	Twin-hammer	9.500	160	R/L 4 levels	5,3	1,2	PT 1/4"	6,5	9,9	82
MI-16M3/8	TOKU	3/8"	R	12	Twin-hammer	6.200	270	R/L 4 levels	9,3	1,5	PT 1/4"	6,5	4,6	87
RR-16N 3/8	RR	3/8"	R	12	Twin-hammer	11.000	340	R/L 3 levels	8,7	1,3	PT 1/4"	6,5	4,6	83
MI-16M1/2	TOKU	1/2"	R	12	Twin-hammer	6.200	310	R/L 4 levels	9,3	1,5	PT 1/4"	6,5	4,6	87
RR-16N 1/2	RR	1/2"	R	14	Twin-hammer	11.000	405	R/L 3 levels	8,7	1,2	PT 1/4"	6,5	4,6	83
RR-15P	RR	1/2"	R	14	1-Hammer	6.900	430	R/L 4 levels	8	2,4	PT 1/4"	10	11	82
RRI-14 ^{2a)}	RRI	1/2"	R	14	Twin-hammer	9.000	440	R 2 levels	8,5	1,1	PT 1/4"	6,5	5,8	89
MI-14S 1/2	TOKU	1/2"	R+H	16	Twin-hammer	11.700	390	R/L 4 pos	6	1,15	PT 1/4"	10	8	88
RRI-17 1/2 ^{2b)}	RRI	1/2"	R	16	Twin-hammer	10.000	450	R 3 levels ⁶⁾	10,8	1,3	PT 1/4"	10	6,8	89
RRI-17 3/8 ^{2b)}	RRI	3/8"	R	16	Twin-hammer	10.000	390	R 3 levels ⁶⁾	10,8	1,3	PT 1/4"	10	6,8	89
RR-18N	RR	1/2"	R	16	Twin-hammer	7.000	815	R/L 3 levels	12,1	2	PT 1/4"	10	4,8	83
RR-18N T	RR	1/2"	R	16	Twin-hammer	7.000	815	90 Nm ¹⁾	12,1	2	PT 1/4"	10	3,1	83
RR-160H	RR	1/2"	R	16	Dynapact	8.000	580	R/L 4 levels	7	2,3	PT 1/4"	10	11	82
V-160P	YOKOTA	1/2"	R	16	1-Hammer	6.500	580	R/L 4 levels	12,6	2,8	PT 1/4"	10	13	84
MI-17MG	TOKU	1/2"	R	16	Twin-hammer	5.500	650	R/L 4 levels	8,8	2,4	PT 1/4"	10	7,4	88
MI-17C ^{2c)}	TOKU	1/2"	R	16	Twin-hammer	8.800	650	R3/L2 levels	13,3	1,84	PT 1/4"	10	5,7	85
RRI-21 ^{2d)}	RRI	1/2"	R	20	Twin-hammer	7.500	900	R 3 levels ⁶⁾	12,6	2	PT 1/4"	10	3,4	86
MI-20S	TOKU	3/4"	R+H	20	Twin-hammer	4.500	900	R/L 4 pos	15	3,25	PT 3/8"	10	8,3	90
RR-20PN	RR	3/4"	R+H	20	1-Hammer	4.800	720	R/L levels	10,5	4,6	PT 1/4"	10	4	87
RRI-25S	RRI	3/4"	R+H	24	Twin-hammer	5.500	1.300	R 2 pos	9	2,85	PT 3/8"	10	10,8	95
MI-20PG	TOKU	3/4"	R+H	24	Twin-hammer	5.000	1.000	R/L 4 levels	15	3,9	PT 3/8"	10	4,6	92
MI-20PL	TOKU	3/4"	R+H	24	Twin-hammer	5.000	1.000	R/L 4 levels	15	4	PT 3/8"	10	4,6	92
RR-24N	RR	3/4"	R+H	24	Twin-hammer	5.500	1.625	R 3 levels ⁶⁾	16	3,4	PT 3/8"	10	4,8	90
RRI-25 ^{2e)}	RRI	3/4"	R+H	24	Twin-hammer	5.000	1.800	R 3 levels ⁶⁾	17	3,7	PT 3/8"	10	7,6	87
RR-24N 1	RR	1"	R+H	24	Twin-hammer	5.500	1.900	R 3 levels ⁶⁾	16	3,7	PT 3/8"	10	4,8	90
MI-3800PR	TOKU	1"	R+H	36	Closed hammer	4.500	2.100	R/L 4 levels	15	9,3	PT 1/2"	13	8	84
MI-3800PLR ³⁾	TOKU	1"	R+H	36	Closed hammer	4.500	2.000	R/L 4 levels	15	9,9	PT 1/2"	13	8	84

ANGLE MODEL

Type	Brand	Square drive	Type ⁴⁾	Bolt capacity mm	Impact-mechanism	RPM	Torque Nm	Power adjustment ⁵⁾	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
YW-6CL	YOKOTA	3/8"	H	6	1-Hamer	6.500	145	-	4,2	1,6	PT 1/4"	6,5	18	81
RR-15A	RR	1/2"	R	14	Jumbo-Hammer	7.000	310	R 2 levels	5,3	1,8	PT 1/4"	9,5	5,8	89

1) RR-18NT: maximum tightening torque 90NM, full power in untightening
 2a) Max. break loose torque RRI-14: 610Nm
 2b) Max. break loose torque RRI-17: 610Nm
 2c) Max. break loose torque MI-17C: 1.900Nm
 2d) Max. break loose torque RRI-21: 1.750Nm
 2e) Max. break loose torque RRI-25: 2.550Nm
 3) L = long anvil
 4) Versions: R = ring type / H = hole type / R + H = ring + hole type
 5) R3 levels means: 3 positions clockwise and counterclockwise full power
 6) The air consumption of the impact wrenches is measured under load

TYPE



IMPACT WRENCHES

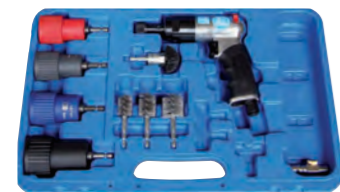
Straight models



Type	Brand	Square drive	Type ¹⁾	Bolt capacity mm	Impact-mechanism	RPM	Torque Nm	Power adjustment	Air cons. l/s ⁴⁾	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-37E	RRI	1"	R+H	36	Twin-Hammer	6.000	2.200	R/L 3 levels	15	8,75	PT 1/2"	13	17	99
MI-38ESR	TOKU	1"	R+H	36	Twin-Hammer	3.700	1.850	R/L 4 levels	11,7	7,75	PT 1/2"	13	8,7	93
MI-38ELR ²⁾	TOKU	1"	R+H	36	Twin-Hammer	3.700	1.800	R/L 4 levels	11,7	7,95	PT 1/2"	13	8,7	93
MI-590TR ³⁾	TOKU	1"	R+H	36	Dynapact	3.800	1.850	450-700 Nm	11,7	10,9	PT 1/2"	13	9,1	93
MI-3800ESR	TOKU	1"	R+H	36	Closed hammer	4.500	2.100	R/L 4 levels	15	9,3	PT 1/2"	13	8	84
MI-3800ELR ²⁾	TOKU	1"	R+H	36	Closed hammer	4.500	2.000	R/L 4 levels	15	9,9	PT 1/2"	13	8	84
MI-42ESR	TOKU	1"	R+H	42	Twin-Hammer	3.900	2.850	R/L 4 levels	23	9,4	PT 1/2"	13	7,6	99
MI-42ELR ²⁾	TOKU	1"	R+H	42	Twin-Hammer	3.900	2.800	R/L 4 levels	23	10,6	PT 1/2"	13	7,6	99
MI-4500ESR	TOKU	1"	R+H	45	Closed hammer	3.700	2.900	R/L 4 levels	23	13,4	PT 1/2"	13	7	84
MI-4500ELR ²⁾	TOKU	1"	R+H	45	Closed hammer	3.700	2.900	R/L 4 levels	23	14,5	PT 1/2"	13	7	84
MI-5500ES	TOKU	1 1/2"	H	52	Dynapact	2.800	5.500	R/L 4 levels	15	18,1	PT 1/2"	13	14,3	109
RRI-1061	RRI	1 1/2"	H	52	3-claw	3.200	4.500	-	27	16,0	PT 1/2"	19	5	97

¹⁾ Type: H = Hole type, R + H = Ring + Hole Type / ²⁾ L = Long spindle / ³⁾ Impact wrench with shut-off in forward (450-700 Nm) / ⁴⁾ Airconsumption of impact wrenches is measured under load

BOLT CLEANER SET MBC-30S



- One handheld airtool, 1800 rpm with 1/4" Hex chuck
- Four boltcleanercups with inner wirebrush, for M20, M24 and M30 bolts
- Three hole brushes, for M20, M24 and M30 nuts and holes
- One hole buff

TYPE



Ring type (standard) Hole type Ring + hole type

IMPACT WRENCHES

Heavy duty models



Type	Brand	Square drive	Type ¹⁾	Bolt capacity mm	Impact-mechanism	RPM	Torque Nm	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
YW-50C	YOKOTA	1 1/2"	H	52	2-Hammer	3.000	4.500	30	27	PT 1"	19	2,3	90
YW-65C	YOKOTA	1 1/2"	H	64	2-Hammer	2.100	6.600	30	45	PT 1"	19	2,3	92
YW-90C ²⁾	YOKOTA	1 3/4"	H	90	2-Hammer	1.700	16.500	41	62	PT 1"	19	2,3	94
YW-120C	YOKOTA	2 1/2"	H	130	2-Hammer	1.800	33.000	68	115	PT 1"	25	5	93

¹⁾ Type: H = Hole type / ²⁾ The air consumption of the impact wrenches has been measured under working conditions / ³⁾ 1 1/2" square drive on request

IMPACT WRENCH SETS



RR-18/SETSTD

- Impact wrench RR-18N
- 5 x 1/2" Impact sockets (A/F 17-19-21-22-24)
- Extension bar 100 mm

RR-18/SETLNG

- Impact wrench RR-18N
- 5 x 1/2" Impact sockets (A/F 17-19-21-22-24 deep)
- Extension bar 100 mm

RRI-21/SETSTD

- Impact wrench RRI-21
- 5 x 1/2" Impact sockets (A/F 17-19-21-22-24)
- Extension bar 100 mm

RRI-21/SETLNG

- Impact wrench RRI-21
- 5 x 1/2" Impact sockets (A/F 17-19-21-22-24 deep)
- Extension bar 100 mm



MI-17MG-SK

- Impact wrench MI-17MG
- 5 x 1/2" Impact sockets (A/F 17-19-21-22-24)
- Extension bar 100 mm



MI-17MG-SL

- Impact wrench MI-17MG
- 5 x 1/2" Impact sockets (A/F 17-19-21-22-24 deep)
- Extension bar 100 mm

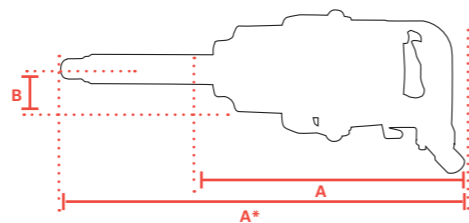
IMPACT WRENCHES

Dimensions, parts, accessories

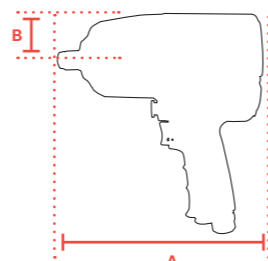
DIMENSIONS

Type	A mm	A* mm	B mm	C mm	D mm	Drawing
MI-12	150	-	24	-	-	3
MI-14S	100	-	30	-	-	3
MI-16	170	-	27	-	-	3
MI-17C	181	-	31	-	-	3
MI-17MG	178	-	31	-	-	3
MI-20P	215	-	38	-	-	3
MI-20PL	335	-	38	-	-	3
MI-38ESR	337	-	50	-	-	2
MI-38ELR	-	515	50	-	-	2
MI-42ESR	370	-	60	-	-	2
MI-42ELR	-	517	60	-	-	2
MI-590TR	570	-	50	-	-	2
MI-3800PR	281	-	55	-	-	3
MI-3800PLR	-	430	55	-	-	3
MI-3800ESR	355	-	55	-	-	2
MI-3800ELR	-	504	55	-	-	2
MI-4500ESR	460	-	60	-	-	2
MI-4500ELR	-	584	60	-	-	2
MI-5500ES	553	-	63	-	-	2
RR-15A	340	-	32	67	-	1
RR-15P	180	-	30	-	-	3
RR-20PN	239	-	38	-	-	3
RR-160H	185	-	30	-	-	3
RR-16N	150	-	30	-	-	3
RR-18N	185	-	30	-	-	3
RR-18NT	185	-	30	-	-	3
RR-24N	210	-	50	-	-	3
RRI-14	120	-	32	-	-	3
RRI-17	172	-	29	-	-	3
RRI-21	190	-	35	-	-	3
RRI-25	234	-	43	-	-	3
RRI-37E	-	515	52	-	-	2
RRI-1061	400	-	78	-	-	2
V-160P	182	-	34	-	-	3
YW-6CL	215	-	14	50	63	1
YW-50C	535	-	355	448	160	4
YW-65C	606	-	344	434	162	4
YW-90C	674	-	358	448	186	4
YW-120C	827	-	527	461	226	4

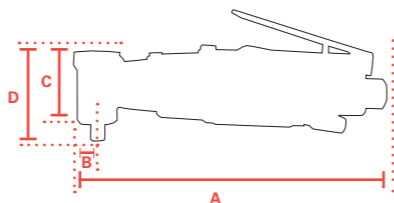
Drawing 1



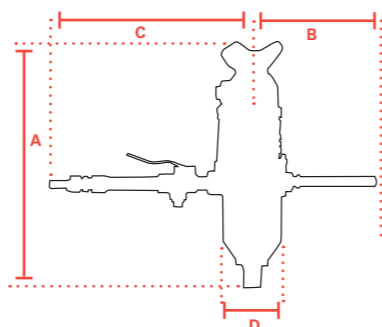
Drawing 2



Drawing 3



Drawing 4



SPARE PARTS – SPRING RING FOR IMPACT SOCKETS

Type	Part number Spring Ring	Part number O-Ring
TOKU 3/8"	13-08-05-092	9010-1004-00-00
TOKU 1/2"	13-08-05-006	13-11-17-108
TOKU 3/4"	13-08-03-113	9010-1012-00-00
TOKU 1"	13-08-03-144	13-11-05-013
V-160P	0208-0416-00-00	13-11-05-006
RR-15P	40303	13-11-05-006
RR-20PN	280-016	9010-1012-00-00
RR-16N/18N(T)	40303	13-11-05-006
RRI-21	250-033	00-4103
RR-24N	45-405112	OR01000305
RR-160H	250-033	00-4103
RRI-17 3/8"	242-026	00-4144
RRI-17 1/2"	250-033	00-4103
RRI-25	280-028	00-4175

ACCESSORIES

RUBBER PROTECTION COVER



Part number	For type
AH0001020	MI-17MG / MI-17HEG
AH0001030	MI-20P

HOSE SET SILENCER



Part number	For type
EH-43-4033SUB	RR-16N/18N/18NT RRI-17/21
EH-454051P	RR-24N

RATCHET WRENCHES



RATCHET WRENCHES 1/4" + 3/8" + 1/2"

Type	Brand	Square-drive	Bolt capacity mm	RPM	Torque Nm	Air cons. l/sec	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
RRW-2202	RR	1/4"	8	200	32	5,0	0,5	PT 1/4"	6,5	4,3	85
MR-2207C	TOKU	1/4"	8	250	28	5,0	0,5	PT 1/4"	6,5	2,7	81
RRW-2203	RR	3/8"	10	200	32	5,0	0,5	PT 1/4"	6,5	4,3	85
MR-2209C	TOKU	3/8"	10	250	28	5,0	0,5	PT 1/4"	6,5	2,7	81
RRW-2403	RR	3/8"	12	150	68	6,0	1,2	PT 1/4"	6,5	5,8	85
MR-2310B	TOKU	3/8"	12	175	78	6,0	1,2	PT 1/4"	6,5	3	85
RRW-2404	RR	1/2"	12	150	68	6,0	1,2	PT 1/4"	6,5	5,8	85
MR-2410B	TOKU	1/2"	12	175	78	6,0	1,2	PT 1/4"	6,5	1,3	81
RRW-121	RR	1/2"	12	150	120	8,0	1,9	PT 1/4"	10	2,3	88

REACTIONLESS RATCHET WRENCHES

Type	Brand	Square-drive	Bolt capacity mm	RPM	Torque Nm	Air cons. l/sec	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
RRW-3403	RR	3/8"	12	500	95	6,0	1,28	PT 1/4"	6,5	4,5	91
RRW-3404	RR	1/2"	12	500	95	6,0	1,28	PT 1/4"	6,5	4,5	91

RATCHET WRENCHES FOR THE ASSEMBLY INDUSTRY

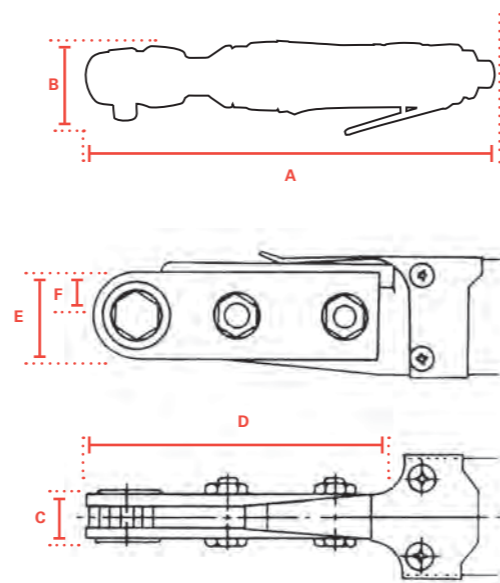
Type	Brand	Square-drive	Bolt capacity mm	RPM	Torque Nm	Air cons. l/sec	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
YRW-6	YOKOTA	8, 9, 10 *	6	200	13	4,6	1,15	PT 1/4"	6,5	2,5	81
YRW-8NS	YOKOTA	10, 12, 13, 14 *	8	250	30	8,3	2,00	PT 1/4"	10	2,5	82
YRW-10N	YOKOTA	14, 17 *	10	140	45	11,6	2,65	PT 1/4"	10	2,5	84

* Socket size in mm (Please state socket size in your order).

RATCHET WRENCHES

Dimensions

Type	A mm	B mm	C mm	D mm	E mm	F mm
MR-2207C	165	33	-	-	-	-
MR-2209C	165	33	-	-	-	-
MR-2310B	255	44	-	-	-	-
MR-2410B	255	50	-	-	-	-
RRW-121	357	57	-	-	-	-
RRW-2202	180	32	-	-	-	-
RRW-2203	180	32	-	-	-	-
RRW-2403	250	40	-	-	-	-
RRW-2404	250	45	-	-	-	-
RRW-3403	280	40	-	-	-	-
RRW-3404	280	45	-	-	-	-
YRW-6	320	13	13	88	20	10
YRW-8NS	350	18	13	105	25	12,5
YRW-10N	388	18	18	108	33	16,5



SCREWDRIVERS

Hammermechanism & Direct drive



1-HAMMER

Type	Brand	Square hex drive	Bolt capacity mm	Model	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
YD-3A ¹⁾	YOKOTA	1/4" Hex	4	Recht	12.000	7,5	1,6	0,50	PT 1/8"	6,5	2,3	82
YD-4A ¹⁾	YOKOTA	1/4" Hex	5	Recht	11.000	12	2,3	0,60	PT 1/8"	6,5	2	90
YD-5A ¹⁾	YOKOTA	1/4" Hex	6	Recht	10.000	15,5	3,2	0,85	PT 1/8"	6,5	2,5	90

2-HAMMER

Type	Brand	Square hex drive	Bolt capacity mm	Model	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
MID-600 ²⁾	TOKU	1/4" Hex	3-5	Pistol	9.500	90	5,0	0,9	PT 1/4"	6,5	3,6	82
YD-40PZ	YOKOTA	1/4" Hex	4	Pistol	14.000	15	1,6	0,52	PT 1/4"	6,5	4	80
YD-600SZ ²⁾	YOKOTA	1/4" Hex	6	Recht	7.500	37	5,0	0,95	PT 1/4"	6,5	1,6	77
YD-670A-RF ³⁾	YOKOTA	1/4" Hex	6	Pistol	7.500	90	6,1	0,98	PT 1/4"	6,5	1,5	75

DIRECT DRIVE

Type	Brand	Square hex drive	Bolt capacity mm	Model	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
RR-0800DD	RR	1/4" Hex	6	Pistol	800	10,5	9,8	1,0	PT 1/4"	10	3,5	83
RR-1800DD	RR	1/4" Hex	6	Pistol	1.800	7,5	9,8	1,0	PT 1/4"	10	3,5	83

1) Delivered with regulator / 2) 4 settings power adjustment / 3) Delivered with rubber protection cover

SELECTION GUIDE: TYPE OF SCREWDRIVER PER APPLICATION

Type	Machine screw 4.8	Machine screw 8.8	Self tapping screw-M	Self tapping screw-ST	Self tapping screw-ST, for plastic	Self-drilling/ Self-tapping Screw-S	Wood screw
Impact	Green	Green	Green	Green	Red	Green	Green
Direct drive	Green	Green	Green	Green	Red	Green	Green
Clutchtype mechanism	Green	Green	Green	Green	Red	Green	Green
Shut-off mechanism	Green	Green	Green	Green	Red	Green	Green

Green Recommended Yellow OK Red not OK
For suitable impact sockets please refer to chapter on impact sockets.

SCREWDRIVERS

Clutch type mechanism (adjustable)

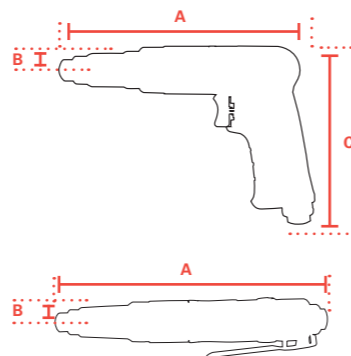


Type	Brand	Square hex drive	Bolt capacity mm	Model	RPM	Torque Nm	Air-cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise-level dB(A)
YD-400SCA	YOKOTA	1/4" Hex	4	Recht	1.700	1 - 3,2	2,5	0,56	PT 1/8"	6,5	4	77
RR-02SC	RR	1/4" Hex	5	Recht	1.800	1 - 6	10,0	1,2	PT 1/4"	10	1,6	85
RR-06SC	RR	1/4" Hex	6	Recht	800	5 - 16	10,0	1,4	PT 1/4"	10	1,6	85
YD-5PHCA	YOKOTA	1/4" Hex	5	Pistol	1.650	1 - 6,6	5,8	1,2	PT 1/4"	6,5	2	77
RR-02SP	RR	1/4" Hex	5	Pistol	1.800	1 - 6	10,0	1,3	PT 1/4"	10	1,6	85
RR-06SP	RR	1/4" Hex	6	Pistol	800	5 - 16	10,0	1,4	PT 1/4"	10	3,5	83

DIMENSIONS

Type	A mm	B mm	C mm
YD-3A	168	13,5	-
YD-4A	180	16	-
YD-5A	200	19	-
YD-5PHCA	217	20	154
YD-40PZ	107	18	125
YD-400SCA	209	16,5	-
YD-600SZ	206	23	-
YD-670A-RF (3/8)	149	22	167

Type	A mm	B mm	C mm
MID-600	149	22	161
RR-02SP / RR-06SP	214	21	155
RR-06SC	227	21	-
RR-02SC	260	21	-
RR-0800DD	190	21	165
RR-1800DD	175	21	165



All screwdrivers adapt 1/4" standard type hexagon \ insert bits and are reversible.

CONTROL

1-Hammer	
YD-3A	Push start
YD-4A	Push start
YD-5A	Push start

2-Hammer	
MID-600	Trigger start
YD-40PZ	2-step trigger
YD-600SZ	Lever start
YD-670A-RF (3/8)	2-step trigger

Direct drive	
RR-0800DD	Trigger start
RR-1800DD	Trigger start

Slipping clutch (adjustable)	
YD-400SCA	Trigger start
YD-5PHCA	2-step trigger
RR-02SP/RR-06SP	Lever start
RR-02SC/RR-06SC	2-step trigger

SIDE HANDLES

Type	Order Number
RR-06SP	75-725139-0001S +822340

* Supplied as standard

SILENCER HOSE SET

Type	Order Number
RR-0800DD	EH-701SUB
RR-1800DD	
RR-02SP	
RR-06SP	



TORQUE SPRINGS

Automotive models RR-02SP/SC and RR-06SP/SC are supplied with 2 torque springs.

SCREW SPANNER

The YD-400SCA and YD-5PHCA are supplied with screw spanner 2201-0243-00-00.

SPRING BALANCERS

Use a spring balancer for the tools to become "weightless" thus greatly reducing operator fatigue.

DRILLS



PISTOL MODELS

Type	Brand	Capacity steel mm	Spindle size	Rotation direction	RPM	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-2006	RRI	6,5	3/8" x 24 UNF	R	5.000	0,21	10,8	0,65	PT 1/4"	10	3	79
RRI-2206/28	RRI	6,5	3/8" x 24 UNF	R	2.800	0,26	7,6	0,60	PT 1/4"	10	0,4	84
RRI-2206/40	RRI	6,5	3/8" x 24 UNF	R	4.000	0,26	7,6	0,60	PT 1/4"	10	0,6	86
YRD-6NBK	YOKOTA	6-8	3/8" x 24 UNF	R	2.800	0,33	8,3	0,90	PT 1/4"	10	3	76
YRD-8NBK	YOKOTA	8-10	3/8" x 24 UNF	R	1.900	0,38	10	1,30	PT 1/4"	10	3	75
RR-10DP	RR	10	3/8" x 24 UNF	L/R	1.800	0,35	8	1,1	PT 1/4"	10	4	83
YRD-10NBK	YOKOTA	10-13	1/2" x 20 UNF	R	1.000	0,44	10	1,50	PT 1/4"	10	1,3	80
YRD-13NBK	YOKOTA	13	1/2" x 20 UNF	R	700	0,50	13,3	1,6	PT 1/4"	10	0,8	79
RR-13DP	RR	13	3/8" x 24 UNF	L/R	800	0,35	8	1,3	PT 1/4"	10	4	83
RRI-2116P ¹⁾	RRI	16	1/2" x 20 UNF	R	950 ²⁾	0,50	11	2,4	PT 1/4"	10	1,8	82

¹⁾ Supplied with hose set silencer / ²⁾ Remove gears with needle bearings

ANGLE MODEL

Type	Brand	Capacity steel mm	Spindle size	Rotation direction	RPM	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
MD-3312B	TOKU	10	3/8" x 24 UNF	L/R	1.900	0,38	6	0,91	PT 1/4"	6,5	2,3	77

STRAIGHT MODEL

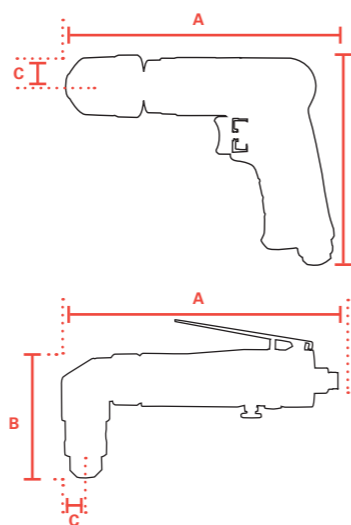
Type	Brand	Capacity steel mm	Spindle size	Rotation direction	RPM	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
10RDS-2500	RR	10	3/8" x 24 UNF	R	2.500	0,37	3,5	1,1	PT 1/4"	6,5	0,4	79
10RDS-4000	RR	10	3/8" x 24 UNF	R	4.000	0,37	3,5	1,1	PT 1/4"	6,5	0,4	79

DRILLS

Dimensions & accessories

DIMENSIONS

Type	A mm	B mm	C mm
RR-10DP	185	165	-
RR-13DP	218	165	-
10RDS-2500	250	-	22
10RDS-4000	250	-	25
MD-3312B	205	93	20
RRI-2006	192	138	14
RRI-2206/28	128	116	14
RRI-2206/40	128	116	14
RRI-2116P	270	168	28
YRD-6NBK	151	140	21
YRD-8NBK	176	150	25
YRD-10NBK	209	150	25
YRD-13NBK	218	145	25



ACCESSORIES

DRILL CHUCKS

Type	Order Number
MD-3312B *	10MM-3/8 x 24NF
RRI-2206/28 *	6MM-3/8 x 24NF
RRI-2206/40 *	6MM-3/8 x 24NF
RRI-2006 *	6MM-3/8 x 24NF
RRI-2116P *	BHP-16 1/2 x 20NF
10RDS-4000 *	10MM-3/8 x 24NF

* Supplied as standard

QUICKCHANGE DRILL CHUCKS

Type	Order Number
RR-10DP *	10035-14
10RDS-2500 *	10035-14
YRD-6NBK *	BHS-10MM
YRD-8NBK *	BHS-10MM
YRD-10NBK *	BHS-13MM
YRD-13NBK *	BHS-13MM
RR-13DP *	10033-14

* Supplied as standard

SILENCER HOSE SET

Type	Order Number
RR-10DP	EH-701SUB
RR-13DP	



DRILL CHUCKS

Type	Order Number
RR-13DP *	822340 + 75-725139-0001S
RRI-2116P *	2116-061-99
YRD-13NBK	SM-71239 & SM-71240

* Supplied as standard

KEYS FOR DRILL CHUCKS

Type	Order Number
MD-3312B *	90180
RRI-2116P *	90200
RRI-2206/28 *	90160
RRI-2206/40 *	90160

* Supplied as standard

TAPPING MACHINE



RRI-T330M12

The RED ROOSTER universal tapping machine RRI-T330M12 has been developed for manual thread tapping. The direction of rotation and speed are easily adjusted with the rocker switch. It is an ergonomically developed tool that fits well in the hand. Exhaust through grip, sound muffled. Thanks to the quick-change holder, different sizes of tap holders can be changed quickly and easily.



CHARACTERISTICS

- Can be used both left and right handed
- Side handle included for extra stability
- Low air consumption
- Low in vibrations
- Can be used for M6 to M12 taps
- With quick-change holder for quick switch of tap holders
- Exhaust through grip, sound muffled

Tap holders RRI-T330M12 (order separately)



Type	Brand	Capacity steel	Spindle size	Rotation direction	RPM	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-T330M12	RRI	M6-M12	B12	L - R	330	0,39	15	1,63	PT 1/4"	10	4	82

GRINDERS

Die grinders



Type	Brand	Wheel size mm	RPM	Power kW	Collet chuck mm	Air-cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-34100	RRI	6	100.000	0,09	3	3,3	0,20	PT 1/4"	6,5	<2,5	73
RRI-3445	RRI	20	45.000	0,30	3 / 6	7,5	0,40	PT 1/4"	10	2,4	79
MG-OA	YOKOTA	20	25.000	0,30	6	6,2	0,45	PT 1/4"	6,5	5	78
RRI-3430	RRI	20	30.000	0,23	3 / 6	7,5	0,40	PT 1/4"	10	2,2	81
MG-7206B*	TOKU	25	23.000	0,38	6	5	0,56	PT 1/4"	6,5	2,3	81
MG-OC	YOKOTA	25	33.000	0,13	6	3	0,39	PT 1/4"	6,5	3	78
RRG-200RE*	RR	35	25.000	0,25	6	4	0,56	PT 1/4"	6,5	2,5	83
RRG-200REL	RR	35	25.000	0,25	6	4	0,86	PT 1/4"	6,5	1,5	83
RRG-500RE	RR	35	20.000	0,37	6	4,6	0,7	PT 1/4"	6,5	1,68	79
RRG-500REL	RR	35	20.000	0,37	6	4,6	1,4	PT 1/4"	6,5	1,68	79
RRG-1000RE	RR	35	22.000	0,74	6 (8) ²⁾	11	0,8	PT 1/4"	10	2,9	89
RRG-1000REL	RR	35	22.000	0,74	6 (8) ²⁾	11	1,2	PT 1/4"	10	2,9	89
RRI-3425	RRI	35	25.000	0,50	3 / 6	12,3	0,8	PT 1/4"	10	2	80,2
RRI-3425L	RRI	35	20.000	0,50	3 / 6	12,3	0,8	PT 1/4"	10	2,5	80,2
RRI-3425EL	RRI	35	20.000	0,50	3 / 6	12,3	0,95	PT 1/4"	10	2,5	80,6
MG-1B	TOKU	45	18.000	0,28	6	8	0,55	PT 1/4"	10	1,3	77
RRI-3407	RRI	35	7.000	0,70	6 (8) ³⁾	4	1,15	PT 1/4"	6,5	<2,5	84
RRG-60160	RR	50	15.000	0,3	6	4,9	0,56	PT 1/4"	10	0,74	80
RRG-515RE	RR	50	15.000	0,52	6	17	0,74	PT 1/4"	10	2,6	80

1) 8 mm collet chuck also available: 50-500228-18 / 2) 8 mm collet chuck also available: 315073
 Shaftlength: RRG-200REL: 116 mm / RRG-500REL: 180 mm / RRI-3425: 30 mm / RRI-3425L: 130 mm / RRI-3425EL: 215 mm

NOTE: MG-7206B and RRG-200RE are also available in set (including assortment abrasives).
 Collet chucks for die grinders are supplied with the tool.
 For collet chucks and adaptors see page 92.

GRINDERS

Angle models turbo grinders and sets

Angle grinders



Type	Brand	Wheel size mm	RPM	Power kW	Collet chuck mm	Air-cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRG-2090	RR	35	20.000	0,23	6	4,0	0,56	PT 1/4"	6,5	2,4	84
RRI-3506	RRI	40	20.000	0,22	6	4,9	0,55	PT 1/4"	6,5	1	80
MG-7236B	TOKU	40	20.000	0,20	6	5,0	0,45	PT 1/4"	6,5	2	85

Air turbine grinders



These RED ROOSTER Air turbine grinders with high RPM are specifically designed for grinding with carbide cutters. The Turbine motor ensures a very steady speed of the axle, with and without load. The turbine motor can operate without lubricated air.

Type	Brand	Wheel size mm	RPM	Power kW	Collet chuck mm	Air-cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-T1565	RRI	9	65.000	0,15	3	3,7	0,135	PT 1/4"	6,5	<2,5	75
RRI-T4065	RRI	9	65.000	0,4	3	5,6	0,2	PT 1/4"	6,5	<2,5	75
RRI-T1550	RRI	20	50.000	0,15	3	3,7	0,135	PT 1/4"	6,5	<2,5	75
RRI-T3340	RRI	20	40.000	0,33	6	5,6	0,4	PT 1/4"	6,5	<2,5	75
RRI-T1135	RRI	20	35.000	0,11	3	3,7	0,135	PT 1/4"	6,5	<2,5	75
RRI-T3335	RRI	20	35.000	0,33	3	5,6	0,2	PT 1/4"	6,5	<2,5	75

Die grinder set



Type	Brand	Wheel size mm	RPM	Power kW	Collet chuck mm	Air-cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-3007	RRI	9	70.000	0,08	3	1,6	0,35	PT 1/4"	6,5	1,2	77
RRI-3006	RRI	12	58.000	0,10	3	1,6	0,35	PT 1/4"	6,5	0,8	80

GRINDERS

Straight models

Straight grinders



Type	Brand	Wheel size mm	RPM	Power kW	Spindle	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
GS-2EFS	YOKOTA	65 x 13 x 9,5	14.000	0,45	3/8" x 16	10,0	1,3	PT 1/4"	10	3	84
TSG-3L	TOKU	75 x 13 x 9,5	11.500	0,53	3/8"	8,3	1,6	PT 3/8"	10	0,8	73
TSG-4L	TOKU	100 x 19 x 15,9	7.600	1,05	5/8"	16,6	3	PT 3/8"	13	1,1	83
TSG-5L	TOKU	125 x 19 x 12,7	7.600	1,05	5/8"	16,6	3	PT 3/8"	13	1,5	79
TSG-6L	TOKU	150 x 25 x 15,9	6.000	1,58	5/8"	20,0	4,2	PT 3/8"	13	0,8	80

Vertical grinders



Type	Brand	Wheel size mm	RPM	Power kW	Spindle	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
7VC-6500FS*	YOKOTA	230 x 6 x 22	6.500	1,74	5/8"	23,0	4,2	PT 3/8"	13	3	82
7VC-8500FS*	YOKOTA	180 x 6 x 22	8.500	1,74	5/8"	23,0	4,1	PT 3/8"	13	2,1	83

* Noise reduced

ACCESSORIES



Grinding disc for GS-2EFS

Order number	Dimensions
9300-0005-00-01	65 x 13 x 9,5

All vertical and straight grinders have a governor wheel for regulating the right speed of the grinding wheel. This reduces the risk of overspeeding and assures the best material removal.

Both YOKOTA and TOKU straight grinders have double bearings for a longer lifetime.

GRINDERS

Angle models



Type	Brand	Wheel size mm	RPM	Power kW	Spindle	Air cons. l/s	Weight kg	Inlet-thread	Hose-diameter mm	Vibration m/s ²	Noise level dB(A)
RRG-1046AL	RR	100 x (0,8-1,0) x 16	14.000	0,76	M6	14	1,7	PT 1/4"	10	2,5	83
G-40SRF	YOKOTA	100 x (0,8-6) x 16	13.000	0,39	M8 x 1,25	7,5	0,90	PT 1/4"	10	6,6	79
RRG-2134*	RR	100 x (0,8-6) x 16	12.000	1,04	M10 x 1,5	17,4	1,90	PT 3/8"	13	6,6	88
TAG-40FLH*	TOKU	100 x (0,8-6) x 16	13.000	0,55	M8	10,8	1,70	PT 3/8"	10	2,6	83
RRG-2144*	RR	115 x (0,8-7) x 22,2	12.000	1,04	M14x2	17,4	1,90	PT 3/8"	10	2,4	88
G-40EF*	YOKOTA	115 x (0,8-7) x 22,2	13.000	0,60	7/16"	10,8	1,40	PT 1/4"	13	6,6	79
TAG-45MLH*	TOKU	115 x (0,8-7) x 22,2	13.000	0,67	M14x2	10,8	1,80	PT 3/8"	10	2,7	83
RRG-2155*	RR	125 x (0,8-7) x 22,2	12.000	1,04	M14x2	17,4	1,90	PT 3/8"	13	6,6	88
G-50EF*	YOKOTA	125 x (0,8-7) x 22,2	12.000	0,60	7/16"	10,8	1,50	PT 1/4"	10	4	77
TAG-50MLH*	TOKU	125 x (0,8-7) x 22,2	12.000	0,67	M14x2	10,8	1,80	PT 3/8"	10	2,7	83
RRI-G50HP*	RRI	125 x (0,8-7) x 22,2	12.000	1,32	M14x2	17	1,8	PT 3/8"	13	<2,5	94
RRI-G70*	RRI	180 x (1,6-8) x 22,2	8.500	2	M14x2	33	4,1	PT 3/8"	16	2,4	83
G-70EF*	YOKOTA	180 x (1,6-8) x 22,2	8.500	1,12	5/8"	16,7	2,90	PT 3/8"	13	2,3	82
TAG-700QJL*	TOKU	180 x (1,6-8) x 22,2	8.500	1,10	-	16,6	3,10	PT 3/8"	13	2,6	82
TAG-900QJL*	TOKU	230 x (1,9-8) x 22,2	6.500	1,10	-	16,6	3,10	PT 3/8"	13	3,6	82

* Vibration reduced side handle

ACCESSORIES



Grinding disc for RRG-1046AL

Order number	Dimensions
5L-222893	100x1,0x16

VIBRATION REDUCED



The transfer of vibration to the user is greatly limited by the solid performance of the rubber handle. See page 96 for more information.

All angle grinders (except RRG-1046AL) are supplied with regulator for optimal safety and the correct RPM for best material removal.

Flanges for cup wheels and a tool service set for mounting the flanges are supplied with all grinders. Flanges for flat, thin discs for mounting on the YOKOTA grinders are optional.

The RRG-1046AL, RRG-2134, RRG-2144, RRG-2155, TAG-45 MLH, TAG-50 MLH, RRI-G50HP and RRI-G70 have a spindle lock for increased ease of changing the wheel.

GRINDERS

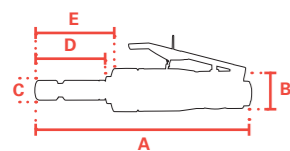
Dimensions & side handles

DIMENSIONS

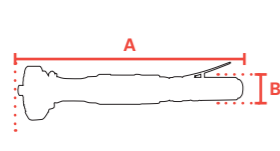
Type	A mm	B mm	C mm	D mm	E mm	Drawing
MG-OA	170	29	15	55	62	A
MG-OC	197	33	20	50	56	A
MG-1B	162	43	19	46	48	A
MG-7206B	164	40	-	-	-	A
RRG-200RE	162	40	18	30	34	A
RRG-200REL	258	40	18	116	135	A
RRG-500RE	190	45	22	30	-	A
RRG-500REL	350	45	22	180	190	A
RRG-515RE	200	43	21	50	-	A
RRG-1000RE	200	46	21	41	50	A
RRG-1000REL	330	46	21	171	50	A
RRI-3006	151	16	10	-	-	A
RRI-3007	151	16	10	-	-	A
RRI-3407	280	45	28	38	80	A
RRI-3425	215	40	12	30	43	A
RRI-3425L	310	40	12	130	130	A
RRI-3425EL	390	40	12	215	215	A
RRI-3430	190	34	14	16	22	A
RRI-3445	190	34	14	16	22	A
RRI-34100	140	29	10	15	21	A
GS-2EFS	350	51	-	-	-	B
TSG-3L	365	51	-	-	-	B
TSG-4L	460	65	-	-	-	B
TSG-5L	460	65	-	-	-	B
TSG-6L	490	80	-	-	-	B
RRG-2090	167	75	-	42	-	C
RRI-3506	150	80	-	40	-	C
MG-7236B	124	72	-	32	-	C
RRG-60160	121	140	-	-	-	D
HS-4	125	102	-	-	-	D
MS-4125B	150	110	-	-	-	D

All angle grinders are equipped with flanges to adapt flat and depressed grinding wheels.

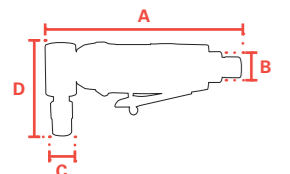
Drawing A



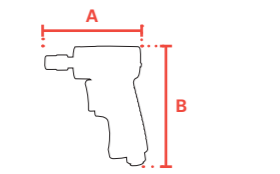
Drawing B



Drawing C



Drawing D



Type	A mm	B mm	C mm	D mm	E mm	Drawing
7VC-6500FS	195	180	180	160	-	D
7VC-8500FS	195	180	180	165	-	D
G-40EF	299	88	29	50	-	E
G-40SRF	196	65	25	40	-	E
G-50EF	299	88	29	50	-	E
G-70EF	341	107	37	60	-	E
RRG-1046AL	377	42	22	45	-	E
RRG-2134	215	95	25	50	-	E
RRG-2144	215	95	25	50	-	E
RRG-2155	215	95	25	50	-	E
RRI-G50	255	55	32	45	-	E
RRI-G70	351	110	45	-	-	E
TAG-40FLH	267	85	33	50	-	E
TAG-45MLH	267	85	33	50	-	E
TAG-50MLH	267	85	33	50	-	E
TAG-700QJL	307	103	36	62	-	E
TAG-900QJL	307	103	36	62	-	E
RRI-T1565	156	31	13	120	-	F
RRI-T4065	172	43	13	134	-	F
RRI-T1550	156	31	13	120	-	F
RRI-T3340	196	43	15,5	145	-	F
RRI-T1135	156	31	13	120	-	F
RRI-T3335	172	43	13	134	-	F

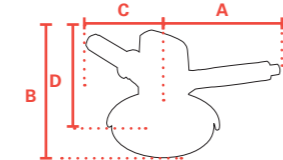
SIDE HANDLES FOR GRINDERS & SANDERS



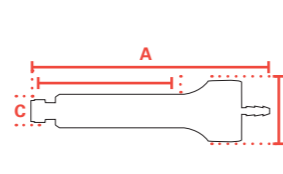
Side handle	Order number
HS-4	1203-0013-0011 *
G-40/50	
TAG-40/45/50	2400-046-11 *
TAG-700/900	
RRI-G50-HP/G70	
RRG-2134/2144/2155	
G-70	1407-0013-0011 *

* Supplied as standard

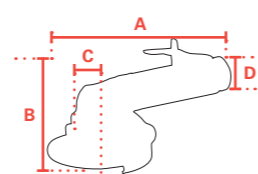
Drawing D



Drawing F



Drawing E



GRINDERS

Accessories

RUBBER PADS

Type	Order number	Diameter
RRG-2134	9310-3008-00-00	100 x 16 mm
RRG-2144	9310-3003-00-00	110 x 22 mm
TAG-45MLH		
RRG-2155	9310-3004-00-00	120 x 22 mm
G-50EF/RF		
TAG-50MLH		
RRI-G70	9310-3006-00-00	175 x 22 mm
G-70EF		

FLANGES FOR RUBBER PADS

Type	Order number	Description
RRG-2144	1508-0654-05-05	Outer flange
TAG-45MLH		
RRG-2155	1508-0654-05-05	Lock nut
G-50EF/RF	1120-0655-00-01	Outer flange
TAG-50MLH	1120-0655-00-05	
RRI-G70	1508-0654-05-05	
G-70EF	1422-0653-00-99	Inner flange

STANDARD FLANGES AND OUTER WHEEL SCREWS

Type	Order number	Description
G-40EF/RF	9310-3003-00-99	Disc 110 x 16 mm Paper 115 x 22 mm
G-50EF	9310-3004-00-99	Disc 120 x 16 mm Paper 125 x 22 mm
G-70EF	9310-3006-00-99	Disc 175 x 22 mm
7VC-6500FS		Paper 180 x 22 mm
7VC-8500FS		Paper 180 x 22 mm
RRI-G70	G70-0531-99	Disc 175 x 22 mm Paper 180 x 22 mm

ACCESSORIES FOR FLAT CUT-OFF DISCS

Type	Order number	Description
G-70EF	1508-0653-00-03	Inner flange
7VC-6500FS		
7VC-8500FS		
G-70EF	1508-0654-00-02	Outer flange
7VC-6500FS		
7VC-8500FS		

STANDARD FLANGES AND OUTER WHEEL SCREWS

Type	Order number	Description
TAG-40FLH	42-05-77-171	* Outer flange
	13-17-08-020	* Outer wheel screw
TAG-45MLH	42-05-80-H00	* Outer flange
TAG-50MLH	42-05-80-H00	* Outer flange
TAG-700 QJL	2700-040-00	* Outer flange
TAG-900 QJL	2700-041-00	* Outer wheel screw
G-40SRF	1105-0654-02-02	* Outer flange
	1105-0656-02-00	* Outer wheel screw
G-70EF	1422-0653-00-99	* Inner flange
7VC-6500/8500	1508-0654-00-01	* Outer flange
	1508-0655-00-00	* Outer wheel screw
RRG-2134	61938A	* Inner flange
	61938A	* Outer flange
RRG-2144	5D-619239	* Inner flange
RRG-2155	5D-619240	* Outer flange

* Supplied as standard

ACCESSORIES FOR CUP STONES / CUP BRUSHES

Type	Order number	Description
7VC-6500FS	1508-0653-01-02	Inner flange
7VC-8500FS		
7VC-6500FS	8100-4003-00-01	Angle spanner
7VC-8500FS		
7VC-6500FS	8100-5001-00-00	Double key spanner
7VC-8500FS		

ACCESSORIES FOR GRINDING WHEELS

Type	Order number	Description
G-40/G-50 EF	1117-0653-00-01	Inner flange 16 mm
G-40/G-50 EF	1117-0654-00-01	Outer flange 16 mm
G-40/G-50 EF	1117-0653-00-02	* Inner flange 22 mm
G-40/G-50 EF	1117-0654-00-02	* Outer flange 22 mm
G-40/G-50 EF	1126-0655-00-00	* Outer wheel screw for 22 mm flens

* Supplied as standard

PADS

Sanding pads	Order number	Description
HS-4	9350-1002-00-00	Fiber, 115 x 22 mm
MS-4125B		

GRINDERS

Accessories

COLLET CHUCKS



Type	Order number	Description
MG-OA	1013-0661-01-99	* 6 mm
MG-OC	1011-0661-00-00	* 6 mm
MG-1B	42-04-90-K10	* 6 mm
MG-7206B	NVK-A10	* 3 mm
	T5-07-10-270	* 6 mm
	T5-07-10-27A	* 1/4"
MG-7236B	3003-035-00	* 6 mm
GS-2EFS/TSG-3L	1104-0661-01-99	- 6 mm
RRG-200RE(L)	51224	* 6 mm
RRG-500RE(L)	51224	* 6 mm
RRG-1000RE(L)	50-500228	* 6 mm
RRG-1000RE(L)	50-500228-18	- 8 mm
RRI-3407	315018	* 6 mm
	315073	- 8 mm

* Supplied as standard

TOOLS FOR MOUNTING GRINDING WHEELS AND SANDING PADS



Type	Order number	Description
HS-4	8081-0021-00-00	* Spanner H36
HS-4	8100-2001-00-00	* Forked wrench
G-40 / G-50	8100-1003-00-00	* Bar wrench
G-40 / G-50	8100-2001-00-00	* Forked wrench
G-40 / G-50	8100-3001-00-00	* L-wrench
G-70EF	8100-5002-00-00	* Twin wrench
7VC6500FS		
7VC8500FS		
G-70EF	8081-0020-00-00	* Spanner H32
7VC6500FS		
7VC8500FS		
TAG-40FLH	13-40-01-006	* Hex wrench 6 mm
TAG-40FLH	42-05-71-G90	* Wheel ring washer
TAG-40FLH	13-40-04-014	* Combi spanner 14 x 19
TAG-45MLH		
TAG-50MLH		
TAG-45MLH		
TAG-50MLH	13-08-02-147	* Socket bar
TAG-700QJL	8081-0022-00-00	* Spanner H41
TAG-900QJL		
TAG-40FLH		
TAG-45MLH		
TAG-50MLH		
TAG-700QJL		
TAG-900QJL		
RRI-G50	G50-900-99	* Forked wrench
RRI-G70		

* Supplied as standard

M14X2 QUICK NUT



Type	Order number
RRG-2144	QN-M14
RRG-2155	
RRI-G50	
RRI-G70	
TAG-45MLH	
TAG-50MLH	

ADAPTERS



Type	Order number
MG-OA / MG-OC / MG-1B	1001-0659-00-01
RRI-3425(L/EL) / RRG-500RE(L)	
RRG-200RE(L) / RRG-2090	
RRI-3506	
RRR-T3340 / RRI-T5625 / RRI-3407	

EXHAUST HOSE/SILENCER KIT



Type	Order number
RRG-2134	5D-619249
RRG-2144	
RRG-2155	

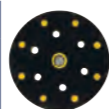
HOOK & LOOP PADS FOR SANDERS



Type	Order number	Description
RRI-5125-2NV	65-613342*	Pad 125 mm
RRI-5125-5NV		
RRI-5125-2CV	65-6133C42*	Pad 125 mm
RRI-5125-5CV		
RRI-5125-2SV	50LVJOSY-P	Pad 125 mm, multi hole
RRI-5125-5SV		
RRI-6150-2NV	610227V-61*	Pad 150 mm
RRI-6150-5NV		
RRI-T6250-5NV		
RRI-6150-2CV	66-613A43	Pad 150 mm, 15 holes
RRI-6150-5CV		
RRI-6150-2SV		
RRI-6150-5SV		
RRI-T6250-5CV		

* Supplied as standard

Order number
66-613A43 150 mm 15 holes



Order number
50LVJOSY-P 125mm Multi hole



SANDERS



Type	Brand	Pad size mm	Stroke mm	RPM	Power kW	Spindle	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
HS-4	YOKOTA	127 x 22	-	12.000	0,5	7/16" x 20	9,2	1,1	PT 1/4"	10	2	79
MS-4125B	TOKU	125 x 22	-	20.000	0,5	7/16" UNF	8,3	1,0	PT 1/4"	10	2,3	90

PALM ORBITAL SANDERS

Type	Brand	Pad size mm	Stroke mm	RPM	Power kW	Spindle	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-5125-2NV	RRI	125	2,5	12.000	0,3	5/16" UNF	4,9	0,6	PT 1/4"	6,5	<2,5	73
RRI-5125-2CV	RRI	125	2,5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-5125-2SV	RRI	125	2,5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-5125-5NV	RRI	125	5	12.000	0,3	5/16" UNF	4,9	0,6	PT 1/4"	6,5	<2,5	73
RRI-5125-5CV	RRI	125	5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-5125-5SV	RRI	125	5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-6150-2NV	RRI	150	2,5	12.000	0,3	5/16" UNF	4,9	0,6	PT 1/4"	6,5	<2,5	73
RRI-6150-2CV	RRI	150	2,5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-6150-2SV	RRI	150	2,5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-6150-5NV	RRI	150	5	12.000	0,3	5/16" UNF	4,9	0,6	PT 1/4"	6,5	<2,5	73
RRI-6150-5CV	RRI	150	5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-6150-5SV	RRI	150	5	12.000	0,3	5/16" UNF	4,9	0,7	PT 1/4"	6,5	<2,5	73
RRI-T6250-5NV	RRI	150	5	12.000	0,3	5/16" UNF	4,9	1	PT 1/4"	6,5	3,65	73
RRI-T6250-5CV	RRI	150	5	12.000	0,3	5/16" UNF	4,9	1	PT 1/4"	6,5	3,65	73

*) Standard delivered with Hook & Loop pad. NV = No dust extraction / CV = For connection to central dust extraction / SV = Self created Vacuum for dust extraction

WIRE BRUSH SANDER

Type	Brand	Pad size mm	Stroke mm	RPM	Power kW	Spindle	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRB-280	RRI	80 ¹⁾	-	8.000	0,45	M14 x 2 ²⁾	9,6	1,5	PT 1/4"	10	9	80

1) Size wire brush (supplied without wire brushes) / 2) Spindle stainless steel

MINI-SANDERS



Type	Brand	Pad size mm	RPM	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRS-60152 ¹⁾	RR	50	15.000	0,3	4,9	0,54	PT 1/4"	10	0,74	80
RRS-60153 ²⁾	RR	75	15.000	0,3	4,9	0,54	PT 1/4"	10	0,74	80
RRS-60323 ³⁾	RR	75	3.200	0,3	4,9	0,75	PT 1/4"	10	0,74	80

¹⁾ RRS-60152 = mini sander Ø50 mm (Roloc™-Pad) / ²⁾ RRS-60153 = mini sander Ø75 mm (Roloc™-Pad) / ³⁾ RRS-60323 = mini polisher Ø75 mm (Velcro Pad)

The RRI mini sanders can be ordered as separate tool or as set (K) with sanding and/or polishing discs. The RRS-60323K is only available as set.

The RRI mini sanders RRS-60152K and RRS-60153K come in a plastic case containing the following sanding pads: 10 x grain 80, 10 x grain 100 and 10 x grain 120. The RRS-60323K comes with 2 polishing pads and 1 polishing bonnet.

The ROLOC™ system ensures quick and safe changing of the pads.

ACCESSORIES



Polishing discs



Pad RRS-60323



Roloc™ Pad

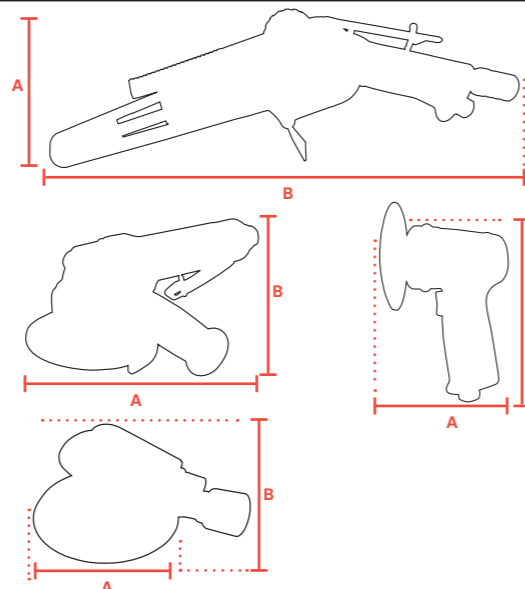
Type	Order number	Description
RRS-60043K & RRS-60323	SA-75543VC*	Yellow sponge 3½"
RRS-60043K & RRS-60323	SA-75653VC*	White sponge 3½"
RRS-60043K & RRS-60323	SA-77213*	Polishing bonnet 3½"

* Supplied as standard

Type	Order number	Description
RRS-60152	600125-21	Roloc™ Pad, Ø 50 mm
RRS-60153	600127-31	Roloc™ Pad, Ø 75 mm
RRS-60323	6004-031-00	Velcro sanding pad, Ø 75 mm

DIMENSIONS

Type	A mm	B mm	C mm	D mm
RRB-280	225	85	28	50
RRG-3611	50	265	-	-
RRG-3617K	50	265	-	-
RRG-3621	60	420	-	-
RRG-3630	60	490	-	-
RRI-5125-2NV/5NV	163	104	-	-
RRI-6150-2NV/5NV	163	104	-	-
RRI-5125-2CV/5CV	213	104	-	-
RRI-6150-2CV/5CV	213	104	-	-
RRI-5125-2SV/5SV	213	104	-	-
RRI-6150-2SV/5SV	213	104	-	-
RRI-T6250-5NV/5CV	262	104	-	-
RRS-60323	116	150	-	-
RRS-60152	116	140	-	-
RRS-60153	116	140	-	-



BELT SANDERS



Type	Brand	Belt size mm	RPM	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRG-3617K	RRI	6/10 x 330	20.000	0,28	6,7	0,75	PT 1/4"	10	0,6	80
RRG-3611	RRI	10 x 330	20.000	0,28	6,7	0,75	PT 1/4"	10	0,6	80
RRG-3621	RRI	20 x 520	18.000	0,34	8,7	1,40	PT 1/4"	10	2,5	79
RRG-3630	RRI	30 x 540	12.000	0,52	10,3	2,20	PT 1/4"	10	2	79

The RRG-3617K is the same as model RRG-3611 however supplied as set. This set contains a sanding arm 6 x 330 and a sanding arm 10 x 330 mm (1 tool, 2 applications).

The RED ROOSTER belt sanders are suitable for nearly all materials, e.g. steel, aluminium, plastics and wood and for use as a de-burring method in difficult access applications. All belt sanders are executed with safety handle and adjustable silencer and a regulator screw to reduce the RPM when handling sensitive materials.

ACCESSORIES



Sanding belts

Sanding belt for 6 mm sanding arm		
SSB60660	6 x 330 mm	Korrel 60
SSB60680	6 x 330 mm	Korrel 80
SSB606100	6 x 330 mm	Korrel 100
SSB606120	6 x 330 mm	Korrel 120
SSB606150	6 x 330 mm	Korrel 150

Sanding belt for 20 mm sanding arm		
SSB62060	20 x 520 mm	Korrel 60
SSB62080	20 x 520 mm	Korrel 80
SSB620100	20 x 520 mm	Korrel 100
SSB620120	20 x 520 mm	Korrel 120
SSB620150	20 x 520 mm	Korrel 150

Sanding belt for 10 mm sanding arm		
SSB61060	10 x 330 mm	Korrel 60
SSB61080	10 x 330 mm	Korrel 80
SSB610100	10 x 330 mm	Korrel 100
SSB610120	10 x 330 mm	Korrel 120
SSB610150	10 x 330 mm	Korrel 150

Sanding belt for 30 mm sanding arm		
SSB63060	30 x 540 mm	Korrel 60
SSB63080	30 x 540 mm	Korrel 80
SSB630100	30 x 540 mm	Korrel 100
SSB630120	30 x 540 mm	Korrel 120
SSB630150	30 x 540 mm	Korrel 150

VIBRATION REDUCTION

Raynauds phenomenon, RSI

Vibration of hand held tools, in particular heavier tools such as grinders and hammers, may pose serious health risks for the operators of the tools. When working for long periods of time, and on a daily basis, one can be subject to several severe conditions. To prevent these adverse effects we offer a selection of our product range with reduced vibration.

RAYNAUDS PHENOMENON

This condition is more commonly known as “white finger disease” and can be caused by workplace exposure. Occupationally, it is most commonly associated with “hand-arm vibration syndrome.” It is important to know the signs and symptoms and the workplace hazards that cause it. Awareness and intervention, through the reduction of vibration exposure, can help prevent the disorder from progressing to a serious stage. If not detected in the early stages, the disorder can permanently impair blood circulation in the fingers.

RSI

Another potential condition the operator is subjected to is “repetitive strain injury,” commonly known as RSI. It covers many types of soft tissue injuries, including carpal tunnel syndrome and tendinitis. A mixture of poor posture, stress, repetitive motion and bad ergonomics are the most common causes.

HOW TO AVOID THESE CONDITIONS:

- A well-balanced power to weight ratio
- Rubber handgrip to dampen vibrations
- Active vibration reduction
- Good quality tools and accessories
- Replace wear parts frequently

VIBRATION REDUCED



Red Rooster and TOKU have developed numerous vibration reduced models that lower the vibration of the tool to an acceptable and manageable level. When possible, always choose pneumatic tools with an active vibration reduction. Please see the tables in this catalogue for the vibration level and look out for the vibration reduced icon.



AIR HAMMERS



* Used as hammer and needle scaler. See page 108

Type	Brand	Shank size mm	Bore diameter mm	Stroke mm	Blows p/min	J/Blow	Air cons. l/s	Weight kg	Inlet thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
TFC-200F	TOKU	□ 12,7	20	10	12.000	1,5	4,1	1,1	PT 1/4"	6,5	14,3	91
F-25 ¹⁾	YOKOTA	□ 12,7 x 16 x 28	25	22	4.000	5,1	6	1,8	PT 1/4"	6,5	12	91
RR-0315	RR	□ 12,7 x 16 x 28	25	32	4.000	7,4	3	2,6	PT 1/4"	6,5	9,4	93
TFC-257H	TOKU	□ 12,7	25	34	4.000	7,9	6,7	1,73	PT 1/4"	10	14	92
RRI-4021/4 ¹⁾	RRI	○ 11 x ○ 12,7 x 40	18	30	4.500	3,5	10	2,2	PT 1/4"	10	3,5	88
RRH-2000	RR	○ 11 x ○ 12,7 x 40	17,4	42	5.000	4,5	8,4	1,5	PT 1/4"	10	8	88
AA-OBR(H)	TOKU	○ 12,7 x ○ 15 x 53	20	50	3.600	7,5	5,8	2,6	PT 3/8"	6,5	12	89
BRH-6	YOKOTA	○ 10,2 x 40	20	60	3.500	9,0	6,6	1,4	PT 1/4"	10	17	95
RRH-4309K	RR	○ 11 x ○ 12,7 x 40	19	67	3.200	9,0	7,1	1,7	PT 1/4"	10	2,2	95
RRH-4312K	RR	○ 11 x ○ 12,7 x 40	19	89	2.100	12,0	7,1	1,8	PT 1/4"	10	2,6	95
AA-1.3BR(H)19x50 ²⁾	TOKU	○ 19 x 50	24	58	2.800	12,7	7,5	4,5	PT 3/8"	10	10	93

For chisels overview see pages 101-104 / 1) For suction casings see page 100 / 2) Also available with shank size ○ 17,5 mm

HAMMER SETS



- RRH-4309KSET1**
RRH-4312KSET1
- Hammer
 - 5 chisels for metal
 - Quick change retainer



- RRH-4309KSET2**
RRH-4312KSET2
- Hammer
 - 4 chisels for concrete or stone
 - Quick change retainer

*Chisels are also available separately see pages 101-104.

AIR HAMMERS



RRI-4596/1 RRI-4596R RRI-4612K VL RRI-4612R VL TCD-20

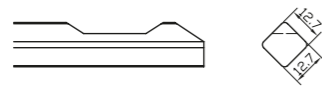
Type	Brand	Shank size mm	Bore diameter mm	Stroke mm	Blows p/min	J/Blow	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
THA-2BRH19x50	TOKU	19 x 50	28,5	51	2.300	15,7	14,2	6,8	PT 3/8"	13	11,6	93
THA-3BRH19x50	TOKU	19 x 50	28,5	64	2.200	19,9	15	7,2	PT 3/8"	13	8	93
THA-4BRH19x50	TOKU	19 x 50	28,5	102	1.800	31,8	15,8	7,8	PT 3/8"	13	11,6	93
RRI-4596/1	RRI	22 x 82	34	114	1.590	51,6	15,0	10,7	PT 3/4"	13	16	101
RRI-4596R	RRI	25 x 75	34	114	1.590	51,6	15,0	9,7	PT 3/4"	13	16	101
RRI-4612K VL	RRI	22 x 82	35	170	1.290	81,2	16,6	14,3	PT 3/4"	16	3,8	105
RRI-4612R VL	RRI	25 x 75	35	170	1.290	81,2	16,6	12,9	PT 3/4"	16	3,8	105
TCD-20	TOKU	22 x 82	43	60	2.000	42,4	18	11,4	PT 1/2"	13	16	106

For overview chisels see pages 101-104.

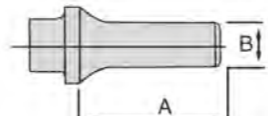
SHANK SIZE



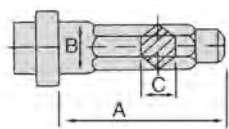
Type	A	B	C	D
TFC-200F	51	23	21	9,5



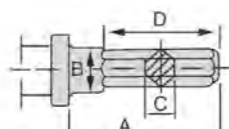
Type	A	B	C
F-25	16	12,7	28
RR-0315	16	12,7	28
TFC-257H	13	12,7	27



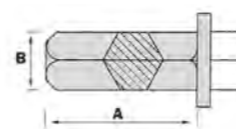
Type	A	B
BRH-6	40	10,2
RRI-4596R	75	25
RRI-4612R VL	75	25



Type	A	B	C
RRH-2000	40	12,7	11
RRH-4309K	40	12,7	11
RRH-4312K	40	12,7	11
RRI-4021/4	40	12,7	11



Type	A	B	C
AA-OB3R(H)	53	15	12,7



Type	A	B
RRI-4596/1	82	22
AA-1.3BR(H)19x50	50	19
AA-3BR(H) 19x50	50	19
RRI-4612K VL	82	22
TCD-20	82	22
THA-2BRH 19x50	50	19
THA-3BRH 19x50	50	19
THA-4BRH 19x50	50	19

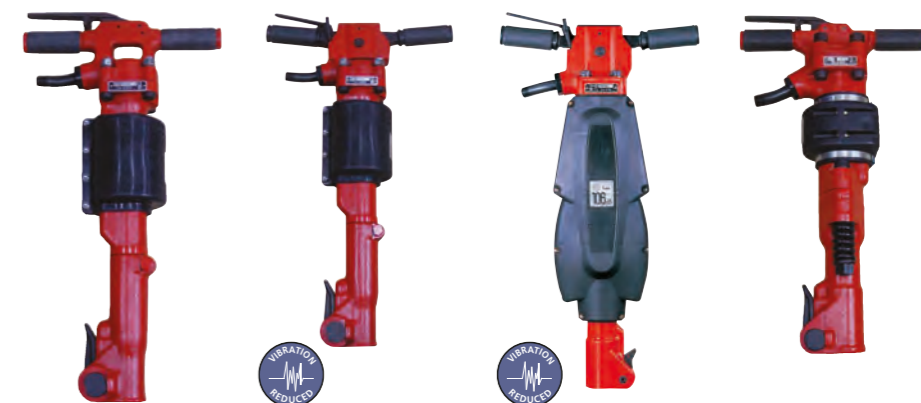


VIBRATION REDUCED

Vibration reduction in the hammers, breakers and drills enables longer working hours. For further information please refer to page 96.

BREAKERS & ROCK DRILLS

Paving Breakers



TPB-40 TPB-40SV TPB-501SV TPB-60

Type	Brand	Shank size mm	Bore diameter mm	Stroke mm	Blows p/min	J/Blow	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
TPB-40	TOKU	25 x 108	44	146	1.400	110	26	19	PT 3/4"	19	19,1	106
TPB-40SV ¹⁾	TOKU	25 x 108	40	146	1.050	110	26	19,5	PT 3/4"	19	5,5	106
TPB-501SV ¹⁾	TOKU	32 x 160	50	156	1.250	151	25	28,1	PT 3/4"	19	5,3	107
TPB-60	TOKU	32 x 160	57	100	1.400	125	27	30	PT 3/4"	19	9,7	110

¹⁾ Vibration reduced / For chisels please refer to pages 101-104.

Rock Drills

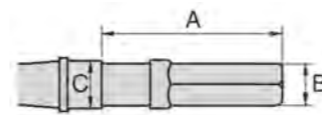


TH-55 TJ-15SBS TJ-15SV SBS TJ-15SV LBS TJ-20SV LBS TJ-20SV SBS

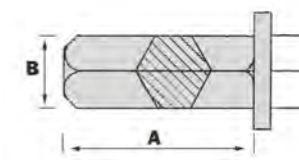
Type	Brand	Shank size mm	Bore diameter mm	Stroke mm	Blows p/min	RPM	J/Blow	Air cons. l/sec	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
TH-5S ¹⁾	TOKU	19 x 14,8 x 89	38	31	3.400	420	17	14	5,8	PT 3/8"	13	14	95
TJ-15SBS	TOKU	22 x 82	54	45	2.450	250	44,7	26	17,4	PT 3/4"	19	30	99
TJ-15SV LBS ¹⁾	TOKU	22 x 108	54	45	2.450	250	44,7	26	17,7	PT 3/4"	19	7	99
TJ-15SV SBS ¹⁾	TOKU	22 x 82	54	45	2.450	250	44,7	26	17,4	PT 3/4"	19	7	99
TJ-20SV LBS ¹⁾	TOKU	22 x 108	68	49	2.400	200	72	41	19	PT 3/4"	19	10,8	100
TJ-20SV SBS ¹⁾	TOKU	22 x 82	68	49	2.400	200	72	41	19	PT 3/4"	19	10,8	100

¹⁾ Vibration reduced. For drills please refer to page 105.

SHANK SIZE



Type	A	B	C
TH-55	89	14,8	19



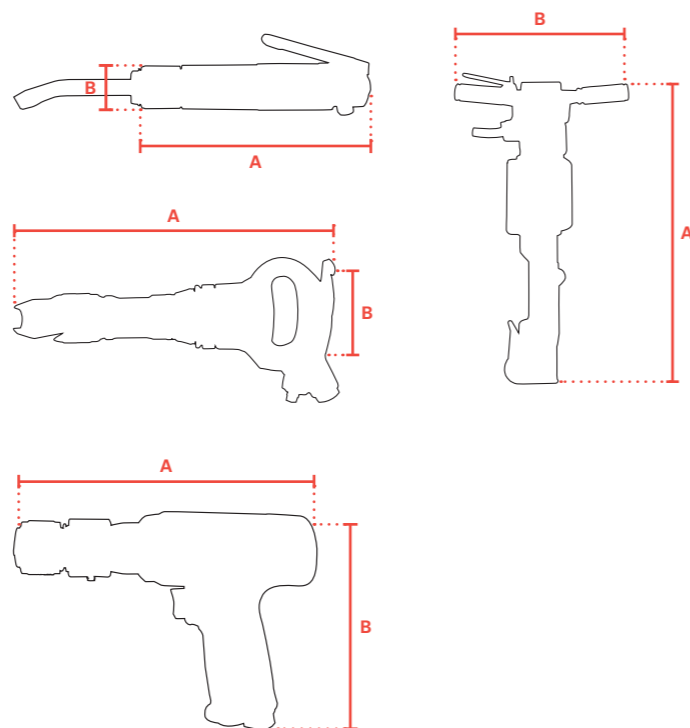
Type	A	B
TPB-40/40SV	108	25
TPB-50N/501SV	160	32
TPB-60	160	32
TJ-15LBS/SBS	108/82	22
TJ-20LBS/SBS	108/82	22

AIR HAMMERS BREAKERS & ROCK DRILLS

Dimensions & Accessories

DIMENSIONS

Type	A mm	B mm
AA-OBR(H)	245	95
AA-1.3BR(H)	300	76
BRH-6	200	149
F-25	310	43
RR-0315	320	43
RRH-2000	165	140
RRH-4309K	223	173
RRH-4312K	267	173
RRI-4021/4	255	100
RRI-4596/1	480	118
RRI-4596 R	480	118
RRI-4612k VL	645	120
RRI-4612R VL	645	120
TCD-20	520	100
TFC-200F	189	40
TFC-257H	330	43
TH-5S	425	250
THA-2BRH19x50	350	87
THA-3BRH19x50	422	87
THA-4BRH19x50	430	87
TJ-15	468	340
TJ-20	385	585
TPB-40	670	350
TPB-40SV	649	390
TPB-501SV	714	390
TPB-60	645	400



ACCESSORIES

For dust extraction of the models RRI-4021/4 and F25.
For other hammers ask for the most suitable solution.



DC6622



DC6078

SUCTION CASINGS FOR AIR HAMMERS

For hammer	Type	Tool connection Ø D (in/mm)	Hose connection (in/mm)	Height mm
F25	DC6622	43	38	158
RRI-4021/4	DC6078	61	38	178

QUICK CHANGE CHISEL RETAINER

Hammer	Order number
BRH-6	PT-2311
RRH-2000*	PT-2311
RRH-4309	TJI-202A
RRH-4312	TJI-202A

CHISEL HOLDER

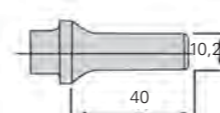
Hammer	Order number
RRH-4309	TJI-202C
RRH-4312	TJI-202C

RETAINER SPRING

Hammer	Order number
RRH-4309	TJI-207
RRH-4312	TJI-207

* Supplied as standard

CHISELS FOR AIR HAMMERS

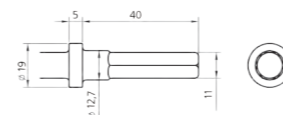


FOR HAMMERS

- YOKOTA BRH-6
- RED ROOSTER RRH-4210

SHANK SIZE Ø 10,2 MM X 40MM

Order number	Description	L (mm) total	B (mm)
BE101002	Cutting chisel	122	20
BE101003	Sheet metal trimmer	135	16
BE101005	Muffler cutter	115	15
BE101006	Bushing splitter	132	12
BE101007	Spot-weld breaker bent	79	15
BE101008	Bushing driver	63	Ø 23
BE101010	Flat chisel	120	33
BE101011	Double edged cutter	110	22
BE101012	Shear bent	132	12
BE101016	Straight punch	120	Ø 12
BE101017	Spot-weld breaker	117	19
BE101018	Scraper	137	33
BE101019	Tail pipe cutter	119	29
BE101020	Concave scraping	130	34
BE101021	Wide cutting	129	44
BE101022	Diamond point	161	-
BE101024	Flat, bent	106	15
BE101025	River cutter	109	23
BE101027	Center punch chisel	106	Ø 9
BE101028	Pin punch	134	Ø 8

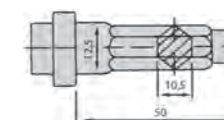


FOR HAMMERS

- RED ROOSTER RRH-2000
- RED ROOSTER RRH-4309K
- RED ROOSTER RRH-4312K
- RED ROOSTER RRI-4021/4

SHANK SIZE 11 MM HEX / Ø 12,7MM X 40MM

Order number	Description	L (mm) total	B (mm)
CB51102190	Wide Cuttingchisbent	190	32
CB51103185	45mm Wide hisel,L=185mm	185	45
CB51103250	Flat Chisel	235	40
CB51104190	Wide flat bent chisel	190	33
CB51109165	Flat Chisel	165	18
CB51109180	Flat Chisel	180	18
CB51109250	Flat Chisel	250	18
CB51109350	Flat Chisel	350	20
CB51112180	Flat Chisel	180	33
CB51112250	Flat Chisel	250	33
CB51114180	Double Bladepanelcutter	178	22
CB51115180	Moil point chisel	180	-
CB51115250	Moil Point	250	-
CB51116180	Chisel	175	26
CB51117180	Spotweld Breaker	179	20
CB51123180	Claw Ripper/PannelCutter	176	16
CB51193180	Slotting Tool W.Carbide Tip L=180	180	38
CB51193180-4	Slotting Tool W.Carbide Tip L=180	180	38
CB51193180-6	Slotting Tool W.Carbide Tip L=180	180	38

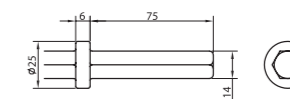


FOR HAMMERS

- RED ROOSTER RRH-4210K

SHANK SIZE 10,5MM HEX X Ø 12,5MM X 50MM

Order number	Description	L (mm) total	B (mm)
BE151002	Cutting chisel	122	20
BE151003	Sheet metal trimmer	135	16
BE151004	Panel cutter	131	15
BE151005	Muffler cutter	115	15
BE151007	Spot-weld breaker bent	79	15
BE151008	Bushing driver	63	Ø 23
BE151009	Tapered punch	132	Ø 3
BE151010	Flat chisel	120	33
BE151011	Double edged cutter	110	22
BE151012	Shear bent	132	12
BE151014	Double blade panel cutter	136	18
BE151015	Wide cutting, bent	130	33
BE151016	Straight punch	120	Ø 12
BE151017	Spot-weld breaker	117	19
BE151018	Scraper	137	33
BE151019	Tail pipe cutter	119	29
BE151020	Concave scraping	130	34
BE151021	Wide cutting	129	44
BE151022	Diamond point	161	-
BE151024	Flat, bent	106	15
BE151026	Round nose panel cutter	90	21
BE151027	Center punch chisel	106	Ø 9
BE151028	Pin punch	134	Ø 8
BE152001	Slotting tool with carbide tip	155	30



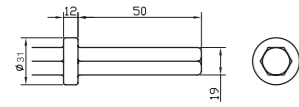
FOR HAMMERS

- Von Arx

SHANK SIZE 13,8MM 6-KT X 75MM

Order number	Description	L (mm) total	B (mm)
CB5100105/3	Moil point	180	-
CB5100102/3	Flat chisel	110	24
CB5100104/3	Flat chisel	180	24
CB5100103/3	Wide flat chisel	180	40
CB5100107/3S	Wide flat chisel	180	60
CB5100115/3	Wide flat chisel	180	100
CBMCOVAXS	Slotting tool with carbide tip	120	35

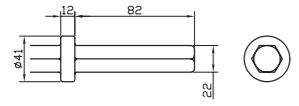
CHISELS FOR AIR HAMMERS


FOR HAMMERS

- TOKU AA-1.3BR(H) 19x50
- TOKU THA-Series

SHANK SIZE 19 MM 6-HEX X 50 MM

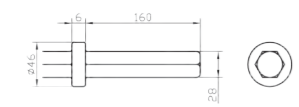
Order number	Description	L (mm) under the collar	B (mm)
MP5	Moil point	250	-
MP5-350	Moil point	350	-
MP5-450	Moil point	450	-
NC5	Flat chisel	250	25
NC5-350	Flat chisel	340	25
NC5-450	Flat chisel	440	25
CB5	Wide flat chisel	250	60
CB5-G	Wide flat bent chisel	250	60


FOR HAMMERS

- TOKU TCD-20
- RED ROOSTER RRI-4596/1
- RED ROOSTER RRI-4612K VL

SHANK SIZE 22 MM HEX X 82,5 MM

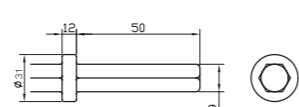
Order number	Description	L (mm) under the collar	B (mm)
MP4	Moil point	380	-
MP4-450	Moil point	450	-
MP4-1000	Moil point	1.000	-
MP4-1500	Moil point	1.400	-
MP4-2000	Moil point	1.900	-
NC4	Flat chisel	380	28
NC4-450	Flat chisel	450	28
NC4-1000	Flat chisel	1.000	27
NC4-1500	Flat chisel	1.500	28
NC4-2000	Flat chisel	2.000	27
NC4-2500	Flat chisel	2.500	27
CB4	Wide flat chisel	380	75
DC4	Asphalt chisel	400	75
AC4	Asphalt cutter	350	100


FOR HAMMERS

- TOKU TPB-50N
- TOKU TPB-501SV
- TOKU TPB-60

SHANK SIZE 32 MM HEX X 160 MM

Order number	Description	L (mm) under the collar	B (mm)
MP1A	Moil point	380	-
MP1	Moil point	450	-
MP1-900	Moil point	900	-
MP1-1500	Moil point	1.500	-
NC1A	Flat chisel	380	35
NC1	Flat chisel	450	35
CB1A	Wide flat chisel	380	75
DC1	Digging chisel	400	75
AC1	Heavyt asphalt cutter	270	115
CB5019	Asphalt cutter	280	125

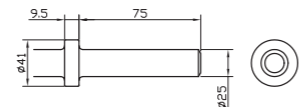

FOR HAMMERS

- TOKU TPB-40
- TOKU TPB-40SV

SHANK SIZE 25 MM HEX X 108 MM

Order number	Description	L (mm) under the collar	B (mm)
MP3	Moil point	380	-
MP3-450	Moil point	450	-
MP3-1000	Moil point	1.000	-
MP3-1500	Moil point	1.500	-
MP3-2000	Moil point	2.000	-
NC3	Flat chisel	380	25
NC3-450	Flat chisel	450	25
CB3	Wide flat chisel	360	75
DC3	Digging chisel	400	75
AC3	Asphalt cutter	400	125
AC3-PF*	Asphalt cutter	400	125

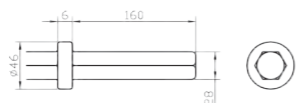
* When the chisel lies flat the position of the tip of the hex faces upwards


FOR HAMMERS

- RED ROOSTER RRI-4596/R
- RED ROOSTER RRI-4612R VL

SHANK SIZE Ø 25 MM X 75 MM,
ROUND COLLAR 42 MM

Order number	Description	L (mm) under the collar	B (mm)
B350MP	Moil point	350	-
B450MP	Moil point	450	-
B600MP	Moil point	600	-
B1000MP	Moil point	1.000	-
B1500MP	Moil point	1.500	-
B2000MP	Moil point	2.000	-
B350NC	Flat chisel	350	24
B450NC	Flat chisel	450	24
B600NC	Flat chisel	600	24
B1000NC	Flat chisel	1.000	24
B1500NC	Flat chisel	1.500	24

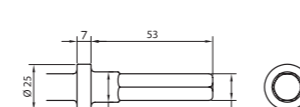

FOR HAMMERS

- TOKU TPB-40
- TOKU TPB-40SV

SHANK SIZE 28 MM HEX X 160 MM

Order number	Description	L (mm) under the collar	B (mm)
MP2A	Moil point	380	-
MP2	Moil point	450	-
NC2A	Flat chisel	380	35
NC2	Flat chisel	450	35
CB2A	Wide flat chisel	380	75
DC2	Wide flat chisel	400	75
CB5819	Asphalt cutter	350	125

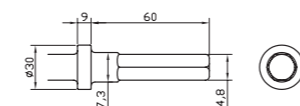
CHISELS FOR AIR HAMMERS


FOR HAMMERS

- TOKU AA-OB
- TOKU AA-OB(RH)

SHANK SIZE 12,7MM HEX / Ø 15MM X 53MM

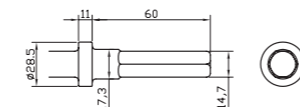
Order number	Description	L (mm) total	B (mm)
BEAA-OB-01	Flat chisel	220	16
BEAA-OB-01 400MM	Flat chisel	400	16
BEAA-OB-02	Diamond point	220	-
BEAA-OB-02 400MM	Diamond point	400	-
BEAA-OB-03	Flat chisel	220	25
BEAA-OB-04	Flat chisel	220	49
BEAA-OB-04 540MM	Flat chisel	540	49
BEAA-OB-05	Flat chisel	220	97
BEAA-OB-06	Flat chisel bent	220	50


FOR HAMMERS

- TOKU AA-1.3B,
- AA-3B (old series)

SHANK SIZE 14,8MM HEX / Ø 17,3MM X 60MM

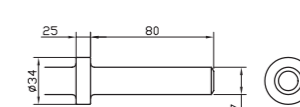
Order number	Description	L (mm) total	B (mm)
CB3210260	Moil point	280	-
CB3210450	Moil point	530	-
CB418	Round nose	210	-
CB420	Diamond point	160	-
CB3211260	Flat chisel	380	22
CB424	Flat chisel	190	50
CB426	Flat chisel	137	38
CB3218200	Wide flat chisel	190	50
CB3217210G	Wide flat chisel, bent	200	95
CB3211450	Flat chisel, bent	510	22


FOR HAMMERS

- TOKU THH-2BH
- TOKU THH-3BH
- TOKU THH-4BH

SHANK SIZE 14,7MM HEX / Ø 17,3MM X 60MM,
OVAL COLLAR

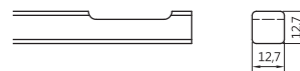
Order number	Description	L (mm) total	B (mm)
HS2-OC	Flat chisel	200	24
CB304	Flat chisel	158	24
CB304-12	Flat chisel	234	24
CB304-18	Flat chisel	386	24
CB324-24	Flat chisel	610	50
HS2-32-OC	Wide flat chisel	200	32
HS2-50-OC	Wide flat chisel	200	50
HS6-OC	Moil point	200	-


FOR HAMMERS

- RED ROOSTER RRH-4210K

SHANK SIZE 27 MM X 80 MM, COLLAR 34 MM SQUARE

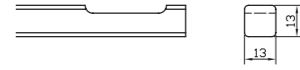
Order number	Description	L (mm) total	B (mm)
CB1362010045	Moil point	400	-
CB1362011045	Flat chisel	400	27


FOR HAMMERS

- AC RRC-12

SHANK SIZE 13 MM SQUARE, WITH RRC RECESS

Order number	Description	L (mm) total	B (mm)
CB3251	Flat chisel	180	19
CB3251-300	Flat chisel	300	19
CB3251-450	Flat chisel	450	19
CB3252	Wide flat chisel	155	34
CB3252-300	Wide flat chisel	240	34
CB3253	Wide flat chisel, bent	178	34


FOR HAMMERS

- AC RRC

SHANK SIZE 13 MM SQUARE, WITH RRC RECESS

Order number	Description	L (mm) total	B (mm)
CB4221	Flat chisel	180	19
CB4222	Wide flat chisel	153	38
CBMCCORRC13.2	Slotting tool with carbide tip (d=8)	150	36
CBMCCORRC13.0-4	Slotting tool with carbide tip (d=4)	150	36
CBMCCORRC13.0-6	Slotting tool with carbide tip (d=6)	150	36
CBMCO422180-1	Slotting tool with carbide tip(d=8)	180	36
CBMCO422180-2	Slotting tool with carbide tip (d=4)	180	36
CBMCO422180-3	Slotting tool with carbide tip (d=6)	180	35

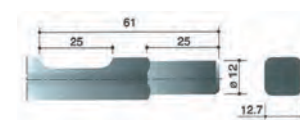
CHISELS FOR AIR HAMMERS



- FOR HAMMERS**
- YOKOTA F-25
 - RED ROOSTER RR-0315

SHANK SIZE 12,7 MM SQUARE, WITH RECESS

Order number	Description	L (mm) total	B (mm)
BE15/1B	Flat, bent	112	20
BE15/1F	Flat chisel	115	20
BE15/1G	Wide flat chisel, bent	114	34
BE15/1W	Wide flat chisel	115	34
8160-1002-00-00	Flat, bent	115	25
CBMCOF25-150	Slotting tool with carbide tip	103	33
CBMCOF25-180	Slotting tool with carbide tip (d=8)	180	35
CBMCOF25-180-4	Slotting tool with carbide tip(d=4)	180	35
CBMCOF25-180-6	Slotting tool with carbide tip (d=6)	180	35



- FOR HAMMERS**
- TOKU TFC-200F

SHANK SIZE 12,7 MM SQUARE, WITH RECESS

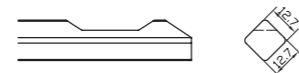
Order number	Description	L (mm) total	B (mm)
CB40901180	Moil point	180	-
CB40902180	Flat chisel	180	19
CB40903180	Wide flat chisel, bent	180	35
CB40904180	Wide flat chisel, bent	180	35
CB40905180	Wide flat chisel	180	50
CB40906180	Wide flat chisel, bent	180	50



- FOR HAMMERS**
- RED ROOSTER RRI-4006VL
 - RED ROOSTER RRI-4007VL

SHANK SIZE 12,7 MM SQUARE WITH RECESS

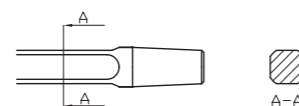
Order number	Description	L (mm) total	B (mm)
704.3101	Moil point	178	19
704.3103	Wide flat chisel	178	64
704.3107	Flat chisel	254	19
704.3110	Wide flat chisel spark free	178	50
704.3205	Flat bent chisel	178	35



- FOR HAMMERS**
- TOKU TFC-257H

SHANK SIZE 12,7 MM SQUARE, WITH RECESS

Order number	Description	L (mm) total	B (mm)
CB382	Flat chisel	178	19
CB382-12	Flat chisel	300	19
CB382-18	Flat chisel	455	19
CB383	Wide flat chisel	178	35
CB383-12	Wide flat chisel	300	35
CB383-18	Wide flat chisel	450	35
CB384	Wide flat chisel, bent	178	35
CB384/12	Wide flat chisel, bent	300	35
CB380	Wide flat chisel	178	50
CB380-3	Wide flat chisel	200	75
CBMCOIR180	Slotting tool with carbide tip	200	35
CBMCOIR180-4	Slotting tool with carbide tip (d=4)	200	35
CBMCOIR180-6	Slotting tool with carbide tip (d=6)	200	35

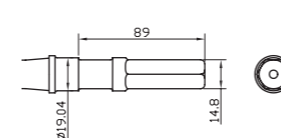


- FOR HAMMERS**
- IR9001 (e.g.)

SHANK SIZE JUMBO SQUARE

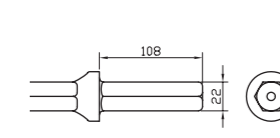
Order number	Description	L (mm) total	B (mm)	Ø
CB296	Moil point	250	-	
CB297	Moil point	300	-	
CB276	Flat chisel	250	24	
CB276-12	Flat chisel	300	24	
CB276-18	Flat chisel	450	24	
CB278	Punch	250	-	10
CB279	Punch	250	-	13
CB280	Punch	250	-	16
CB281	Punch	250	-	19
CB282	Punch	250	-	22
CB283	Punch	250	-	25
CB284	Punch	250	-	28

DRILLS FOR AIR HAMMERS



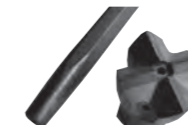
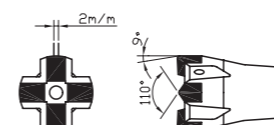
MONOBLOC-DRILLS SHANK 14.8 MM HEX X 89 MM COMBI FOR HAMMERS - TOKU TH-5S

Order number	L (mm) total	Ø (mm)
CB9F25013	330	13
CB9F25014	330	14
CB9F25016	330	16
CB9F25019	330	19
CB9F25022	330	22
CB9F35014	430	14
CB9F35016	430	16
CB9F35019	430	19
CB9F35022	430	22



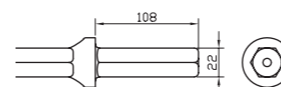
MONOBLOC-DRILLS SHANK 22 MM HEX X 108 MM FOR HAMMERS - TOKU TJ-15LBS /TJ-20LBS

Order number	L (mm) total	Ø (mm)
CB2240016	400	16
CB2260016	600	16
CB2240019	400	19
CB2260019	600	19
CB22100019	1.000	19
CB2230022	300	22
CB2240022	400	22
CB2260022	600	22
CB22100022	1.000	22
CB2240025	400	25
CB2260025	600	25
CB22100025	1.000	25
CB2260028	600	28
CB2260030	600	30



DRILL BIT CROSSHEADS, KONUS II

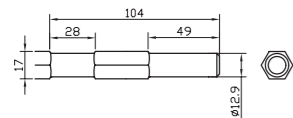
Order number	L (mm) total	Ø (mm)
CB6126300030	-	30
CB6126300032	-	32
CB6126300034	-	34
CB6126300036	-	36
CB6126300038	-	38
CB6126300040	-	40
CB6126300045	-	45
CB6126300050	-	50
CB6126300055	-	55



DRILL BARS SHANK 22 MM HEX X 108 MM KONUS II FOR HAMMERS - TOKU TJ-15LBS /TJ-20LBS

Order number	L (mm) total	Ø (mm)
CB2261510500	500	-
CB2261510800	800	-
CB2261511000	1.000	-
CB2261511400	1.400	-
CB2261512000	2.000	-
CB2261512400	2.400	-

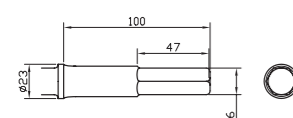
CHISELS FOR ELECTRIC HAMMERS



FOR HAMMERS
• Makita 0810, 8035

SHANK SIZE Ø 12,9MM X 77 MM

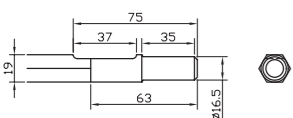
Order number	Description	L (mm) total	B (mm)
CB2453	Flat chisel	280	20
CB2455	Wide flat chisel	280	40



FOR HAMMERS
• Duss PK35, PK40, PK45, PK75

SHANK SIZE 16MM HEX X 100MM

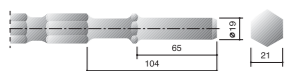
Order number	Description	L (mm) total	B (mm)
CB2291	Moil point	400	-
CB2293	flat chisel	400	24



FOR HAMMERS
• Bosch USH6, UBH6, 11206

SHANK SIZE Ø 16,3MM X 19MM

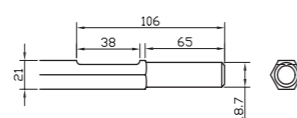
Order number	Description	L (mm) total	B (mm)
CB2061	Moil point	300	-
CB2066	Flat chisel	300	24
CB2072	Wide flat chisel	400	50



FOR HAMMERS
• Kangoo 900/950

SHANK SIZE Ø 19 MM X 65 MM

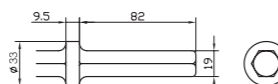
Order number	Description	L (mm) total	B (mm)
CB2381	Wide flat chisel	300	50
CB2381-L	Wide flat chisel	380	50
CB2382	Wide flat chisel	300	75
CB944484	Adaptor for floorscraper	450	-



FOR HAMMERS
• Kangoo 900/950

SHANK SIZE Ø 19 MM X 65 MM

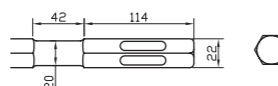
Order number	Description	L (mm) total	B (mm)
CB2362	Moil point	380	-
CB2363	Moil point	450	-
CB2366	Flat chisel	380	24
CB2367	Flat chisel	450	24
CB100134	Floorscraper	270	150
CB100156	Blade for floorscraper M10	-	150
CB100156-M12	Blade for floorscraper M12	-	150
CBB61040K	Repair kit for floorscraper M10	-	-
CBB61040K-M12	Repair kit for floorscraper M12	-	-



FOR HAMMERS
• Wacker

SHANK SIZE 19 MM HEX X 82,5MM

Order number	Description	L (mm) total	B (mm)
CB2904	Flat chisel	330	24
CB2906	Flat chisel	500	24
CB2907	Wide flat chisel	330	65

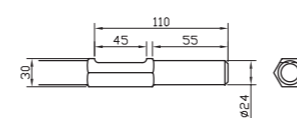


FOR HAMMERS
• Duss PK160, PK300

SHANK SIZE 22 MM HEX WITH RECESS

Order number	Description	L (mm) total	B (mm)
CB100526	Moil point	400	-
CB100533	Moil point	500	-
CB100534	Flat chisel	500	28
CB100535	Wide flat chisel	500	50

CHISELS FOR ELECTRIC HAMMERS

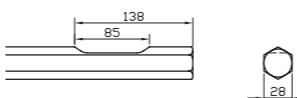


FOR HAMMERS
• Makita
• Hitachi

SHANK SIZE Ø 24MM X 55MM

Order number	Description	L (mm) total	B (mm)
CB3021	Moil point	400	-
CB3022A *	Flat chisel	400	32
CB3022B *	Flat chisel	400	32
CB3023A *	Wide flat chisel	400	75
CB3023B *	Wide flat chisel	400	75
CB3024A *	Asphalt cutter	400	125

* Type A: recess parallel on flat side of the spade, type B: crosswise



FOR HAMMERS
• Bosch USH27, 11304

SHANK SIZE 28MM HEX WITH RECESS

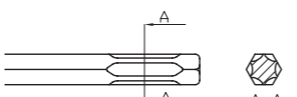
Order number	Description	L (mm) total	B (mm)
CB2001	Moil point	400	-
CB2003	Flat chisel	400	35
CB2005	Wide flat chisel	400	75



FOR HAMMERS
• Impex EH25

SHANK SIZE 11 MM

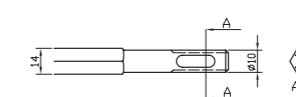
Order number	Description	L (mm) total	B (mm)
CBMCOEH25	Slotting tool with carbide tip	250	35



FOR HAMMERS
• Hilti TE805, TE905
• TE-1000-AVR & TE-2000-AVR

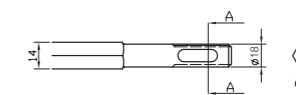
SHANK SIZE HILTI TE805 AND TE905

Order number	Description	L (mm) total	B (mm)
CB914972	Moil point	360	-
CB914974	Moil point	500	-
CB914982	Flat chisel	360	30
CB914992	Wide flat chisel	360	50
CB914995	Wide flat chisel	360	75



SDS PLUS

Order number	Description	L (mm) total	B (mm)
CB2101	Moil point	250	-
CB2102V	Flat chisel	250	20
CB2103	Wide flat chisel	250	40
CBMCOUSDPLUSKORT	Slotting tool with carbide tip	158	35
CBMCOUSDPLUSLANG	Slotting tool with carbide tip	250	35



SDS MAX

Order number	Description	L (mm) total	B (mm)
CB04001	Moil point	280	-
CB04002	Moil point	400	-
CB04003	Moil point	600	-
CB04004	Flat chisel	280	25
CB04005	Flat chisel	400	25
CB04006	Flat chisel	600	25
CB04007	Hollow gouge	300	26
CB04007-33	Hollow gouge	300	33
CB04009	Wide flat chisel	400	50
CB04010	Wide flat chisel	300	80
CB04013	Wide flat chisel	350	115
CB04011	Wide flat chisel, bent	300	50
CB04012	Wide flat chisel, bent	300	80
CBMCOMAX	Slotting tool with carbide tip	280	-
CB914978	Adaptor for floorscraper	450	-
CB100134	Floorscraper	270	150
CB100156	Blade for floorscraper	-	150
CB100156-M12	Blade for floorscraper M12	-	150
CBB61040K	Repair kit for floorscraper	-	-
CBB61040K-M12	Repair kit for floorscraper M12	-	-

NEEDLE SCALERS

Straight & Pistol Models



Type	Brand	Bore diameter mm	Stroke mm	Blows p/min	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
YK-2 ¹⁾	YOKOTA	24	33	8.000	6	2,5	PT 3/8"	6,5	5,6	85
TFC-N200	TOKU	20	10	12.000	4,1	1,2	PT 1/4"	6,5	14,3	91
F-25N	YOKOTA	25	22	4.000	6	2,3	PT 1/4"	6,5	10	78
RR-0315NS	RR	25	32	4.000	6,6	2,6	PT 1/4"	6,5	9,4	93
RR-2110NS	RR	23,5	33	3.000	6,6	2,5	PT 1/4"	6,5	20	96
RRI-4006	RRI	23,5	34	3.000	2,6	2,6	PT 1/4"	6,5	17	90
RRI-4006VL ²⁾³⁾	RRI	23,5	34	2.400	1,9	2,7	PT 1/4"	6,5	2,7	90
RRI-4007	RRI	30,5	30,5	2.500	3,3	4,3	PT 1/4"	6,5	12	91
RRI-4007VL ²⁾³⁾	RRI	34,4	30,5	3.000	2,6	3,4	PT 1/4"	6,5	1,9	95

¹⁾ Scaler/scabler / ²⁾ Vibration reduced / ³⁾ Can also be used as air hammer, see below

NOTE

All needle scalers are supplied with 3mm needles

NEEDLE SCALER SETS

Chisel holder and anvil also separately available.



Order number	Description
419.2003	Chisel Holder 1/2" Square
610.2003	Anvil

Conversion kits for RRI-4006VL vibration reduced needle scaler.

Order number	Description
419.3003	Chisel Holder 1/2" Square
610.3003	Anvil

Conversion kits for RRI-4007VL vibration reduced needle scaler. For overview of Chisel see pages 101-104.

NEEDLE SCALERS

Accessories & Dimensions

NEEDLEHOLDERS

Type	2 mm	3 mm	4 mm
TFC-N200	Y3-06-12-220	Y3-06-12-200*	-
F-25N	-	6203-0829-02-00*	-
RR-0315NS	-	SG-0315NS-25*	-
RR-2110NS	SG-2110NS-24	SG-2110NS-17*	-
RRI-4006	218	217*	-
RRI-4006VL	601.2020	601.2030*	-
RRI-4007	330	314*	353
RRI-4007VL	601.3020	601.3030*	601.3040

* Supplied as standard

NUMBER OF NEEDLES

Needle for type	Amount 2 mm	Amount 3 mm	Amount 4 mm
TFC-N200	21	12	-
F-25N	-	19	-
RR-0315NS	-	19	-
RR-2110NS	29	19	-
RRI-4006	51	19	-
RRI-4006VL	51	19	-
RRI-4007	65	28	19
RRI-5007VL	65	28	19

All needle scalers are supplied as standard with 3 mm needles, except RRI-4008 which is supplied with 4 mm needles.

NEEDLE

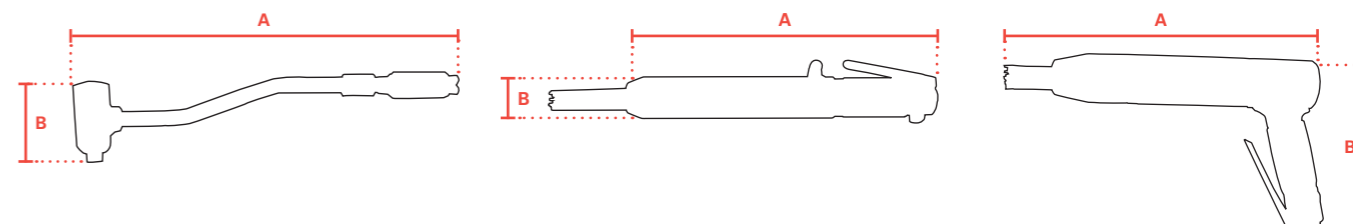
Ø	Version	Length	Order Number
2 mm	Blunt, hardened steel	178 mm	6203-0827-02-01
3 mm	Blunt, hardened steel	178 mm	6203-0827-03-01*
3 mm	Chisel point, hardened steel	178 mm	6203-0827-03-02
3 mm	Copper-beryllium	178 mm	6203-0827-03-03
4 mm	Blunt, hardened steel	178 mm	6203-0827-04-01

Ø	Version	Length	Order Number
3 mm	TFC-N200	125 mm	Y3-06-12-210

* Supplied as standard

DIMENSIONS

Type	A mm	B mm
YK-2	489	126
F-25N	412	43
RR-0315NS	415	45
RR-2110NS	340	175
RRI-4006	330	48
RRI-4006VL	340	48
RRI-4007	460	57
RRI-4007VL	330	48
TFC-N200	273	36



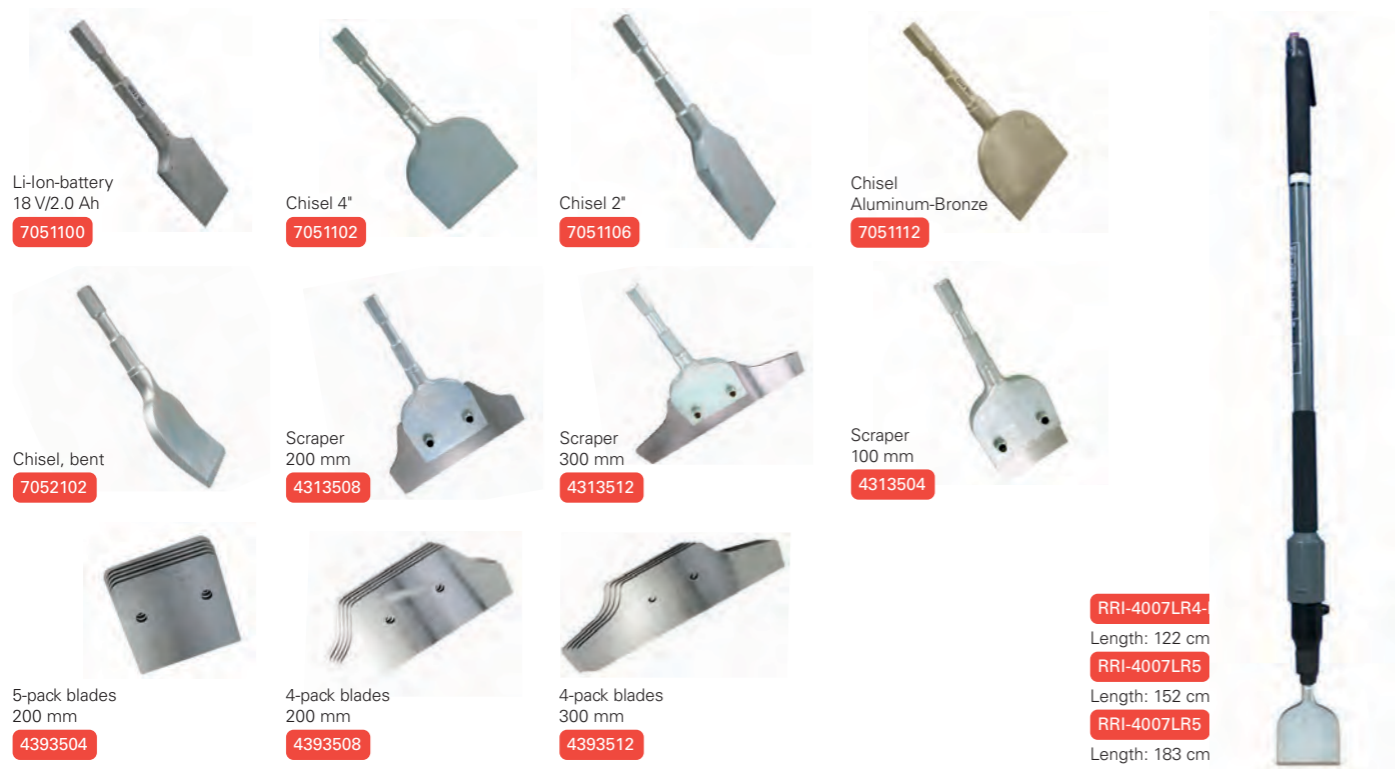
LONG REACH SCALERS

RRI 4000 series

This tool is intended to ergonomically clean a surface. It functions just like a needle scaler / hammer.

CAN BE USED FOR APPLICATIONS SUCH AS

- Removal of floor coverings, adhesive layers, tiles and tarpaulin
- Remove rust or paint layers
- Removal of slag in, for example, a laser plasma cutting machine
- Facade cleaning

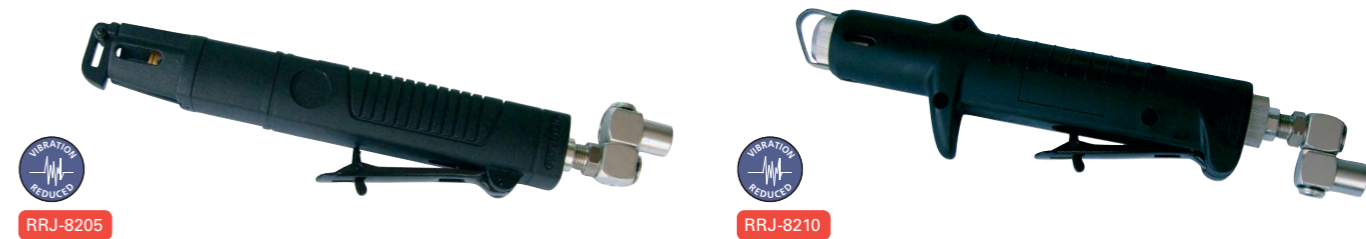


Type	Brand	Shank size mm	Bore diameter mm	Stroke mm	Blows p/min	J/Blow	Air-cons. l/s	Weight kg	Inlet thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-4007LR4-LITE	RRI	15,88	28,6	39	2.200	15,55	2,1	3,7	PT 1/4"	10	13	85,8
RRI-4007LR5	RRI	15,88	28,6	39	2.200	15,55	2,1	6,25	PT 1/4"	10	11,4	82,4
RRI-4007LR6	RRI	15,88	28,6	39	2.200	15,55	2,1	6,9	PT 1/4"	10	7,7	84,3

SAWS

RRJ, RRI

Reciprocating Saws



Type	Brand	Capacity steel mm	Capacity aluminium mm	Strokes min ⁻¹	Stroke mm	Power kW	Air cons l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRJ-8205*	RR	10	12	5.000	25	0,25	2,8	0,96	PT 1/4"	6,5	3,5	79
RRJ-8210*	RR	3,1	3,9	9.500	10	0,25	2,8	0,51	PT 1/4"	6,5	3,5	78

*Includes sawblades and rotating clutch. See the next page for accessories.

CHARACTERISTICS

- Vibration reduced and lightweight.
- Both tools are delivered with a swivel joint that allows flexibility.
- The sawing tools are delivered in a blow molded case, including an assortment of saw-blades.
- The RRJ-8210 has a full composite body; the RRJ-8205 has a plastic layer over its housing, offering good thermal isolation.

- For thin (sheet-) material, the RRJ-8210 is the best choice of tool, whilst the RRJ-8205 is better for heavier sawing-jobs.
- Files in different shapes, sawblades and other accessories are available on request.

Pipe Saw



This Red Rooster pipesaw is intended for heavy industrial use.



Always use the tube spanner and chain for fixation of the tool!

RRI-8460

Type	Brand	Capacity steel Ø mm	Strokes p/min	Stroke mm	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-8460	RRI	45-530	300	65	1,1	20	8	BSP 3/4"	19	1,7	82

Saw is utilized for all the available standard blades on the market. The pipe clamps are optional. / See accessories for saws on the next page.

Chain Saw



RRI-8560



Type	Brand	Length sawblade inch	Max capacity mm	RPM ⁻¹	Power kW	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-8560	RRI	14"	340	18.000	1,5	50	7,6	BSP 3/4"	19	< 2,5 m/s ²	98

Saw comes with an Oregon sawblade and chain. / Accessories for saws on the next page.

SAWS

Accessories & Dimensions

ACCESSORIES



SAWBLADES FOR THE RRJ-8205

Description	Order number	Teeth
5-pack sawblades length: 140 mm	8205-518-00	18-teeth
	8205-524-00	24-teeth



SAWBLADES FOR THE RRJ-8210

Description	Order number	Teeth
5-pack sawblades: 74 mm	31418-5	18 teeth/inch St37, V2A, wood, plastics, metal plate up to 2,5 mm
5-pack sawblades: 74 mm	31442-5	24 teeth/inch St37, V2A, aluminium, metal plate up to 2 mm
5-pack sawblades: 74 mm	31432-5	32 teeth/inch, St37, V2A, aluminium, metal plate up to 1 mm
Files 5 mm length: 74 mm	8210-501-00	5 mm, square
	8210-502-00	5 mm, round
	8210-503-00	5 mm, half-round
	8210-504-00	5 mm, triangle



SAWBLADE AND CHAIN FOR THE RRI-8560

Description	Order number	Brand
Sawblade	140SPET041 DZ	Oregon
Chain	91VLX	Oregon

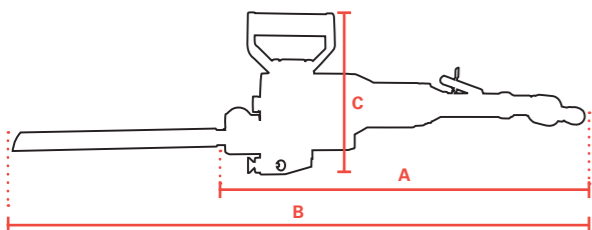
SAWBLADE AND CHAIN FOR THE RRI-8550*

Description	Order number	Brand
Sawblade	140SPEA041	Sandvik
Chain	91VG-52E	Sandvik

* The RRI-8550 is no longer available.

DIMENSIONS

Type	A mm	B mm	C mm	D mm
RRJ-8205	367	65	-	-
RRJ-8210	365	80	-	-
RRI-8460	460	537	240	-
RRI-8560	340	650	20	200



PIPE CLAMPS & SAWBLADES FOR THE RRI-8460

Description	Order number	Dimensions	Teeth
Extension chain	8460-201-50		
HSS-sawblades	Z22-10	200 x 25 x 1,5	16 teeth/inch
	Z22-6	300 x 25 x 1,5	16 teeth/inch
	Z22-7	400 x 25 x 1,5	16 teeth/inch
	Z22-72	500 x 28 x 2	14 teeth/inch
	Z22-73	600 x 28 x 2	14 teeth/inch
	Z22-75	770 x 28 x 2	12 teeth/inch
	Z22-31	300 x 25 x 1,5	12 teeth/inch
	Z22-30	530 x 28 x 1,5	12 teeth/inch
	Z22-37	940 x 32 x 2	12 teeth/inch
	Z22-9	200 x 25 x 1,5	8 teeth/inch
Z22-29	400 x 25 x 1,5	8 teeth/inch	
Z22-74	600 x 28 x 2	8 teeth/inch	
HSS-sawblade	Z22CT-06	300 x 25 x 2	16 teeth/inch
Sawblades tungsten carbide coating	2CT-72	500 x 32 x 2,5	-
	2CT-73	600 x 32 x 2,5	-



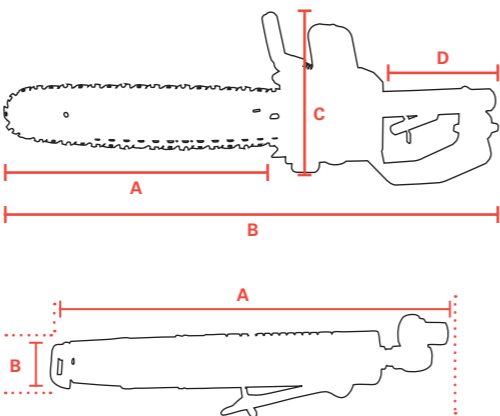
PIPE CLAMPS FOR THE RRI-8460

Type	Order number	Dimensions
Pipe clamps 6"	8460-200-00	6"
Pipe clamps 12"	8460-201-01	12"
Pipe clamps 20"	8460-205-00	20"



SWIVEL JOINT FOR THE RRJ-8205 & RRJ-8210

Description	Order number
Universal Swivel Joint 1/4"	922A18



ENGRAVING PEN



RRI-9010

Type	Brand	Needle diameter mm	Strokes p/min	Air cons. l/sec	Weight kg	Inletthread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-9010	RRI	1,7	36.000	0,5	0,25	R 1/4"	4	0,7	62

ACCESSORIES

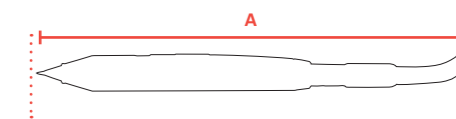
FOR RRI-9010

Accessory	Order number
Engraving needle, fine	2-01-011-90
Engraving needle, medium	2-01-011-91
Engraving needle, coarse	2-01-011-92

* Supplied as standard

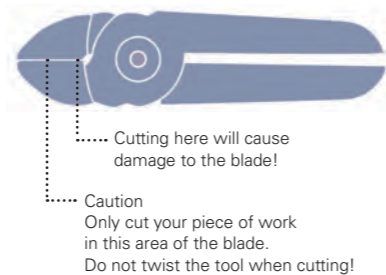
DIMENSIONS

Type	A mm	B mm
RRI-9010	160	-



POWERCUTTERS

Cutting and Pressing

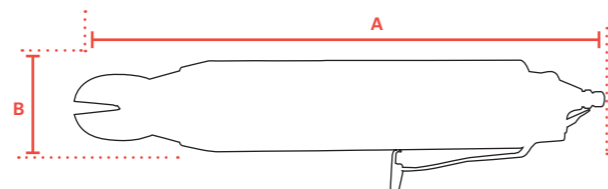


Type	Brand	Capacity copper mm	Capacity steel* mm	Capacity plastics mm	Capacity crimping mm	Power midway on blade kg	Air cons. l/stroke	Weight kg**	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RRI-8002	RRI	1	0,5	-	-	40	0,064	0,13	PT 1/4"	6,5	0,2	71
RRI-8003	RRI	1,6	1	4	-	60	0,116	0,20	PT 1/4"	6,5	0,4	72
RRI-8004	RRI	2,6	2	7	-	140	0,23	0,34	PT 1/4"	6,5	0,3	73
RRI-8011	RRI	3,3	2,8	10	2	280	0,584	0,52	PT 1/4"	6,5	1	76
RRI-8031	RRI	4,8	4	13	5,5	450	0,956	0,83	PT 1/4"	6,5	1	75
RRI-8032	RRI	7	6	-	-	790	2,7	2	PT 1/4"	6,5	1,5	78

* Steel FE 370 / **Without blades (power cutters are supplied without blade, for blades see the next page) / Working pressure 0,4-0,5 MPa

DIMENSIONS

Type	A mm	B mm
RRI-8002	30	104
RRI-8003	36	124
RRI-8004	45	156
RRI-8011	56	192
RRI-8031	56	280
RRI-8032	75	390



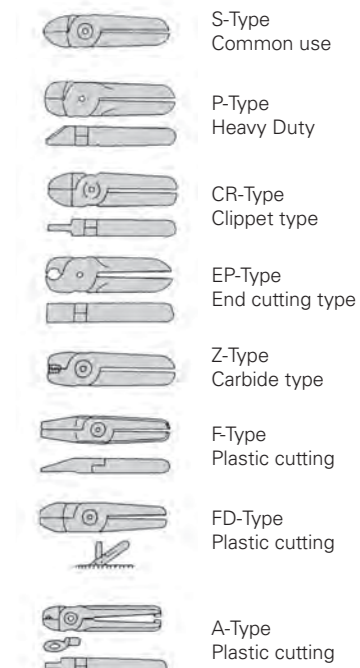
POWERCUTTERS

Accessories: Blades



CUTTING CAPACITY OF THE BLADES

Type	Copper mm	steel FE 370 mm	Piano-wire mm	Plastics mm	Crimping mm	Blade type
RRI-8002	1	0,5	-	-	-	S-26
RRI-8003	1,6	1	-	-	-	S-4
	1,6	1	0,5	-	-	Z-4
	-	-	-	4	-	F-3
RRI-8004	2,6	2	-	-	-	P-6, CR-6, EP-6, S-5
	2,6	2	1	-	-	Z-6 (carbide tip)
	-	-	-	7	-	F-5, FD-5
RRI-8011	3,3	2,8	-	-	-	P-8P, CR-8P, EP-10P, S-7P
	3,3	2,8	1,2	-	-	Z-8P (carbide tip), ZCR-8P
	-	-	-	10	-	F-9P, FD-9P
RRI-8031	4,8	4	-	-	-	P-8P, ZCR-8P, CR-8P, EP-10P, S-7P
	-	-	-	13	-	F-9P, FD-9P
	-	-	-	-	5,5	A-8P
RRI-8032	7	6	-	-	-	P-120R23, CR-120



Power cutters are supplied without blade, please order separately from the list above.

TIP DRESSERS & HOG RINGERS



YNR-8F

YHR-33L

TIP DRESSERS

Type	Brand	Tip capacity mm	RPM	Rotation L/R	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
YNR-8F*	YOKOTA	16	1.400	right	6,7	1,2	PT 1/4"	9,5	< 2,5	5

* Hand model
Blades for tip dressers are separately available and will be custom made on tip specifications. On request we can supply you with detailed information.

HOG RINGERS

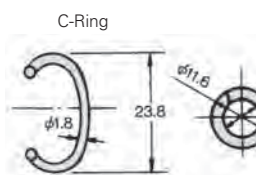
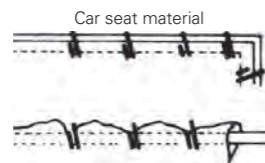
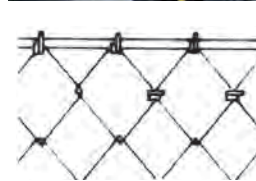
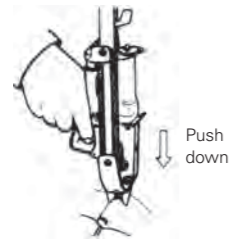
Type	Brand	Max. number of rings	Ring size mm	Trigger-pressure kg	Stroke trigger mm	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
YHR-33	YOKOTA	120	8	0,6	7	0,8	1,5	PT 1/4"	6	1,66	79
YHR-33L*	YOKOTA	120	8	0,6	7	0,8	1,5	PT 1/4"	6	1,66	79

* Extended nose

FUNCTIONING OF THE YHR-33(L)



Pull the trigger and clamp. The work is completed when the trigger is released.

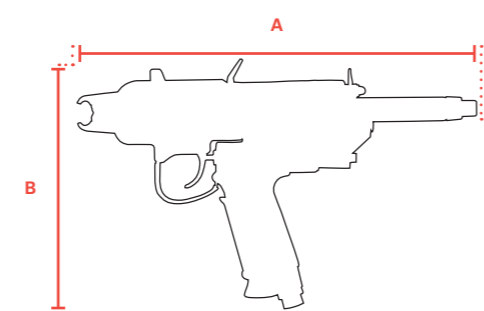
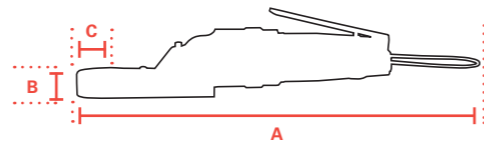


YHR-33/33L
Dimensions after clamping

60 Stk./Set

DIMENSIONS

Type	A mm	B mm	B* mm	C mm
YNR-8F	257	19,5	-	24
YHR-33	346	188	-	-
YHR-33L	361	188	-	-



DOWELL PIN PULLERS

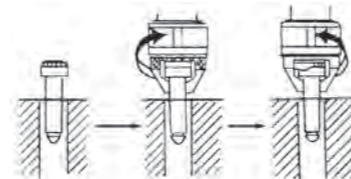


YDP-13

YDP-20

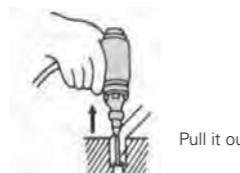
Type	Brand	Capacity pin mm	Stroke mm	Blows min ⁻¹	Air cons. l/s	Weight kg	Inlet-thread	Hose diameter mm
YDP-13	YOKOTA	13	30 x 25	5.000	3,3	1,35	PT 1/4"	6,5
YDP-20	YOKOTA	20	36 x 33	2.700	4,3	2,10	PT 1/4"	6,5

PULLING & HAMMERING OPERATION



PULLING OPERATION

1. Screw hanger bolt to threaded pin.
2. Fit dowel pin to guide hole.
3. Lock hanger bolt.
4. Operate the tool and pull.



Pull it out



Hammering in

HAMMERING OPERATION

1. Screw hanger bolt to threaded pin.
2. Fit dowel pin to guide hole.
3. Place the tool reversed on dowel pin.
4. Operate the tool to hammer dowel pin.

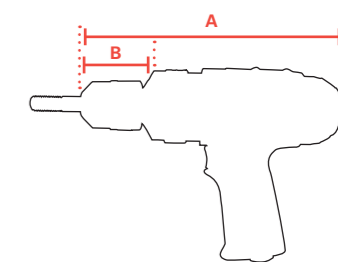
ACCESSORIES

Hanger bolts for YDP-13	Order number
M8 x 29L	6502-0022-00-01
M6 x 23L	6502-0022-00-02
M5 x 21L	6502-0022-00-03
M4 x 21L	6502-0022-00-04
M8 x 50L	6502-0022-00-05
M8 x 100L	6502-0022-00-06
M8 x 150L	6502-0022-00-07
M8 x 200L	6502-0022-00-08
M6 x 50L	6502-0022-00-09
M6 x 100L	6502-0022-00-10
M6 x 150L	6502-0022-00-11
M6 x 200L	6502-0022-00-12
M5 x 50L	6502-0022-00-13
M5 x 100L	6502-0022-00-14
M5 x 150L	6502-0022-00-15
M5 x 200L	6502-0022-00-16
M4 x 50L	6502-0022-00-17
M4 x 100L	6502-0022-00-18
M4 x 150L	6502-0022-00-19
M4 x 200L	6502-0022-00-20

Hanger bolts for YDP-20	Order number
M12 x 36L	6503-0022-00-01
M10 x 33L	6503-0022-00-02
M8 x 32L	6503-0022-00-03
M8 x 100L	6503-0022-00-04
M8 x 150L	6503-0022-00-05
M8 x 200L	6503-0022-00-06
M10 x 100L	6503-0022-00-07
M10 x 150L	6503-0022-00-08
M10 x 200L	6503-0022-00-09
M12 x 100L	6503-0022-00-10
M12 x 150L	6503-0022-00-11
M12 x 200L	6503-0022-00-12
M8 x 50L	6503-0022-00-13
M10 x 50L	6503-0022-00-14
M12 x 50L	6503-0022-00-15
M6 x 50L	6503-0022-00-16

L = Length
* Supplied as standard

DIMENSIONS



Type	A mm	B mm
YDP-13	162	75
YDP-20	195	82

MULTI-CUTTER

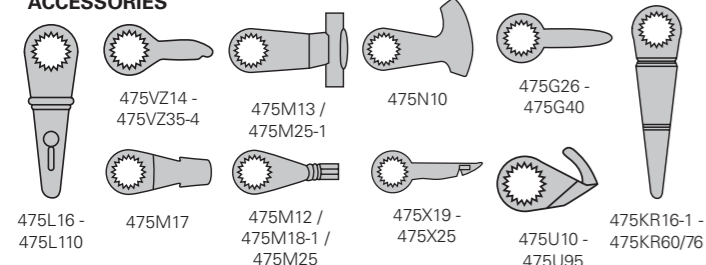


TYPE RR-476 CAN BE USED AS:

- Saw (with sawblade)
- For cutting
- Urethane-bonded windows (with various blades)
- As a sander (with triangle sanding pad)

Type	Brand	Sawing capacity mm	Movements p/min	Air cons. l/stroke	Weight kg	Inlet-thread	Hose diameter mm	Vibration m/s ²	Noise level dB(A)
RR-476	RR	1	0 - 22.000	6,5	1,1	PT 1/4"	6,5	2,6	90

ACCESSORIES



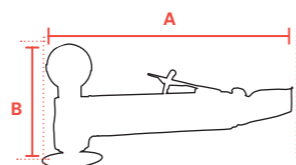
WINDOW CUTTER

Order number	Type	Dimension
475L16	639-03-122-011	16 mm
475LR16	639-03-099-010	16 mm
475L23	639-03-173-010	23 mm
475L25	639-03-124-013	25 mm
475L27	639-03-174-018	27 mm
475L45	639-03-168-018	45 mm
475LR54	639-03-160-015	54 mm
475LR58	639-03-097-018	58 mm
475L55	639-03-123-015	55/32 mm
475L80	639-03-171-013	80/70 mm
475L85	639-03-081-013	85/60 mm
475L85-1	639-03-125-017	85/70 mm
475L110	639-03-194-016	110 mm
475VZ14	639-03-120-019	14 mm
475VZ35	639-03-103-017	35 mm
475VZ35-1	639-03-104-015	35 mm
475VZ35-2	639-03-109-018	35 mm
475VZ35-3	639-03-164-019	35 mm
475VZ35-4	639-03-172-016	35 mm
475M12	639-03-129-050	12 mm
475M13	639-03-113-016	13 mm
475M17	639-03-144-011	17 mm
475M18-1	639-03-146-018	18 mm
475M25	639-03-105-019	25 mm
475M25-1	639-03-131-017	25 mm
475N10	639-03-132-010	-
475X19	639-03-208-010	19 mm
475X24	639-03-153-012	24 mm
475X25	639-03-207-012	25,4 mm
475G26	639-03-121-018	56/26 mm
475G35	639-03-073-011	56/35 mm
475G40	639-03-176-015	74/40 mm

Order number	Type	Dimension
475KR16-1	639-03-133-014	16 mm
475KR16/35	639-03-143-013	16/35 mm
475KR18/39	639-03-170-014	18/39 mm
475KR32/42	639-03-195-010	32/46 mm
475KR39	639-03-152-018	39 mm
475KR42/60	639-03-182-015	42/60 mm
475K45	639-03-072-017	45 mm
475KR60/76	639-03-169-012	60/72 mm
475U10	639-03-083-010	10 mm
475U16-2	639-03-108-014	16 mm
475U18	639-03-087-019	18 mm
475U18-1	639-03-127-014	18 mm
475U19	639-03-118-013	19,5 mm
475U22	639-03-115-018	22 mm
475U24	639-03-076-016	24 mm
475U28	639-03-163-011	28 mm
475U32	639-03-114-014	32 mm
475U32-1	639-03-147-012	32 mm
475U32-2	639-03-191-011	32 mm
475U36	639-03-079-012	36 mm
475U40	639-03-110-010	40 mm
475U40-1	639-03-156-017	40 mm
475U45	639-03-154-010	45 mm
475U52	639-03-153-012	52 mm
475U60	639-03-101-010	60 mm
475U60-2	639-03-107-016	60 mm
475U60-3	639-03-157-011	60 mm
475U70	639-03-155-014	70 mm
475U95	639-03-111-019	95 mm

Type	Order number	Type	Dimension
Sawblade	475101	635-02-102-016	ø 63 mm - Staal 1 mm
Sawblade	475801	635-02-103-010	ø 80 mm - HSS
Sanding paper	475380	637-17-083-043	Korrel 80
Sanding paper	4753150	637-17-087-042	Korrel 150
Sanding paper	4753240	637-17-090-046	Korrel 240
Pad	476/TP	-	3-hoekig

Type	A mm	B mm
RR-476	195	79



BARREL & SUMP PUMPS



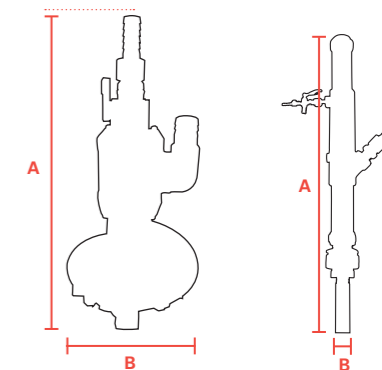
Type	Brand	Description	Max. capacity	Max. capacity m	Air-cons. l/s	Weight kg	Air hose Ø mm	Outlet hose Ø mm	Air return hose Ø mm
YPP-1*	YOKOTA	Barrel pump	65 l/min	40	7,5	8,8	10	19	-
YP-18	YOKOTA	Bronze sump pump	55 t/h	25	33	19	19	65	25
YP-35	YOKOTA	Bronze sump pump	80 t/h	41	73	32	25	65	38

*YPP-1: Connection thread PT 1 1/2" / Inlet thread PT 1/4" / Outlet thread PT 3/4"

DIMENSIONS

Teflon packing for the YPP-1	Order number
Piston packing	7003-1009-11-11
Case packing	7003-1014-11-11
Fa-packing 48 x 54 x 1,5	8010-3015-11-11
O-ring P-35	9010-1026-11-11

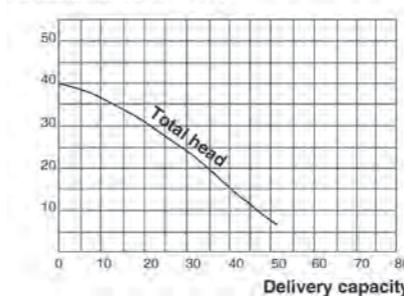
Type	A mm	B mm	C mm
YPP-1	606	68	-
YP-18	525	189	250
YP-35	550	270	320



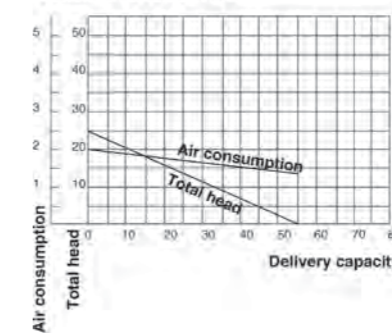
PERFORMANCE CURVE

Type YPP-1 has been developed for pumping liquids from drums. The pump fits on standard oil-drums with a normal 1 1/2" pipe thread opening. The models YP-18 and YP-35 are made of bronze and are suitable to pump aggressive liquids and acids. For a full overview please contact us.

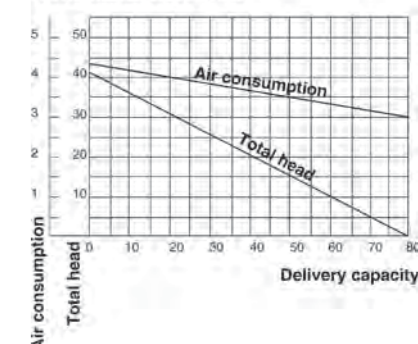
Performance curve YPP-1



Performance curve YP-18



Performance curve YP-35



CAULKING GUN



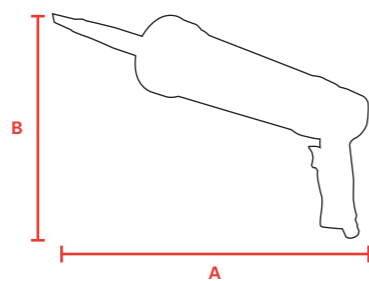
RRP-203

Type	Brand	Tube Ø x mm	Working pressure bar	Weight kg	Inlet- thread	Hose diameter mm
RRP-203	RR	Ø 50 x 215 (for 400 ml) *	2-4	1,1	PT 1/4"	6,5

*The Red Rooster caulking gun is suitable for 400 ml cartridges

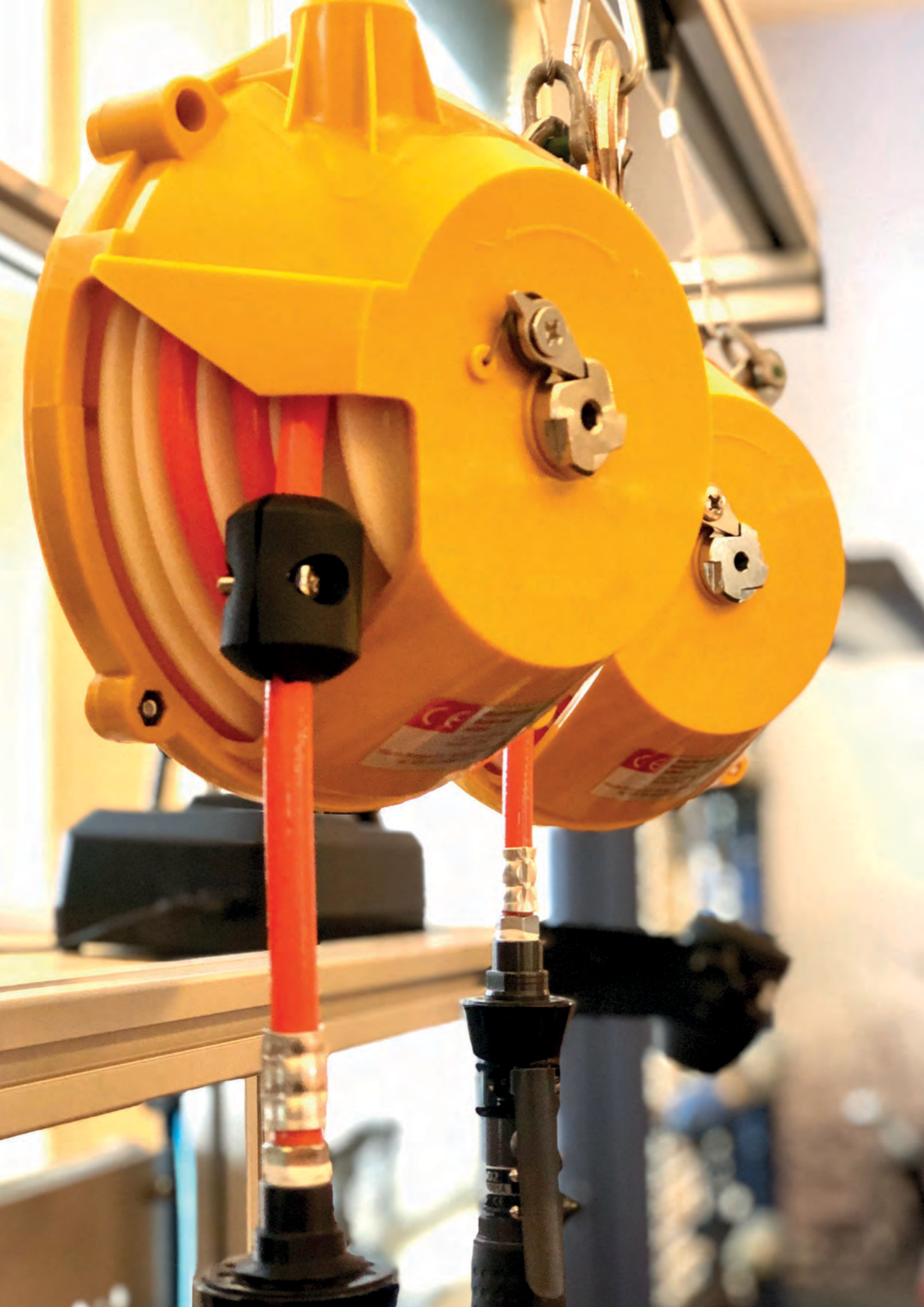
DIMENSIONS

Type	A mm	B mm
RRP-203	268	135



ACCESSORIES





ACCESSORIES

The proper choice of tools is not the only element to take into consideration when you aim to improve productivity. Accessories that enable an operator more flexibility and avoid physical burden, can make a big difference and will increase the operators efficiency as well as decrease the occurrence of injuries. When an operator is supported through the use of a balancer, it is possible to work for longer hours with less stress. Moving around the workplace through the use of spiral hoses and swivel joints increase flexibility while the use of the right lubricant avoids premature maintenance and risk of costly failures. Rami Yokota can assist you in choosing the adequate accessories that suit your tools and workplace. Resulting in less downtime on the production line and more safety and satisfaction among employees.

BALANCERS

Types

BALANCERS

Type	Brand	Capacity kg	Cable length m	Weight kg
RRI-9001/1	RRI	0,5 - 1,5	2	0,5
RRI-9003/1	RRI	1 - 3	2	0,7
RRI-9005/1	RRI	2,5 - 5	2	0,9
EK-0	RRI	0,5 - 1,5	1	0,5
TW-3	RRI	1 - 3	1,3	1,4
TW-5	RRI	2,5 - 5	1,3	1,5
TW-9	RRI	4,5 - 9	1,3	3,4
TW-15	RRI	9 - 15	1,3	3,8
TW-22	RRI	15 - 22	1,5	7,2
TW-30	RRI	22 - 30	1,5	7,6
TW-40	RRI	30 - 40	1,5	9,8
TW-50	RRI	40 - 50	1,5	10,4
TW-60	RRI	50 - 60	1,5	11,6
TW-70	RRI	60 - 70	1,5	11,8
ETP-14	RRI	120 - 140	1,2	24,1
ETP-15	RRI	140 - 170	1,2	28,7
ETP-16	RRI	170 - 200	1,2	29,7

SPRINGBALANCERS: HOSEREEL WITH INTEGRATED CABLE

Type	Brand	Capacity kg	Cable length m	Weight kg	Hose diameter mm	Air cons. l/min	Inlet-thread
HTB-0	RRI	0,5 - 1,5	1,3	1,58	6,5	700	PT 1/4"
HTB-1	RRI	1,5 - 3	1,3	1,66	6,5	700	PT 1/4"
HTB-2	RRI	3 - 5	1,3	1,73	6,5	700	PT 1/4"

SPRINGBALANCERS: LONG STROKE

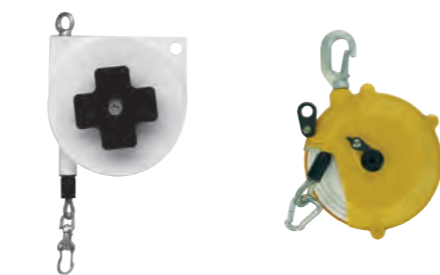
Type	Brand	Capacity kg	Cable length m	Weight kg
ELF-3	RRI	1,5 - 3	2,5	4,1
ELF-5	RRI	3 - 5	2,5	4,2
ELF-9	RRI	5 - 9	2,5	4,7
ELF-15	RRI	9 - 15	2,5	10
ELF-22	RRI	15 - 22	2,5	10,2
ELF-30	RRI	22 - 30	2,5	11
ELF-40	RRI	30 - 40	2,5	14
ELF-50	RRI	40 - 50	2,5	14,5
ELF-60	RRI	50 - 60	2,5	17
ELF-70	RRI	60 - 70	2,5	18

EXTRA SAFETY

The models ELF and TW from TW-9 upwards have a safety mechanism which activates in case of spring breakage.

DIMENSIONS

You can find the dimensions of our spring balances on our website.



RRI-9001/1
RRI-9003/1
RRI-9005/1

EK-0
EK-00



TW3
TW-5

TW9
TW-70



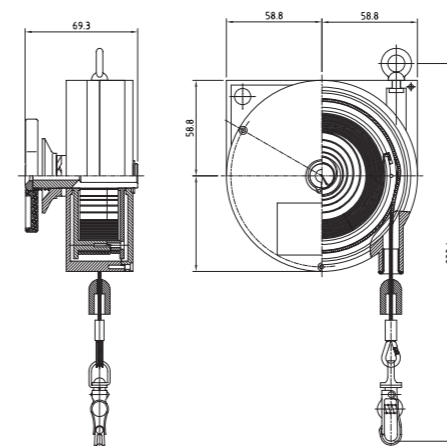
HTB-0
HTB-1
HTB-2



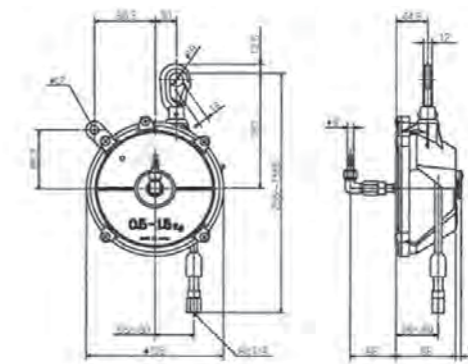
ELF-3 - ELF-70

BALANCERS

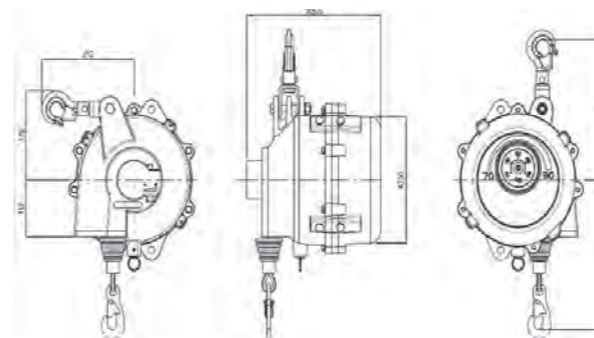
Dimensions



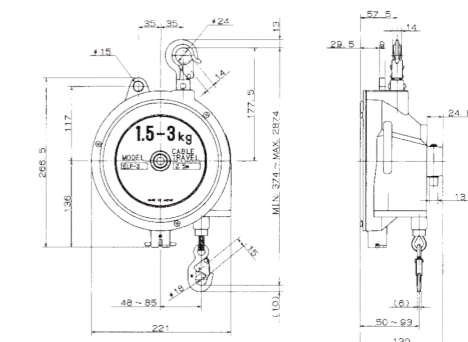
RRI-9001/1



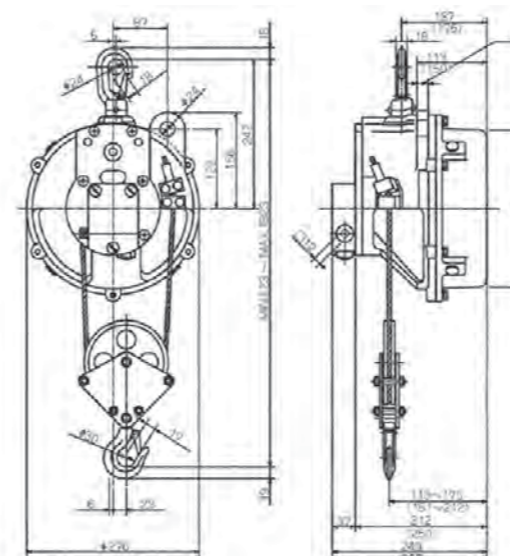
HTB-0 HTB-1 HTB-2



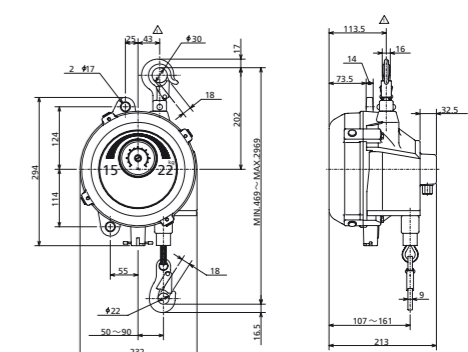
TW-3 t/m 70



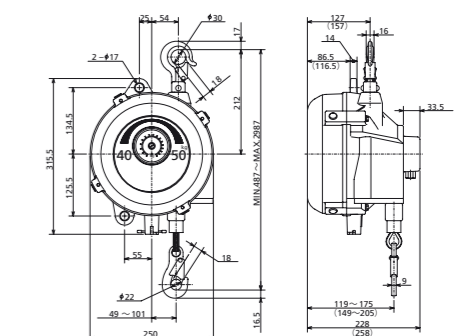
ELF-3 ELF-5 ELF-9



ETP-14_15_16



ELF-15 ELF-22 ELF-30



ELF-40 ELF-50 ELF-60 ELF-70

BLOW GUNS



RRI-21930

VMG11W-F02

Type	Brand	Air cons. l/sec	Weight kg	Inlet-thread	Hose diameter mm
RRI-21930	RRI	5	0,2	PT 1/4"	6,5
VMG11W-F02	SMC	1-6 *	0,2	PT 1/4"	6,5

* Depending on nozzle size, to be ordered separately, see below.

ACCESSORIES

FOR VMG11WF02

Accessory	Order number
Nozzle Ø 1 mm	KN-R02-100
Nozzle Ø 1,5 mm	KN-R02-150
Nozzle Ø 2 mm	KN-R02-200
Nozzle Ø 2,5 mm	KN-R02-250

DIMENSIONS

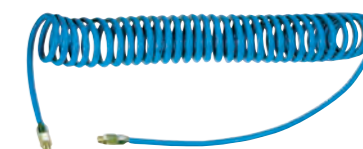
Type	A mm	B mm
VMG	140	164
RRI 21930	80	250

POLYURETHANE SPIRAL AIR HOSES

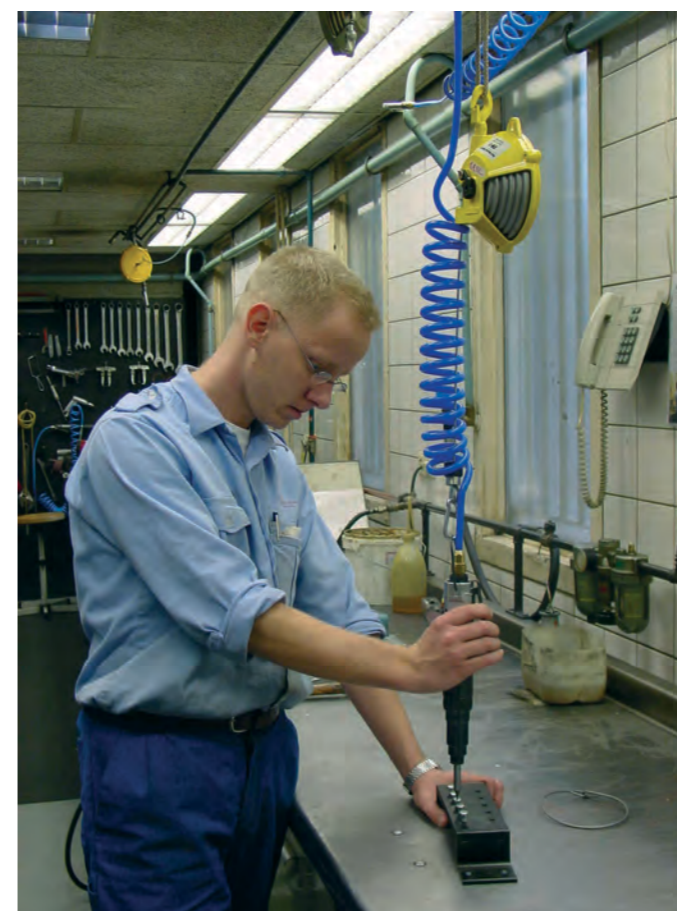
Type	Brand	Working length m	Total length m	Inside diameter mm	Outside diameter mm	Joint connection
PT-02510SJ	RR	2	2,5	6,5	9,5	1/4"
PT-02525SJ	RR	4	5	6,5	9,5	1/4"
PT-02550SJ	RR	9	10	6,5	9,5	1/4"
PT-03525SJ	RR	4	5	8	12	1/4"
PT-03550SJ	RR	9	10	8	12	1/4"
PT-04525SJ	RR	4,2	4,7	9,5	13,5	3/8"
PT-04550SJ	RR	9	10	9,5	13,5	3/8"

FEATURES

- Both ends executed with universal swivel-joints
- Provided with straight ends of 10 and 50 cm
- Increased flexibility, no kinks after bending
- Max. pressure 8 bar
- Oil and petrol resistant
- Temperature -20°C. up to +60°C
- Swivel executed with ballbearings
- Can be used in combination with balancers



Polyurethane air hoses



OIL, REGULATOR, SWIVEL JOINT

Oil

ATLUB is the perfect lubricant especially developed to meet the lubrication requirements of pneumatic tools. ATLUB is based on a water soluble synthetic lubricant, containing a well balanced choice of additives to obtain the following properties:

- Very good protection against wear, corrosion and oxidation
- No forming of ice in pneumatic tools and machinery
- A good protection against deposit in the pneumatic system
- Good cleaning properties
- Compatibility with seal and gaskets made from synthetic material

ATLUB can be used in an air-line or microfog lubricator for lubrication of hammers, pile-drivers drills, grinders, pumps, hoists, clamps and vices. ATLUB will not mix with other mineral oils.

With ATLUB as the lubricant it is possible to work at very low temperatures, even at - 25°C, without freezing of the pneumatic system.



Regulator

FEATURES

- Can be easily inserted in the inlet of any air tool
- Reduces the flow of air and the power speed of the air tool



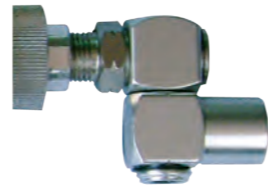
8130-1001-00-00

Type	Brand	Description	Inlet-thread
8130-1001-00-00	Yokota	Regulator	PT 1/8"
8130-1002-00-00	Yokota	Regulator	PT 1/4"
8130-1003-00-00	Yokota	10 step regulator	PT 1/4"

Universal swivel joint

FEATURES

- Optimal ergonomics
- Swivels in all directions
- Increases flexibility of air tool use



Type	Order number
Universal Swivel Joint 1/4"	922A18
Universal Swivel Joint 3/8"	933A19
Universal Swivel Joint 1/2"	944A



AIR CHAIN HOISTS & TROLLEYS



AIR CHAIN HOISTS & TROLLEYS

Red Rooster specializes in the sale, rental and repair of air powered hoists, trolleys and winches. Our pneumatic hoists with safe working loads range from 125kg to 100 tonne and are conform to the EC Machinery Directive and the European Standard for hoists BS EN 14492-2. All of our hoist parts are manufactured in Japan and Europe, controlled under the ISO 9001:2008 quality control system. Our lifting equipment can be used in industries such as the (offshore) oil and gas industry, assembly lines, power plants, refineries, chemical plants, mechanical engineering, shipyards, foundries, oil storage and many others.

BROCHURE

RED ROOSTER AIR CHAIN HOISTS



For a complete overview of the Red Rooster Air Chain Hoists & Trolleys ask for the special brochure Red Rooster AIR CHAIN HOISTS or visit our website: www.rami-yokota.com

ATEX



The Red Rooster ATEX classified, spark resistant air chain hoists, are suitable for use in explosion-prone areas. Air does not generate sparks and an air chain hoist can be used continuously without the danger of overheating, in contrast to electric hoists and the danger of using electricity in highly flammable or explosive environments.

AIR CHAIN HOISTS

Overview



PNEUMATIC HOISTS

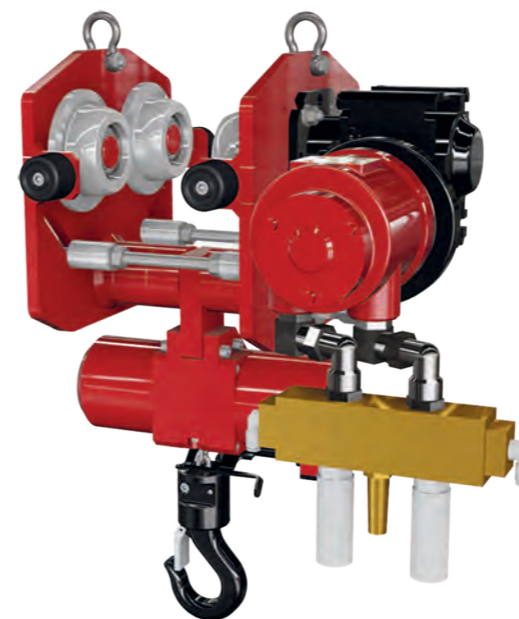
The Red Rooster TMM, TCR, TCS and TMH series pneumatic hoists offer a comprehensive range of hoists suited for all types of industrial and marine environments. For use in areas where there is a risk of explosion due to flammable gases or dust, we can offer a range of ATEX classifications to suit your requirements. With safety the number one priority, Red Rooster hoists have been used and tested for the past 25 years. Where engineers and operators require a hoist fit for purpose, easily controlled and maintained, with readily available spare parts, you'll find Red Rooster hoists. We have the perfect lifting solution for where the duty is high, or where a robust hoist is required to withstand harsh conditions. As standard, Red Rooster hoists are able to work within a temperature range of -10°C to +70°C, with some slight modifications suitable to use at -20°C.

FEATURES

- TOKU high quality vane motor and planetary, gearbox with long life grease
- Overload protection
- High strength cast steel housing for durability
- Compact and lightweight for easy handling
- Extended duty cycles and frequent reversals
- Variable speed for raising and lowering accurately
- Alloy steel hooks with safety catches (Bottom hook fitted with thrust bearing for easy operation)
- Adjustable load limiter (Not for TMM, TCR Mini or TCS)
- Failsafe automatic disk brake (fully enclosed) ensures the load cannot fall if power is lost
- Emergency stop
- Mechanical upper and lower hoist limits
- Lifting heights to meet your need
- Choice of cord, pendant control or control systems
- Low noise level down to 80 dB (Silencer and filter easily changed)
- Low air consumption (TCR and TMH model)
- Air pressure from 4,5 to 6 Bar (7 Bar maximum)
- Durable in harsh environments
- Self cooling air motor with the exhaust over the motor
- Low maintenance
- Easily available spares at the right conditions
- Hoist body manufactured in Japan, all other parts in Europe
- High quality calibrated load chain of European/Japanese manufacture with 5:1 FOS
- High speed (TCS model)
- Ex classification to EC directive 94/9/EC (ATEX models)
- Various paint specifications and colours

TROLLEYS & OPTIONAL FEATURES

Overview



TROLLEYS

The Red Rooster range of trolleys is designed to match our range of pneumatic hoists, with capacities from 250 kg to 50 tonne, but they are easily adapted to be used with other manufacturers hoists. The trolleys are designed to work on a wide range of beam sizes and beam types, with parallel or tapered flanges. The trolley can either have a lifting lug to hook in the hoist or be built in using a link plate. The versatile design and interchangeable parts can be used on a range of geared, low headroom, articulated and overhead crane units.

Besides pneumatic trolleys we also offer geared and push trolleys.

OPTIONAL FEATURES

- (Ultra) and low headroom
- Marine Specification/Corrosion resistant
- Paint systems from C2 - Industrial to C5 - Offshore specification (Red finish as standard. Other RAL colours available on request)
- Choice of pendants/control systems
- Radio control pendant for electro pneumatic controls
- Chain collectors (PVC, galvanised or stainless steel)
- Various types of hook or clevis available
- Air supply systems and valves
- Piped away exhaust air
- In house design for "specials"
- Festoon systems
- Main air shut off valve



Festoon system

AIR CHAIN HOISTS

TCR, TCS, TMH Series

COMPACT HOISTS FOR "MATERIAL-HANDLING"

The Red Rooster compact hoists are suitable for "material-handling". The pendant control is positioned directly on the lower hook, so the operator can control and position the load easily with one hand. The perfect solution for horizontal movements is to combine the hoist with a push trolley.

MINI AIR CHAIN HOISTS LIGHT, STRONG & COMPACT

The Red Rooster mini air chain hoists are suitable for industrial use and material handling. Due to their low weight these hoists are also very suitable for service applications.

TCS HIGH SPEED AIR CHAIN HOISTS

These series Red Rooster air chain hoists are especially developed for the material handling industry such as warehousing and packaging. These hoists have very high lifting and lowering speeds and are therefore suitable for applications with long lifting heights.

AIR CHAIN HOISTS TCR SERIES 0,25 - 2 TONNE

These Red Rooster air chain hoists are especially developed for heavy industrial use. With a robust cast steel body and load limiter.

TMH SERIES AIR CHAIN HOISTS 3 - 100 TONNE

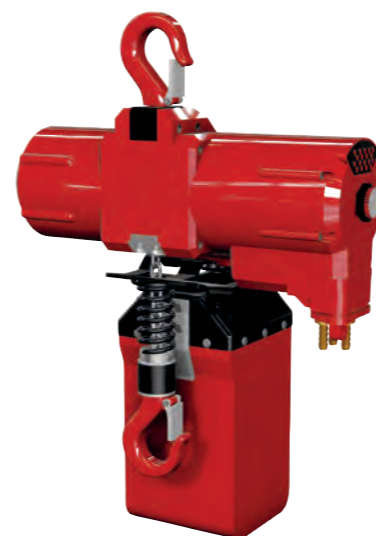
The new Red Rooster TMH series air chain hoists have the highest lifting speed and lowest headroom on the market.



TMM-140AE



TCR-250ME



TCS-500



TMH-3000



TMH-25

	Capacity kg	Lifting speed full load m/min	Lowering speed full load m/min	Lifting speed without load m/min	Lowering speed without load m/min	Number of chain falls	Air consumption full load l/s	Inlet thread	Hose diameter mm	Weight kg incl. 3 m lift	Chain weight kg per meter lift	Load limiter	Air trolley	4-button pendant with emergency stop (42-02-35-VRD)	Chain size mm	Chain bag/chain bucket
--	-------------	-------------------------------	--------------------------------	----------------------------------	-----------------------------------	-----------------------	-------------------------------	--------------	------------------	--------------------------	--------------------------------	--------------	-------------	---	---------------	------------------------

COMPACT HOIST FOR - „MATERIAL-HANDLING“

TMM-140AE	140	12,5	20,1	20,2	17	1 (cable)	10,5	PT 3/8"	13	10	-	-	+	-	4 mm staalkabel	-
TCR-250ME	250	8	16,5	16,7	12,4	1	11,7	PT 3/8"	13	11	0,35	-	+	-	4x12	*

RED ROOSTER MINI AIR CHAIN HOISTS

TCR-125C /DPE	125	14 / 12,8	16 / 14,8	19 / 17,2	13	1	13,3	PT 3/8"	13	7 / 8,6	0,35	-	+	+	4x12	+
TCR-250C /DPE	250	9,5 / 8,1	17 / 15,9	19 / 17,2	13	1	13,3	PT 3/8"	13	7 / 8,6	0,35	-	+	+	4x12	+
TCR-500/C2 / DPE	500	4,8 / 4	8 / 6,5	9,5 / 8,6	6,5	2	13,3	PT 3/8"	13	8,5	0,7	-	+	+	4x12	+

TCS AIR CHAIN HOISTS HIGH SPEED

TCS-500 C/PE	500	17	34	33	19	1	28,3	PT 1/2"	13	15,9	0,9	-	+	+	6,3x19,1	+
TCS-980/2 C/PE	980	8,5	17	16,5	9,5	2	28,3	PT 1/2"	13	16,8	1,8	-	+	+	6,3x19,1	+

RED ROOSTER AIR CHAIN HOISTS TCR SERIES 0,25 - 6 TONNES

TCR-600250 C/P	250	10	16	19	13	1	23,3	PT 1/2"	13	31	0,9	*	+	+	6,3x19,1	+
TCR-500 C/P	500	10	16	19	13	1	23,3	PT 1/2"	13	31	0,9	*	+	+	6,3x19,1	+
TCR-1000/2 C/P	1000	8	8	9,5	6,5	2	23,3	PT 1/2"	13	34	1,8	*	+	+	6,3x19,1	+
TCR-1000 C/P	1000	5,8	4,3	10,5	6,5	1	23,3	PT 1/2"	13	35	1,1	*	+	+	7,1x21	+
TCR-2000/2 C/P	2000	2,9	4,7	5,3	3,3	2	23,3	PT 1/2"	13	40	2,2	*	+	+	7,1x21	+

NEW RED ROOSTER TMH SERIES AIR CHAIN HOISTS: "The highest lifting speed with the lowest headroom on the hoist market"

TMH-3000 C/PE	3000	5,4	10,5	10,7	6,4	1	58,3	PT 1"	19	99	3,8	*	+	+	13x36	+
TMH-6000 C/PE	6000	2,8	5,1	5,4	3,6	2	58,3	PT 1"	19	103	7,6	*	+	+	13x36	+
TMH-10 C/PE	10.000	1,6	3,2	3,3	1,9	2	58,3	PT 1"	25,4	206	11,4	*	+	+	16x45	+
TMH-25	25.000	1,4	3	2,7	2	2	108	PT 1 1/2"	38	581	24,2	*	*	*	23,5 x 66	+

Technical specifications at 0,63 MPa (dynamic airpressure at 6,3 Bar) | Please contact us for all hoists above 30 TONNE

* = standard integrated / + = optional / - = not available

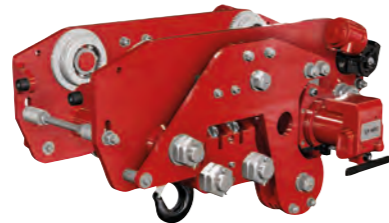
AIR TROLLEYS

Standard and special versions

Standard air trolley



Ultra low head



Ultra low head articulated



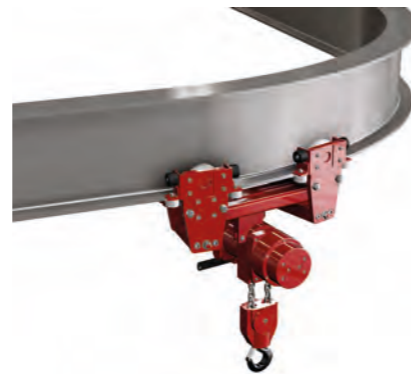
Air trolley with beam brake



Air trolley extended frame



Air trolley articulated



Red Rooster offers a complete program of pneumatic trolleys. From the most simple versions where the upper hook of the hoist is replaced by a link plate to mount on the trolley, to low headroom trolleys where minimum space only allows for minimum building height. Whether the use is industrial, shipping or off-shore, Red Rooster can offer you a fitting solution.

With our team of designers and production facilities, semi-standard solutions supplement a large variety of custom-made units that incorporate your requirements.

Big bag handling, ultra low headroom, articulated trolleys and different sizes of beams belong to the wide range of possibilities. Even complete BOP handling units are developed and manufactured on demand. Options such as pneumatic trolleys with rack and pinion and beam brake are also available.

For more details and a full overview of all possibilities please refer to our full catalogue of air chain hoists and trolleys (available languages; English, German, French, Polish and Spanish).



AIR TREATMENT EQUIPMENT



AIR TREATMENT EQUIPMENT



COMBINATION SETS

Air treatment combination sets can consist of and AF (filter) + AR (regulator) + AL (lubricator) or AW (filter/regulator) + AL (lubricator).

PAGE 146



REGULATORS

SMC regulators guarantee a constant secondary pressure, even when the in port pressure or pressure in general, fluctuates.

PAGE 149



FILTERS

The SMC filters allow for an exceptionally large air flow and a high grade of filtration. The filters guarantee an adequate level of air quality, due to the separation of condensate by their centrifugal working, and the filtration of polluted particles.

PAGE 148-149



LUBRICATORS

For precise lubrication of machine components. From series 3.000 oil can be filled under pressure. Easy and accurate adjustment. Lubricates with minimal airflow.

PAGE 150-151



WATER SEPARATORS & BOOSTERS

With the SMC AMG water separators you can easily and cheaply remove 99% of all water from your compressed air. These compact and light weight water separators are available with port sizes from 1/8" up to 2". They are suitable for compressors from 1-75kW and are standard equipped with automatic drain for long term jobs. SMC boosters can increase pressure by 4 times without separate energy supply and without additional cooling.

PAGE 147



REFRIGERATED AIR DRYERS

The SMC refrigerated air dryer series IDFA removes humidity from your compressed air system, thereby extending the life span of all of your airtools.

PAGE 154-155

AIR TREATMENT EQUIPMENT

Low quality of your compressed air can lead to costly malfunctioning of your tools and your production process. It will also increase maintenance costs, decrease the lifetime of your tools and lead to larger expenditure in general. Investing in air quality will pay off. Sufficient air and air quality are paramount to a trouble-free production process. SMC pneumatics is the worlds largest manufacturer of pneumatic components and compressed air treatment equipment. SMC products are known for their high unquestionable quality and will ensure a long lifetime for all of your air tools and air hoists.



AIR QUALITY

Good air quality is crucial for the trouble-free use of your tools. When your system consists of clean and dry air, the lifetime of your tools will greatly increase. This leads to more sustainability and also to a reduction of costs.

LOW PRESSURE MAY OCCUR IF:

- The compressor capacity is insufficient
- The air piping has been pitched incorrectly
- There is air leakage
- The air treatment equipment is incorrectly pitched, not functioning properly
- The wrong hose size, nipples or quick couplers are applied
- The tank is too small

SUFFICIENT AIR

In order to ensure the proper functioning of your tools the air pressure needs to be just right. If the pressure is too low the tool will show less performance and less precision, resulting in slow starting and less productivity. 1 bar pressure reduction can imply 25% air motor power loss.

COMBINATION SETS

AC-B Series

The AC-B series of SMC consists of modular sets of filters, regulators and lubricators, with which the air quality and pressure of your installation can be optimized.

BENEFITS

- Transparent bowl: clearly visible liquid level
- Quick interchanging of filter elements and simple to add oil
- Bowl with bajonet connection: simple control, quick and easy maintenance
- Nylon bowl: chemical and other corrosive substances resistant
- Metal bowl: robust and shock and chemical resistant
- In-built pressure gauge: solid construction without protruding parts

APPLICATIONS

All equipment for air treatment can be used in any sector where pneumatic applications exist. Important industrial sectors: automotive, facilities, machine building.

FEATURES

- Transparent double-layered polycarbonate bowl protection. 360 degree visibility, light weight, corrosion proof
- Interchangeable with existing AC-series through panel mounting
- Element construction integrated in bowl, element and bowl form a whole. Choice of in-built pressure gauge and switch: square in-built pressure gauge, mounted round pressure gauge, digital pressure switch.
- Choice of bowl material: Polycarbonate (standard), metal (with or without level indication), Nylon

AC-SERIES - COMBINATION OF AF (FILTER), AR (REGULATOR), AL (LUBRICATOR) AND PRESSURE GAUGE

Type	Port size	NI/min	Filter micron	Working pres. (MPa)	Bowl	Bowl with bajonet connection
AC20-F02E-B	1/4"	300	5	0,05 - 0,85	Polycarbonate	o
AC30-F03E-B	3/8"	1.500	5	0,05 - 0,85	Polycarbonate	s
AC40-F03E-B	3/8"	1.800	5	0,05 - 0,85	Polycarbonate	s
AC40-F04E-B	1/2"	2.200	5	0,05 - 0,85	Polycarbonate	s
AC40-F06E-B	3/4"	2.500	5	0,05 - 0,85	Polycarbonate	s
AC50-F06E-B	3/4"	3.000	5	0,05 - 0,85	Polycarbonate	s
AC50-F10E-B	1"	3.500	5	0,05 - 0,85	Polycarbonate	s
AC60-F10E-B	1"	4.000	5	0,05 - 0,85	Polycarbonate	s

o = optional, s = standard / Max. supply pressure: 1,5 MPa / Max. working pressure: 0,7 MPa / Temperature working area: -5 to 60° C.

AC-SERIES - COMBINATION OF AW (FILTER, REGULATOR COMBINATION), AL (LUBRICATOR) AND PRESSURE GAUGE

Type	Port size	NI/min	Filter micron	Working pres. (MPa)	Bowl	Bowl with bajonet connection
AC20A-F02E-B	1/4"	300	5	0,05 - 0,85	Polycarbonate	o
AC30A-F03E-B	3/8"	1.500	5	0,05 - 0,85	Polycarbonate	s
AC40A-F04E-B	1/2"	2.000	5	0,05 - 0,85	Polycarbonate	s
AC50A-F06E-B	3/4"	3.000	5	0,05 - 0,85	Polycarbonate	s

o = optional, s = standard / Max. supply pressure: 1,5 MPa / Max. working pressure: 0,7 MPa / Temperature working area: -5 to 60 °C.

FEATURES

- Other combinations
- Automatic drain, normally opened (add DE for E in order number). For good functioning, the drain line should have min. 8 mm diam. and should not be longer than 5 m
- Filtration 2, 10, 20, 40, 70, 100 μ
- For metal or nylon bowls see page 152

Polycarbonate bowls may be damaged and could possibly fail if they are exposed to synthetic oils, thinner solvents, trichloorethylene, kerosene and other aromatics hydrocarbons. If used in above atmosphere, please use a metal bowl.



AC



AC.A

WATER SEPARATORS & BOOSTERS

AMG-Series, VBA & VBAT Series

AMG SERIES WATER SEPARATORS

Type	Compressor kW	NI/min	Port size Rc	Weight kg	Mounting brackets	Filter elements
AMG150C-F02C	2,2	300	1/4"	0,38	AM-BM101	AMG-EL150
AMG250C-F03D	5,5	700	3/8"	0,55	AM-BM102	AMG-EL250
AMG350C-F04D	11	1.300	1/2"	0,9	AM-BM103	AMG-EL350
AMG450C-F06D	15	2.200	3/4"	1,4	AM-BM104	AMG-EL450
AMG550C-F10D	22	3.300	1"	2,1	AM-BM105	AMG-EL550
AMG650-F14D	37	6.000	1 1/2"	4,2	BM56	AMG-EL650
AMG850-F20D	75	12.000	2"	10,5	BM57	AMG-EL850

Working pressure: 1,5 - 1,0 MPa bar / Temperature working area: -5 to 60°C. Accessories like mounting brackets and filter elements available on request.



AMG

FEATURES

- Easy and cheap removal 99% water from air
- Compact and light weight
- Port sizes from 1/4" to 2"
- Standard automatic drain for long term jobs
- Long life due to the special hardened resin grid with large mesh to reduce clogging
- Suitable for compressors of 2,2-75KW



Booster



Air tank with booster

APPLICATIONS

- Where air does not need to be 100% dry
- Where refrigerated air dryers cannot be used
- Where an affordable alternative is needed

Warning:

Place water separator at large enough distance from compressor.

VBA SERIES PRESSURE BOOSTERS

Type	Working pressure MPa	NI/min	Connection	Pressure
VBA11A-F02	0,2-2,0	70	G 1/4	max. 4 : 1
VBA10A-F02	0,2-2,0	230	G 1/4	max. 2 : 1
VBA20A-F03	0,2-1,0	1.000	G 3/8	max. 2 : 1
VBA40A-F04	0,2-1,0	1.900	G 1/2	max. 2 : 1
VBA43A-F04	0,2-1,6	1.600	G 1/2	max. 2 : 1

FEATURES

- Incoming pressure 0,1-1MPa
- Increases incoming pressure x4
- Cooling not required
- Simple installation
- No separate energy supply needed
- Horizontal mounting bracket

VBAT SERIES AIR TANK

Type	Max. working pressure MPa	Content L
VBAT05A F-SV-Q	2,0	5
VBAT10A F-SV-Q	2,0	10
VBAT20A F-RV-Q	1,0	20
VBAT38A F-RV-Q	1,0	38

APPLICATIONS

Ideal in combination with pressure booster. This air tank can be easily connected to the pressure booster with the assembly set that is included as standard. Optional: combination with a larger air tank on request.

FILTERS

AF Series, AFM & AFD Series (modular)

AF SERIES FILTERS

Type	Connection	NI/min	Filter micron	Bowl	Bowl protection with bajonet connection ¹⁾	Mounting brackets
AF20-F02-A	1/4"	1.100	5	Polycarbonate	s	AF22P-050AS
AF30-F02-A	1/4"	2.200	5	Polycarbonate	s	AF32P-050AS
AF30-F03-A	3/8"	2.600	5	Polycarbonate	s	AF32P-050AS
AF40-F03-A	3/8"	4.000	5	Polycarbonate	s	AF42P-050AS
AF40-F04-A	1/2"	4.300	5	Polycarbonate	s	AF42P-050AS
AF40-F06-A	3/4"	5.000	5	Polycarbonate	s	AF42P-070AS
AF50-F06-A	3/4"	7.000	5	Polycarbonate	s	AF52P-050AS
AF50-F10-A	1"	7.000	5	Polycarbonate	s	AF52P-050AS
AF60-F10-A	1"	8.500	5	Polycarbonate	s	AF52P-050AS
AF800-12	1 1/4"	12.000	5	Polycarbonate	s	-
AF800-14	1 1/2"	12.000	5	Polycarbonate	s	-
AF900-20	2"	16.000	5	Polycarbonate	s	-



1) o = option s = standard / Max. testing pressure 1,2 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees

ON REQUEST

- Other combinations
- Automatic drain, normally opened (add DE for E in order number). For proper functioning the drain line should have min. 8 mm diam. and should not be longer than 5 m.
- Filtration standard 5 micron, others upon request
- Metal or nylon bowls (see page 152)

Polycarbonate bowls may be damaged and could possibly fail if they are exposed to synthetic oils, thinner solvents, trichloroethylene, kerosene and other aromatic hydrocarbons. If used in above described atmosphere, please use a metal bowl (see page.152)

AFM SERIES MICROFILTERS

Type	Connection	NI/min	Filter micron	Bowl	Bowl protection with bajonet connection ¹⁾	Mounting brackets
AFM20-F02-A	1/4"	200	0,3	Polycarbonate	o	AF22P-050AS
AFM30-F02-A	1/4"	400	0,3	Polycarbonate	s	AF32P-050AS
AFM30-F03-A	3/8"	400	0,3	Polycarbonate	s	AF32P-050AS
AFM40-F03-A	3/8"	900	0,3	Polycarbonate	s	AF42P-050AS
AFM40-F04-A	1/2"	1.000	0,3	Polycarbonate	s	AF42P-050AS
AFM40-F06-A	3/4"	1.000	0,3	Polycarbonate	s	AF42P-070AS



1) o = option s = standard / Max. testing pressure 1,2 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees

AFD SERIE - SUBMICROFILTERS

Type	Connection	NI/min	Filter micron	Bowl	Bowl protection with bajonet connection ¹⁾	Mounting brackets
AFD20-F02-A	1/4"	120	0,01	Polycarbonate	o	AF22P-050AS
AFD30-F02-A	1/4"	270	0,01	Polycarbonate	s	AF32P-050AS
AFD30-F03-A	3/8"	270	0,01	Polycarbonate	s	AF32P-050AS
AFD40-F03-A	3/8"	600	0,01	Polycarbonate	s	AF42P-050AS
AFD40-F04-A	1/2"	600	0,01	Polycarbonate	s	AF42P-050AS
AFD40-F06-A	3/4"	600	0,01	Polycarbonate	s	AF42P-070AS

1) o = option s = standard / Max. testing pressure 1,2 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees

ON REQUEST

- Automatic drain (add D to order number). For proper functioning the drain line should have min. 8 mm diam. and should not be longer than 5 m.
- Metal or nylon bowl

The microfilters have an extremely large flow and a high degree of filtration. Works optimal in combination with standard filters. More than 99,9% of oil is removed. The filter should be replaced when the loss of pressure is larger than 0,1 MPa.

FILTERS & REGULATORS

AW-Series & AR-Series (modular)



AW SERIES FILTERS & REGULATORS

Type	Connection	NI/min	Connection pressure gauge	Working pressure MPa	Filter micron	Bowl	Mounting nuts	Bowl protection with bajonet connection ³⁾	Mounting brackets
AW20-F02E-B	1/4"	500	Geintegr.	0,05 - 0,85	5	Polycarbonate	AR23P-260S	o	AW23P-270AS ¹⁾
AW30-F03E-B	3/8"	1.300	Geintegr.	0,05 - 0,85	5	Polycarbonate	AR33P-260S	s	AR33P-270AS ¹⁾
AW40-F04E-B	1/2"	1.900	Geintegr.	0,05 - 0,85	5	Polycarbonate	AR43P-260S	s	AR43P-270AS ¹⁾
AW40-F06E-B	3/4"	2.500	Geintegr.	0,05 - 0,85	5	Polycarbonate	AR43P-260S	s	AR43P-270AS ¹⁾
AW60-F10E-B	1"	8.000	Geintegr.	0,05 - 0,85	5	Polycarbonate	-	s	AW62P-270 AS ²⁾

1) Delivery with mounting nuts / 2) Delivery with mounting bolts / 3) o = option s = standard
Max. testing pressure 1,5 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees

ON REQUEST

- Automatic drain, normally opened (add DE for E in order number). For proper functioning the drain line should have min. 8 mm diam. and should not be longer than 5 m.
- Filtration standard 5 μ , others upon request
- Metal or nylon bowls (see page 152)

AR SERIES REGULATORS

Type	Connection	NI/min	Connection pressure gauge	Working pressure MPa	Mounting nuts	Mounting brackets
AR20-F02E-B	1/4"	650	Integrated	0,05 - 0,85	AR23P-260S	AR23P-270AS*
AR30-F03E-B	3/8"	1.500	Integrated	0,05 - 0,85	AR33P-260S	AR33P-270AS*
AR40-F03E-B	3/8"	2.500	Integrated	0,05 - 0,85	AR43P-260S	AR43P-270AS*
AR40-F04E-B	1/2"	3.000	Integrated	0,05 - 0,85	AR43P-260S	AR43P-270AS*
AR40-F06E-B	3/4"	5.000	Integrated	0,05 - 0,85	AR43P-260S	AR43P-270AS*
AR50-F06E-B	3/4"	4.000	Integrated	0,05 - 0,85	-	AR52P-270AS**
AR50-F10E-B	1"	4.000	Integrated	0,05 - 0,85	-	AR52P-270AS**
AR60-F10E-B	1"	5.000	Integrated	0,05 - 0,85	-	AR52P-270AS**
AR825-12	1 1/4"	14.000	1/4"	0,05 - 0,85	-	-
AR825-14	1 1/2"	14.000	1/4"	0,05 - 0,85	-	-
AR925-20	2"	17.000	1/4"	0,05 - 0,85	-	-

* Delivery with mounting nuts / ** Delivery with mounting bolts
Max. testing pressure 1,5 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees

AR SERIES HIGH PRESSURE REGULATORS

Type	Connection	NI/min	Connection pressure gauge	Working pressure MPa	Mounting nuts	Mounting brackets
AR40-F03-X425	3/8"	3.000	1/4"	0,05 - 1,6	AR40P-260S	AR40P-270AS*
AR40-F04-X425	1/2"	3.300	1/4"	0,05 - 1,6	AR40P-260S	AR40P-270AS*
AR60-F10-X425	1"	5.000	1/4"	0,05 - 1,6	-	AR50P-270AS**

* Delivery with mounting nuts / ** Delivery with mounting bolts
Max. testing pressure 3,0 MPa / Max. working pressure: 2,0 MPa / Temperature range: -5 to 60 degrees

LUBRICATORS

AL & ALDU-Series (modular)

SMC lubricators (AL-Series) are used for precise lubrication of the air tools and air chain hoists. From building height 30 the oil supply can be added under pressure through simple and precise tuning. Lubrication takes place even with low levels of air flow. For the optimal functioning of the lubricator the length of the hose between the lubricator and the tool should not exceed 8 meters. Longer hoses or the use of a hose reel will impede the functioning of the lubricator.

Auto-feed lubrication ensures both frequency of lubrication as well as volume thus saving your expenditure on oil. Other benefits are; less maintenance to your air tool or air chain hoist, increased safety in the working environment and less pollution.

The ALDU-series of SMC is a centralized lubricator with an oil mist range of up to 200 meters. Using the ALDU series, only one lubricator can service multiple air chain hoists or tools. This means; less maintenance and it reduces errors and oil-consumption by 80 to 90%. The use of hose-reels and FESTOON systems is possible when by using the ALDU series.

NOTE

Also refer to the SMC-AC-series filters and -regulators for the correct compressed air conditioning. The correct choice of SMC combinations should be based on air consumption of your tools or hoists. See technical specifications: NI/min (normal litres per minute). Take into consideration the parallel use of multiple tools or hoists.

AL-SERIES LUBRICATORS

Type	Connection	Flow NI/min	Lubricates from NI/min	Level glass	Bowl	Bowl protection with bajonet connection	Mounting brackets
AL20-F02-A	1/4"	2.400	15	AL20P-080AS	Polycarbonate	s	AF22P-050AS
AL30-F03-A	3/8"	4.500	30	AL20P-080AS	Polycarbonate	s	AF32P-050AS
AL40-F03-A	3/8"	6.000	40	AL20P-080AS	Polycarbonate	s	AF42P-050AS
AL40-F04-A	1/2"	5.800	40	AL20P-080AS	Polycarbonate	s	AF42P-050AS
AL40-F06-A	3/4"	6.000	40	AL20P-080AS	Polycarbonate	s	AF42P-070AS
AL50-F06-A	3/4"	7.500	190	AL20P-080AS	Polycarbonate	s	AF52P-050AS
AL50-F10-A	1"	7.500	190	AL20P-080AS	Polycarbonate	s	AF52P-050AS
AL60-F10-A	1"	10.500	220	AL20P-080AS	Polycarbonate	s	AF52P-050AS
AL800-12	1 1/4"	13.000	460	12316	Polycarbonate	s	-
AL800-14	1 1/2"	13.000	650	12316	Polycarbonate	s	-
AL900-20	2"	20.000	1.800	12316	Polycarbonate	s	-

1) o = option s = standard
 Max. testing pressure 1,5 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees / Recommended oil norm: ISO VG32

ALDU-SERIES

Type	Brand	Connection	Max. NI/min	Filter micron	Working pressure MPa	Bowl capacity cm ³
EALDU600-10	SMC	1"	6.000	5	0,15 - 1,0	2.000
EALDU900-20	SMC	2"	15.000	5	0,15 - 1,0	5.000

Max. testing pressure 1,5 MPa / Max. working pressure: 1,0 MPa / Temperature range: -5 to 60 degrees



ALA



EALDU900E

LUBRICATORS

ALF & ALT-Series (modular & mobile units)

Do you have a lubricator in an area that is difficult to reach; for example high at the top hook of an air chain hoist? In such cases we advise the use of the SMC ALF/ALT-Series. The ALF-lubricator is automatically refilled from the ALT-Oil tank.

ALF-SERIES AUTO FEED LUBE

Type	Connection	Max. working pressure MPa	Lubricates from (NI/min (ANR))	Bowl capacity cm ³	Bowl	Weight kg
ALF400-F04	1/2"	0,7	100	-	Polycarbonate	0,85
ALF900-F20	2"	0,7	1.800	-	Polycarbonate	1,9



ALF

ALT-SERIES AUTO FEED TANK

Type	Connection	Max. working pressure MPa	Lubricates from NI/min	Tankl cm ³	Bowl	Weight kg
ALT-5	Air 1/4"/Oil 3/8"	1,0	-	5.000	Metal	12,6
ALT-5-IS-1*	Air 1/4"/Oil 3/8"	1,0	-	5.000	Metal	13,2
ALT-9	Air 1/4"/Oil 3/8"	1,0	-	9.000	Metal	26,0
ALT-9-IS-1*	Air 1/4"/Oil 3/8"	1,0	-	9.000	Metal	26,6

*With level switch
 Temperature range: -5 to 60 degrees / Recommended oil norm: ISO VG32



ALT

Mobile air treatment units

When working on location it is possible to use one of our mobile solutions to extend the lifetime of your equipment. With this unit the air is filtered, lubricated and the air pressure is regulated. Water and dirt cannot enter the air motor and the capacity of your air tool or hoist is maintained.



KIT-AC

FOR OPTIMAL ADJUSTMENT YOU NEED TO TAKE INTO CONSIDERATION

- The dynamic air pressure (with an operating tool) of 0,63MPa
- Maximum hose length of 8 meters after the oil lubricator
- The kits are provided with claw couplings and a stainless steel frame

Type	Connection	Max. working pressure MPa	NI/min	Working pressure MPa	Filter (micron)
KIT-AC40F04E	1/2"	1	2.200	0,05 - 0,85	5
KIT-AC50F06E	3/4"	1	3.000	0,05 - 0,85	5
KIT-AC50F10E	1"	1	3.500	0,05 - 0,85	5

BOWLS

FRL-Series

For series	Bowl for lubricator	Bowl for filter				O-ring for lubricator or filter
		Polycarbonate	Polycarbonate with automatic drain	Nylon	Metal	
20	C2SL-A	C2SF-A	AD27-C-A	C2SF-6-A	C2SF-2-A	C2SFP-260S
30	C3SL-A	C3SF-A	AD37-A	C3SF-6-A	C3SF-2-A	C32FP-260S
40	C4SL-A	C4SF-A	AD47-A	C4SF-6-A	C4SF-2-A	C42FP-260S
50	C4SL-A	C4SF-A	AD47-A	C4SF-6-A	C4SF-2-A	C42SFP-260S
60	C4SL-A	C4SF-A	AD47-A	C4SF-6-A	C4SF-2-A	C42SFP-260S

Polycarbonate bowls may be damaged and could possibly fail if they are exposed to synthetic oils, thinner solvents, trichloroethylene, kerosene and other aromatic hydrocarbons. If used in above described atmosphere, please use a metal bowl.



C2SF-A

Accessories for modular assembly versions



For series	Connection	Spacer	Spacer with bracket	T-interface	Piping adaptor
20	1/4"	Y200-A	Y200T-A	Y210-F02-A	E200-F02-A
30	3/8"	Y300-A	Y300T-A	Y310-F02-A	E300-F03-A
40	1/2"	Y400-A	Y400T-A	Y410-F03-A	E400-F04-A
40	3/4"	Y500-A	Y500T-A	Y50-F03-A	E500-F06-A
50	3/4"	Y600-A	Y600T-A	Y610-F04-A	E600-F06
50	1"	Y600-A	Y600T-A	Y610-F04-A	E600-F10
60	3/4"	Y600-A	Y600T-A	Y610-F04-A	E600-F06
60	1"	Y600-A	Y600T-A	Y610-F04-A	E600-F10

Piping adaptors for easy installation and maintenance. / Spacers for mounting the combination without wall connection. / T-type bracket for wall mounting. / Mounting brackets for the attachment of separate components in the corresponding product series.

EAD-SERIES: AUTOMATIC CONDENSATE DRAINS

Type	For series	Connection	Control	NI/min	Silencer	Working pressure MPa	Diameter mm
AD402-F02C-A	-	1/4"	Pneumatic	-	-	-	-
AD402-F03D-A	-	3/8"	Pneumatic	-	-	-	-
AD402-F04D-A	-	1/2"	Pneumatic	-	-	-	-
EAD600-F10	-	1"	Pneumatic	-	-	-	-
ADM200-045	-	1/2"	Electric (220V)	-	-	-	-



EAD

VARIOUS PRODUCTS

AKM-SERIES: T-TYPE SPACERS WITH CHECK VALVE

Type	For series	Connection	Control	NI/min	Silencer	Working pressure MPa	Diameter mm
AKM2000-F02-A	20	1/4"	-	750	-	-	-
AKM3000-F02-A	30	3/8"	-	1.700	-	-	-
AKM4000-F03-A	40	1/2"	-	3.150	-	-	-



AKM

VHS-SERIES: SHUT-OFF VALVES

Type	For series	Connection	Control	NI/min	Silencer	Working pressure MPa	Diameter mm
VHS20-F02-A	20	1/4"	-	750	AN103-01	-	-
VHS30-F03-A	30	3/8"	-	1.700	AN200-02	-	-
VHS40-F04-A	40	1/2"	-	3.150	AN300-03	-	-



VHS



K serie

K-SERIES: PRESSURE GAUGES EXTERNAL

Type	For series	Connection	Control	NI/min	Silencer	Working pressure MPa	Diameter mm
K8-10-40	20/30	1/8"	-	-	-	0 - 1	40
K4-10-50	40/50/60	1/4"	-	-	-	0 - 1	50



GC serie



ISE35

GC-SERIES: PRESSURE GAUGES INTERNAL

Type	For series	Connection	Control	NI/min	Silencer	Working pressure MPa	Diameter mm
G27-10-R1	10	1/16"	-	-	-	0 - 1	26
GC3-10AS	20/30/40/50/60	-	-	-	-	0 - 1	24

ISE35-SERIES: INTEGRATED PRESSURE GAUGES WITH PRESSURE SWITCH AND CABLE

Type	For series	Power supply	Cable length m	Protection degree	Display	Set pressure range MPa	Output
ISE35-N-65-LA	20/30/40/50/60	12 - 24V DC	2	IP40	LED 2 kleuren	-0,01 - 1	PNP
ISE35-N-25-LA	20/30/40/50/60	12 - 24V DC	2	IP40	LED 2 kleuren	-0,01 - 1	NPN



AN#00



AMC#20 serie

AN-SERIES: SILENCERS

Type	Connection
AN10-01	1/8"
AN20-02	1/4"
AN30-03	3/8"
AN40-04	1/2"
AN500-06	3/4"
AN600-10	1"
AN700-12	1 1/4"
AN800-14	1 1/2"

Note: Noise reduction 30dB(A)

AMC-SERIES: ENVIRONMENTAL PROTECTION FILTERS

Type	Connection	NI/min	Weight kg	Working pressure MPa
AMC310-03	3/8"	300	0,2	< 0,1
AMC310-F03	G 3/8"	300	0,2	< 0,1
AMC320-03	3/8"	300	0,2	< 0,1
AMC510-06	3/4"	1.000	0,5	< 0,1
AMC520-F04	G 1/2"	1.000	0,5	< 0,1
AMC520-F04B	G 1/2"	1.000	0,5	< 0,1
AMC520-F06	G 3/4"	1.000	0,5	< 0,1
AMC610-10	1"	3.000	0,7	< 0,1
AMC810-14	1-1/2"	6.000	1,2	< 0,1
AMC910-20	2"	10.000	1,7	< 0,1

AM#10 = male / AM#20 = female | Secures clean air for the work environment | Reduces noise pollution with more than 35dB(A) | More than 99% oil removal

SEPARATE FILTER ELEMENTS FOR THE AF/AW-SERIES

Type	Standard 5 μ
20	AF20P-060S
30	AF30P-060S
40	AF40P-060S
50	AF50P-060S
60	AF60P-060S

REFRIGERATED AIR DRYERS

IDFA serie

The SMC IDFA Series of refrigerated air dryers are the result of over 40 years of experience combined with the latest compressed air and refrigeration technology. Built according to international standards and recognized by SMC's BS EN ISO 9001 quality certification. The IDFA Series has thirteen standard models with nominal capacities ranging from 12 – 1.340 m3/h.



FEATURES

- Innovative design ensures a constant +3 degrees °C pressure dew point
- High efficiency heat exchanger
- Environmentally ozone friendly refrigerants
- Conforms to stringent ISO8573-1 standard
- Simple control system with easy to read evaporator gauge
- Compact design for easy installation
- High performance, reliable and trouble-free

DIMENSIONS IDFA SERIES

Type	A	B	C
IDFA3E-23	226	410	437
IDFA4E-23	270	453	498
IDFA6E-23-K	270	455	498
IDFA8E-23-K	270	485	568
IDFA11E-23-K	270	485	568
IDFA15E-23-K	300	603	578
IDFA22E-23-K	290	775	623
IDFA37E-23-K	290	855	623
IDFA55E-23-L	470	855	800
IDFA75E-23-L	470	855	900
IDFA100F-40	670	1.120	1.276
IDFA125F-40	700	1.120	1.276
IDFA150F-40	950	1.290	1.332

NOMINAL AIR FLOW RATE [M3/H (ANR)]*

Type	3°C pressure dew point	7°C pressure dew point	10°C pressure dew point
IDFA3E-23	12	15	17
IDFA4E-23	24	31	34
IDFA6E-23-K	36	46	50
IDFA8E-23-K	65	83	91
IDFA11E-23-K	80	101	112
IDFA15E-23-K	120	152	168
IDFA22E-23-K	182	231	254
IDFA37E-23-K	273	347	382
IDFA55E-23-L	390	432	510
IDFA75E-23-L	660	720	822
IDFA100F-40	860	-	-
IDFA125F-40	1.100	-	-
IDFA150F-40	1.340	-	-

* Standard condition (ANR) with 20 C ambient temperature, atmospheric pressure and relative humidity of 65%. Performance data for pressure dew point in accordance with operating conditions from ISO7183 (P1=0,7 MPa, T1=35 °C (saturated), cooling air temp. 25 °C).

IDFA SERIES: STANDARD TECHNICAL SPECIFICATIONS

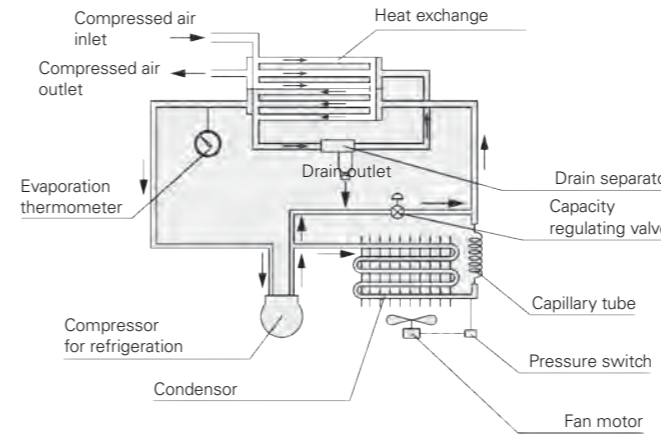
Type	Inlet air pressure MPa Inlet air	Ambient temperature °C	Power supply voltage	Power consumption W	Air port connection	Refrigerant	Weight kg	
IDFA3E-23	0,15 - 1	5 - 50	2 - 40	1 Phase 230V AC 50Hz/60Hz	180	Rc 3/8	R134a	18
IDFA4E-23	0,15 - 1	5 - 50	2 - 40	1 Phase 230V AC 50Hz/60Hz	180	Rc 1/2	R134a	22
IDFA6E-23-K	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz/60Hz	180	Rc 3/4	R134a	23
IDFA8E-23-K	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz/60Hz	208	Rc 3/4	R134a	27
IDFA11E-23-K	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz/60Hz	385	Rc 3/4	R134a	28
IDFA15E-23-K	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz	470	Rc 1	R134a	46
IDFA22E-23-K	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz	760	R 1	R407C	54
IDFA37E-23-K	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz	760	R 1½	R407C	62
IDFA55E-23-L	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz	1.130	R 2	R407C	100
IDFA75E-23-L	0,15 - 1,6	5 - 50	2 - 40	1 Phase 230V AC 50Hz	1.700	R 2	R407C	116
IDFA100F-40	0,15 - 1*	5 - 60	2 - 45	3 Phase 400V AC 50Hz	2.500	R 2	R407C	245
IDFA125F-40	0,15 - 1*	5 - 60	2 - 45	3 Phase 400V AC 50Hz	2.700	R 2½	R407C	270
IDFA150F-40	0,15 - 1*	5 - 60	2 - 45	3 Phase 400V AC 50Hz	2.700	DIN 80	R407C	350

* Also available in 0,15-1,6 MPa
Note: Thread adaptors to convert from Rc thread to R thread are included from IDFA3E to IDFA15E

REFRIGERATED AIR DRYERS

Operating principle / correction factors

DIMENSIONS IDFA SERIES



Saturated compressed air enters the air-to-air heat exchanger. The incoming air is cooled by the cold air exiting the dryer. The air passes through the evaporator, where it is further cooled to 3 °C dew point. As the air cools, the water condenses to liquid which is removed by the automatic drain. The dry air is then passed back through the air-to-air heat exchanger where it is reheated before leaving the dryer.

BANISH MOISTURE IN YOUR COMPRESSED AIR

Tests carried out by SMC, the world leader in pneumatic technology, have indicated that in certain atmospheric conditions the moisture in compressed air using a 75Kw compressor after on day of operation, could be equivalent to a 113 liters of water.

Any compressed air system containing this volume of air moisture will suffer dramatically reduced valve and air cylinder performance. Armed with this knowledge, SMC's R&D department have produced the perfect answer with the IDFA Series.

Designed specifically for the European market, with both CE accreditation and 230V AC (50Hz) voltage requirements, the IDFA Series effectively removes water vapour through a highly efficient stainless steel, corrosion resistant, heat exchanger. With 13 flow rate size options ranging from 12 to 1.340 M3/h (ANR), these air dryers use ozone friendly HFC refrigerants R134a/R407C and emit outlet air at 3 C point as per ISO8573-1 standard.

Thanks to an evaporation temperature gauge it is simple to confirm correct operation. The IDFA Series is also highly efficient due to minimal pressure drop during operation, which improves energy saving.

CORRECTION FACTORS IDFA3E-23 UP TO IDFA75E-23-L

Inlet air temp. C			5-25°	30°	35°	40°	45°	50°								
Correction factor A			1,30	1,25	1,00	0,83	0,70	0,60								
Ambient temp.(°C)			20°	25°	30°	35°	40°									
Correction factor B		IDFA3E - IDFA11E	1,10	1,00	0,91	0,83	0,79									
		IDFA15E - IDFA37E	1,10	1	0,97	0,89	0,77									
Inlet air pressure MPa			0,3	0,4	0,5	0,6	0,7	0,8	0,9	1,0	1,1	1,2	1,3	1,4	1,5	1,6
Correction factor C		IDFA3E - IDFA11E	0,80	0,87	0,92	0,96	1,00	1,04	1,07	1,10	1,13	1,16	1,18	1,21	1,23	1,25
		IDFA15E - IDFA37E	0,72	0,81	0,88	0,95	1,00	1,06	1,11	1,16	1,19	1,21	1,23	1,25	1,26	1,27

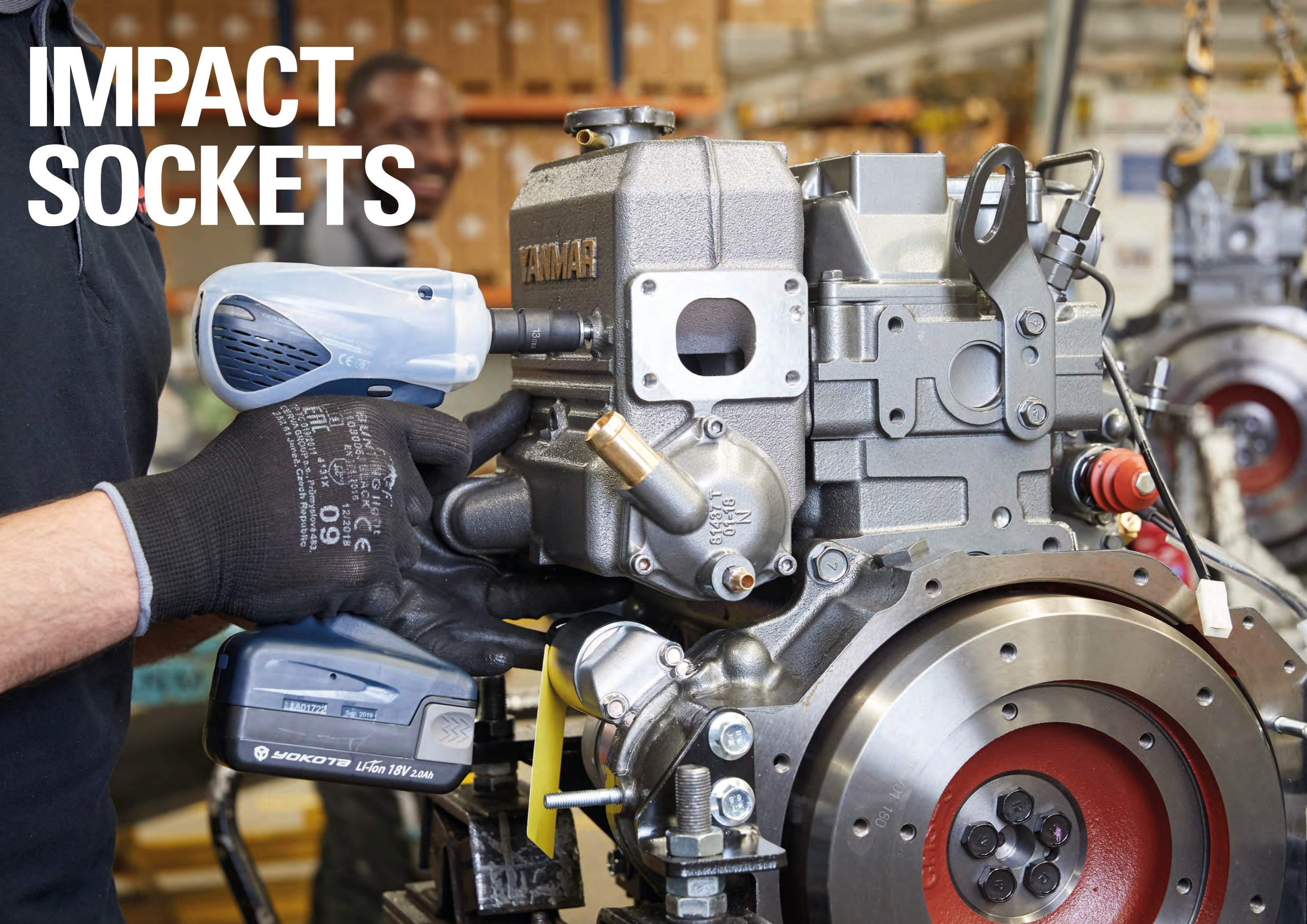
Corrected air flow rate [m3/h] = Customers air flow rate / (factor A x factor B x factor C)

CORRECTION FACTORS IDFA100F-40 UP TO IDFA150F-40

Correction factor A		Correction factor B		Correction factor C		Correction factor D	
Inlet temp. (°C)	Correction factor	Ambient temp. (°C)	Correction factor	Pressure dew point (°C)	Correction factor	Pressure inlet air MPa	Correction factor
5 up to 30	1,41	2 up to 25	-	3	0,7	0,2	0,84
35	1,21	30	-	5	0,75	0,3	0,87
40	1	32	1	10	1	0,4	0,9
45	0,92	35	1	15	1,4	0,5	0,93
50	0,75	40	0,99			0,6	0,96
55	0,63	45	0,92			0,7	1
60	0,53					0,8	0,99
						0,9	0,92
						1 up to 1,6	

Corrected air flow rate [m3/h] = air flow rate of the customer / (factor A x factor B x factor C x factor D)

IMPACT SOCKETS



IMPACT SOCKETS

ACTION is the worlds' largest manufacturer of impact sockets. Its impact sockets are durable, of high quality and competitively priced and manufactured from the best materials (chrom-molybdenum alloy steel). The ACTION impact sockets can be used for any kind of power tools; air, electric, hydraulic or battery, and for any kind of application ranging from car repair shops to the car industry. At Rami Yokota we have a very large continuous stock available, ranging from 1/4" drive to 2 1/2" drive.



SQUARE DRIVE

ACTION impact sockets are available for square drives of 1/4" up to 2 1/2". The shape of the square drive of these sockets is characterized by rounded off corners, so the square drive of the power tool has the best possible fit. This means that the torque is transmitted on a large area, not only the corners of the socket. This results in good endurance of the sockets and a long lifetime.



6-POINT SOCKETS

The 6-point sockets manufactured by ACTION also have rounded off corners. The rounded corners allow some space for the points of the bolt head, so the torque is transmitted on the flanks of the bolt head, giving you better results. Driving the flanks also means that the wear on the points of the bolt head or nut is reduced. For 12 point sockets, a similar geometry is used.



SURFACE DRIVE SOCKETS

Surface drive sockets are designed to drive only the center of the flank of a bolt head or nut. The surface drive sockets should be recommended for use on nuts with points that have worn off, but also for nuts of softer materials and polished nuts and bolt heads.



WARNING

The European regulation, directive of machinery 2006/42/EG and EN/ISO 11148-6 states that only IMPACT SOCKETS are to be used on power tools. All Action impact sockets are manufactured according to DIN 3121 and DIN 3129. Universal joints, reducing adaptors and thin wall sockets are supplied without warranty. Always wear safety goggles when using impact equipment. Do not hold the socket while in use.

NOTE: If you can't find the proper dimensions please contact us.

CONTENTS

1/4" Impact sockets for screwdrivers
6-point & tap holding sockets 161

1/4" **IMPACT SOCKETS**
6-point normal..... 162
6-point deep..... 162
Torx® 163
Surface drive 164
Universal joint sockets 164

3/8"
6-point normal..... 165
6-point deep..... 165-166
12-point normal..... 166
12-point deep..... 166
Surface drive 167
Torx® 167-168
Triple square 170
Universal joints 169-170
Ribe driver 171
Tap holding sockets 171

1/2"
4-point / double square 171
6-point normal..... 172
6-point deep..... 172-173
12-point normal..... 175
12-point deep..... 175
Surface drive 176
Torx® 176-177
Universal joints 178
Triple square 179
Ribe driver 179
Tap holding sockets 179
Stud bolt setters 180

3/4"
4-point..... 182
6-point normal..... 182
6-point deep..... 183
Stud bolt setters 182
8-point..... 184
12-point normal..... 184
12-point deep..... 185
Torx® 185

1"
4-point normal..... 186
6-point normal..... 186
6-point deep..... 187
8-point normal..... 188
12-point normal..... 188
12 point deep..... 189

HEX DRIVER SOCKET 189

1 1/2"
6-point normal..... 190
6-point deep..... 190
Hex driver socket..... 190

2 1/2"
6-point normal..... 191

ADAPTORS
Extension bars 192-193
Lock pin retainer 192
Universal joints 193
Impact bit holder..... 195
Hex drivers and triple square..... 194
Quick-change adaptors 195
Pin & Ring..... 196

3/8" **SLEEVE DRIVE**
6-point normal..... 198-199
6-point long..... 198-199
6-point deep..... 199
Torx® 199
Hex driver socket..... 199

1/2"
6-point normal..... 200
6-point long..... 200
6-point deep..... 201
Torx® 201
Hex driver socket..... 201
Stud bolt setters 201

3/4"
6-point normal..... 202
Hex driver socket..... 202
Torx® 202
Extensions..... 202
Quickchange adaptors 203
Bit holders 203

IMPACT SOCKETS SETS
Impact Socket Sets..... 204-205
Torque sockets & specials 206

IMPACT SOCKETS

1/4" HEX DRIVE FOR SCREWDRIVERS



ACTION

6-POINT NORMAL 1

Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO697B0S04	4	A	8	55	4,5	-
DO697B0S06	6	A	10	55	4,5	-
DO697B0S07	7	A	11	55	5	-
DO697B0S08	8	A	12	55	5	-
DO697B0S10	10	A	14	55	6,5	-
DO697B0T06	6	A	10	75	4,5	-
DO697B0T07	7	A	11	75	4,5	-
DO697B0T08	8	A	12	75	4,5	-
DO697B0T10	10	A	14	75	5,5	-
DO697B0T12	12	A	17	75	5,5	-
DO697B0T13	13	A	18	75	5,5	-
DO697B0T14	14	A	19	75	5,5	-
DO697B0W12	12	A	17	200	5,5	-
DO697B0W14	14	A	19	200	5,5	-

6-POINT MAGNETIC 2

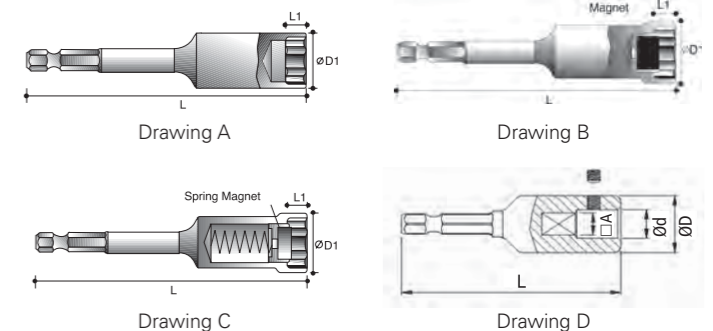
Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO697B0M06	6	B	10	55	4,5	-
DO697B0M07	7	B	11	55	4,5	-
DO697B0M08	8	B	12	55	4,5	-
DO697B0M10	10	B	14	55	5,5	-
DO697B0M11	11	B	16	55	5,5	-
DO697B0M12	12	B	17	55	5,5	-
DO697B0M13	13	B	18	55	5,5	-
DO697B0M14	14	B	19	55	5,5	-
DO697B0N10	10	B	14	75	5,5	-
DO697B0N12	12	B	17	75	5,5	-
DO697B0P06	6	B	10	100	4,5	-
DO697B0P07	7	B	11	100	4,5	-
DO697B0P08	8	B	12	100	4,5	-
DO697B0P10	10	B	14	100	5,5	-
DO697B0P12	12	B	17	100	5,5	-
DO697B0P13	13	B	18	100	5,5	-
DO697B0P14	14	B	19	100	5,5	-
DO697B0P17	17	B	23	100	5,5	-
DO697B0Q10	10	B	14	150	5,5	-
DO697B0R07	7	B	11	200	4,5	-
DO697B0R10	10	B	14	200	5,5	-

6-POINT DEEP MAGNETIC 2

Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO697B6006	6	C	10	75	4,5	-
DO697B7006	6	C	10	100	4,5	-
DO697B7008	8	C	12	100	4,5	-
DO697B7010	10	C	14	100	5,5	-
DO697B7012	12	C	17	100	5,5	-
DO697B7013	13	C	18	100	5,5	-
DO697B7014	14	C	19	100	5,5	-
DO697B8006	6	C	10	150	4,5	-
DO697B8008	8	C	12	150	4,5	-
DO697B8010	10	C	14	150	5,5	-
DO697B8012	12	C	17	150	5,5	-
DO697B8013	13	C	18	150	5,5	-
DO697B8014	14	C	19	150	5,5	-
DO697B9006	6	C	10	200	4,5	-
DO697B9008	8	C	12	200	4,5	-
DO697B9010	10	C	14	200	5,5	-
DO697B9012	12	C	17	200	5,5	-
DO697B9013	13	C	18	200	5,5	-
DO697B9014	14	C	19	200	5,5	-

TAP HOLDERS 3

Type	A mm	Drawing	Ø d mm	Ø D mm	L mm	-
Metric						
DO63A65001	3,4	D	4,5	14	55	-
DO63A65002	4,9	D	6	15	55	-
DO63A65003	5,5	D	7	16	55	-
DO63A65004	6,2	D	8	17	60	-
DO63A65005	7	D	9	18	70	-
DO63A65006	8	D	10	19	70	-
DO63A65007	9	D	11	20	70	-
DO63A65008	9	D	12	21	70	-
DO63A65009	11	D	14	23	75	-



1/4" SQUARE DRIVE



6-POINT NORMAL 1

Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO0014-0-004	4	A	7,6	13	23	4
DO0014-0-0045	4,5	A	8,2	13	23	5
DO0014-0-005	5	A	8,8	13	23	5
DO0014-0-0055	5,5	A	9,5	13	23	5
DO0014-0-006	6	A	10	13	23	6
DO0014-0-007	7	A	11,3	13	23	6
DO0014-0-008	8	A	12,5	13	23	7
DO0014-0-009	9	A	13,8	13	23	7
DO0014-0-010	10	C	15	13	23	7
DO0014-0-011	11	C	16,3	13	23	8
DO0014-0-012	12	C	17	13	23	8
DO0014-0-013	13	C	18,8	13	23	8
DO0014-0-014	14	C	20	13	23	8
DO0014-0-015	15	C	21	13	23	8

6-POINT NORMAL 1

Type	Inch	Drawing	D1 mm	L mm	L1 mm	-
Inch						
DO0014-0-3/16	3/16"	A	8,5	13	23	5
DO0014-0-1/4	1/4"	A	10,3	13	23	6
DO0014-0-5/16	5/16"	A	12,5	13	23	7
DO0014-0-3/8	3/8"	C	15	13	23	7
DO0014-0-7/16	7/16"	C	16,3	13	23	8
DO0014-0-1/2	1/2"	C	18,8	13	23	8

6-POINT DEEP 2

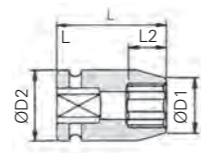
Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO0014-1-004	4	A	7,6	13	50	4
DO0014-1-045	4,5	A	8,2	13	50	6
DO0014-1-005	5	A	8,8	13	50	6
DO0014-1-006	6	A	10	13	50	7
DO0014-1-007	7	A	11,3	13	50	7
DO0014-1-008	8	A	12,5	13	50	9
DO0014-1-009	9	C	13,8	13	50	9
DO0014-1-010	10	C	15	13	50	9
DO0014-1-011	11	C	16,3	13	50	9
DO0014-1-012	12	C	17	13	50	9
DO0014-1-013	13	C	18,8	13	50	9
DO0014-1-014	14	C	20	13	50	9
DO0014-1-015	15	C	21	13	50	9

6-POINT NORMAL MAGNETIC 3

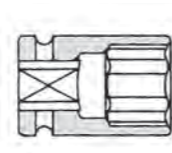
Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO6050P050	5	A	8,8	13	23	3
DO6050P055	5,5	A	9,5	13	23	3
DO6050P060	6	A	10	13	23	3
DO6050P070	7	A	11,3	13	23	3
DO6050P080	8	A	12,5	13	23	3
DO6050P090	9	C	13,8	13	23	4
DO6050P100	10	C	15	13	23	4
DO6050P110	11	C	16,3	13	23	5
DO6050P120	12	C	17	13	23	5
DO6050P130	13	C	18,8	13	23	5
DO6050P140	14	C	20	13	23	6
DO6050P150	15	C	21	13	23	6
DO0014-1-015	15	C	21	13	50	9

DEEP MAGNETIC 4

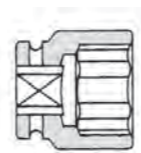
Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO6050R050	5	A	8,8	13	50	3
DO6050R055	5,5	A	9,5	13	50	3
DO6050R060	6	A	10	13	50	3
DO6050R070	7	A	11,3	13	50	3
DO6050R080	8	A	12,5	13	50	3
DO6050R090	9	C	13,8	13	50	4
DO6050R100	10	C	15	13	50	4
DO6050R110	11	C	16,3	13	50	5
DO6050R120	12	C	17	13	50	5
DO6050R130	13	C	18,8	13	50	5
DO6050R140	14	C	20	13	50	6
DO6050R150	15	C	21	13	50	6



Drawing A



Drawing B



Drawing C

1/4" SQUARE DRIVE



HEX DRIVER 1

Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO64805025	2,5	D	13	35	4	-
DO64805030	3	D	13	35	6	-
DO64805040	4	D	13	35	6	-
DO64805050	5	D	13	35	6	-
DO64805060	6	D	13	35	8	-
DO64805070	7	D	13	35	8	-
DO64805080	8	D	13	35	8	-
DO64805090	9	D	13	35	10	-
DO64805100	10	D	13	35	10	-

TORX INTERNAL 2

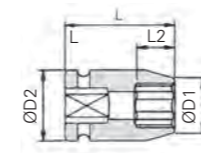
Type	mm	Drawing	D1 mm	L mm	L1 mm	-
Metric						
DO64701005	T5	F	13	2	35	-
DO64701006	T6	F	13	2	35	-
DO64701007	T7	F	13	2	35	-
DO64701008	T8	F	13	2	35	-
DO64701009	T9	F	13	2	35	-
DO64701010	T10	F	13	2,8	35	-
DO64701015	T15	F	13	2,8	35	-
DO64701020	T20	F	13	2,8	35	-
DO64701025	T25	F	13	3	35	-
DO64701027	T27	F	13	3	35	-
DO64701030	T30	F	13	3,8	35	-

Torx® is a trademark of Textron

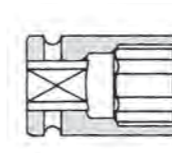
TORX® TAMPER RESISTANT INTERNAL 2

Type	mm	Drawing	D2 mm	L mm	L1 mm	-
DO64706008	T8	F	13	2,0	35	-
DO64706009	T9	F	13	2,0	35	-
DO64706010	T10	F	13	2,8	35	-
DO64706015	T15	F	13	2,8	35	-
DO64706020	T20	F	13	2,8	35	-
DO64706025	T25	F	13	3,0	35	-
DO64706027	T27	F	13	3,0	35	-
DO64706030	T30	F	13	3,8	35	-

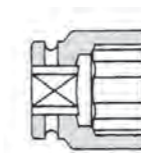
Torx® is a trademark of Textron



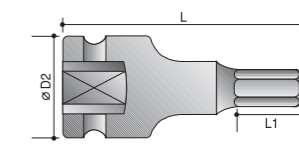
Drawing A



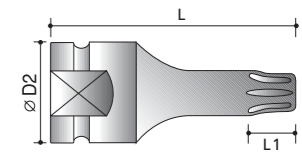
Drawing B



Drawing C



Drawing D



Drawing F

TORX® EXTERNAL 3

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO63300004	E4	A	7,2	13	25	4
DO63300005	E5	A	8	13	25	4,5
DO63300006	E6	A	9	13	25	5
DO63300007	E7	A	9,5	13	25	6
DO63300008	E8	A	10	13	25	6
DO63300010	E10	A	12,5	13	25	7,5
DO63300011	E11	B	13	13	25	8
DO63300012	E12	B	14,5	14,5	25	8,5

Torx® is a trademark of Textron

TORX THIN WALL EXTERNAL 4

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO63305004	E4	A	6,5	13	25	4
DO63305005	E5	A	7,5	13	25	4,5
DO63305006	E6	A	8,5	13	25	5
DO63305007	E7	A	9	13	25	6
DO63305008	E8	A	9,8	13	25	6
DO63305010	E10	A	12	13	25	6,5
DO63305011	E11	A	12,7	13	25	8
DO63305012	E12	A	14	14,5	25	8,5

Thin wall sockets are not covered by the Action warranty.
Torx® is a trademark of Textron

1/4" SQUARE DRIVE

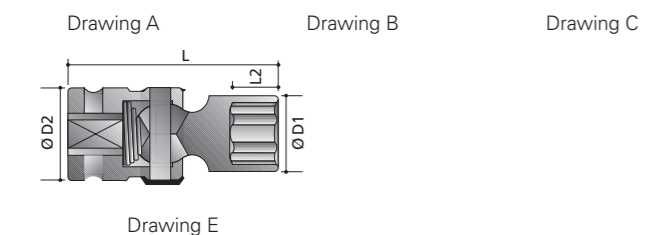
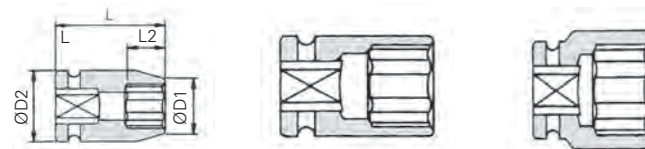


1 SURFACE DRIVE NORMAL

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63405040	4	A	7,6	13	23	4
DO63405045	4,5	A	8,2	13	23	5
DO63405050	5	A	8,8	13	23	5
DO63405055	5,5	A	9,5	13	23	5
DO63405060	6	A	10	13	23	6
DO63405070	7	A	11,3	13	23	6
DO63405080	8	A	12,5	13	23	7
DO63405090	9	C	13,8	13	23	7
DO63405100	10	C	15	13	23	7
DO63405110	11	C	16,3	13	23	8
DO63405120	12	C	17	13	23	8
DO63405130	13	C	18,8	13	23	8
DO63405140	14	C	20	13	23	8
DO63405150	15	C	21	13	23	8

2 SURFACE DRIVE DEEP

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63407040	4	A	7,6	13	50	4
DO63407045	4,5	A	8,2	13	50	6
DO63407050	5	A	8,8	13	50	6
DO63407055	5,5	A	9,5	13	50	6
DO63407060	6	A	10	13	50	7
DO63407070	7	A	11,3	13	50	7
DO63407080	8	A	12,5	13	50	9
DO63407090	9	C	13,8	13	50	9
DO63407100	10	C	15	13	50	9
DO63407110	11	C	16,3	13	50	9
DO63407120	12	C	17	13	50	9
DO63407130	13	C	18,8	13	50	9
DO63407140	14	C	20	13	50	9
DO63407150	15	C	21	13	50	9



3 UNIVERSAL JOINT SOCKETS 6-POINT

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO62500050	5	E	8,8	15	43	5
DO62500055	5,5	E	9,5	15	43	6
DO62500060	6	E	10	15	43	6
DO62500070	7	E	11,5	15	43	8
DO62500080	8	E	12,5	15	43	8
DO62500090	9	E	14	15	43	8
DO62500100	10	E	15	15	43	8
DO62500110	11	E	16,5	15	43	8
DO62500120	12	E	16,8	16	48	8
DO62500130	13	E	18,8	16	48	8
DO62500140	14	E	19,8	16	48	8
DO62500150	15	E	20,8	16	48	8

Universal joint sockets are not covered by the Action warranty



PIN AND RING

Type
DO1014-0-000



3/8" SQUARE DRIVE

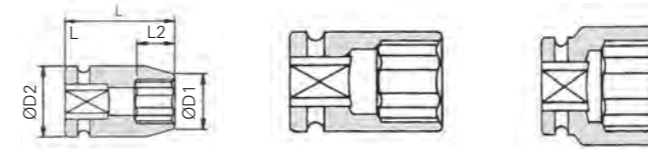


1 6-POINT NORMAL

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO1038-0-006	6	A	11	19	30	4
DO1038-0-007	7	A	12,5	19	30	8
DO1038-0-008	8	A	14	19	30	8
DO1038-0-009	9	A	15	19	30	8
DO1038-0-010	10	A	16	19	30	8
DO1038-0-011	11	A	17,5	19	30	9
DO1038-0-012	12	B	19	19	30	9
DO1038-0-013	13	A	20	22	30	9
DO1038-0-014	14	A	21	22	30	9
DO1038-0-015	15	B	22	22	30	11
DO1038-0-016	16	C	24	22	30	11
DO1038-0-017	17	C	25	22	30	11
DO1038-0-018	18	C	26	22	30	11
DO1038-0-019	19	C	27,5	22	30	11
DO1038-0-020	20	C	28	22	30	12
DO1038-0-021	21	C	30	22	30	13
DO1038-0-022	22	C	32	23	30	13
DO1038-0-024	24	C	34	23	30	13

2 6-POINT NORMAL

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO1038-0-5/16	5/16"	A	12,5	19	30	8
DO1038-0-3/8	3/8"	A	14,5	19	30	8
DO1038-0-7/16	7/16"	A	17	19	30	9
DO1038-0-1/2	1/2"	B	19	19	30	9
DO1038-0-9/16	9/16"	B	20	20	30	9
DO1038-0-5/8	5/8"	B	24	24	30	11
DO1038-0-11/16	11/16"	B	24	24	30	11



Drawing A Drawing B Drawing C

3 6-POINT NORMAL MAGNETIC

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6051P006	6	A	11,5	19	30	3
DO6051P007	7	A	12,5	19	30	3
DO6051P008	8	A	14	19	30	3
DO6051P009	9	A	15	19	30	4
DO6051P010	10	A	16,5	19	30	4
DO6051P011	11	A	17,5	19	30	5
DO6051P012	12	B	19	19	30	5
DO6051P013	13	A	20	22	30	5
DO6051P014	14	A	21,5	22	30	6
DO6051P015	15	B	22	22	30	6
DO6051P016	16	C	24	22	30	6
DO6051P017	17	C	25	22	30	6
DO6051P018	18	C	26	22	30	7
DO6051P019	19	C	27,5	22	30	7

4 6-POINT DEEP MAGNETIC

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6051R006	6	A	11,5	19	55	3
DO6051R007	7	A	12,5	19	55	3
DO6051R008	8	A	14	19	55	3
DO6051R009	9	A	15	19	55	4
DO6051R010	10	A	16,5	19	55	4
DO6051R011	11	A	17,5	19	55	5
DO6051R012	12	B	19	19	55	5
DO6051R013	13	A	20	22	55	5
DO6051R014	14	A	21,5	22	55	6
DO6051R015	15	B	22	22	55	6
DO6051R016	16	C	24	22	55	6
DO6051R017	17	C	25	22	55	6
DO6051R018	18	C	26	22	55	7
DO6051R019	19	C	27,5	22	55	7

3/8" SQUARE DRIVE



6-POINT DEEP 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO1038-1-006	6	A	11	19	63
DO1038-1-007	7	A	12,5	19	63
DO1038-1-008	8	A	13,8	19	63
DO1038-1-009	9	A	15	19	65
DO1038-1-010	10	A	16	19	65
DO1038-1-011	11	A	17,5	19	65
DO1038-1-012	12	B	19	19	65
DO1038-1-013	13	A	20	22	65
DO1038-1-014	14	A	21	22	65
DO1038-1-015	15	B	22	22	65
DO1038-1-016	16	C	24	22	65
DO1038-1-017	17	C	25	22	65
DO1038-1-018	18	C	26	22	65
DO1038-1-019	19	C	27,5	22	65
DO1038-1-020	20	C	28	22	65
DO1038-1-021	21	C	30	22	65
DO1038-1-022	22	C	32	23	65
DO1038-1-024	24	C	34	23	65

12-POINT DEEP 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO65817006	6	A	11	19	63
DO65817007	7	A	12	19	63
DO65817008	8	A	13	19	63
DO65817009	9	A	15	19	65
DO65817010	10	A	16	19	65
DO65817011	11	A	17,5	19	65
DO65817012	12	A	18,5	19	65
DO65817013	13	A	20	22	65
DO65817014	14	A	21	22	65
DO65817015	15	B	22	22	65
DO65817016	16	C	24	22	65
DO65817017	17	C	25	22	65
DO65817018	18	C	26	22	65
DO65817019	19	C	27	22	65
DO65817020	20	C	28	22	65
DO65817021	21	C	30	22	65
DO65817022	22	C	31	23	65
DO65817023	23	C	32	23	65
DO65817024	24	C	34	23	65
DO65817025	25	C	35	23	65
DO65817026	26	C	36	23	65

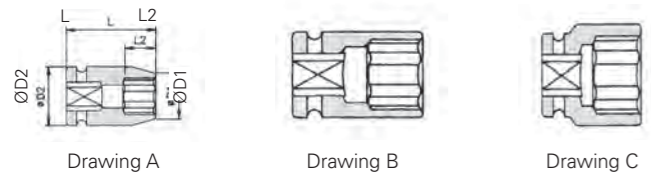
12-POINT NORMAL 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO65815006	6	A	11	19	30
DO65815007	7	A	12	19	30
DO65815008	8	A	13	19	30
DO65815009	9	A	15	19	30
DO65815010	10	A	16	19	30
DO65815011	11	A	17,5	19	30
DO65815012	12	A	18,5	19	30
DO65815013	13	A	20	22	30
DO65815014	14	A	21	22	32
DO65815015	15	B	22	22	32
DO65815016	16	C	24	22	32
DO65815017	17	C	25	22	34
DO65815018	18	C	26	22	34
DO65815019	19	C	27	22	34
DO65815020	20	C	28	22	34
DO65815021	21	C	30	22	34
DO65815022	22	C	31	23	34
DO65815023	23	C	32	23	34
DO65815024	24	C	34	23	34
DO65815025	25	C	35	23	36
DO65815026	26	C	36	23	36

ACCESSORIES

STUD BOLT SETTERS

Type	Size	D1 mm	D2 mm	L mm
DO69781050	M5x0,8	12	22	50
DO69781053	M6x1,0	12,5	22	50
DO69781056	M7x1,0	13	22	50
DO69781059	M8x1,0	15	22	50
DO69781060	M8x1,25	14,5	22	50
DO69781062	M10x1,25	18	22	50
DO69781063	M10x1,5	17	22	50
DO69781066	M12x1,75	19	22	50



3/8" SQUARE DRIVE



6-POINT L=150 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO60715006	6	G	11	19	150
DO60715008	8	G	13	19	150
DO60715010	10	G	16	19	150
DO60715012	12	G	18,5	19	150
DO60715013	13	G	20	22	150
DO60715014	14	G	21	22	150
DO60715015	15	G	22	22	150
DO60715016	16	G	24	22	150
DO60715017	17	G	25	22	150
DO60715018	18	G	26	22	150

SURFACE DRIVE NORMAL 4

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO63415008	8	A	13,8	19	32
DO63415009	9	A	15	19	32
DO63415010	10	A	16	19	32
DO63415011	11	A	17,5	19	32
DO63415012	12	B	19	19	32
DO63415013	13	A	20	22	32
DO63415014	14	B	22	22	32
DO63415015	15	B	22	22	32
DO63415016	16	C	24	22	32
DO63415017	17	C	25	22	32
DO63415018	18	C	26	22	32
DO63415019	19	C	28	22	32

6-POINT L=200 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO60716006	6	G	11	19	200
DO60716008	8	G	13	19	200
DO60716010	10	G	16	19	200
DO60716012	12	G	18,5	19	200
DO60716013	13	G	20	22	200
DO60716014	14	G	21	22	200
DO60716015	15	G	22	22	200
DO60716016	16	G	24	22	200
DO60716017	17	G	25	22	200

SURFACE DRIVE NORMAL 4

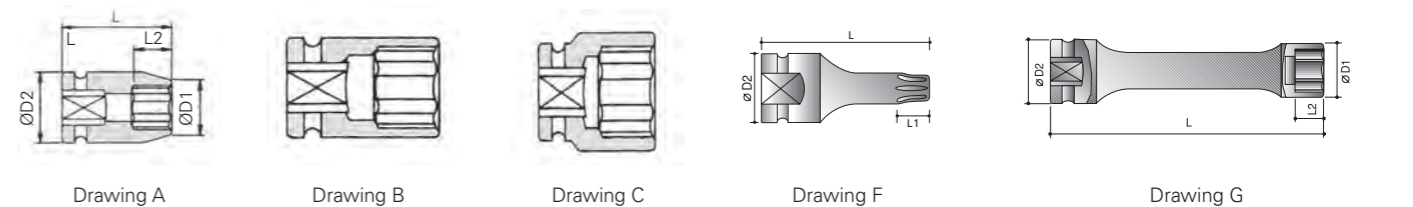
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Inch					
DO63410008	1/4"	A	11,5	19	32
DO63410010	5/16"	A	13,8	19	32
DO63410012	3/8"	A	15,5	19	32
DO63410014	7/16"	A	17,5	19	32
DO63410016	1/2"	A	20	22	32
DO63410018	9/16"	B	22	22	32
DO63410020	5/8"	C	24	22	32
DO63410022	11/16"	C	26	22	32
DO63410024	3/4"	C	28	22	32

6-POINT L=250 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO60717006	6	G	11	19	250
DO60717008	8	G	13	19	250
DO60717010	10	G	16	19	250
DO60717012	12	G	18,5	19	250
DO60717013	13	G	20	22	250
DO60717014	14	G	21	22	250
DO60717015	15	G	22	22	250
DO60717016	16	G	24	22	250
DO60717017	17	G	25	22	250

TORX® INTERNAL 5

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO64711009	T9	F	19	2,8	50
DO64711010	T10	F	19	2,8	50
DO64711015	T15	F	19	2,8	50
DO64711020	T20	F	19	3,0	50
DO64711025	T25	F	19	3,0	50
DO64711027	T27	F	19	3,8	50
DO64711030	T30	F	19	3,8	50
DO64711040	T40	F	19	4,3	50
DO64711045	T45	F	19	5,0	50
DO64711047	T47	F	19	5,0	50
DO64711050	T50	F	19	5,5	50



3/8" SQUARE DRIVE



1 SURFACE DRIVE DEEP

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63417008	8	A	13,8	19	80	12
DO63417009	9	A	15	19	80	12
DO63417010	10	A	16	19	80	12
DO63417011	11	A	17,5	19	80	25
DO63417012	12	B	19	19	80	25
DO63417013	13	A	20	22	80	25
DO63417014	14	B	22	22	80	25
DO63417015	15	B	22	22	80	25
DO63417016	16	C	24	22	80	25
DO63417017	17	C	25	22	80	25
DO63417018	18	C	26	22	80	25
DO63417019	19	C	28	22	80	25

3 TORX® EXTERNAL

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO63310005	E5	A	9	19	32	4,5
DO63310006	E6	A	10	19	32	5
DO63310007	E7	A	10	19	32	6
DO63310008	E8	A	10,5	19	32	6
DO63310010	E10	A	12,5	19	32	7,5
DO63310011	E11	A	14,5	19	32	8
DO63310012	E12	A	15	19	32	8,5
DO63310014	E14	A	17,5	19	32	10
DO63310016	E16	B	19	19	32	11
DO63310018	E18	B	21	21	34	12,5

1 SURFACE DRIVE DEEP

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO63412010	5/16"	A	13,8	19	80	12
DO63412012	3/8"	A	15,5	19	80	12
DO63412014	7/16"	A	17,5	19	80	25
DO63412016	1/2"	A	20	22	80	25
DO63412018	9/16"	B	22	22	80	25
DO63412020	5/8"	C	24	22	80	25
DO63412022	11/16"	C	26	22	80	25
DO63412024	3/4"	C	28	22	80	25

4 TORX® EXTERNAL MAGNETIC

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO6331N008	E8	A	11,5	19	32	5
DO6331N010	E10	A	13,5	19	32	5
DO6331N011	E11	A	14	19	32	5
DO6331N012	E11	A	15,5	19	32	6
DO6332N014	E14	A	17,5	19	32	8
DO6332N016	E16	A	19	19	32	9
DO6332N018	E18	A	21	21	32	9

Torx® is a trademark of Textron

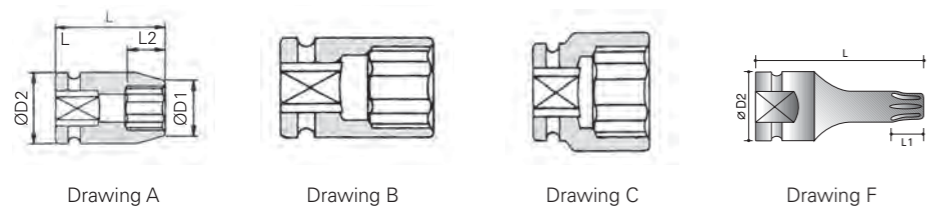
2 TORX® TAMPER RESISTANT INTERNAL

Type	Drawing	D2 mm	L1 mm	L mm	-	
DO64716020	T20	F	19	3,0	50	-
DO64716025	T25	F	19	3,0	50	-
DO64716027	T27	F	19	3,8	50	-
DO64716030	T30	F	19	3,8	50	-
DO64716040	T40	F	19	4,3	50	-
DO64716045	T45	F	19	5,0	50	-
DO64716047	T47	F	19	5,0	50	-
DO64716050	T50	F	19	5,5	50	-
DO64716055	T55	F	19	5,5	50	-

4 TORX® THIN WALL EXTERNAL

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO63315005	E5	A	8	19	32	4,5
DO63315006	E6	A	9	19	32	5
DO63315007	E7	A	9,3	19	32	6
DO63315008	E8	A	10	19	32	6
DO63315010	E10	A	12,3	19	32	7,5
DO63315011	E11	A	13	19	32	8
DO63315012	E12	A	14	19	32	8,5
DO63315014	E14	A	16,5	19	32	10
DO63315016	E16	A	18,4	19	32	11

Thin wall sockets are not covered by the Action warranty



3/8" SQUARE DRIVE



1 6-POINT THIN WALL NORMAL

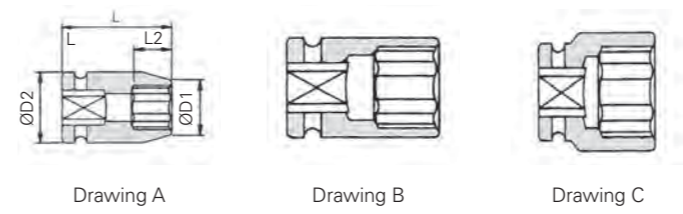
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO61110006	6	A	10,5	19	30	4
DO61110007	7	A	11,5	19	30	8
DO61110008	8	A	12,5	19	30	8
DO61110009	9	A	14	19	30	8
DO61110010	10	A	15	19	30	8
DO61110011	11	A	17	19	30	9
DO61110012	12	A	17,5	19	30	9
DO61110013	13	B	19	19	30	9
DO61110014	14	B	20	20	30	9

Thin wall sockets are not covered by the Action warranty

2 6-POINT THIN WALL MAGNETIC

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO61112007	7	A	11,5	19	65	12
DO61112008	8	A	12,5	19	65	12
DO61112009	9	A	14	19	65	12
DO61112010	10	A	15	19	65	25
DO61112011	11	A	17	19	65	25
DO61112012	12	A	17,5	19	65	25
DO61112013	13	B	19	19	65	25
DO61112014	14	B	20	20	65	25
DO61112015	15	A	21	22	65	25
DO61112016	16	C	22,5	22	65	25
DO61112017	17	C	24	22	65	25
DO61112018	18	C	25	22	65	25
DO61112019	19	C	26	22	65	25
DO61112020	20	C	27	22	65	25
DO61112021	21	C	28	22	65	25
DO61112022	22	C	30	23	65	25

Thin wall sockets are not covered by the Action warranty.



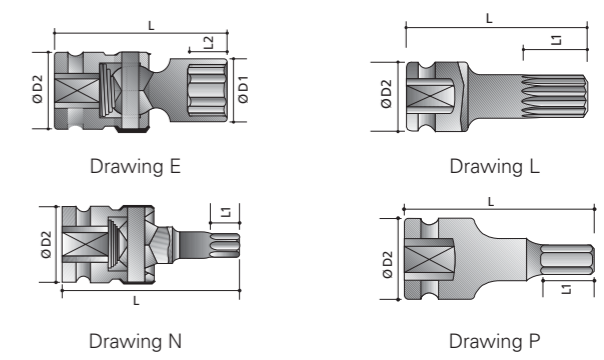
3 6-POINT UNIVERSAL JOINT

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO1038-2-009	9	E	15	24	53	9
DO1038-2-010	10	E	15	24	53	9
DO1038-2-011	11	E	17	24	53	9
DO1038-2-012	12	E	19	24	53	12
DO1038-2-013	13	E	19	24	53	13
DO1038-2-014	14	E	21	24	53	13
DO1038-2-015	15	E	22	24	53	13
DO1038-2-016	16	E	23	24	53	13
DO1038-2-017	17	E	25	24	53	13
DO1038-2-018	18	E	25	24	53	13
DO1038-2-019	19	E	27	24	53	13
DO1038-2-020	20	E	30	24	53	13
DO1038-2-021	21	E	30	24	53	13
DO1038-2-022	22	E	32	24	53	13

4 6-POINT UNIVERSAL JOINT DEEP

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO1038-4-009	9	E	15	24	78	20
DO1038-4-010	10	E	15	24	78	20
DO1038-4-011	11	E	17	24	80	20
DO1038-4-012	12	E	19	24	80	20
DO1038-4-013	13	E	19	24	80	20
DO1038-4-014	14	E	21	24	80	20
DO1038-4-015	15	E	22	24	80	20
DO1038-4-016	16	E	23	24	80	20
DO1038-4-017	17	E	25	24	80	20
DO1038-4-018	18	E	25	24	80	20
DO1038-4-019	19	E	27	24	80	25
DO1038-4-020	20	E	30	24	80	25
DO1038-4-021	21	E	30	24	80	25
DO1038-4-022	22	E	32	24	80	25

Universal joint sockets are not included in the Action warranty



3/8" SQUARE DRIVE



HEX DRIVER SOCKETS 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO696203A	3	P	19	50	16
DO696204A	4	P	19	50	16
DO696205A	5	P	19	50	16
DO696206A	6	P	19	50	16
DO696207A	7	P	19	50	16
DO696208A	8	P	19	50	16
DO696209A	9	P	19	50	16
DO696210A	10	P	19	50	16
DO696211A	11	P	19	50	16
DO696212A	12	P	19	50	16
DO696213A	13	P	19	50	16
DO696214A	14	P	19	50	16
DO696215A	15	P	19	50	16
DO696216A	16	P	19	50	16

TRIPLE SQUARE 2

Type	Drawing	D2 mm	L mm	L1 mm
Metric				
DO65216005	M5	L	19	50
DO65216006	M6	L	19	50
DO65216008	M8	L	19	50
DO65216010	M10	L	19	50
DO65216012	M12	L	19	50
DO65216014	M14	L	19	50
DO65216016	M16	L	19	50

TRIPLE SQUARE LONG 3

Type	Drawing	D2 mm	L mm	L1 mm
Metric				
DO65217005	M5	L	19	100
DO65217006	M6	L	19	100
DO65217008	M8	L	19	100
DO65217010	M10	L	19	100
DO65217012	M12	L	19	100
DO65217014	M14	L	19	100
DO65217016	M16	L	19	100
DO65218005	M5	L	19	120
DO65218006	M6	L	19	120
DO65218008	M8	L	19	120
DO65218010	M10	L	19	120
DO65218012	M12	L	19	120
DO65218014	M14	L	19	120
DO65218016	M14	L	19	120

HEX DRIVER UNIVERSAL JOINT 4

Type	Drawing	D1 mm	L mm	L2 mm
Metric				
DO65110005	5	N	24	60
DO65110006	6	N	24	60
DO65110007	7	N	24	60
DO65110008	8	N	24	60
DO65110009	9	N	24	60
DO65110010	10	N	24	60
DO65110011	11	N	24	60
DO65110012	12	N	24	60
DO65110013	13	N	24	60
DO65110014	14	N	24	60
DO65110015	15	N	24	60
DO65110016	16	N	24	60

Universal joint sockets are not included in the Action warranty

UNIVERSAL JOINT FOR TORX® INTERNAL 5

Type	Drawing	D2 mm	L mm	L1 mm
Metric				
DO64910020	T20	N	24	60
DO64910025	T25	N	24	60
DO64910027	T27	N	24	60
DO64910030	T30	N	24	60
DO64910040	T40	N	24	60
DO64910045	T45	N	24	60
DO64910047	T47	N	24	60
DO64910050	T50	N	24	60
DO64910055	T55	N	24	60

Universal joint sockets are not included in the Action warranty

UNIVERSAL JOINT FOR TORX® EXTERNAL 6

Type	Drawing	D2 mm	L mm	L1 mm
Metric				
DO68710005	E5	E	24	50
DO68710006	E6	E	24	50
DO68710007	E7	E	24	50
DO68710008	E8	E	24	50
DO68710010	E10	E	24	50
DO68710012	E12	E	24	50
DO68710014	E14	E	24	50
DO68710016	E16	E	24	50

Universal joint sockets are not included in the Action warranty

PIN AND RING

Type
DO1014-0-000



3/8" & 1/2" SQUARE DRIVE



3/8" Drive

RIBE DRIVER 1

Type	Drawing	D1 mm	L mm	L2 mm
Metric				
DO65315005	M5	H	19	50
DO65315006	M6	H	19	50
DO65315007	M7	H	19	50
DO65315008	M8	H	19	50
DO65315010	M10	H	19	50
DO65315012	M12	H	19	50
DO65315014	M14	H	19	50
DO65315016	M16	H	19	50

TAP HOLDER 2

Type	A mm	Drawing	Ø D1 mm	Ø D2 mm	Ø d mm	L mm
Metric						
DO65315005	M5	H	19	50	4,5	-
DO65315006	M6	H	19	50	5	-
DO65315007	M7	H	19	50	6,5	-
DO65315008	M8	H	19	50	7,5	-
DO65315010	M10	H	19	50	9	-
DO65315012	M12	H	19	50	10	-
DO65315014	M14	H	19	50	12	-
DO65315016	M16	H	19	50	14	-

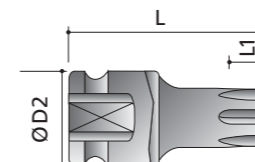
1/2" Drive

4-POINT NORMAL 3

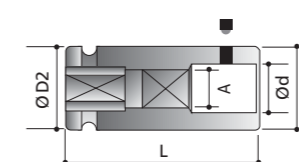
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO63125007	7	A	17,5	25	40
DO63125008	8	A	19	25	40
DO63125010	10	A	21,5	25	40
DO63125011	11	A	23	25	40
DO63125012	12	A	24	25	40
DO63125013	13	A	26	30	40
DO63125014	14	A	27,5	30	40
DO63125016	16	B	30	30	40
DO63125017	17	C	32	30	40
DO63125019	19	C	36	30	45
DO63125021	21	C	40	30	45
DO63125022	22	C	42	30	45
DO63125024	24	C	44	30	50
DO63125030	30	C	53	30	50
DO63125032	32	C	56	30	50

8-POINT 4

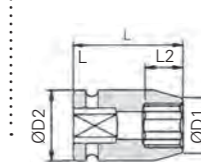
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric					
DO2012-8-010	10	A	20	22	38
DO2012-8-014	14	B	26	26	38
DO2012-8-017	17	B	30	30	38
DO2012-8-019	19	B	34	34	40
DO2012-8-022	22	B	38	38	40
DO2012-8-024	24	B	42	38	45
DO2012-8-027	27	B	46,5	46,5	50
DO2012-8-028	28	B	49	49	50



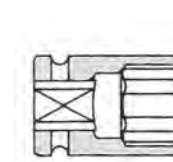
Drawing H



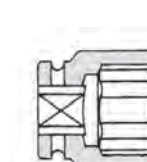
Drawing J



Drawing A



Drawing B



Drawing C

1/2" SQUARE DRIVE



6-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO2012-0-008	8	A	14,5	25	38	9
DO2012-0-009	9	A	16	25	38	12
DO2012-0-010	10	A	17	25	38	12
DO2012-0-011	11	A	19	25	38	12
DO2012-0-012	12	A	20	24	38	12
DO2012-0-013	13	A	21	25	38	12
DO2012-0-014	14	A	22	25	38	12
DO2012-0-015	15	A	24	30	38	12
DO2012-0-016	16	A	25	30	38	12
DO2012-0-017	17	A	26	30	38	13
DO2012-0-018	18	A	27,5	30	38	13
DO2012-0-019	19	A	29	30	38	13
DO2012-0-020	20	B	30	30	38	13
DO2012-0-021	21	B	32	30	38	13
DO2012-0-022	22	C	32	30	38	13
DO2012-0-023	23	C	32,5	30	38	13
DO2012-0-024	24	C	35	30	45	20
DO2012-0-025	25	C	36	30	45	20
DO2012-0-026	26	C	37,5	30	45	22
DO2012-0-027	27	C	39	30	50	22
DO2012-0-028	28	C	40	30	50	22
DO2012-0-029	29	C	41	30	50	22
DO2012-0-030	30	C	42,5	30	50	22
DO2012-0-032	32	C	44	30	50	28
DO2012-0-034	34	C	45	30	50	28
DO2012-0-036	36	C	48	30	50	28
DO2012-0-038	38	C	53	38	50	24
DO2012-0-041	41	C	58	44	60	27
DO2012-0-046	46	C	65	44	70	30
DO2012-0-050	50	C	70	52	70	32

6-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO2012-0-3/8	3/8"	A	16	22	38	12
DO2012-0-7/16	7/16"	A	18	22	38	12
DO2012-0-1/2	1/2"	A	20	22	38	12
DO2012-0-9/16	9/16"	A	22	24	38	12
DO2012-0-5/8	5/8"	B	25	25	38	12
DO2012-0-11/16	11/16"	B	26	26	38	13
DO2012-0-3/4	3/4"	B	28	28	38	13
DO2012-0-13/16	13/16"	B	30	30	38	13
DO2012-0-7/8	7/8"	B	32	32	38	13
DO2012-0-15/16	15/16"	B	34	34	38	13
DO2012-0-1	1"	B	36	36	38	14
DO2012-0-1 1/16	1 1/16"	B	38	38	40	16
DO2012-0-1 1/8	1 1/8"	C	40	38	40	16
DO2012-0-1 3/16	1 3/16"	C	42	38	40	16
DO2012-0-1 1/4	1 1/4"	C	44	38	40	18
DO2012-0-1 3/8	1 3/8"	C	48,5	38	50	26
DO2012-0-1 7/16	1 7/16"	C	50,5	38	50	26
DO2012-0-1 1/2	1 1/2"	C	52,5	38	50	26

6-POINT NORMAL MAGNETIC 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6052P008	8	A	15	25	38	3
DO6052P009	9	A	16	25	38	4
DO6052P010	10	A	17,5	25	38	4
DO6052P011	11	A	18,5	25	38	5
DO6052P012	12	A	20	25	38	5
DO6052P013	13	A	21	25	38	5
DO6052P014	14	A	22,5	25	38	6
DO6052P015	15	A	23,7	30	38	6
DO6052P016	16	A	25	30	38	6
DO6052P017	17	A	26,5	30	38	6
DO6052P018	18	A	27,5	30	38	7
DO6052P019	19	A	29	30	38	7
DO6052P020	20	B	30	30	38	7
DO6052P021	21	C	31	30	38	8
DO6052P022	22	C	32,5	30	38	8
DO6052P024	24	C	35	30	45	10

6-POINT DEEP 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO2012-1-008	8	A	14,5	25	78	13
DO2012-1-009	9	A	16	25	78	14
DO2012-1-010	10	A	17	25	78	14
DO2012-1-011	11	A	18	25	78	14
DO2012-1-012	12	A	19,5	25	78	14
DO2012-1-013	13	A	21	25	78	14
DO2012-1-014	14	A	22	25	78	17
DO2012-1-015	15	A	23,5	30	78	17
DO2012-1-016	16	A	23,5	30	78	17
DO2012-1-017	17	A	26	30	78	17
DO2012-1-018	18	A	26	30	78	17
DO2012-1-019	19	A	28	30	78	19
DO2012-1-020	20	B	30,5	30	78	19
DO2012-1-021	21	B	31	30	78	24
DO2012-1-022	22	C	32,5	30	78	24
DO2012-1-023	23	C	32,5	30	78	24
DO2012-1-024	24	C	35	30	78	24
DO2012-1-025	25	C	36	30	78	24
DO2012-1-026	26	C	37,5	30	78	24
DO2012-1-027	27	C	38	30	78	24
DO2012-1-028	28	C	40	30	78	24
DO2012-1-029	29	C	40	30	78	24
DO2012-1-030	30	C	42	30	78	24
DO2012-1-031	31	C	43	30	78	24
DO2012-1-032	32	C	45	30	78	24
DO2012-1-033	33	C	45	30	90	24
DO2012-1-034	34	C	45	30	90	24
DO2012-1-035	35	C	47	30	90	24
DO2012-1-036	36	C	49	30	90	24
DO2012-1-041	41	C	48	44	93	58
DO2012-1-046	46	C	65	44	93	58

1/2" SQUARE DRIVE



6-POINT DEEP 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO2012-1-3/8	7/16"	A	16	22	78	14
DO2012-1-7/16	7/16"	A	18	22	78	14
DO2012-1-1/2	1/2"	A	20	22	78	14
DO2012-1-9/16	9/16"	A	22	24	78	17
DO2012-1-5/8	5/8"	B	26	26	78	17
DO2012-1-11/16	11/16"	B	26	26	78	17
DO2012-1-3/4	3/4"	B	28	28	78	19
DO2012-1-13/16	13/16"	B	30	30	78	24
DO2012-1-7/8	7/8"	B	32	32	78	24
DO2012-1-15/16	15/16"	B	28	28	78	19
DO2012-1-1	1"	B	36	36	78	24
DO2012-1-1/16	1-1/16"	B	38	38	78	24
DO2012-1-1/8	1-1/8"	C	38	38	78	24
DO2012-1-3/16	1-3/16"	C	42	38	78	24
DO2012-1-1/4	1-1/4"	C	44	38	78	24
DO2012-1-5/16	1-5/16"	C	45	38	78	24
DO2012-1-3/8	1-3/8"	C	48,5	38	78	24
DO2012-1-7/16	1-7/16"	C	50,5	38	78	24
DO2012-1-1/2	1-1/2"	C	52,5	38	78	24

6-POINT DEEP MAGNETIC 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6052R008	8	A	15	25	78	3
DO6052R009	9	A	16	25	78	4
DO6052R010	10	A	17,5	25	78	4
DO6052R011	11	A	18,5	25	78	5
DO6052R012	12	A	20	25	78	5
DO6052R013	13	A	21	25	78	5
DO6052R014	14	A	22,5	25	78	6
DO6052R015	15	A	23,7	30	78	6
DO6052R016	16	A	25	30	78	6
DO6052R017	17	A	26,5	30	78	6
DO6052R018	18	A	27,5	30	78	7
DO6052R019	19	A	29	30	78	7
DO6052R020	20	B	30	30	78	7
DO6052R021	21	C	31	30	78	8
DO6052R022	22	C	32,5	30	78	8
DO6052R024	24	C	35	30	78	10

6-POINT THIN WALL NORMAL 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO61120008	8	A	13	25	38	6
DO61120009	9	A	14,5	25	38	6
DO61120010	10	A	15,5	25	38	7
DO61120011	11	A	16,7	25	38	8
DO61120012	12	A	18	25	38	9
DO61120013	13	A	19,2	25	38	9
DO61120014	14	A	21	25	38	11
DO61120015	15	A	21,7	30	38	11
DO61120016	16	A	23	30	38	11
DO61120017	17	B	24	30	38	11
DO61120018	18	B	25	30	38	13
DO61120019	19	B	26	30	38	13
DO61120020	20	B	27,5	30	38	13
DO61120021	21	B	28	30	38	15
DO61120022	22	B	29,5	30	38	15
DO61120023	23	C	30,5	30	38	15
DO61120024	24	C	32	30	45	18
DO61120030	30	C	40	30	50	21

Thin wall sockets are not included in the Action warranty

6-POINT THIN WALL DEEP 4

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO61122008	8	A	14	22	78	13
DO61122009	9	A	14,5	22	78	14
DO61122010	10	A	15,5	22	78	14
DO61122011	11	A	16,7	22	78	14
DO61122012	12	A	18	22	78	14
DO61122013	13	A	19,2	24	78	14
DO61122014	14	A	21	24	78	17
DO61122015	15	A	21,7	24	78	17
DO61122016	16	A	23	24	78	17
DO61122017	17	B	24	24	78	17
DO61122018	18	B	25	25	78	17
DO61122019	19	B	26	26	78	19
DO61122020	20	B	27,5	27,5	78	19
DO61122021	21	B	28	28	78	24
DO61122022	22	B	29,5	29,5	78	24
DO61122023	23	B	30,5	30,5	78	24
DO61122024	24	B	32	32	78	24
DO61122025	25	B	33	33	78	24
DO61122026	26	B	35	35	78	24
DO61122027	27	B	36	36	78	24
DO61122028	28	B	37,5	37,5	78	24
DO61122030	30	C	40	38	78	24
DO61122031	31	C	41	38	78	24
DO61122032	32	C	42	38	78	24

1/2" SQUARE DRIVE



6-POINT L=150 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60725008	8	G	15	25	150	10
DO60725010	10	G	17,5	25	150	12
DO60725012	12	G	19,5	25	150	12
DO60725013	13	G	21	25	150	12
DO60725014	14	G	22,5	25	150	12
DO60725015	15	G	23,5	30	150	12
DO60725017	17	G	26	30	150	13
DO60725019	19	G	28,5	30	150	13
DO60725020	20	G	30	30	150	13
DO60725021	21	G	31	30	150	13
DO60725022	22	G	32	30	150	14
DO60725024	24	G	34	30	150	14
DO60725025	25	G	36	30	150	15

6-POINT L=200 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60726008	8	G	15	25	200	10
DO60726010	10	G	17,5	25	200	12
DO60726012	12	G	20	25	200	12
DO60726013	13	G	20	25	200	12
DO60726014	14	G	21	25	200	12
DO60726015	15	G	23,5	30	200	12
DO60726017	17	G	26	30	200	13
DO60726019	19	G	28,5	30	200	13
DO60726020	20	G	30	30	200	13
DO60726021	21	G	31	30	200	13

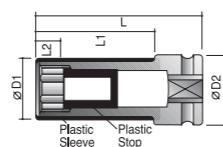
6-POINT L=250 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60727008	8	G	15	25	250	10
DO60727010	10	G	17,5	25	250	12
DO60727012	12	G	20	25	250	12
DO60727013	13	G	20,5	25	250	12
DO60727014	14	G	22,5	25	250	12
DO60727015	15	G	23,5	30	250	12
DO60727017	17	G	26	30	250	13
DO60727019	19	G	28,5	30	250	13
DO60727020	20	G	30	30	250	13
DO60727021	21	G	31	30	250	13
DO60727022	22	G	32	30	250	14

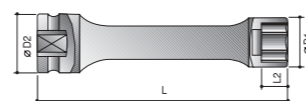
6-POINT THIN WALL DEEP WITH PLASTIC STOP AND SLEEVE 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO61126015 (wit)	15	H	22	30	85	13
DO61126017 (blauw)	17	H	27	30	85	14
DO61126019 (geel)	19	H	29	30	85	15
DO61126021 (rood)	21	H	31	30	85	17
DO61126022 (groen)	22	H	32,5	30	85	18
DO6112J017 (blauw)	17	H	27	25	130	24
DO6112J019 (geel)	19	H	29	30	130	24
DO6112J021 (rood)	21	H	31	30	130	24
DO6112J022 (groen)	22	H	32,5	30	130	24

Thin wall sockets are not included in the Action warranty



Drawing H



Drawing G

1/2" SQUARE DRIVE

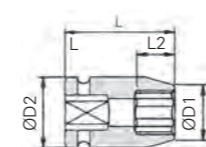


12-POINT NORMAL 1

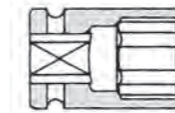
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63825006	6	A	13	25	38	5
DO63825008	8	A	14	25	38	6
DO63825009	9	A	16	25	38	6
DO63825010	10	A	17,5	25	38	7
DO63825011	11	A	19	25	38	8
DO63825012	12	A	20	25	38	9
DO63825013	13	A	21	25	38	9
DO63825014	14	A	22,5	25	38	11
DO63825015	15	A	23,5	30	38	11
DO63825016	16	A	25	30	38	11
DO63825017	17	A	26,5	30	40	11
DO63825018	18	A	27,5	30	40	13
DO63825019	19	A	29	30	40	13
DO63825020	20	B	30	30	40	13
DO63825021	21	C	31	30	40	15
DO63825022	22	C	32,5	30	40	15
DO63825023	23	C	34	30	40	15
DO63825024	24	C	35	30	45	18
DO63825025	25	C	36	30	45	18
DO63825026	26	C	38	30	50	18
DO63825027	27	C	39	30	50	19
DO63825028	28	C	40	30	50	19
DO63825029	29	C	41	30	50	19
DO63825030	30	C	42,5	30	50	21
DO63825032	32	C	44	30	50	22
DO63825033	33	C	46,5	30	50	22
DO63825036	36	C	50,5	30	50	24
DO63825041	41	C	58,5	44	60	27
DO63825046	46	C	65	44	70	30

12-POINT DEEP 2

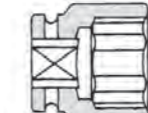
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO65827006	6	A	13	25	83	5
DO65827007	7	A	14	25	83	5
DO65827008	8	A	15	25	83	6
DO65827009	9	A	16	25	83	6
DO65827010	10	A	17,5	25	83	7
DO65827011	11	A	19	25	83	8
DO65827012	12	A	20	25	83	9
DO65827013	13	A	21	25	83	9
DO65827014	14	A	22,5	25	83	11
DO65827015	15	A	23,5	30	83	11
DO65827016	16	A	25	30	83	11
DO65827017	17	A	26,5	30	83	11
DO65827018	18	A	27,5	30	83	13
DO65827019	19	A	29	30	83	13
DO65827020	20	B	30	30	83	13
DO65827021	21	C	31	30	83	15
DO65827022	22	C	32,5	30	90	15
DO65827023	23	C	34	30	90	15
DO65827024	24	C	35	30	90	18
DO65827025	25	C	36	30	90	18
DO65827026	26	C	38	30	90	18
DO65827027	27	C	39	30	90	19
DO65827028	28	C	40	30	90	19
DO65827029	29	C	41	30	90	19
DO65827030	30	C	42,5	30	90	21
DO65827031	31	C	44	30	90	21
DO65827032	32	C	45	30	90	22
DO65827033	33	C	46,5	30	90	22
DO65827034	34	C	48	30	90	22
DO65827035	35	C	49,5	30	90	22
DO65827036	36	C	50,5	30	90	24
DO65827038	38	C	53	38	90	24
DO65827039	39	C	54,5	44	93	24
DO65827040	40	C	56	44	93	58
DO65827041	41	C	58	44	93	58
DO65827042	42	C	60	44	93	58
DO65827043	43	C	61	44	93	58
DO65827044	44	C	63	44	93	58
DO65827045	45	C	64	44	93	58
DO65827046	46	C	65	44	93	58
DO65827047	47	C	66,5	44	93	58
DO65827048	48	C	68	44	93	58
DO65827049	49	C	69	44	93	58
DO65827050	50	C	70	52	93	58
DO65827052	52	C	72,5	52	93	58
DO65827054	54	C	75	52	93	58
DO65827056	56	C	77	52	93	58
DO65827057	57	C	78	52	93	58
DO65827058	58	C	79	52	93	58



Drawing A



Drawing B



Drawing C

1/2" SQUARE DRIVE



1 SURFACE DRIVE NORMAL

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO63425010	10	A	17,5	25	38	12
DO63425011	11	A	18,7	25	38	12
DO63425012	12	A	20	25	38	12
DO63425013	13	A	21	25	38	12
DO63425014	14	A	22,5	25	38	12
DO63425015	15	A	23,7	30	38	12
DO63425016	16	A	25	30	38	12
DO63425017	17	A	26	30	38	13
DO63425018	18	A	27,5	30	38	13
DO63425019	19	A	28,7	30	38	13
DO63425020	20	B	30	30	38	13
DO63425021	21	B	30	30	38	13
DO63425022	22	C	32	30	38	13
DO63425023	23	C	32	30	38	13
DO63425024	24	C	35	30	45	20
DO63425026	26	C	38	30	50	22
DO63425027	27	C	38,7	30	50	22
DO63425029	29	C	40	30	50	22
DO63425030	30	C	42	30	50	22
DO63425032	32	C	44	30	50	22

2 SURFACE DRIVE DEEP

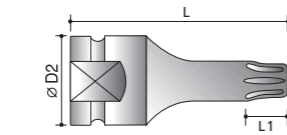
Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO63427010	10	A	17,5	25	83	14
DO63427011	11	A	18,7	25	83	14
DO63427012	12	A	20	25	83	14
DO63427013	13	A	21	25	83	14
DO63427014	14	A	22,5	25	83	17
DO63427015	15	A	23,7	30	83	17
DO63427016	16	A	25	30	83	17
DO63427017	17	A	26	30	83	17
DO63427018	18	A	27,5	30	83	17
DO63427019	19	A	28,7	30	83	19
DO63427020	20	B	30	30	83	19
DO63427021	21	B	30	30	83	24
DO63427022	22	C	32	30	90	24
DO63427023	23	C	32	30	90	24
DO63427024	24	C	35	30	90	24
DO63427026	26	C	38	30	90	24
DO63427027	27	C	38,7	30	90	24
DO63427029	29	C	40	30	90	24
DO63427030	30	C	42	30	90	24
DO63427032	32	C	44	30	90	24

3 TORX® INTERNAL

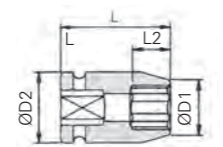
Type	mm	Drawing	D2 mm	L mm	L1 mm	-
Metric						
DO64721020	T20	F	25	2,8	55	-
DO64721025	T25	F	25	3,0	55	-
DO64721027	T27	F	25	3,0	55	-
DO64721030	T30	F	25	3,8	55	-
DO64721040	T40	F	25	3,8	55	-
DO64721045	T45	F	25	4,3	55	-
DO64721047	T47	F	25	5,0	55	-
DO64721050	T50	F	25	5,0	55	-
DO64721055	T55	F	25	5,5	55	-
DO64721060	T60	F	25	8,0	55	-
DO64721070	T70	F	25	9,4	55	-

4 TORX® INTERNAL LONG

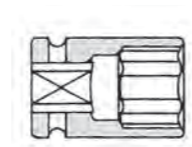
Type	mm	Drawing	D2 mm	L mm	L1 mm	-
Metric						
DO64722020	T20	F	25	2,8	75	-
DO64722025	T25	F	25	3,0	75	-
DO64722027	T27	F	25	3,0	75	-
DO64722030	T30	F	25	3,8	75	-
DO64722040	T40	F	25	3,8	75	-
DO64722045	T45	F	25	4,3	75	-
DO64722047	T47	F	25	5,0	75	-
DO64722050	T50	F	25	5,0	75	-
DO64722055	T55	F	25	5,5	75	-
DO64722060	T60	F	25	8,0	75	-
DO64722070	T70	F	25	9,4	75	-
DO64725025	T25	F	25	3,0	150	-
DO64725027	T27	F	25	3,0	150	-
DO64725030	T30	F	25	3,8	150	-
DO64725040	T40	F	25	3,8	150	-
DO64725045	T45	F	25	4,3	150	-



Drawing F



Drawing A



Drawing B



Drawing C

1/2" SQUARE DRIVE



1 TORX® TAMPER RESISTANT INTERNAL

Type	mm	Drawing	D2 mm	L1 mm	L mm	-
DO64726020	T20	F	25	2,8	55	-
DO64726025	T25	F	25	3,0	55	-
DO64726027	T27	F	25	3,0	55	-
DO64726030	T30	F	25	3,8	55	-
DO64726040	T40	F	25	3,8	55	-
DO64726045	T45	F	25	4,3	55	-
DO64726047	T47	F	25	5,0	55	-
DO64726050	T50	F	25	5,0	55	-
DO64726055	T55	F	25	5,5	55	-
DO64726060	T60	F	25	8,0	55	-
DO64726070	T70	F	25	9,4	55	-

2 TORX® TAMPER RESISTANT INTERNAL LONG

Type	mm	Drawing	D2 mm	L1 mm	L mm	-
DO64727020	T20	F	25	2,8	75	-
DO64727025	T25	F	25	3,0	75	-
DO64727027	T27	F	25	3,0	75	-
DO64727030	T30	F	25	3,8	75	-
DO64727040	T40	F	25	3,8	75	-
DO64727045	T45	F	25	4,3	75	-
DO64727047	T47	F	25	5,0	75	-
DO64727050	T50	F	25	5,0	75	-
DO64727055	T55	F	25	5,5	75	-
DO64727060	T60	F	25	8,0	75	-
DO64727070	T70	F	25	9,4	75	-

3 TORX® EXTERNAL

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO63320010	E10	A	15	25	38	7,5
DO63320011	E11	A	15,5	25	38	8
DO63320012	E12	A	16	25	38	8,5
DO63320014	E14	A	18,5	25	38	10
DO63320016	E16	A	20	25	38	11
DO63320018	E18	A	22	25	38	12
DO63320020	E20	A	25	30	38	13,5
DO63320022	E22	A	26,5	30	45	18
DO63320024	E24	A	28,5	30	45	18

4 TORX® THIN WALL EXTERNAL

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO63325010	E10	A	13	25	38	7,5
DO63325011	E11	A	14	25	38	8
DO63325012	E12	A	15	25	38	8,5
DO63325014	E14	A	17	25	38	10
DO63325016	E16	A	18,5	25	38	11
DO63325018	E18	A	20,5	25	38	12
DO63325020	E20	A	22,5	30	38	13,5
DO63325022	E22	A	24,5	30	45	18
DO63325024	E24	A	26,5	30	45	18

Thin wall sockets are not included in the Action warranty

5 TORX® EXTERNAL MAGNETIC

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO6332N010	E10	A	14,5	25	38	5
DO6332N011	E11	A	15	25	38	5
DO6332N012	E12	A	16	25	38	6
DO6332N014	E14	A	18	25	38	8
DO6332N016	E16	A	20	25	38	9
DO6332N018	E18	A	22	25	38	9
DO6332N020	E20	A	25	30	38	10
DO6332N022	E22	A	27	30	45	10
DO6332N024	E24	A	29	30	45	11

Torx® is a trademark of Textron



1/2" SQUARE DRIVE



6-POINT UNIVERSAL JOINT NORMAL 1

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO2012-2-010	10	E	15	28	65	14
DO2012-2-011	11	E	17	28	65	14
DO2012-2-012	12	E	19	28	65	14
DO2012-2-013	13	E	20	28	65	14
DO2012-2-014	14	E	22	28	65	14
DO2012-2-015	15	E	23	28	65	14
DO2012-2-016	16	E	23	28	65	14
DO2012-2-017	17	E	26	32	65	14
DO2012-2-018	18	E	26	32	65	14
DO2012-2-019	19	E	28	32	65	14
DO2012-2-020	20	E	30	32	65	14
DO2012-2-021	21	E	30	32	65	14
DO2012-2-022	22	E	32	32	65	14
DO2012-2-023	23	E	32	32	65	14
DO2012-2-024	24	E	34	32	65	14

Universal joints sockets are not included in the Action warranty

6-POINT UNIVERSAL JOINT DEEP 2

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO2012-4-010	10	E	15	28	90	14
DO2012-4-011	11	E	17	28	90	20
DO2012-4-012	12	E	19	28	90	20
DO2012-4-013	13	E	20	28	90	20
DO2012-4-014	14	E	22	28	90	20
DO2012-4-015	15	E	23	28	90	20
DO2012-4-016	16	E	23	28	90	20
DO2012-4-017	17	E	26	32	90	20
DO2012-4-018	18	E	26	32	90	20
DO2012-4-019	19	E	28	32	90	25
DO2012-4-020	20	E	30	32	90	25
DO2012-4-021	21	E	30	32	90	25
DO2012-4-022	22	E	32	32	90	25
DO2012-4-023	23	E	32	32	90	25
DO2012-4-024	24	E	34	32	90	25

Universal joints sockets are not included in the Action warranty

UNIVERSAL JOINT FOR TORX INTERNAL 3

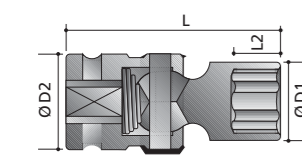
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO64921025	T25	M	28	70	3	-
DO64921027	T27	M	28	70	3	-
DO64921030	T30	M	28	70	3,8	-
DO64921040	T40	M	28	70	3,8	-
DO64921045	T45	M	28	70	4,3	-
DO64921047	T47	M	28	70	5	-
DO64921050	T50	M	28	70	5	-
DO64921055	T55	M	28	70	5,5	-
DO64921060	T60	M	28	70	8	-

Universal joints sockets are not included in the Action warranty

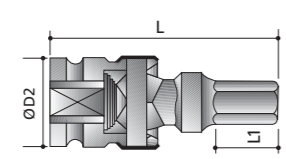
UNIVERSAL JOINT FOR TORX EXTERNAL 4

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO68720010	E10	E	13	28	65	7,5
DO68720011	E11	E	14	28	65	8,0
DO68720012	E12	E	15	28	65	8,5
DO68720014	E14	E	17	28	65	10
DO68720016	E16	E	18,5	28	65	11
DO68720018	E18	E	20,5	28	65	12
DO68720020	E20	E	22,5	32	70	13,5
DO68720022	E22	E	24,5	32	70	15
DO68720024	E24	E	26,5	32	70	17

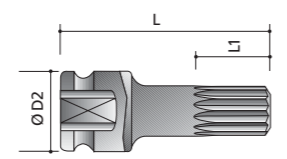
Universal joints sockets are not included in the Action warranty



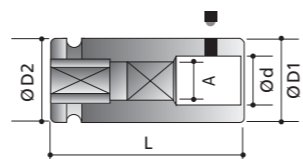
Drawing E



Drawing M



Drawing L



Drawing P

1/2" SQUARE DRIVE

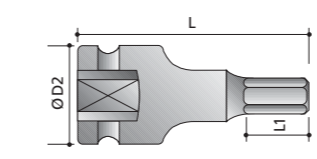


HEX DRIVER 1

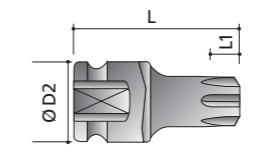
Type	mm	Drawing	D2 mm	L mm	L1 mm	-
Metric						
DO696304A	4	K	25	75	11	-
DO696305A	5	K	25	75	15	-
DO696306A	6	K	25	75	15	-
DO696307A	7	K	25	75	15	-
DO696308A	8	K	25	75	16	-
DO696309A	9	K	25	75	16	-
DO696310A	10	K	25	75	16	-
DO696311A	11	K	25	75	16	-
DO696312A	12	K	25	75	16	-
DO696313A	13	K	25	75	16	-
DO696314A	14	K	25	75	16	-
DO696315A	15	K	25	75	16	-
DO696316A	16	K	25	75	16	-
DO696317A	17	K	30	75	16	-
DO696319A	19	K	30	75	16	-
DO696321A	21	K	30	75	16	-
DO696322A	22	K	30	75	16	-
DO696324A	24	K	30	75	16	-
DO64827006	6	K	25	100	15	-
DO64828006	6	K	25	125	15	-
DO64827008	8	K	25	100	16	-
DO64828008	8	K	25	125	16	-
DO64827010	10	K	25	100	16	-
DO64828010	10	K	25	125	16	-
DO64827012	12	K	25	100	16	-
DO64827014	14	K	25	100	16	-

TAP HOLDER 2

Type	A mm	IMG	Ø D1 mm	Ø D2 mm	Ø d mm	L mm
Metric						
DO6322B001	3,4	P	22	22	4,5	40
DO6322B002	4,9	P	22	22	6,0	45
DO6322B003	5,5	P	22	22	7,0	45
DO6322B004	6,2	P	22	22	8,0	45
DO6322B005	7,0	P	22	22	9,0	45
DO6322B006	8,0	P	22	22	10,0	45
DO6322B007	9,0	P	22	22	11,0	45
DO6322B008	9,0	P	22	22	12,0	50
DO6322B009	11,0	P	22	22	14,0	52



Drawing K



Drawing H

TRIPLE SQUARE BIT NORMAL 3

Type	Drawing	D2 mm	L mm	L1 mm	-	
Metric						
DO65226005	M5	L	25	55	7	-
DO65226006	M6	L	25	55	7	-
DO65226008	M8	L	25	55	9	-
DO65226010	M10	L	25	55	9	-
DO65226012	M12	L	25	55	11	-
DO65226014	M14	L	25	55	11	-
DO65226016	M16	L	25	55	13	-

TRIPLE SQUARE BIT LONG 4

Type	Drawing	D2 mm	L mm	L1 mm	-	
Metric						
DO65227005	M5	L	25	100	7	-
DO65227006	M6	L	25	100	7	-
DO65227008	M8	L	25	100	9	-
DO65227010	M10	L	25	100	9	-
DO65227012	M12	L	25	100	11	-
DO65227014	M14	L	25	100	11	-
DO65227016	M16	L	25	100	13	-
DO65227018	M18	L	25	100	13	-

TRIPLE SQUARE BIT EXTRA LONG 4

Type	Drawing	D2 mm	L mm	L1 mm	-	
Metric						
DO65228008	M8	L	25	120	9	-
DO65228010	M10	L	25	120	9	-
DO65228012	M12	L	25	120	11	-
DO65228018	M18	L	25	120	14	-

RIBE DRIVER 5

Type	Drawing	D2 mm	L mm	L1 mm	-	
Metric						
DO65326006	M6	H	25	55	5	-
DO65326007	M7	H	25	55	6,5	-
DO65326008	M8	H	25	55	7,5	-
DO65326010	M10	H	25	55	9	-
DO65326012	M12	H	25	55	10	-
DO65326014	M14	H	25	55	12	-
DO65326016	M16	H	25	55	14	-
DO65326018	M18	H	25	55	16	-

1/2" SQUARE DRIVE



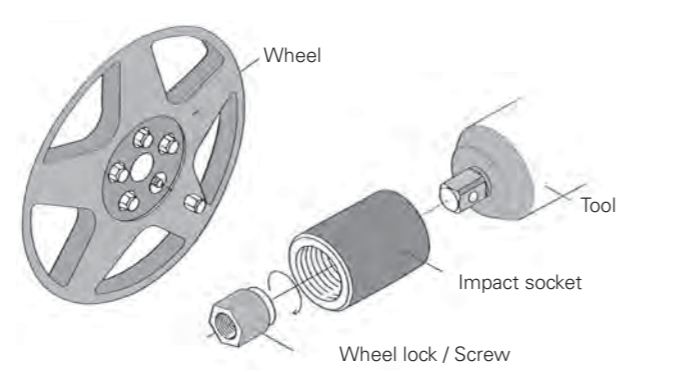
HEX DRIVER WITH UNIVERSAL JOINT 1

Type	mm	Drawing	D2 mm	L mm	L1 mm	-
Metric						
DO65121006	6	M	28	75	13	-
DO65121007	7	M	28	75	13	-
DO65121008	8	M	28	75	20	-
DO65121009	9	M	28	75	20	-
DO65121010	10	M	28	75	20	-
DO65121011	11	M	28	75	20	-
DO65121012	12	M	28	75	20	-
DO65121013	13	M	28	75	20	-
DO65121014	14	M	28	75	20	-
DO65121015	15	M	28	75	20	-
DO65121016	16	M	28	75	20	-
DO65121017	17	M	28	75	20	-
DO65121018	18	M	28	75	20	-
DO65121019	19	M	28	75	20	-

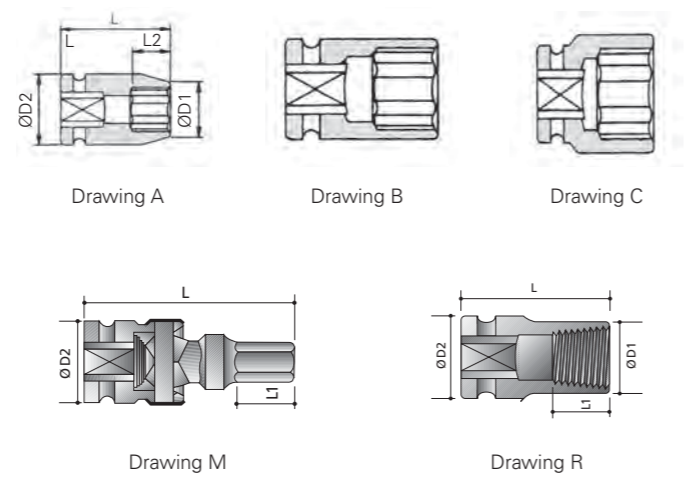
WHEEL LUG NUT REMOVER SOCKETS 2

Type	mm	Drawing	D1 mm	D2 mm	L mm	L1 mm
DO69782090	17	R	24	24	38	17
DO69782091	18,5	R	25	25	38	17
DO69782092	20	R	26	26	38	22
DO69782093	21,5	R	28,5	28,5	38	22
DO69782094	23	R	30	30	38	22
DO69782095	24,5	R	31	31	38	22
DO69782096	26	R	32	32	38	22

APPLICATION WHEEL LUG NUT REMOVER SOCKETS

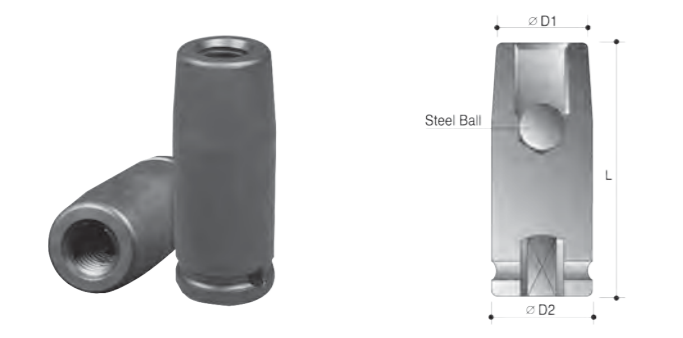


This wheel lug nut remover is used when it is discovered that the original key to remove your car wheel is lost. In order to remove the lock and the wheel, these sockets can be used. Proper use of the socket is to have at least three windings of thread of the socket gripping over the lock. In case any of the first three windings are already gripping, the next bigger size of socket should be chosen. When the correct size of socket is chosen, it can unlock up to four bolts.



STUD BOLT SETTERS

Type	SW	D1 mm	D2 mm	L mm
DO69782010	M6 x 1,0	13	25	55
DO69782017	M8 x 1,0	15	25	55
DO69782018	M8 x 1,25	15	25	55
DO69782020	M10 x 1,0	18	25	55
DO69782021	M10 x 1,25	18	25	55
DO69782022	M10 x 1,5	17	25	55
DO69782025	M12 x 1,25	19	25	55
DO69782026	M12 x 1,5	19	25	55
DO69782027	M12 x 1,75	19	25	55
DO69782030	M14 x 1,5	23	25	55
DO69782031	M14 x 2,0	22	25	55
DO69782034	M16 x 1,5	28	30	75
DO69782035	M16 x 2,0	27	30	75
DO69782036	M18 x 1,5	29,5	30	75
DO69782038	M18 x 2,5	29	30	75
DO69782040	M20 x 1,5	30	30	75
DO69782041	M20 x 2,5	30	30	75



ACCESSORIES

Pin and ring	
DO1014-0-000	



3/4" SQUARE DRIVE



4-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63045016	16	B	40	40	52	24
DO63045017	17	B	40	40	52	24
DO63045019	19	B	40	40	52	24
DO63045020	20	B	42	42	52	24
DO63045021	21	B	42	42	52	24
DO63045022	22	B	44	44	52	24
DO63045024	24	C	47	44	52	24

6-POINT NORMAL (CONTINUED) 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO3034-0-056	56	C	80	54	74	35
DO3034-0-057	57	C	84	54	74	35
DO3034-0-060	60	C	84	54	75	37
DO3034-0-063	63	C	86	54	75	37
DO3034-0-065	65	C	88	54	78	40
DO3034-0-067	67	C	90	54	80	40
DO3034-0-070	70	C	96	54	80	40
DO3034-0-075	75	C	102	64	83	42

6-POINT NORMAL 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO3034-0-013	13	A	25	44	50	9
DO3034-0-014	14	A	25	44	50	11
DO3034-0-015	15	A	26	44	50	11
DO3034-0-016	16	A	27	44	50	11
DO3034-0-017	17	A	31	44	50	12
DO3034-0-018	18	A	32	44	50	13
DO3034-0-019	19	A	33	44	50	13
DO3034-0-020	20	A	34	44	50	14
DO3034-0-021	21	A	35	44	50	15
DO3034-0-022	22	A	37	44	50	15
DO3034-0-023	23	A	38	44	50	16
DO3034-0-024	24	A	40	44	50	16
DO3034-0-025	25	A	40	44	50	16
DO3034-0-026	26	A	41	44	50	16
DO3034-0-027	27	A	43	44	54	19
DO3034-0-028	28	B	44	44	54	19
DO3034-0-029	29	C	45	44	54	21
DO3034-0-030	30	C	47	44	54	21
DO3034-0-031	31	C	48	44	56	21
DO3034-0-032	32	C	49	44	56	22
DO3034-0-033	33	C	51	44	56	22
DO3034-0-034	34	C	52	44	56	22
DO3034-0-035	35	C	53	44	56	22
DO3034-0-036	36	C	54	44	56	25
DO3034-0-037	37	C	56	44	58	25
DO3034-0-038	38	C	57	44	58	25
DO3034-0-039	39	C	58	44	58	25
DO3034-0-040	40	C	58	44	58	25
DO3034-0-041	41	C	60	44	58	27
DO3034-0-042	42	C	62	44	58	27
DO3034-0-043	43	C	63	44	63	27
DO3034-0-044	44	C	65	44	63	27
DO3034-0-045	45	C	66	44	63	27
DO3034-0-046	46	C	67	44	63	30
DO3034-0-047	47	C	68	44	68	30
DO3034-0-049	49	C	70	44	70	30
DO3034-0-050	50	C	71	54	72	32
DO3034-0-055	55	C	77	54	74	35

6-POINT NORMAL 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO3034-0-11/16	11/16"	A	29	38	50	12
DO3034-0-3/4	3/4"	A	30	38	50	14
DO3034-0-13/16	13/16"	A	32	38	52	16
DO3034-0-7/8	7/8"	A	34	38	52	16
DO3034-0-15/16	15/16"	A	36	38	52	16
DO3034-0-1 1/8	1 1/8"	B	42	42	52	20
DO3034-0-1 3/16	1 3/16"	B	44	44	52	20
DO3034-0-1 1/4	1 1/4"	B	44	44	52	20
DO3034-0-1	1"	C	40	38	52	16
DO3034-0-1 1/16	1 1/16"	C	40	38	52	16
DO3034-0-1 5/16	1 5/16"	C	47	44	56	23
DO3034-0-1 3/8	1 3/8"	C	50	44	56	23
DO3034-0-1 7/16	1 7/16"	C	51	44	56	23
DO3034-0-1 1/2	1 1/2"	C	53	44	56	23
DO3034-0-1 3/4	1 3/4"	C	65	44	62	27
DO3034-0-1 13/16	1 13/16"	C	67	44	56	32

STUD BOLT SETTERS

Type	SW	D1 mm	D2 mm	L mm
DO69784162	M16 x 2	29	44	100
DO69784203	M20 x 2,5	35	44	100
DO69784241	M24 x 1,5	37	44	100
DO69784244	M24 x 3	37	44	100
DO69784285	M28 x 3,5	42	44	100
DO69784305	M30 x 3,5	43	44	100



3/4" SQUARE DRIVE



6-POINT DEEP 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO3034-1-013	13	A	25	44	95	13
DO3034-1-014	14	A	25	44	95	14
DO3034-1-015	15	A	26	44	95	15
DO3034-1-017	17	A	31	44	95	17
DO3034-1-018	18	A	32	44	95	18
DO3034-1-019	19	A	33	44	95	19
DO3034-1-020	20	A	34	44	95	20
DO3034-1-021	21	A	35	44	95	21
DO3034-1-022	22	A	37	44	95	22
DO3034-1-023	23	A	38	44	95	23
DO3034-1-024	24	A	39,5	44	95	24
DO3034-1-025	25	A	40	44	95	25
DO3034-1-026	26	A	41	44	95	26
DO3034-1-027	27	A	43	44	95	27
DO3034-1-028	28	B	44	44	95	28
DO3034-1-029	29	C	45	44	95	29
DO3034-1-030	30	C	47	44	95	30
DO3034-1-031	31	C	48	44	95	31
DO3034-1-032	32	C	49	44	95	32
DO3034-1-033	33	C	51	44	95	33
DO3034-1-034	34	C	52	44	95	34
DO3034-1-035	35	C	53	44	95	35
DO3034-1-036	36	C	54	44	95	36
DO3034-1-037	37	C	56	44	95	37
DO3034-1-038	38	C	57	44	95	38
DO3034-1-039	39	C	58	44	95	38
DO3034-1-040	40	C	58	44	95	38
DO3034-1-041	41	C	60	44	95	38
DO3034-1-042	42	C	62	44	95	38
DO3034-1-043	43	C	63	44	95	38
DO3034-1-044	44	C	65	44	95	38
DO3034-1-046	46	C	67	44	95	38
DO3034-1-047	47	C	68	44	95	38
DO3034-1-048	48	C	69	44	95	38
DO3034-1-049	49	C	70	44	95	38
DO3034-1-050	50	C	71	54	95	38
DO3034-1-052	52	C	74	54	95	40
DO3034-1-055	55	C	77	54	100	40
DO3034-1-060	60	C	84	54	105	42
DO3034-1-065	65	C	88	54	105	66

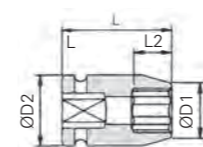
6-POINT DEEP 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO3034-1-13/16	13/16"	A	32	38	85	23
DO3034-1-7/8	7/8"	A	34	38	85	23
DO3034-1-15/16	15/16"	A	36	38	85	41
DO3034-1-1	1"	C	40	38	85	41
DO3034-1-1 1/8	1 1/8"	B	42	42	85	52
DO3034-1-1 3/16	1 3/16"	B	44	44	85	52
DO3034-1-1 1/4	1 1/4"	B	44	44	85	52
DO3034-1-1 5/16	1 5/16"	C	47	44	85	52
DO3034-1-1 7/16	1 7/16"	C	51	44	85	52
DO3034-1-1 1/2	1 1/2"	C	53	44	85	60

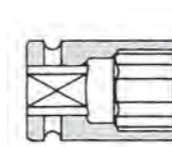
6-POINT EXTRA LONG 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO61145024	24	G	38,5	44	270	24
DO61145027	27	G	42	44	270	27
DO61145030	30	G	45	44	270	30
DO61145032	32	G	47	44	270	32
DO61145033	33	G	48	44	270	32
DO61145036	36	G	53,5	44	270	32
DO61145046	46	G	63	44	270	38
DO61146024	24	G	38,5	44	400	24
DO61146027	27	G	42	44	400	27
DO61146030	30	G	45	44	400	30
DO61146032	32	G	47	44	400	32
DO61146033	33	G	48	44	400	32
DO61146036	36	G	53,5	44	400	32

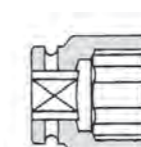
ACCESSORIES



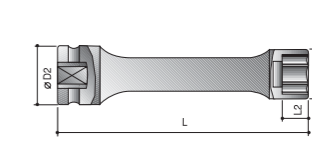
Drawing A



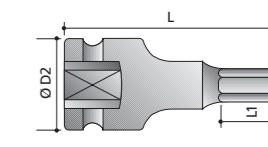
Drawing B



Drawing C



Drawing G



Drawing K

3/4" SQUARE DRIVE



6-POINT THIN WALL DEEP 1

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO61141017	17	A	25,5	44	95	17
DO61141019	19	A	28,5	44	95	19
DO61141022	22	A	33,5	44	95	22
DO61141024	24	A	36,5	44	95	24
DO61141027	27	A	40,5	44	95	27
DO61141030	30	A	43,5	44	95	30
DO61141032	32	B	46,5	44	95	32
DO61141033	33	B	47,5	44	95	33
DO61141036	36	B	52	44	95	36
DO61141038	38	B	54	44	95	38
DO61141041	41	B	57	44	95	38

Thin wall sockets are not included in the Action warranty.

6-POINT EXTREME THIN WALL DEEP 1

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO61142027	27	A	40	43	108	43
DO61142032	32	B	45	45	108	43
DO61142041	41	C	54,5	45	108	43

Thin wall sockets are not included in the Action warranty.

HEX DRIVER 2

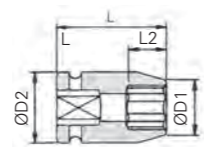
Type	mm	Drawing	D2 mm	L mm	L1 mm	-
Metric						
DO696510A	10	K	44	100	20	-
DO696512A	12	K	44	100	20	-
DO696514A	14	K	44	100	20	-
DO696517A	17	K	44	100	20	-
DO696519A	19	K	44	100	20	-
DO696522A	22	K	44	100	20	-
DO696524A	24	K	44	100	20	-
DO696527A	27	K	44	100	20	-
DO696530A	30	K	44	100	20	-
DO696532A	32	K	44	100	20	-
DO696536A	36	K	44	100	20	-

8-POINT 3

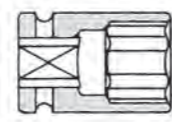
Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO63645019	19	B	41	41	52	15
DO63645024	24	C	46	44,5	52	20
DO63645027	27	C	53	44,5	56	24
DO63645030	30	C	60	44,5	60	28
DO63645032	32	C	60	44,5	60	28
DO63645038	38	C	70	44,5	64	32

12-POINT NORMAL 4

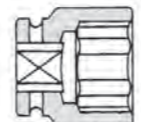
Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO63845013	13	A	23	44	50	12
DO63845014	14	A	24	44	50	12
DO63845015	15	A	26	44	50	12
DO63845016	16	A	27	44	50	12
DO63845017	17	A	28	44	50	12
DO63845018	18	A	29	44	50	12
DO63845019	19	A	30	44	50	14
DO63845020	20	A	31	44	52	16
DO63845021	21	A	32	44	52	16
DO63845022	22	A	34	44	52	16
DO63845023	23	A	35	44	52	16
DO63845024	24	A	36	44	52	18
DO63845025	25	B	38	44	52	18
DO63845026	26	C	40	44	52	23
DO63845027	27	C	40	44	52	23
DO63845028	28	C	42	44	52	23
DO63845029	29	C	43	44	52	23
DO63845030	30	C	43	44	52	23
DO63845031	31	C	44	44	56	24
DO63845032	32	C	45	44	56	24
DO63845033	33	C	46	44	56	24
DO63845034	34	C	48	44	56	24
DO63845035	35	C	50	44	56	24
DO63845036	36	C	51	44	56	24
DO63845037	37	C	52	44	56	24
DO63845038	38	C	53	44	56	24
DO63845039	39	C	55	44	62	28
DO63845041	41	C	58	44	62	28
DO63845042	42	C	61	44	62	28
DO63845043	43	C	63	44	62	28
DO63845046	46	C	67	44	68	33
DO63845050	50	C	71	54	70	34
DO63845055	55	C	77	54	74	35
DO63845056	56	C	77	54	74	35
DO63845060	60	C	84	54	75	35
DO63845063	63	C	86	54	78	37
DO63845065	65	C	88	54	78	38
DO63845067	67	C	90	54	80	40
DO63845070	70	C	96	54	80	40



Drawing A



Drawing B



Drawing C

3/4" SQUARE DRIVE



12-POINT DEEP 1

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO65847013	13	A	24,5	44	95	13
DO65847014	14	A	25,5	44	95	14
DO65847015	15	A	27	44	95	15
DO65847016	16	A	28	44	95	16
DO65847017	17	A	29,5	44	95	17
DO65847018	18	A	31	44	95	18
DO65847019	19	A	32	44	95	19
DO65847020	20	A	34	44	95	20
DO65847021	21	A	35	44	95	21
DO65847022	22	A	37	44	95	22
DO65847023	23	A	38	44	95	23
DO65847024	24	A	39	44	95	24
DO65847025	25	A	41	44	95	25
DO65847026	26	A	42	44	95	26
DO65847027	27	A	43	44	95	27
DO65847028	28	B	44	44	95	28
DO65847029	29	C	46	44	95	29
DO65847030	30	C	47	44	95	30
DO65847031	31	C	48	44	95	31
DO65847032	32	C	49	44	95	32
DO65847033	33	C	51	44	95	33
DO65847034	34	C	52	44	95	34
DO65847035	35	C	53	44	95	35
DO65847036	36	C	54	44	95	36
DO65847037	37	C	56	44	95	37
DO65847038	38	C	57	44	95	38
DO65847039	39	C	58	44	95	38
DO65847040	40	C	59,5	44	95	38
DO65847041	41	C	61	44	95	38
DO65847042	42	C	62	44	95	38
DO65847043	43	C	63,5	44	95	38
DO65847044	44	C	64,5	44	95	38
DO65847045	45	C	65,5	44	95	38
DO65847046	46	C	66,5	44	100	38
DO65847047	47	C	68	44	100	38
DO65847048	48	C	69	44	100	38
DO65847049	49	C	70	44	100	38
DO65847050	50	C	71	54	100	38
DO65847051	51	C	72	54	100	40
DO65847052	52	C	74	54	100	40
DO65847053	53	C	75	54	100	40
DO65847054	54	C	77	54	100	40
DO65847055	55	C	78	54	105	40
DO65847056	56	C	79	54	105	40
DO65847057	57	C	80	54	105	40
DO65847058	58	C	81	54	105	40

12-POINT DEEP (CONTINUED) 2

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO65847060	60	C	84	54	105	42
DO65847063	63	C	87	54	105	42
DO65847065	65	C	90	54	105	66
DO65847067	67	C	92	54	105	66
DO65847068	68	C	94	54	105	66
DO65847070	70	C	96	54	105	66
DO65847073	73	C	100	54	108	66
DO65847075	75	C	102	64	108	68

TORX® INTERNAL 3

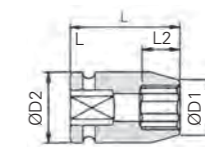
Type	mm	Drawing	D mm	L mm	L1 mm	-
Metric						
DO64742050	T50	F	44	100	5,0	-
DO64742055	T55	F	44	100	5,5	-
DO64742060	T60	F	44	100	8,0	-
DO64742070	T70	F	44	100	9,4	-
DO64742080	T80	F	44	100	10,5	-
DO64742090	T90	F	44	100	11,8	-
DO64742100	T100	F	44	100	13,1	-

Torx® is a trademark of Textron

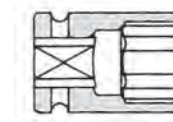
TORX® EXTERNAL 4

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO63340018	E18	A	25	44	56	12,5
DO63340020	E20	A	27	44	56	14
DO63340024	E24	A	33	44	56	16,5
DO63340032	E32	A	44	44	56	24,5

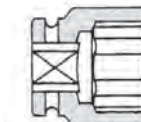
Torx® is a trademark of Textron.



Drawing A



Drawing B



Drawing C

1" SQUARE DRIVE



4-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63055017	17	B	52	52	57	24
DO63055019	19	B	52	52	57	24
DO63055020	20	B	52	52	57	24
DO63055021	21	B	52	52	57	24

6-POINT NORMAL 2

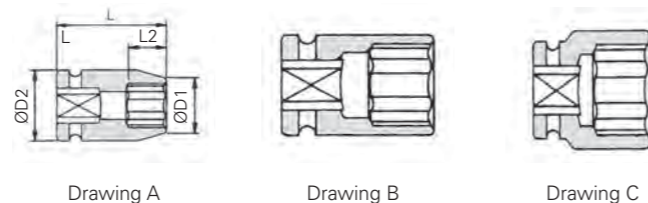
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO4010-0-017	17	A	34	54	60	12
DO4010-0-018	18	A	35	54	60	13
DO4010-0-019	19	A	35,5	54	60	13
DO4010-0-020	20	A	37	54	60	14
DO4010-0-021	21	A	38	54	60	15
DO4010-0-022	22	A	40	54	60	15
DO4010-0-023	23	A	41	54	60	16
DO4010-0-024	24	A	42	54	60	18
DO4010-0-025	25	A	43	54	60	18
DO4010-0-026	26	A	44,5	54	60	18
DO4010-0-027	27	A	46	54	60	19
DO4010-0-028	28	A	47	54	62	19
DO4010-0-029	29	A	48	54	62	19
DO4010-0-030	30	A	50	54	62	21
DO4010-0-031	31	A	51	54	62	21
DO4010-0-032	32	A	52	54	62	22
DO4010-0-033	33	A	53	54	62	22
DO4010-0-034	34	C	55	54	62	22
DO4010-0-035	35	C	56	54	65	22
DO4010-0-036	36	C	57	54	67	25
DO4010-0-037	37	C	59	54	67	25
DO4010-0-038	38	C	59,5	54	67	25
DO4010-0-039	39	C	60	54	70	25
DO4010-0-040	40	C	62	54	70	25
DO4010-0-041	41	C	64	54	70	27
DO4010-0-042	42	C	65	54	74	27
DO4010-0-043	43	C	66	54	74	27
DO4010-0-045	45	C	68	54	74	27
DO4010-0-046	46	C	69,5	54	76	30
DO4010-0-047	47	C	72	54	76	32
DO4010-0-048	48	C	73	54	76	32
DO4010-0-050	50	C	74	54	80	35
DO4010-0-052	52	C	77	54	84	35
DO4010-0-053	53	C	78	54	84	35
DO4010-0-054	54	C	79	54	84	35
DO4010-0-055	55	C	81	54	84	35

6-POINT NORMAL (CONTINUED) 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO4010-0-056	56	C	83	54	84	40
DO4010-0-057	57	C	84	54	84	40
DO4010-0-058	58	C	85	54	87	40
DO4010-0-060	60	C	87	54	87	42
DO4010-0-062	62	C	89	54	87	42
DO4010-0-063	63	C	90	54	87	42
DO4010-0-065	65	C	93	54	90	42
DO4010-0-070	70	C	100	54	96	42
DO4010-0-075	75	C	106	86	98	45
DO4010-0-080	80	C	112	86	100	48
DO4010-0-085	85	C	118	86	105	52
DO4010-0-090	90	C	125	86	105	52
DO4010-0-095	95	C	131	86	115	52
DO4010-0-100	100	C	137	95	115	58
DO4010-0-105	105	C	143	95	115	58

6-POINT NORMAL 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO4010-0-1	1"	A	42	51	58	18
DO4010-0-1 1/8	1 1/8"	A	46	51	58	19
DO4010-0-1 5/16	1 5/16"	C	53	52	62	21
DO4010-0-1 7/16	1 7/16"	C	56	52	62	26
DO4010-0-1 1/2	1 1/2"	C	58	52	62	26
DO4010-0-1 11/16	1 11/16"	C	65	52	64	27
DO4010-0-1 7/8	1 7/8"	C	70	58	66	28
DO4010-0-2 1/16	2 1/16"	C	75	58	70	31
DO4010-0-2 1/4	2 1/4"	C	84	62	75	34
DO4010-0-2 7/16	2 7/16"	C	89	62	78	35
DO4010-0-2 1/2	2 1/2"	C	91	62	80	36
DO4010-0-2 7/8	2 7/8"	C	102	62	87	41



1" SQUARE DRIVE



6-POINT DEEP 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO4010-1-017	17	A	34	54	100	17
DO4010-1-018	18	A	34	54	100	18
DO4010-1-019	19	A	35,5	54	100	19
DO4010-1-020	20	A	36,5	54	100	20
DO4010-1-021	21	A	37,5	54	100	21
DO4010-1-022	22	A	40	54	100	22
DO4010-1-023	23	A	41	54	100	23
DO4010-1-024	24	A	42	54	100	24
DO4010-1-025	25	A	43	54	100	25
DO4010-1-026	26	A	44,5	54	100	26
DO4010-1-027	27	A	46	54	100	27
DO4010-1-028	28	A	47	54	100	28
DO4010-1-029	29	A	48	54	100	29
DO4010-1-030	30	A	50	54	100	30
DO4010-1-031	31	A	51	54	100	31
DO4010-1-032	32	A	52	54	100	32
DO4010-1-033	33	A	53	53	100	33
DO4010-1-034	34	C	55	54	100	34
DO4010-1-035	35	C	56	54	100	35
DO4010-1-036	36	C	57	54	100	36
DO4010-1-037	37	C	57	54	100	37
DO4010-1-038	38	C	59,5	54	100	38
DO4010-1-039	39	C	61	54	100	38
DO4010-1-040	40	C	62	54	100	38
DO4010-1-041	41	C	64	54	100	38
DO4010-1-042	42	C	65	54	100	38
DO4010-1-046	46	C	69,5	54	100	38
DO4010-1-047	47	C	71,5	54	100	38
DO4010-1-048	48	C	72,5	54	100	38
DO4010-1-050	50	C	75	54	100	38
DO4010-1-054	54	C	80	54	100	40
DO4010-1-055	55	C	81	54	100	40
DO4010-1-056	56	C	82	54	105	40
DO4010-1-058	58	C	85	54	105	40
DO4010-1-060	60	C	87	54	120	42
DO4010-1-065	65	C	93	54	125	42
DO4010-1-070	70	C	100	54	125	42
DO4010-1-075	75	C	106	86	135	45
DO4010-1-080	80	C	112	86	135	48
DO4010-1-085	85	C	118	86	140	52
DO4010-1-090	90	C	125	86	140	52
DO4010-1-095	95	C	131	86	140	52
DO4010-1-100	100	C	137	95	140	58
DO4010-1-105	105	C	143	95	155	58
DO4010-1-110	110	C	149	95	155	60
DO4010-1-115	115	C	155	95	155	62

6-POINT DEEP 1

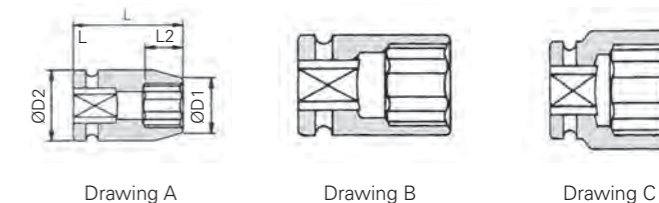
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Inch						
DO4010-1-15/16	15/16"	A	40	51	90	21
DO4010-1-1	1"	A	42	51	90	25
DO4010-1-1 1/16	1 1/16"	A	44	51	90	23
DO4010-1-1 3/16	1 3/16"	A	48	51	90	40
DO4010-1-1 5/16	1 5/16"	C	53	52	90	40
DO4010-1-1 1/2	1 1/2"	C	58	52	92	54

6-POINT THIN WALL DEEP 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO61151019	19	A	33	54	100	19
DO61151024	24	A	38	54	100	24
DO61151027	27	A	42,5	54	100	27
DO61151028	28	A	43	54	100	28
DO61151030	30	A	45	54	100	30
DO61151032	32	A	47	54	100	32
DO61151033	33	A	49	54	100	33
DO61151036	36	A	52	54	100	36
DO61151041	41	C	57	54	100	38

6-POINT EXTRA DEEP 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60559024	24	B	42	54	270	24
DO60559027	27	B	45	54	270	27
DO60559030	30	B	50	54	270	30
DO60559032	32	B	52	54	270	32
DO60559033	33	B	52	54	270	32
DO60559036	36	B	57	54	270	36
DO6115H032	32	B	48,5	54	400	32
DO6115H033	33	B	50	54	400	32



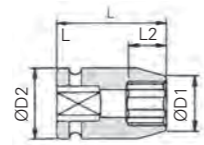
1" SQUARE DRIVE



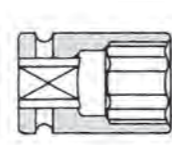
8-POINT NORMAL 1						
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO63655019	19	A	45	54	60	13
DO63655024	24	A	52	54	60	18
DO63655027	27	C	56,5	54	60	19
DO63655030	30	C	61	54	62	21
DO63655032	32	C	64	54	62	22
DO63655035	35	C	68,5	58	65	22
DO63655038	38	C	73	58	67	24
DO63655046	46	C	86	62	76	30

12-POINT NORMAL 2						
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO65855016	16	A	32	54	60	11
DO65855017	17	A	34	54	60	11
DO65855018	18	A	35	54	60	13
DO65855019	19	A	36	54	60	13
DO65855020	20	A	37	54	60	13
DO65855021	21	A	38	54	60	15
DO65855022	22	A	39	54	60	15
DO65855023	23	A	40	54	60	15
DO65855024	24	A	41	54	60	18
DO65855025	25	A	43	54	60	18
DO65855026	26	A	44,5	54	60	18
DO65855027	27	A	45	54	60	19
DO65855028	28	A	46,5	54	62	19
DO65855029	29	A	48	54	62	19
DO65855030	30	A	50	54	62	21
DO65855031	31	A	51	54	62	21
DO65855032	32	A	52	54	62	22
DO65855033	33	A	53	54	62	22
DO65855034	34	C	55	54	62	22
DO65855035	35	C	56	54	65	22
DO65855036	36	C	57	54	67	24
DO65855037	37	C	59	54	67	24
DO65855038	38	C	60	54	67	24
DO65855039	39	C	61	54	70	24
DO65855040	40	C	62	54	70	24
DO65855041	41	C	63,5	54	70	27
DO65855042	42	C	65	54	74	27
DO65855043	43	C	66	54	74	27
DO65855044	44	C	67	54	74	27
DO65855045	45	C	68	54	74	27
DO65855046	46	C	70	58	76	30

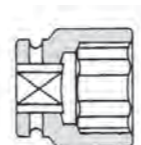
12-POINT NORMAL (CONTINUED) 2						
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO65855047	47	C	71,5	58	76	30
DO65855048	48	C	72,5	58	76	30
DO65855050	50	C	75	62	80	32
DO65855051	51	C	76	62	80	32
DO65855052	52	C	77	62	84	32
DO65855053	53	C	78	62	84	32
DO65855054	54	C	80	62	84	32
DO65855055	55	C	81	62	84	35
DO65855056	56	C	82	62	84	35
DO65855057	57	C	84	62	84	35
DO65855058	58	C	85	62	87	37
DO65855060	60	C	87	62	87	37
DO65855062	62	C	89	62	87	37
DO65855063	63	C	90	62	87	37
DO65855065	65	C	93	62	90	40
DO65855067	67	C	96	62	92	40
DO65855070	70	C	100	62	96	40
DO65855075	75	C	106	86	98	42
DO65855076	76	C	107	86	100	45
DO65855077	77	C	109	86	100	45
DO65855078	78	C	110	86	100	45
DO65855080	80	C	112	86	100	45
DO65855085	85	C	118	86	105	52
DO65855090	90	C	125	86	105	52
DO65855095	95	C	131	86	105	52
DO65855100	100	C	137	86	110	58
DO65855105	105	C	143	95	110	58
DO65855110	110	C	149	95	115	62
DO65855115	115	C	155	95	115	62



Drawing A



Drawing B



Drawing C

1" SQUARE DRIVE

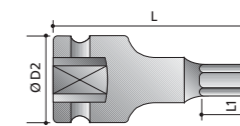


12-POINT DEEP 1						
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO65857016	16	A	32	54	100	11
DO65857017	17	A	34	54	100	11
DO65857018	18	A	35	54	100	13
DO65857019	19	A	36	54	100	13
DO65857020	20	A	37	54	100	13
DO65857021	21	A	38	54	100	15
DO65857022	22	A	39	54	100	15
DO65857023	23	A	40	54	100	15
DO65857024	24	A	41	54	100	18
DO65857025	25	A	43	54	100	18
DO65857026	26	A	44,5	54	100	18
DO65857027	27	A	45	54	100	19
DO65857028	28	A	46,5	54	100	19
DO65857029	29	A	48	54	100	19
DO65857030	30	A	50	54	100	21
DO65857031	31	A	51	54	100	21
DO65857032	32	A	52	54	100	22
DO65857033	33	A	53	54	100	22
DO65857034	34	C	55	54	100	22
DO65857035	35	C	56	54	100	22
DO65857036	36	C	57	54	100	24
DO65857037	37	C	59	54	100	24
DO65857038	38	C	60	54	100	24
DO65857039	39	C	61	54	100	24
DO65857040	40	C	62	54	100	24
DO65857041	41	C	63,5	54	100	27
DO65857042	42	C	65	54	100	27
DO65857043	43	C	66	54	100	27
DO65857044	44	C	67	54	100	27
DO65857045	45	C	68	54	100	27
DO65857046	46	C	70	58	100	30
DO65857047	47	C	71,5	58	100	30
DO65857048	48	C	72,5	58	100	30
DO65857050	50	C	75	62	100	32
DO65857051	51	C	76	62	100	32
DO65857052	52	C	77	62	100	32
DO65857053	53	C	78	62	100	32
DO65857054	54	C	80	62	100	32
DO65857055	55	C	81	62	100	35
DO65857056	56	C	82	62	105	35
DO65857057	57	C	84	62	105	35
DO65857058	58	C	85	62	105	37
DO65857060	60	C	87	62	120	37
DO65857062	62	C	89	62	120	37
DO65857063	63	C	90	62	120	37
DO65857065	65	C	93	62	125	40

12-POINT DEEP (CONTINUED) 1						
Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO65857067	67	C	96	62	125	40
DO65857070	70	C	100	62	125	40
DO65857075	75	C	106	86	135	42
DO65857076	76	C	107	86	135	45
DO65857077	77	C	109	86	135	45
DO65857078	78	C	110	86	135	45
DO65857080	80	C	112	86	135	45
DO65857085	85	C	118	86	140	52
DO65857090	90	C	125	86	140	52
DO65857095	95	C	131	86	140	52
DO65857100	100	C	137	86	140	58
DO65857105	105	C	143	95	155	58
DO65857110	110	C	149	95	155	62
DO65857115	115	C	155	95	155	62

HEX DRIVER 2						
Type	Drawing	D2 mm	L mm	L1 mm	-	
Metric						
DO696610A	10	K	54	100	20	-
DO696612A	12	K	54	100	20	-
DO696614A	14	K	54	100	20	-
DO696617A	17	K	54	100	20	-
DO696619A	19	K	54	100	20	-
DO696622A	22	K	54	100	20	-
DO696622B	22	K	54	140	20	-
DO696624A	24	K	54	100	20	-
DO696627A	27	K	54	100	20	-
DO696630A	30	K	54	100	24	-
DO696632A	32	K	54	100	24	-
DO696636A	36	K	54	100	28	-

PIN & RING		
Type	D2 mm	
DO1100-0-000	54	
DO1100-0-086	86	
DO1100-0-095	95	



Drawing K



1 1/2" SQUARE DRIVE

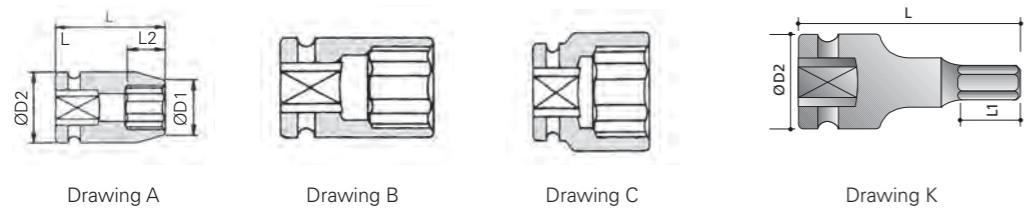


6-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO5112-0-030	30	A	56	86	78	21
DO5112-0-032	32	A	58	86	78	22
DO5112-0-035	35	A	62	86	78	22
DO5112-0-036	36	A	64	86	78	24
DO5112-0-037	37	A	65	86	78	24
DO5112-0-038	38	A	66	86	78	26
DO5112-0-040	40	A	68	86	78	28
DO5112-0-041	41	A	70	86	80	28
DO5112-0-045	45	A	75	86	84	30
DO5112-0-046	46	A	76	86	84	30
DO5112-0-047	47	A	77	86	84	32
DO5112-0-048	48	A	79	86	84	32
DO5112-0-050	50	A	81	87	87	32
DO5112-0-052	52	A	83	86	87	34
DO5112-0-054	54	B	86	86	90	37
DO5112-0-055	55	B	86	86	90	37
DO5112-0-056	56	B	86	86	92	37
DO5112-0-058	58	C	92	86	92	39
DO5112-0-060	60	C	93	86	92	39
DO5112-0-061	61	C	95	86	95	42
DO5112-0-062	62	C	96	86	95	42
DO5112-0-065	65	C	97	86	95	42
DO5112-0-068	68	C	104	86	100	46
DO5112-0-070	70	C	105	86	100	46
DO5112-0-072	72	C	108	86	108	49
DO5112-0-075	75	C	110	86	108	49
DO5112-0-078	78	C	115	86	115	53
DO5112-0-080	80	C	116	86	115	53
DO5112-0-085	85	C	125	86	118	56
DO5112-0-090	90	C	130	86	123	59
DO5112-0-095	95	C	137	95	123	62
DO5112-0-100	100	C	140	95	130	65
DO5112-0-105	105	C	150	95	130	68
DO5112-0-110	110	C	156	95	135	72
DO5112-0-115	115	C	160	95	140	77
DO5112-0-125	125	C	175	127	140	77

6-POINT DEEP 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO5112-1-036	36	A	64	86	115	24
DO5112-1-041	41	A	70	86	115	28
DO5112-1-042	42	A	71	86	115	28
DO5112-1-046	46	A	76	86	115	30
DO5112-1-050	50	A	81	86	135	34
DO5112-1-054	54	B	86	86	140	37
DO5112-1-055	55	B	86	86	140	37
DO5112-1-056	56	B	88	86	140	37
DO5112-1-060	60	C	94	86	150	39
DO5112-1-063	63	C	97	86	150	42
DO5112-1-065	65	C	100	86	150	42
DO5112-1-070	70	C	106	86	160	46
DO5112-1-075	75	C	112	86	170	49
DO5112-1-080	80	C	119	86	170	53
DO5112-1-085	85	C	125	86	170	56
DO5112-1-090	90	C	131	86	170	59
DO5112-1-095	95	C	137	95	180	61
DO5112-1-100	100	C	144	95	190	65
DO5112-1-105	105	C	154	95	190	68
DO5112-1-110	110	C	157	95	200	72
DO5112-1-115	115	C	164	95	210	77
DO5112-1-120	120	C	167	95	210	77
DO5112-1-125	125	C	174	127	210	77



1 1/2" & 2 1/2" SQUARE DRIVE



Red Rooster · Yokota · Toku · Action

1 1/2" DRIVE HEX DRIVER 1

Type	Drawing	D2mm	L mm	L1 mm	-	
Metric						
DO64866019	19	K	86	105	20	-
DO64866022	22	K	86	105	20	-
DO64866024	24	K	86	105	20	-
DO64866027	27	K	86	105	20	-
DO64866030	30	K	86	105	20	-
DO64866032	32	K	86	105	20	-
DO64866033	33	K	86	105	20	-
DO64866041	41	K	86	105	20	-
DO64866046	46	K	86	105	20	-
DO64866050	50	K	86	105	20	-
DO64866055	55	K	86	105	20	-
DO64865019	19	K	86	120	20	-
DO64865022	22	K	86	120	20	-
DO64865024	24	K	86	120	20	-
DO64865027	27	K	86	120	20	-
DO64865030	30	K	86	120	24	-
DO64865032	32	K	86	120	24	-
DO64865033	33	K	86	120	24	-
DO64865036	36	K	86	120	28	-
DO64865038	38	K	86	120	28	-
DO64865041	41	K	86	120	34	-
DO64865046	46	K	86	120	38	-
DO64865050	50	K	86	120	38	-
DO64865055	55	K	86	120	43	-

PIN & RING

Type	D2 mm
DO1112-0-000	86
DO1112-0-095	95
DO1112-0-127	127



2 1/2" DRIVE 6-POINT NORMAL 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6212-0-060	60	A	99	127	125	37
DO6212-0-065	65	A	105	127	130	40
DO6212-0-070	70	A	110	127	130	40
DO6212-0-075	75	A	118	127	140	42
DO6212-0-077	77	A	122	127	140	45
DO6212-0-080	80	A	124	127	140	45
DO6212-0-085	85	C	130	127	140	52
DO6212-0-090	90	C	136	127	145	52
DO6212-0-095	95	C	143	127	145	52
DO6212-0-100	100	C	149	127	150	58
DO6212-0-105	105	C	155	127	155	58
DO6212-0-110	110	C	161	127	160	60
DO6212-0-115	115	C	167	127	165	62
DO6212-0-120	120	C	176	127	170	67
DO6212-0-125	125	C	184	127	175	72
DO6212-0-130	130	C	188	152	175	72
DO6212-0-135	135	C	195	152	180	77
DO6212-0-140	140	C	204	152	180	77
DO6212-0-145	145	C	207	152	185	83
DO6212-0-150	150	C	214	152	185	83
DO6212-0-155	155	C	224	152	190	90
DO6212-0-160	160	C	227	152	190	90
DO6212-0-165	165	C	234	152	195	95
DO6212-0-170	170	C	244	152	195	95
DO6212-0-175	175	C	247	152	200	100
DO6212-0-180	180	C	254	152	200	100
DO6212-0-185	185	C	257	152	210	105
DO6212-0-190	190	C	265	152	210	105
DO6212-0-200	200	C	275	152	220	110

PIN & RING

Type
DO2112-0-000



ADAPTORS

EXTENSION BARS WITH PIN HOLE 1

Type	Drawing	D mm	L mm
Metric			
DO7014-0-050	1/4" B	13	50
DO7014-0-100	1/4" B	13	100
DO7014-0-150	1/4" B	13	150
DO7038-0-075	3/8" B	19	75
DO7038-0-100	3/8" B	19	100
DO7038-0-125	3/8" B	19	125
DO7038-0-150	3/8" B	19	150
DO7038-0-200	3/8" B	19	200
DO7038-0-250	3/8" B	19	250
DO7012-0-075	1/2" B	25	75
DO7012-0-100	1/2" B	25	100
DO7012-0-125	1/2" B	25	125
DO7012-0-150	1/2" B	25	150
DO7012-0-175	1/2" B	25	175
DO7012-0-200	1/2" B	25	200
DO7012-0-250	1/2" B	25	250
DO7012-0-300	1/2" B	25	300
DO7012-0-460	1/2" B	25	460
DO7012-0-610	1/2" B	25	610
DO7012-0-915	1/2" B	25	915
DO7034-0-075	3/4" B	44	75
DO7034-0-100	3/4" B	44	100
DO7034-0-125	3/4" B	44	125
DO7034-0-150	3/4" B	44	150
DO7034-0-175	3/4" B	44	175
DO7034-0-200	3/4" B	44	200
DO7034-0-250	3/4" B	44	250
DO7034-0-330	3/4" B	44	330
DO7034-0-400	3/4" B	44	400
DO7100-0-075	1" B	54	75
DO7100-0-100	1" B	54	100
DO7100-0-125	1" B	54	125
DO7100-0-150	1" B	54	150
DO7100-0-175	1" B	54	175
DO7100-0-200	1" B	54	200
DO7100-0-250	1" B	54	250
DO7100-0-300	1" B	54	300
DO7100-0-330	1" B	54	330
DO7100-0-350	1" B	54	350
DO7100-0-400	1" B	54	400
DO7112-0-125	1 1/2" B	86	125
DO7112-0-250	1 1/2" B	86	250
DO7112-0-500	1 1/2" B	86	500
DO7212-0-250	2 1/2" B	127	250
DO7212-0-500	2 1/2" B	127	500

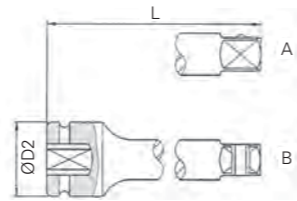
Rings and pins are not standard. Please order separately.

EXTENSION BARS WITH STEEL BALL RETAINER 2

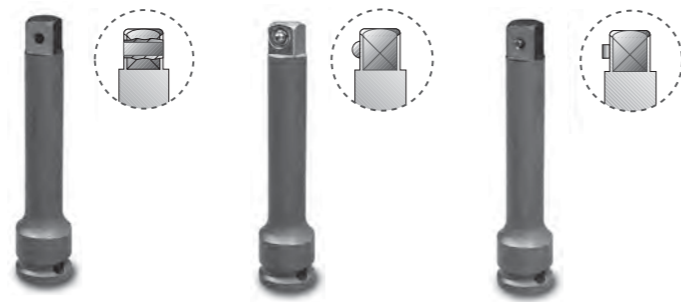
Type	Drawing	D2 mm	L mm
Metric			
DO6862075	3/8" A	19	75
DO6862100	3/8" A	19	100
DO6862125	3/8" A	19	125
DO6862150	3/8" A	19	150
DO6862250	3/8" A	19	250
DO6863075	1/2" A	25	75
DO6863100	1/2" A	25	100
DO6863125	1/2" A	25	125
DO6863250	1/2" A	25	250

EXTENSION BAR WITH LOCK PIN RETAINER 3

Type	Drawing	D2 mm	L mm
Metric			
DO64514075	3/8" A	19	75
DO64514100	3/8" A	19	100
DO64514125	3/8" A	19	125
DO64514150	3/8" A	19	150
DO64514200	3/8" A	19	200
DO64514250	3/8" A	19	250
DO64524075	1/2" A	25	75
DO64524100	1/2" A	25	100
DO64524125	1/2" A	25	125
DO64524150	1/2" A	25	150
DO64524200	1/2" A	25	200
DO64524250	1/2" A	25	250
DO64524460	1/2" A	25	460



Drawing A & B

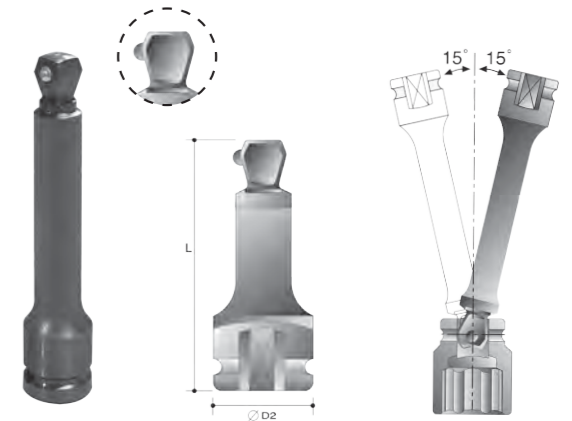


1 Pin hole
2 Steel ball retainer
3 Lock pin retainer

ADAPTORS

WOBBLE EXTENSION BARS

Type	Drawing	D2 mm	L mm	Type
Metric				
DO6450F050	1/4"	13	50	Steel ball retainer
DO6450F075	1/4"	13	75	Steel ball retainer
DO6450F100	1/4"	13	100	Steel ball retainer
DO6451F050	3/8"	19	50	Steel ball retainer
DO6451F075	3/8"	19	75	Steel ball retainer
DO6451F100	3/8"	19	100	Steel ball retainer
DO6451F200	3/8"	19	200	Steel ball retainer
DO6452F075	1/2"	25	75	Steel ball retainer
DO6452F125	1/2"	25	125	Steel ball retainer
DO6452F150	1/2"	25	150	Steel ball retainer
DO6452F200	1/2"	25	200	Steel ball retainer



JOINTS

UNIVERSAL JOINTS WITH STEEL BALL

Type	Drawing	D2 mm	L mm
Metric			
DO6781F1T	1/4" A	16	43
DO6782F2T	3/8" A	24	50
DO6783F3T	1/2" A	32	60
DO6784F4T	3/4" A	44	90

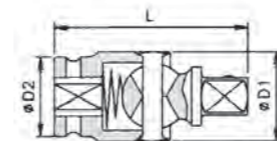


UNIVERSAL JOINTS WITH PIN HOLE

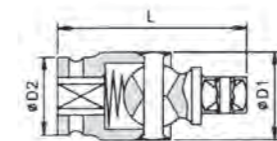
Type	Drawing	D2 mm	L mm
Metric			
DO9014-0-000	1/4" B	16	43
DO9038-0-000	3/8" B	24	50
DO9012-0-000	1/2" B	32	60
DO9034-0-000	3/4" B	44	105
DO9100-0-000	1" B	54	110
DO9112-0-000	1 1/2" B	86	182



Rings and pins are not standard. Please order separately.



Drawing A



Drawing B

ADAPTORS

ADAPTORS EXTERNAL SQUARE - EXTERNAL HEX

Type	Drawing	L mm	D mm
Metric			
DO69306050	1/4" C	50	9
DO69306075	1/4" C	75	9
DO69306100	1/4" C	100	9
DO69306150	1/4" C	150	9
DO69316050	3/8" C	50	13
DO69316075	3/8" C	75	13
DO69316100	3/8" C	100	13
DO69318075	3/8" D	75	13
DO6932E050	1/2" C	50	17
DO69328075	1/2" D	75	17



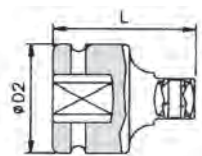
Drawing C



Drawing D



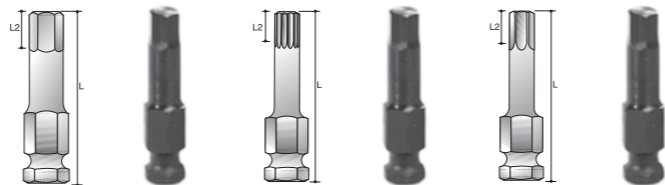
ADAPTORS



Drawing A



1 2



Hex drivers Triple Square Torx intern

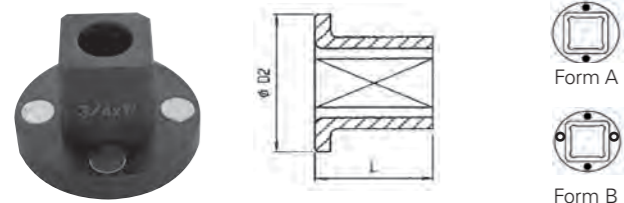
ADAPTORS WITH PIN HOLE

Type	Drawing		D2 mm	L mm
Metric				
DO8014-0-038	1/4"	3/8"	A	13
DO8038-0-014	3/8"	1/4"	A	22
DO8038-0-012	3/8"	1/2"	A	22
DO8012-0-034	1/2"	3/4"	A	30
DO8012-0-038	1/2"	3/8"	A	26
DO8034-0-012	3/4"	1/2"	A	40
DO8034-0-100	3/4"	1"	A	40
DO8100-0-034	1"	3/4"	A	52
DO8100-0-112	1"	1 1/2"	A	52
DO8112-0-100	1 1/2"	1"	A	84
DO8112-0-212	1 1/2"	2 1/2"	A	86
DO8134-0-112	1 3/4"	1 1/2"	A	127
DO8212-0-112	2 1/2"	1 1/2"	A	127

ADAPTORS WITH STEEL BALL

Type	Drawing		D2 mm	L mm
Metric				
DO64001012	1/4"	3/8"	A	13,6
DO64011008	3/8"	1/4"	A	22
DO6822F3T	3/8"	1/2"	A	22
DO6823F2T	1/2"	3/8"	A	25
DO64021024	1/2"	3/4"	A	30
DO6815L3T	3/4"	1/2"	A	44
DO64051024	1"	3/4"	A	54

The magnetic sleeve adaptors allow the temporary use of bigger impact sockets on smaller tools. By means of magnet, chances of loosing the adaptor are reduced. Especially well suited for the service kit of a traveling mechanic tasked with the servicing of heavy equipment.



Form A

Form B

HEX DRIVERS - 7/16"

Type	Drawing		L2 mm	L mm
Metric				
DO697RG606	7/16"	A	6	60
DO697RG608	7/16"	A	8	60
DO697RG610	7/16"	A	10	60
DO697RG612	7/16"	A	12	60
DO697RG614	7/16"	A	14	60
DO697RG617	7/16"	A	17	60

TRIPLE SQUARE BITS - 7/16"

Type	Drawing		L2 mm	L mm
Metric				
DO698JG110	7/16"	A	M10	9



INTERNAL TORX BITS - 7/16" DRIVE

Type	Drawing		L2 mm	L mm
Metric				
DO697LG130	7/16"	A	T30	3,8
DO697LG140	7/16"	A	T40	3,8
DO697LG145	7/16"	A	T45	4,3
DO697LG150	7/16"	A	T50	5
DO697LG155	7/16"	A	T55	5,5
DO697LG160	7/16"	A	T60	8

*Also available as set DO691121301, see page 204.

MAGNETIC REDUCING ADAPTORS

Type	Form		D2 mm	L mm
Metric				
DO69880P12	1/4"	3/8"	A	19
DO69880P16	1/4"	1/2"	A	25
DO69881P16	3/8"	1/2"	A	25
DO69882P20	1/2"	5/8"	A	35
DO69882P24	1/2"	3/4"	A	44
DO69884P32	3/4"	1"	B	54
DO69885P48	1"	1-1/2"	B	86
DO69886P80	1-1/2"	2-1/2"	B	127
DO69888P01	2-1/2"	3-1/2"	B	176

ADAPTORS



1 2 3 4



QUICK CHANGE ADAPTORS

Type	Drawing		D2 mm	L mm
Metric				
DO69110C08	A	1/4"	1/4"	13
DO69110C12	A	1/4"	3/8"	13
DO69111C12	A	3/8"	3/8"	19
DO69111C16	A	3/8"	1/2"	22
DO69112C12	A	1/2"	3/8"	25
DO69112C16	A	1/2"	1/2"	25
DO69114C16	A	3/4"	1/2"	44
DO69114C24	A	3/4"	3/4"	44
DO69115C24	A	1"	3/4"	54
DO69115C32	A	1"	1"	54
DO69115C64	A	1"	3/4"	54

QUICK CHANGE BIT HOLDER

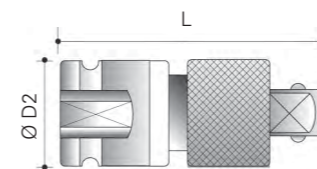
Type	Drawing		D2 mm	L mm	Bit holder
Metric					
DO69111A14	B	3/8"	7/16"	22	51
DO69112A14	B	1/2"	7/16"	25	54



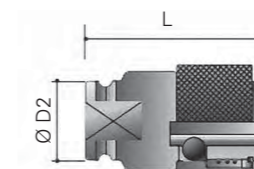
BIT HOLDER E



BIT HOLDER C



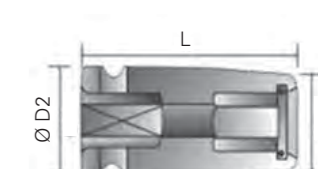
Drawing A



Drawing B



Drawing C



Drawing D

QUICK CHANGE BIT HOLDER

Type	Drawing		D2 mm	L mm	Bit holder
Metric					
DO69121B08	C	3/8"	1/4"	19	33
DO69122B08	C	1/2"	1/4"	25	41

BIT HOLDER

Type	Drawing		D1 mm	D2 mm	L mm	Bit holder
Metric						
DO69121008	D	3/8"	1/4"	12,5	19	32
DO69121010	D	3/8"	5/16"	14	19	37
DO69121016	D	3/8"	1/2"	19	19	37
DO69122008	D	1/2"	1/4"	12,5	25	40
DO69122010	D	1/2"	5/16"	15,5	25	40
DO69122016	D	1/2"	1/2"	20	25	40

PIN & RING

Pin & ring



Retring



PIN & RING

Drive	Type	Diameter socket (D2) see OPM
1/4"	DO1014-0-000	13 mm
3/8"	DO1038-0-000	19 & 22 mm (set)
1/2"	DO1012-0-000	25 & 30 mm (set)
3/4"	DO1034-0-000	44 mm
	DO1100-0-000	54 mm
1"	DO1100-0-000	54 mm
	DO1100-0-086	86 mm
	DO1100-0-095	95 mm
1 1/2"	DO1112-0-000	86 mm
	DO1112-0-095	95 mm
	DO1112-0-127	127 mm
2 1/2"	DO2112-0-000	152 mm
	DO2112-0-127	127 mm

OPM.: These sizes are not those of the O-ring but are based on the D2 dimensions of the socket.

RETRING

Type	D2 mm	
DO10032S	36,5	3/4"
DO18708S	44,5	3/4"
DO18715S	53,9	3/4" & 1"
DO10008S	44,5	1"
DO10021S	76,2	1 1/2"
DO10025S	85,7	1 1/2"



STEP 1
Place socket retainer over square driver. Place socket on square driver aligning retention holes. Hold center pin of retainer between thumb and index finger, and insert it into the retention holes.



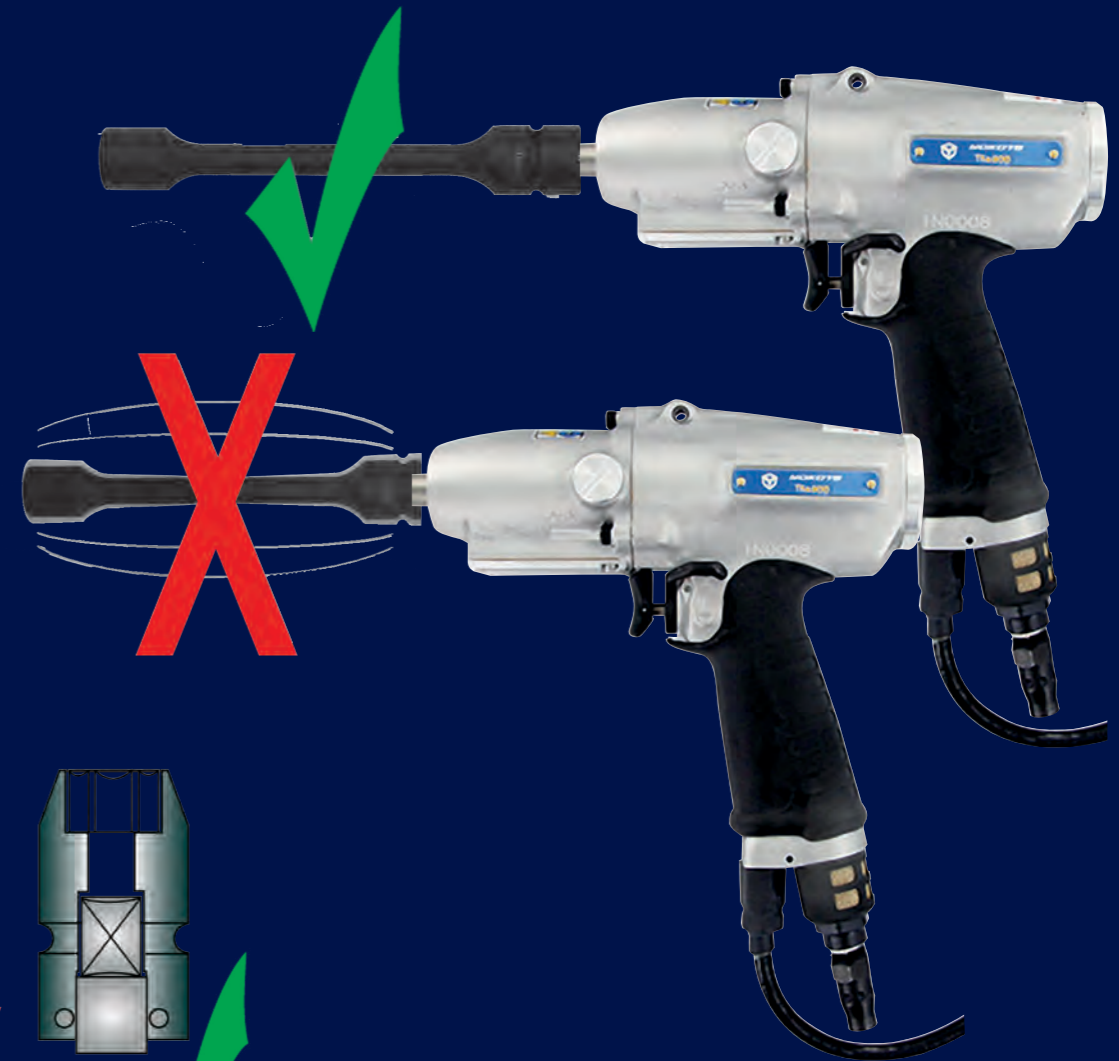
STEP 2
Push center pin of socket retainer all the way in.



STEP 3
Pull O-ring of socket retainer up into groove socket.

SLEEVE DRIVE IMPACT SOCKETS

Sleeve drive impact sockets have been developed for us by ACTION. Sleeve drive sockets improve the quality of a joint tightened with an impulse wrench. They minimize the play between the socket and the tool thus reducing „wobble“ and stabilizing the torque setting. The use of sleeve drive sockets is not only of benefit to the actual joint but it also reduces vibration to the tool and operator, reduces noise and prevents fast wearing of the tool.



LOW VIBRATION

- Sleeve drive impact sockets guarantee:
- Reduced vibration
 - Accurate torque
 - Noise reduction
 - Less wear

SLEEVE DRIVE

3/8" Square Drive

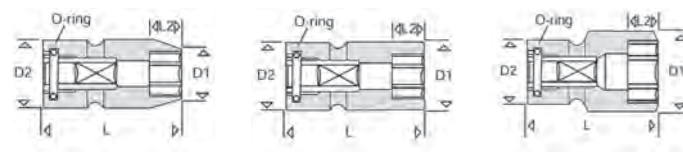


6-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60910006	6	A	11	19	43	5
DO60910008	8	A	13	19	43	7
DO60910009	9	A	15	19	43	7
DO60910010	10	A	16	19	43	8
DO60910011	11	A	17,5	19	43	9
DO60910012	12	B	19	19	43	9
DO60910013	13	A	20	22	43	9
DO60910014	14	A	21	22	43	9
DO60910015	15	B	22	22	43	11
DO60910016	16	C	24	22	43	11
DO60910017	17	C	25	22	43	11
DO60910018	18	C	26	22	43	11
DO60910019	19	C	27,5	22	43	11
DO60910021	21	C	30	22	43	13

6-POINT MAGNETIC 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6091A006	6	A	11	19	43	5
DO6091A007	7	A	12	19	43	5
DO6091A008	8	A	13	19	43	7
DO6091A009	9	A	15	19	43	7
DO6091A010	10	A	16	19	43	8
DO6091A011	11	A	17,5	19	43	9
DO6091A012	12	B	18,5	19	43	9
DO6091A013	13	A	20	22	43	9
DO6091A014	14	A	21	22	43	9
DO6091A016	16	C	24	22	43	11
DO6091A017	17	C	25	22	43	11
DO6091A018	18	C	26	22	43	11
DO6091A019	19	C	27	22	43	11
DO6091A020	20	C	28	22	43	13
DO6091A021	21	C	30	22	43	13
DO6091A022	22	C	31	22	50	13
DO6091A023	23	C	32	22	50	13
DO6091A024	24	C	34	22	50	13
DO6091A025	25	C	35	22	50	13
DO6091A026	26	C	36	22	50	13
DO6091A027	27	C	38	22	50	13



Drawing A

Drawing B

Drawing C

6-POINT LONG 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60913006	6	D	10,5	22	100	4
DO60913008	8	D	12,5	22	100	8
DO60913010	10	D	15	22	100	8
DO60913012	12	D	18	22	100	9
DO60913013	13	D	19	22	100	9
DO60913014	14	D	20	22	100	9
DO60913015	15	D	21	22	100	11
DO60913016	16	D	22,5	22	100	11
DO60913017	17	D	24	22	100	11
DO60914006	6	D	10,5	22	150	4
DO60914008	8	D	12,5	22	150	8
DO60914010	10	D	15	22	150	8
DO60914012	12	D	18	22	150	9
DO60914013	13	D	19	22	150	9
DO60914014	14	D	20	22	150	9
DO60914015	15	D	21	22	150	11
DO60914016	16	D	22,5	22	150	11
DO60914017	17	D	24	22	150	11
DO60915006	6	D	10,5	22	200	4
DO60915008	8	D	12,5	22	200	8
DO60915010	10	D	15	22	200	8
DO60915012	12	D	18	22	200	9
DO60915013	13	D	19	22	200	9
DO60915014	14	D	20	22	200	9
DO60915015	15	D	21	22	200	11
DO60915016	16	D	22,5	22	200	11
DO60915017	17	D	24	22	200	11
DO60915019	19	D	27	22	200	11

6-POINT MAGNETIC LONG 3

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6091P006	6	D	11	19	100	3
DO6091P007	7	D	12	19	100	3
DO6091P008	8	D	13	19	100	4
DO6091P009	9	D	15	19	100	4
DO6091P010	10	D	16	19	100	4
DO6091P011	11	D	17,5	19	100	5
DO6091P012	12	D	18,5	19	100	5
DO6091P013	13	D	20	22	100	6
DO6091P014	14	D	21	22	100	6
DO6091P015	15	D	22	22	100	7
DO6091P016	16	D	24	22	100	7
DO6091P017	17	D	25	22	100	7
DO6091R008	8	D	13	19	150	4
DO6091R010	10	D	16	19	150	4
DO6091R011	11	D	17,5	19	150	5

SLEEVE DRIVE

3/8" Square Drive



6-POINT LONG MAGNETIC (CONTINUED) 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6091R012	12	D	18,5	19	150	5
DO6091R013	13	D	20	22	150	6
DO6091R014	14	D	21	22	150	6
DO6091R015	15	D	22	22	150	7
DO6091R016	16	D	24	22	150	7
DO6091R017	17	D	25	22	150	7
DO6091T008	8	D	13	19	200	4
DO6091T009	9	D	15	19	200	4
DO6091T010	10	D	16	19	200	4
DO6091T012	12	D	18,5	19	200	5
DO6091T013	13	D	20	22	200	6
DO6091T014	14	D	21	22	200	6
DO6091T015	15	D	22	22	200	7

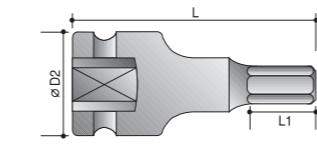
6-POINT DEEP MAGNETIC 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6091Q010	10	F	16	19	100	5
DO6091Q012	12	F	18,5	19	100	6
DO6091Q013	13	F	20	22	100	6
DO6091Q014	14	F	21	22	100	6
DO6091Q016	16	F	24	22	100	7

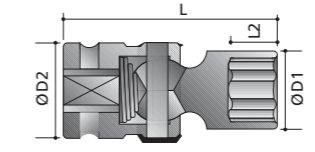
TORX® INTERNAL 3

Type	Drawing	L1 mm	D2 mm	L mm	-	
DO68811009	T9	E	2	22	75	-
DO68811010	T10	E	2,8	22	75	-
DO68811015	T15	E	2,8	22	75	-
DO68811020	T20	E	2,8	22	75	-
DO68811025	T25	E	3	22	75	-
DO68811027	T27	E	3	22	75	-
DO68811030	T30	E	3,8	22	75	-
DO68811040	T40	E	3,8	22	75	-
DO68811045	T45	E	4,3	22	75	-
DO68811047	T47	E	5	22	75	-
DO68811050	T50	E	5	22	75	-
DO68811055	T55	E	5	22	75	-

Torx® is a trademark of Textron.



Drawing D



Drawing E

TORX® EXTERNAL 4

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO66910005	E5	A	8	19	43	4,5
DO66910006	E6	A	9	19	43	5,0
DO66910007	E7	A	9,5	19	43	6,0
DO66910008	E8	A	11	19	43	6,5
DO66910010	E10	A	13	19	43	7,5
DO66910011	E11	A	14	19	43	8,0
DO66910012	E12	A	15,5	19	43	8,5
DO66910014	E14	A	17,5	22	43	10,0
DO66910016	E16	A	18,5	22	43	11,0

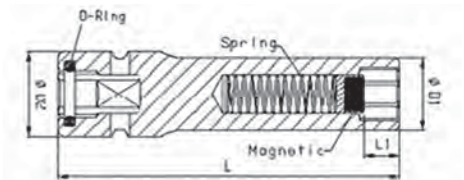
Torx® is a trademark of Textron.

HEX DRIVER 5

Type	Drawing	L1 mm	D2 mm	L mm	-	
Metric						
DO68916003	3	E	11	22	75	-
DO68916004	4	E	11	22	75	-
DO68916005	5	E	11	22	75	-
DO68916006	6	E	11	22	75	-
DO68916007	7	E	16	22	75	-
DO68916008	8	E	16	22	75	-
DO68916009	9	E	16	22	75	-
DO68916010	10	E	16	22	75	-
DO68916011	11	E	16	22	75	-
DO68916012	12	E	16	22	75	-
DO68916013	13	E	16	22	75	-
DO68916014	14	E	16	22	75	-
DO68916015	15	E	16	22	75	-
DO68916016	16	E	16	22	75	-

STUD BOLT SETTERS

Type	Size	D1 mm	D2 mm	L mm
DO66A10062	M6 x 1	12,5	22	50
DO66A10083	M8 x 1,25	15	22	50
DO66A10104	M10 x 1,5	17	22	50



Drawing F

SLEEVE DRIVE

1/2" Square Drive



6-POINT NORMAL 1

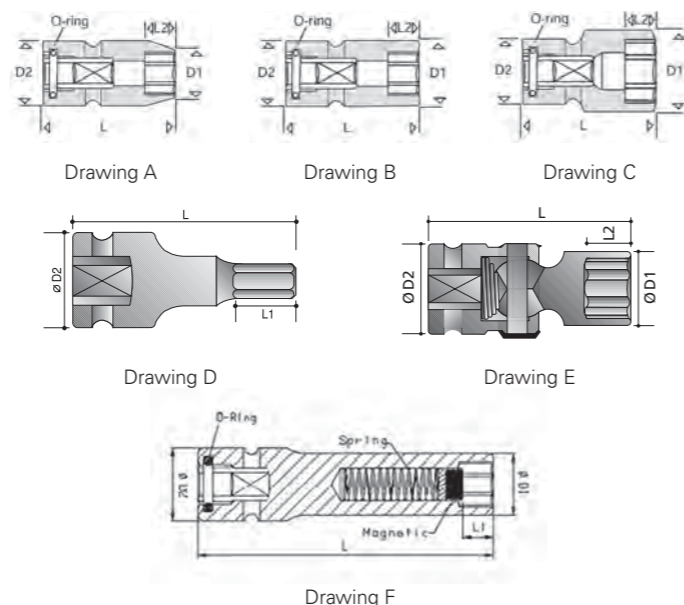
Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO60920012	12	A	20	25	52	12
DO60920013	13	A	21	25	52	12
DO60920014	14	A	22,5	25	52	12
DO60920015	15	A	23,7	30	52	12
DO60920016	16	A	25	30	52	12
DO60920017	17	A	26	30	52	12
DO60920018	18	A	27,5	30	52	12
DO60920019	19	A	28,7	30	52	12
DO60920021	21	B	30	30	52	12
DO60920022	22	C	32	30	52	12
DO60920023	23	C	32	30	52	12
DO60920024	24	C	35	30	52	12
DO60920025	25	C	36	30	57	12
DO60920027	27	C	39	30	57	12
DO60920030	30	C	42	30	62	12
DO60920032	32	C	44	30	62	12

6-POINT LONG 2

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO60923010	10	D	17	25	100	12
DO60923012	12	D	19,5	25	100	12
DO60923013	13	D	20,5	25	100	12
DO60923014	14	D	21,5	25	100	12
DO60923015	15	D	22,5	25	100	12
DO60923017	17	D	25	25	100	13
DO60923019	19	D	28	25	100	13
DO60924010	10	D	17	25	150	12
DO60924012	12	D	19,5	25	150	12
DO60924013	13	D	20,5	25	150	12
DO60924014	14	D	21,5	25	150	12
DO60924015	15	D	22,5	25	150	12
DO60924017	17	D	25	25	150	13
DO60924019	19	D	28	25	150	13
DO60925010	10	D	17	25	200	12
DO60925012	12	D	19,5	25	200	12
DO60925013	13	D	20,5	25	200	12
DO60925014	14	D	21,5	25	200	12
DO60925015	15	D	22,5	25	200	12
DO60925017	17	D	25	25	200	13
DO60925019	19	D	28	25	200	13

6-POINT LONG MAGNETIC 3

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO6092P010	10	D	17,5	25	100	4
DO6092P011	11	D	18,5	25	100	5
DO6092P012	12	D	20	25	100	5
DO6092P013	13	D	21	25	100	6
DO6092P014	14	D	22,5	25	100	6
DO6092P015	15	D	23,5	30	100	7
DO6092P016	16	D	25	30	100	7
DO6092P017	17	D	26	30	100	7
DO6092P018	18	D	27,5	30	100	8
DO6092P019	19	D	28,5	30	100	8
DO6092R010	10	D	17,5	25	150	12
DO6092R011	11	D	18,5	25	150	12
DO6092R012	12	D	20	25	150	12
DO6092R013	13	D	21	25	150	12
DO6092R014	14	D	22,5	25	150	12
DO6092R015	15	D	23,5	30	150	12
DO6092R016	16	D	25	30	150	13
DO6092R017	17	D	26	30	150	13
DO6092R018	18	D	27,5	30	150	13
DO6092R019	19	D	28,5	30	150	13
DO6092T010	10	D	17,5	25	200	12
DO6092T011	11	D	18,5	25	200	12
DO6092T012	12	D	20	25	200	12
DO6092T013	13	D	21	25	200	12
DO6092T014	14	D	22,5	25	200	12
DO6092T015	15	D	23,5	30	200	12
DO6092T016	16	D	25	30	200	13
DO6092T017	17	D	26	30	200	13
DO6092T018	18	D	27,5	30	200	13
DO6092T019	19	D	28,5	30	200	13



SLEEVE DRIVE

1/2" Square Drive



6-POINT NORMAL MAGNETIC 1

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
Metric						
DO6092A006	6	A	13	25	52	5
DO6092A007	7	A	14	25	52	5
DO6092A008	8	A	15	25	52	7
DO6092A009	9	A	16	25	52	7
DO6092A010	10	A	17,5	25	52	8
DO6092A011	11	A	18,5	25	52	9
DO6092A012	12	A	20	25	52	12
DO6092A013	13	A	21	25	52	12
DO6092A014	14	A	22,5	25	52	12
DO6092A015	15	A	23,5	30	52	12
DO6092A016	16	A	25	30	52	12
DO6092A017	17	A	26	30	52	12
DO6092A018	18	A	27,5	30	52	12
DO6092A019	19	A	28,5	30	52	12
DO6092A020	20	B	30	30	52	12
DO6092A021	21	C	31	30	52	12
DO6092A022	22	C	32	30	52	12
DO6092A023	23	C	34	30	52	12
DO6092A024	24	C	35	30	52	12
DO6092A025	25	C	36	30	57	12
DO6092A026	26	C	38	30	57	12
DO6092A027	27	C	38,5	30	57	12

6-POINT DEEP MAGNETIC 2

Type	mm	Drawing	D1 mm	D2 mm	L mm	L1 mm
Metric						
DO6092Q010	10	F	17,5	25	100	5
DO6092Q013	13	F	21	25	100	6
DO6092Q016	16	F	25	30	100	7
DO6092Q017	17	F	26	30	100	7
DO6092Q019	19	F	28,5	30	100	8

TORX® EXTERNAL 3

Type	mm	Drawing	D1 mm	D2 mm	L mm	L2 mm
DO66920010	E10	A	14	25	52	7,5
DO66920011	E11	A	15	25	52	8
DO66920012	E12	A	16	25	52	8,5
DO66920014	E14	A	18	25	52	10
DO66920016	E16	A	20	25	52	11
DO66920018	E18	A	22	25	52	12,5
DO66920020	E20	A	25	30	52	14
DO66920022	E22	A	27	30	52	15
DO66920024	E24	A	29	30	52	16,5

Torx® is a trademark of Textron.

TORX® INTERNAL 4

Type	mm	Drawing	L1 mm	D2 mm	L mm	-
DO68821020	T20	E	2,8	25	75	-
DO68821025	T25	E	3	25	75	-
DO68821027	T27	E	3	25	75	-
DO68821030	T30	E	3,8	25	75	-
DO68821040	T40	E	3,8	25	75	-
DO68821045	T45	E	4,3	25	75	-
DO68821047	T47	E	5	25	75	-
DO68821050	T50	E	5	25	75	-
DO68821055	T55	E	5,5	25	75	-
DO68821060	T60	E	8	25	75	-
DO68821070	T70	F	9,4	25	75	-
DO68821080	T80	E	10,5	25	75	-
DO68821090	T90	E	11,8	25	75	-
DO68821100	T100	E	13,1	25	75	-

Torx® is a trademark of Textron.

HEX DRIVER 5

Type	mm	Drawing	L1 mm	D2 mm	L mm	-
Metric						
DO68925003	3	E	11	25	75	-
DO68925004	4	E	11	25	75	-
DO68925005	5	E	15	25	75	-
DO68925006	6	E	15	25	75	-
DO68925007	7	E	20	25	75	-
DO68925008	8	E	25	25	75	-
DO68925009	9	E	25	25	75	-
DO68925010	10	F	25	25	75	-
DO68925011	11	E	25	25	75	-
DO68925012	12	E	25	25	75	-
DO68925013	13	E	25	25	75	-
DO68925014	14	E	25	25	75	-
DO68925015	15	E	25	25	75	-
DO68925016	16	E	25	25	75	-
DO68925017	17	E	25	25	75	-
DO68925018	18	E	25	25	75	-
DO68925019	19	E	25	25	75	-

STUD BOLT SETTERS

Type	Size	D1 mm	D2 mm	L mm
DO66A21062	M6 x 1	13	25	75
DO66A21104	M10 x 1,5	17	25	75
DO66A21125	M12 x 1,75	19	25	75
DO66A21146	M14 x 2	22	25	75
DO66A21166	M16 x 2	27	30	75

SLEEVE DRIVE

3/4" Square Drive

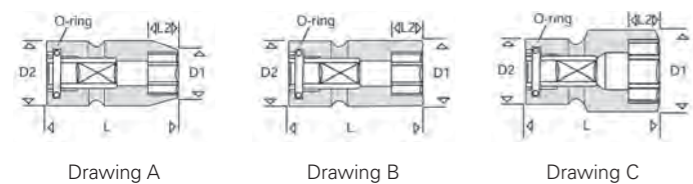


6-POINT NORMAL 1

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO60940017	17	A	31	44	65	12
DO60940018	18	A	32	44	65	12
DO60940019	19	A	33	44	65	14
DO60940021	21	A	35	44	65	16
DO60940022	22	A	37	44	65	16
DO60940023	23	A	38	44	65	16
DO60940024	24	A	39	44	65	16
DO60940026	26	A	41	44	65	16
DO60940027	27	A	43	44	65	16
DO60940028	28	B	44	44	68	20
DO60940029	29	C	45	44	68	20
DO60940030	30	C	47	44	68	20
DO60940032	32	C	49	44	70	20
DO60940033	33	C	51	44	70	20
DO60940034	34	C	52	44	70	20
DO60940035	35	C	53	44	70	20
DO60940036	36	C	54	44	70	20
DO60940038	38	C	57	44	72	22
DO60940041	41	C	60	44	72	22
DO60940046	46	C	67	54	77	23
DO60940050	50	C	71	54	77	23

6-POINT MAGNETIC 2

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
Metric						
DO6094A013	13	A	24,5	44	65	12
DO6094A014	14	A	25,5	44	65	12
DO6094A015	15	A	27	44	65	12
DO6094A016	16	A	28	44	65	12
DO6094A017	17	A	30	44	65	12
DO6094A018	18	A	31	44	65	12
DO6094A019	19	A	32	44	65	14
DO6094A020	20	A	34	44	68	14
DO6094A021	21	A	35	44	68	16
DO6094A022	22	A	37	44	68	16
DO6094A023	23	A	38	44	68	16
DO6094A024	24	A	39	44	68	16
DO6094A025	25	A	41	44	69	16
DO6094A026	26	A	42	44	69	16
DO6094A027	27	A	43	44	69	16



HEX DRIVER 3

Type	Drawing	D2 mm	L mm	L2 mm		
Metric						
DO68945010	10	E	44	100	20	-
DO68945012	12	E	44	100	20	-
DO68945014	14	E	44	100	20	-
DO68945016	16	E	44	100	20	-
DO68945017	17	E	44	100	20	-
DO68945019	19	E	44	100	20	-
DO68945022	22	E	44	100	20	-
DO68945024	24	E	44	100	20	-
DO68945027	27	E	44	100	20	-
DO68945030	30	E	44	100	20	-
DO68945032	32	E	44	100	20	-
DO68945033	33	E	44	100	20	-
DO68945036	36	E	44	100	20	-
DO68945038	38	E	44	100	20	-

For drawings see page 194.

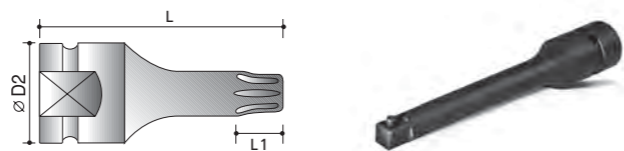
TORX® EXTERNAL 4

Type	Drawing	D1 mm	D2 mm	L mm	L2 mm	
DO66940018	E18	A	26	44	65	12,5
DO66940020	E20	A	28	44	65	14
DO66940022	E22	A	31	44	65	15
DO66940024	E24	A	33	44	65	16,5

Torx® is a trademark of Textron

EXTENSIONS

Type	Drawing	L mm	D1 mm
DO64614075	3/8"	75	22
DO64614125	3/8"	125	22
DO64614250	3/8"	250	22
DO64624075	1/2"	75	25
DO64624125	1/2"	125	25
DO64624175	1/2"	175	25
DO64624250	1/2"	250	25
DO64644175	3/4"	175	44
DO64644250	3/4"	250	44
DO64644330	3/4"	330	44



SLEEVE DRIVE



QUICKCHANGE ADAPTORS 1

Type	D2 mm	L mm			
Metric					
DO69151112	3/8"	3/8"	19	75	-
DO69151212	3/8"	3/8"	19	100	-
DO69151116	3/8"	1/2"	20	80	-
DO69152112	1/2"	3/8"	25	75	-
DO69152216	1/2"	1/2"	25	100	-
DO69154116	3/4"	1/2"	44	90	-
DO69154324	3/4"	3/4"	44	125	-

BIT HOLDERS 2

Type	D2 mm	L mm			
Metric					
DO69111E08	3/8"	1/4"	52	22	-
DO69111E14*	3/8"	7/16"	62	22	-
DO69112E08	1/2"	1/4"	60	25	-
DO69112E14*	1/2"	7/16"	70	25	-
DO69114E14*	3/4"	7/16"	80	44	-

* See page 186.

SETS

DO605121301

3/8"



13 IMPACT SOCKETS, 6-POINT, DEEP

7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 1 - 8 - 19 mm

DO611101301

3/8"



13 IMPACT SOCKETS, 6-POINT, THIN WALL

7-8-9-10-11-12-13-14-15-16-17-18-19 mm

DO0012-0-000S

1/2"



10 IMPACT SOCKETS, 6-POINT, NORMAL

9-10-11-13-14-17-19-22-24-27 mm

DO69521093

1/2"



9 IMPACT SOCKETS, HEX DRIVER

4-5-6-8-10-12-14-17-19 mm

DO691121301

1/2"



1 QUICK CHANGE ADAPTOR, 1/2" SQUARE DRIVE, 7/16" HEX. HEX INTERNAL TORX BITS 7/16"

T30-T40-T45-T50-T55-T60
Hex driver bits - 7/16": 6-8-10-12-14-17 mm

DO605222601

1/2"



26 IMPACT SOCKETS, 6-POINT, DEEP

10-11-12-13-14-15-16-17-18-19-20-21-22-23-2-25-26-27-28-29-30-32-33-34-35-36 mm

DO605202602

1/2"



26 IMPACT SOCKETS, 6-POINT

10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32-33-34-35-36 mm

DO69523108

1/2"



10 IMPACT SOCKETS, 6-POINT, DEEP

10-11-13-14-17-19-21-22-24-27 mm

DO652260701

1/2"



7 PCS 1/2" DRIVE IMPACT TRIPLE SQUARE DRIVER SET
M5-M6-M8-M10-M12-M14-M16

Particularly suitable for use in car workshops geared to service Volkswagen brand cars.

SETS

DO61120310

1/2"



3 IMPACT SOCKETS WITH PLASTIC STOP AND SLEEVE
BLUE 17 MM - YELLOW 19 MM - RED 21 MM

DO611260501

1/2"



5 IMPACT SOCKETS WITH PLASTIC STOP AND SLEEVE
white 15 mm - blue 17 mm - yellow 19 mm - red 21 mm - green 22 mm

SPECIAL SET FOR WHEEL LUG NUT REMOVER

DO0012-0-286

1/2"

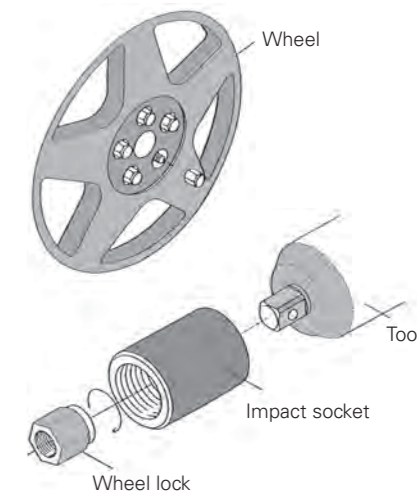


7 IMPACT SOCKETS, NORMAL

17 - 18,5 - 20 - 21,5 - 23 - 24,5 - 26 mm

APPLICATION

This wheel lug nut remover is used when it is discovered that the original key to remove your car wheel is lost. In order to remove the lock and the wheel, these sockets can be used. Proper use of the socket is to have at least three windings of thread of the socket gripping over the lock. In case any of the first three windings are already gripping, the next bigger size of socket should be chosen. When the correct size of socket is chosen, it can unlock up to four bolts.



SET MAGNETIC REDUCERS

DO698800401

4 PCS. MAGNETIC SLEEVE INSERT ADAPTORS

1/4" FEMALE X 3/8" MALE
3/8" FEMALE X 1/2" MALE
1/2" FEMALE X 3/4" MALE
3/4" FEMALE X 1" MALE

The magnetic sleeve adaptors allow the temporary use of bigger impact sockets on smaller tools. By means of the magnet changes of losing the adaptor are reduced. Especially well suited for the service kit of a traveling mechanic, tasked with the servicing of heavy equipment.



SETS, TORQUE SOCKETS & SPECIALS

DO605401001

3/4"



10 impact sockets, 6-point, normal
21-22-24-27-30-32-33-36-41-46 mm

DO605421001

3/4"



10 impact sockets, 6-point, deep
21-22-24-27-30-32-33-36-41-46 mm

DO0100-1-007

1"



7 impact sockets, 6-point, deep
24-27-30-32-33-36-41 mm

TORQUE SOCKETS

1/2" 1"



Type 1/2"	A/F mm	Nm	Length	Color
DO68122D17	17	75	220	Groen
DO68122L17	17	110	220	Rood
DO68122G19	19	90	220	Geel
DO68122L19	19	110	220	Blauw
DO68122M19	19	135	220	Grijs
DO68122E21	21	80	220	Zwart
DO68122L21	21	110	220	Bruin

Type 1"	A/F mm	Nm	Length
DO68552U23	23	250	305
DO68552W24	24	350	305
DO68552W27	27	350	305
DO68552Z27	27	450	305
DO68552Y29	29	400	305
DO68552B30	30	550	305
DO68552C30	30	600	305
DO68552A32	32	500	305
DO68552C32	32	600	305
DO68552F32	32	700	305
DO68552A33	33	500	305
DO68552C33	33	600	305
DO68552C36	36	600	305

WHEEL NUT SOCKET FOR SPECIAL MERCEDES WHEEL BOLTS. (1/2" X 17 MM)

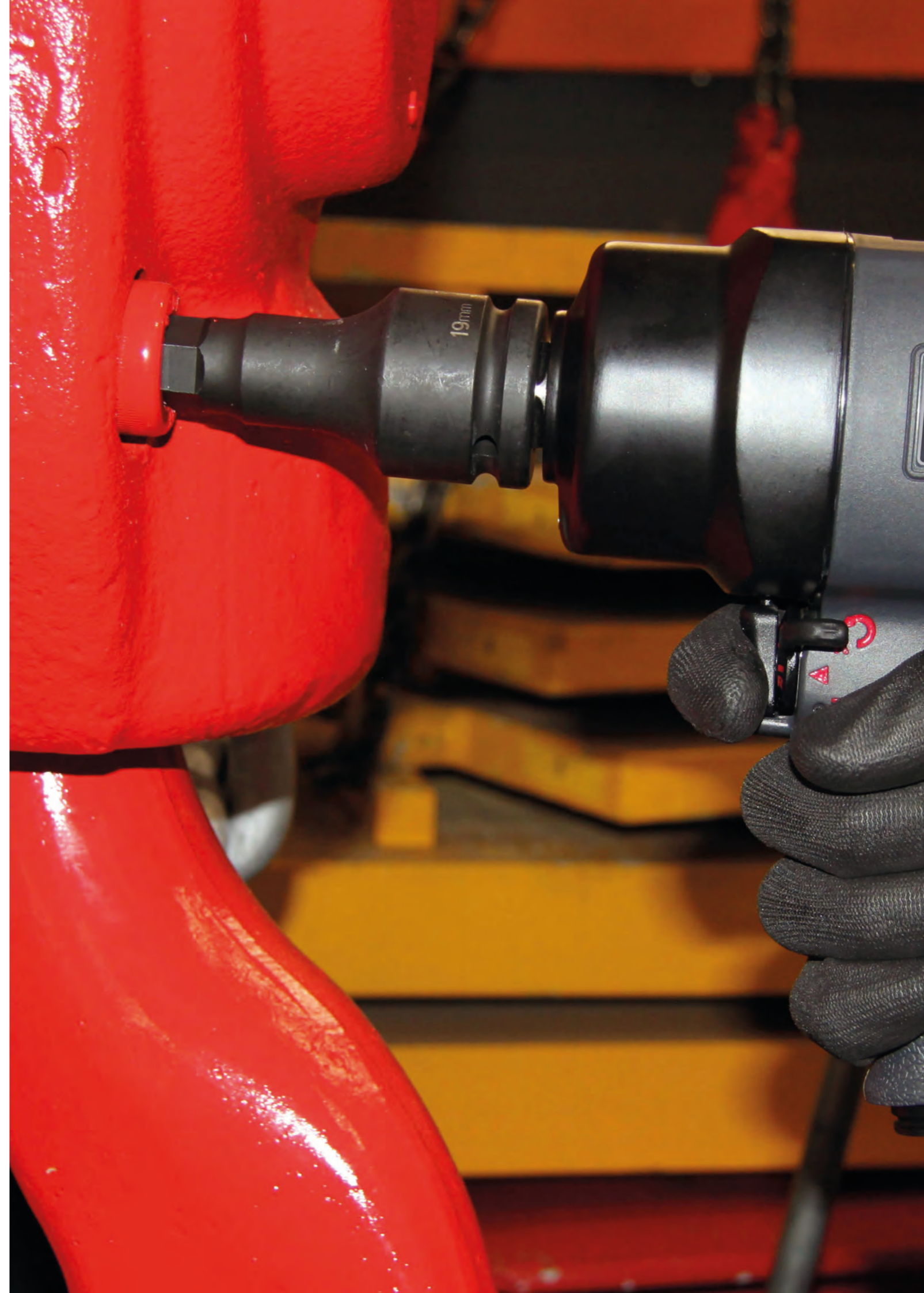
DO6112P017

Special



Includes rotating plastic sleeve and stop for protecting alloy wheels.

This special impact socket is suitable for: Mercedes C-Class / GLK (W204), E-Class (W211, W212, W207), SLK (W172), M-Class (W164, W166), CL-Class (W216), S-Class (W221, W222) en Maybach.



SERVICE



SERVICE

At Rami Yokota we continuously place great emphasis on giving excellent support, we can deliver 97% of our product range Europe wide within 24-48 hours from our centrally located warehouse in Antwerp, Belgium. Maintaining a large stock is important to us and the certainty it provides our partners which is one of the reasons they value us.

We value concepts such as durability and sustainability and endeavour to train all our customers in the use and maintenance of our products, proper use lengthens the lifetime of the tools considerably therefore contributing to a reliable production process. We have extensive facilities and very experienced expert staff who not only master the course content but also possess great teaching ability which makes our training highly effective and motivating.

We also assist in demonstrating our tools at end-users together with our customers, which enables us to give specialized advice. The practical information may differ from the theoretical and the insight gained on-site gives us the information we require to arrive at the most suitable solution for the application.

We support our partners by supplying a variety of display racks and units to exhibit tools, impact sockets and in some cases our lower capacity air chain hoists. In order to remain relevant we also assist the customer in analysing the range on display and adjusting it when deemed necessary.

Our entire product range has been combined in our main POWERTOOLS brochure which is offered in both print and pdf versions in five languages. We also have a variety of other (smaller) brochures that touch upon all the different types of products within our program. Important information regarding our tools, from exploded view to user manuals and instruction or tutorial videos can be found on our website.

On the next page please pay careful attention to the information regarding maintenance and warranty of your tools and related products.

MAINTENANCE

Maintenance

At Rami Yokota we strive to avoid breakage and expensive interruption of your production processes through proper and thorough maintenance.

BEFORE USE

Read and store the user manual of your tool. It contains valuable information about the functioning of the tool and the safety recommendations.

For the batteries of cordless tools: before use, charge the battery fully. Do not store the battery for periods longer than 6 months without discharging and charging them again.

WE ADVISE YOU TO TAKE THE FOLLOWING POINTS INTO CONSIDERATION:

– Oil your tool at regular intervals using Red Rooster Atlub fully synthetic resin and acid free lubrication

FOR AIRTOOLS:

- Always check before connecting the hose to the tool, that both the air hose and fittings are in good condition and free of any debris or dirt
- The use of a correctly sized air treatment set (FRL) and a correctly adjusted lubricator
- The use of a hose between the oiler and air tool of max. 8 m. (26 ft.). In case of a longer hose please mount an SMC jet oiler. The jet oiler has a reach of approx. 200 m. (656 ft.).
- The air pressure of the tool has to be 0.63 MPa.

DRAW WATER FROM THE AIR PIPING AND COMPRESSOR TANK DAILY. CHECK IF THE LUBRICATORS ARE FILLED WITH RED ROOSTER ATLUB OIL.

Warranty

The warranty period from the date of purchase is as follows:

12 MONTHS

- Industrial cordless, electrical and air tools Yokota, Red Rooster and Toku.
- Hoists and winches of Red Rooster

3 MONTHS

- On repairs and replaced spare parts, repaired by us or our recognized partners.

Warranty covers clearly definable material and/or construction faults by the manufacturer. Replacement of parts or repair by an official partner of ours, is free of charge when the tool is covered by warranty. Freight or postage is the

PRESSURE TOO LOW!

When the air supply to the tools is too low it could reduce the performance and the accuracy of the tool. Slow starting and lower productivity lead to a loss of efficiency. 0,1 MPa pressure reduction means 25% power loss to the air motor.

LOW PRESSURE MAY OCCUR IF:

- The capacity of the compressor is insufficient
- The air piping has been pitched incorrectly
- There are air leaks
- The air treatment equipment is not functioning
- The wrong size hose nipples or quick couplers are used
- The tank is too small

PLEASE NOTE

When using impact wrenches and impulse wrenches, the torques shown will vary if used on a soft joint. A soft joint can be caused by the use of washers, gaskets and other elastic materials.

QUALITY OF THE AIR

Poor air quality can result in expensive production downtime, and will increase the time and costs of maintenance, as well as shorten the lifetime of the tool. Good quality air should be a first priority, investments will be worth it, saving your tools from (permanent) damages. Poor quality air can be caused by:

- Lack of necessary air treatment equipment
- Poor quality and/or wrong installation of the air treatment equipment
- Lack of maintenance of the air treatment equipment
- Incorrect hose diameter

responsibility of the customer. Damage attributed to normal wear, overloading or incorrect use is excluded from warranty. Replacement of tools as a consequence of warranty claims is not part of the warranty arrangements. Claims for the loss of production and/or other damages are excluded from this warranty.

Repairs under warranty can only be considered when the tool is in its original state and it is accompanied by the purchase invoice. Warranty claims have to be made through the distributor who supplied the tool. We reserve the right to make unannounced changes/modifications to our tools. These warranty conditions are based on an 8 hour working day.

TRAINING



TRAINING

Changes are continuously taking place as systems, guidelines or installations are renewed. New systems require new skills, which is why it is so important that you continue to train your employees.

Rami Yokota's know how on products, applications, regulations and much more is something that we are happy to share with you. We will teach you everything about our products both from a theoretical and a practical point of view.

RAMI YOKOTA TRAINING

In our Head Office located in Amsterdam, the Netherlands we have a showroom and workshop with extensive training facilities which enable us to use actual tools when discussing every day practice. In addition to the practical elements of the training, the commercial and technical experience of our training team will prove of great benefit to your employees. Theoretical aspects are cleverly woven into one or two day courses, ensuring dynamic and exciting curriculum that will not be easily forgotten.

TRAINING MODULES

Our modules vary from basic training in the practical use of tools all the way to advanced training on highly specialised tools. Course material is always up-to-date and includes the most recent technologies in tools, processing and materials.

– General product training

During our general product training you will receive full knowledge about the necessary pre-conditions for the long-term trouble-free use of our (air)tools. You will also receive insight regarding the different solutions that Rami Yokota can offer for numerous applications and intensities of use those applications require.

– Assembly training

Market wide components are engineered with increasing detail, therefore bolt connections have to be calculated in a more detailed manner too. The choice of assembly

tool is therefore of growing and greater importance.

This training is specifically aimed at the assembly industry. After this training you will be enabled to give correct advice about the tools and their applications.

– Training with compressed air hoisting equipment

Air hoists are virtually indispensable in a variety of sectors such as offshore, oil and gas, (petro) chemical plants, food industry, tank cleaning and every other industry where the danger of explosion is real. In addition the 100% duty rating along with other important characteristics of air hoists can be immensely useful in other sectors too. During training you will learn about the required pre-conditions that enable safe and long term use of air hoists. There will also be ample attention given to the large variety of possible applications where air hoists are, often, the best alternative to electric or hand-held hoists.

– Repair training

Faults and break-downs of tools and machinery constitute a large unnecessary cost for many companies, downtime of tools can cause costly interruption to expensive production processes. Rami Yokota's training is developed to minimize the costs to our customers, our training focuses on recognizing and interpreting signals of wear and tear, as well as disseminating all the necessary information to prevent breakage of (air) tools and air hoists. Timely and sufficient maintenance is the key! Your company benefits from the acquired know-how about products and their applications. Well trained employees help increase productivity, quality and safety.

Interested in a training course at Rami Yokota or would you like some more information?

Then do get in touch with us via marketing@rami-yokota.com and inform us about your requirements.

SUPPORT



DISPLAYS RACKS

Besides technical advice and a delivery rate of 97% within 24-48 hours in Europe of our tools, air hoists, impact sockets and accessories, we also gladly support you in the design of displays. We will help you determine the best assortment for your location, or deliver a fully assorted ready-made display. We always make sure that the concept is suited to your specific needs.

Direct availability of tools with high turnover rates on display, offer your customer the correct tool without risking stagnation. The variety of the assortment and the turnover rate can be periodically analysed. When necessary it can be tweaked to ensure no tools remain in stock over long periods of time and you always have the most current product line available.

We can supply different types of displays to present your products in the most appropriate way: 1 meter displays for our powertools, desk displays for a small assortment of tools, special displays for impact sockets as well as displays for our assortment of breaking and paving hammers.

If your customers are interested in a larger assortment then you can choose to add several interconnecting displays. If you are interested in a special custom made display we can also make you an offer.

DISPLAY CARDS

Each tool has its own important specifications. In order to inform your customers we can supply you with magnetized display cards for each tool, carrying all the information relevant to you and your customer.

BROCHURES

We offer several information brochures and product leaflets to help you promote, explain and sell our products. The following brochures are available upon request in five languages (Dutch, English, German, French, Polish):

- Power tools
- Assembly tools
- ACTION impact sockets
- RED ROOSTER air chain hoists
- Twice yearly brochure with special OFFERS

All brochures have a space on the back for your stamp or sticker, enabling your customers to know where they can get direct knowledge/training and materials about their tools or potential purchases.

DEMONSTRATION

Many of our tools require explanation and even demonstration. Our sales staff are highly trained and available to plan visits with your staff so that the end customer can be convinced the proposed tool is the appropriate solution for their place of work.

For appointments and further information please feel free to contact the sales person in your region, or our head office in Amsterdam.

INDEX

01-0508(C)..... 130
 01-0507(C)..... 130
 7VC-6500FS..... 88
 7VC-8500FS..... 88
 10RDS-2500..... 83
 10RDS-4000..... 83
 922A18..... 130
 922A19..... 130
 944A..... 130
 8130-1001-00-00..... 130
 8130-1002-00-00..... 130
 8130-1003-00-00..... 130

A

AA-OBR(H)..... 97
 AA-1.3BR(H)19x50..... 97
 ATLUB..... 130

B

BRH-6..... 97

D

DC6622..... 91
 DC6078..... 91
 DS-1..... 22

E

E-M500..... 20
 E-M700..... 20
 E-M900..... 20
 E-M1100..... 20
 E-PDA-4..... 21
 EK-0..... 126
 ELF-3..... 126
 ELF-5..... 126
 ELF-9..... 126
 ELF-15..... 126
 ELF-22..... 126
 ELF-30..... 126
 ELF-40..... 126
 ELF-50..... 126
 ELF-60..... 126
 ELF-70..... 126
 ETP-14..... 126
 ETP-15..... 126
 ETP-16..... 126

F

F-25..... 97
 F-25N..... 108

G

G-40EF..... 89
 G-40SRF..... 89
 G-50EF..... 89
 G-70EF..... 89
 GS-2EFS..... 88

H

HS-4..... 93
 HTB-0..... 126
 HTB-1..... 126
 HTB-2..... 126

I

Innotec..... 130

K

KIT-AC40 F04E..... 151
 KIT-AC50 F06E..... 151
 KIT-AC50 F10E..... 151

M

MD-3312B..... 83
 MG-OA..... 86
 MG-OC..... 86
 MG-1B..... 86
 MG-7206B..... 86
 MG-7206BSET..... 87
 MG-7236B..... 86
 MI-12..... 74
 MI-16M1/2..... 74
 MI-16M3/8..... 74
 MI-17C..... 74
 MI-17MG..... 74
 MI-17MG-SL..... 74
 MI-17MG-SK..... 74
 MI-20P..... 74
 MI-38ESR..... 76
 MI-38ELR..... 76
 MI-42ESR..... 76
 MI-42ELR..... 76
 MI-590TR..... 76
 MI-3800PLR..... 74
 MI-3800PR..... 74
 MI-3800ELR..... 76
 MI-3800ESR..... 76
 MI-4500ELR..... 76

MI-4500ESR..... 76
 MI-5500ES..... 76

MID-600..... 81

MR-2207C..... 79
 MR-2209C..... 79
 MR-2310B..... 79
 MR-2410B..... 79
 MS-4125B..... 79

N

NOBP..... 130

P

PT-Serie..... 129
 PC-1..... 22

R

RR-02SC..... 81
 RR-02SP..... 81
 RR-06SC..... 81
 RR-06SP..... 81
 RR-0315..... 97
 RR-0315NS..... 108
 RR-10DP..... 83
 RR-13DP..... 83
 RR-15A..... 74
 RR-15P..... 74
 RR-16N 1/2..... 74
 RR-16N 3/8..... 74
 RR-18N..... 74
 RR-18N T..... 74
 RR-18N/SETSTD..... 74
 RR-18N/SETLNG..... 74
 RR-20PN..... 74
 RR-24N..... 74
 RR-24N 1..... 74
 RR-160H..... 74
 RR-476..... 118
 RR-0800DD..... 81
 RR-1800DD..... 81
 RR-2110NS..... 108

RRB-280..... 93

RRG-200RE..... 86
 RRG-200RE/SET..... 87
 RRG-200REL..... 86
 RRG-500RE..... 86
 RRG-500REL..... 86
 RRG-515RE..... 86

RRG-1000RE..... 86
 RRG-1000REL..... 86
 RRG-1046AL..... 89
 RRG-2134..... 89
 RRG-2144..... 89
 RRG-2155..... 89
 RRG-2090..... 87
 RRG-3611..... 95
 RRG-3617K..... 95
 RRG-3621..... 95
 RRG-3630..... 95
 RRG-60160..... 86

RRH-2000..... 97
 RRH-4309K..... 97
 RRH-4312K..... 97
 RRH-4309KSET1..... 97
 RRH-4309KSET2..... 97

RRI-BA10BCA..... 55
 RRI-BA10BOA..... 55
 RRI-BA10ICA..... 56
 RRI-BA10IOA..... 56
 RRI-BA10S3..... 54
 RRI-BA16BCA..... 55
 RRI-BA16BOA..... 55
 RRI-BA16ICA..... 56
 RRI-BA16IOA..... 56
 RRI-BA16S3..... 54
 RRI-BA30BCA..... 55
 RRI-BA30BOA..... 55
 RRI-BA30ICA..... 56
 RRI-BA30IOA..... 56
 RRI-BA30S3..... 54
 RRI-BA35BCA..... 55
 RRI-BA35BOA..... 55
 RRI-BA35ICA..... 56
 RRI-BA35IOA..... 56
 RRI-BA35S3..... 54
 RRI-BA50S3..... 54
 RRI-BA70S3..... 54
 RRI-BA90S4..... 54

RRI-BS3..... 51
 RRI-BS6..... 51
 RRI-BS9..... 51
 RRI-BS12..... 51

RRI-BI32T..... 57
 RRI-BI55T..... 57
 RRI-B100T..... 57
 RRI-B120T..... 57
 RRI-BIM15AT..... 44

INDEX

RRI-BIM15T..... 44
 RRI-BIM25AT..... 44
 RRI-BIM25T..... 44
 RRI-BIM35T..... 44
 RRI-BIM45T..... 44
 RRI-BIM65T..... 44
 RRI-G50HP..... 89
 RRI-G70..... 89
 RRI-PR40740..... 59
 RRI-PR40948..... 59
 RRI-PR41764..... 59
 RRI-PRN41612M..... 59

RRI-SA10902..... 49
 RRI-SA11602..... 49
 RRI-SA20705..... 49
 RRI-SA21104..... 49
 RRI-SA21704..... 49
 RRI-SA30511..... 49
 RRI-SA30710..... 49
 RRI-SA31108..... 49
 RRI-SA30511W..... 49
 RRI-SA30710W..... 49
 RRI-SA31108W..... 49

RRI-SD10902..... 48
 RRI-SD11602..... 48
 RRI-SD20705..... 48
 RRI-SD21104..... 48
 RRI-SD21704..... 48
 RRI-SD30511..... 48
 RRI-SD30710..... 48
 RRI-SD31108..... 48
 RRI-SD31706..... 48

RRI-SL10902..... 48
 RRI-SL11602..... 48
 RRI-SL20705..... 48
 RRI-SL21104..... 48
 RRI-SL21704..... 48
 RRI-SL30511..... 48
 RRI-SL30710..... 48
 RRI-SL31108..... 48
 RRI-SL31706..... 48

RRI-SP10502..... 47
 RRI-SP10902..... 47
 RRI-SP11602..... 47
 RRI-SP20705..... 47
 RRI-SP21104..... 47
 RRI-SP21704..... 47
 RRI-SP30511..... 47
 RRI-SP30710..... 47

RRI-SP31108..... 47
 RRI-SP31706..... 47
 RRI-T1135..... 87
 RRI-T1550..... 87
 RRI-T1565..... 87
 RRI-T3335..... 87
 RRI-T3340..... 87
 RRI-T4065..... 87
 RRI-T6250-5NV..... 83
 RRI-T6250-5CV..... 83

RRI-14..... 74
 RRI-17 1/2..... 74
 RRI-17 3/8..... 74
 RRI-21..... 74
 RRI-21/SETSTD..... 77
 RRI-21/SETLNG..... 77
 RRI-25..... 74
 RRI-30..... 38
 RRI-30A..... 38
 RRI-30AT..... 35
 RRI-30S..... 39
 RRI-30SA..... 39
 RRI-30ST..... 36
 RRI-30STA..... 36
 RRI-30T..... 35
 RRI-37E..... 76
 RRI-40AT..... 35
 RRI-40AX..... 38
 RRI-40S..... 39
 RRI-40SA..... 39
 RRI-40ST..... 36
 RRI-40STA..... 36
 RRI-40T..... 35
 RRI-40X..... 38
 RRI-50AT..... 35
 RRI-50AX..... 38
 RRI-50R..... 40
 RRI-50RA..... 40
 RRI-50RT..... 37
 RRI-50RTA..... 37
 RRI-50S..... 39
 RRI-50SA..... 39
 RRI-50ST..... 36
 RRI-50STA..... 36
 RRI-50T..... 35
 RRI-50X..... 38

RRI-60RT..... 37
 RRI-60RTA..... 37
 RRI-60S..... 39
 RRI-60STA..... 36
 RRI-60T..... 35
 RRI-60X..... 38
 RRI-70..... 38
 RRI-70A..... 38
 RRI-70AT..... 35
 RRI-70R..... 40
 RRI-70RA..... 40
 RRI-70RG..... 40
 RRI-70RGT..... 37
 RRI-70RH..... 40
 RRI-70RHT..... 37
 RRI-70RT..... 37
 RRI-70RTA..... 37
 RRI-70S..... 39
 RRI-70SA..... 39
 RRI-70ST..... 36
 RRI-70STA..... 36
 RRI-70T..... 35
 RRI-80..... 38
 RRI-80RHT..... 37
 RRI-80ST..... 36
 RRI-80T..... 35
 RRI-90..... 38
 RRI-90T..... 35

RRI-100..... 38
 RRI-100T..... 35
 RRI-130..... 38
 RRI-130T..... 35
 RRI-150..... 38
 RRI-150T..... 35
 RRI-180..... 38
 RRI-180T..... 35
 RRI-200..... 38
 RRI-200T..... 35
 RRI-1061..... 76

RRI-3006..... 87
 RRI-3007..... 87
 RRI-3407..... 86
 RRI-3425..... 86
 RRI-3425L..... 86
 RRI-3425EL..... 86
 RRI-3430..... 86
 RRI-3445..... 86
 RRI-3506..... 87
 RRI-4006..... 108
 RRI-4006VL..... 108
 RRI-4007..... 108
 RRI-4007VL..... 108
 RRI-4010..... 59
 RRI-4011..... 59
 RRI-4021/4..... 97
 RRI-4596/1..... 97
 RRI-4596R..... 97
 RRI-4612K VL..... 97
 RRI-4612R VL..... 97
 RRI-4007LR 4/5/6..... 110
 RRI-5125-2NV..... 93
 RRI-5125-2CV..... 93
 RRI-5125-2SV..... 93
 RRI-5125-5NV..... 93
 RRI-5125-5CV..... 93
 RRI-5125-5SV..... 93
 RRI-6150-2NV..... 93
 RRI-6150-2CV..... 93
 RRI-6150-2SV..... 93
 RRI-6150-5NV..... 93
 RRI-6150-5CV..... 93
 RRI-6150-5SV..... 93
 RRI-8002..... 114
 RRI-8003..... 114
 RRI-8004..... 114
 RRI-8011..... 114
 RRI-8031..... 114
 RRI-8032..... 114
 RRI-8460..... 111
 RRI-8560..... 111
 RRI-9001/1..... 110
 RRI-9003/1..... 110
 RRI-9005/1..... 110
 RRI-9010..... 113
 RRI-21930..... 108
 RRI-34100..... 86
 RRI-T330M12..... 85
 RRJ-8205..... 111
 RRJ-8210..... 111

RRJ-8205..... 111
 RRP-203..... 120
 RRS-60152..... 94
 RRS-60153..... 94
 RRS-60323..... 94

INDEX

RRW-121	79	TKa150	18	Y40SA	30	YLa60A	29
RRW-2202	79	TKa600	17	Y41A	30	YLa60A-JQ	27
RRW-2203	79	TKa600A	17	Y46A	30	YLa60E	29
RRW-2403	79	TKa700	17	Y46E	30	YLa60E-JQ	27
RRW-2404	79	TKa600A	17	Y140	30	YLa70A	29
		TKa800	17			YLa70A-JQ	27
		TKa900	17			YLa70E	29
RRW-3403	79	TKa1110	17	YD-3A	81	YLa70E-JQ	27
RRW-3404	79	TKa1200	17	YD-4A	81	YLa80A	29
		TKa1400	17	YD-5A	81	YLa80A-JQ	27
		TKa1500	17	YD-5PHCA	82	YLa80E	29
				YD-40PZ	81	YLa80E-JQ	27
				YD-400SCA	82	YLa90E	29
		TMH-25T	138	YD-600SZ	81	YLa90E-JQ	27
		TMH-3000	138	YD-670E-RF	81	YLa110E	29
		TMH-6000	138	YD-670A-RF	81	YLa110E-JQ	27
		TMM-140AE	138			YLa120E	29
				YDP-13	117	YLa120E-JQ	27
		TMH-10T	138	YDP-20	117	YLa140E	29
						YLa140E-JQ	27
		TPB-40	99	YED-200	18		
		TPB-40SV	99	YED-240S	18	YLT60AL	28
		TPB-501SV	99			YLT70AL	28
		TPB-60	99	YETC-230EA	18	YLT60EL	28
				YETC-230EA4	18	YLT70EL	28
		TSG-3L	88	YETC-230ER	17	YLT80EL	28
		TSG-4L	88	YETC-330EA2	18	YLT110EL	28
		TSG-5L	88	YETC-330ER2-L	17	YLT120EL	28
		TSG-6L	88	YETC-500	21	YLT140EL	28
				YEX-100SA	19	YLTX50A	28
		TW-3	126	YEX-120	19	YLTX60A	28
		TW-5	126	YEX-120A	19	YLTX70A	28
		TW-9	126	YEX-120SA	19	YLTX50E	28
		TW-15	126	YEX-150	19	YLTX60E	28
		TW-22	126	YEX-150A	19	YLTX70E	28
		TW-30	126	YEX-150S	19	YLTX80E	28
		TW-40	126	YEX-150SA	19	YLTX110E	28
		TW-50	126	YEX-300SA	19	YLTX120E	28
		TW-60	126	YEX-500S	19	YLTX140E	28
		TW-70	126	YEX-500SA	19	YLTX50	28
				YEX-501	19		
				YEX-501A	19	YK-2	108
				YEX-500S	19		
				YEX-701	19	YNR-8F	116
				YEX-700S	19	YP-18	119
				YEX-901	19	YP-35	119
				YEX-1400	19	YPP-1	119
				YEX-1900	19		
				YEX-3000	19	YRD-6NBK	83
						YRD-8NBK	83
				YHR-33	116	YRD-10NBK	83
				YHR-33L	116	YRD-13NBK	83
						YRW-6	79
TKa60	18						
TKa60A	18						
TKa70	18						
TKa70A	18						
TKa80	18						
TKa80A	18						
TKa90	18						
TKa110	18	Y41A-JQ	27				
TKa120	18	Y46E-JQ	27				
TKa140	18	Y140JQ	27				

INDEX

YRW-8NS	79
YRW-10N	79
YS-e600	22
YS-e800	22
YS-e900	22
YS-e950	22
YTC-3	27
YW-6CL	75
YW-50C	77
YW-65C	77
YW-90C	77
YW-120C	77
YX-280C	30
YX-500C	30
YX-700C	30
YX-180SE	31
YX-180SA	31
YX-280SE	31
YX-280SA	31
YX-380SE	31
YX-380SA	31
YX-500SE	31
YX-700SE	31
YX-700C	30
YX-3000	31
YX-4500	31
YZ-N600E	25
YZ-N600A	25
YZ-N800E	25
YZ-N800A	25
YZ-N900E	25
YZ-N950E	25
YZ-T600E	24
YZ-T600A	24
YZ-T800E	24
YZ-T800A	24
YZ-T900E	24
YZ-T950E	24

Assembly tools
Impulse wrenches
System wrenches
Screwdrivers
Impact wrenches
Ratchet wrenches
Drills
Grinders
Sanders
Balancers
Hammers
Breakers
Air chain hoists
Air treatment equipment
Impact sockets