

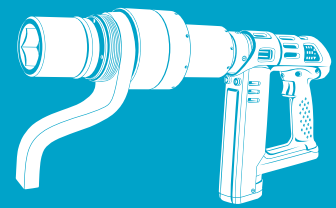
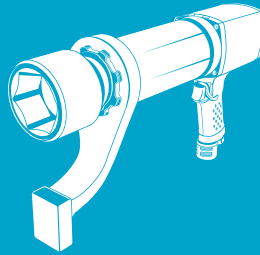
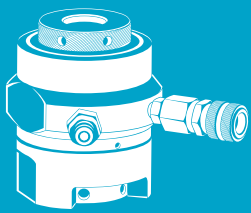


BOLT TIGHTENING SOLUTIONS

We offer a complete and dynamic range of bolting tools including hydraulic bolt tensioners and hydraulic torque wrenches, as well as pneumatic and electric transducerized nutrunners.

Atlas Copco

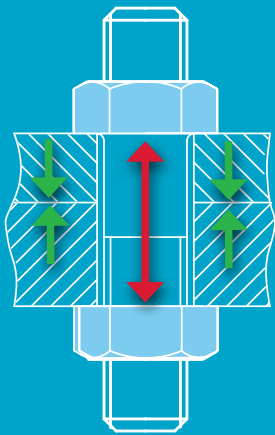
BOLTING TOOLS FOR CRUCIAL BOLTING APPLICATIONS



You now have one reliable partner that gives you access to a complete line of bolt tightening tools to boost your productivity and minimize downtime. Whether using our custom-designed hydraulic bolt tensioner, our robust and accurate hydraulic torque wrench, or our industry-leading electric or pneumatic nutrunners, we bring the best product and support available to you.

We are passionate about bringing solutions to our customers' bolt tightening challenges. This is why we are in this business. We do believe in tight connections through technology and people.

TIGHT CONNECTIONS FOR YOUR APPLICATIONS



- Clamp Force
- Stretch

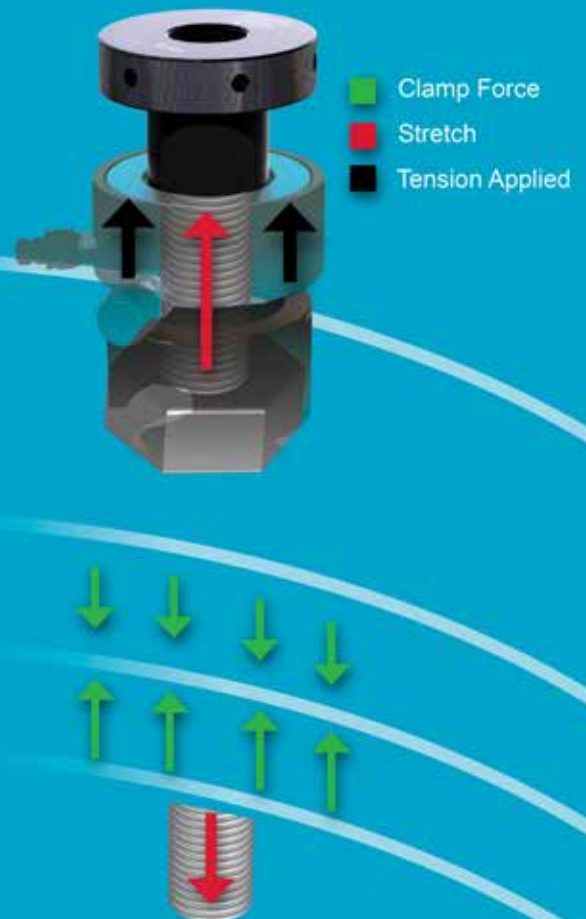
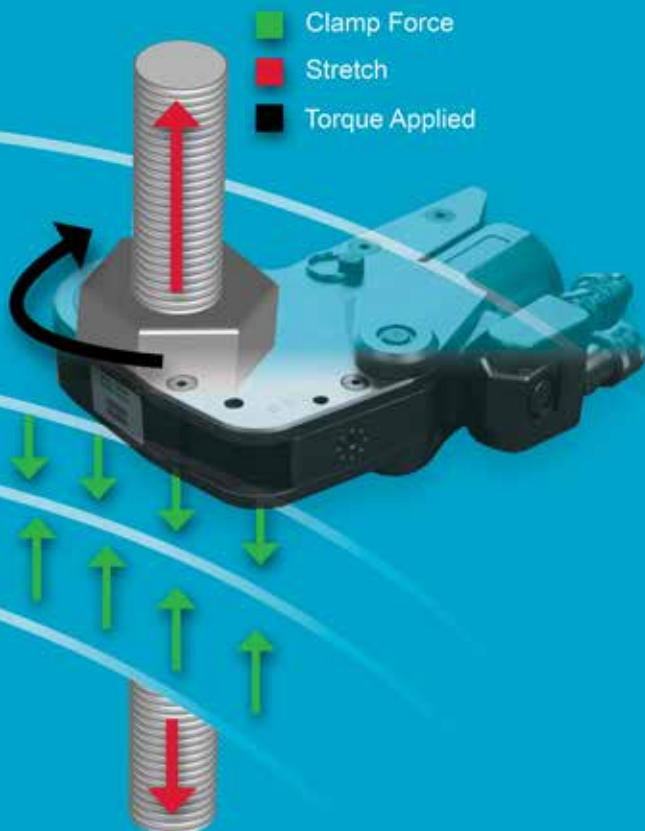
Torque and Tension are two distinct ways to achieve the same result: create the appropriate **clamping force** for the joint or connection. To do this, the **bolt has to stretch**, while a nut holds the load and thereby creating the desired clamp force. Atlas Copco offers a comprehensive product range of torque and tension tools, to work on critical bolting applications.

TORQUE

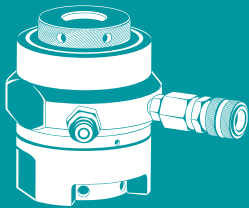
Using torque tools, such as nutrunners or hydraulic torque wrenches, you turn the nut. As the nut turns, it stretches the stud. The torque setting for the tool translates into load on the connection. When the tools are used following the appropriate specifications for lubrication, coating and other factors, a desired clamp force can be produced.

TENSION

With tensioners, the action is not directly on the nut, rather tension is applied directly to the stud in order to produce stretch. Once the prestretch is achieved, the nut can be tightened. Once the pressure is released the nut holds the load on the bolt. This produces the clamp force. Multiple tensioners can be used together to provide even load when tightening. Hydraulic bolt tensioners have a footprint and thread height requirement.



BOLT TIGHTENING TOOL TYPE INTRODUCTION



TENTEC HYDRAULIC BOLT TENSIONING SYSTEMS

6

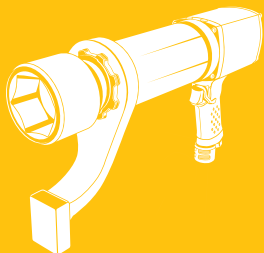
Available in standard or custom models, to suit any application. Works with hand, air or electrical pump types.



HYDRAULIC TORQUE WRENCHES

42

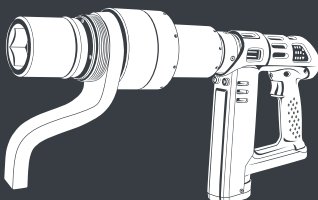
Available in standard or low profile models, this is the cornerstone for high torque applications. Works with 10,000 psi hydraulic pump.



PNEUMATIC NUTRUNNERS

98

Non-impact torquing power, in a lightweight and ergonomic design. Uses your air line and the Atlas Copco FRL pressure unit.



ELECTRIC TRANSDUCERIZED NUTRUNNER

110

The Tensor Revo DC nutrunner provides easy positioning and access to the bolt thanks to a 360° gear swivel – unique in a tool with an integrated torque transducer.

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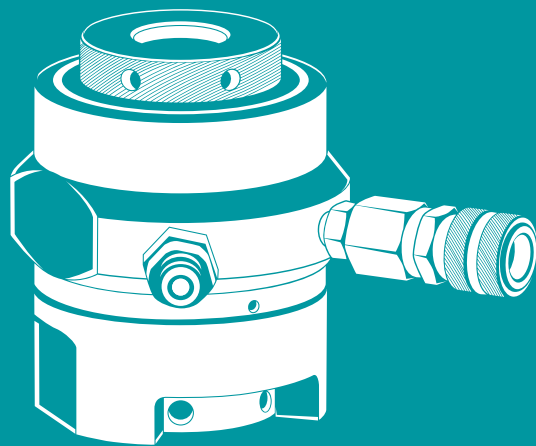
Tentec CTST Topside Tensioners	8
Tentec Compact 8 Subsea Tensioners	14
Tentec WTB Wind Turbine Bolt Tensioners	18
Tentec WTF Wind Turbine Foundation Tensioners	22
Tentec Hydraulic Nuts	26
Tentec Force10 Spring Return Tensioners	30
Tentec V-Series Compact Flange Tensioners	34
Custom Tensioners	38

RT Square Drive Hydraulic Torque Wrench	44
RTX Low Profile Hydraulic Torque Wrench	58
Extreme Access Spanner	68
Hydraulic Torque Wrench Pumps	86
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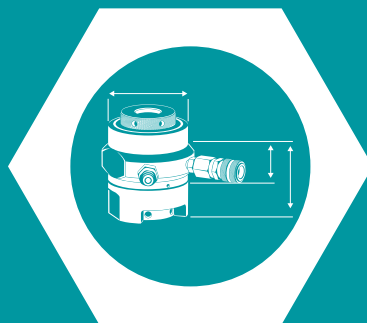
RTP High Torque Pneumatic Nutrunner	100
LTP Pneumatic Nutrunner	104

Electric Transducerized Nutrunner	112
Controllers And Software For Tensor Revo	116

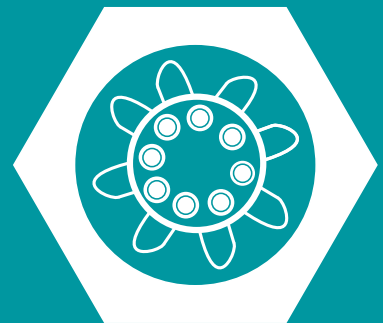
TENTEC HYDRAULIC BOLT TENSIONING SYSTEMS



**REACTION FREE
OPERATION**



**CUSTOM
ENGINEERING**



**SIMULTANEOUS
TENSIONING**



TENTEC CTST

TOPSIDE HYDRAULIC BOLT TENSIONER

THREAD INSERT

Contains a matching female thread to the bolt being tensioned.

RELIABLE SEALS

Proven seal technology ensures many 1000's of tool pressure cycles.

PISTON STROKE

15mm piston/ram stroke capability on models CTST 02 - CTST 06.

VERSATILE

Detachable and Interchangeable bridge component.



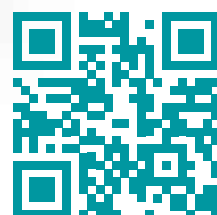
Tentec CTST range of topside bolt tensioning tools comprises 6 base tools covering bolt sizes from 3/4" to 4" (M20 to M100). The tools are designed to fit on to most ANSI B16.5, ANSI B16.47 Series 1, MSS-SP44, API-6A and API-17D flanges. Each base tool can be converted for use with different bolt sizes using a conversion kit.



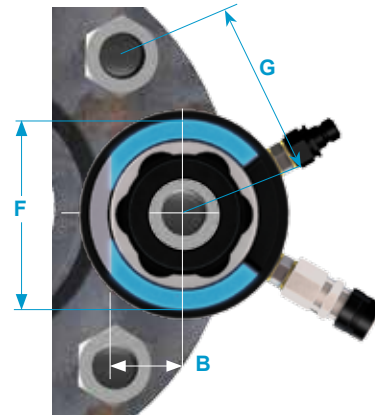
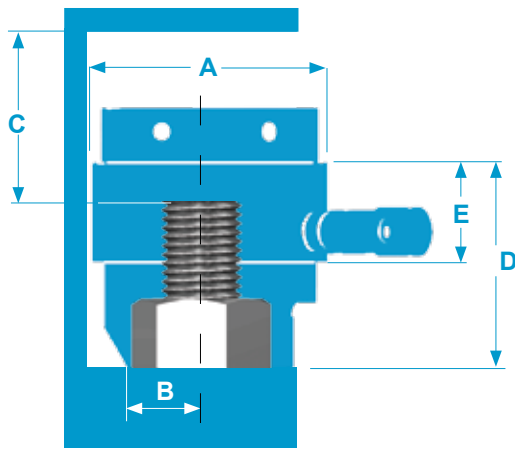
HYDRAULIC CONNECTIONS
User configurable quick release connections.

NUT ROTATING SOCKET (NRS)
Fits around the bolted joint nut to allow for easy rotation.

Tentec CTST
Tensioner Datasheet



CTST BOLT TENSIONERS

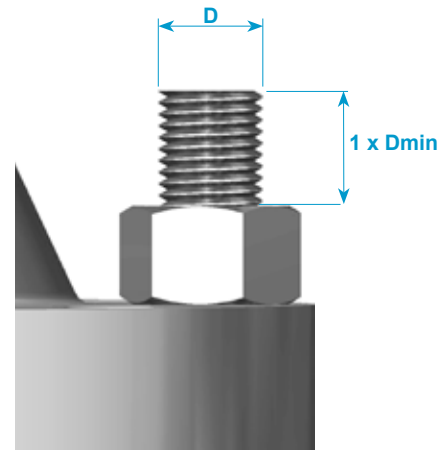


Tool	Item Imperial	Thread Size		Item Metric	Bolt Load		Ram Area		Stroke mm	Weight kg	A	B	C	D	E	F	G
		Inch	mm		Kn	Ton	In ²	mm ²									
No 1	HTT.9551:0750	3/4"-10UNC	M20x2.5	HTT.9551:M20	227.81	22.86	2.354	1518.76	10	2.0	73.50	21.0	67.00	71.0	45	62	49.5
	HTT.9551:0875	7/8"-9UNC	M22x2.5	HTT.9551:M22						1.9		24.0	64.00	71.0		63	53
	HTT.9551:1000	1"-8UN	M24x3	HTT.9551:M24						1.9		24.0	69.00	78.0		69	58.5
	HTT.9551:1125	1 1/8"-8UN	M27x3	HTT.9551:M27						1.9		24.0	66.00	79.0		74	63.5
No 2	HTT.9552:1125	1 1/8"-8UN	M27x3	HTT.9552:M27	443.00	44.46	4.578	2953.69	15	4.8	102	27.0	85.50	92.0	54	82	67.5
			M30x3.5	HTT.9552:M30						4.9		32.0	85.00	93.0		85	69
	HTT.9552:1250	1 1/4"-8UN	M33x3.5	HTT.9552:M33						4.6		31.0	84.00	95.0		85	72
	HTT.9552:1375	1 3/8"-8UN	M36x4	HTT.9552:M36						4.6		34.0	84.00	98.0		91	78
	HTT.9552:1500	1 1/2"-8UN	M39x4	HTT.9552:M39						4.7		36.5	82.00	100.0		90	80
No 3	HTT.9553:1500	1 1/2"-8UN	M39x4	HTT.9553:M39	810.85	81.38	8.379	5405.70	15	9.5	133	36.5	98.00	109.0	56	97	83.5
	HTT.9553:1625	1 5/8"-8UN	M42x4.5	HTT.9553:M42						9.0		37.5	93.00	107.0		110	92.5
	HTT.9553:1750	1 3/4"-8UN	M45x4.5	HTT.9553:M45						9.3		40.5	98.50	116.0		115	98
	HTT.9553:1875	1 7/8"-8UN	M48x5	HTT.9553:M48						9.0		42.5	95.00	116.0		116	101
	HTT.9553:2000	2"-8UN	M52x5	HTT.9553:M52						8.6		50.0	93.50	117.0		120	106
No 4	HTT.9554:1875	1 7/8"-8UN	M48x5	HTT.9554:M48	1273.16	127.78	13.159	8489.96	15	16.1	163	43.5	106.00	118.0	57	130	108
	HTT.9554:2000	2"-8UN	M52x5	HTT.9554:M52						15.7		46.0	102.50	117.0		124	108
	HTT.9554:2250	2 1/4"-8UN	M56x5.5	HTT.9554:M56						15.8		55.0	103.00	123.0		134	118.5
			M60x5.5	HTT.9554:M60						18.3		54.0	121.50	145.5		150	127
	HTT.9554:2500	2 1/2"-8UN	M64x6	HTT.9554:M64						15.1		58.0	102.50	130.0		147	130.5
No 5	HTT.9555:2500	2 1/2"-8UN	M64x6	HTT.9555:M64	1828.99	183.56	18.905	12196.45	15	22.7	193	64.0	107.50	133.0	60	147	130.5
			M68x6	HTT.9555:M68						23.6		80.0	111.00	141.0		160	138
	HTT.9555:2750	2 3/4"-8UN	M72x6	HTT.9555:M72						24.7		72.0	115.00	147.0		161	143
	HTT.9555:3000	3"-8UN	M76x6	HTT.9555:M76						22.2		77.0	108.00	146.0		170	153
No 6	HTT.9556:3000	3"-8UN	M76x6	HTT.9556:M76	2643.43	265.30	27.323	17627.48	15	38.5	233	77.0	120.00	153.0	64	170	153
			M80x6	HTT.9556:M80						38.3		78.0	117.00	154.0		178	155.5
	HTT.9556:3250	3 1/4"-8UN	M85x6	HTT.9556:M85						38.1		78.0	114.00	154.0		182	165.5
	HTT.9556:3500	3 1/2"-8UN	M90x6	HTT.9556:M90						37.0		86.0	114.00	160.0		191	174.5
	HTT.9556:3750	3 3/4"-8UN	M95x6	HTT.9556:M95						37.0		99.0	116.00	168.0		210	189.5
	HTT.9556:4000	4"-8UN	M100x6	HTT.9556:M100						36.4		105.0	116.00	174.0		220	200

CTST ORDERING NUMBERS

Bolt Protrusion

CTST-Series tensioners need a minimum of 1 x bolt diameter protruding above the hexagon or round nut.



Metric

Item	Description	Ordering No.
HTT.9551:M20	M20 CTST Tensioner	8434 2200 71
HTT.9551:M22	M22 CTST Tensioner	8434 2200 73
HTT.9551:M24	M24 CTST Tensioner	8434 2200 75
HTT.9551:M27	M27 CTST Tensioner	8434 2200 77
HTT.9552:M27	M27 CTST Tensioner	8434 2200 80
HTT.9552:M30	M30 CTST Tensioner	8434 2200 82
HTT.9552:M33	M33 CTST Tensioner	8434 2200 83
HTT.9552:M36	M36 CTST Tensioner	8434 2200 85
HTT.9552:M39	M39 CTST Tensioner	8434 2200 87
HTT.9553:M39	M39 CTST Tensioner	8434 2200 94
HTT.9553:M42	M42 CTST Tensioner	8434 2200 95
HTT.9553:M45	M45 CTST Tensioner	8434 2200 96
HTT.9553:M48	M48 CTST Tensioner	8434 2200 97
HTT.9553:M52	M52 CTST Tensioner	8434 2200 98
HTT.9554:M48	M48 CTST Tensioner	8434 2201 03
HTT.9554:M52	M52 CTST Tensioner	8434 2201 05
HTT.9554:M56	M56 CTST Tensioner	8434 2201 06
HTT.9554:M60	M60 CTST Tensioner	8434 2201 07
HTT.9554:M64	M64 CTST Tensioner	8434 2201 08
HTT.9555:M64	M64 CTST Tensioner	8434 2201 13
HTT.9555:M68	M68 CTST Tensioner	8434 2201 14
HTT.9555:M72	M72 CTST Tensioner	8434 2201 15
HTT.9555:M76	M76 CTST Tensioner	8434 2201 16
HTT.9556:M76	M76 CTST Tensioner	8434 2201 30
HTT.9556:M80	M80 CTST Tensioner	8434 2201 31
HTT.9556:M85	M85 CTST Tensioner	8434 2201 32
HTT.9556:M90	M90 CTST Tensioner	8434 2201 33
HTT.9556:M95	M95 CTST Tensioner	8434 2201 34
HTT.9556:M100	M100 CTST Tensioner	8434 2201 35

Imperial

Item	Description	Ordering No.
HTT.9551:0750	3/4" CTST Tensioner	8434220070
HTT.9551:0875	7/8" CTST Tensioner	8434220072
HTT.9551:1000	1" CTST Tensioner	8434220074
HTT.9551:1125	1 1/8" CTST Tensioner	8434220076
HTT.9552:1125	1 1/8" CTST Tensioner	8434220079
HTT.9552:1250	1 1/4" CTST Tensioner	8434220081
HTT.9552:1375	1 3/8" CTST Tensioner	8434220084
HTT.9552:1500	1 1/2" CTST Tensioner	8834220086
HTT.9553:1500	1 1/2" CTST Tensioner	8834220089
HTT.9553:1625	1 5/8" CTST Tensioner	8434220090
HTT.9553:1750	1 3/4" CTST Tensioner	8434220091
HTT.9553:1875	1 7/8" CTST Tensioner	8434220092
HTT.9553:2000	2" CTST Tensioner	8434220093
HTT.9554:1875	1 7/8" CTST Tensioner	8434220100
HTT.9554:2000	2" CTST Tensioner	8434220101
HTT.9554:2250	2 1/4" CTST Tensioner	8434220104
HTT.9554:2500	2 1/2" CTST Tensioner	8434220102
HTT.9555:2500	2 1/2" CTST Tensioner	8434220110
HTT.9555:2750	2 3/4" CTST Tensioner	8434220111
HTT.9555:3000	3" CTST Tensioner	8434220112
HTT.9556:3000	3" CTST Tensioner	8434220126
HTT.9556:3250	3 1/4" CTST Tensioner	8434220125
HTT.9556:3500	3 1/2" CTST Tensioner	8434220127
HTT.9556:3750	3 3/4" CTST Tensioner	8434220128
HTT.9556:4000	4" CTST Tensioner	8434220129

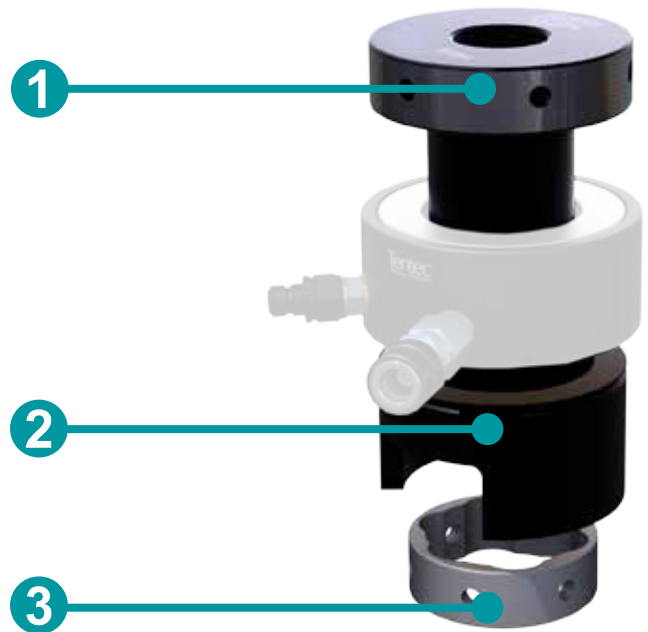
You can order a complete tensioner for the stud size using the table above, or you can order load cells and conversion kits as needed (see pages 12 and 13). Many different configurations are available for our CTST bolt tensioners. For a custom hydraulic bolt tensioner quote, see page 38.

CTST CONVERSION KITS

Conversion Kits offer a very economical way to expand your inventory of bolt tensioning tools. Kits are available to convert a Tentec CTST tensioner to suit an alternative bolt size within its size range.

Kits consist of three items:

- 1 Thread Insert
- 2 Bridge Piece
- 3 Nut Rotating Socket

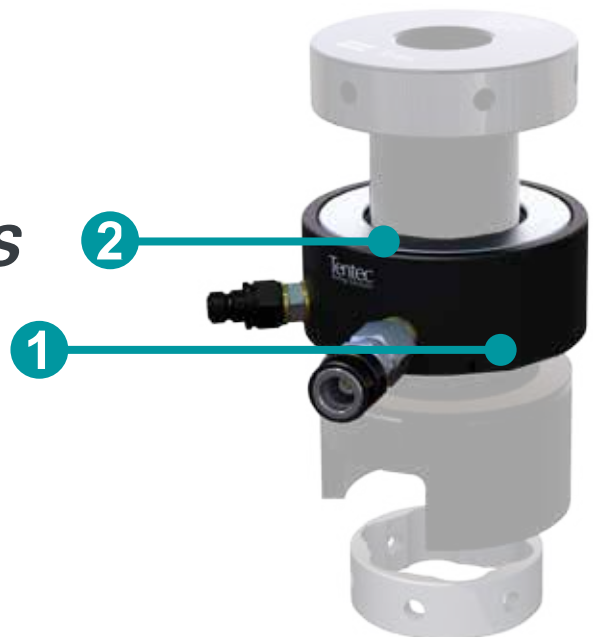


LOAD CELL AND SEAL KITS

The core unit for any tensioner set is composed of two items:

- 1 Load cells
- 2 Seal kit

Comes fitted with hydraulic connections.



CTST CONVERSION KIT ORDERING NUMBERS

Metric

Tool Ident	Item	Description	Ordering No.
No 1	HTT.9551.521	M20 Conversion Kit	4222 2600 02
	HTT.9551.523	M22 Conversion Kit	4222 2600 04
	HTT.9551.525	M24 Conversion Kit	4222 2600 06
	HTT.9551.528	M27 Conversion Kit	4222 2600 08
No 2	HTT.9552.528	M27 Conversion Kit	4222 2600 10
	HTT.9552.532	M30 Conversion Kit	4222 2600 11
	HTT.9552.534	M33 Conversion Kit	4222 2600 13
	HTT.9552.537	M36 Conversion Kit	4222 2600 15
	HTT.9552.514	M39 Conversion Kit	4222 2600 17
No 3	HTT.9553.540	M39 Conversion Kit	4222 2600 19
	HTT.9553.543	M42 Conversion Kit	4222 2600 21
	HTT.9553.546	M45 Conversion Kit	4222 2600 23
	HTT.9553.549	M48 Conversion Kit	4222 2600 25
	HTT.9553.553	M52 Conversion Kit	4222 2600 27
No 4	HTT.9554.549	M48 Conversion Kit	4222 2600 29
	HTT.9554.553	M52 Conversion Kit	4222 2600 31
	HTT.9554.557	M56 Conversion Kit	4222 2600 33
	HTT.9554.562	M60 Conversion Kit	4222 2600 34
No 5	HTT.9554.568	M64 Conversion Kit	4222 2600 36
	HTT.9555.565	M64 Conversion Kit	4222 2701 60
	HTT.9555.570	M68 Conversion Kit	4222 2701 61
	HTT.9555.573	M72 Conversion Kit	4222 2701 62
	HTT.9555.577	M76 Conversion Kit	4222 2701 63
No 6	HTT.9556.577	M76 Conversion Kit	4222 2600 38
	HTT.9556.582	M80 Conversion Kit	4222 2600 39
	HTT.9556.586	M85 Conversion Kit	4222 2600 41
	HTT.9556.591	M90 Conversion Kit	4222 2600 43
	HTT.9556.596	M95 Conversion Kit	4222 2600 45
	HTT.9556.501	M100 Conversion Kit	4222 2600 47

Imperial

Tool Ident	Item	Description	Ordering No.
No 1	HTT.9551.536	3/4" Conversion Kit	4222 2600 01
	HTT.9551.580	7/8" Conversion Kit	4222 2600 03
	HTT.9551.502	1" Conversion Kit	4222 2600 05
	HTT.9551.520	1 1/8" Conversion Kit	4222 2600 07
No 2	HTT.9552.520	1 1/8" Conversion Kit	4222 2600 12
	HTT.9552.516	1 1/4" Conversion Kit	4222 2600 09
	HTT.9552.540	1 3/8" Conversion Kit	4222 2600 14
	HTT.9552.511	1 1/2" Conversion Kit	4222 2600 16
	HTT.9553.514	1 1/2" Conversion Kit	4222 2600 18
No 3	HTT.9553.516	1 5/8" Conversion Kit	4222 2600 20
	HTT.9553.536	1 3/4" Conversion Kit	4222 2600 22
	HTT.9553.580	1 7/8" Conversion Kit	4222 2600 24
	HTT.9553.502	2" Conversion Kit	4222 2600 26
No 4	HTT.9554.580	1 7/8" Conversion Kit	4222 2600 28
	HTT.9554.502	2" Conversion Kit	4222 2600 30
	HTT.9554.516	2 1/4" Conversion Kit	4222 2600 32
	HTT.9554.511	2 1/2" Conversion Kit	4222 2600 35
No 5	HTT.9555.514	2 1/2" Conversion Kit	4222 2701 64
	HTT.9555.536	2 3/4" Conversion Kit	4222 2701 65
	HTT.9555.502	3" Conversion Kit	4222 2701 66
No 6	HTT.9556.502	3" Conversion Kit	4222 2600 37
	HTT.9556.516	3 1/4" Conversion Kit	4222 2600 40
	HTT.9556.511	3 1/2" Conversion Kit	4222 2600 42
	HTT.9556.536	3 3/4" Conversion Kit	4222 2600 44
	HTT.9556.542	4" Conversion Kit	4222 2600 46

LOAD CELL AND SEAL KITS ORDERING NUMBERS

Item	Description	Ordering No.
HTT.9551.000A	CTST No.1 Loadcell	8434 2200 69
HTT.9551.003.A	CTST No.1 Spare Seal Kit	4222 2700 26
HTT.9552.000A	CTST No.2 Loadcell	8434 2200 78
HTT.9552.003.A	CTST No.2 Spare Seal Kit	4222 2700 27
HTT.9553.000A	CTST No.3 Loadcell	8434 2200 88
HTT.9553.003.A	CTST No.3 Spare Seal Kit	4222 2700 28

Item	Description	Ordering No.
HTT.9554.000A	CTST No.4 Loadcell	8434 2200 99
HTT.9554.003.A	CTST No.4 Spare Seal Kit	4222 2700 29
HTT.9555.000A	CTST No.5 Loadcell	8434 2201 09
HTT.9555.003.A	CTST No.5 Spare Seal Kit	4222 2700 30
HTT.9556.000A	CTST No.6 Loadcell	8434 2201 24
HTT.9556.003.A	CTST No.6 Spare Seal Kit	4222 2700 31

TENTEC COMPACT 8

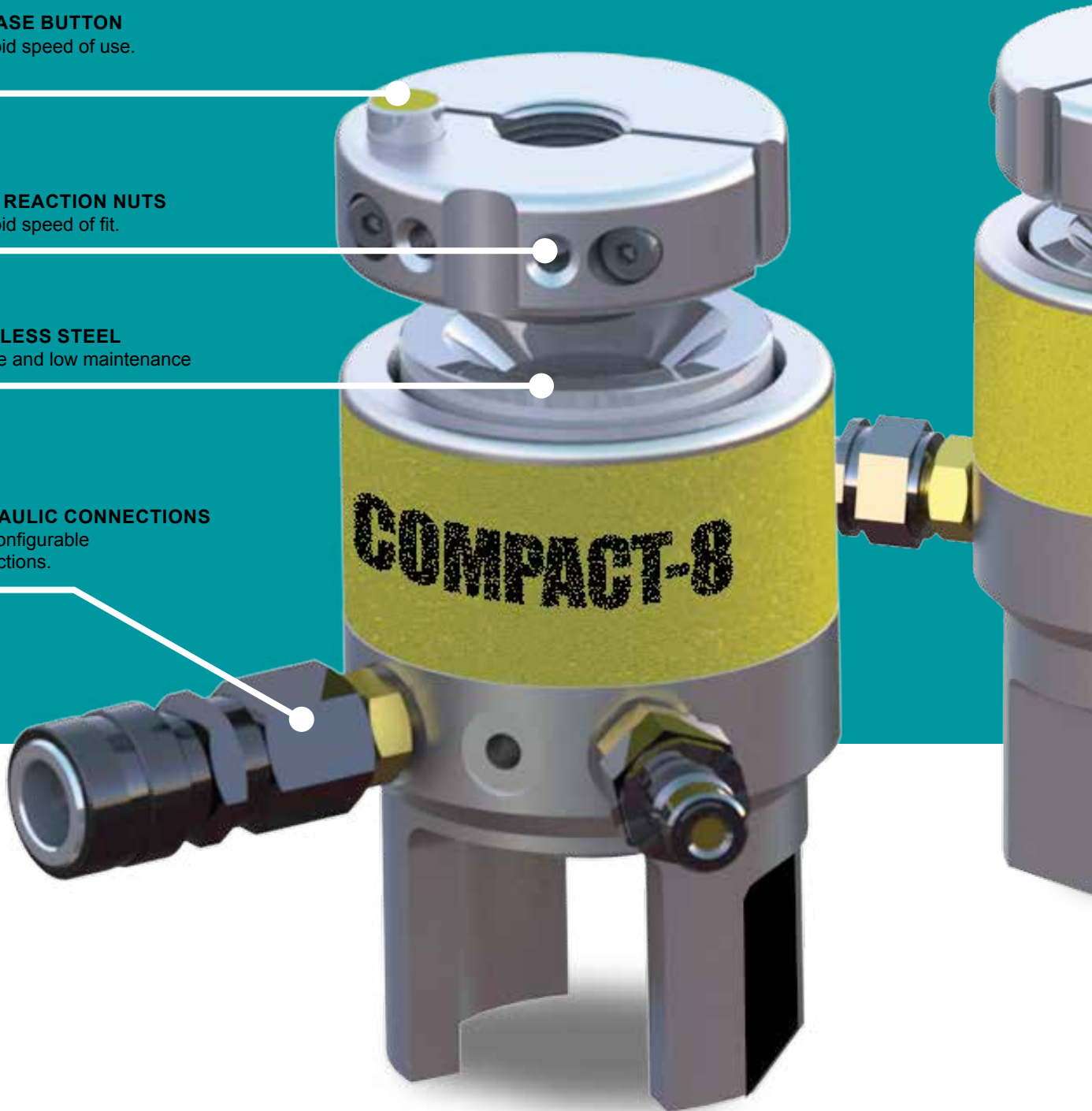
SUBSEA HYDRAULIC BOLT TENSIONER

RELEASE BUTTON
For rapid speed of use.

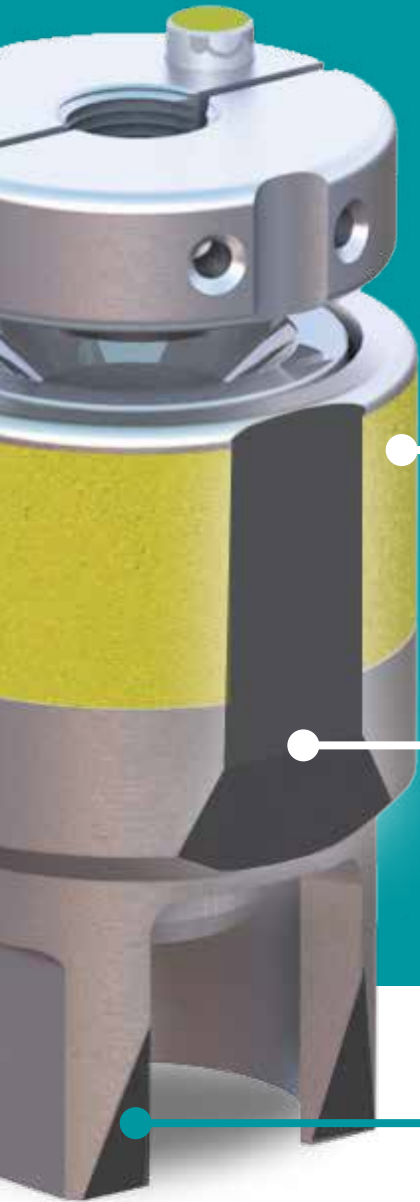
SPLIT REACTION NUTS
For rapid speed of fit.

STAINLESS STEEL
Durable and low maintenance

HYDRAULIC CONNECTIONS
User configurable
Connections.



Tentec COMPACT-8 range of subsea bolt tensioning tools brings a new generation of bolting solutions. Comprising just 8 bolt tensioning tools, the COMPACT-8 series is capable of tensioning most standard flanges and Compact flanges. The COMPACT-8 series is made from high strength stainless steel which greatly reduces maintenance work to a minimum after subsea use.



GRIP SURFACE
For easy diver handling.

REAR PROFILE
Rear profile machined for versatility.

VERSATILE
Side profile machined flats,
to clear the adjacent nut.

Tentec Compact 8
Tensioner Datasheet

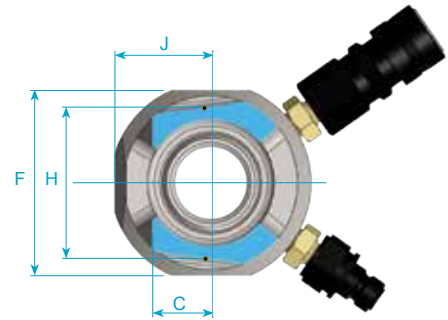
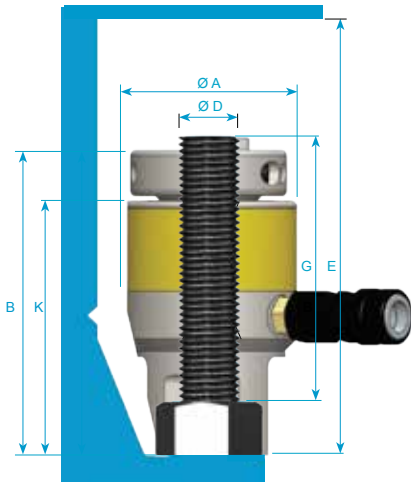


COMPACT 8 TECHNICAL DATA

Model	Bolt Dia		Tool Dia	Side Dia	Tool Height	Radial Dim'n	Max Initial Bolt Load	Hyd Area mm ²	Ram Stroke mm	Extra Stud Length	Headroom Dimension	AF	Radial Dim'n	Dim'n
	D	Thread Pitch	A	F	B	C	G			E	H	J	K	
	Inch		mm	mm	mm	mm	mm			mm	mm	mm	mm	mm
C8-00	0.75	UNC	66.0	66.0	123	20	190.21	1268.420	20	113.5	214.5	50.2	31.6	97.00
	0.875	UNC	66.0	66.0	123	20	190.21	1268.420	20	110.3	214.5	50.2	31.6	97.00
C8-01	1	8-UN	87.0	87.0	153	25	328.87	2193.020	30	137.1	270.5	65	41.5	127.00
	1.125	8-UN	87.0	87.0	153	25	328.87	2193.020	30	134.0	270.5	65	41.5	127.00
C8-02	1.25	8-UN	104.5	104.5	165	28	514.84	3433.170	30	142.8	286.5	82.5	50.15	135.00
	1.375	8-UN	104.5	104.5	165	28	514.84	3433.170	30	139.6	286.5	82.5	50.15	135.00
C8-03	1.5	8-UN	123.1	118.3	184.5	35	746.70	4979.300	30	155.9	321.5	90	59.1	150.50
	1.625	8-UN	123.1	118.3	184.5	35	746.70	4979.300	30	152.8	321.5	90	59.1	150.50
C8-04	1.75	8-UN	150.0	143.5	210.75	48	1177.31	7850.800	30	175.8	365.0	110	71.7	169.75
	1.875	8-UN	150.0	143.5	210.75	48	1177.31	7850.800	30	172.7	365.0	110	71.7	169.75
C8-05	2	8-UN	150.0	143.5	210.75	48	1177.31	7850.800	30	169.5	365.0	110	71.7	169.75
	2.25	8-UN	182.5	174.3	235.75	59	1904.04	12696.940	30	188.1	393.0	136	87.1	179.75
C8-06	2.5	8-UN	182.5	174.3	235.75	59	1904.04	12696.940	30	181.8	393.0	136	87.1	179.75
	2.75	8-UN	210.0	210.0	259.75	65	2542.11	16951.840	30	199.4	432.0	163.5	105	199.75
C8-07	3	8-UN	210.0	210.0	259.75	65	2542.11	16951.840	30	193.1	432.0	163.5	105	199.75
	3.25	8-UN	258.1	258.1	302.8	85	4059.32	27069.190	30	229.8	492.6	204	129	232.25
C8-07	3.5	8-UN	258.1	258.1	302.8	85	4059.32	27069.190	30	223.4	492.6	204	129	232.25
	3.75	8-UN	258.1	258.1	302.8	85	4059.32	27069.190	30	217.1	492.6	204	129	232.25

Model	Bolt Dia		Tool Dia	Side Dia	Tool Height	Radial Dim'n	Max Initial Bolt Load kN	Hyd Area mm ²	Ram Stroke mm	Extra Stud Length	Headroom Dimension	AF	Radial Dim'n	Dim'n
	D	Thread Pitch	A	F	B	C				G	E	H	J	K
	mm		mm	mm	mm	mm				mm	mm	mm	mm	mm
C8-01	24	3	87.0	87.0	153	25	328.87	2193.020	30	138	270	65	41.5	127.00
	27	3	87.0	87.0	153	25	328.87	2193.020	30	135	270	65	41.5	127.00
	30	3.5	87.0	87.0	153	25	328.87	2193.020	30	133.5	271.5	65	41.5	127.00
C8-02	33	3.5	104.5	104.5	165	28	514.84	3433.170	30	142.5	287.5	82.5	50.15	135.00
	36	4	104.5	104.5	165	28	514.84	3433.170	30	141	289	82.5	50.15	135.00
C8-03	39	4	123.1	118.3	184.5	35	746.70	4979.300	30	157.5	324	90	59.1	150.50
	42	4.5	123.1	118.3	184.5	35	746.70	4979.300	30	156	325.5	90	59.1	150.50
C8-04	45	4.5	150.0	143.5	210.8	48	1177.31	7850.800	30	179.25	369	110	71.7	169.75
	48	5	150.0	143.5	210.8	48	1177.31	7850.800	30	177.75	370.5	110	71.7	169.75
C8-05	52	5	150.0	143.5	210.8	48	1177.31	7850.800	30	173.75	370.5	110	71.7	169.75
	56	5.5	182.5	174.3	235.8	59	1904.04	12696.940	30	196.25	400	136	87.1	179.75
C8-06	60	5.5	182.5	174.3	235.8	59	1904.04	12696.940	30	192.25	400	136	87.1	179.75
	64	6	182.5	174.3	235.8	59	1904.04	12696.940	30	189.75	401.5	136	87.1	179.75
C8-07	68	6	210.0	210.0	259.8	65	2542.11	16951.840	30	209.75	440.5	163.5	105	199.75
	72	6	210.0	210.0	259.8	65	2542.11	16951.840	30	205.75	440.5	163.5	105	199.75
C8-07	76	6	210.0	210.0	259.8	65	2542.11	16951.840	30	201.75	440.5	163.5	105	199.75
	80	6	258.1	258.1	302.8	85	4059.32	27069.190	30	240.8	501.05	204	129	232.25
	85	6	258.1	258.1	302.8	85	4059.32	27069.190	30	235.8	501.05	204	129	232.25
C8-07	90	6	258.1	258.1	302.8	85	4059.32	27069.190	30	230.8	501.05	204	129	232.25
	95	6	258.1	258.1	302.8	85	4059.32	27069.190	30	225.8	501.05	204	129	232.25

COMPACT 8 ORDERING NUMBERS



Technical Specification

Maximum Working Pressure = 1500bar : 21750psi
 Maximum ram stroke = (Tools 01 to 07): 30mm : 1.181"
 Maximum ram stroke = (Tool 00): 20mm : 0.787"

Item	Description	Ordering No.
HTT.9700.102.A	No.0 Compact-8 Spare Seal Kit	4222 2700 04
HTT.9700.000.A	No.0 Compact-8 Subsea Loadcell	8434 2200 54
HTT.9701.102.A	No.1 Compact-8 Spare Seal Kit	4222 2700 05
HTT.9701.000.A	No.1 Compact-8 Subsea Loadcell	8434 2200 55
HTT.8824.500.A	No.1 Split Nut - 1" Thread	8434 2200 18
HTT.8824.501.A	No.1 Split Nut - 1.1/8" Thread	8434 2200 19
HTT.8824.510.A	No.1 Split Nut - M24 Thread	8434 2200 20
HTT.8824.511.A	No.1 Split Nut - M27 Thread	8434 2200 21
HTT.8824.512.A	No.1 Split Nut - M30 Thread	8434 2200 22
HTT.9702.102.A	No.2 Compact-8 Spare Seal Kit	4222 2700 06
HTT.9702.000.A	No.2 Compact-8 Subsea Loadcell	8434 2200 56
HTT.8825.500.A	No.2 Split Nut - 1.1/4" Thread	8434 2200 23
HTT.8825.501.A	No.2 Split Nut - 1.3/8" Thread	8434 2200 24
HTT.8825.510.A	No.2 Split Nut - M33 Thread	8434 2200 25
HTT.8825.511.A	No.2 Split Nut - M36 Thread	8434 2200 26
HTT.9703.102.A	No.3 Compact-8 Spare Seal Kit	4222 2700 07
HTT.9703.000.A	No.3 Compact-8 Subsea Loadcell	8434 2200 57
HTT.8826.500.A	No.3 Split Nut - 1.1/2" Thread	8434 2200 27
HTT.8826.510.A	No.3 Split Nut - M39 Thread	8434 2200 29
HTT.8826.511.A	No.3 Split Nut - M42 Thread	8434 2200 30
HTT.8826.501.A	No.3 Split Nut 1.5/8" Thread	8434 2200 28
HTT.9704.102.A	No.4 Compact-8 Spare Seal Kit	4222 2700 08
HTT.9704.000.A	No.4 Compact-8 Subsea Loadcell	8434 2200 58
HTT.8827.500.A	No.4 Split Nut - 1.3/4" Thread	8434 2200 31
HTT.8827.501.A	No.4 Split Nut - 1.7/8" Thread	8434 2200 32

Item	Description	Ordering No.
HTT.8827.502.A	No.4 Split Nut - 2" Thread	8434 2200 33
HTT.8827.510.A	No.4 Split Nut - M45 Thread	8434 2200 34
HTT.8827.511.A	No.4 Split Nut - M48 Thread	8434 2200 35
HTT.8827.512.A	No.4 Split Nut - M52 Thread	8434 2200 36
HTT.9705.102.A	No.5 Compact-8 Spare Seal Kit	4222 2700 09
HTT.9705.000.A	No.5 Compact-8 Subsea Loadcell	8434 2200 59
HTT.8828.501.A	No.5 Split Nut - 2.1/2" Thread	8434 2200 38
HTT.8828.500.A	No.5 Split Nut - 2.1/4" Thread	8434 2200 37
HTT.8828.510.A	No.5 Split Nut - M56 Thread	8434 2200 39
HTT.8828.511.A	No.5 Split Nut - M60 Thread	8434 2200 40
HTT.8828.512.A	No.5 Split Nut - M64 Thread	8434 2200 41
HTT.9706.102.A	No.6 Compact-8 Spare Seal Kit	4222 2700 10
HTT.9706.000.A	No.6 Compact-8 Subsea Loadcell	8434 2200 60
HTT.8829.500.B	No.6 Split Nut - 2.3/4" Thread	8434 2200 42
HTT.8829.501.B	No.6 Split Nut - 3" Thread	8434 2200 43
HTT.8829.510.B	No.6 Split Nut - M68 Thread	8434 2200 44
HTT.8829.511.B	No.6 Split Nut - M72 Thread	8434 2200 45
HTT.8829.512.B	No.6 Split Nut - M76 Thread	8434 2200 46
HTT.9707.102.A	No.7 Compact-8 Spare Seal Kit	4222 2700 11
HTT.9707.000.A	No.7 Compact-8 Subsea Loadcell	8434 2200 61
HTT.8830.501.B	No.7 Split Nut - 3.1/2" Thread	8434 2200 48
HTT.8830.500.B	No.7 Split Nut - 3.1/4" Thread	8434 2200 47
HTT.8830.502.A	No.7 Split Nut - 3.3/4" Thread	8434 2200 49
HTT.8830.510.B	No.7 Split Nut - M80 Thread	8434 2200 50
HTT.8830.511.B	No.7 Split Nut - M85 Thread	8434 2200 51
HTT.8830.512.B	No.7 Split Nut - M90 Thread	8434 2200 52
HTT.8830.513.A	No.7 Split Nut - M95 Thread	8434 2200 53

You can order Compact-8 tensioners using the table above. There are also many different configurations available for our Compact-8 subsea bolt tensioners. For a custom hydraulic bolt tensioner quote, see page 38.

TENTEC WTB

WIND TURBINE HYDRAULIC BOLT TENSIONER

AUTOMATIC RESET

Internal heavy duty springs automatically resets the tensioner once the pressure has been released.

HIGH LIFE PULLER

All Aero WTB tensioners have a device that ensures the tool fails safely in the unlikely event of a puller failure.

“SNAP DOWN” NUT DRIVE

To increase speed all Aero WTB tensioners are fitted with a spring loaded device that automatically engages the tensioner drive socket with the hexagon nut.



These feature-packed tensioners have been designed with rapid tensioning in mind and offer a safe, reliable and consistent method of simultaneously tensioning many bolts.



GRIP SURFACE
For easy user handling.

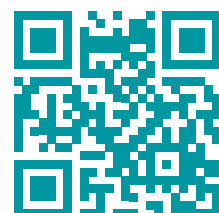
OPTIONAL CYCLE COUNTER
For maintenance scheduling purposes all Aero WTB Tools offer an optional mechanical pressure cycle counter.

SWIVEL CONNECTION
360° swivel operation allows the hydraulic hoses to be positioned in the best possible position to allow open access to the tensioning tools.

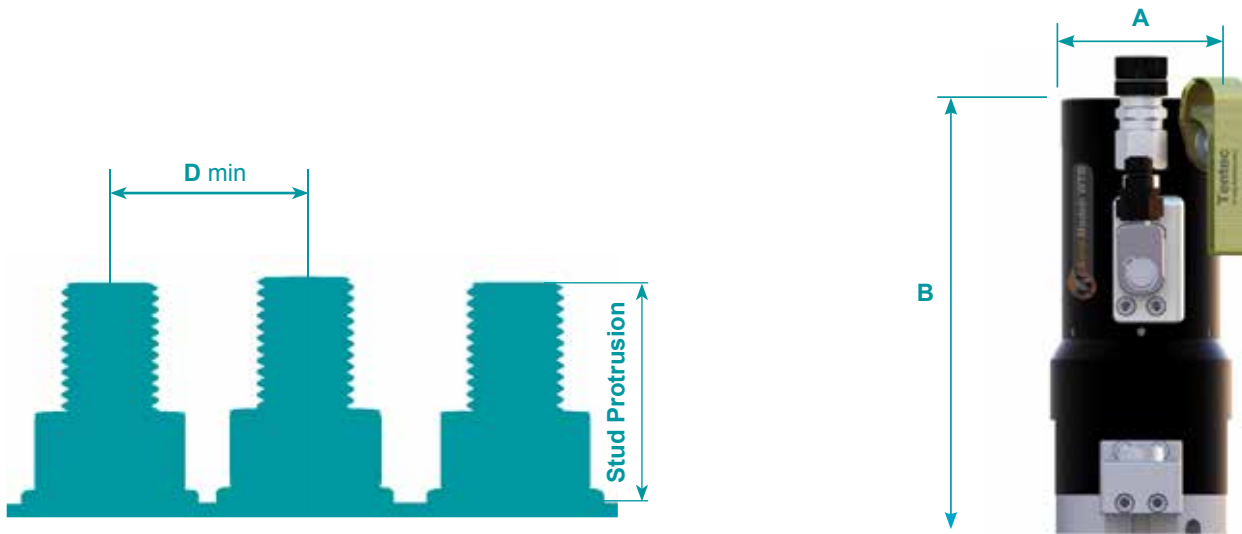
GEARED NUT RUN DOWN
The inclusion of a gear nut run-down mechanism offers a very rapid and consistent way of seating the hexagon nuts during the tensioning procedure.

BEST FIT
The interchangeable profile cut spacer at the base of the tool gives the tensioner the flexibility to be used on many different applications.

Tentec WTB
Tensioner Datasheet



AERO WTB TECHNICAL DATA



Model	Bolt Diameter	Stud Protrusion (Mm)		Max Stroke	Maximum Load		Hydraulic Pressure Area		Dia A	Height B	D	Weight
		min	max		mm	kN	lbs	mm2				
WTB30	M30	59	69	8	465.38	104622	3447.21	5.343	72	205	64	6.16
WTB33	M33	64	73	10	575.80	129444	4265.09	6.611	79	217.5	71	7.24
WTB36	M36	71	81	10	678.26	152478	5024.05	7.787	84.5	229.5	77	8.75
WTB39	M39	76	86	10	810.58	182225	6004.20	9.307	92	263	83	11.12
WTB42	M42	83	93	10	929.67	208999	6886.37	10.674	97	262.5	95	12.75
WTB45	M45	88	98	10	1079.48	242682	7996.12	12.394	105	275.5	94.5	15.86
WTB48	M48	94	104	10	1221.57	274620	9048.67	14.025	111	286.5	100.5	17.84
WTB56	M56	110	120	10	1686.19	379070	12490.29	19.359	132	314	115	26.5
WTB64	M64	124	134	10	2221.00	499300	16461.30	25.515	150	352	124	35

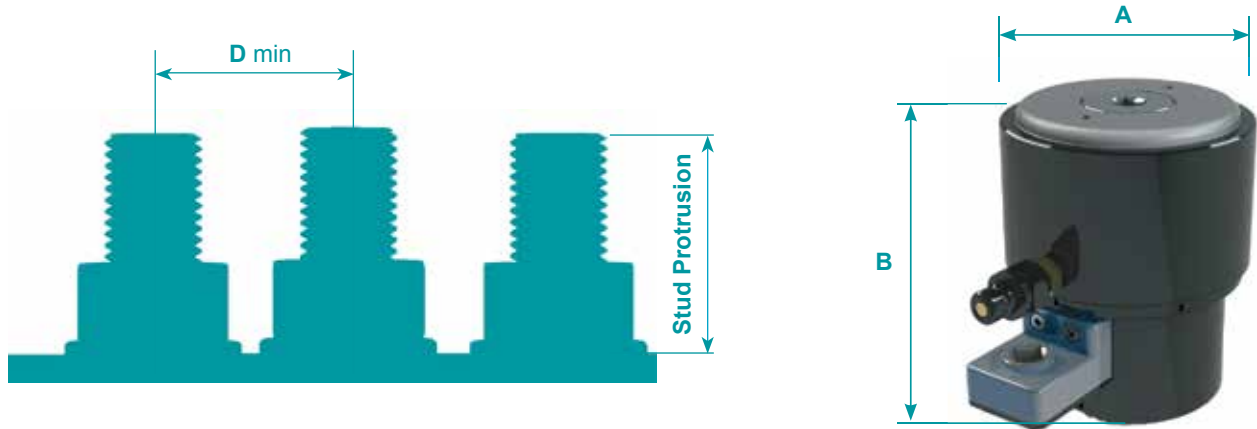
WTB TENSIONER ORDERING NUMBERS

Model	Description	Ordering No.
M30 – HTT.8010.000	M30 Blade Tensioner	8434 2200 62
M33 – HTT.8011.000	M33 Blade Tensioner	8434 2200 63
M36 – HTT.8012.000	M36 Blade Tensioner	8434 2200 64
M39 – HTT.8013.000	M39 Blade Tensioner	8434 2200 65
M42 – HTT.8014.000	M42 Blade Tensioner	8434 2200 66
M45 – HTT.8015.000	M45 Blade Tensioner	8434 2200 67
M48 – HTT.8016.000	M48 Blade Tensioner	8434 2200 68
M56 – HTT.9185.000	M56 Blade Tensioner	8434 2203 50
M64 – HTT.13153.000	M64 Blade Tensioner	8434 2203 51

WTB SPARE SEAL KIT ORDERING NUMBERS

Model	Description	Ordering No.
HTT.8010	WTB Spare Seal kit	4222 2700 12
HTT.8011	WTB Spare Seal kit	4222 2700 13
HTT.8012	WTB Spare Seal kit	4222 2700 14
HTT.8013	WTB Spare Seal kit	4222 2700 15
HTT.8014	WTB Spare Seal kit	4222 2700 16
HTT.8015	WTB Spare Seal kit	4222 2700 17
HTT.8016	WTB Spare Seal kit	4222 2700 18
HTT.9185	WTB Spare Seal kit	4222 2701 16
HTT.13153	WTB Spare Seal kit	4222 2701 17
HTT.8314	WTBLH Spare Seal kit	4222 2701 18
HTT.13153	WTBLH Spare Seal kit	4222 2701 19

AERO WTB-LOW HEIGHT TECHNICAL DATA



Model	Bolt Diameter	Stud Protrusion (Mm)		Max Stroke	Maximum Load		Hydraulic Pressure		Dia A	Height B	D	Weight
		min	max		mm	lbs	mm2	in2				
WTBLH36	M36	71	91	10	678.14	152452	5023.4	7.79	123	167.5	-	9.97
WTBLH42	M42	83	103	10	930.15	209106	6889.96	10.68	142.5	181.3	-	13.94

WTB-LH ORDERING NUMBERS

Model	Description	Ordering No.
M36-HTT.8314	M36 Low Height Tensioner	8434 2203 52
M42- HTT.8315	M42 Low Height Tensioner	8434 2203 53



"Snap Down" Nut Drive



Automatic Reset



Best Fit

You can order a from our standard wind turbine base tensioners but there are many different configurations available for our WTB tensioners. For a custom hydraulic bolt tensioner quote, see page 38.

TENTEC WTF

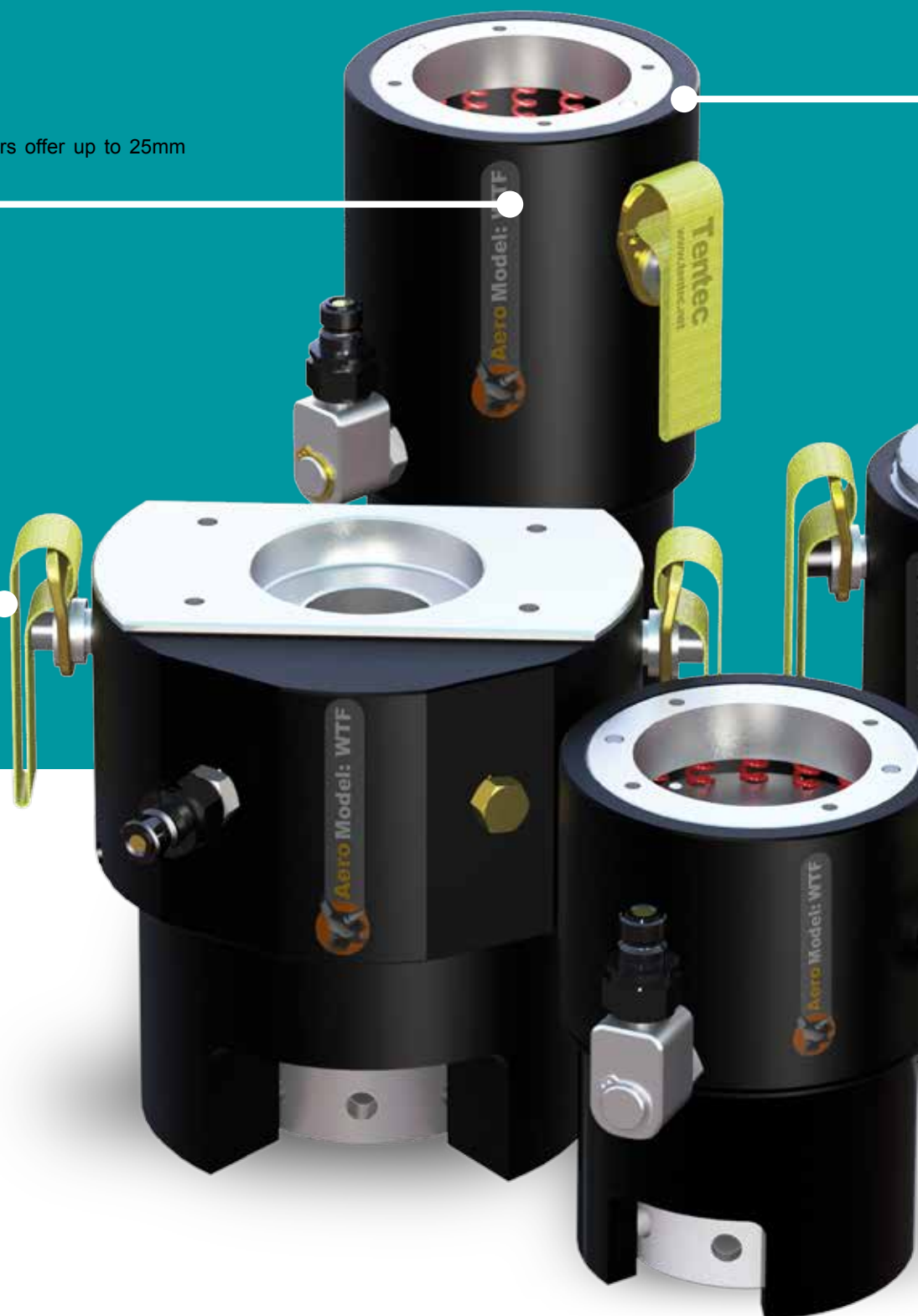
WIND TURBINE FOUNDATION HYDRAULIC BOLT TENSIONER

LONG PISTON STROKE

The Aero WTF range of tensioners offer up to 25mm piston/ram stroke capability.

HANDLING STRAPS

For easy user handling in tight areas.



Tentec wind turbine foundation tensioning tools can be supplied to suit many different All Thread Bars and the more conventionally ISO metric and Imperial Unified thread forms. These feature packed tensioners have been designed with rapid tensioning in mind and offer a safe, reliable and consistent method to simultaneously tension many foundation bolts.

SEAL RELIABILITY

Class leading high pressure seal technology.

SWIVEL CONNECTION

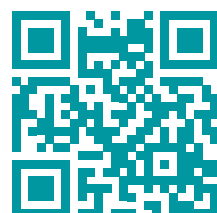
360° swivel operation allows the hydraulic hoses to be positioned in the best possible position to allow open access to the tensioning tools.

GEARED NUT RUN DOWN

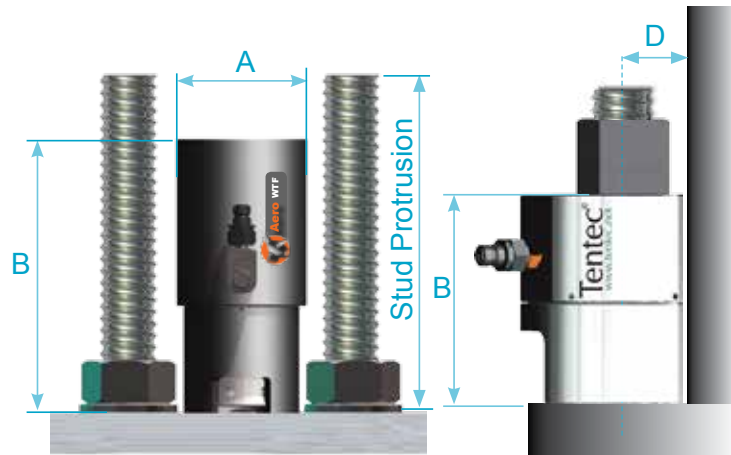
The inclusion of a gear nut run-down mechanism offers a very rapid and consistent way of seating the hexagon nuts during the tensioning procedure.



Tentec WTB
Tensioner Datasheet



AERO WTF TECHNICAL DATA



75 KSI - All Thread Bar

Tool Ident	Foundation Bolt Type	Gear Box	Stud Protrusion (mm)		Max Stroke mm	Maximum Load		Hydraulic Pressure Area		Dia A mm	Height B mm	D mm	Weight kg
			#10	#11		kN	lbs	mm2	In2				
WTF-8041	Grade 75ksi AllThread	Y	260	257	25	472.6	106244.7	3500.72	5.426	110	231	56	10.84
WTF-8148	Grade 75ksi AllThread	N	260	257	25	472.6	106244.7	3500.72	5.426	110	231	56	10.47
WTF-8040	Grade 75ksi AllThread	Y	200	197	10	472.6	106244.7	3500.72	5.426	108	158	55	7.06
WTF-8147	Grade 75ksi AllThread	N	200	197	10	472.6	106244.7	3500.72	5.426	108	158	55	6.69
WTF-7566 Elliptical	Grade 75ksi AllThread	N	205	198	10	469.3	105502.8	3128.83	4.85	142	144	41	10

150 KSI - All Thread Bar

Tool Ident	Foundation Bolt Type	Gear Box	Stud Protrusion (mm)	Max Stroke mm	Maximum Load		Hydraulic Pressure Area		Dia A mm	Height B mm	D mm	Weight kg	
					kN	lbs	mm2	In2					
WTF-8342	Grade 150ksi AllThread	Y	270	275	25	762.45	171404.8	5647.79	8.754	125	245	63.5	14.34
WTF-8343	Grade 150ksi AllThread	N	270	275	25	762.45	171404.8	5647.79	8.754	125	245	63.5	14.34
WTF-8340	Grade 150ksi AllThread	Y	215	223	10	762.45	171404.8	5647.79	8.754	123	175	62.5	9.72
WTF-8341	Grade 150ksi AllThread	N	215	223	10	762.45	171404.8	5647.79	8.754	123	175	62.5	9.72

Metric Coarse Threads

Tool Ident	Foundation Bolt Type	Gear Box	Stud Protrusion (mm)		Max Stroke mm	Maximum Load		Hydraulic Pressure Area		Dia A mm	Height B mm	D mm	Weight kg
			Max	Min		kN	lbs	mm2	In2				
WTF-9753	M36x4	Y	250	190	15	579.8	130344	3866	5.992	108	210	50.6	10.27
WTF-9426	M42x4.5	Y	250	199	15	788	177078	5251	8.139	124	210	62	13.25

AERO WTF ORDERING NUMBERS

Aero Foundation tensioners come in four basic types.

- 1 Long Piston Stroke Tensioner
- 2 Metric Thread Tensioner
- 3 Short Piston Stroke Tensioner
- 4 Elliptical Tensioner



Tool Ident	Foundation Bolt Type	Ordering No.
75 KSI - AllThread Bar		
WTF-8041	Grade 75ksi AllThread	8434 2203 54
WTF-8148	Grade 75ksi AllThread	8434 2203 55
WTF-8040	Grade 75ksi AllThread	8434 2203 56
WTF-8147	Grade 75ksi AllThread	8434 2203 57
WTF-7566 Elliptical	Grade 75ksi AllThread	8434 2203 58
150 KSI - AllThread Bar		
WTF-8342	Grade 150ksi AllThread	8434 2203 59
WTF-8343	Grade 150ksi AllThread	8434 2203 60
WTF-8340	Grade 150ksi AllThread	8434 2203 61
WTF-8341	Grade 150ksi AllThread	8434 2203 62
Metric Coarse Threads		
WTF-9753	M36x4	8434 2203 63
WTF-9426	M42x4.5	8434 2203 64

WTF SPARE SEALS ORDERING NUMBERS

Model	Description	Ordering No.
WTF-8041	WTF Spare Seals	4222 2701 41
WTF-8148	WTF Spare Seals	4222 2701 42
WTF-8040	WTF Spare Seals	4222 2701 43
WTF-8147	WTF Spare Seals	4222 2701 44
WTF-7566 Elliptical	WTF Spare Seals	4222 2701 45
WTF-8342	WTF Spare Seals	4222 2701 46
WTF-8343	WTF Spare Seals	4222 2701 47
WTF-8340	WTF Spare Seals	4222 2701 48
WTF-8341	WTF Spare Seals	4222 2701 49
WTF-9753	WTF Spare Seals	4222 2701 50
WTF-9426	WTF Spare Seals	4222 2701 51

You can order from our standard WTF wind turbine foundation tensioners using the table above. There are many different configurations available. For a custom hydraulic bolt tensioner quote, see page 38.

TENTEC HYDRAULIC NUTS

TOP COLLAR AND BOTTOM COLLAR MODELS

HYDRAULIC CONNECTIONS

User configurable quick release connections. Side and top connections available.

NUT BODY

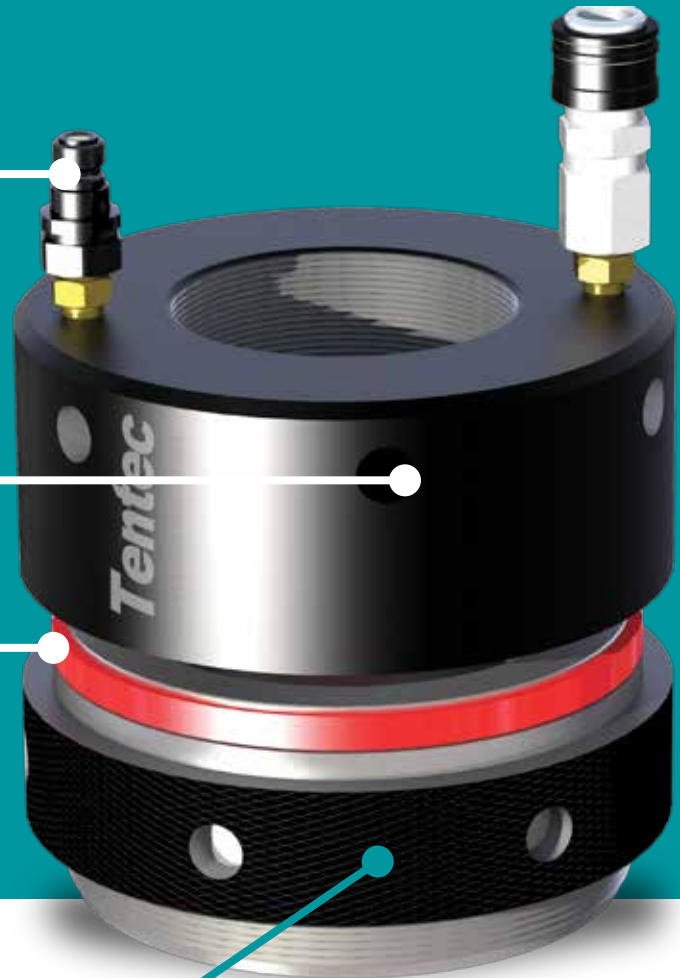
Designed with considerable allowable piston movement.

HYDRAULIC SEALS

Proven seal technology ensures many thousands of tool pressure cycles.

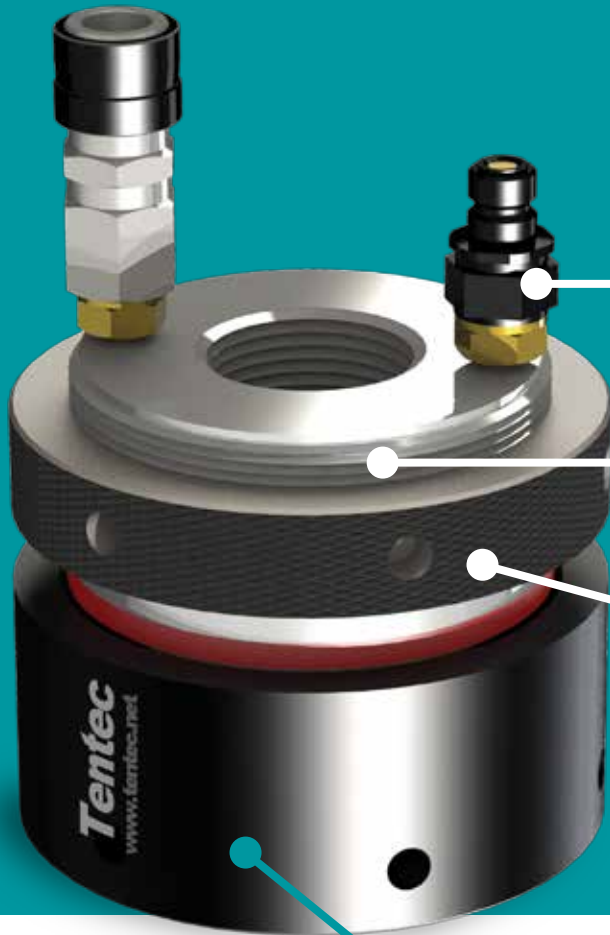
LOAD RETAINING COLLAR

The tension is permanently retained by means of the load retaining collar.



**BOTTOM
COLLAR**

Tentec Hydraulic Nuts offer an extremely rapid and simple method of simultaneously accurately tensioning every bolt on a bolted joint. Hydraulic Nuts become a permanent part of the bolted joint and remain on the joint after the bolt load has been generated.



HYDRAULIC CONNECTIONS

User configurable quick release connections. Side and top connections available.

THREADED PISTON

Interfaces with the load collar to retain bolt load.

LOAD RETAINING COLLAR

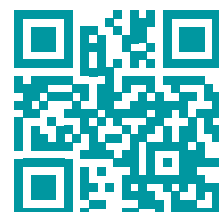
The tension is permanently retained by means of the load retaining collar.

TOP COLLAR

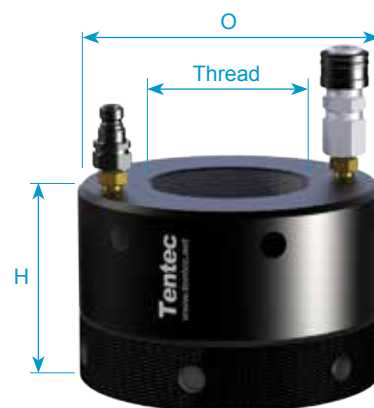
NUT BODY

Designed with considerable allowable piston movement.

Tentec Hydraulic Nuts
Datasheet



BOTTOM COLLAR TECHNICAL DATA



Model		Thread		Bolt Load		O	H	S	Ordering No.	
Inch	Metric	Inches	Metric	kN	Tons	mm	mm	mm	Imperial	Metric
BCHN:0875	BCHN:0022	7/8	M22	190	19.1	54	48	5	8434 2202 64	8434 2202 86
BCHN:1000	BCHN:0024	1"	M24	205	20.6	57	44	5	8434 2202 65	8434 2202 87
BCHN:1125	BCHN:0027	1 1/8	M27	220	22.1	60	48	5	8434 2202 66	8434 2202 88
	BCHN:0030		M30							8434 2200 09
BCHN:1250	BCHN:0033	1 1/4	M33	265	26.6	67	51	5	8434 2202 67	8434 2202 89
BCHN:1375	BCHN:0036	1 3/8	M36	325	32.6	73	54	6	8434 2202 68	8434 2200 08
BCHN:1500	BCHN:0039	1 1/2	M39	373	37.5	78	56	6	8434 2202 69	8434 2202 90
BCHN:1625	BCHN:0042	1 5/8	M42	424	42.6	83	58	6	8434 2202 70	8434 2200 07
BCHN:1750	BCHN:0045	1 3/4	M45	445	44.6	86	60	6	8434 2202 71	8434 2202 91
BCHN:1875	BCHN:0048	1 7/8	M48	523	52.5	93	70	8	8434 2202 72	8434 2202 92
BCHN:2000	BCHN:0052	2	M52	629	63.1	102	71	8	8434 2202 73	8434 2202 93
BCHN:2250	BCHN:0056	2 1/4	M56	781	78.3	112	75	8	8434 2202 74	8434 2202 94
BCHN:2500	BCHN:0064	2 1/2	M64	941	94.4	124	86	8	8434 2202 75	8434 2202 95
BCHN:2750	BCHN:0068	2 3/4	M68	1042	104.5	131	90	8	8434 2202 76	8434 2202 96
BCHN:3000	BCHN:0072	3	M72	1246	125.1	144	94	10	8434 2202 77	8434 2202 97
BCHN:3250	BCHN:0080	3 1/4	M80	1607	161.3	159	104	10	8434 2202 78	8434 2202 98
BCHN:3500	BCHN:0090	3 1/2	M90	2027	203.4	176	114	10	8434 2202 79	8434 2202 99
BCHN:3750	BCHN:0095	3 3/4	M95	2160	216.7	182	118	10	8434 2202 80	8434 2203 00
BCHN:4000	BCHN:0100	4	M100	2466	247.5	200	124	15	8434 2202 81	8434 2203 01
BCHN:4500	BCHN:0110	4 1/2	M110	2814	282.4	215	136	15	8434 2202 82	8434 2203 02
BCHN:5000	BCHN:0125	5	M125	3820	383.4	244	148	15	8434 2202 83	8434 2203 03
BCHN:5500	BCHN:0140	5 1/2	M140	4954	497.1	272	164	15	8434 2202 84	8434 2203 04
BCHN:6000	BCHN:0150	6	M150	5655	567.5	290	176	15	8434 2202 85	8434 2203 05

HYDRAULIC NUT SEAL ORDERING NUMBERS

Ordering No.	Item imperial	Thread		Item metric	Ordering No.
		Inches	metric		
4222 2700 32	BCHN:0875	7/8"	M22	BCHN:0022	4222 2700 52
4222 2701 58	BCHN:1000	1"	M24	BCHN:0024	4222 2700 53
4222 2701 59	BCHN:1125	1 1/8"	M27	BCHN:0027	4222 2700 54
			M30	BCHN:0030	4222 2700 03
4222 2700 33	BCHN:1250	1 1/4"	M33	BCHN:0033	4222 2700 55
4222 2700 34	BCHN:1375	1 3/8"	M36	BCHN:0036	4222 2700 02
4222 2700 35	BCHN:1500	1 1/2"	M39	BCHN:0039	4222 2700 56
4222 2700 36	BCHN:1625	1 5/8"	M42	BCHN:0042	4222 2700 01
4222 2700 37	BCHN:1750	1 3/4"	M45	BCHN:0045	4222 2700 57
4222 2700 38	BCHN:1875	1 7/8"	M48	BCHN:0048	4222 2700 58
4222 2700 39	BCHN:2000	2"	M52	BCHN:0052	4222 2700 59
4222 2700 40	BCHN:2250	2 1/4"	M56	BCHN:0056	4222 2700 60

Ordering No.	Item imperial	Thread		Item metric	Ordering No.
		Inches	metric		
4222 2700 41	BCHN:2500	2 1/2"	M64	BCHN:0064	4222 2700 61
4222 2700 42	BCHN:2750	2 3/4"	M68	BCHN:0068	4222 2700 62
4222 2700 43	BCHN:3000	3"	M72	BCHN:0072	4222 2700 63
4222 2700 44	BCHN:3250	3 1/4"	M80	BCHN:0080	4222 2700 64
4222 2700 45	BCHN:3500	3 1/2"	M90	BCHN:0090	4222 2700 65
4222 2700 46	BCHN:3750	3 3/4"	M95	BCHN:0095	4222 2700 66
4222 2700 47	BCHN:4000	4"	M100	BCHN:0100	4222 2700 67
4222 2700 48	BCHN:4500	4 1/2"	M110	BCHN:0110	4222 2700 68
4222 2700 49	BCHN:5000	5"	M125	BCHN:0125	4222 2700 69
4222 2700 50	BCHN:5500	5 1/2"	M140	BCHN:0140	4222 2700 70
4222 2700 51	BCHN:6000	6"	M150	BCHN:0150	4222 2700 71

TOP COLLAR TECHNICAL DATA



Model		Thread		Bolt Load		O	H	Ram Stroke	Ordering No.	
Inch	Metric	Inches	Metric	kN	Tons	mm	mm	mm	Imperial	Metric
TCHN:0875	TCHN:0022	7/8	M22	190	19.1	54	40	5	8434 2203 06	8434 2203 28
TCHN:1000	TCHN:0024	1	M24	205	20.6	57	44	5	8434 2203 07	8434 2203 29
TCHN:1125	TCHN:0027	1 1/8	M27	220	22.1	60	46	5	8434 2203 08	8434 2203 30
TCHN:1250	TCHN:0033	1 1/4	M33	265	26.6	67	48	5	8434 2203 09	8434 2203 31
TCHN:1375	TCHN:0036	1 3/8	M36	325	32.6	73	52	6	8434 2203 10	8434 2203 32
TCHN:1500	TCHN:0039	1 1/2	M39	373	37.5	78	56	6	8434 2203 11	8434 2203 33
TCHN:1625	TCHN:0042	1 5/8	M42	424	42.6	83	58	6	8434 2203 12	8434 2203 34
TCHN:1750	TCHN:0045	1 3/4	M45	445	44.6	86	60	6	8434 2203 13	8434 2203 35
TCHN:1875	TCHN:0048	1 7/8	M48	523	52.5	93	64	8	8434 2203 14	8434 2203 36
TCHN:2000	TCHN:0052	2	M52	629	63.1	102	72	8	8434 2203 15	8434 2203 37
TCHN:2250	TCHN:0056	2 1/4	M56	781	78.3	112	75	8	8434 2203 16	8434 2203 38
TCHN:2500	TCHN:0064	2 1/2	M64	941	94.4	124	81	8	8434 2203 17	8434 2203 39
TCHN:2750	TCHN:0068	2 3/4	M68	1042	104.5	131	89	8	8434 2203 18	8434 2203 40
TCHN:3000	TCHN:0072	3	M72	1246	125.1	144	96	10	8434 2203 19	8434 2203 41
TCHN:3250	TCHN:0080	3 1/4	M80	1607	161.3	159	104	10	8434 2203 20	8434 2203 42
TCHN:3500	TCHN:0090	3 1/2	M90	2027	203.4	176	114	10	8434 2203 21	8434 2203 43
TCHN:3750	TCHN:0095	3 3/4	M95	2160	216.7	182	117	10	8434 2203 22	8434 2203 44
TCHN:4000	TCHN:0100	4	M100	2466	247.5	200	126	15	8434 2203 23	8434 2203 45
TCHN:4500	TCHN:0110	4 1/2	M110	2814	282.4	215	138	15	8434 2203 24	8434 2203 46
TCHN:5000	TCHN:0125	5	M125	3820	383.4	244	150	15	8434 2203 25	8434 2203 47
TCHN:5500	TCHN:0140	5 1/2	M140	4954	497.1	272	168	15	8434 2203 26	8434 2203 48
TCHN:6000	TCHN:0150	6	M150	5655	567.5	290	174	15	8434 2203 27	8434 2203 49

HYDRAULIC NUT SEAL ORDERING NUMBERS

Ordering No.	Item imperial	Thread		Item metric	Ordering No.
		Inches	metric		
4222 2700 72	TCHN:0875	7/8"	M22	TCHN:0022	4222 2700 94
4222 2700 73	TCHN:1000	1"	M24	TCHN:0024	4222 2700 95
4222 2700 74	TCHN:1125	1 1/8"	M27	TCHN:0027	4222 2700 96
4222 2700 75	TCHN:1250	1 1/4"	M33	TCHN:0033	4222 2700 97
4222 2700 76	TCHN:1375	1 3/8"	M36	TCHN:0036	4222 2700 98
4222 2700 77	TCHN:1500	1 1/2"	M39	TCHN:0039	4222 2700 99
4222 2700 78	TCHN:1625	1 5/8"	M42	TCHN:0042	4222 2701 00
4222 2700 79	TCHN:1750	1 3/4"	M45	TCHN:0045	4222 2701 01
4222 2700 80	TCHN:1875	1 7/8"	M48	TCHN:0048	4222 2701 02
4222 2700 81	TCHN:2000	2"	M52	TCHN:0052	4222 2701 03
4222 2700 82	TCHN:2250	2 1/4"	M56	TCHN:0056	4222 2701 04

Ordering No.	Item imperial	Thread		Item metric	Ordering No.
		Inches	metric		
4222 2700 83	TCHN:2500	2 1/2"	M64	TCHN:0064	4222 2701 05
4222 2700 84	TCHN:2750	2 3/4"	M68	TCHN:0068	4222 2701 06
4222 2700 85	TCHN:3000	3"	M72	TCHN:0072	4222 2701 07
4222 2700 86	TCHN:3250	3 1/4"	M80	TCHN:0080	4222 2701 08
4222 2700 87	TCHN:3500	3 1/2"	M90	TCHN:0090	4222 2701 09
4222 2700 88	TCHN:3750	3 3/4"	M95	TCHN:0095	4222 2701 10
4222 2700 89	TCHN:4000	4"	M100	TCHN:0100	4222 2701 11
4222 2700 90	TCHN:4500	4 1/2"	M110	TCHN:0110	4222 2701 12
4222 2700 91	TCHN:5000	5"	M125	TCHN:0125	4222 2701 13
4222 2700 92	TCHN:5500	5 1/2"	M140	TCHN:0140	4222 2701 14

Order from standard configurations on the table above. For a custom tensioner quote, see page 38.

TENTEC FORCE10

SPRING RETURN TENSIONER

THREAD INSERT

Heavy duty integrated springs assist automatic piston reset. Reduces operation time between pressure cycles.



BRIDGE

Machine profiled rotatable Bridge component. Convert tool from one bolt size to another size within the tool range. Forms part of the Conversion Kit

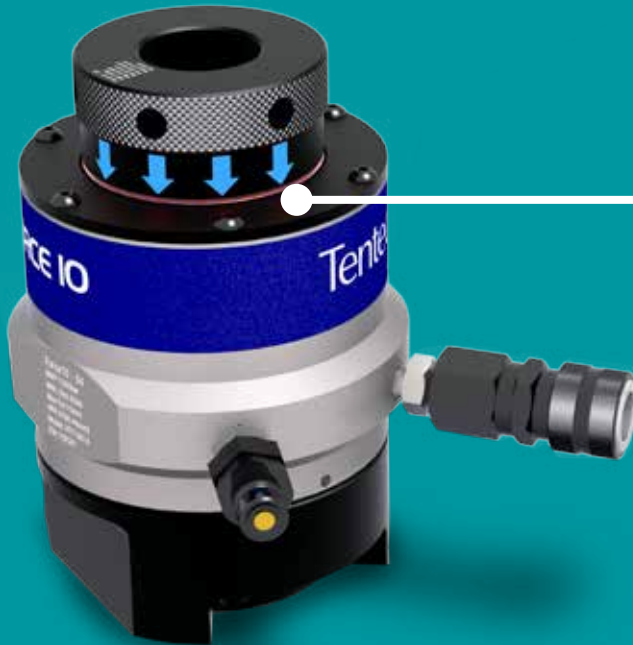


NUT ROTATING SOCKET (NRS)

To increase speed all Aero WTB tensioners are fitted with a spring loaded device that automatically engages the tensioner drive socket with the hexagon nut.



Tentec FORCE10 Tensioners have many new features and user requested enhancements and provide extra bolt load capacity without compromising on the tool size and ease of handling. The 10 tool range offers multiple tool variations per bolt size, only 5 tools are required to suit bolt sizes from 3/4" to 4" (M20 to M100).



SPRING ASSISTED RETURN

Heavy duty integrated springs assist automatic ram reset. Reduces operation time between pressure cycles.



KNURLED THREAD INSERT

Makes operation easier for the user.

GRIP SURFACE

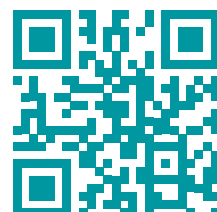
Allows easier user handling.



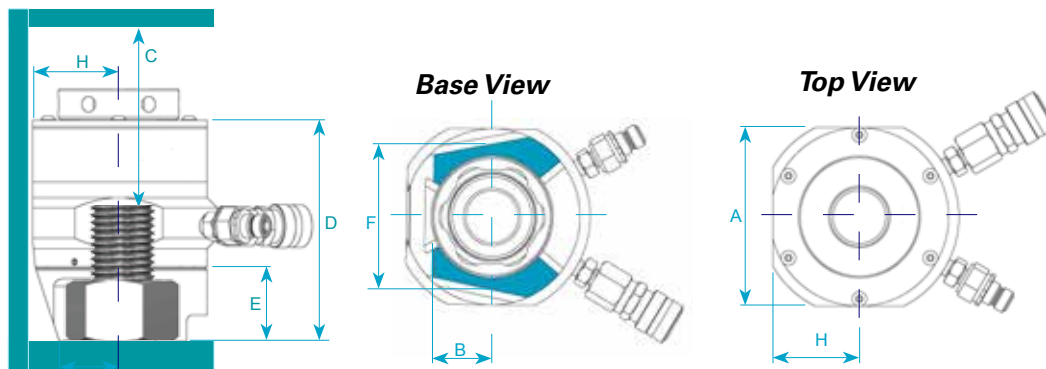
NO SMALL BONDED SEALS

All Force10 series have been designed without the need for small bonded seals, which helps reduce downtime.

Tentec Force10 Series
Product Datasheet



FORCE10 TECHNICAL DATA



Tool	Bolt Load		Ram Area		Stroke mm	Weight kg	A	B	C	D	E	F	G	H
	Kn	Ton	In ²	mm ²										
F10-01	180.25	18.09	1.86	1201.93	15	2.62	72	21.5	90	99.5	68.5	61.75	49	36
							24.75	89.25	100.75	72	57.5			
F10-02	236.06	23.69	2.44	1573.55	15	3.24	80.5	21	90	99.5	68.5	59.75	49	38.8
							25	89.25	100.75	70	56.5			
							28	90	104	80.5	64.25			
F10-03	380.38	38.18	3.93	2536.12	15	5.21	99	24.75	93	104.5	71.5	76	59.5	47.9
							27.5	93	107	80.5	64.25			
							28	96	113.5	90.75	72			
							35	94	114	85	69			
F10-04	564.95	56.70	5.84	408.00	15	8.76	116.5	33	118.5	135.5	97	90.75	75	56.5
							35	121	136	85	72			
							35	122	140	89.88	77			
							42	121	142	95.14	83			
							39	121	145	93.41	85			
F10-05	763.94	76.67	7.89	5092.89	15	12.71	134.75	42	131.5	152.5	107.5	95.14	83	65.375
							45	131.5	155.5	100.53	88			
							45	136	159	111.54	96			
							46	136	162	119.72	103			
F10-06	951.41	95.49	9.83	6342.57	15	15.67	149.25	48	135.75	158.75	107.5	111.54	96	72.525
							48	136	162	119.72	103			
							46.5	137.5	166.5	113.52	103			
							53.5	135	168.5	120.47	110			
F10-07	1458.89	146.42	15.08	9725.79	15	24.3	179.5	55	141.25	170.25	109.5	121.45	107	87.5
							55	142.5	176	128.42	114			
							59	148.25	180.75	132.61	119			
							60	145.5	182	144.8	127			
							67	141.5	182	144.8	130			
F10-08	1989.25	199.64	20.56	13261.91	15	33.68	206.75	65	151.25	184.75	110.5	134.6	119	103.375
							60	145.5	183	170	137			
							66	152.5	194	144.8	130			
							70	151	196.5	160	141			
							76	147.75	197.25	158.23	146			
							80.5	146.75	198.75	169.93	151			
F10-09	2753.32	276.33	28.45	18355.45	15	48.6	239	80	154.75	204.25	112.5	170.18	149	119.5
							81	160.75	211.75	169.93	151			
							78	158.5	213.5	190	164			
							88	159	219	181.37	160			
							94	158.5	223.5	187.38	172			
F10-10	3109.94	312.12	32.14	20732.86	15	59.28	257.5	87	165	223	112.5	181.37	163	128.75
							95.5	166.5	229.5	187.38	171			
							100	157.75	225.75	209.44	185			
							105	152	223.5	215.64	194			

FORCE10 ORDERING NUMBERS

Tool	Description		Thread Size		Ordering No.	
	Imperial	Metric	Inch	mm	Imperial	Metric
F10-01	HTT.10001.034	HTT.10001.020	3/4" Spring Return Tensioner	M20 Spring Return Tensioner	8434 2201 82	8434 2202 19
	HTT.10001.078	HTT.10001.022	7/8" Spring Return Tensioner	M22 Spring Return Tensioner	8434 2201 83	8434 2202 20
F10-02	HTT.10002.034	HTT.10002.020	3/4" Spring Return Tensioner	M20 Spring Return Tensioner	8434 2201 84	8434 2202 21
	HTT.10002.078	HTT.10002.022	7/8" Spring Return Tensioner	M22 Spring Return Tensioner	8434 2201 85	8434 2202 22
F10-03	HTT.10003.078	HTT.10003.022	7/8" Spring Return Tensioner	M22 Spring Return Tensioner	8434 2201 87	8434 2202 24
	HTT.10003.100	HTT.10003.024	1" Spring Return Tensioner	M24 Spring Return Tensioner	8434 2201 88	8434 2202 25
F10-04	HTT.10003.118	HTT.10003.027	1.1/8" Spring Return Tensioner	M27 Spring Return Tensioner	8434 2201 89	8434 2202 26
	HTT.10003.114	HTT.10003.033	1.1/4" Spring Return Tensioner	M33 Spring Return Tensioner	8434 2201 90	8434 2202 28
F10-05	HTT.10014.118	HTT.10014.027	1.1/8" Spring Return Tensioner	M27 Spring Return Tensioner	8434 2201 91	8434 2202 29
	HTT.10014.114	HTT.10014.033	1.1/4" Spring Return Tensioner	M33 Spring Return Tensioner	8434 2201 92	8434 2202 31
F10-06	HTT.10014.138	HTT.10014.036	1.3/8" Spring Return Tensioner	M36 Spring Return Tensioner	8434 2201 93	8434 2202 32
	HTT.10014.112	HTT.10014.039	1.1/2" Spring Return Tensioner	M39 Spring Return Tensioner	8434 2201 94	8434 2202 33
F10-07	HTT.10015.138	HTT.10015.036	1.3/8" Spring Return Tensioner	M36 Spring Return Tensioner	8434 2201 95	8434 2202 34
	HTT.10015.112	HTT.10015.039	1.1/2" Spring Return Tensioner	M39 Spring Return Tensioner	8434 2201 96	8434 2202 35
F10-08	HTT.10015.158	HTT.10015.042	1.5/8" Spring Return Tensioner	M42 Spring Return Tensioner	8434 2201 97	8434 2202 36
	HTT.10015.134	HTT.10015.045	1.3/4" Spring Return Tensioner	M45 Spring Return Tensioner	8434 2201 98	8434 2202 37
F10-09	HTT.10016.158	HTT.10016.042	1.5/8" Spring Return Tensioner	M42 Spring Return Tensioner	8434 2201 99	8434 2202 38
	HTT.10016.134	HTT.10016.045	1.3/4" Spring Return Tensioner	M45 Spring Return Tensioner	8434 2202 00	8434 2202 39
F10-10	HTT.10016.178	HTT.10016.048	1.7/8" Spring Return Tensioner	M48 Spring Return Tensioner	8434 2202 01	8434 2202 40
	HTT.10016.200	HTT.10016.052	2" Spring Return Tensioner	M52 Spring Return Tensioner	8434 2202 02	8434 2202 41
F10-11	HTT.10017.178	HTT.10017.048	1.7/8" Spring Return Tensioner	M48 Spring Return Tensioner	8434 2202 03	8434 2202 42
	HTT.10017.200	HTT.10017.052	2" Spring Return Tensioner	M52 Spring Return Tensioner	8434 2202 04	8434 2202 43
F10-12	HTT.10017.214	HTT.10017.056	2.1/4" Spring Return Tensioner	M56 Spring Return Tensioner	8434 2202 05	8434 2202 44
	HTT.10017.212	HTT.10017.060	2.1/2" Spring Return Tensioner	M60 Spring Return Tensioner	8434 2202 06	8434 2202 45
F10-13	HTT.10018.214	HTT.10018.056	2.1/4" Spring Return Tensioner	M56 Spring Return Tensioner	8434 2202 07	8434 2202 46
	HTT.10018.212	HTT.10018.060	2.1/2" Spring Return Tensioner	M60 Spring Return Tensioner	8434 2202 08	8434 2202 47
F10-14	HTT.10018.234	HTT.10018.064	2.3/4" Spring Return Tensioner	M64 Spring Return Tensioner	8434 2202 09	8434 2202 48
	HTT.10018.300	HTT.10018.068	3" Spring Return Tensioner	M68 Spring Return Tensioner	8434 2202 10	8434 2202 49
F10-15	HTT.10019.234	HTT.10019.072	2.3/4" Spring Return Tensioner	M72 Spring Return Tensioner	8434 2202 11	8434 2202 50
	HTT.10019.300	HTT.10019.076	3" Spring Return Tensioner	M76 Spring Return Tensioner	8434 2202 12	8434 2202 51
F10-16	HTT.10019.314	HTT.10019.080	3.1/4" Spring Return Tensioner	M80 Spring Return Tensioner	8434 2202 13	8434 2202 52
	HTT.10019.312	HTT.10019.085	3.1/2" Spring Return Tensioner	M85 Spring Return Tensioner	8434 2202 14	8434 2202 53
F10-17	HTT.10020.314	HTT.10020.085	3.1/4" Spring Return Tensioner	M85 Spring Return Tensioner	8434 2202 15	8434 2202 54
	HTT.10020.312	HTT.10020.090	3.1/2" Spring Return Tensioner	M90 Spring Return Tensioner	8434 2202 16	8434 2202 55
F10-18	HTT.10020.334	HTT.10020.095	3.3/4" Spring Return Tensioner	M95 Spring Return Tensioner	8434 2202 17	8434 2202 56
	HTT.10020.400	HTT.10020.100	4" Spring Return Tensioner	M100 Spring Return Tensioner	8434 2202 18	8434 2202 57

FORCE10 SPARE SEAL ORDERING NUMBERS

Tool	Description	Ordering No.
F10-01	Spare Seal for Force 10 #1	4222 2701 31
F10-02	Spare Seal for Force 10 #2	4222 2701 32
F10-03	Spare Seal for Force 10 #3	4222 2701 33
F10-04	Spare Seal for Force 10 #4	4222 2701 34
F10-05	Spare Seal for Force 10 #5	4222 2701 35
F10-06	Spare Seal for Force 10 #6	4222 2701 36
F10-07	Spare Seal for Force 10 #7	4222 2701 37
F10-08	Spare Seal for Force 10 #8	4222 2701 38
F10-09	Spare Seal for Force 10 #9	4222 2701 39
F10-10	Spare Seal for Force 10 #10	4222 2701 40

You can order a from our standard Force10 range using the table above. There are many different configurations available. For a custom hydraulic bolt tensioner quote, see page 38.

TENTEC V-SERIES

COMPACT FLANGE BOLT TENSIONER

KNURLED THREAD INSERT

Makes operation easier for the user.



SCULPTED TO FIT

Machined flats and other custom design on this tensioner perfectly clears elliptical hub profile, weld protrusion and peion diameter.

The V-Series compact flange bolt tensioners are a purpose designed range of tools designed specifically for use on SPO Compact flanges. The range consists of 11 powerful bolt tensioning tools covering bolt sizes from 3/4" to 4".

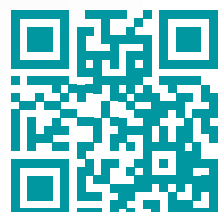
GRIP SURFACE
Allows easier user handling.

HOLDING STRAPS
On our larger tensioners, we include holding straps to make it easier to move tools around.

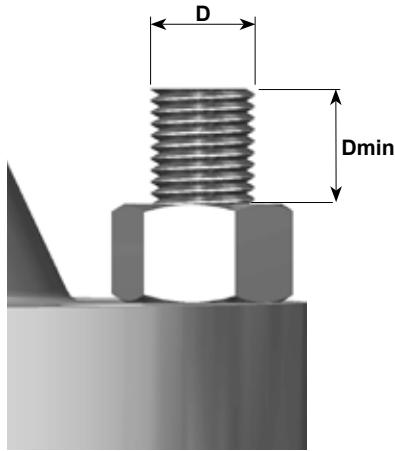
NO SMALL BONDED SEALS
All V-Series have been designed without the need for small bonded seals, which helps reduce downtime.



Tentec V-Series
Product Datasheet



TENTEC V-SERIES TECHNICAL DATA



V-Series tensioners need a minimum of 1 x bolt diameter protruding above the hexagon or round nut.

Tool	Item Imperial	Thread Size		Item Metric	Bolt Load		Ram Area		Stroke Mm	Weight Kg
		Inch	Mm		Kn	Ton	In ²	Mm ²		
V-1	HTT.10101.034	3/4"-10Unc	M20x2.5	HTT.10101.020	135.5	13.599	1.401	903.87	10	1.67
V-2	HTT.10102.034	3/4"-10Unc	M20x2.5	HTT.10102.020	189.39	19.007	1.958	1263.22	10	2.17
	HTT.10102.078	7/8"-9Unc	M22x2.5	HTT.10102.022						2.07
V-3	HTT.10103.078	7/8"-9Unc	M22x2.5	HTT.10103.022	245.92	24.681	2.542	1640.00	15	3.33
	HTT.10103.100	1"-8Un	M24x3	HTT.10103.024						3.19
			M27x3	HTT.10104.027	415.52	41.702	4.295	2770.96	15	6.2
V-4	HTT.10104.118	1.1/8-8Un	M30x3.5	HTT.10104.030						6.08
	HTT.10104.114	1.1/4"-8Un	M33x3.5	HTT.10104.033						5.87
V-5	HTT.10105.138	1.3/8"-8Un	M36x4	HTT.10105.036	628.64	63.091	6.498	4192.25	15	8.65
	HTT.10105.112	1.1/2"-8Un	M39x4	HTT.10105.039						8.37
V-6	HTT.10106.158	1.5/8"-8Un	M42x4.5	HTT.10106.042	878.45	88.162	9.08	5858.05	15	12.08
	HTT.10106.134	1.3/4"-8Un	M45x4.5	HTT.10106.045						11.73
V-7	HTT.10107.178	1.7/8"-8Un	M48x5	HTT.10107.048	1184.49	118.877	12.243	7898.69	15	16.34
	HTT.10107.200	2"-8Un	M52x5	HTT.10107.052						15.92
V-8			M56x5.5	HTT.10108.056	1905.46	191.234	19.695	12706.43	15	28.27
	HTT.10108.214	2.1/4"-8Un	M60x5.5	HTT.10108.060						27.91
	HTT.10108.212	2.1/2"-8Un	M64x6	HTT.10108.064						26.71
V-9			M68x6	HTT.10109.068	2544.02	255.321	26.295	16964.48	15	40.13
	HTT.10109.234	2.3/4"-8Un	M72x6	HTT.10109.072						39.22
	HTT.10109.300	3"-8Un	M76x6	HTT.10109.076						37.64
V-10			M80x6	HTT.10110.080	3521.35	353.407	36.397	23481.89	15	64.76
	HTT.10110.314	3.1/4"-8Un	M85x6	HTT.10110.085						63.07
	HTT.10110.312	3.1/2"-8Un	M90x6	HTT.10110.090						61.05
V-11	HTT.10111.334	3.3/4"-8Un	M95x6	HTT.10111.095	4653.38	467.018	48.098	31030.91	15	88.36
	HTT.10111.400	4"-8Un	M100x6	HTT.10111.100						85.64

TENTEC V-SERIES ORDERING NUMBERS

Tool	Item		Thread Size		Item	PTD Number Imperial	PTD Number Metric
	Imperial	Inch	mm	Metric			
V-1	HTT.10101.034	3/4" V-Series Tensioner	M20 V-Series Tensioner	HTT.10101.020	8434 2201 36	8434 2201 57	
V-2	HTT.10102.034	3/4" V-Series Tensioner	M20 V-Series Tensioner	HTT.10102.020	8434 2201 37	8434 2201 58	
	HTT.10102.078	7/8" V-Series Tensioner	M22 V-Series Tensioner	HTT.10102.022	8434 2201 38	8434 2201 59	
V-3	HTT.10103.078	7/8" V-Series Tensioner	M22 V-Series Tensioner	HTT.10103.022	8434 2201 39	8434 2201 60	
	HTT.10103.100	1" V-Series Tensioner	M24 V-Series Tensioner	HTT.10103.024	8434 2201 40	8434 2201 61	
V-4			M27 V-Series Tensioner	HTT.10104.027		8434 2201 62	
	HTT.10104.118	1.1/8" V-Series Tensioner	M30 V-Series Tensioner	HTT.10104.030	8434 2201 41	8434 2201 63	
	HTT.10104.114	1.1/4" V-Series Tensioner	M33 V-Series Tensioner	HTT.10104.033	8434 2201 42	8434 2201 64	
V-5	HTT.10105.138	1.3/8" V-Series Tensioner	M36 V-Series Tensioner	HTT.10105.036	8434 2201 43	8434 2201 65	
	HTT.10105.112	1.1/2" V-Series Tensioner	M39 V-Series Tensioner	HTT.10105.039	8434 2201 44	8434 2201 66	
V-6	HTT.10106.158	1.5/8" V-Series Tensioner	M42 V-Series Tensioner	HTT.10106.042	8434 2201 45	8434 2201 67	
	HTT.10106.134	1.3/4" V-Series Tensioner	M45 V-Series Tensioner	HTT.10106.045	8434 2201 46	8434 2201 68	
V-7	HTT.10107.178	1.7/8" V-Series Tensioner	M48 V-Series Tensioner	HTT.10107.048	8434 2201 47	8434 2201 69	
	HTT.10107.200	2" V-Series Tensioner	M52 V-Series Tensioner	HTT.10107.052	8434 2201 48	8434 2201 70	
V-8			M56 V-Series Tensioner	HTT.10108.056		8434 2201 71	
	HTT.10108.214	2.1/4" V-Series Tensioner	M60 V-Series Tensioner	HTT.10108.060	8434 2201 49	8434 2201 72	
	HTT.10108.212	2.1/2" V-Series Tensioner	M64 V-Series Tensioner	HTT.10108.064	8434 2201 50	8434 2201 73	
V-9			M68 V-Series Tensioner	HTT.10109.068		8434 2201 74	
	HTT.10109.234	2.3/4" V-Series Tensioner	M72 V-Series Tensioner	HTT.10109.072	8434 2201 51	8434 2201 75	
	HTT.10109.300	3" V-Series Tensioner	M76 V-Series Tensioner	HTT.10109.076	8434 2201 52	8434 2201 76	
V-10			M80 V-Series Tensioner	HTT.10110.080		8434 2201 77	
	HTT.10110.314	3.1/4" V-Series Tensioner	M85 V-Series Tensioner	HTT.10110.085	8434 2201 53	8434 2201 78	
V-11	HTT.10110.312	3.1/2" V-Series Tensioner	M90 V-Series Tensioner	HTT.10110.090	8434 2201 54	8434 2201 79	
	HTT.10111.334	3.3/4" V-Series Tensioner	M95 V-Series Tensioner	HTT.10111.095	8434 2201 55	8434 2201 80	
	HTT.10111.400	4" V-Series Tensioner	M100 V-Series Tensioner	HTT.10111.100	8434 2201 56	8434 2201 81	

V-SERIES SPARE SEAL KIT ORDERING NUMBER

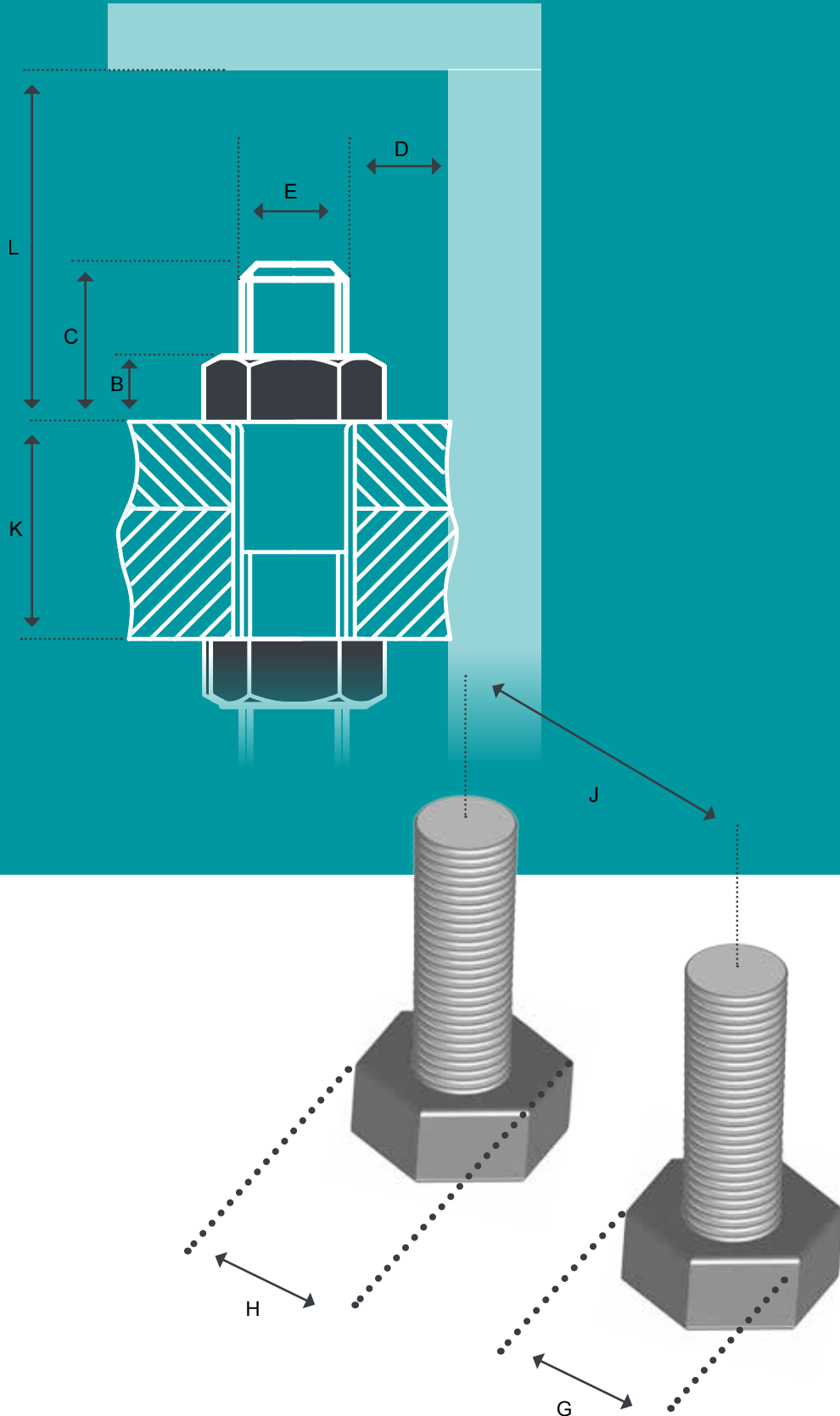
Tool	Description	Ordering No.
V-1	V-1 Spare Seal Kit	4222 2701 20
V-2	V-2 Spare Seal Kit	4222 2701 21
V-3	V-3 Spare Seal Kit	4222 2701 22
V-4	V-4 Spare Seal Kit	4222 2701 23
V-5	V-5 Spare Seal Kit	4222 2701 24
V-6	V-6 Spare Seal Kit	4222 2701 25

Tool	Description	Ordering No.
V-7	V-7 Spare Seal Kit	4222 2701 26
V-8	V-8 Spare Seal Kit	4222 2701 27
V-9	V-9 Spare Seal Kit	4222 2701 28
V-10	V-10 Spare Seal Kit	4222 2701 29
V-11	V-11 Spare Seal Kit	4222 2701 30

You can order a from our standard V-Series range using the table above. There are many different configurations available for V-Series bolt tensioners. For a custom hydraulic bolt tensioner quote, see page 38.

CUSTOM TENSIONERS

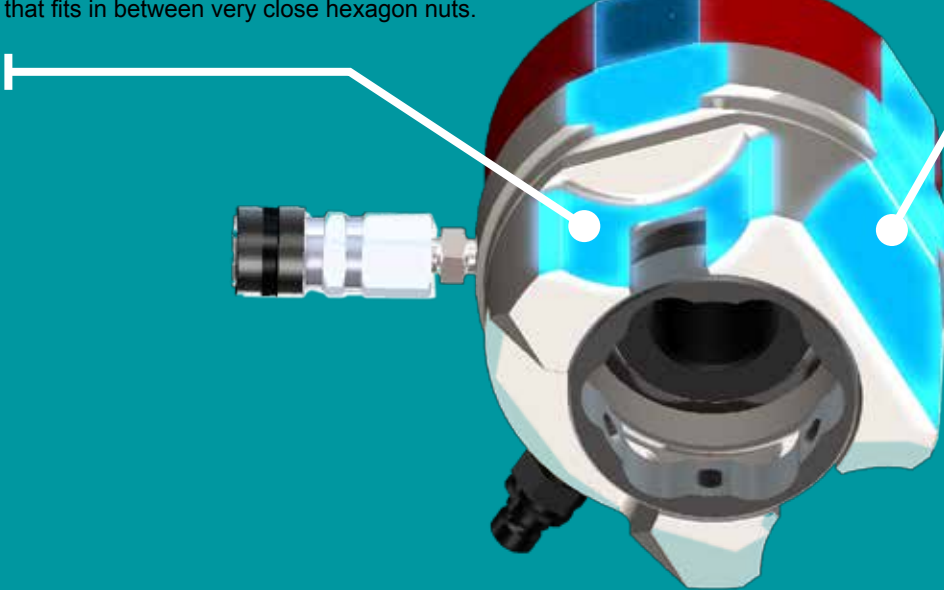
CUSTOM-BUILT FOR YOUR APPLICATION



Tentec line of tensioners cover a great range of applications, but our in-house development team really shines when it comes to custom tensioner design. No matter the application, our team can get it done. By providing us with basic measurements, we can create the exact tensioner design for your application. All parts of a tensioner can be customized to cater for any special application. Common customization is requested to match thread pitch, bolt load requirements and Nut Rotating Socket height.

CUSTOMIZED SCULPTED BRIDGE

By customizing the bridge, we can make a tensioner that fits in between very close hexagon nuts.

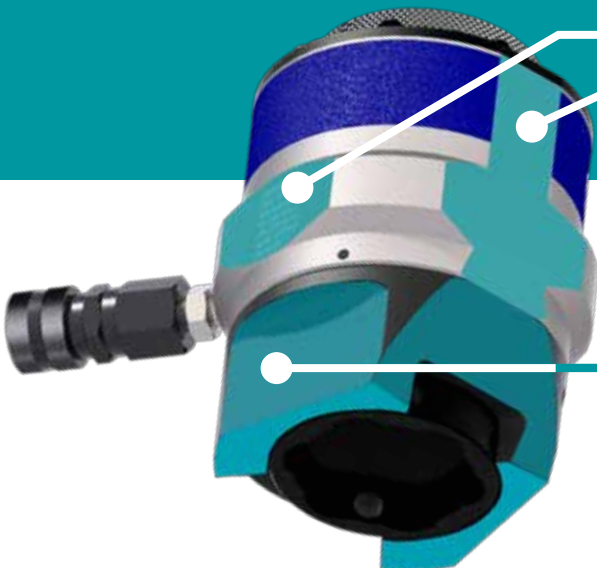


CUSTOMIZED MACHINED FLATS

Customized machined flats to the rear of the tensioner to allow for tight weld radius and tight applications.

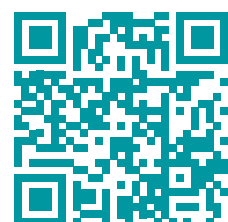
MACHINED PROFILE

We can machine profile, rear and sides to adjust to a specific measurement.



MACHINED NUT ROTATING SOCKET

Profiles can be reduced on the Nut Rotating Socket to perfectly sit in between adjacent nuts.



Request a custom tensioner online by scanning this QR code

ACCESSORIES FOR TENTEC BOLT TENSIONERS

Hand Pumps

Item	Description	Ordering No.
HTT.2065.000.A	Low Pressure Hand Pump	8434 2200 03
HTT.2122.000.A	Low Pressure Hand Pump	8434 2200 04



Air-Driven Pumps

Item	Description	Ordering No.
HTT.6271	Low Pressure Air Driven Pump	8434 2200 05
HTT.6272	High Pressure Air Driven Pump	8434 2200 06
Hi-Flow HTT.6978	Low Pressure Hi-Flow Air Driven Pump, stainless steel frame	8434 2202 62
Hi-Flow HTT.9384	High Pressure High Flow Air Driven Pump, stainless steel frame	8434 2202 63



Wind Turbine Pumps

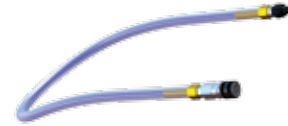
Item	Description	Ordering No.
HTT.8900.100	Wind Turbine Pump 230v-60Hz	8434 22003 65
HTT.8900.200	Wind Turbine Pump 115v-60Hz	8434 22003 66
HTT.8900.300	Wind Turbine Pump 440v-60Hz	8434 22003 67
HTT.8900.400	Wind Turbine Pump 230v-50Hz	8434 22003 68
HTT.8900.500	Wind Turbine Pump 380v-80Hz	8434 22003 69
HTT.8900.600	Wind Turbine Pump 400v-50Hz	8434 22003 70
HTT.8900.700	Wind Turbine Pump 690v-60Hz	8434 22003 71



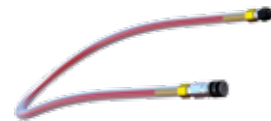
Hydraulic Hoses

Item	Description	Ordering No.
HTT.4425.130.B	4.Ply 1.3 Meter Long Hose (Low Pressure)	8434 2200 10
HTT.4425.150.B	4.Ply 1.3 Meter Long Hose (Low Pressure)	8434 2200 11
HTT.4425.300.B	4.Ply 1.5 Meter Long Hose (Low Pressure)	8434 2200 12
HTT.4425.500.B	4.Ply 5 Meter Long Hose (Low Pressure)	8434 2200 13
HTT.4444.130.A	6.Ply 1.3 Meter Long Hose (High Pressure)	8434 2200 14
HTT.4444.150.B	6.Ply 1.3 Meter Long Hose (High Pressure)	8434 2200 15
HTT.4444.300.B	6.Ply 1.5 Meter Long Hose (High Pressure)	8434 2200 16
HTT.4444.500.B	6.Ply 5 Meter Long Hose (High Pressure)	8434 2200 17

1500 bar Hydraulic Link Hose



2275 bar Hydraulic Link Hose



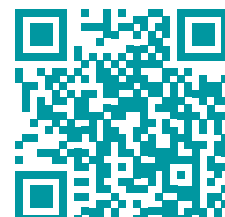
Couplers/Nipples

Item	Description	Ordering No.
HTT.3427.000.D	1/4" Male X 1/4" Male Adaptor (Tensioner)	4222 2700 19
HTT.3627.000.C	1/4" Male X 1/4" Cejn Male (Hose)	4222 2700 20
400.021-4490-2	1/4" Dowty Seal	4222 2700 21
C101161202	C116 Female Coupling (Low Pressure)	4222 2700 22
C101166202	C116 Male Nipple (Low Pressure)	4222 2700 23
C101251203	C125 Female Coupling (High Pressure)	4222 2700 24
C101256203	C125 Male Nipple (Hiigh Pressure)	4222 2700 25
HTT.4132	1/4 BSP M X 1/8 BSP M ADAP	4222 2701 52
DOWTY.0.125	1/8" DOWTY SEAL	4222 2701 53
HTT.2408	1/8" BSP CONED BLANK PLUG	4222 2701 54
HTT.3609	9/16" UNF CONED BLANK PLUG	4222 2701 55
HTT.5886	1/4" BSP BLANK PLUG	4222 2701 56



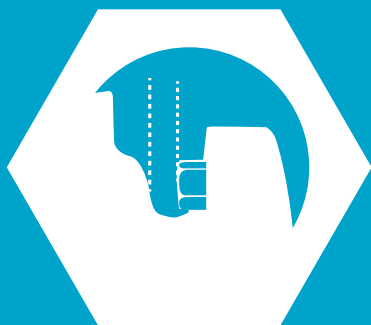
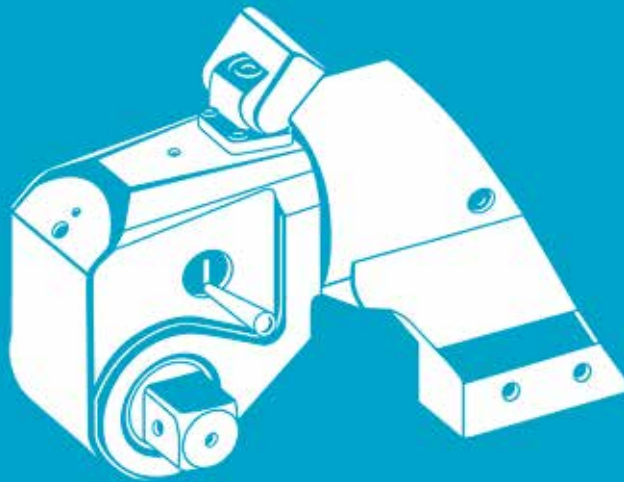
Hydraulic Oil

Item	Description	Ordering No.
AWS68	AWS68 - Hyd Oil One Gallon	8434 2200 01
AWS32	AWS32 - Hyd Oil One Gallon	8434 2200 02

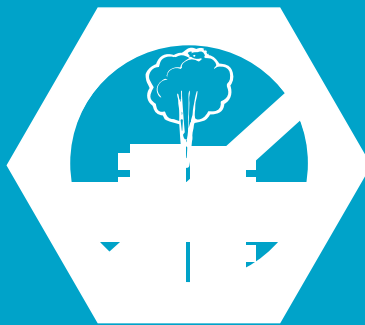


Tentec Bolt Tensioner
Accessories Datasheet

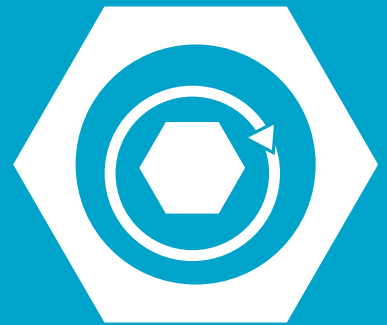
HYDRAULIC TORQUE WRENCHES



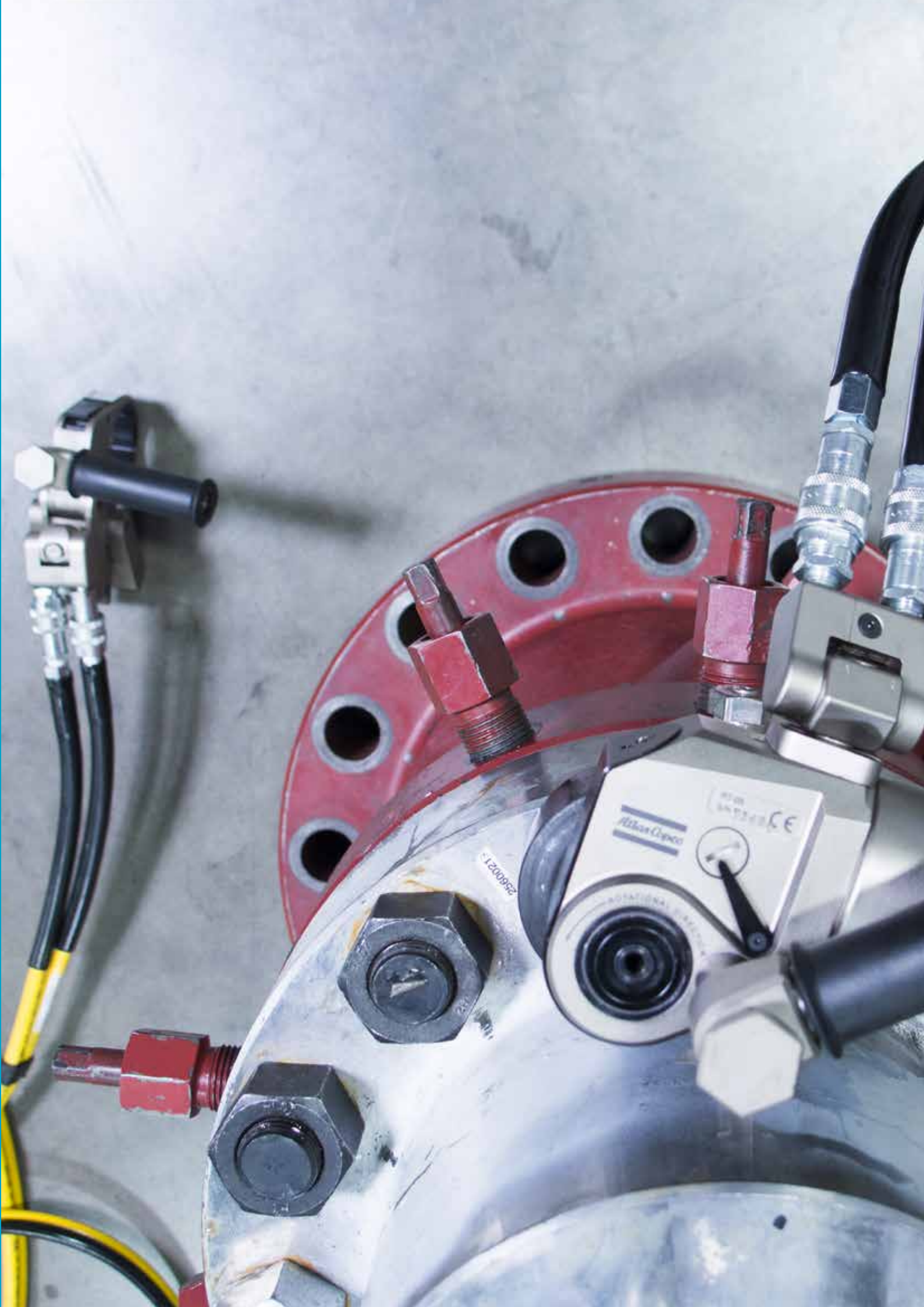
***LOW
CLEARANCE***



***LEAK FREE
JOINTS***



***AUTO-ADVANCE
FEATURE***



RT SERIES

SQUARE DRIVE HYDRAULIC TORQUE WRENCH

MONOBLOC ALUMINUM HOUSING

A single block of aircraft quality aluminum alloy is used to produce the RT Series housing. This allows the tool to produce massive amounts of torque, while having an amazing power-to-weight ratio.

SPRING-LOADED SHROUD

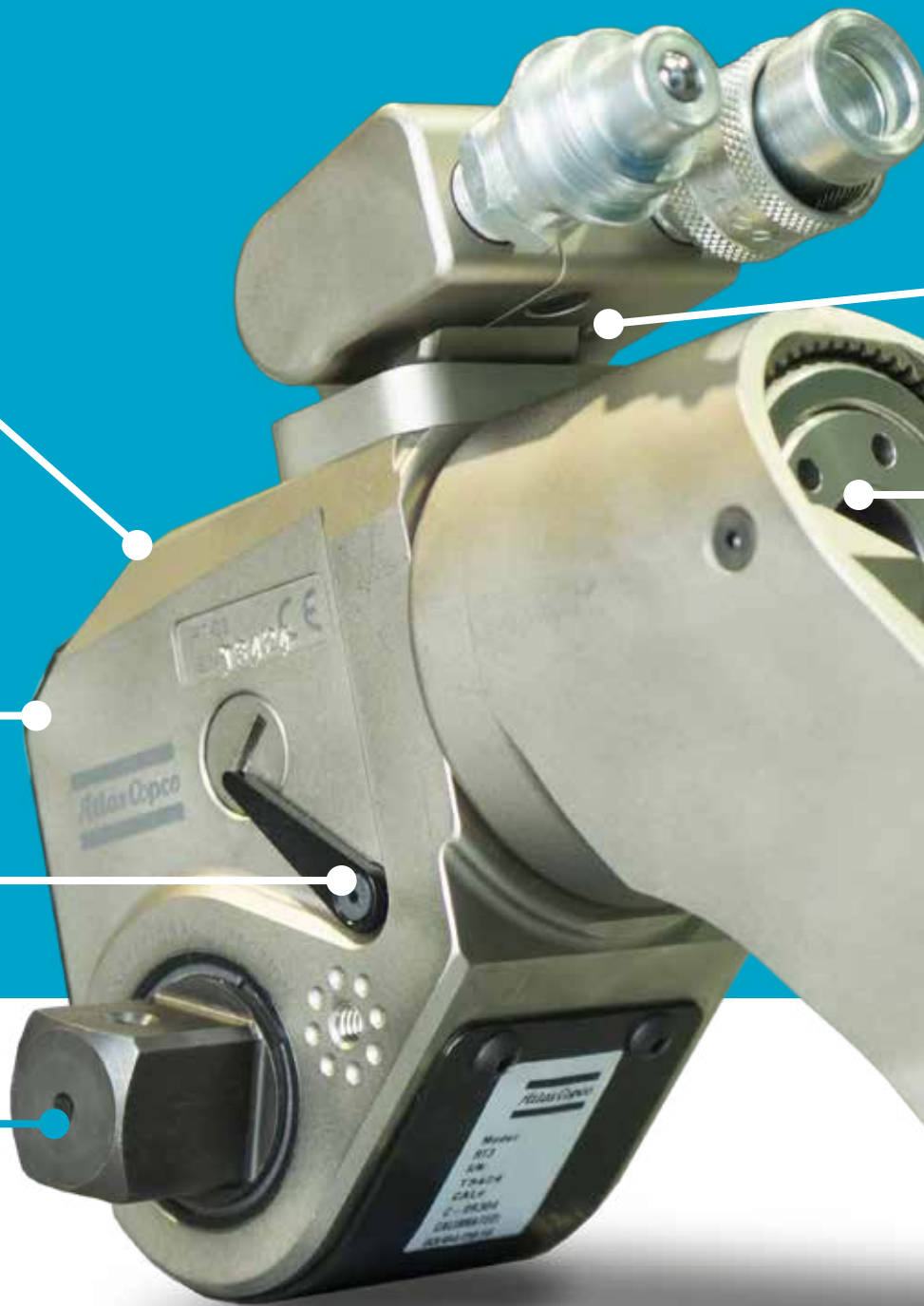
Spring loaded shroud absorbs energy during operation.

EXTERNAL DISENGAGEMENT LEVER

These external disengagement levers make it easy to remove the tool from the application.

SPLINED SQUARE DRIVE

The RT Series splined square drive distributes load evenly through the drive components, providing full heavy-duty transmission of force. Direct Hex Drives and Hex Adapters are available.



Atlas Copco RT Series standard hydraulic wrenches offer extremely high torquing power. There are nine models to choose from and output accuracy is at +/-3%

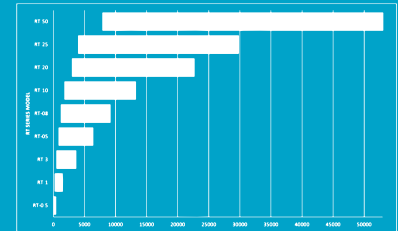


MULTI-AXIS SWIVEL

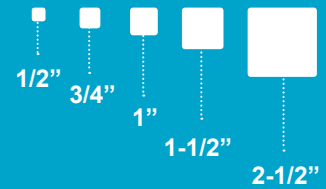
Greater range of movement on multiple axis allows the hose to move easier compared to single axis swivels.

SPLINED REACTION ARM

Splined reaction arm makes the tool more compact and allows the reaction arm to be adjusted for maximum safety.

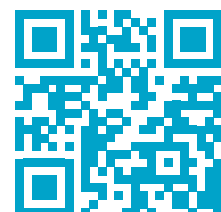


Square Drive Sizes



HIGH STRENGTH STEEL BOOT

The reaction arm boot comes standard. Copper boot also available.

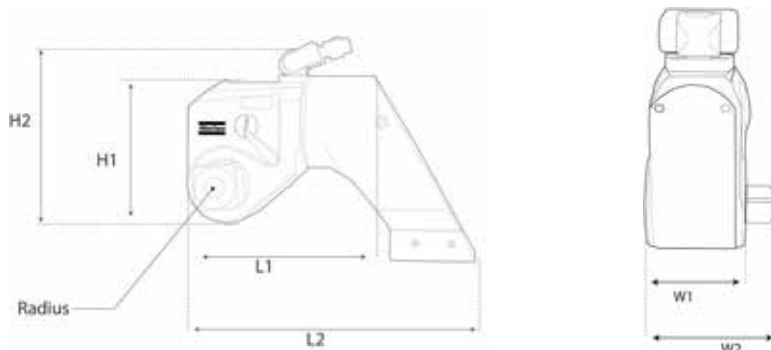


RT Series
Hydraulic Torque Wrench Datasheet

RT SERIES TECHNICAL INFORMATION



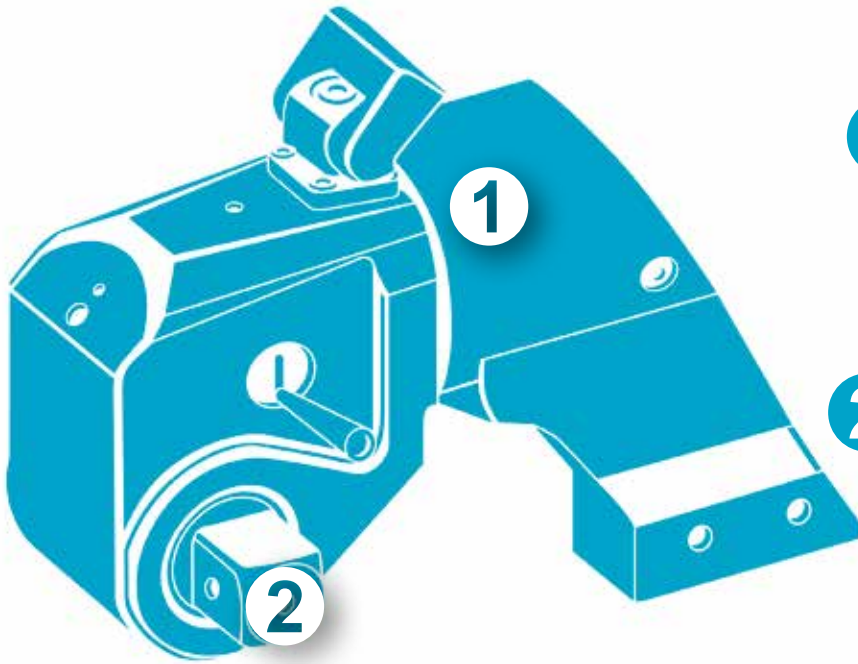
Model	Square Drive in	Torque				Weight		Ordering No.
		ft. lb.		Nm		lb	kg	
		min	max	min	max			
RT-0.5	1/2	55	397	75	538	0.8	0.4	8434 2010 00
RT-01	3/4	200	1340	271	1817	3.8	1.9	8434 2010 02
RT-03	1	480	3230	651	4379	7.8	3.9	8434 2010 05
RT-05	1-1/2	835	5590	1132	7578	15	7.5	8434 2010 09
RT-08	1-1/2	1200	8000	1627	10845	23	11.5	8434 2010 13
RT-10	1-1/2	1755	11520	2379	15617	26.8	13.4	8434 2010 16
RT-20	2-1/2	2960	19760	4013	26787	36	18	8434 2010 20
RT-25	2-1/2	3960	25890	5368	35096	62	31	8434 2010 25
RT-50	2-1/2	7875	52500	10675	71169	96	48	8434 2010 29



Model	Dimensions													
	L1		L2		H1		H2		Radius		W1		W2	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
RT-0.5	3.15	81	4.87	125	2.35	60.5	3.62	93	0.52	13.5	1.3	33.5	1.97	50.5
RT-01	4.68	120	7.13	183	3.52	90.5	4.75	122	0.9	23	1.95	50	2.76	71
RT-03	6.04	155	9.24	237	4.68	120	6.08	156	1.28	33	2.59	66.5	3.72	95.5
RT-05	7.21	185	11.23	288	5.63	144.5	7.05	181	1.44	37	3.12	80	4.9	126
RT-08	7.85	202	12.49	321	6.42	164.6	8.4	213.36	1.62	41	3.48	88	4.95	126
RT-10	9	232	13.9	357	7.2	186	9.3	239	1.87	48	3.9	100	5.5	142.5
RT-20	10.2	259	16.55	420	8.5	216	9.9	251	2.17	55.1	4.7	119	6.7	170
RT-25	12	310	18.4	473	9.1	234	11	282	2.37	61	5.2	134	7.4	191
RT-50	15.2	390	23.9	615	11.4	294	13.4	344	30.8	79	6.5	167	8.9	228

Designs and specifications are subject to change without notice or obligation. Read all safety instructions in the manual before usage.

RT SERIES STANDARD SETUP

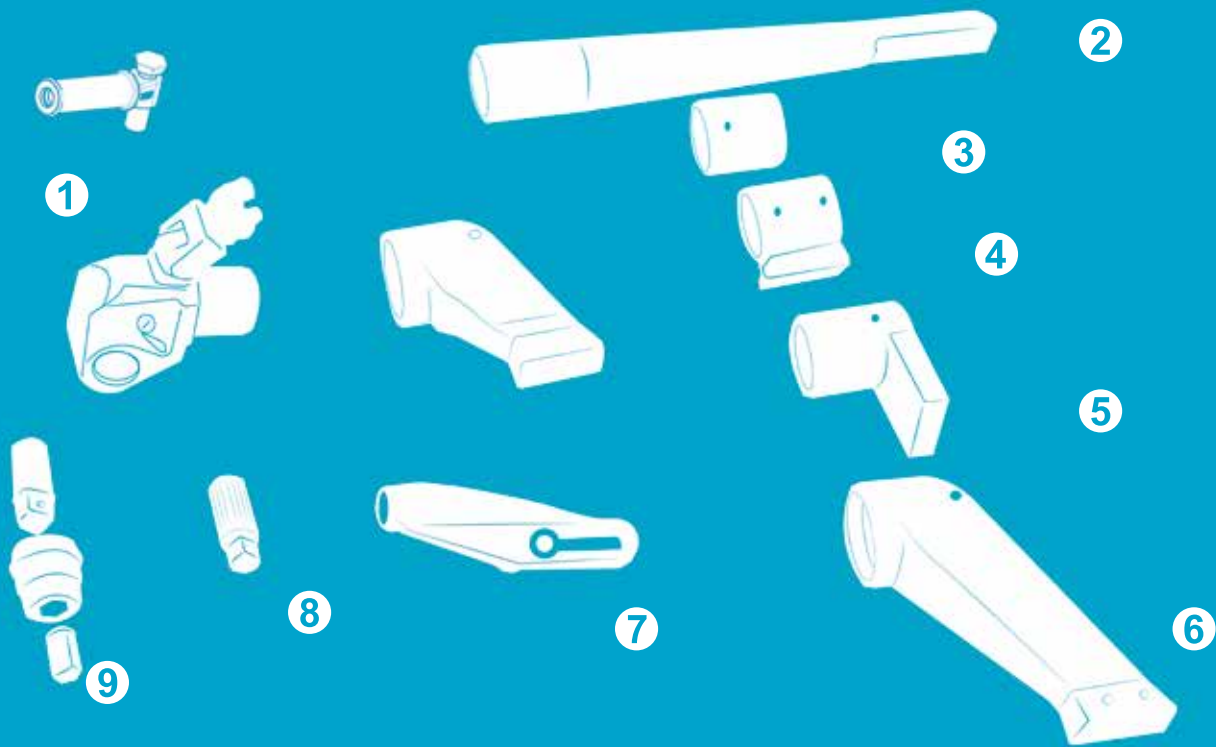


1 The RT comes with the standard reaction arm, great for many common applications.

2 The RT Series comes standard with a square drive, use with a socket.

Use high quality impact sockets
See page 74 for impact socket selection.

SQUARE DRIVE HYDRAULIC TORQUE WRENCH ACCESSORIES



1 RT Safety Handle

2 Alco Reaction Arm

3 Steel Reaction Sleeve

4 Steel Reaction Sleeve with Foot

5 CAM-style Reaction Arm

6 Extended Reaction Arm

7 Sliding Reaction Arm

8 Direct Hex Drive

9 Insert Bit Adapter

1 SAFETY HANDLE



Description	Ordering No.
Handle Kit RT0.5, RT1	8434 2170 34
Handle Kit RT3, RT5	8434 2170 33
Handle Kit RT8, RT10	8434 2170 32

2 ALCO ARM



Description	Ordering No.
RT0.5-ALC	4222 2126 76
RT01-ALC	4222 2102 64
RT03-ALC	8434 2057 10
RT05-ALC	8434 2139 88
RT08-ALC	8434 2140 36
RT10-ALC	8434 2140 60

3 STEEL SLEEVE



Description	Ordering No.
RT0.5-SSLV	4222 2126 88
RT01-SSLV	8434 2057 08
RT03-SSLV	8434 2057 32
RT05-SSLV	8434 2140 30
RT08-SSLV	8434 2140 51
RT10-SSLV	8434 2140 90

4 STEEL SLEEVE W/FOOT



Description	Ordering No.
RT01-SSLVF	8434 2057 09
RT03-SLVF	4222 2130 21

5 CAM STYLE ARM



Description	Ordering No.
RT03-CAM ARM	4222 2130 12
RT05-CAM ARM	4222 2130 57

RT SERIES ACCESSORIES

6 EXT ARM



Description	Ordering No.
RT0.5-EXT	4222 2126 82
RT01-EXT	8434 2056 92
RT03-EXT	8434 2057 12
RT05-EXT	8434 2057 34
RT08-EXT	8434 2140 42
RT10-EXT	8434 2140 66

7 SLIDING REACTION ARM



Description	Ordering No.
RT-01 Sliding Ext	8434 2057 33
RT-01 Sliding Std	8434 2150 95
RT-03 Sliding Ext	8434 2150 37
RT-03 Sliding Std	8434 2150 30
RT-05 Sliding Ext	8434 2150 36
RT-05 Sliding Std	8434 2150 35
RT-08 Sliding Ext	8434 2150 32
RT-08 Sliding Std	8434 2150 31
RT-10 Sliding Ext	8434 2150 34
RT-10 Sliding Std	8434 2150 33

STD= Standard EXT=Extended

Description	Ordering No.
RT20 Sliding Ext	8434 2150 90
RT20 Sliding Std	8434 2150 89
RT25 Sliding Ext	8434 2150 92
RT25 Sliding Std	8434 2150 91
RT50 Sliding Ext	8434 2150 94
RT50 Sliding Std	8434 2150 93

RT SERIES ACCESSORIES

8 DIRECT HEX DRIVE



Description	Ordering No.
RT0.5-HX-10MM	8434 2138 44
RT0.5-HX-12MM	8434 2138 47
RT0.5-HX-14MM	8434 2138 50
RT0.5-HX-16MM	8434 2138 53
RT0.5-HX-17MM	8434 2138 56
RT0.5-HX-19MM	8434 2138 62
RT0.5-HX-22MM	8434 2138 68
RT0.5-HX-24MM	8434 2101 71
RT01-HX-010	8434 2138 71
RT01-HX-012	8434 2138 74
RT01-HX-014	8434 2138 77
RT01-HX-17MM	8434 2056 96
RT01-HX-19MM	8434 2056 98
RT01-HX-22MM	8434 2057 02

Description	Ordering No.
RT01-HX-24MM	8434 2057 04
RT01-HX-27MM	8434 2057 06
RT03-HX-010	8434 2057 14
RT03-HX-012	8434 2057 16
RT03-HX-014	8434 2057 18
RT03-HX-19MM	8434 2057 22
RT03-HX-19MM-EXT	8434 2139 40
RT03-HX-22MM	8434 2057 24
RT03-HX-22MM-EXT	8434 2116 22
RT03-HX-24MM	8434 2057 26
RT03-HX-24MM-EXT	8434 2116 25
RT03-HX-27MM	8434 2057 28
RT03-HX-30MM	8434 2139 46
RT03-HX-32MM	8434 2057 30
RT03-HX-36MM	8434 2139 49

Description	Ordering No.
RT03-HX-36MM-EXT	8434 2139 52
RT03-HX-38MM	8434 2139 55
RT05-HX-24MM	8434 2140 03
RT05-HX-27MM	8434 2057 36
RT05-HX-27MM-EXT	8434 2140 09
RT05-HX-32MM	8434 2140 12
RT05-HX-32MM-EXT	8434 2140 15

9 INSERT BIT ADAPTER

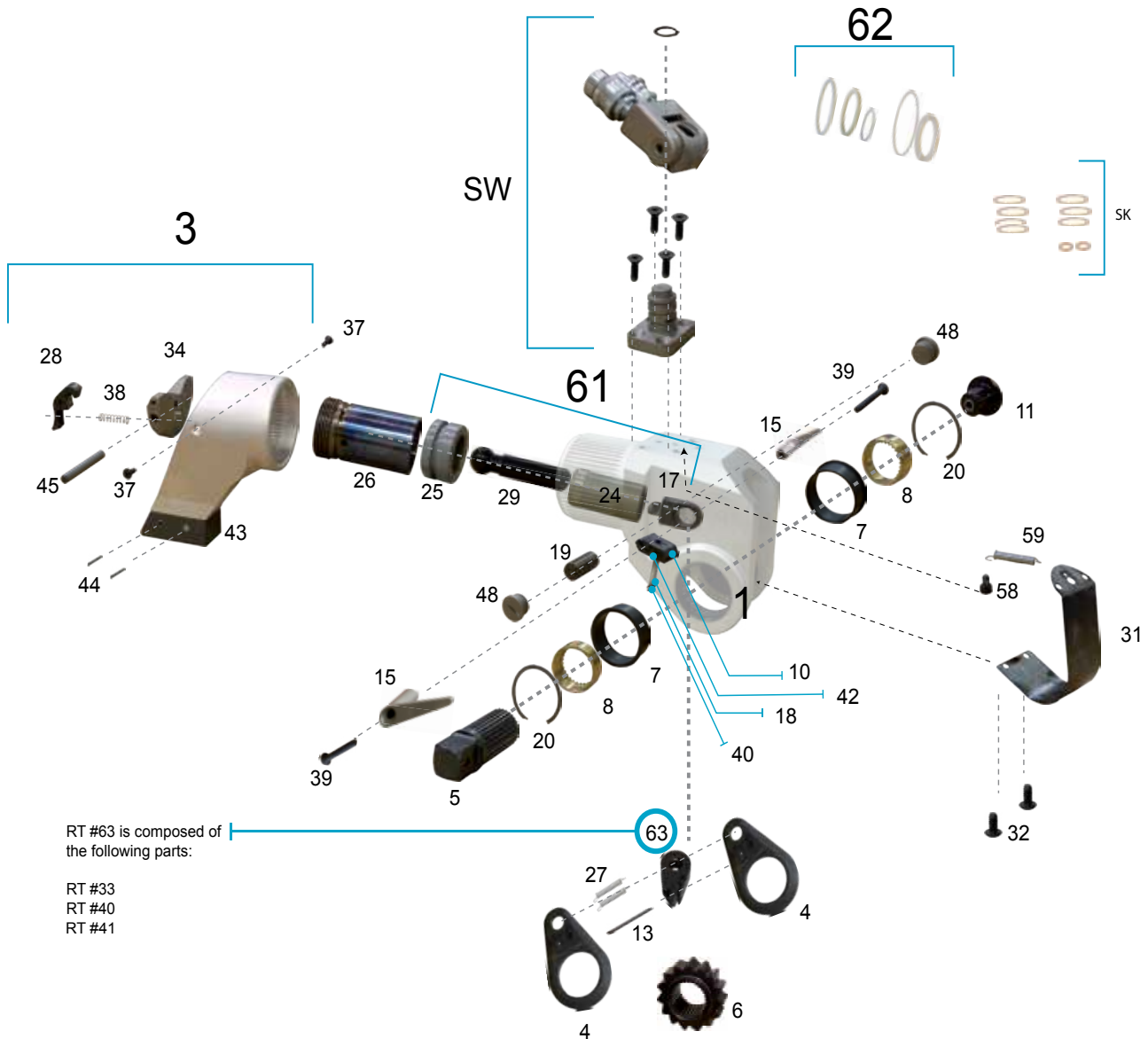


Description	Ordering No.
Hex Holder Sq Dr 3/4"-7/8"	8434 2129 59
Hex Holder Sq Dr 1/2"-1/2"	8434 2056 58
Hex Holder Sq Dr 1/2"-7/8"	8434 2056 60
Hex Holder Sq Dr 1 1/2"-1 3/4"	8434 2129 62
Hex Holder Sq Dr 1 1/2"-1 1/4"	8434 2129 65
Hex Holder Sq Dr 1"-1 1/4"	8434 2129 68
Hex Holder Sq Dr 1"-7/8"	8434 2056 62
Hex Size 10MM	8434 2054 24
Hex Size 12MM	8434 2054 26
Hex Size 14MM	8434 2054 30
Hex Size 17MM	8434 2054 32
Hex Size 19MM	8434 2054 34
Hex Size 22MM	8434 2054 36

Description	Ordering No.
Hex Size 24MM	8434 2054 38
Hex Size 27MM	8434 2123 32
Hex Size 24MM	8434 2050 18
Hex Size 27MM	8434 2050 20
Hex Size 28MM	8434 2050 22
Hex Size 29MM	8434 2050 24
Hex Size 30MM	8434 2050 26
Hex Size 32MM	8434 2050 28
Hex Size 33MM	8434 2050 30
Hex Size 36MM	8434 2124 13
Hex Size 36MM	8434 2050 40
Hex Size 40MM	8434 2124 16
Hex Size 41MM	8434 2050 42
Hex Size 46MM	8434 2050 44
Hex Size 50MM	8434 2050 46
Hex Size 1"	8434 2054 20
Hex Size 1"	8434 2050 12
Hex Size 1 1/16"	8434 2124 10
Hex Size 1 1/4"	8434 2050 14

Description	Ordering No.
Hex Size 1 1/8"	8434 2050 16
Hex Size 1 1/2"	8434 2050 32
Hex Size 1 3/4"	8434 2050 34
Hex Size 1 3/8"	8434 2050 36
Hex Size 1 5/8"	8434 2050 38
Hex Size 1"-12pt	8434 2126 86
Hex Size 1/2"	8434 2054 22
Hex Size 13/16"	8434 2054 28
Hex Size 3/4"	8434 2054 40
Hex Size 5/8"	8434 2054 42
Hex Size 7/8"	8434 2054 44
Hex Size 9/16"	8434 2054 46

RT SERIES SPARE PARTS INFORMATION



Periodic testing and maintenance is advised to ensure accuracy and safe operation of the tool. Our technicians are experts in keeping your tool in optimal working condition. Or you can opt to purchase our RT Series maintenance kits.

Parts List

Item	Part Description	Description
1*	Housing	RT#-1
3	Reaction Arm Assembly	RT#-3
4	Drive Plate	RT#-4
5	Square Drive	RT#-5
6	Ratchet Spine	RT#-6
7	Drive Bushing	RT#-7
8	Drive Sleeve Spline	RT#-8
10	Reaction Pawl	RT#-10
11	Drive Retainer	RT#-11
13	Drive Plate Roll Pin	RT#-13
15	Disengagement Lever	RT#-15
17	Piston Rod End	RT#-17
18	Reaction Pawl Spring	RT#-18
19	Rod End Pin	RT#-19
20	Drive Sleeve Retaining Ring	RT#-20
24	Piston Sleeve	RT#-24
25	Piston with Seal	RT#-25
26	Cylinder End Cap	RT#-26
27	Drive Pawl Spring	RT#-27
28	Reaction Arm Lever	RT#-28
29	Piston Rod	RT#-29
31	Shroud	RT#-31
32	Shroud Screw	RT#-32
33	Secondary Drive Pawl Spring	RT#-33
34	Reaction Arm Plate	RT#-34
37	Reaction Arm Plate Screw	RT#-37
38	Reaction Arm Lever Spring	RT#-38
39	Disengagement Lever Screw	RT#-39
40	Primary Drive Pawl Roll Pin	RT#-40
41	Secondary Drive Pawl Pin	RT#-41
42	Reaction Pawl Roll Pin	RT#-42
43	Reaction Arm Boot with Pins	RT#-43
44	Reaction Arm Boot Pin	RT#-44
45	Reaction Arm Lever Pin	RT#-45
48	Access Plug	RT#-48
58	Shroud Spring Screw	RT#-58
59	Shroud Spring	RT#-59
61	Piston Rod Assembly	RT#-61
62	Housing Seal Kit	RT#-62
63	Drive Pawl Assembly	RT#-63
SW*	Swivel Assembly (Small, Medium or Large)	RT-SW
SK	Swivel Seal Kit (Small, Medium or Large)	RT-SK

RT Series Maintenance Kits

Description	Part Description	Ordering No.
RT0.5-MK	Maintenance Kit	4222 2126 85
RT01-MK	Maintenance Kit	4222 2127 36
RT03-MK	Maintenance Kit	8434 2139 73
RT05-MK	Maintenance Kit	4222 2127 78
RT08-MK	Maintenance Kit	4222 2105 52
RT10-MK	Maintenance Kit	8434 2140 87
RT20-MK	Maintenance Kit	8434 2057 56
RT25-MK	Maintenance Kit	4222 2116 31
RT50-MK	Maintenance Kit	4222 2116 34

Maintenance kits have the spare parts you need to do basic maintenance on your tool, including seals springs and roll pins.

Maintenance Kit Includes:

Disengagement Lever w/Screws
 Drive Sleeve Retaining Ring
 Shroud
 Reaction Arm Plate Screws
 Disengagement Lever screw
 Access Plug (if applicable)
 Shroud Spring Screw
 Housing Seal Kit
 Roll Pin Kit
 Spring Kit
 Medium Swivel Seal Kit
 Male Female Nipple
 Female Coupler

*Please note: Seals are not included with spare parts. For replacement seals order our Seal Kits

RT SERIES SPARE PARTS ORDERING NUMBERS

RT-0.5

Description	Part Description	Ordering No.
RT0.5-01	Housing	4222 2125 80
RT0.5-03	Reaction Arm Assembly	4222 2101 44
RT0.5-04	Drive Plate	4222 2101 47
RT0.5-05	Square Drive	4222 2125 83
RT0.5-06	Ratchet Spline	4222 2125 86
RT0.5-07	Drive Bushing	4222 2101 50
RT0.5-08	Drive Sleeve Spline	4222 2125 89
RT0.5-10	Reaction Pawl	4222 2125 92
RT0.5-11	Drive Retainer	4222 2101 53
RT0.5-13	Drive Plate Roll Pin	4222 2101 56
RT0.5-15	Disengagement Lever	4222 2125 95
RT0.5-17	Piston Rod End	4222 2101 59
RT0.5-18	Reaction Pawl Spring	4222 2125 98
RT0.5-19	Rod End Pin	4222 2101 62
RT0.5-20	Drive Sleeve Retaining Ring	4222 2126 01
RT0.5-24	Piston Sleeve	4222 2126 04
RT0.5-25	Piston	4222 2126 07
RT0.5-26	Cylinder End Cap	4222 2126 10
RT0.5-27	Drive Pawl Spring	4222 2101 65
RT0.5-28	Reaction arm lever	4222 2126 13
RT0.5-29	Piston Rod	4222 2126 16
RT0.5-31	Shroud	4222 2126 19
RT0.5-32	Shroud Screws	4222 2126 22
RT0.5-33	Secondary Drive Pawl Spring	4222 2126 25
RT0.5-34	Reaction Arm Plate	4222 2126 28
RT0.5-37	Reaction Arm Plate Screws	4222 2126 31
RT0.5-38	Reaction Arm Lever Spring	4222 2126 34
RT0.5-39	Disengagement Lever Screw	4222 2126 37
RT0.5-40	Primary Drive Pawl Roll Pin	4222 2101 68
RT0.5-41	Secondary Drive Pawl Pin	4222 2126 40
RT0.5-42	Reaction Pawl Roll Pin	4222 2126 43
RT0.5-58	Shroud Spring Screw	4222 2126 58
RT0.5-59	Shroud Spring	4222 2126 61
RT0.5-61	Piston Rod Assembly	4222 2126 64
RT0.5-62	Housing Seal Kit	4222 2126 67
RT0.5-63	Drive Pawl Assembly	4222 2126 70
RT0.5-64	Roll Pin Kit	4222 2126 73
RT-SWIVEL-S	Small Swivel Assembly	4222 2116 19
RT-SK-S	Small Swivel Seal Kit	4222 2100 03

RT-01

Description	Part Description	Ordering No.
RT01-01	Housing	4222 2101 74
RT01-03	Reaction Arm Assembly	4222 2104 85
RT01-04	Drive Plate	4222 2101 77
RT01-05	Square Drive	4222 2126 97
RT01-06	Ratchet Spline	4222 2101 80
RT01-07	Drive Bushing	4222 2101 83
RT01-08	Drive Sleeve Spline	4222 2101 86
RT01-10	Reaction Pawl	4222 2127 00
RT01-11	Drive Retainer	4222 2127 03
RT01-13	Drive Plate Roll Pin	4222 2101 89
RT01-15	Disengagement Lever	4222 2101 92
RT01-17	Piston Rod End	4222 2101 95
RT01-18	Reaction Pawl Spring	4222 2101 98
RT01-19	Rod End Pin	4222 2102 01
RT01-20	Drive Sleeve Retaining Ring	4222 2102 04
RT01-24	Piston Sleeve	4222 2102 07
RT01-25	Piston	4222 2102 10
RT01-26	Cylinder End Cap	4222 2102 13
RT01-27	Drive Pawl Spring	4222 2102 16
RT01-28	Reaction Arm Lever	4222 2127 06
RT01-29	Piston Rod	4222 2102 19
RT01-31	Shroud	4222 2102 22
RT01-32	Shroud Screws	4222 2102 25
RT01-33	Secondary Drive Pawl Spring	4222 2102 28
RT01-34	Reaction Arm Plate	4222 2127 09
RT01-37	Reaction Arm Plate Screws	4222 2127 12
RT01-38	Reaction Arm Lever Spring	4222 2127 15
RT01-39	Disengagement Lever Screw	4222 2102 31
RT01-40	Primary Drive Pawl Roll Pin	4222 2102 34
RT01-41	Secondary Drive Pawl Pin	4222 2102 37
RT01-42	Reaction Pawl Roll Pin	4222 2102 40
RT01-43	Reaction Arm Boot with Pins	4222 2102 43
RT01-44	Reaction Arm Boot Pin	4222 2102 46
RT01-45	Reaction Arm Lever Pin	4222 2127 18
RT01-48	Access Plug	4222 2102 49
RT01-58	Shroud Spring Screw	4222 2102 52
RT01-59	Shroud Spring	4222 2102 55
RT01-61	Piston Rod Assembly	4222 2127 21
RT01-62	Housing Seal Kit	4222 2102 58
RT01-63	Drive Pawl Assembly	4222 2102 61
RT01-64	Roll Pin Kit	4222 2127 24
RT01-65	Spring Kit	4222 2127 27
RT-SWIVEL-S	Swivel Assembly Small	4222 2116 19
RT-SK-S	Swivel Seal Kit Small	4222 2100 03

RT-03

Description	Part Description	Ordering No.
RT03-01	Housing	4222 2102 70
RT03-03	Reaction Arm Assembly	4222 2102 73
RT03-04	Drive Plate	4222 2102 76
RT03-05	Square Drive	4222 2102 79
RT03-06	Ratchet Spline	4222 2102 82
RT03-07	Drive Bushing	4222 2102 85
RT03-08	Drive Sleeve Spline	4222 2102 88
RT03-10	Reaction Pawl	4222 2102 91
RT03-11	Drive Retainer	4222 2102 94
RT03-13	Drive Plate Roll Pin	4222 2102 97
RT03-15	Disengagement Lever	4222 2103 00
RT03-17	Piston Rod End	4222 2103 03
RT03-18	Reaction Pawl Spring	4222 2103 06
RT03-19	Rod End Pin	4222 2103 09
RT03-20	Drive Sleeve Retaining Ring	4222 2103 12
RT03-24	Piston Sleeve	4222 2103 15
RT03-25	Piston	4222 2103 18
RT03-26	Cylinder End Cap	4222 2103 21
RT03-27	Drive Pawl Spring	4222 2127 42
RT03-28	Reaction Arm Lever	4222 2103 24
RT03-29	Piston Rod	4222 2103 27
RT03-31	Shroud	4222 2103 30
RT03-32	Shroud Screws	4222 2103 33
RT03-33	Secondary Drive Pawl Spring	4222 2103 36
RT03-34	Reaction Arm Plate	4222 2103 39
RT03-37	Reaction Arm Plate Screws	4222 2103 42
RT03-38	Reaction Arm Lever Spring	4222 2103 45
RT03-39	Disengagement Lever Screw	4222 2103 48
RT03-40	Primary Drive Pawl Roll Pin	4222 2103 51
RT03-41	Secondary Drive Pawl Pin	4222 2103 54
RT03-42	Reaction Pawl Roll Pin	4222 2103 57
RT03-43	Reaction Arm Boot with Pins	4222 2103 60
RT03-44	Reaction Arm Boot Pin	4222 2103 63
RT03-45	Reaction Arm Lever Pin	4222 2103 66
RT03-48	Access Plug	4222 2103 69
RT03-58	Shroud Spring Screw	4222 2103 72
RT03-59	Shroud Spring	4222 2103 75
RT03-61	Piston Rod Assembly	4222 2127 45
RT03-62	Housing Seal Kit	4222 2103 78
RT03-63	Drive Pawl Assembly	4222 2127 48
RT03-64	Roll Pin Kit	4222 2127 51
RT03-65	Spring Kit	4222 2127 54
RT-SWIVEL-M	Medium Swivel Assembly	4222 2100 09
RT-SK-M	Medium Swivel Seal Kit	4222 2130 87

RT-05

Description	Part Description	Ordering No.
RT05-01	Housing	4222 2127 57
RT05-03	Reaction Arm Assembly	4222 2127 60
RT05-04	Drive Plate	4222 2103 81
RT05-05	Square Drive	4222 2103 84
RT05-06	Ratchet Spline	4222 2103 87
RT05-07	Drive Bushing	4222 2103 90
RT05-08	Drive Sleeve Spline	4222 2103 93
RT05-10	Reaction Pawl	4222 2103 96
RT05-11	Drive Retainer	4222 2103 99
RT05-13	Drive Plate Roll Pin	4222 2104 02
RT05-15	Disengagement Lever	4222 2104 05
RT05-17	Piston Rod End	4222 2104 08
RT05-18	Reaction Pawl Spring	4222 2104 11
RT05-19	Rod End Pin	4222 2104 14
RT05-20	Drive Sleeve Retaining Ring	4222 2104 17
RT05-24	Piston Sleeve	4222 2104 20
RT05-25	Piston	4222 2104 23
RT05-26	Cylinder End Cap	4222 2104 26
RT05-27	Drive Pawl Spring	4222 2127 63
RT05-28	Reaction Arm Lever	4222 2127 66
RT05-29	Piston Rod	4222 2104 29
RT05-31	Shroud	4222 2104 32
RT05-32	Shroud Screw	4222 2127 69
RT05-33	Secondary Drive Pawl Spring	4222 2104 35
RT05-34	Reaction Arm Plate	4222 2104 38
RT05-37	Reaction Arm Plate Screws	4222 2104 39
RT05-38	Reaction Arm Lever Spring	4222 2104 41
RT05-39	Disengagement Lever Screw	4222 2104 44
RT05-40	Primary Drive Pawl Roll Pin	4222 2104 47
RT05-41	Secondary Drive Pawl Pin	4222 2104 50
RT05-42	Reaction Pawl Roll Pin	4222 2104 53
RT05-43	Reaction Arm Boot with Pins	4222 2104 56
RT05-44	Reaction Arm Boot Pin	4222 2104 59
RT05-45	Reaction Arm Lever Pin	4222 2105 41
RT05-48	Access Plug	4222 2104 62
RT05-58	Shroud Spring Screw	4222 2104 65
RT05-59	Shroud Spring	4222 2104 68
RT05-61	Piston Rod Assembly	4222 2104 71
RT05-62	Housing Seal Kit	4222 2104 74
RT05-63	Drive Pawl Assembly	4222 2104 77
RT05-63-1	Drive Pawl Assembly part 1	4222 2104 78
RT05-63-2	Drive Pawl Assembly part 2	4222 2104 79
RT05-65	Spring Kit	4222 2127 75
RT-SWIVEL-M	Medium Swivel Assembly	4222 2100 09
RT-SK-M	Medium Swivel Seal Kit	4222 2130 87

RT SERIES SPARE PARTS ORDERING NUMBERS

RT-08

Description	Part Description	Ordering No.
RT08-01	Housing	4222 2104 80
RT08-03	Reaction Arm Assembly	4222 2104 83
RT08-04	Drive Plate	4222 2104 86
RT08-05	Square Drive	4222 2104 89
RT08-06	Ratchet Spline	4222 2104 92
RT08-07	Drive Bushing	4222 2104 95
RT08-08	Drive Sleeve Spline	4222 2104 98
RT08-10	Reaction Pawl	4222 2105 01
RT08-11	Drive Retainer	4222 2105 04
RT08-13	Drive Plate Roll Pin	4222 2127 81
RT08-15	Disengagement Lever	4222 2105 07
RT08-17	Piston Rod End	4222 2105 10
RT08-18	Reaction Pawl Spring	4222 2127 84
RT08-19	Rod End Pin	4222 2105 13
RT08-20	Drive Sleeve Retaining Ring	4222 2127 87
RT08-24	Piston Sleeve	4222 2105 16
RT08-25	Piston	4222 2105 19
RT08-26	Cylinder End Cap	4222 2105 22
RT08-27	Drive Pawl Spring	4222 2127 90
RT08-28	Reaction Arm Lever	4222 2105 25
RT08-29	Piston Rod	4222 2105 28
RT08-31	Shroud	4222 2105 31
RT08-32	Shroud Screws	4222 2127 93
RT08-33	Secondary Drive Pawl Pin	4222 2127 96
RT08-34	Reaction Arm Plate	4222 2105 34
RT08-37	Reaction Arm Plate Screws	4222 2127 99
RT08-38	Reaction Arm Lever Spring	4222 2128 02
RT08-39	Disengagement Lever Screw	4222 2128 05
RT08-40	Primary Drive Pawl Roll Pin	4222 2128 06
RT08-41	Secondary Drive Pawl Pin	4222 2128 07
RT08-42	Reaction Pawl Roll Pin	4222 2128 09
RT08-43	Reaction Arm Boot with Pins	4222 2105 37
RT08-44	Reaction Arm Boot Pin	4222 2128 08
RT08-45	Reaction Arm Lever Pin	4222 2105 40
RT08-48	Access Plug	4222 2105 43
RT08-58	Shroud Spring Screw	4222 2128 11
RT08-59	Shroud Spring	4222 2128 14
RT08-61	Piston Rod Assembly	4222 2128 17
RT08-62	Housing Seal Kit	4222 2105 46
RT08-63	Drive Pawl Assembly	4222 2105 49
RT08-64	Roll Pin Kit	4222 2128 20
RT08-65	Screw Kit	4222 2128 23
RT-SWIVEL-M	Medium Swivel Assembly	4222 2100 09
RT-SK-M	Medium Swivel Seal Kit	4222 2130 87

RT-10

Description	Part Description	Ordering No.
RT10-01	Housing	4222 2105 55
RT10-03	Reaction Arm Assembly	4222 2105 58
RT10-04	Drive Plate	4222 2105 61
RT10-05	Square Drive	4222 2105 64
RT10-06	Ratchet Spline	4222 2105 67
RT10-07	Drive Bushing	4222 2105 70
RT10-08	Drive Sleeve Spine	4222 2105 73
RT10-10	Reaction Pawl	4222 2105 76
RT10-11	Drive Retainer	4222 2105 79
RT10-13	Drive Plate Roll Pin	4222 2105 82
RT10-15	Disengagement Lever	4222 2105 85
RT10-17	Piston Rod End	4222 2105 88
RT10-18	Reaction Pawl Spring	4222 2105 91
RT10-19	Rod End Pin	4222 2105 94
RT10-20	Drive Sleeve Retaining Ring	4222 2128 29
RT10-24	Piston Sleeve	4222 2105 97
RT10-25	Piston	4222 2106 00
RT10-26	Cylinder End Cap	4222 2106 03
RT10-27	Drive Pawl Spring	4222 2106 06
RT10-28	Reaction Arm Lever	4222 2106 09
RT10-29	Piston Rod	4222 2106 12
RT10-31	Shroud	4222 2128 32
RT10-32	Shroud Screws	4222 2128 35
RT10-33	Secondary Drive Pawl Spring	4222 2106 15
RT10-34	Reaction Arm Plate	4222 2106 18
RT10-37	Reaction Arm Plate Screws	4222 2128 38
RT10-38	Reaction Arm Lever Spring	4222 2128 41
RT10-39	Disengagement Lever Screw	4222 2128 44
RT10-40	Primary Drive Pawl Roll Pin	4222 2128 47
RT10-41	Secondary Drive Pawl Pin	4222 2106 21
RT10-42	Reaction Pawl Roll Pin	4222 2106 24
RT10-43	Reaction Arm Boot with Pins	4222 2106 27
RT10-44	Reaction Arm Boot Pin	4222 2128 50
RT10-45	Reaction Arm Lever Pin	4222 2128 53
RT10-48	Access Plug	4222 2106 30
RT10-58	Shroud Spring Screw	4222 2106 33
RT10-59	Shroud Spring	4222 2128 56
RT10-61	Piston Rod Assembly	4222 2128 59
RT10-62	Housing Seal Kit	4222 2106 36
RT10-63	Drive Pawl Assembly	4222 2106 39
RT10-64	Roll Pin Kit	4222 2128 62
RT10-65	Spring Kit	4222 2128 65
RT-SWIVEL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

RT-20

Description	Part Description	Ordering No.
RT20-01	Housing	4222 2128 68
RT20-03	Reaction Arm Assembly	4222 2128 71
RT20-04	Drive Plate	4222 2128 74
RT20-05	Square Drive	4222 2128 77
RT20-06	Ratchet Spline	4222 2128 80
RT20-07	Drive Bushing	4222 2106 42
RT20-08	Drive Sleeve Spine	4222 2106 45
RT20-10	Reaction Pawl	4222 2128 83
RT20-11	Drive Retainer	4222 2106 48
RT20-13	Drive Plate Roll Pin	4222 2128 86
RT20-15	Disengagement Lever	4222 2106 51
RT20-17	Piston Rod Connector	4222 2128 89
RT20-18	Reaction Pawl Spring	4222 2128 92
RT20-19	Rod End Pin	4222 2106 54
RT20-20	Drive Sleeve Retaining Ring	4222 2128 95
RT20-24	Piston Sleeve	4222 2128 98
RT20-25	Piston with Seal	4222 2129 01
RT20-26	Cylinder End Cap	4222 2129 04
RT20-27	Drive Pawl Spring	4222 2129 07
RT20-28	Reaction Arm Lever	4222 2129 10
RT20-29	Piston Rod	4222 2129 13
RT20-31	Shroud	4222 2129 16
RT20-32	Shroud Screws	4222 2129 19
RT20-33	Secondary Drive Plate Spring	4222 2129 22
RT20-34	Reaction Arm Plate	4222 2129 25
RT20-37	Reaction Arm Plate Screws	4222 2129 28
RT20-38	Reaction Arm Lever Spring	4222 2129 26
RT20-39	Disengagement Lever Screw	4222 2129 27
RT20-40	Primary Drive Pawl Roll Pin	4222 2129 29
RT20-41	Secondary Drive Pawl Roll Pin	4222 2129 30
RT20-42	Reaction Pawl Roll Pin	4222 2129 32
RT20-43	Reaction Arm Boot with Pins	4222 2129 33
RT20-61	Piston Rod Assembly	4222 2129 31
RT20-62	Housing Seal Kit	4222 2106 57
RT20-63	Drive Pawl Assembly	4222 2129 34
RT-SWIVEL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

Contact your local representative to obtain ordering numbers on other spare part items.

RT-25

Description	Part Description	Ordering No.
RT25-01	Housing	4222 2129 37
RT25-03	Reaction Arm Assembly	4222 2106 60
RT25-04	Drive Plate	4222 2129 40
RT25-05	Square Drive	4222 2129 43
RT25-06	Ratchet Spline	4222 2129 46
RT25-07	Drive Bushing	4222 2129 49
RT25-08	Drive Sleeve Spine	4222 2129 52
RT25-10	Reaction Pawl	4222 2106 63
RT25-11	Drive Retainer	4222 2129 55
RT25-13	Drive Plate Roll Pin	4222 2129 58
RT25-15	Disengagement Lever	4222 2106 66
RT25-17	Piston Rod Connector	4222 2129 61
RT25-18	Reaction Pawl Spring	4222 2129 64
RT25-19	Rod End Pin	4222 2129 67
RT25-20	Drive Sleeve Retaining Ring	4222 2129 70
RT25-24	Piston Sleeve	4222 2129 73
RT25-25	Piston	4222 2106 69
RT25-26	Cylinder end cap	4222 2106 70
RT25-28	Reaction Arm Lever	4222 2129 76
RT25-29	Piston Rod	4222 2129 79
RT25-31	Shroud	4222 2129 82
RT25-37	Reaction Arm Plate Screw	4222 2129 85
RT25-38	Reaction Arm Lever Spring	4222 2129 88
RT25-43	Reaction Arm Boot with Pins	4222 2129 91
RT25-59	Shroud Spring	4222 2129 94
RT25-61	Piston Rod Assembly	4222 2129 97
RT25-62	Housing Seal Kit	4222 2106 72
RT25-63	Drive Pawl Assembly	4222 2106 75
RT-SWIVEL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

RT-50

Description	Part Description	Ordering No.
RT50-05	Square Drive	4222 2130 27
RT50-07	Drive Bushing	4222 2106 78
RT50-08	Drive Sleeve Spine	4222 2130 30
RT50-11	Drive Retainer	4222 2130 33
RT50-15	Disengagement Lever	4222 2130 36
RT50-19	Rod End Pin	4222 2130 39
RT50-28	Reaction Arm Lever	4222 2106 82
RT50-31	Shroud	4222 2130 42
RT50-32	Shroud Screws	4222 2130 45
RT50-43	Reaction Arm Boot	4222 2130 51
RT50-62	Housing Seal Kit	4222 2106 81
RT-SWIVEL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

RTX SERIES

LOW PROFILE HYDRAULIC TORQUE WRENCH

AIRCRAFT ALUMINUM ALLOY

Most of the exterior is made up of aircraft-quality aluminum alloy, which provides amazing strength while keeping weight to a minimum.

HIGH STRENGTH STEEL ALLOY

Heavy duty contact points ensure long tool life.

LARGEST HEX RANGE

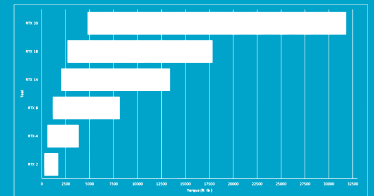
Largest range of hex sizes available. Torque output is consistent for any link size. Available in Reduced Radius and 12 point.



Atlas Copco RTX Series Low Profile Hydraulic Torque Wrenches eliminate problems with tight clearances. Repeatability is +/-1% and output accuracy is at +/-3%.



MULTI-AXIS SWIVEL
Greater range of movement on multiple axis allows the hose to move easier compared to one axis swivels.



AUTOMATIC ENGAGEMENT
The powerhead engages the direct fit ratchet link automatically.



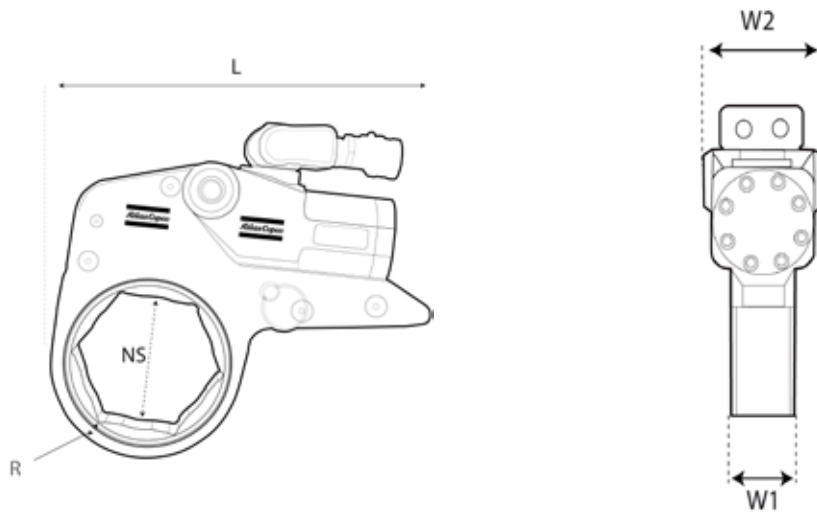
Ranges from 3/4" to 6 1/2"

REACTION OPTIONS AVAILABLE
The in-line reaction pad works beautifully on most applications. For special applications, Atlas Copco offers outside reaction arms and Alco arms to increase reaction points.

RTX Series
Hydraulic Torque Wrench Datasheet



RTX SERIES TECHNICAL INFORMATION



Model	Dimensions									
	L		NS (based on ratchet link size)		R		W1		W2	
	in	mm	in	mm	in	mm	in	mm	in	mm
RTX-02	7.2	183	3/4 – 2-9/16	19-65	0.35	9	1.26	32	1.92	49
RTX-04	9.7	248	1-5/16 - 3-1/8	32-80	0.47	12	1.65	42	2.56	65
RTX-08	12.1	308	1-13/16 - 3-7/8	46-100	0.59	15	2.08	53	3.22	82
RTX-14	14.6	372	2 – 4-5/8	50-120	0.72	18.5	2.48	63	3.89	99
RTX-18	15.5	393	3 - 5-1/2	75-140	.87	22.2	2.75	70	4.37	111
RTX-30	18	457	3-9/16- 6-1/8	90-155	1	25.4	3.26	83	5.28	132

Model	Ratchet Link Hex Size*		Torque Range		Weight		Ordering No.
	in	mm	ft.lb.	Nm	lb	kg	
RTX-02	3/4 – 2-3/4	19-65	255-1710	346-2318	4.5	2	8434 2021 90
RTX-04	1 - 3-1/8	25-85	580-3855	786-5226	9.7	4.4	8434 2021 95
RTX-08	1-5/8 - 4-1/8	46-105	1143-8151	1549-11049	19.5	9	8434 2022 00
RTX-14	2-1/2 – 5-3/8	60-135	2010-13400	2725-18165	33	15	8434 2116 58
RTX-18	3-1/2 - 5-1/2	75-140	2676-17845	3628-24191	51	23	8434 2022 05
RTX-30	3-1/2 - 6-1/2	90-165	4770-31800	6466-43108	78	35.5	8434 2022 10

Designs and specifications are subject to change without notice or obligation. Read all safety instructions in the manual before usage.

CHOOSING YOUR RTX SERIES HYDRAULIC TORQUE WRENCH

1

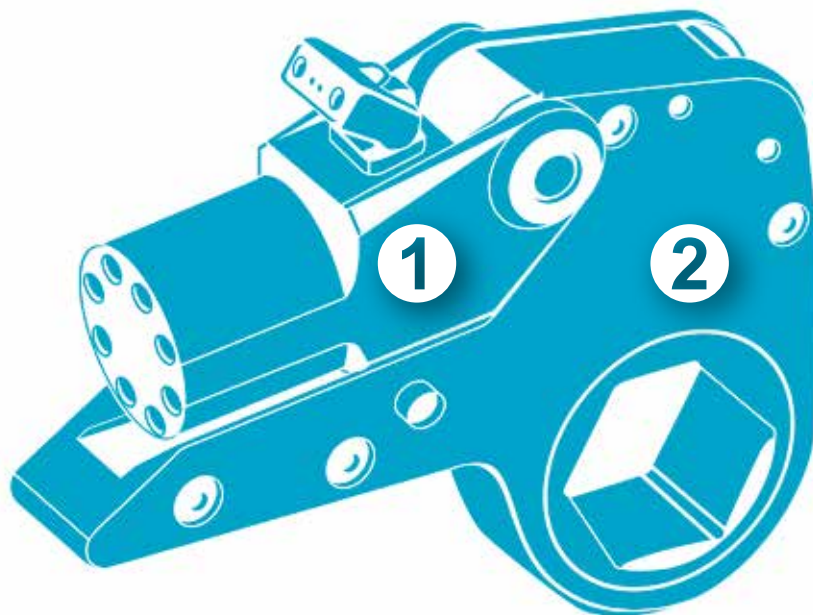
RTX Powerhead

Choose your torque range.

2

Direct Fit Ratchet Links

Choose the Across Flat Hex Link Size* needed for your application. Available in Reduced Radius#.



How do I select the link size on the following pages?

In this catalog, sizes are expressed as MM for metric while imperial have a 3 digit designation. How can you tell the sizes?



First number indicates inch, and the following two numbers indicate an increment of 1/16". For example **RL18-308** would be a link that is 3-8/16, with 8/16 being 1/2. Another example and **RL04-105** would be a 1-5/16" link. When the link sizes in metric and imperial are the same size, we have it listed together. For example: **RL14-104/32MM** would be a link for a nut that is 1-1/4 (4/16 being 1/4) but would also be used for a 32MM nut.

*RTX Hydraulic Torque Wrench is uniquely designed to have consistent torque output, regardless of hex size link. That means that you don't have to worry about different torque charts when changing direct hex link size.

#Reduced Radius Ratchets (RR) are .062" (1.57 mm) reduction compared to the standard size links.

RTX-02 RATCHET LINK SIZES



Use the following link sizes with RTX-02, which has a torque range of 255 to 1,710 ft. lb.

Model	Ordering No.
RL02-17MM	8434 2132 41
RL02-012/19MM RR	8434 2132 47
RL02-012/19MM	8434 2131 84
RL02-013	8434 2131 87
RL02-22MM	8434 2132 74
RL02-014	8434 2020 00
RL02-015	8434 2131 90
RL02-24MM	8434 2020 54
RL02-100/25MM	8434 2020 03
RL02-100/25MM 12PT	8434 2131 93
RL02-101/27MM	8434 2131 96
RL02-102	8434 2131 99
RL02-102 12PT	8434 2132 02
RL02-103/30MM	8434 2132 05
RL02-104/32MM 12PT	8434 2132 11
RL02-104/32MM	8434 2132 08
RL02-105	8434 2132 14
RL02-34	8434 2132 81
RL02-106	8434 2132 17
RL02-107/36MM	8434 2021 68
RL02-107/36MM RR	8434 2021 83
RL02-108/38MM	8434 2132 20
RL02-109	8434 2132 23
RL02-110/41MM	8434 2021 07
RL02-110/41MM RR	8434 2021 08
RL02-111/43MM	8434 2132 26
RL02-112	8434 2132 29
RL02-113/46MM	8434 2132 32

Model	Ordering No.
RL02-113/46MM RR	8434 2132 35
RL02-114	8434 2020 06
RL02-115	8434 2132 38
RL02-50MM	8434 2021 86
RL02-200	8434 2132 50
RL02-200 RR	8434 2021 74
RL02-201	8434 2132 53
RL02-202	8434 2132 56
RL02-203/55MM	8434 2132 59
RL02-204	8434 2132 62
RL02-58MM	8434 2132 89
RL02-205	8434 2132 65
RL02-206/60MM	8434 2021 47
RL02-207	8434 2132 68
RL02-208	8434 2132 71
RL02-209/65MM	8434 2021 50
RL02-210	8434 2021 51
RL02-212	8434 2021 59
RL02-212/70MM	8434 2059 29
RL02-213 13/16	8434 2021 60
RL02-215/75MM	8434 2132 92

12 Point Hexagonal, Reduced Radius and Custom Sizes available upon request.

RTX-04 RATCHET LINK SIZES



Use the following link sizes with RTX-04, which has a torque range of 580 to 3,855 ft. lb.

Model	Ordering No.
RL04-15MM	8434 2133 47
RL04-17MM	8434 2133 48
RL04-014/22MM	8434 2133 19
RL04-24MM	8434 2133 93
RL04-100/25MM	8434 2133 22
RL04-101/27MM	8434 2020 63
RL04-102	8434 2133 23
RL04-103/30MM	8434 2133 25
RL04-104/32MM	8434 2020 15
RL04-104/32MM 12PT	8434 2134 15
RL04-105	8434 2133 32
RL04-106	8434 2133 34
RL04-107/36MM	8434 2020 09
RL04-108/38MM 12PT	8434 2133 37
RL04-108/38MM	8434 2133 40
RL04-109	8434 2133 41
RL04-110/41MM	8434 2021 35
RL04-42MM	8434 2134 24
RL04-111/43MM	8434 2020 12
RL04-112	8434 2020 60
RL04-113/46MM	8434 2021 53
RL04-113/46MM RR	8434 2116 01
RL04-114	8434 2133 43
RL04-48MM	8434 2134 27
RL04-115	8434 2133 46
RL04-50MM	8434 2134 30
RL04-200	8434 2133 49
RL04-201	8434 2133 52
RL04-202	8434 2133 55
RL04-54MM	8434 2134 33
RL04-55MM RR	8434 2134 39
RL04-203/55MM	8434 2021 71
RL04-204	8434 2133 58
RL04-58MM	8434 2134 42

Model	Ordering No.
RL04-205	8434 2133 61
RL04-206/60MM	8434 2133 64
RL04-207	8434 2133 65
RL04-208	8434 2133 67
RL04-64MM	8434 2134 46
RL04-209/65MM	8434 2133 70
RL04-210	8434 2133 73
RL04-211	8434 2133 76
RL04-212/70MM RR	8434 2133 82
RL04-212/70MM	8434 2021 62
RL04-71MM	8434 2021 63
RL04-213	8434 2133 85
RL04-214	8434 2133 88
RL04-215/75MM	8434 2020 21
RL04-300	8434 2134 00
RL04-77MM	8434 2020 22
RL04-301	8434 2134 03
RL04-302/79MM	8434 2134 06
RL04-80MM	8434 2134 51
RL04-303	8434 2134 07
RL04-85MM	8434 2134 54
RL04-306	8434 2134 08
RL04-308	8434 2134 09
RL04-312/95MM	8434 2059 31

12 Point Hexagonal, Reduced Radius and Custom Sizes available upon request.

RTX-08 RATCHET LINK SIZES



Use the following link sizes with RTX-08, which has a torque range of 1,143 to 8,151 ft. lb.

Model	Ordering No.
RL08-102	8434 2134 93
RL08-36mm	8434 2059 34
RL08-108/38MM 12PT	8434 2134 99
RL08-110/41MM	8434 2135 02
RL08-111/43MM	8434 2135 08
RL08-113/46MM	8434 2020 66
RL08-114	8434 2135 11
RL08-50MM	8434 2135 47
RL08-200	8434 2020 68
RL08-200 12PT	8434 2020 67
RL08-201	8434 2135 17
RL08-54MM	8434 2135 50
RL08-203/55MM	8434 2020 69
RL08-204	8434 2135 20
RL08-206/60MM	8434 2020 70
RL08-207	8434 2135 23
RL08-63MM	8434 2020 31
RL08-208	8434 2135 26

Model	Ordering No.
RL08-209/65MM	8434 2116 04
RL08-210	8434 2135 29
RL08-67MM	8434 2020 32
RL08-212/70MM	8434 2135 59
RL08-71MM	8434 2135 62
RL08-213	8434 2135 32
RL08-215/75MM	8434 2135 65
RL08-300	8434 2135 35
RL08-77MM	8434 2135 68
RL08-78MM	8434 2135 71
RL08-302	8434 2020 72
RL08-80MM	8434 2135 74
RL08-304	8434 2020 73
RL08-305	8434 2020 77
RL08-85MM	8434 2021 11
RL08-306	8434 2021 02
RL08-308	8434 2020 74
RL08-309/90MM	8434 2135 38
RL08-310	8434 2020 27

Model	Ordering No.
RL08-312/95MM	8434 2135 41
RL08-314	8434 2021 65
RL08-315/100MM	8434 2020 24
RL08-400	8434 2135 44
RL08-401	8434 2020 75
RL08-105MM	8434 2134 96
RL08-404	8434 2020 78
RL08-110MM	8434 2135 05
RL08-115MM	8434 2135 14

RTX-18 RATCHET LINK SIZES



Use the following link sizes with RTX-18, which has a torque range of 2,676 to 17,845 ft lb.

Model	Ordering No.
RL18-105	8434 2020 91
RL18-106	8434 2020 92
RL18-203/55MM	8434 2137 10
RL18-206/60MM	8434 2137 11
RL18-209/65MM	8434 2137 12
RL18-212/70MM	8434 2059 47
RL18-71MM	8434 2137 14
RL18-215/75MM	8434 2137 16
RL18-300	8434 2137 13
RL18-77MM	8434 2137 17
RL18-302	8434 2137 08
RL18-80MM	8434 2137 18
RL18-85MM	8434 2137 21
RL18-306	8434 2020 85
RL18-308	8434 2020 87
RL18-90MM	8434 2137 24
RL18-309/90MM	8434 2020 86
RL18-312/95MM	8434 2020 90
RL18-314	8434 2137 15
RL18-315/100MM	8434 2020 88

Model	Ordering No.
RL18-401	8434 2020 47
RL18-105MM	8434 2136 88
RL18-106MM	8434 2136 91
RL18-404	8434 2020 48
RL18-110MM	8434 2136 94
RL18-115MM	8434 2136 97
RL18-410	8434 2020 93
RL18-120MM	8434 2137 00
RL18-500	8434 2021 56
RL18-130MM	8434 2137 03
RL18-135MM	8434 2137 06
RL18-506	8434 2021 23
RL18-140MM	8434 2020 89
RL18-510	8434 2021 22
RL18-145MM	8434 2020 94
RL18-512	8434 2020 96
RL18-515	8434 2021 24
RL18-151MM	8434 2137 09
RL18-602	8434 2021 25

12 Point Hexagonal, Reduced Radius and Custom Sizes available upon request.

RTX-14 RATCHET LINK SIZES



Use the following link sizes with RTX-14, which has a torque range of 2,010 to 13,400 ft. lb.

Model	Ordering No.
RL14-104/32MM	8434 2135 99
RL14-108/38MM	8434 2136 02
RL14-200	8434 2020 33
RL14-203/55MM	8434 2020 36
RL14-57MM	8434 2136 60
RL14-204	8434 2020 37
RL14-206/60MM	8434 2136 13
RL14-208	8434 2136 16
RL14-209/65MM	8434 2020 39
RL14-210	8434 2136 19
RL14-67MM	8434 2136 64
RL14-211	8434 2136 20
RL14-212/70MM	8434 2136 66
RL14-71MM	8434 2136 67
RL14-213	8434 2136 22
RL14-215/75MM	8434 2021 29
RL14-300	8434 2136 25
RL14-77MM	8434 2021 30
RL14-301	8434 2136 28
RL14-302	8434 2136 31

Model	Ordering No.
RL14-80MM	8434 2021 20
RL14-303	8434 2136 32
RL14-304	8434 2136 30
RL14-85MM	8434 2021 32
RL14-306	8434 2136 33
RL14-308	8434 2136 34
RL14-309/90MM	8434 2136 37
RL14-310	8434 2136 38
RL14-311	8434 2136 39
RL14-312/95MM	8434 2020 42
RL14-98MM	8434 2136 70
RL14-314	8434 2020 45
RL14-100MM	8434 2021 14
RL14-400	8434 2136 43
RL14-401	8434 2021 26
RL14-402	8434 2136 46
RL14-105MM	8434 2135 98
RL14-403	8434 2136 47
RL14-404	8434 2020 84
RL14-405	8434 2020 83

Model	Ordering No.
RL14-110MM	8434 2136 01
RL14-408	8434 2136 49
RL14-115MM	8434 2136 04
RL14-409	8434 2136 52
RL14-410	8434 2136 55
RL14-120MM	8434 2136 07
RL14-500	8434 2021 41
RL14-130MM	8434 2136 10
RL14-506	8434 2136 58

RTX-30 RATCHET LINK SIZES



Use the following link sizes with RTX-30, which has a torque range of 4,770 to 31,800 ft lb.

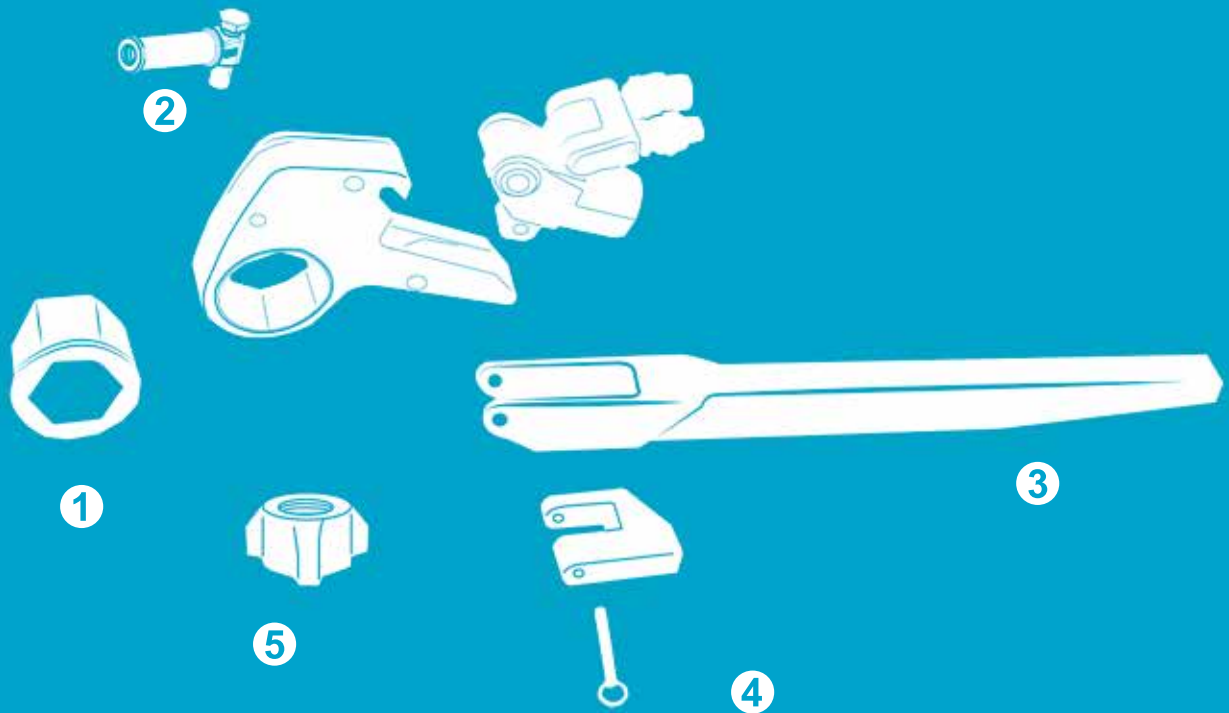
Model	Ordering No.
RL30-209/65MM	8434 2137 72
RL30-215/75MM	8434 2137 73
RL30-302	8434 2137 75
RL30-80MM	8434 2138 14
RL30-85MM	8434 2138 17
RL30-306	8434 2137 78
RL30-308	8434 2137 81
RL30-90MM	8434 2138 18
RL30-312/95MM	8434 2137 84
RL30-98MM	8434 2138 20
RL30-314	8434 2137 87
RL30-315/100MM	8434 2137 33
RL30-400	8434 2133 86
RL30-401	8434 2137 88
RL30-402	8434 2137 89
RL30-105MM	8434 2137 36
RL30-404	8434 2137 90
RL30-110MM	8434 2137 39
RL30-408	8434 2021 01
RL30-115MM	8434 2137 42

Model	Ordering No.
RL30-117MM	8434 2020 56
RL30-410	8434 2021 00
RL30-120MM	8434 2137 45
RL30-123MM	8434 2137 48
RL30-124MM	8434 2020 55
RL30-125MM	8434 2137 51
RL30-500	8434 2020 99
RL30-130MM	8434 2020 53
RL30-133MM	8434 2020 58
RL30-135MM	8434 2137 54
RL30-506	8434 2020 51
RL30-508	8434 2137 92
RL30-140MM	8434 2138 21
RL30-145MM	8434 2137 57
RL30-512	8434 2137 93
RL30-150MM	8434 2137 60
RL30-515	8434 2137 96
RL30-152MM	8434 2020 61
RL30-600	8434 2138 02
RL30-155MM	8434 2137 63

Model	Ordering No.
RL30-602	8434 2020 59
RL30-160MM	8434 2137 66
RL30-606	8434 2138 05
RL30-608	8434 2138 08
RL30-170MM	8434 2137 69
RL30-175MM	8434 2138 22
RL30-701	8434 2138 11

12 Point Hexagonal, Reduced Radius and Custom Sizes available upon request.

LOW PROFILE HYDRAULIC TORQUE WRENCH ACCESSORIES



- ① Insert Hex Reducer
- ② Safety Handle for RTX
- ③ Alco Arm
- ④ Inside Reaction Arm
- ⑤ Safety Nut

1 INSERT HEX REDUCER



Starting Size	Reduces To	Ordering No.
2 3/4	1 5/8	4222 2134 17
2 3/4	1 13/16	4222 2134 20
2 3/4	1 7/8	4222 2134 23
46mm	36mm	4222 2134 26
50mm	41mm	4222 2134 29
50mm	46mm	4222 2134 32
1 13/16	30mm	4222 2119 58
1 13/16	36mm	4222 2119 62
1 13/16	42mm	4222 2119 66
2	1 3/4	4222 2137 74
2	1 13/16	4222 2137 77
2 1/4	1 5/16	4222 2137 80
2 1/4	1 1/2	4222 2137 83
2 1/4	1 7/8	4222 2137 86
2 1/2	1 7/8	4222 2119 70
2 3/4	2 1/2	4222 2137 89
2 3/4	2 1/16	4222 2137 92
2 3/4	2 1/8	4222 2137 95
2 3/4	2 3/16	4222 2137 98
2 3/4	2 1/4	4222 2138 01
2 3/4	2 3/8	4222 2138 04

Starting Size	Reduces To	Ordering No.
2 15/16	2 9/16	4222 2138 07
3 1/8	1	4222 2138 10
3 1/8	1 1/2	4222 2138 13
3 1/8	1 5/8	4222 2138 16
3 1/8	1 3/4	4222 2138 19
3 1/8	2	4222 2138 22
3 1/8	2 3/8	4222 2138 25
50mm	19mm	4222 2138 28
50mm	32mm	4222 2138 31
50mm	41mm	4222 2138 34
50mm	42mm	4222 2138 37
50mm	46mm	4222 2138 40
55mm	50mm	4222 2138 43
65mm	55mm	4222 2119 74
70mm	60mm	4222 2119 78
70mm	65mm	4222 2119 82
100mm	80mm	4222 2140 62
2 3/16	2	4222 2140 65
3 1/8	2 15/16	4222 2140 68
3 1/8	50mm	4222 2140 71
3 1/8	55mm	4222 2140 74
3 1/8	60mm	4222 2140 77
3 7/8	3 1/2	4222 2140 80
60mm	50mm	4222 2122 07
60mm	55mm	4222 2122 11
70mm	46mm	4222 2140 83

2 SAFETY HANDLE



Model	Ordering No.
Handle Kit RT-02	8434 2170 35
Handle Kit RT-04	8434 2170 36
Handle Kit RT-08	8434 2170 37
Handle Kit RT-14	8434 2170 38
Handle Kit RT-18	8434 2170 39
Handle Kit RT-30	8434 2170 40

3 ALCO ARM



Model	Ordering No.
RTX02-ALC	8434 2057 58
RTX04-ALC	8434 2057 60
RTX08-ALC	8434 2057 62
RTX14-ALC	8434 2057 64
RTX18-ALC	8434 2057 66
RTX30-ALC	8434 2057 67

4 ONSIDE REACTION ARM



Model	Ordering No.
RTX02-14	4222 2107 14
RTX04-14	4222 2109 27
RTX08-14	4222 2110 44
RTX14-14	4222 2141 22
RTX18-14	4222 2141 23
RTX30-14	4222 2144 43

5 SAFETY NUT



Stud Size	Ordering No.
2"	8434 2129 19
2-1/2"	8434 2129 18
2-1/4"	8434 2129 16
1-7/8"	8434 2129 15
3"	8434 2129 13
2-3/4"	8434 2129 12
1-3/4"	8434 2129 10
1-5/8"	8434 2129 09
1-1/2"	8434 2129 07
1-3/8"	8434 2129 06
1-1/4"	8434 2129 04
1-1/8"	8434 2129 03
1"	8434 2129 01
7/8"	8434 2129 00

EA TOOL

EXTREME ACCESS SPANNER

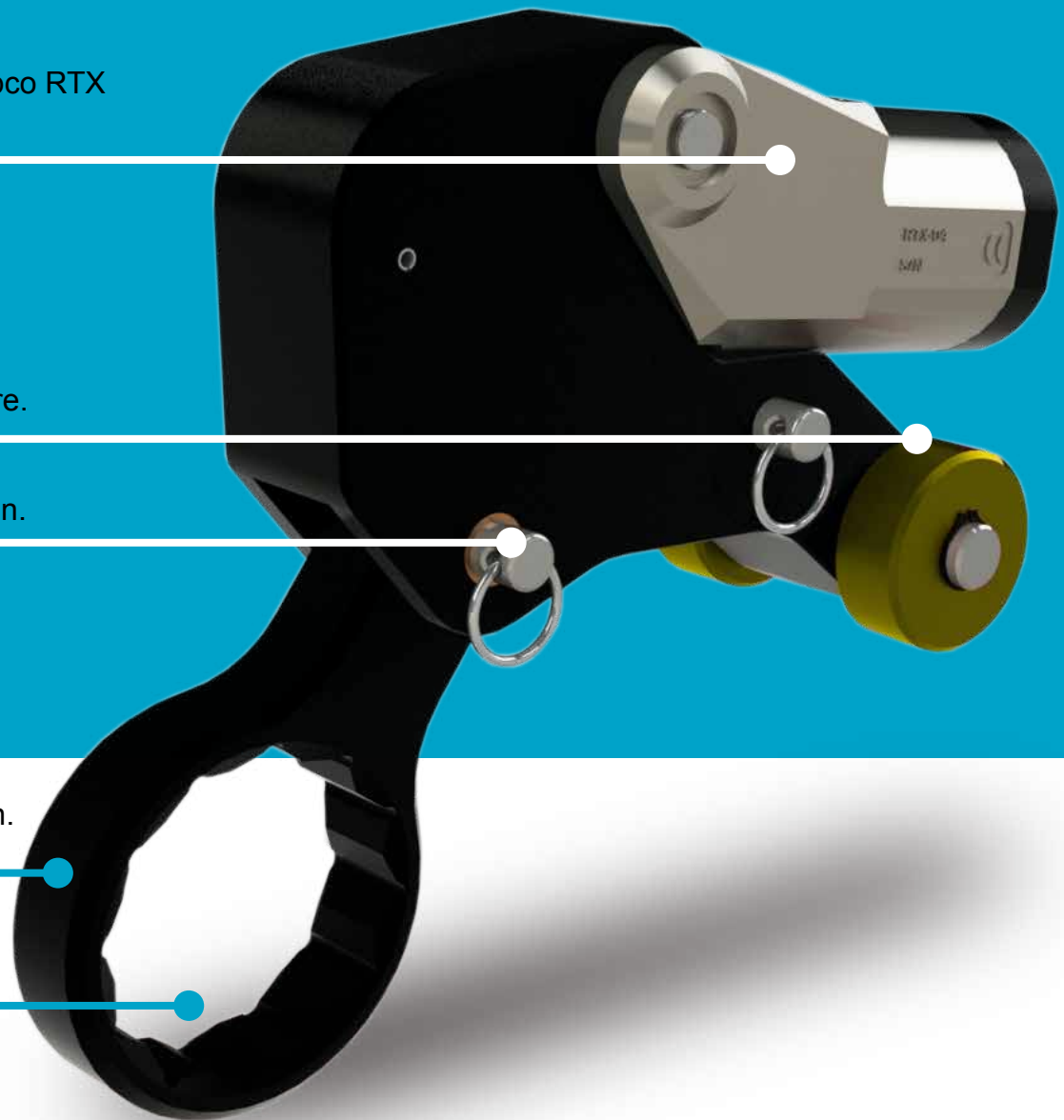
Connects to Atlas Copco RTX powerhead.

Integrated roller feature.

Secured with a link pin.

Minimal spanner width.

Minimal spanner nose radius.



The EA Tool is perfect for ultra-tight clearances where our reduced-radius ratchet links for RTX series won't fit. To choose the best one for your application, follow these steps:



Choose your power

The RTX powers the EA Spanner assembly. Choose your powerhead based on the torque values you will need.



Set up your link

Our link has been designed from the ground up to provide the strength needed while being extremely easy to set up.



Choose your spanner

Extreme Access spanners provide the durability and strength of our traditional ratchet links but can fit where traditional links won't. Choose open or closed type.



Open Spanners also available

Choose open or closed spanner to suit your application.

EA SPANNER ORDERING NUMBERS



Description	Ordering No.
RTL-02	
LOW PRO LINK	8434 2022 90
RTL-04	
LOW PRO LINK	8434 2022 91
RTL-08	
LOW PRO LINK	8434 2022 92
EA-02-012-C	8434 2165 13
EA-02-012-O	8434 2167 88
EA-02-013-C	8434 2165 14
EA-02-013-O	8434 2167 89
EA-02-014-C	8434 2165 15
EA-02-014-O	8434 2167 90
EA-02-015-C	8434 2165 16
EA-02-015-O	8434 2167 91
EA-02-100-C	8434 2165 18
EA-02-100-O	8434 2167 93
EA-02-102-C	8434 2165 20
EA-02-102-O	8434 2167 95
EA-02-103-C	8434 2165 21
EA-02-103-O	8434 2167 96
EA-02-104-C	8434 2165 22
EA-02-104-O	8434 2167 97
EA-02-105-C	8434 2165 24
EA-02-105-O	8434 2167 99
EA-02-106-C	8434 2165 25
EA-02-106-O	8434 2168 00
EA-02-107-C	8434 2165 27
EA-02-107-O	8434 2168 02
EA-02-108-C	8434 2165 28
EA-02-108-O	8434 2168 03
EA-02-109-C	8434 2165 29
EA-02-109-O	8434 2168 04
EA-02-110-C	8434 2165 31
EA-02-110-O	8434 2168 06
EA-02-111-C	8434 2165 33
EA-02-111-O	8434 2168 08
EA-02-112-C	8434 2165 34
EA-02-112-O	8434 2168 09
EA-02-113-C	8434 2165 35
EA-02-113-O	8434 2168 10
EA-02-114-C	8434 2165 36
EA-02-114-O	8434 2168 11
EA-02-115-C	8434 2165 37
EA-02-115-O	8434 2168 12
EA-02-200-C	8434 2165 38
EA-02-200-O	8434 2168 13
EA-02-201-C	8434 2165 39
EA-02-201-O	8434 2168 14
EA-02-202-C	8434 2165 40
EA-02-202-O	8434 2168 15
EA-02-203-C	8434 2165 42
EA-02-203-O	8434 2168 17
EA-02-204-C	8434 2165 43
EA-02-204-O	8434 2168 18
EA-02-205-C	8434 2165 44
EA-02-205-O	8434 2168 19

Description	Ordering No.
EA-02-206-C	8434 2165 46
EA-02-206-O	8434 2168 21
EA-02-207-C	8434 2165 47
EA-02-207-O	8434 2168 22
EA-02-208-C	8434 2165 48
EA-02-208-O	8434 2168 23
EA-02-209-C	8434 2165 49
EA-02-209-O	8434 2168 24
EA-02-210-C	8434 2165 50
EA-02-210-O	8434 2168 25
EA-02-211-C	8434 2165 51
EA-02-211-O	8434 2168 26
EA-02-212-C	8434 2165 52
EA-02-212-O	8434 2168 27
EA-02-213-C	8434 2165 54
EA-02-213-O	8434 2168 29
EA-02-214-C	8434 2165 55
EA-02-214-O	8434 2168 30
EA-02-215-C	8434 2165 56
EA-02-215-O	8434 2168 31
EA-02-24MM-C	8434 2165 17
EA-02-24MM-O	8434 2167 92
EA-02-27MM-C	8434 2165 19
EA-02-27MM-O	8434 2167 94
EA-02-32MM-C	8434 2165 23
EA-02-32MM-O	8434 2167 98
EA-02-36MM-C	8434 2165 26
EA-02-36MM-O	8434 2168 01
EA-02-41MM-C	8434 2165 30
EA-02-41MM-O	8434 2168 05
EA-02-42MM-C	8434 2165 32
EA-02-42MM-O	8434 2168 07
EA-02-50MM-C	8434 2022 04
EA-02-50MM-O	8434 2021 03
EA-02-55MM-C	8434 2165 41
EA-02-55MM-O	8434 2168 16
EA-02-60MM-C	8434 2165 45
EA-02-60MM-O	8434 2168 20
EA-02-70MM-C	8434 2165 53
EA-02-70MM-O	8434 2168 28
EA-02-75MM-C	8434 2165 57
EA-02-75MM-O	8434 2168 32
EA-04-111-C	8434 2165 70
EA-04-111-O	8434 2168 45
EA-04-112-C	8434 2165 71
EA-04-112-O	8434 2168 46
EA-04-113-C	8434 2165 72
EA-04-113-O	8434 2168 47
EA-04-114-C	8434 2165 73
EA-04-114-O	8434 2168 48
EA-04-115-C	8434 2165 74
EA-04-115-O	8434 2168 49
EA-04-200-C	8434 2165 76
EA-04-200-O	8434 2168 51
EA-04-201-C	8434 2023 01
EA-04-201-O	8434 2168 53

Description	Ordering No.
EA-04-202-C	8434 2165 78
EA-04-202-O	8434 2168 54
EA-04-203-C	8434 2021 94
EA-04-203-O	8434 2021 82
EA-04-204-C	8434 2165 81
EA-04-204-O	8434 2168 57
EA-04-205-C	8434 2165 82
EA-04-205-O	8434 2168 58
EA-04-206-C	8434 2021 91
EA-04-206-O	8434 2021 84
EA-04-207-C	8434 2165 85
EA-04-207-O	8434 2168 61
EA-04-208-C	8434 2165 86
EA-04-208-O	8434 2168 62
EA-04-209-C	8434 2021 97
EA-04-209-O	8434 2021 81
EA-04-210-C	8434 2165 88
EA-04-210-O	8434 2168 64
EA-04-211-C	8434 2165 89
EA-04-211-O	8434 2168 65
EA-04-212-C	8434 2021 93
EA-04-212-O	8434 2021 80
EA-04-213-C	8434 2165 92
EA-04-213-O	8434 2168 68
EA-04-214-C	8434 2165 93
EA-04-214-O	8434 2168 69
EA-04-215-C	8434 2021 96
EA-04-215-O	8434 2021 85
EA-04-300-C	8434 2165 95
EA-04-300-O	8434 2168 71
EA-04-302-C	8434 2023 02
EA-04-302-O	8434 2168 72
EA-04-50MM-C	8434 2165 75
EA-04-50MM-O	8434 2168 50
EA-04-51MM-C	8434 2165 77
EA-04-51MM-O	8434 2168 52
EA-04-55MM-C	8434 2165 79
EA-04-55MM-O	8434 2168 55
EA-04-56MM-C	8434 2165 80
EA-04-56MM-O	8434 2168 56
EA-04-60MM-C	8434 2165 83
EA-04-60MM-O	8434 2168 59
EA-04-61MM-C	8434 2165 84
EA-04-61MM-O	8434 2168 60
EA-04-66MM-C	8434 2165 87
EA-04-66MM-O	8434 2168 63
EA-04-70MM-C	8434 2165 90
EA-04-70MM-O	8434 2168 66
EA-04-71MM-C	8434 2165 91
EA-04-71MM-O	8434 2168 67
EA-04-75MM-C	8434 2165 94
EA-04-75MM-O	8434 2168 70
EA-04-80MM-C	8434 2165 96
EA-04-80MM-O	8434 2168 73
EA-08-100MM-C	8434 2166 46
EA-08-100MM-O	8434 2169 22

“C” refers to closed
spanner



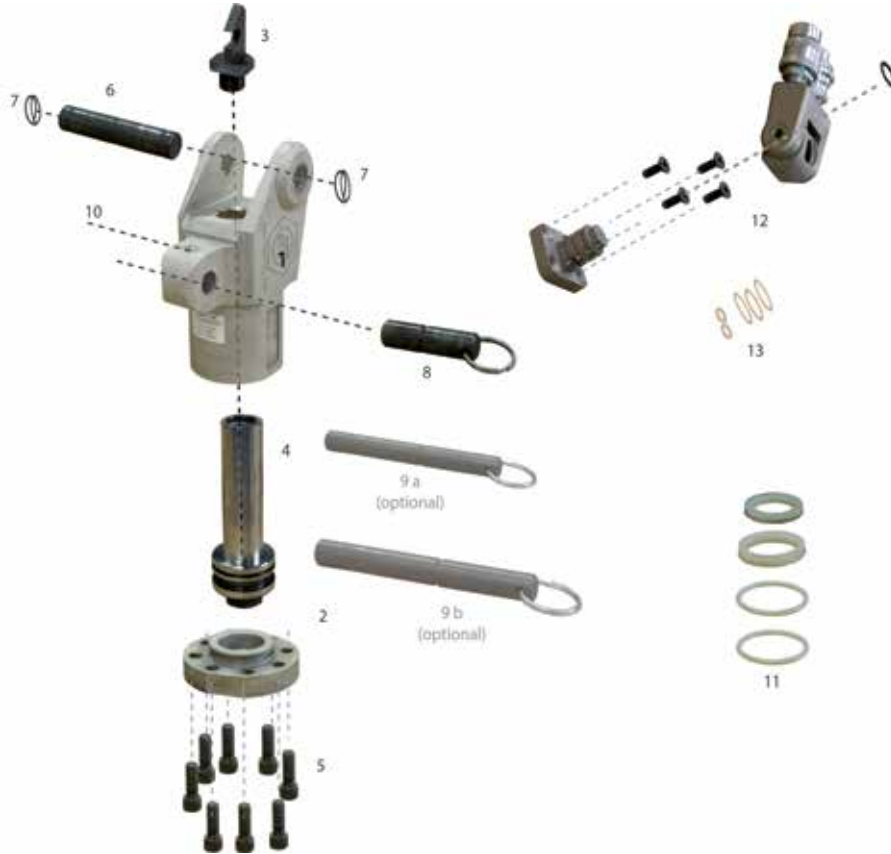
“O” stands for open
spanner such as this.



Description	Ordering No.
EA-08-107-C	8434 2165 97
EA-08-107-O	8434 2168 74
EA-08-108-C	8434 2165 98
EA-08-108-O	8434 2168 75
EA-08-109-C	8434 2165 99
EA-08-109-O	8434 2168 76
EA-08-110-C	8434 2166 01
EA-08-110-O	8434 2168 78
EA-08-111-C	8434 2166 03
EA-08-111-O	8434 2168 80
EA-08-112-C	8434 2166 04
EA-08-112-O	8434 2168 81
EA-08-113-C	8434 2166 05
EA-08-113-O	8434 2168 82
EA-08-114-C	8434 2166 06
EA-08-114-O	8434 2168 83
EA-08-115-C	8434 2166 07
EA-08-115-O	8434 2168 84
EA-08-200-C	8434 2166 09
EA-08-200-O	8434 2168 86
EA-08-201-C	8434 2166 11
EA-08-201-O	8434 2168 88
EA-08-202-C	8434 2166 12
EA-08-202-O	8434 2168 89
EA-08-203-C	8434 2166 14
EA-08-203-O	8434 2168 91
EA-08-204-C	8434 2166 16
EA-08-204-O	8434 2168 93
EA-08-205-C	8434 2166 17
EA-08-205-O	8434 2168 94
EA-08-206-C	8434 2166 19
EA-08-206-O	8434 2168 96
EA-08-207-C	8434 2166 21
EA-08-207-O	8434 2168 98
EA-08-208-C	8434 2166 22
EA-08-208-O	8434 2168 99
EA-08-209-C	8434 2166 23
EA-08-209-O	8434 2169 00
EA-08-210-C	8434 2166 25
EA-08-210-O	8434 2169 02
EA-08-211-C	8434 2166 26
EA-08-211-O	8434 2169 03
EA-08-212-C	8434 2166 27
EA-08-212-O	8434 2169 04
EA-08-213-C	8434 2166 30
EA-08-213-O	8434 2169 07
EA-08-214-C	8434 2166 31
EA-08-214-O	8434 2169 08
EA-08-215-C	8434 2166 32
EA-08-215-O	8434 2169 09
EA-08-300-C	8434 2166 34
EA-08-300-O	8434 2169 11
EA-08-302-C	8434 2166 35
EA-08-302-O	8434 2169 12
EA-08-304-C	8434 2022 03
EA-08-304-O	8434 2169 14

Description	Ordering No.
EA-08-305-C	8434 2166 37
EA-08-306-C	8434 2166 39
EA-08-306-O	8434 2169 16
EA-08-308-C	8434 2166 40
EA-08-308-O	8434 2169 17
EA-08-309-C	8434 2166 42
EA-08-309-O	8434 2169 19
EA-08-314-C	8434 2166 44
EA-08-314-O	8434 2169 21
EA-08-400-C	8434 2166 45
EA-08-404-C	8434 2166 47
EA-08-41MM-C	8434 2166 00
EA-08-41MM-O	8434 2168 77
EA-08-42MM-C	8434 2166 02
EA-08-42MM-O	8434 2168 79
EA-08-50MM-C	8434 2166 08
EA-08-50MM-O	8434 2168 85
EA-08-51MM-C	8434 2166 10
EA-08-51MM-O	8434 2168 87
EA-08-55MM-C	8434 2166 13
EA-08-55MM-O	8434 2168 90
EA-08-56MM-C	8434 2166 15
EA-08-56MM-O	8434 2168 92
EA-08-60MM-C	8434 2166 18
EA-08-60MM-O	8434 2168 95
EA-08-61MM-C	8434 2166 20
EA-08-61MM-O	8434 2168 97
EA-08-66MM-C	8434 2166 24
EA-08-66MM-O	8434 2169 01
EA-08-70MM-C	8434 2166 28
EA-08-70MM-O	8434 2169 05
EA-08-71MM-C	8434 2166 29
EA-08-71MM-O	8434 2169 06
EA-08-75MM-C	8434 2166 33
EA-08-75MM-O	8434 2169 10
EA-08-80MM-C	8434 2166 36
EA-08-80MM-O	8434 2169 13
EA-08-85MM-C	8434 2166 38
EA-08-85MM-O	8434 2169 15
EA-08-90MM-C	8434 2166 41
EA-08-90MM-O	8434 2169 18
EA-08-95MM-C	8434 2166 43
EA-08-95MM-O	8434 2169 20

RTX POWERHEAD PARTS LIST



Periodic testing and maintenance is advised to ensure accuracy and safe operation of the tool. Our technicians are experts in keeping your tool in optimal working condition. Or you can opt to purchase our RTX maintenance kits.

Powerhead Parts List

#	Description	Part Number
1*	Housing	RTX-#-01
2	End Cap	RTX-#-02
3	Rod End	RTX-#-05
4	Piston Rod	RTX-#-06
5	Cylinder End Cap Screw	RTX-#-07
6	Fixed Upper Pin	RTX-#-08
7	Fixed Upper Pin Ring	RTX-#-09
8	Link Pin Short	RTX-#-10
9a	Link Pin Long for Alco Reaction Arm	RTX-#-11
9b	Link Pin Extra Long for On Side Reaction Arm	RTX-#-11XL
10	Link Pin Retainer	RTX-#-12
11	Housing Seal Kit	RTX-#-13
12*	Swivel Assembly (Small, Medium or Large)	RTX-SW
13	Swivel Seal Kit (Small, Medium or Large)	RTX-SK

Powerhead Maintenance Kits

Model	Description	Ordering No.
RTX02-MK	Maintenance Kit	4222 2134 35
RTX04-MK	Maintenance Kit	4222 2138 46
RTX08-MK	Maintenance Kit	4222 2141 07
RTX14-MK	Maintenance Kit	4222 2143 47
RTX18-MK	Maintenance Kit	4222 2144 25
RTX30-MK	Maintenance Kit	4222 2145 51

Maintenance Kits for RTX Powerhead contain the following:

Housing Seal kit, Swivel Seal Kit, Link Pin for Alco Arm (if applicable), Link Pin Standard, Cylinder End Cap Screw, Fixed Upper Pin, Fixed Upper Ring, Rod End, Link Pin Retainer, 10,000psi/700bar Male & Female Coupler.

*Please note: Seals are not included with spare parts. For replacement seals order our Seal Kits.

RL RATCHET LINK PARTS LIST



Ratchet Link Maintenance Kits

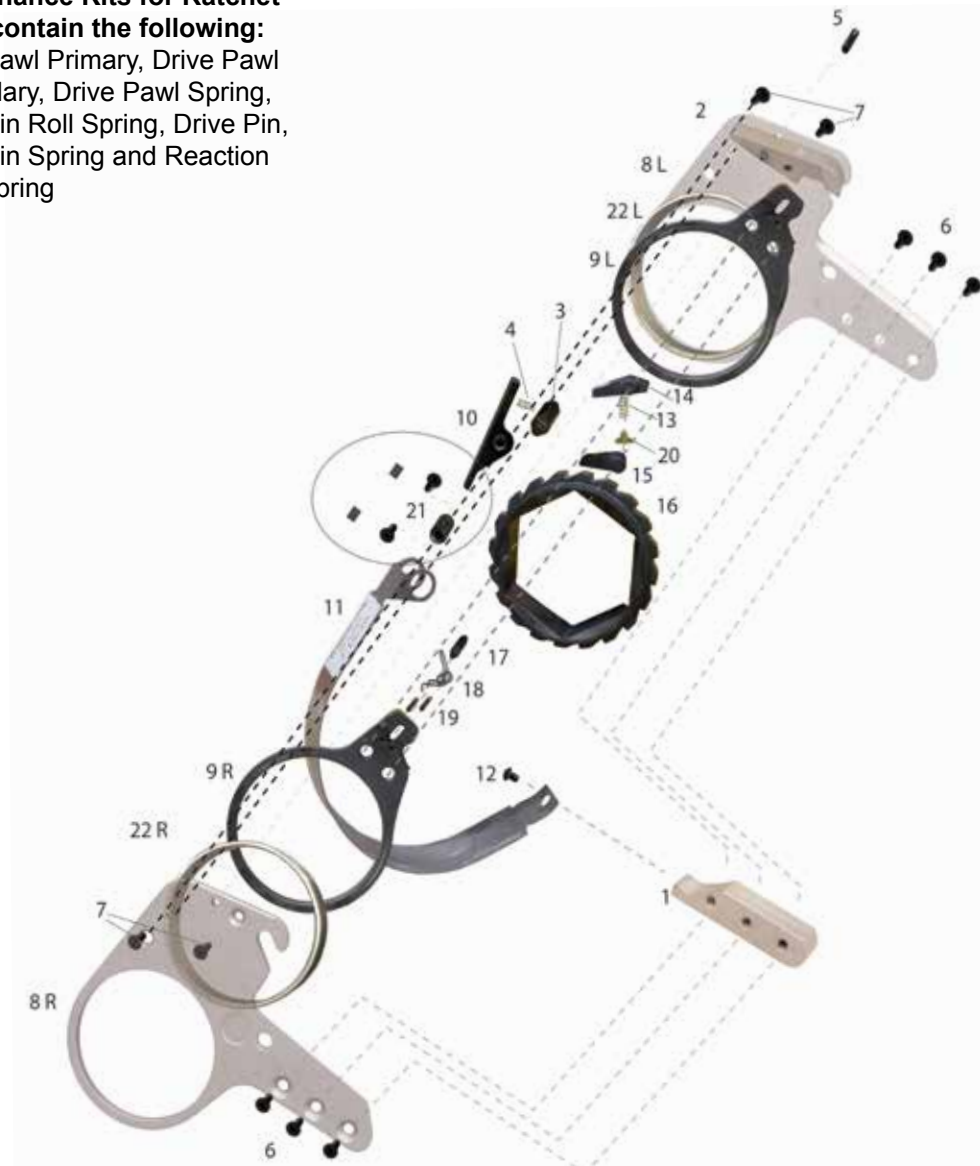
Model	Description	Ordering No.
RL02-MK	Ratchet Link Maintenance Kit	8434 2132 95
RL04-MK	Ratchet Link Maintenance Kit	8434 2134 57
RL08-MK	Ratchet Link Maintenance Kit	8434 2059 53
RL14-MK	Ratchet Link Maintenance Kit	8434 2136 73
RL18-MK	Ratchet Link Maintenance Kit	8434 2137 27
RL30-MK	Ratchet Link Maintenance Kit	8434 2138 23

Ratchet Link Parts List

#	Description	Part No.	#	Description	Part No.
1	Reaction Block Spacer	RTX-#45	14	Drive Pawl Primary	RTX-#22
2	Top Spacer	RTX-#46	15	Drive Pawl Secondary	RTX-#23
3	Reaction Pawl Spring Spacer	RTX-#47	16	Ratchet	RTX-#28
4	Reaction Pawl Spring	RTX-#37	17	Drive Pin	RTX-#33
5	Side Plate Roll Pin	RTX-#48	18	Drive Pin Spring	RTX-#34
6	Side Plate Screw Bottom	RTX-#50	19	Drive Spring Roll Pin	RTX-#32
7	Side Plate Screw Top	RTX-#51	20	Spring Seat	RTX-#49
8	Side Plate (left or right)	RTX-#52	21	Reaction Pawl Pin Assembly	RTX-#99
9	Drive Plate (left or right)	RTX-#35	22	Drive Plate Bushing	RTX-#89
10	Reaction Pawl	RTX-#36			
11	Shroud	RTX-#43			
12	Shroud Screw	RTX-#44			
13	Drive Pawl Spring	RTX-#27			

Maintenance Kits for Ratchet Links contain the following:

Drive Pawl Primary, Drive Pawl Secondary, Drive Pawl Spring, Drive Pin Roll Spring, Drive Pin, Drive Pin Spring and Reaction Pawl Spring



RTX-02 SPARE PARTS

RTX-02 Powerhead Spare Parts



Item	Description	Ordering No.
RTX02-01	Housing	4222 2106 84
RTX02-02	End Cap	4222 2106 87
RTX02-05	Rod End	4222 2106 90
RTX02-06	Piston Rod	4222 2106 93
RTX02-07	Cylinder End Cap Screw	4222 2106 96
RTX02-08	Fixed Upper Pin	4222 2106 99
RTX02-09	Fixed Upper Pin Ring	4222 2107 02
RTX02-10	Link Pin Short	4222 2107 05
RTX02-11	Link Pin Long	4222 2107 08
RTX02-12	Link Pin Retainer	4222 2107 11
RTX02-13	Housing Seal Kit	4222 2131 02
RT-SWIV-EL-S	Small Swivel Assembly	4222 2116 19
RT-SK-S	Swivel Kit Small	4222 2100 03

RTX-02 Ratchet Link Spare Parts



Item	Description	Ordering No.
RTX02-14	On Side Reaction Arm	4222 2107 14
RTX02-14-L	On Side Reaction Arm L	4222 2116 67
RTX02-22	Drive Pawl Primary	4222 2107 17
RTX02-23	Drive Pawl Secondary	4222 2107 20
RTX02-27	Drive Pawl Spring	4222 2107 23
RTX02-28-012	Ratchet 3/4"	4222 2131 35
RTX02-28-014	Ratchet 7/8"	4222 2131 38
RTX02-28-100	Ratchet 1"	4222 2131 41
RTX02-28-101	Ratchet 1 1/16"	4222 2107 26
RTX02-28-103	Ratchet 1 3/16"	4222 2116 73

Item	Description	Ordering No.
RTX02-28-104 12p	Ratchet 1 1/4"	4222 2131 44
RTX02-28-105	Ratchet 1 5/16"	4222 2131 46
RTX02-28-106	Ratchet 1 3/8"	4222 2131 47
RTX02-28-107	Ratchet 1 7/16"	4222 2107 29
RTX02-28-107 RR*	Ratchet RR 1 7/16"	4222 2131 50
RTX02-28-108	Ratchet 1 1/2"	4222 2131 53
RTX02-28-110	Ratchet 1 5/8"	4222 2131 56
RTX02-28-111	Ratchet 1 11/16"	4222 2131 59
RTX02-28-112	Ratchet 1 3/4"	4222 2131 60
RTX02-28-113	Ratchet 1 13/16"	4222 2107 32
RTX02-28-114	Ratchet 1 7/8"	4222 2116 76
RTX02-28-115	Ratchet 1 15/16"	4222 2131 62
RTX02-28-17MM	Ratchet 17mm	4222 2131 63
RTX02-28-19MM	Ratchet 19mm	4222 2131 65
RTX02-28-200	Ratchet 2"	4222 2107 35
RTX02-28-202	Ratchet 2 1/8"	4222 2131 68
RTX02-28-203	Ratchet 2 3/16"	4222 2107 38
RTX02-28-204	Ratchet 2 1/4"	4222 2131 71
RTX02-28-205	Ratchet 2 5/16"	4222 2131 72
RTX02-28-206	Ratchet 2 3/8"	4222 2107 41
RTX02-28-209	Ratchet 2 9/16"	4222 2107 44
RTX02-28-214	Ratchet 2 7/8"	4222 2107 45
RTX02-28-24MM	Ratchet 24mm	4222 2131 73
RTX02-28-27MM	Ratchet 27mm	4222 2131 74
RTX02-28-30MM	Ratchet 30mm	4222 2131 77
RTX02-28-32MM	Ratchet 32mm	4222 2107 47
RTX02-28-33MM	Ratchet 33mm	4222 2131 80
RTX02-28-36MM	Ratchet 36mm	4222 2107 50
RTX02-28-38MM	Ratchet 38mm	4222 2131 83
RTX02-28-41MM	Ratchet 41mm	4222 2131 86
RTX02-28-46MM	Ratchet 46mm	4222 2131 89
RTX02-28-50MM	Ratchet 50mm	4222 2131 92

Item	Description	Ordering No.
RTX02-28-55MM	Ratchet 55mm	4222 2107 53
RTX02-28-60MM	Ratchet 60mm	4222 2131 95
RTX02-28-65MM	Ratchet 65mm	4222 2131 98
RTX02-32	Drive Spring Roll Pin	4222 2107 56
RTX02-33	Drive Pin	4222 2107 59
RTX02-34	Drive Pin Spring	4222 2132 01
RTX02-35-L #1	Drive Plate (Left)	4222 2132 04
RTX02-35-L #10	Drive Plate (Left)	4222 2132 07
RTX02-35-L #11	Drive Plate (Left)	4222 2132 10
RTX02-35-L #2	Drive Plate (Left)	4222 2116 79
RTX02-35-L #3	Drive Plate (Left)	4222 2116 82
RTX02-35-L #4	Drive Plate (Left)	4222 2116 85
RTX02-35-L #5	Drive Plate (Left)	4222 2132 13
RTX02-35-L #5 RR*	Drive Plate (Left)	4222 2116 88
RTX02-35-L #6	Drive Plate (Left)	4222 2132 16
RTX02-35-L #7	Drive Plate (Left)	4222 2116 91
RTX02-35-L #8	Drive Plate (Left)	4222 2132 19
RTX02-35-L #9	Drive Plate (Left)	4222 2132 22
RTX02-35-R #1	Drive Plate (Right)	4222 2132 40
RTX02-35-R #10	Drive Plate (Right)	4222 2132 43
RTX02-35-R #11	Drive Plate (Right)	4222 2132 46
RTX02-35-R #2	Drive Plate (Right)	4222 2116 94
RTX02-35-R #3	Drive Plate (Right)	4222 2116 97
RTX02-35-R #4	Drive Plate (Right)	4222 2117 00
RTX02-35-R #5	Drive Plate (Right)	4222 2132 49
RTX02-35-R #5 RR*	Drive Plate (Right)	4222 2117 03
RTX02-35-R #6	Drive Plate (Right)	4222 2132 52
RTX02-35-R #7	Drive Plate (Right)	4222 2117 06
RTX02-35-R #8	Drive Plate (Right)	4222 2132 55
RTX02-35-R #9	Drive Plate (Right)	4222 2132 58
RTX02-36 #1	Reaction Pawl	4222 2132 82

Item	Description	Ordering No.
RTX02-36 #10	Reaction Pawl	4222 2132 85
RTX02-36 #11	Reaction Pawl	4222 2132 88
RTX02-36 #2	Reaction Pawl	4222 2117 09
RTX02-36 #3	Reaction Pawl	4222 2117 12
RTX02-36 #4	Reaction Pawl	4222 2117 15
RTX02-36 #5	Reaction Pawl	4222 2132 91
RTX02-36 #6	Reaction Pawl	4222 2117 18
RTX02-36 #7	Reaction Pawl	4222 2132 94
RTX02-36 #8	Reaction Pawl	4222 2117 21
RTX02-36 #9	Reaction Pawl	4222 2132 97
RTX02-37	Reaction Pawl Spring	4222 2107 89
RTX02-43 #1	Shroud	4222 2133 00
RTX02-43 #10	Shroud	4222 2133 03
RTX02-43 #11	Shroud	4222 2133 06
RTX02-43 #2	Shroud	4222 2117 25
RTX02-43 #3	Shroud	4222 2117 29
RTX02-43 #4	Shroud	4222 2117 33
RTX02-43 #5	Shroud	4222 2117 37
RTX02-43 #6	Shroud	4222 2117 41
RTX02-43 #7	Shroud	4222 2133 09
RTX02-43 #8	Shroud	4222 2117 45
RTX02-43 #9	Shroud	4222 2117 49
RTX02-44	Shroud Screw	4222 2108 13
RTX02-45 #1	Reaction Block Spacer	4222 2133 12
RTX02-45 #10	Reaction Block Spacer	4222 2108 31
RTX02-45 #11	Reaction Block Spacer	4222 2108 32
RTX02-45 #2	Reaction Block Spacer	4222 2133 15
RTX02-45 #3	Reaction Block Spacer	4222 2117 53
RTX02-45 #4	Reaction Block Spacer	4222 2117 57
RTX02-45 #5	Reaction Block Spacer	4222 2133 18
RTX02-45 #6	Reaction Block Spacer	4222 2133 21
RTX02-45 #7	Reaction Block Spacer	4222 2117 61
RTX02-45 #8	Reaction Block Spacer	4222 2117 65
RTX02-45 #9	Reaction Block Spacer	4222 2133 24
RTX02-46	Top Spacer	4222 2133 27

Item	Description	Ordering No.
RTX02-47	Reaction Pawl Spring Spacer	4222 2108 34
RTX02-48	Side Plate Roll Pin	4222 2108 37
RTX02-49	Spring Seat	4222 2108 40
RTX02-50	Side Plate Screw Bottom	4222 2108 43
RTX02-51	Side Plate Screw Top	4222 2108 46
RTX02-52-L #1	Side Plate (Left)	4222 2133 30
RTX02-52-L #10	Side Plate (Left)	4222 2133 33
RTX02-52-L #2	Side Plate (Left)	4222 2117 70
RTX02-52-L #3	Side Plate (Left)	4222 2117 75
RTX02-52-L #4	Side Plate (Left)	4222 2117 80
RTX02-52-L #5	Side Plate (Left)	4222 2117 85
RTX02-52-L #6	Side Plate (Left)	4222 2117 90
RTX02-52-L #7	Side Plate (Left)	4222 2117 95
RTX02-52-L #8	Side Plate (Left)	4222 2118 00
RTX02-52-L #9	Side Plate (Left)	4222 2118 05
RTX02-52-R #1	Side Plate (Right)	4222 2133 36
RTX02-52-R #10	Side Plate (Right)	4222 2118 41
RTX02-52-R #2	Side Plate (Right)	4222 2118 10
RTX02-52-R #3	Side Plate (Right)	4222 2118 15
RTX02-52-R #4	Side Plate (Right)	4222 2118 20
RTX02-52-R #5	Side Plate (Right)	4222 2118 25
RTX02-52-R #6	Side Plate (Right)	4222 2118 30
RTX02-52-R #7	Side Plate (Right)	4222 2118 35
RTX02-52-R #8	Side Plate (Right)	4222 2118 40
RTX02-52-R #9	Side Plate (Right)	4222 2118 42
RTX02-56 #1	Side Plate Bushing	4222 2133 39
RTX02-56 #10	Side Plate Bushing	4222 2133 42
RTX02-56 #11	Side Plate Bushing	4222 2133 45
RTX02-56 #2	Side Plate Bushing	4222 2133 48
RTX02-56 #3	Side Plate Bushing	4222 2118 50

Item	Description	Ordering No.
RTX02-56 #4	Side Plate Bushing	4222 2133 51
RTX02-56 #5	Side Plate Bushing	4222 2133 54
RTX02-56 #6	Side Plate Bushing	4222 2133 57
RTX02-56 #7	Side Plate Bushing	4222 2133 60
RTX02-56 #8	Side Plate Bushing	4222 2133 63
RTX02-56 #9	Side Plate Bushing	4222 2133 66
RTX02-89 #2	Brass Bushing	4222 2133 69
RTX02-89 #4	Brass Bushing	4222 2133 72
RTX02-89 #5	Brass Bushing	4222 2133 75
RTX02-89 #7	Brass Bushing	4222 2133 78
RTX02-99	Reaction Pawl Pin	4222 2108 97

12 Point Hexagonal, Reduced Radius and Custom Sizes available upon request.

RTX-04 SPARE PARTS

RTX-04 Powerhead Spare Parts



Item	Description	Ordering No.
RTX04-01	Housing	4222 2134 44
RTX04-02	End Cap	4222 2109 00
RTX04-05	Rod End	4222 2109 03
RTX04-06	Piston Rod	4222 2109 06
RTX04-07	Cylinder End Cap Screw	4222 2109 09
RTX04-08	Fixed Upper Pin	4222 2109 12
RTX04-09	Fixed Upper Pin Ring	4222 2109 15
RTX04-10	Link Pin Short	4222 2109 18
RTX04-11	Link Pin Long	4222 2109 21
RTX04-11-XL	Link Pin Extra Long	4222 2134 56
RTX04-12	Link Pin Retainer	4222 2109 24
RTX04-13	Housing Seal Kit	4222 2134 59
RT-SWIV-EL-M	Medium Swivel Assembly	4222 2100 09
RT-SK-M	Medium Swivel Seal Kit	4222 2130 87

RTX-04 Ratchet Link Spare Parts



Item	Description	Ordering No.
RTX04-22	Drive Pawl Primary	4222 2109 30
RTX04-23	Drive Pawl Secondary	4222 2109 33
RTX04-27	Drive Pawl Spring	4222 2109 36
RTX04-28-014	Ratchet 7/8IN	4222 2134 86
RTX04-28-100	Ratchet 1IN	4222 2134 89
RTX04-28-104 12pt	Ratchet	4222 2134 92
RTX04-28-108	Ratchet	4222 2134 95
RTX04-28-111	Ratchet	4222 2109 39
RTX04-28-113	Ratchet	4222 2134 98

Item	Description	Ordering No.
RTX04-28-114	Ratchet	4222 2135 01
RTX04-28-200	Ratchet	4222 2109 42
RTX04-28-203	Ratchet	4222 2118 79
RTX04-28-204	Ratchet	4222 2135 04
RTX04-28-205	Ratchet	4222 2135 07
RTX04-28-206	Ratchet	4222 2118 83
RTX04-28-209	Ratchet	4222 2135 10
RTX04-28-210	Ratchet	4222 2135 13
RTX04-28-211	Ratchet	4222 2135 16
RTX04-28-212	Ratchet	4222 2135 19
RTX04-28-212 RR	Ratchet	4222 2135 22
RTX04-28-213	Ratchet	4222 2135 25
RTX04-28-215	Ratchet	4222 2135 26
RTX04-28-301	Ratchet	4222 2135 27
RTX04-28-302	Ratchet	4222 2135 28
RTX04-28-32MM	Ratchet	4222 2135 31
RTX04-28-36MM	Ratchet	4222 2135 34
RTX04-28-41MM	Ratchet	4222 2109 45
RTX04-28-42MM	Ratchet	4222 2109 48
RTX04-28-46MM	Ratchet	4222 2135 37
RTX04-28-50MM	Ratchet	4222 2135 40
RTX04-28-55MM	Ratchet	4222 2135 43
RTX04-28-60MM	Ratchet	4222 2135 46
RTX04-28-63MM	Ratchet	4222 2135 49
RTX04-28-70MM	Ratchet	4222 2135 50
RTX04-28-75MM	Ratchet	4222 2135 51
RTX04-28-80MM	Ratchet	4222 2118 87
RTX04-32	Drive Pin Roll Spring	4222 2109 51
RTX04-33	Drive Pin	4222 2109 54
RTX04-34	Drive Pin Spring	4222 2135 52
RTX04-35-L #1	Drive Plate (Left)	4222 2135 55

Item	Description	Ordering No.
RTX04-35-L #10	Drive Plate (Left)	4222 2135 58
RTX04-35-L #11	Drive Plate (Left)	4222 2135 61
RTX04-35-L #12	Drive Plate (Left)	4222 2135 64
RTX04-35-L #2	Drive Plate (Left)	4222 2135 67
RTX04-35-L #3	Drive Plate (Left)	4222 2135 70
RTX04-35-L #4	Drive Plate (Left)	4222 2135 73
RTX04-35-L #5	Drive Plate (Left)	4222 2135 76
RTX04-35-L #6	Drive Plate (Left)	4222 2135 79
RTX04-35-L #7	Drive Plate (Left)	4222 2135 82
RTX04-35-L #8	Drive Plate (Left)	4222 2118 90
RTX04-35-L #8 RR	Drive Plate (Left) RR	4222 2135 88
RTX04-35-L #9	Drive Plate (Left)	4222 2135 85
RTX04-35-R #1	Drive Plate (Right)	4222 2135 91
RTX04-35-R #10	Drive Plate (Right)	4222 2135 94
RTX04-35-R #11	Drive Plate (Right)	4222 2135 97
RTX04-35-R #12	Drive Plate (Right)	4222 2136 00
RTX04-35-R #2	Drive Plate (Right)	4222 2136 03
RTX04-35-R #3	Drive Plate (Right)	4222 2136 06
RTX04-35-R #4	Drive Plate (Right)	4222 2136 09
RTX04-35-R #5	Drive Plate (Right)	4222 2136 12
RTX04-35-R #6	Drive Plate (Right)	4222 2136 15
RTX04-35-R #7	Drive Plate (Right)	4222 2136 18
RTX04-35-R #8	Drive Plate (Right)	4222 2136 21
RTX04-35-R #8 RR	Drive Plate (Right) Reduced RR	4222 2136 27
RTX04-35-R #9	Drive Plate (Right)	4222 2136 24
RTX04-36 #1	Reaction Pawl	4222 2136 30
RTX04-36 #10	Reaction Pawl	4222 2136 33
RTX04-36 #11	Reaction Pawl	4222 2136 36
RTX04-36 #2	Reaction Pawl	4222 2136 39
RTX04-36 #3	Reaction Pawl	4222 2136 42
RTX04-36 #4	Reaction Pawl	4222 2118 94
RTX04-36 #5	Reaction Pawl	4222 2136 45
RTX04-36 #6	Reaction Pawl	4222 2136 48

Item	Description	Ordering No.
RTX04-36 #7	Reaction Pawl	4222 2136 51
RTX04-36 #8	Reaction Pawl	4222 2136 54
RTX04-36 #9	Reaction Pawl	4222 2136 57
RTX04-37	Reaction Pawl Spring	4222 2109 63
RTX04-38	Reaction Pawl Spacer	4222 2136 60
RTX04-43 #1	Shroud	4222 2118 98
RTX04-43 #10	Shroud	4222 2136 63
RTX04-43 #11	Shroud	4222 2136 66
RTX04-43 #2	Shroud	4222 2119 03
RTX04-43 #3	Shroud	4222 2119 07
RTX04-43 #4	Shroud	4222 2119 11
RTX04-43 #5	Shroud	4222 2136 69
RTX04-43 #6	Shroud	4222 2119 15
RTX04-43 #7	Shroud	4222 2136 72
RTX04-43 #8	Shroud	4222 2136 75
RTX04-43 #9	Shroud	4222 2136 78
RTX04-44	Shroud Screw	4222 2136 81
RTX04-45 #1	Reaction Block Spacer	4222 2136 84
RTX04-45 #10	Reaction Block Spacer	4222 2136 87
RTX04-45 #11	Reaction Block Spacer	4222 2136 88
RTX04-45 #2	Reaction Block Spacer	4222 2136 90
RTX04-45 #3	Reaction Block Spacer	4222 2119 19
RTX04-45 #4	Reaction Block Spacer	4222 2136 93
RTX04-45 #5	Reaction Block Spacer	4222 2136 96
RTX04-45 #6	Reaction Block Spacer	4222 2136 99
RTX04-45 #7	Reaction Block Spacer	4222 2137 02
RTX04-45 #8	Reaction Block Spacer	4222 2119 23
RTX04-45 #9	Reaction Block Spacer	4222 2137 05
RTX04-46	Top Spacer	4222 2137 08
RTX04-47	Reaction Pawl Spring Spacer	4222 2137 11
RTX04-48	Side Plate Roll Pin	4222 2109 87
RTX04-49	Spring Seat	4222 2137 14
RTX04-50	Side Plate Screw Bottom	4222 2109 90
RTX04-51	Side Plate Screw Top	4222 2137 17
RTX04-52-L #1	Side Plate (Left)	4222 2119 26
RTX04-52-L #10	Side Plate (Left)	4222 2110 08

Item	Description	Ordering No.
RTX04-52-L #11	Side Plate (Left)	4222 2110 09
RTX04-52-L #4	Side Plate (Left)	4222 2119 27
RTX04-52-L #5	Side Plate (Left)	4222 2137 20
RTX04-52-L #6	Side Plate (Left)	4222 2119 32
RTX04-52-L #7	Side Plate (Left)	4222 2119 37
RTX04-52-L #8	Side Plate (Left)	4222 2119 42
RTX04-52-L #9	Side Plate (Left)	4222 2119 47
RTX04-52-R #1	Side Plate (Right)	4222 2119 51
RTX04-52-R #10	Side Plate (Right)	4222 2110 17
RTX04-52-R #11	Side Plate (Right)	4222 2110 18
RTX04-52-R #4	Side Plate (Right)	4222 2119 52
RTX04-52-R #5	Side Plate (Right)	4222 2137 23
RTX04-52-R #6	Side Plate (Right)	4222 2137 26
RTX04-52-R #8	Side Plate (Right)	4222 2137 29
RTX04-52-R #9	Side Plate (Right)	4222 2137 32
RTX04-52-R #7	Side Plate (Right)	4222 2119 55
RTX04-56 #1	Side Plate Bushing	4222 2137 35
RTX04-56 #10	Side Plate Bushing	4222 2137 38
RTX04-56 #11	Side Plate Bushing	4222 2137 41
RTX04-56 #2	Side Plate Bushing	4222 2137 44
RTX04-56 #3	Side Plate Bushing	4222 2137 47
RTX04-56 #4	Side Plate Bushing	4222 2137 50
RTX04-56 #5	Side Plate Bushing	4222 2137 53
RTX04-56 #6	Side Plate Bushing	4222 2137 56
RTX04-56 #7	Side Plate Bushing	4222 2137 59
RTX04-56 #8	Side Plate Bushing	4222 2137 62
RTX04-56 #9	Side Plate Bushing	4222 2137 65
RTX04-99	Reaction Pawl Pin	4222 2137 68

12 Point Hexagonal, Reduced Radius and Custom Ratchet sizes available. Contact your local representative for assistance with other sizes.

RTX-08 SPARE PARTS

RTX-08 Powerhead Spare Parts



Item	Description	Ordering No.
RTX08-01	Housing	4222 2138 49
RTX08-02	End Cap	4222 2110 20
RTX08-05	Rod End	4222 2119 85
RTX08-06	Piston Rod	4222 2110 23
RTX08-07	Cylinder End Cap Screw	4222 2110 26
RTX08-08	Fixed Upper Pin	4222 2138 52
RTX08-09	Fixed upper Pin Ring	4222 2110 29
RTX08-10	Link Pin Short	4222 2110 32
RTX08-11	Link Pin Long	4222 2110 35
RTX08-12	Link Pin Retainer	4222 2110 38
RTX08-13	Housing Seal Kit	4222 2110 41
RT-SWIV-ELM	Medium Swivel Assembly	4222 2100 09
RT-SK-M	Medium Swivel Seal Kit	4222 2130 87

RTX-08 Ratchet Link Spare Parts



Item	Description	Ordering No.
RTX08-22	Drive Pawl Primary	4222 2110 47
RTX08-23	Drive Pawl Secondary	4222 2110 50
RTX08-27	Drive Pawl Spring	4222 2110 53
RTX08-28-100MM	Ratchet	4222 2138 88
RTX08-28-105MM	Ratchet	4222 2138 91
RTX08-28-108	Ratchet	4222 2138 94
RTX08-28-113	Ratchet	4222 2138 97
RTX08-28-114	Ratchet	4222 2139 00
RTX08-28-115	Ratchet	4222 2139 03
RTX08-28-200	Ratchet	4222 2139 06
RTX08-28-203	Ratchet	4222 2119 89
RTX08-28-204	Ratchet	4222 2139 09
RTX08-28-206	Ratchet	4222 2119 92
RTX08-28-209	Ratchet	4222 2119 95
RTX08-28-210	Ratchet	4222 2139 12
RTX08-28-212	Ratchet	4222 2139 15
RTX08-28-213	Ratchet	4222 2110 56
RTX08-28-215	Ratchet	4222 2139 18
RTX08-28-300	Ratchet	4222 2110 59
RTX08-28-302	Ratchet	4222 2139 21
RTX08-28-308	Ratchet	4222 2139 24
RTX08-28-310	Ratchet	4222 2110 62
RTX08-28-314	Ratchet	4222 2110 65
RTX08-28-404	Ratchet	4222 2110 66

Item	Description	Ordering No.
RTX08-28-41MM	Ratchet	4222 2139 27
RTX08-28-45MM	Ratchet	4222 2139 30
RTX08-28-46MM	Ratchet	4222 2139 33
RTX08-28-50MM	Ratchet	4222 2119 98
RTX08-28-58MM	Ratchet	4222 2139 36
RTX08-28-60MM	Ratchet	4222 2139 39
RTX08-28-63MM	Ratchet	4222 2110 68
RTX08-28-65MM	Ratchet	4222 2139 42
RTX08-28-67MM	Ratchet	4222 2110 71
RTX08-28-70MM	Ratchet	4222 2139 44
RTX08-28-71MM	Ratchet	4222 2139 45
RTX08-28-75MM	Ratchet	4222 2110 74
RTX08-28-77MM	Ratchet	4222 2139 48
RTX08-28-80MM	Ratchet	4222 2110 77
RTX08-28-90MM	Ratchet	4222 2110 80
RTX08-28-95MM	Ratchet	4222 2139 51
RTX08-32	Drive Spring Roll Pin	4222 2110 83
RTX08-33	Drive Pin	4222 2110 86
RTX08-34	Drive Pin Spring	4222 2110 89
RTX08-35-L #1	Drive Plate (Left)	4222 2120 43
RTX08-35-L #10	Drive Plate (Left)	4222 2111 16
RTX08-35-L #11	Drive Plate (Left)	4222 2139 54
RTX08-35-L #12	Drive Plate (Left)	4222 2139 57
RTX08-35-L #2	Drive Plate (Left)	4222 2120 48

Item	Description	Ordering No.
RTX08-35-L #3	Drive Plate (Left)	4222 2120 53
RTX08-35-L #4	Drive Plate (Left)	4222 2120 58
RTX08-35-L #5	Drive Plate (Left)	4222 2120 68
RTX08-35-L #6	Drive Plate (Left)	4222 2120 73
RTX08-35-L #7	Drive Plate (Left)	4222 2120 78
RTX08-35-L #8	Drive Plate (Left)	4222 2120 63
RTX08-35-L #9	Drive Plate (Left)	4222 2139 60
RTX08-35-R #1	Drive Plate (Right)	4222 2120 83
RTX08-35-R #10	Drive Plate (Right)	4222 2111 40
RTX08-35-R #11	Drive Plate (Right)	4222 2139 63
RTX08-35-R #12	Drive Plate (Right)	4222 2139 66
RTX08-35-R #2	Drive Plate (Right)	4222 2120 87
RTX08-35-R #3	Drive Plate (Right)	4222 2120 91
RTX08-35-R #4	Drive Plate (Right)	4222 2139 69
RTX08-35-R #5	Drive Plate (Right)	4222 2120 95
RTX08-35-R #6	Drive Plate (Right)	4222 2139 72
RTX08-35-R #7	Drive Plate (Right)	4222 2120 99
RTX08-35-R #8	Drive Plate (Right)	4222 2121 03
RTX08-35-R #9	Drive Plate (Right)	4222 2121 07
RTX08-36 #1	Reaction Pawl	4222 2121 11
RTX08-36 #10	Reaction Pawl	4222 2111 64
RTX08-36 #11	Reaction Pawl	4222 2111 67
RTX08-36 #2	Reaction Pawl	4222 2121 15
RTX08-36 #3	Reaction Pawl	4222 2121 19

Item	Description	Ordering No.
RTX08-36 #4	Reaction Pawl	4222 2121 23
RTX08-36 #5	Reaction Pawl	4222 2121 27
RTX08-36 #6	Reaction Pawl	4222 2139 75
RTX08-36 #7	Reaction Pawl	4222 2139 78
RTX08-36 #8	Reaction Pawl	4222 2121 31
RTX08-36 #9	Reaction Pawl	4222 2121 35
RTX08-37	Reaction Pawl	4222 2139 81
RTX08-43	Shroud	4222 2139 84
RTX08-43 #1	Shroud Ratchet Link	4222 2121 39
RTX08-43 #10	Shroud Ratchet Link	4222 2111 91
RTX08-43 #11	Shroud Ratchet Link	4222 2139 87
RTX08-43 #2	Shroud Ratchet Link	4222 2121 44
RTX08-43 #3	Shroud Ratchet Link	4222 2121 48
RTX08-43 #4	Shroud Ratchet Link	4222 2121 52
RTX08-43 #5	Shroud Ratchet Link	4222 2121 56
RTX08-43 #6	Shroud Ratchet Link	4222 2139 90
RTX08-43 #7	Shroud Ratchet Link	4222 2139 93
RTX08-43 #8	Shroud Ratchet Link	4222 2121 60
RTX08-43 #9	Shroud Ratchet Link	4222 2121 64
RTX08-44	Shroud Screw	4222 2111 94
RTX08-45	Reaction Block Spacer	4222 2139 96
RTX08-45 #1	Reaction Block Spacer	4222 2112 15
RTX08-45 #10	Reaction Block Spacer	4222 2112 18

12 Point Hexagonal, Reduced Radius and Custom Ratchet sizes available. Contact your local representative for assistance with other sizes.

RTX-14 SPARE PARTS

RTX-14 Powerhead Spare Parts



Item	Description	Ordering No.
RTX14-01	Housing	4222 2141 10
RTX14-02	End Cap	4222 2112 96
RTX14-05	Rod End	4222 2109 07
RTX14-06	Piston Rod	4222 2112 99
RTX14-07	Cylinder End Cap Screw	4222 2113 02
RTX14-08	Fixed Upper Pin	4222 2113 05
RTX14-09	Fixed Upper Pin Ring	4222 2113 08
RTX14-10	Link Pin Short	4222 2113 11
RTX14-11	Link Pin Long	4222 2113 14
RT-SWIVEL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

RTX-14 Ratchet Link Spare Parts



Item	Description	Ordering No.
RTX14-22	Primary Drive Pawl	4222 2113 20
RTX14-23	Drive Pawl Secondary	4222 2113 23
RTX14-27	Drive Pawl Spring	4222 2113 26
RTX14-28-100MM	Ratchet	4222 2122 18
RTX14-28-110MM	Ratchet	4222 2141 52
RTX14-28-115MM	Ratchet	4222 2141 55
RTX14-28-120MM	Ratchet	4222 2141 58
RTX14-28-209	Ratchet	4222 2141 61
RTX14-28-212	Ratchet	4222 2141 63
RTX14-28-215	Ratchet	4222 2141 64
RTX14-28-302	Ratchet	4222 2141 67
RTX14-28-308	Ratchet	4222 2141 70
RTX14-28-314	Ratchet	4222 2141 73
RTX14-28-404	Ratchet	4222 2141 76
RTX14-28-408	Ratchet	4222 2141 79
RTX14-28-410	Ratchet	4222 2122 22
RTX14-28-71MM	Ratchet	4222 2113 29
RTX14-28-75MM	Ratchet	4222 2113 32
RTX14-28-80MM	Ratchet	4222 2141 82
RTX14-28-85MM	Ratchet	4222 2141 85
RTX14-28-90MM	Ratchet	4222 2122 25
RTX14-28-95MM	Ratchet	4222 2141 88
RTX14-32	Drive Spring Roll Pin	4222 2113 35
RTX14-33	Drive Pin	4222 2113 38
RTX14-34	Drive Pin Spring	4222 2113 41

Item	Description	Ordering No.
RTX14-35-L #1	Drive Plate (Left)	4222 2141 91
RTX14-35-L #11	Drive Plate (Left)	4222 2141 94
RTX14-35-L #2	Drive Plate (Left)	4222 2141 97
RTX14-35-L #3	Drive Plate (Left)	4222 2142 00
RTX14-35-L #4	Drive Plate (Left)	4222 2142 03
RTX14-35-L #5	Drive Plate (Left)	4222 2142 06
RTX14-35-L #6	Drive Plate (Left)	4222 2142 09
RTX14-35-L #7	Drive Plate (Left)	4222 2142 12
RTX14-35-L #8	Drive Plate (Left)	4222 2142 15
RTX14-35-L #9	Drive Plate (Left)	4222 2122 28
RTX14-35-L#10	Drive Plate (Left)	4222 2142 18
RTX14-35-R #1	Drive Plate(Right)	4222 2142 21
RTX14-35-R #11	Drive Plate(Right)	4222 2142 24
RTX14-35-R #2	Drive Plate(Right)	4222 2142 27
RTX14-35-R #3	Drive Plate(Right)	4222 2142 30
RTX14-35-R #4	Drive Plate(Right)	4222 2142 33
RTX14-35-R #5	Drive Plate(Right)	4222 2142 36
RTX14-35-R #6	Drive Plate(Right)	4222 2142 39
RTX14-35-R #7	Drive Plate(Right)	4222 2142 42
RTX14-35-R #8	Drive Plate(Right)	4222 2142 45
RTX14-35-R #9	Drive Plate(Right)	4222 2142 48
RTX14-35-R#10	Drive Plate(Right)	4222 2142 51
RTX14-36 #1	Reaction Pawl	4222 2142 54
RTX14-36 #10	Reaction Pawl	4222 2142 57

Item	Description	Ordering No.
RTX14-36 #2	Reaction Pawl	4222 2142 60
RTX14-36 #3	Reaction Pawl	4222 2142 63
RTX14-36 #4	Reaction Pawl	4222 2142 66
RTX14-36 #5	Reaction Pawl	4222 2142 69
RTX14-36 #7	Reaction Pawl	4222 2122 32
RTX14-36 #9	Reaction Pawl	4222 2142 58
RTX14-37	Reaction Pawl Spring	4222 2113 50
RTX14-43 #1	Shroud	4222 2122 35
RTX14-43 #10	Shroud	4222 2142 72
RTX14-43 #11	Shroud	4222 2142 75
RTX14-43 #2	Shroud	4222 2142 78
RTX14-43 #3	Shroud	4222 2142 81
RTX14-43 #4	Shroud	4222 2142 84
RTX14-43 #5	Shroud	4222 2142 87
RTX14-43 #6	Shroud	4222 2142 90
RTX14-43 #7	Shroud	4222 2142 93
RTX14-43 #8	Shroud	4222 2142 96
RTX14-43 #9	Shroud	4222 2142 99
RTX14-44	Shroud Screw	4222 2143 02
RTX14-45 #1	Reaction Block Spacer	4222 2122 33
RTX14-45 #10	Reaction Block Spacer	4222 2113 71
RTX14-45 #2	Reaction Block Spacer	4222 2122 34
RTX14-45 #3	Reaction Block Spacer	4222 2122 36
RTX14-45 #4	Reaction Block Spacer	4222 2122 37
RTX14-45 #5	Reaction Block Spacer	4222 2122 38

Item	Description	Ordering No.
RTX14-45 #6	Reaction Block Spacer	4222 2122 41
RTX14-45 #7	Reaction Block Spacer	4222 2122 44
RTX14-45 #8	Reaction Block Spacer	4222 2122 47
RTX14-45 #9	Reaction Block Spacer	4222 2122 50
RTX14-46	Top Spacer	4222 2143 05
RTX14-47	Reaction Pawl Spring Spacer	4222 2143 08
RTX14-48	Side Plate Roll Spring	4222 2113 74
RTX14-49	Spring Seat	4222 2113 77
RTX14-50	Side Plate Screw Bottom	4222 2113 80
RTX14-51	Side Plate Screw Top	4222 2113 83
RTX14-52-L #2	Side Plate (Left)	4222 2113 86
RTX14-52-L #3	Side Plate (Left)	4222 2143 11
RTX14-52-L #4	Side Plate (Left)	4222 2143 14
RTX14-52-L #5	Side Plate (Left)	4222 2143 17
RTX14-52-L #6	Side Plate (Left)	4222 2143 20
RTX14-52-L #7	Side Plate (Left)	4222 2143 21
RTX14-52-L #9	Side Plate (Left)	4222 2143 23
RTX14-52-R #2	Side Plate (Right)	4222 2143 26
RTX14-52-R #3	Side Plate (Right)	4222 2143 29
RTX14-52-R #4	Side Plate (Right)	4222 2143 30
RTX14-52-R #6	Side Plate (Right)	4222 2143 32
RTX14-52-R #7	Side Plate (Right)	4222 2143 35
RTX14-99	Reaction Pawl Pin	4222 2116 65

12 Point Hexagonal, Reduced Radius and Custom Ratchet sizes available. Contact your local representative for assistance with other sizes.

RTX-18 SPARE PARTS

RTX-18 Powerhead Spare Parts



Item	Description	Ordering No.
RTX18-02	End Cap	4222 2113 88
RTX18-05	Rod End	4222 2113 89
RTX18-06	Piston Rod	4222 2143 50
RTX18-07	Cylinder End Cap Screw	4222 2143 52
RTX18-08	Fixed Upper Pin	4222 2143 53
RTX18-09	Fixed Upper Pin Ring	4222 2113 92
RTX18-10	Link Pin Short	4222 2113 95
RTX18-11	Link Pin Long	4222 2113 98
RTX18-12	Link Pin Retainer	4222 2114 00
RTX18-13	Housing Seal Kit	4222 2114 01
RT-SWIV-EL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

RTX-18 Ratchet Link Spare Parts



Item	Description	Ordering No.
RTX18-22	Drive Pawl Primary	4222 2143 56
RTX18-23	Drive Pawl Secondary	4222 2143 59
RTX18-27	Drive Pawl Spring	4222 2114 04
RTX18-28-302	Ratchet	4222 2114 07
RTX18-28-80MM	Ratchet	4222 2143 92
RTX18-28-95MM	Ratchet	4222 2143 95
RTX18-32	Drive Spring Roll Pin	4222 2114 10
RTX18-33	Drive Pin	4222 2114 13
RTX18-34	Drive Pin Spring	4222 2114 16
RTX18-35-L #4	Drive Plate (left)	4222 2114 17
RTX18-35-R #4	Drive Plate (right)	4222 2114 18
RTX18-36 #4	Reaction Pawl	4222 2114 20
RTX18-37	Reaction Pawl Spring	4222 2114 19
RTX18-43 #5	Shroud	4222 2143 98
RTX18-43 #6	Shroud	4222 2144 01
RTX18-43-#4	Shroud	4222 2144 04

Item	Description	Ordering No.
RTX18-45 #1	Reaction Block Spacer	4222 2114 22
RTX18-45 #10	Reaction Block Spacer	4222 2114 25
RTX18-45 #2	Reaction Block Spacer	4222 2114 28
RTX18-45 #3	Reaction Block Spacer	4222 2114 31
RTX18-45 #4	Reaction Block Spacer	4222 2114 34
RTX18-45 #5	Reaction Block Spacer	4222 2114 37
RTX18-45 #6	Reaction Block Spacer	4222 2114 40
RTX18-45 #7	Reaction Block Spacer	4222 2114 43
RTX18-45 #8	Reaction Block Spacer	4222 2114 46
RTX18-45 #9	Reaction Block Spacer	4222 2114 49
RTX18-46	Top Spacer	4222 2114 52
RTX18-47	Reaction Pawl Spring Spacer	4222 2144 07
RTX18-49	Spring Seat	4222 2114 55
RTX18-50	Side Plate Screw Top	4222 2114 58
RTX18-51	Side Plate Screw Bottom	4222 2144 10
RTX18-99	Reaction Pawl Pin	4222 2114 61

RTX-30 SPARE PARTS LIST

RTX-30 Powerhead Spare Parts



Item	Description	Ordering No.
RTX30-01	Housing	4222 2144 34
RTX30-05	Rod End	4222 2144 37
RTX30-06	Piston Rod	4222 2114 64
RTX30-07	Cylinder End Cap Screw	4222 2100 12
RTX30-10	Link Pin Short	4222 2100 15
RTX30-11	Link Pin Long	4222 2100 18
RTX30-12	Link Pin Re- tainer	4222 2144 40
RTX30-13	Housing Seal Kit	4222 2100 21
RT-SWIV- EL-L	Large Swivel Assembly	4222 2100 06
RT-SK-L	Large Swivel Seal Kit	4222 2100 00

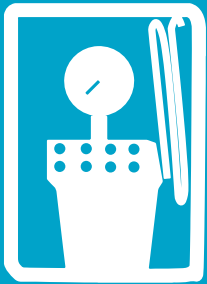
RTX-30 Ratchet Link Spare Parts



Item	Description	Ordering No.
RTX30-22	Drive Pawl Primary	4222 2144 46
RTX30-23	Drive Pawl Secondary	4222 2100 24
RTX30-27	Drive Pawl Spring	4222 2144 49
RTX30-28- 110MM	Ratchet	4222 2144 79
RTX30-28- 309	Ratchet	4222 2144 82
RTX30-28- 500	Ratchet	4222 2144 83
RTX30-28- 95MM	Ratchet	4222 2100 27
RTX30-28- 98MM	Ratchet	4222 2144 85
RTX30-32	Drive Spring Roll Pin	4222 2100 30
RTX30-33	Drive Pin	4222 2144 88
RTX30-34	Drive Pin Spring	4222 2144 91
RTX30-35-L #4	Drive Plate (Left)	4222 2144 94
RTX30-35-R #4	Drive Plate (Right)	4222 2144 97
RTX30-36 #3	Reaction Pawl	4222 2145 00
RTX30-36 #4	Reaction Pawl	4222 2145 03
RTX30-36 #6	Reaction Pawl	4222 2145 04
RTX30-36- 115MM	Reaction Pawl	4222 2145 06
RTX30-37	Reaction Pawl Spring	4222 2100 33
RTX30-43 #2	Shroud	4222 2145 09
RTX30-43 #3	Shroud	4222 2145 12
RTX30-43 #4	Shroud	4222 2145 15
RTX30-43 #5	Shroud	4222 2145 18
RTX30-43 #6	Shroud	4222 2145 21
RTX30-44	Shroud Screws	4222 2145 22
RTX30-45 #1	Reaction Block Spacer	4222 2145 23
RTX30-45 #10	Reaction Block Spacer	4222 2145 25

Item	Description	Ordering No.
RTX30-45 #2	Reaction Block Spacer	4222 2145 26
RTX30-45 #3	Reaction Block Spacer	4222 2145 28
RTX30-45 #4	Reaction Block Spacer	4222 2145 29
RTX30-45 #5	Reaction Block Spacer	4222 2145 31
RTX30-45 #6	Reaction Block Spacer	4222 2145 32
RTX30-45 #7	Reaction Block Spacer	4222 2145 34
RTX30-45 #8	Reaction Block Spacer	4222 2145 35
RTX30-46	Top Spacer	4222 2100 37
RTX30-47	Reaction Pawl Spring Spacer	4222 2100 36
RTX30-48	Side Plate Roll Pin	4222 2100 39
RTX30-49	Spring Seat	4222 2100 40
RTX30-50	Side Plate Screw Top	4222 2100 42
RTX30-51	Side Plate Screw Bottom	4222 2100 45
RTX30-52-L #3	Side Plate (Left)	4222 2145 24
RTX30-52-L #5	Side Plate (Left)	4222 2145 37
RTX30-52-L #6	Side Plate (Left)	4222 2145 27
RTX30-52-L #7	Side Plate (Left)	4222 2145 30
RTX30-52-R #1	Side Plate (Right)	4222 2145 33
RTX30-52-R #2	Side Plate (Right)	4222 2145 36
RTX30-52-R #3	Side Plate (Right)	4222 2145 38
RTX30-52-R #5	Side Plate (Right)	4222 2145 40
RTX30-52-R #6	Side Plate (Right)	4222 2145 39
RTX30-52-R #8	Side Plate (Right)	4222 2145 42

12 Point Hexagonal, Reduced Radius and Custom Ratchet sizes available. Contact your local representative for assistance with other sizes.



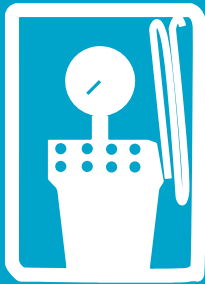
ELECTRIC

Electric Pumps can be ordered for use with 110V or 220V.

		Panther 025	Panther 55	Lynx	Panther 150
Ordering Numbers		110 V w/handle 8434 2040 31			
		110V w/full frame 8434 2040 33	110V 8434 2040 35	110V 8434 2059 61	110V 8434 2040 39
		220V w/handle 8434 2130 22	220V 8434 2040 37	220V 8434 2059 59	220V 8434 2040 41
		220V w/full frame 8434 2059 54			
Dimensions (LxWxH)	inches	12.6 x 8.3 x 15.3	17.3 x 9.4 x 18.5	9.5 x 17.14 x 18.12	18.11 x 11.81 x 17.33
	mm	320 x 210.8 x 388.6	439.4 x 238.7 x 469.9	541.3 x 435.3 x 460.2	460 x 300 x 440
Weight	lb	33	48	75	72
	kg	15	22	34	33
Oil Capacity	Gallons	0.5	1.5	2.5	1.5
	Liters	1.89	5.67	9.5	4.0
Intercooler System		No	Yes	Optional Accessory	Yes
Oil Flow@ 1250psi/86bar	cu.in	195 cu. in/min	391 cu. in/min	-	463 cu. in/min
	l/min	3.2 l/min	6.4 l/min	-	7.6 l/min
Oil Flow@ 3600psi/250bar	cu. in/min	54 cu. in/min	110 cu. in/min	-	183 cu. in/min
	l/min	0.9 l/min	1.8 l/min	-	3.0 l/min
Oil Flow@ 10,000psi/700bar	cu. in/min	21 cu. in/min	42 cu. in/min	56 cu. in/min	61 cu. in/min
	l/min	0.35 l/min	0.7 l/min	0.9 l/min	1.0 l/min
Ports		1	4	1	4
Recommended Tools	RTP5	•	•	•	
	RT1	•	•	•	
	RT3	•	•	•	
	RT5		•	•	
	RT8		•	•	•
	RT10		•	•	•
	RT20		•	•	•
	RT25		•	•	•
	RT50		•	•	•
	RTX2	•	•	•	•
	RTX4		•	•	•
	RTX8		•	•	•
	RTX14		•	•	•
	RTX18		•	•	•
	RTX30		•	•	•

* 4-port manifold is available as an optional accessory. See the pump accessory page for order.

Hoses and oil not included with the pump. Be sure to order corresponding amount of oil for your pump and select hose length for your application.



AIR

Air-driven pumps connect to a minimum 50psi power source.

		Panther A110	Panther A380	TigAir
Ordering Numbers		Small Frame 8434 2040 19	8434 2040 23	8434 2059 62
		Full Frame 8434 2040 17		
Dimensions (LxWxH)	inches	13.4 x 13.7 x 16.5	15.7 x 14.9 x 18.1	18 x 10.5 x 18.5
	mm	340.3 x 347.9 419.1	398.7x 378.4 x 459.7	457.2 x 266.7 x 439.9
Weight	lb	33	48	75
	kg	15	22	34
Oil Capacity	Gallons	0.5	1.5	2.5
	Liters	1.89	5.67	9.5
Oil Flow@ 1250psi/86bar	cu.in	275 cu.in/min	701 cu. in/min	-
	l/min	4.5 l/min	11.5 l/min	-
Oil Flow@ 3600psi/250bar		67 cu in./min	213 cu. in/min	-
		1.1 l/min	3.5 l/min	-
		24 cu. in/min	79 cu.in/min	72 cu. in/min
Oil Flow@ 10,000psi/700bar		0.4 l/min	1.3 l/min	1.1 l/min
Ports		1	4	1
Recommended Tools	RTP5	•	•	•
	RT1	•	•	•
	RT3	•	•	•
	RT5		•	•
	RT8		•	•
	RT10		•	•
	RT20		•	•
	RT25		•	•
	RT50		•	•
	RTX2	•	•	•
	RTX4		•	•
	RTX8		•	•
	RTX14		•	•
	RTX18		•	•
RTX30		•	•	

* 4-port manifold is available as an optional accessory. See the pump accessory page for order.

Maintenance kits are available for every pump model. Consult your local Atlas Copco bolting representative for ordering information.

ACCESSORIES FOR HYDRAULIC TORQUE WRENCH PUMPS



10kpsi/700 bar hoses

Model	Description	Ordering No.
090172	4.5M / 15 ft	8434 2050 08
090172-7	7M / 22.9 ft	8434 2123 95
090172-10	10M / 32 ft	8434 2123 74
090172-15	15M / 49.2 ft	8434 2050 10
090172-20	20M / 65.6 ft	8434 2123 83
090172-30	30M / 98.4 ft	8434 2123 86



Couplers/Nipples

Model	Description	Ordering No.
090156-1	1/8" Coupler Female	8434 2050 06
090156	1/4" Female Coupler	8434 2123 41
090157	3/8" Female Coupler	8434 2123 44
090155-1	1/8" Male Coupler	8434 2123 65
QC-COUPERS	Quick Connect Coupler Set	8434 2131 36
090101	Nipple Male-Male 1/4INx1/4IN	8434 2050 00
090103	Nipple Male 1/4INx-1/8IN	8434 2050 02
090135	Nipple NPT 1/4INx1/4IN	8434 2050 04
090155	1/4" Male Female Nipple	8434 2123 38
090155-M	1/4" Male Nipple	8434 2123 68



Hydraulic Oil

Model	Description	Ordering No.
Tellus 46	5L / 1.32G Container	8434 2040 45



Calibrated Gauges

Model	Description	Ordering No.
090233-2	Gauge 70Mpa Back Mounted	8434 2124 07
090233-1	Gauge 700bar-10kpsi	8434 2051 59

4-port manifold

Model	Description	Ordering No.
4-port	4 port manifold for Tigair	8434211573
4-port	4 port manifold for Lynx	8434211573

IMPACT POWER SOCKETS



6 point

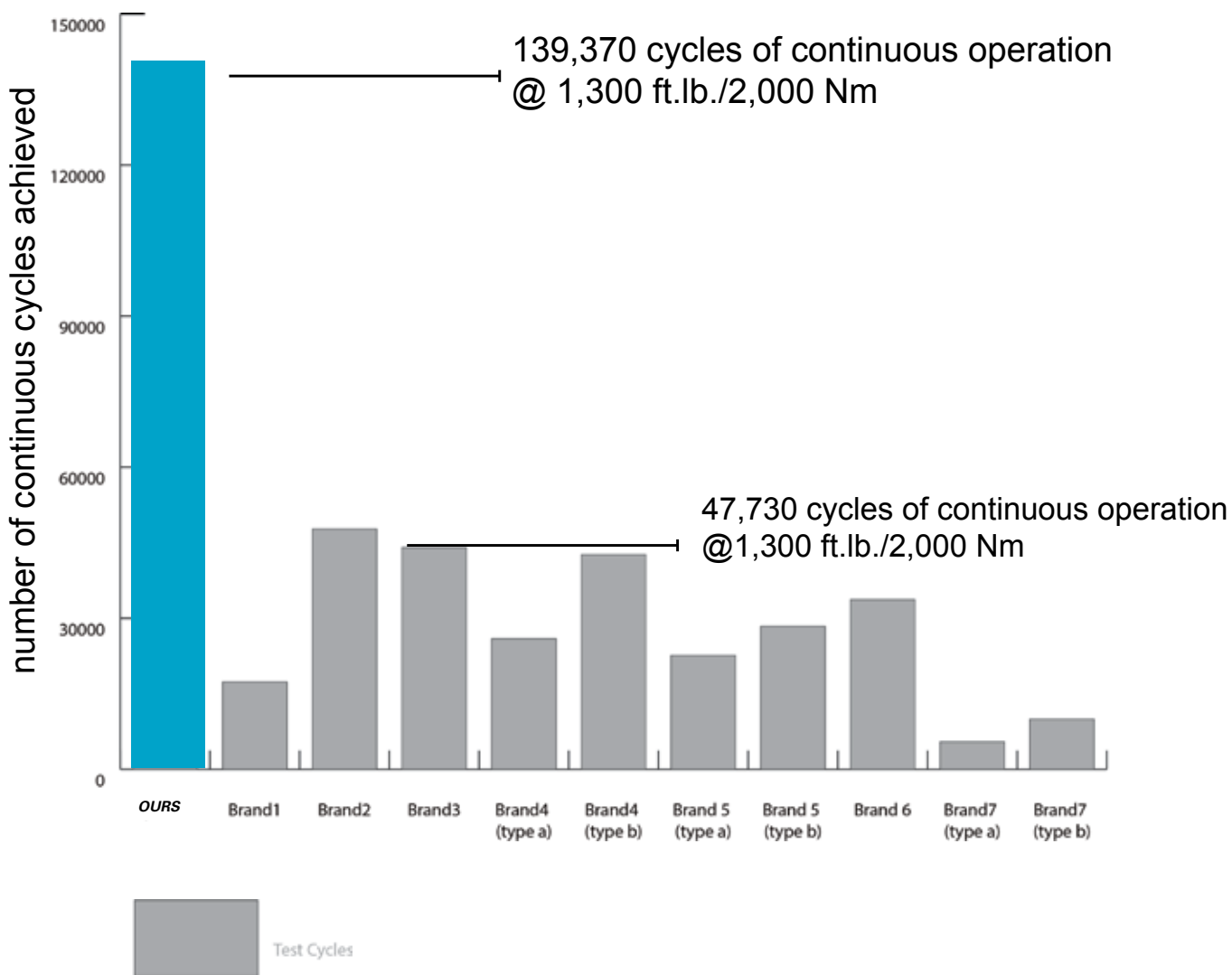
12 point

Produced in Sweden since 1951
Stringent production standards to
ensure quality. Produced in the world's
only ISO 14001:2004 compliant socket
plant

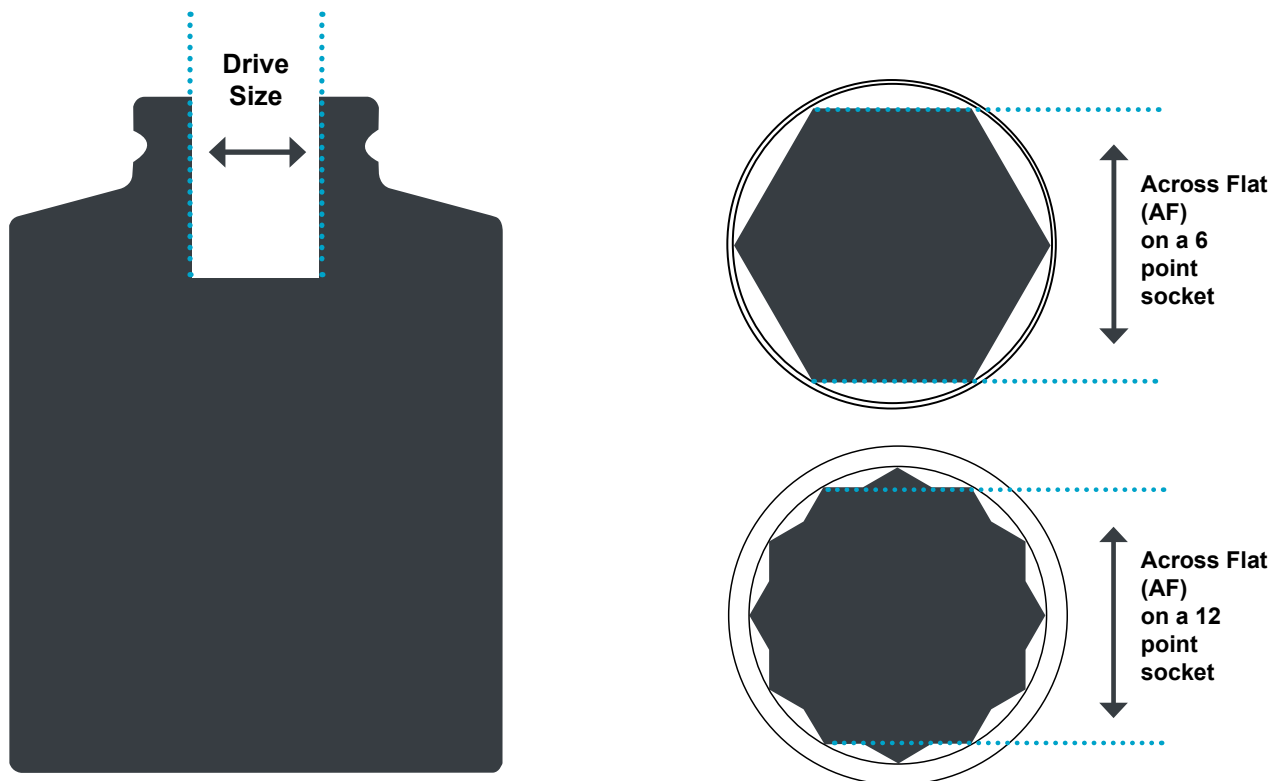
Your work is too critical, and your people too valuable.

Our impact sockets are beyond doubt the most durable and safe sockets in the market. We tested our 3/4" Square drive 24mm AF, against 9 similar sockets from 7 major brands. The test consisted of cycling the sockets at 1,300 ft.lb./2000 Nm, continuously until failure. Our impact sockets lasted 139,370 cycles until breakage, while the nearest competitor only reached 47,730 cycles, 65% less.

Socket Comparison Test



HOW TO SELECT YOUR SOCKET



How do I select the socket size on the following pages?

In this catalog, sizes are expressed as MM for metric while imperial have a 3 digit designation. How can you tell the sizes?



First number indicates inch, and the following two numbers indicate an increment of 1/16". For example **2-206** would be a socket for a with a 3/4" drive and an across flat of 2-6/16", which in turn is the same as 2-3/8". Another example: **9-404** would be a socket for a 1" drive tool, and for an across flat nut of 4-4/16" nut, which is the same as 4-1/4". When the socket sizes in metric and imperial are the same size, we have it listed together. For example: **9-312=95MM 12PT** would be a 12-point socket for a nut that has an across flat 3-3/4" or for 95mm.

3/4" DRIVE SOCKETS



Model	Ordering No.
2-011	8434 2050 54
2-011 12PT	8434 2050 56
2-012/19MM	8434 2050 58
2-012/19MM 12PT	8434 2050 60
2-012/19MM L	8434 2124 37
2-013	8434 2050 62
2-013 12PT	8434 2050 64
2-014	8434 2124 40
2-015	8434 2050 66
2-015 12PT	8434 2050 68
2-1 15/16 12PT	8434 2050 69
2-100	8434 2050 70
2-100 12PT	8434 2050 72
2-101/27MM	8434 2050 74
2-101/27MM 12PT	8434 2050 76
2-102	8434 2050 78
2-102 12 PT	8434 2124 43
2-102 L	8434 2124 42
2-103/30MM	8434 2050 80
2-103/30MM 12PT	8434 2050 82
2-103/30MM L	8434 2050 84
2-104	8434 2124 46
2-104 12PT	8434 2050 86
2-105	8434 2124 49
2-106/35MM	8434 2124 52
2-106/35MM 12PT	8434 2050 88
2-107	8434 2124 55
2-107 12PT	8434 2050 90
2-107 L	8434 2124 58
2-108/38MM	8434 2124 61
2-108/38MM 12PT	8434 2050 92
2-109	8434 2050 94
2-109 12PT	8434 2050 96
2-110	8434 2050 98
2-110 L	8434 2124 64
2-111/43MM	8434 2051 00
2-111/43MM 12PT	8434 2051 02
2-112	8434 2124 67
2-112 12PT	8434 2051 04
2-113/46MM	8434 2051 06

Model	Ordering No.
2-113/46MM 12PT	8434 2051 08
2-113/46MM L	8434 2124 70
2-114	8434 2124 73
2-114 12PT	8434 2051 10
2-16MM	8434 2051 12
2-17MM	8434 2051 14
2-18MM	8434 2051 16
2-200	8434 2124 76
2-200 12PT	8434 2051 18
2-200-L	8434 2051 20
2-201	8434 2051 23
2-201 12PT	8434 2051 22
2-202	8434 2051 25
2-202 12PT	8434 2051 24
2-203	8434 2124 79
2-204	8434 2051 26
2-204 12PT	8434 2051 28
2-205	8434 2051 30
2-206	8434 2051 32
2-206 12PT	8434 2124 82
2-209	8434 2051 34
2-209 12PT	8434 2051 36
2-20MM	8434 2051 38
2-212=70MM	8434 2051 40
2-213	8434 2051 93
2-21MM	8434 2051 42
2-22MM	8434 2051 44
2-22MM 12PT	8434 2124 85
2-22MM L	8434 2124 88
2-23MM	8434 2124 91
2-24MM	8434 2051 46
2-24MM 12PT	8434 2128 79
2-26MM	8434 2051 48
2-28MM	8434 2124 94
2-29MM	8434 2124 97
2-32MM	8434 2051 50
2-32MM 12PT	8434 2051 52
2-33MM	8434 2125 00
2-34MM	8434 2125 03
2-36L33	8434 2050 71
2-36MM	8434 2125 06

Model	Ordering No.
2-36MM L	8434 2051 54
2-37MM	8434 2125 09
2-41MM	8434 2051 56
2-41MM L	8434 2051 58
2-42MM	8434 2125 12
2-47MM	8434 2125 15
2-50MM	8434 2051 60
2-50MM 12PT	8434 2125 18
2-50MM L	8434 2125 21
2-52MM	8434 2125 24
2-55MM	8434 2051 62
2-55MM Long	8434 2051 63
2-60L	8434 2051 67
2-60MM	8434 2051 66
2-65: 2 9/16 L	8434 2051 43
2-7/8	8434 2051 61
2-75mm	8434 2051 41
2-D6K55 12points	8434 2051 31

1" DRIVE SOCKETS

Model	Ordering No.
9-012/19MM	8434 2054 48
9-012/19MM 12PT	8434 2126 89
9-012/19MM L	8434 2054 49
9-014	8434 2054 50
9-014 12PT	8434 2054 52
9-015	8434 2054 54
9-015 12PT	8434 2054 56
9-100	8434 2054 58
9-100 12PT	8434 2054 60
9-100 L	8434 2126 92
9-100 L 12PT	8434 2126 95
9-100MM	8434 2054 62
9-101=27MM	8434 2054 64
9-101=27MM 12PT	8434 2054 66
9-102	8434 2054 68
9-102 12PT	8434 2054 70
9-103=30MM	8434 2054 72
9-103=30MM 12PT	8434 2054 74
9-103=30MM L	8434 2126 98
9-104	8434 2127 01
9-104 12 PT	8434 2127 04
9-104 L 12PT	8434 2054 76
9-105	8434 2127 07
9-105 12PT	8434 2054 78
9-106=35MM	8434 2127 10
9-106=35MM 12 PT	8434 2054 80
9-107	8434 2054 82
9-107 12PT	8434 2127 13
9-107 L	8434 2054 84
9-107 L 12PT	8434 2054 86
9-108=38MM	8434 2127 16
9-108=38MM 12PT	8434 2127 19
9-108=38MM-L-12PT	8434 2054 87
9-109	8434 2054 88
9-109 12PT	8434 2054 90
9-110	8434 2054 92
9-110 12PT	8434 2054 94
9-110 L	8434 2127 22

Model	Ordering No.
9-111=43MM	8434 2127 25
9-111=43MM-12PT	8434 2127 28
9-112	8434 2054 96
9-112 12PT	8434 2054 98
9-113=46MM	8434 2055 00
9-113=46MM L	8434 2055 04
9-113=46MM-12PT	8434 2054 95
9-113=46MM-L	8434 2054 93
9-114	8434 2055 06
9-114TW	8434 2127 31
9-114-12PT	8434 2055 08
9-115	8434 2055 10
9-115 12PT	8434 2055 12
9-200	8434 2127 34
9-200 12PT	8434 2055 14
9-200 L	8434 2055 16
9-200 L 12PT	8434 2055 18
9-200TW 2IN-TW	8434 2127 37
9-201	8434 2127 40
9-201 12PT	8434 2055 20
9-202	8434 2127 43
9-202 12PT	8434 2055 22
9-203	8434 2127 46
9-203 12PT	8434 2127 49
9-203 L	8434 2127 52
9-204	8434 2055 24
9-204 12 PT	8434 2055 26
9-204 L	8434 2055 28
9-205	8434 2055 30
9-205 12PT	8434 2055 32
9-206	8434 2127 55
9-206 12PT	8434 2127 58
9-206 L	8434 2127 61
9-207	8434 2127 64
9-207 L	8434 2127 67
9-208	8434 2127 70
9-208 12PT	8434 2127 73
9-209=65M 12 PT	8434 2055 34
9-209=65MM	8434 2055 36

Model	Ordering No.
9-209=65MM 12 PT	8434 2055 37
9-209=65MM L	8434 2055 38
9-210	8434 2055 40
9-210 12PT	8434 2055 42
9-211	8434 2055 44
9-211 12PT	8434 2055 46
9-212=70MM	8434 2055 48
9-212=70MM 12PT	8434 2055 50
9-212=70MM L	8434 2055 52
9-213	8434 2127 76
9-214	8434 2127 79
9-214 12PT	8434 2055 54
9-215	8434 2127 82
9-215 12PT	8434 2055 56
9-21MM	8434 2055 58
9-22MM	8434 2055 60
9-22MM Long	8434 2055 62
9-24MM	8434 2127 85
9-24MM 12PT	8434 2127 88
9-26MM	8434 2127 91
9-28MM	8434 2127 94
9-29MM	8434 2127 97
9-300	8434 2128 00
9-300 12PT	8434 2055 64
9-301	8434 2055 66
9-301 12PT	8434 2055 68
9-302	8434 2055 70
9-302 12PT	8434 2055 72
9-303 12PT	8434 2055 74
9-304	8434 2128 03
9-304 12PT	8434 2055 76
9-305 12PT	8434 2055 78
9-306	8434 2055 80
9-306 12PT	8434 2055 82
9-308	8434 2055 84
9-309	8434 2128 06
9-30L-133	8434 2128 17
9-30L-143	8434 2128 19
9-310	8434 2128 09

12 Point, Thin Wall and Custom sizes available upon request.

Model	Ordering No.
9-312=95MM	8434 2055 86
9-312=95MM 12PT	8434 2128 12
9-314	8434 2128 15
9-32-500NM	8434 2128 23
9-32L	8434 2051 65
9-32MM	8434 2055 88
9-32MM 12PT	8434 2128 18
9-33-500NM	8434 2128 22
9-33MM	8434 2128 21
9-34MM	8434 2128 24
9-35MM 12PT	8434 2128 27
9-36L	8434 2051 81
9-36MM	8434 2055 90
9-36MM 12PT	8434 2128 30
9-37MM	8434 2128 33
9-37MM 12PT	8434 2128 36
9-38MM 12PT	8434 2128 39
9-400	8434 2128 42
9-401	8434 2055 92
9-402=105MM	8434 2055 94
9-404	8434 2055 96
9-410	8434 2055 98
9-41L	8434 2051 83
9-41L	8434 2128 46
9-41MM	8434 2056 00
9-41MM 12PT	8434 2128 45
9-42MM	8434 2128 48
9-42MM 12PT	8434 2128 51
9-43MM 12PT	8434 2128 54
9-46MM 12PT	8434 2128 57
9-47MM	8434 2128 60
9-48MM	8434 2128 63
9-50MM	8434 2056 02
9-50MM 12PT	8434 2128 66
9-50mm L	8434 2056 03
9-52MM	8434 2128 69
9-55MM	8434 2056 04
9-55MM 12PT	8434 2128 72
9-55MM L	8434 2056 06

Model	Ordering No.
9-56MM 12PT	8434 2128 75
9-60L	8434 2051 85
9-60MM	8434 2056 08
9-60MM 12PT	8434 2128 78
9-75MM	8434 2056 10
9-80MM	8434 2056 12
9-85MM	8434 2056 14
9-85MM L	8434 2056 16
9-90MM	8434 2056 18
9-D6K38=1 1/2	8434 2127 20

12 Point, Thin Wall and Custom sizes available upon request.

1 1/2" DRIVE SOCKETS

Model	Ordering No.
5-100	8434 2051 72
5-100 12PT	8434 2051 74
5-100MM	8434 2051 76
5-101=27MM	8434 2051 78
5-101=27MM 12PT	8434 2125 42
5-102	8434 2051 80
5-102 12PT	8434 2125 45
5-102MM	8434 2051 82
5-103=30MM	8434 2051 84
5-103=30MM 12PT	8434 2125 48
5-104	8434 2051 86
5-104 12PT	8434 2051 88
5-105	8434 2051 90
5-105 12PT	8434 2051 92
5-106=35MM	8434 2051 94
5-106=35MM 12PT	8434 2051 96
5-107	8434 2051 98
5-107 12PT	8434 2052 00
5-107 L	8434 2052 02
5-108=38MM	8434 2052 04
5-108=38MM 12PT	8434 2052 06
5-109	8434 2052 08
5-109 12PT	8434 2125 51
5-110	8434 2052 10
5-110 12PT	8434 2052 12
5-110MM	8434 2052 14
5-111=43MM	8434 2052 16
5-111=43MM-12PT	8434 2052 18
5-112	8434 2052 20
5-112 12PT	8434 2052 22
5-113=46MM	8434 2052 24
5-113=46MM 12PT	8434 2052 26
5-114	8434 2052 28
5-114 12PT	8434 2052 30
5-115	8434 2052 32
5-115 12PT	8434 2052 34
5-115MM	8434 2052 36
5-120MM	8434 2052 38
5-125MM	8434 2052 40
5-130MM	8434 2059 02
5-135MM	8434 2125 54
5-145MM	8434 2125 57
5-200	8434 2052 42
5-200 12PT	8434 2052 44
5-201	8434 2052 46
5-201 12PT	8434 2052 48
5-202	8434 2052 50
5-202 12PT	8434 2052 52
5-203	8434 2052 54
5-203 12PT	8434 2052 56
5-204	8434 2052 58
5-204 12PT	8434 2052 60
5-205	8434 2052 62
5-205 12PT	8434 2052 64
5-206	8434 2125 60
5-206 12PT	8434 2052 66
5-206 L	8434 2052 68
5-207	8434 2125 63

Model	Ordering No.
5-207 12PT	8434 2052 70
5-208	8434 2052 72
5-208 12PT	8434 2052 74
5-209=65MM	8434 2052 76
5-209=65MM-12PT	8434 2052 78
5-209=65MM-L	8434 2052 79
5-210 12PT	8434 2052 80
5-210 2 5/8IN	8434 2125 66
5-211	8434 2052 82
5-211 12PT	8434 2052 84
5-212=70MM 12PT	8434 2052 88
5-213	8434 2052 90
5-213 12PT	8434 2052 92
5-214	8434 2052 94
5-215	8434 2052 96
5-215 12PT	8434 2052 98
5-22MM	8434 2052 43
5-300	8434 2053 00
5-300 12PT	8434 2053 02
5-301	8434 2053 04
5-301 12PT	8434 2053 06
5-302	8434 2125 72
5-302 12PT	8434 2053 08
5-303	8434 2125 78
5-303 12PT	8434 2053 10
5-304	8434 2053 12
5-304 12PT	8434 2053 14
5-305	8434 2053 15
5-306	8434 2125 81
5-306 12PT	8434 2053 16
5-307	8434 2053 17
5-308	8434 2053 18
5-308 12PT	8434 2053 20
5-309	8434 2053 21
5-310	8434 2125 84
5-310 12PT	8434 2053 22
5-311	8434 2053 23
5-312=95MM	8434 2053 24
5-313	8434 2053 25
5-314	8434 2053 26
5-315	8434 2053 27
5-315 12PT	8434 2053 29
5-32MM	8434 2053 28
5-36MM	8434 2053 30
5-400	8434 2053 32
5-400 12PT	8434 2053 34
5-401	8434 2053 35
5-402=105MM	8434 2053 36
5-403	8434 2125 87
5-404	8434 2053 38
5-404 12PT	8434 2053 40
5-405	8434 2053 41
5-406	8434 2053 42
5-408	8434 2125 90
5-410	8434 2053 44
5-414	8434 2053 46
5-41MM	8434 2125 93
5-42MM	8434 2125 99

Model	Ordering No.
5-47MM	8434 2126 02
5-48MM	8434 2126 05
5-500	8434 2053 48
5-502	8434 2053 50
5-503	8434 2053 52
5-504	8434 2126 08
5-506	8434 2053 54
5-50MM	8434 2053 56
5-50MM 12PT	8434 2126 11
5-50MM L	8434 2126 14
5-512	8434 2053 58
5-514	8434 2053 60
5-52MM	8434 2126 17
5-55MM	8434 2053 62
5-56MM	8434 2126 20
5-60MM	8434 2053 64
5-60MM L	8434 2126 23
5-65MM	8434 2126 29
5-70MM	8434 2126 32
5-75MM	8434 2126 35
5-75MM L	8434 2126 38
5-80MM	8434 2053 66
5-85MM	8434 2053 68
5-90MM	8434 2053 70
5-92MM	8434 2126 41
5-93MM	8434 2053 71
5-95MM	8434 2126 44
5-D6K38=11/2L	8434 2052 05
5-D6K43=1 11/16L	8434 2052 07

12 Point, Thin Wall and Custom sizes available upon request.

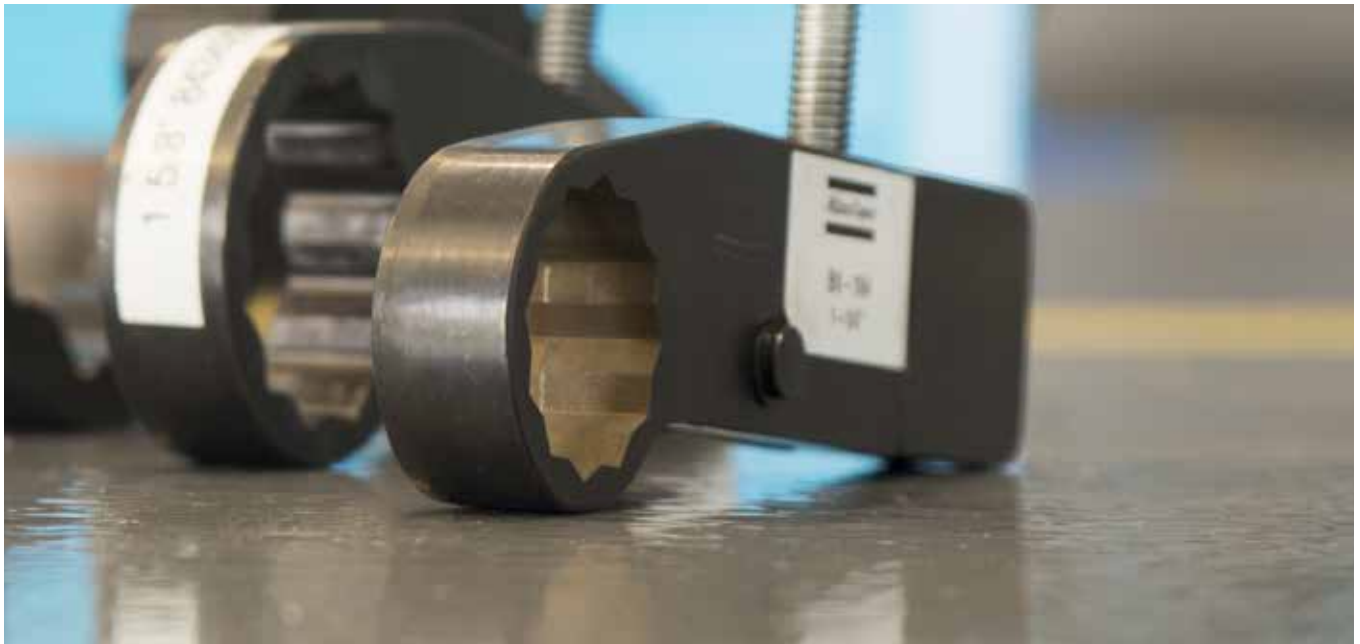
2 1/2" DRIVE SOCKETS

Model	Ordering No.
6-200	8434 2053 85
6-55MM	8434 2054 08
6-203	8434 2126 53
6-206	8434 2126 56
6-60MM	8434 2059 06
6-207	8434 2126 59
6-209=65MM	8434 2053 86
6-210	8434 2053 87
6-212=70MM	8434 2053 88
6-214	8434 2053 89
6-215	8434 2053 90
6-75MM	8434 2059 07
6-300	8434 2126 62
6-302	8434 2126 65
6-80MM	8434 2054 12
6-304	8434 2126 66
6-85MM	8434 2054 16
6-306	8434 2055 83
6-308	8434 2053 92
6-90MM	8434 2054 18
6-310	8434 2126 68
6-312=95MM	8434 2053 94
6-314	8434 2053 96
6-100MM	8434 2053 72
6-400	8434 2053 98
6-401	8434 2053 99
6-402=105MM	8434 2054 00
6-105MM	8434 2126 47
6-404	8434 2054 02

Model	Ordering No.
6-110MM	8434 2053 74
6-406	8434 2126 71
6-115MM	8434 2053 76
6-410	8434 2054 04
6-120MM	8434 2053 78
6-125MM	8434 2053 80
6-500	8434 2126 74
6-130MM	8434 2053 82
6-503	8434 2054 06
6-135MM	8434 2053 84
6-506	8434 2126 77
6-140MM	8434 2126 50
6-145MM	8434 2059 08
6-512	8434 2126 80
6-150MM	8434 2059 09
6-602	8434 2126 83
6-608	8434 2054 10
6-814	8434 2054 14

12 Point, Thin Wall and Custom sizes available upon request.

BACKUP WRENCHES



Backup wrenches drastically improve safety by eliminating the need for hammer wrenches and spanners.

Model	Ordering No.	Model	Ordering No.	Model	Ordering No.
BK-011	8434 2128 89	BK-202	8434 2129 14	BK-410	8434 2056 52
BK-012	8434 2128 97	BK-203	8434 2056 34	BK-43mm	8434 2129 33
BK-013	8434 2128 88	BK-204	8434 2129 17	BK-500	8434 2056 54
BK-014	8434 2056 27	BK-206	8434 2056 36	BK-506	8434 2056 56
BK-015	8434 2128 98	BK-207	8434 2128 95	BK-55MM	8434 2128 92
BK-100MM	8434 2056 24	BK-209	8434 2056 38	BK-70MM	8434 2129 41
BK-101	8434 2056 29	BK-210	8434 2056 40	BK-75MM	8434 2056 55
BK-102	8434 2129 55	BK-212	8434 2056 42	BK-85MM	8434 2129 44
BK-104/32MM	8434 2128 90	BK-213	8434 2129 58		
BK-105	8434 2056 31	BK-213	8434 2129 52		
BK-105MM	8434 2128 93	BK-214	8434 2056 45		
BK-107	8434 2056 26	BK-215	8434 2056 44		
BK-108	8434 2128 96	BK-24MM	8434 2056 23		
BK-110	8434 2056 28	BK-300	8434 2129 23		
BK-110MM	8434 2128 99	BK-302	8434 2056 46		
BK-111	8434 2129 57	BK-302/80MM	8434 2056 53		
BK-111	8434 2129 51	BK-308/90MM	8434 2056 48		
BK-112	8434 2129 02	BK-30MM	8434 2129 26		
BK-113	8434 2056 30	BK-312	8434 2129 29		
BK-114	8434 2129 05	BK-314	8434 2056 50		
BK-120MM	8434 2129 08	BK-34MM	8434 2128 91		
BK-200	8434 2056 32	BK-36MM	8434 2129 32		
BK-201	8434 2129 11	BK-402	8434 2129 35		
		BK-404	8434 2129 38		



Backup wrench works in conjunction with any of our bolting tools and safely prevents the nut from rotating.

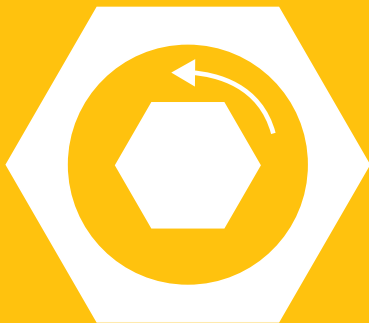
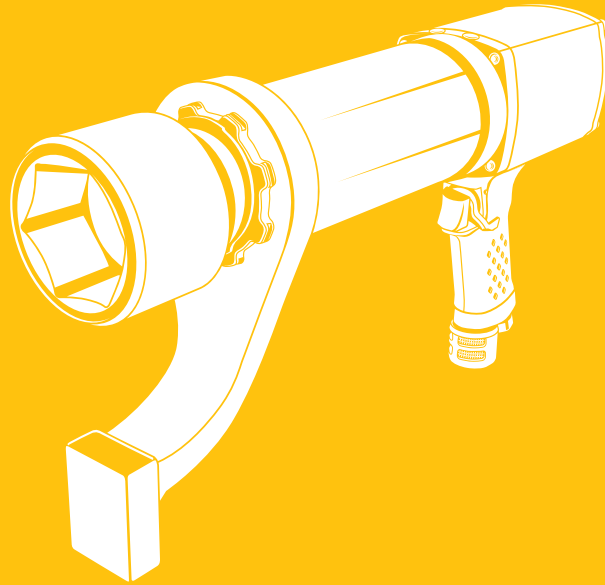
How do I select the backup wrench the following pages?

In this catalog, sizes are expressed as MM for metric while imperial have a 3 digit designation. How can you tell the sizes?

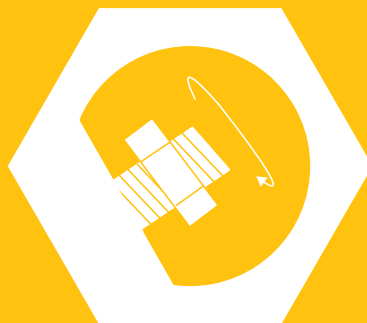


First number indicates inch, and the following two numbers indicate an increment of 1/16". For example **2-206** would be a backup wrench with a 3/4" drive and an across flat of 2-6/16", which in turn is the same as 2-3/8".

PNEUMATIC NUTRUNNERS



LOOSENING



FAST NUT RUNDOWN



TIME-SAVINGS



Hitachi
RTP 4100 HR2S
No. A6511002
Max Torque 4100 Nm
Free Speed 10 rpm
pmax 6,0 bar / 87 bar_g max

RTP

HIGHTORQUE PNEUMATIC NUTRUNNER



Whatever your industry, if your operations include loosening or tightening heavy duty bolts, Atlas Copco's slim, lightweight RTP pneumatic nutrunner can help increase your productivity.

FAST AND ACCURATE

Well proven Atlas Copco air motor.

SWIVELING GEAR PACK

The light weight of the RTP nutrunner will surprise you, yet its high speed motor has the power you need to tighten big bolts.

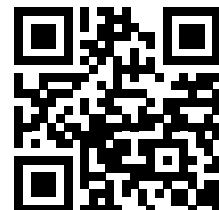
EXCELLENT ACCESSIBILITY, HIGH ACCURACY

Among the smallest on the market, the RTP's slim gearpack gives you effortless access to bolts in cramped spaces. Tightening accuracy and repeatability are high.

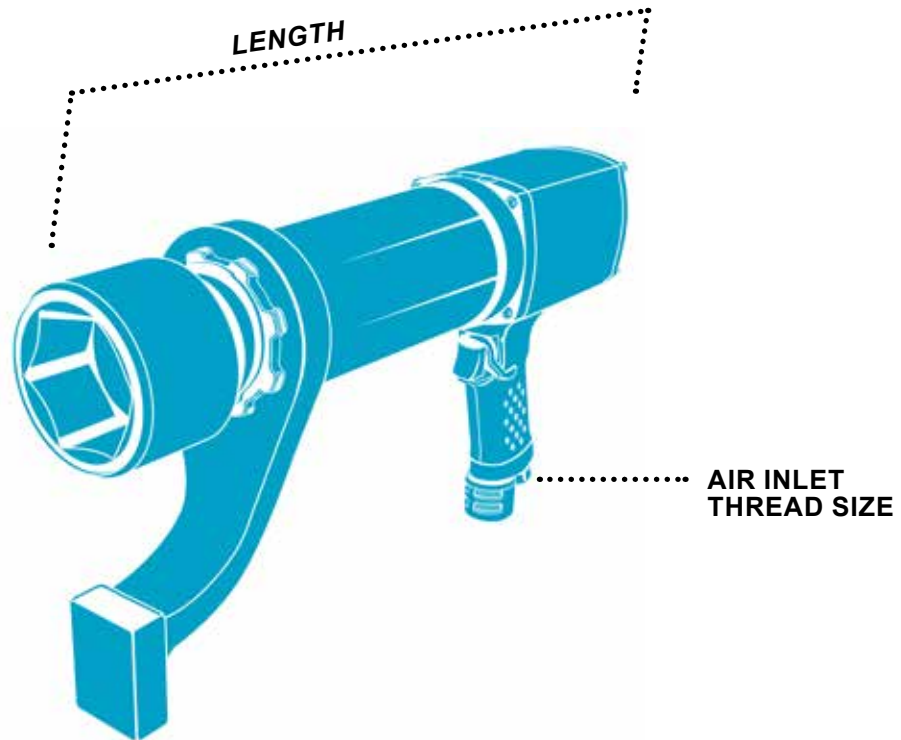
REACTION BARS

Absorbs reaction force. Different bars are available.

RTP Series
Pneumatic Nutrunner Datasheet



RTP PNEUMATIC NUTRUNNER OVERVIEW



Model	Bolt Size mm	Square Drive in	Min Torque at 3 bar		Max Torque at 6.3 Bar		Free Speed r/min	Weight ^a		Length mm	Cs distance mm	Air Consumption at Free Speed		Rec. Hose Size mm	Air Inlet Thread in	Ordering No.
			Nm	ft lb	Nm	ft lb		kg	lb			l/s	cfm			
RTP1300-HR20	20-27	3/4	560	413	1300	1000	20	3.7	8.2	248	34	23	48.7	13	3/8	8431 1013 10
RTP4100-HR25	30-45	1	1850	1365	4100	3097	10	8.7	19.2	335	42	31	65.5	13	3/8	8431 1040 10

^aWeight excluding reaction bar.

RTP ACCESSORIES

ACCESSORIES INCLUDED

Model	Description	Ordering No.
RTP1300	Reaction Bar, S-Type	4210 4480 90
RTP4100	Reaction Bar, S-Type	4210 4480 93
RTP1300 / 4100	Nipple, Ergonip 10. M10, BSP	8202 1220 19
RTP1300 / 4100	Productivity Kit FRL Stand, BSP ^b	9090 3030 02

^b Hose included

OPTIONAL ACCESSORIES

Model	Description	Ordering No.
RTP1300 / 4100	Multiflex Swivel 3/8 BSP	8202 1350 22
RTP1300 / 4100	Trigger Guard	4210 4759 90
RTP1300	Reaction Bar, Sliding-Drive	4210 4752 90
RTP1300	Reaction Bar, Steel Bar	4210 4757 90
RTP1300	Reaction Bar, Square Bracket	4210 4758 90
RTP4100	Reaction Bar, Sliding-Drive	4210 4752 91
RTP4100	Reaction Bar, Steel Bar	4210 4757 91
RTP4100	Reaction Bar, Square Bracket	4210 4758 91

NOTE: All reaction bars includes a snap ring

SERVICE KITS

Model	Description	Ordering No.
RTP1300	Gear / Motor Housing	4082 0125 90
RTP4100	Gear / Motor Housing	4082 0116 91
RTP1300	Gear / Motor / Motor Housing	4081 0510 90
RTP4100	Gear / Motor / Motor Housing	4081 0504 90



**PRODUCTIVITY KIT
FRL STAND**



TRIGGER GUARD



SQUARE BRACKET



MULTIFLEX SWIVEL



S-TYPE



SLIDING-DRIVE



STEEL SPACE BAR

LTP AND LMP

PNEUMATIC NUTRUNNER



With the Atlas Copco LMP/LTP61 range of twin-motor pistol grip nutrunners you get the highest possible torque and speed in relation to the weight of the tool. Fast, accurate and highly user-friendly, the tools are available in reversible versions for maximum flexibility.



FAST AND ACCURATE

In LTP/LMP61 tools the twin motor concept provides extremely fast rundown with good torque accuracy, even on soft joints.

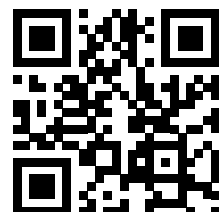
REVERSIBLE FOR MAXIMUM FLEXIBILITY

Being able to loosen fasteners without changing tools saves time and effort and raises productivity.

OPERATOR FRIENDLY

Our pistol grip nutrunners are comfortable to operate. The reaction bar eliminates reaction forces and the exhaust through the handle arrangement keeps noise levels low.

LMP/LTP Series
Pneumatic Nutrunner Web Site



LTP SHUT-OFF



Model	Bolt Size mm	Square Drive In	Torque Range At 6.3 Bar		Min Torque At 3 Bar		Free Speed R/Min	Weight ^a		Length mm	Cs Distance mm	Consumption At Free Speed		Inlet Thread In	Spline Type	Ordering No.
			Nm	ft lb	Nm	ft lb		kg	lb			l/s	cfm			
LTP61 H100-13	M12	1/2	55-100	40-75	45	35	1800	3	6.6	223	29	20	42	3/8	3	8431 0800 07
LTP61 H170-13	M14	1/2	95-170	70-125	70	50	1100	3	6.6	223	29	20	42	3/8	3	8431 0800 14
LTP61 H230-19	M16	3/4	125-230	90-170	85	60	820	3	6.6	223	29	20	42	3/8	3	8431 0800 21
LTP61 H350-20	M18	3/4	190-350	140-255	145	105	520	3.9	8.6	260	31	20	42	3/8	4	8431 0800 28
LTP61 H500-20	M20	3/4	275-500	200-370	220	160	360	3.9	8.6	260	31	20	42	3/8	4	8431 0800 35
LTP61 H700-25	M22	1	360-650	265-480	280	207	280	4.5	9.9	305	34	20	42	3/8	5	8431 0800 42
LTP61 H900-25	M24	1	480-870	350-640	300	220	210	4.5	9.9	282	32	20	42	3/8	5	8431 0800 49
LTP61 H1500-25	M30	1	850-1500	625-1100	700	516	115	6.8	14.5	323	42	20	42	3/8	9	8431 0800 56

Reversible

LTP61 HR100-13	M12	1/2	55-100	40-75	45	35	1800	3	6.6	235	30	20	42	3/8	3	8431 0801 08
LTP61 HR170-13	M14	1/2	95-170	70-125	70	50	1100	3	6.6	238	30	20	42	3/8	3	8431 0801 15
LTP61 HR230-19	M16	3/4	125-230	90-170	85	60	820	3	6.6	275	34	20	42	3/8	3	8431 0801 22
LTP61 HR350-20	M18	3/4	190-350	140-255	145	105	520	3.9	8.6	275	34	20	42	3/8	4	8431 0801 29
LTP61 HR500-20	M20	3/4	275-500	200-370	220	160	360	3.9	8.6	275	34	20	42	3/8	4	8431 0801 36
LTP61 HR700-25	M22	1	360-650	265-480	280	207	280	4.5	9.9	305	34	20	42	3/8	5	8431 0801 43
LTP61 HR900-25	M24	1	480-870	350-640	300	220	210	4.5	9.9	305	34	20	42	3/8	5	8431 0801 50
LTP61 HR1500-25	M30	1	850-1500	625-1100	700	516	115	6.8	14.5	345	42	20	42	3/8	9	8431 0801 57
LTP61 HR1900-38	M30	1 1/2	1050-1900	770-1400	800	590	90	14.1	31	380	68	20	42	3/8	8	8431 0801 64

Model	Bolt Size mm	Square Drive In	Torque Range At 6.3 Bar		Min Torque At 3 Bar		Free Speed R/Min	Weight A		Length mm	Cs Distance mm	Consumption At Free Speed		Inlet Thread In	Spline Type	Ordering No.
			Nm	ft lb	Nm	ft lb		kg	lb			l/s	cfm			
LTP61 HR100-13-MT	M12	1/2	55-100	40-75	45	35	1800	3.3	7.3	288	30	20	42	3/8	3	8431 0806 02
LTP61 HR170-13-MT	M14	1/2	95-170	70-125	70	50	1100	3.3	7.3	288	30	20	42	3/8	3	8431 0806 09
LTP61 HR230-19-MT	M16	3/4	125-230	90-170	85	60	820	3.3	7.3	288	34	20	42	3/8	3	8431 0806 16
LTP61 HR350-20-MT	M18	3/4	190-350	140-255	145	105	520	4.2	9.2	325	34	20	42	3/8	4	8431 0806 23
LTP61 HR500-20-MT	M20	3/4	275-500	200-370	220	160	360	4.2	9.2	325	34	20	42	3/8	4	8431 0806 30
LTP61 HR700-25-MT	M22	1	360-650	265-480	280	207	280	4.8	10.6	355	34	20	42	3/8	5	8431 0806 33
LTP61 HR900-25-MT	M24	1	480-870	350-640	300	220	210	4.8	10.6	355	34	20	42	3/8	5	8431 0806 37
LTP61 HR1500-25-MT	M30	1	850-1500	625-1100	700	516	115	7.1	15.6	395	42	20	42	3/8	9	8431 0806 44
LTP61 PH100-13	M12	1/2	60-110	45-80	45	33	700	3	6.6	223	34	20	42	3/8	3	8431 0807 04
LTP61 PH170-13	M14	1/2	100-180	75-135	70	52	440	3	6.6	223	34	20	42	3/8	3	8431 0807 12
LTP61 PH230-19	M16	3/4	130-240	95-180	90	66	320	3	6.6	223	34	20	42	3/8	3	8431 0807 17
LTP61 PH350-20	M18	3/4	210-370	155-275	150	110	200	3.9	8.6	260	34	20	42	3/8	4	8431 0807 24
LTP61 PH500-20	M20	3/4	300-520	220-380	200	150	140	3.9	8.6	260	34	20	42	3/8	4	8431 0807 31
LTP61 PH700-25	M22	1	400-680	295-500	280	205	100	4.5	9.9	305	34	20	42	3/8	5	8431 0807 38
LTP61 PH900-25	M24	1	500-900	370-665	350	260	80	4.5	9.9	282	34	20	42	3/8	5	8431 0807 41
LTP61 PH1500-25	M30	1	900-1600	665-1180	650	480	45	6.8	14.9	323	42	20	42	3/8	9	8431 0807 52
Reversible																
LTP61 PHR700-25	M22	1	400-680	295-500	280	205	100	4.5	9.9	305	34	20	42	3/8	5	8431 0807 55
LTP61 PHR900-25	M24	1	500-900	370-665	350	260	80	4.5	9.9	305	34	20	42	3/8	5	8431 0807 62
LTP61 PHR1500-25	M30	1	900-1600	665-1180	650	480	45	6.8	14.9	345	42	20	42	3/8	9	8431 0807 68
Reversible with Multi Torque unit																
LTP61 PHR900-25-MT	M24	1	500-900	370-665	350	260	80	4.8	10.6	305	34	20	42	3/8	5	8431 0807 81

^a Without reaction bar.

Recommended hose size: 13 mm.

NOTE: Change over torque is around 4% of maximum torque on a given air pressure.

LMP NON-SHUTOFF



Model	Bolt Size mm	Square Drive in	Max Torque At 6.3 Bar		Min Torque At 3 Bar		Free Speed r/min	Weight ^a		Length mm	CS Distance mm	Air Consumption at Free Speed		Air inlet thread in	Spline Type	Ordering No.
			Nm	ft lb	Nm	ft lb		kg	lb			l/s	cfm			
Non-reversible																
LMP61 H100-13	M12	1/2	100	75	60	45	2200	3.0	6.6	223	29	20	42	3/8	3	8431 0803 05
LMP61 H170-13	M14	1/2	170	125	100	75	1400	3.0	6.6	223	29	20	42	3/8	3	8431 0803 12
LMP61 H230-19	M16	3/4	230	170	130	95	1000	3.0	6.6	223	29	20	42	3/8	3	8431 0803 19
LMP61 H350-20	M18	3/4	350	260	200	145	650	3.9	8.6	260	31	20	42	3/8	4	8431 0803 26
LMP61 H500-20	M20	3/4	500	370	300	220	450	3.9	8.6	260	31	20	42	3/8	4	8431 0803 33
LMP61 H700-25	M22	1	700	520	400	295	350	4.5	9.9	305	34	20	42	3/8	5	8431 0803 40
LMP61 H900-25	M24	1	900	665	500	365	260	4.5	9.9	282	34	20	42	3/8	5	8431 0803 47
Reversible																
LMP61 HR100-13	M12	1/2	100	75	60	45	2200	3.0	6.6	235	30	20	42	3/8	3	8431 0804 04
LMP61 HR170-13	M14	1/2	170	125	100	75	1400	3.0	6.6	238	30	20	42	3/8	3	8431 0804 11
LMP61 HR230-19	M16	3/4	230	170	130	95	1000	3.0	6.6	275	34	20	42	3/8	3	8431 0804 18
LMP61 HR350-20	M18	3/4	350	260	200	145	650	3.9	8.6	275	34	20	42	3/8	4	8431 0804 25
LMP61 HR500-20	M20	3/4	500	370	300	220	450	3.9	8.6	320	35	21	42	3/8	4	8431 0804 32
LMP61 HR700-25	M22	1	700	520	400	295	350	4.5	9.9	305	34	20	42	3/8	5	8431 0804 39
LMP61 HR900-25	M24	1	900	665	500	365	260	4.5	9.9	305	34	20	42	3/8	5	8431 0804 46
LMP61 HR1500-25	M30	1	1600	1180	900	660	140	6.8	14.9	345	42	20	42	3/8	9	8431 0804 53

^a Weight excluding reaction bar.
Recommended hose size 13 mm for hose length up to 5 m.

NOTE: Change over torque is around 4% of maximum torque on a given air pressure.

LMP AND LTP PRODUCTIVITY KITS

Model	Max air flow	Hose, 5 m	Coupling	Lubrication	Ordering No.
For small nutrunners with 3/8" BSP air inlet					
MIDI Optimizer F/RD EQ08-C10	16 l/s	Cabclair 10 mm	ErgoQIC 08	Yes	8202 0850 07
For small nutrunners with 1/4" BSP air inlet					
MIDI Optimizer F/RD EQ08-C10	16 l/s	Cabclair 10 mm	ErgoQIC 08	Yes	8202 0850 03
MIDI Optimizer F/RD EQ10-R10	16 l/s	Rubair 10 mm	ErgoQIC 10	Yes	8202 0850 16
For nutrunners with 3/8" BSP air inlet					
MIDI Optimizer F/RD EQ10-C13	23 l/s	Cabclair 13 mm	ErgoQIC 10	Yes	8202 0850 02
For nutrunners with 1/4" BSP air inlet					
MIDI Optimizer F/RD EQ10-C13-1/4	23 l/s	Cabclair 13 mm	ErgoQIC 10	Yes	8202 0850 11
For nutrunners with 3/8" BSP air inlet					
MIDI Optimizer F/RD EQ10-T13	35 l/s	Turbo 13 mm	ErgoQIC 10	Yes	8202 0850 17
For nutrunners with 1/2" BSP air inlet					
MIDI Optimizer F/R EQ10-T13	35 l/s	Turbo 13 mm	ErgoQIC 10	No	8202 0850 04
MIDI Optimizer F/RD EQ10-T13	35 l/s	Turbo 13 mm	ErgoQIC 10	Yes	8202 0850 13

LMP AND LTP ACCESSORIES

For LMP/LTP61

Model	Ordering No.
Hose nipple	9000 0242 00
Exhaust hose	4210 2201 00
Protective cover	
Standard LTP61	4210 4672 00
LTP 61 with MT unit	4210 4672 01
Multi torque selector LTP61	4210 4636 95
Quick change retainer	
– 1/2" square models	4250 1190 00
– 3/4" square models	4210 3476 80
– 1" square models	4210 3524 80
Shut-off override for LTP61	4210 3545 80
Swivelling type MultiFlex connector 3/8" (BSP)	8202 1350 22
Swivelling type MultiFlex connector 3/8" (NPT)	8202 1350 28



Multi torque selector LTP61



Protective cover

Swivelling suspension yoke LMP/LTP61

Model	Ordering No.
Mounting dia Ø 54 mm	
PH/H 100-13	4210 3088 80
PH/H 170-13	
PH/H 230-19	
PH/H 350-20	
PH/H 500-20	
PH/H 700-25	
PH/H 900-25	
Mounting dia Ø 60 mm	
HR 100-13	4210 3088 84
HR 170-13	
HR 230-19	

Model	Ordering No.
Mounting dia Ø 63.5 mm	
H 1900-38	4210 3088 83
H 2800-38	
H 3800-38	
Mounting dia Ø 67 mm	
HR 350-20	4210 3088 82
HR 500-20	
PHR/HR 700-25	
PHR/HR 900-25	
HR 1900-38	4210 3088 85
HR 2800-38	
HR 3800-38	

Model	Ordering No.
Mounting dia Ø 83.5 mm	
PH/H 1500-25	4210 3088 81
PHR/HR 1500-25	

LMP AND LTP REACTION ARMS

Spline Diameter mm	L/W/H	CC Distance mm	Ordering No.
Steel bar			
Spline 1	268/36/18		4210 1798 01
Spline 2	270/35/10		4220 1903 00
Spline 3	400/56/12		4210 2219 80
Spline 4	500/62/15		4210 2183 80
Spline 5	500/62/15		4210 2726 80
Spline 6	560/80/15		4220 1200 01
Spline 7	500/100/20		4210 3899 02
Spline 8	500/150/20		4210 3899 03
Spline 9	500/85/20		4210 3899 80
Ø 26 mm	270/34/8		4220 3491 00
Square steel bracket			
Spline 3	100/50/12		4210 2219 03
Spline 4	125/65/16		4210 2183 01
Spline 5	125/65/16		4210 2726 01
Spline 6	200/100/15		4220 1200 00
Spline 7	250/150/20		4220 1445 00
Spline 8	250/160/20		4220 1972 91
Spline 9	150/85/20		4210 3899 01
Ø 24 mm	100/60/8		4220 1029 00
Ø 26 mm	100/60/8		4220 1029 02
Ø 28 mm	100/60/8		4220 1029 01
Triangular steel bracket			
Spline 2	73/72/14		4220 2137 02
Spline 3	82/80/15		4220 2137 03
Spline 6	112/109/15		4220 2137 06
Spline 6	150/145/20		4220 2137 16
S-Type reaction bar			
Spline 3	110/18/12		4210 4480 03
Spline 4	120/22/15		4210 4480 04
Spline 5	130/25/15		4210 4480 05
Spline 6	125/25/15		4210 4480 06
Spline 7	170/40/20		4210 4480 07
Spline 8	200/65/20		4210 4480 08
Spline 9	160/40/20		4210 4480 09
L-Type aluminum bar			
Spline 3	266x300/29/15		4210 2219 08
Spline 4	144x150/42/15		4210 2183 08
Bracket stepped			
Spline 1	70/36/13		4210 1798 02
Spline 2	70/41/14		4210 2134 02
Straight aluminum bar			
Spline 3	L = 400		4210 2219 01

Spline Diameter mm	Square Drive Size (in)	CC Distance mm	Ordering No.
Sliding drive reaction bar			
Spline 3	1/2	70-120	4210 4481 83
Spline 3	3/4	70-120	4210 4481 63
Spline 4	3/4	76-126	4210 4481 84
Spline 4	3/4	82-218	4210 4616 84
Spline 5	1	80-125	4210 4481 85
Spline 5	1	82-218	4210 4616 85
Spline 9	1	80-130	4210 4481 89
Spline 9	1	80-280	4210 4616 89

Steel bar



Square steel bracket



Triangular steel bracket



Sliding drive reaction bar



S-Type reaction bar



L-Type aluminum bar



Straight aluminum bar



Extended sliding drive reaction bar



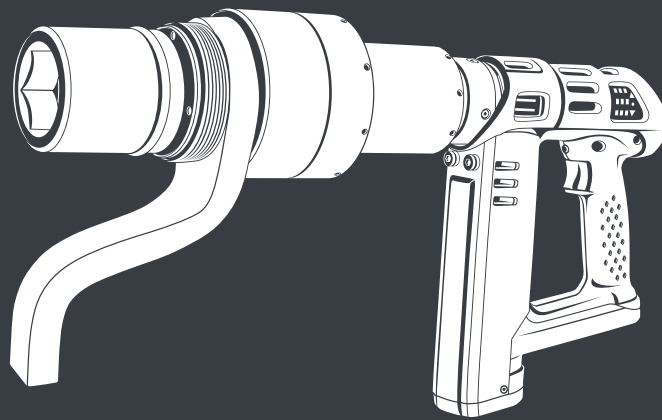
Extended sliding tube reaction bar



Bracket stepped



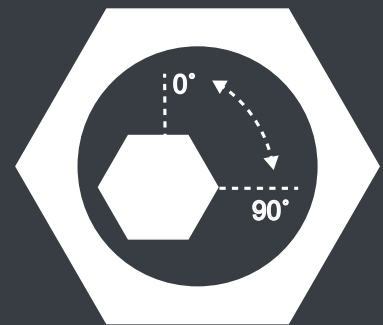
ELECTRIC TRANSDUCERIZED NUTRUNNER



***OPERATOR
FEEDBACK***



TRACEABILITY



TORQUE AND ANGLE



TENSOR REVO

ELECTRIC TRANSDUCERIZED NUTRUNNER

INTERCHANGEABLE REACTION BAR

Many optional reaction bars are available to best suit your work application.

360° TRANSDUCERIZED TOOL

The swiveling front part increases usability and enables faster and easier positioning on the bolt head.

OPTIONAL TWO-HANDED START

Operator handle for two-handed start (optional)



EASY CONNECTION

Connects to controller via quick-connecting cord.

Smarter, lighter and faster, the new electric pistol nutrunner Tensor Revo offers high torque tightening in a hand held package. Meet the market's first and only transducerized handheld nutrunner with 360° swivel capability.



OPERATOR FEEDBACK

Multiple LEDs, Results Display and Program Selector gives direct feedback of tightening result

TENSOR MOTOR

Fast and strong Tensor motor for maximum speed

Tensor Revo
Electric Nutrunner Datasheet



TENSOR REVO TECHNICAL DATA

Model with fan	Square Drive	Torque Range		Speed	Weight		Length			Ordering No.
	in	Nm	ft lb	r/min	kg	lb	mm	mm	Spline	
ETP ST101-200-20-F	3/4	60 - 200	45 - 145	396	5.2	11.5	303	32.5	3	8433 2302 02
ETP ST101-300-20-F	3/4	90 - 300	66 - 221	293	5.2	11.5	303	32.5	3	8433 2303 02
ETP ST101-500-20-F	3/4	150 - 500	110 - 365	186	5.9	13	334	33.5	4	8433 2305 02
ETP ST101-750-25-F	1	220 - 750	160 - 550	132	6.2	13.7	353	33.5	5	8433 2307 52
ETP ST101-1000-25-F	1	300 - 1000	220 - 735	99	6.4	14.1	364	33.5	5	8433 2310 02
ETP ST101-1500-25-F	1	450 - 1500	332 - 1106	47	8.8	19.4	402	43.5	9	8433 2321 52
ETP ST101-2000-38-F	1 1/2	600 - 2000	442 - 1475	38	11.5	25.4	454	48	7	8433 2322 02
ETP ST101-3000-38-F	1 1/2	900 - 3000	664 - 2212	24	14.8	33	476	59	8	8433 2323 02
ETP ST101-4000-38-F	1 1/2	1200 - 4000	885 - 2950	20	15	33	481	59	8	8433 2324 02

Support handle and tool protective cover are included with tool delivery. Reaction bars are not included with tool. For all models in the table declared noise and vibration emissions according to ISO 15744 and ISO 28927-2 are: sound pressure level <70 dB(A) and vibrations <2.5 m/s².



TENSOR REVO 2000 Nm



TENSOR REVO -with support handle

Reaction bars (optional)

Tool Model	Bar	Square Bracket	L-Type Aluminium Bar	Sliding Drive, Short	Sliding Drive, Long	S Type	Ext. Sliding Drive – Spring Loaded	
				(cc in mm) Drive Size	(cc in Mm) Drive Size		cc 68 – 112 mm	cc 68 – 112 mm
ETP ST101-200 20-F								
ETP ST101-200 20-F	4210 2219 80	4210 2219 03	4210 2219 08	4210 4481 63, (70-120) 3/4"	4210 4616 83, (82-218) 1/2"	4210 4480 03	-	-
ETP ST101-300 20-F	4210 2219 80	4210 2219 03	-	4210 4481 63, (70-120) 3/4"	4210 4616 83, (82-218) 1/2"	4210 4480 03	-	-
ETP ST101-500 20-F	-	-	-	-	4210 4616 63, (82-218) 3/4**	-	-	-
ETP ST101-750 25-F	-	-	-	-	4210 4616 63, (82-218) 3/4**	-	-	-
ETP ST101-1000 25-F	4210 2183 80	4210 2183 01	4210 2183 08	4210 4481 84, (76-126) 3/4"	4210 4616 84, (82-218) 3/4"	4210 4480 04	-	-
ETP ST101-1500 25-F	4210 2726 80	4210 2726 01	-	4210 4481 85, (80-125) 1"	4210 4616 85, (82-218) 1"	4210 4480 05	4210 4498 80	4210 4498 82
ETP ST101-2000 38-F	4210 2726 80	4210 2726 01	-	4210 4481 85, (80-125) 1"	4210 4616 85, (82-218) 1"	4210 4480 05	4210 4498 80	4210 4498 82
ETP ST101-3000 38-F	4210 3899 80	4210 3899 01	-	4210 4481 89, (80-130) 1"	4210 4616 89, (80-280) 1"	4210 4480 09	-	-
ETP ST101-4000 38-F	4210 3899 02	4220 1445 00	-	-	-	4210 4480 07	-	-
ETP ST101-2000 38-F	4210 3899 03	4220 1972 91	-	-	-	4210 4480 08	-	-
ETP ST101-3000 38-F	4210 3899 03	4220 1972 91	-	-	-	4210 4480 08	-	-

*Recommended 3/4" drive for ETP ST 101-300

TENSOR REVO ACCESSORIES

Accessories

Designation	Ordering No.
Tool accessories	
ST barcode scanner	8433 0615 50
Protective cover for ST scanner	4220 2762 10
Suspension yoke adjustable ST101 200-1000	4220 4075 90
Suspension yoke adjustable (with ST scanner)	4220 4075 91
Swiveling suspension yoke ST101 750-2000	4210 3088 87
Swiveling suspension yoke ST101 3000-4000	4210 3088 81
Tool protective cover (included)	4220 4299 00
Support handle, ST101 200-500 (included)	4220 4001 84
Support handle, ST101 750-4000 (included)	4220 4001 83
Adjustable operator handle with trigger	4220 4522 82
Fan module	4220 4417 90
Quick change socket release kit 3/4"	4210 3476 80
Quick change socket release kit 1"	4210 3524 80
Telescopic front 25mm, ST101 200	4220 4592 90
Telescopic front 40mm, ST101 500	4210 3781 81
Telescopic front 50mm, ST101 750-1000	4210 3788 80
Telescopic front 50mm ST101 1500	4210 3788 81
Quick change nut for reaction bar, spline 5	4210 2725 87
Quick change nut for reaction bar, spline 4	4210 2182 87
Cable protection	4220 2977 90
Error proofing modules	
Stacklight ESL04	8433 0570 13
Operator panel advanced	8433 0565 00
Selector, large sockets	8433 0610 44
ComNode 2 Touch, ATS 10 spindles	8433 2711 11
MaxiDisplay 3 (19")	8435 3070 20

For additional accessories, cable/controller configurations and software, see Atlas Copco Industrial Power Tools catalogue.

Quick change for reaction bar



Swiveling suspension yoke (gear mounted)



Telescopic front



Suspension yoke adjustable (motor mounted)



Large socket selector



MaxiDisplay 3 (19")

Controller Hardware & Software

Designation	Ordering No.
Controller hardware	
Power Focus 4000-Graph W10	8433 7100 00
Power Focus 4000-Compact W10	8433 7100 05
Controller software	
RBU-Bronze	8433 0010 10
RBU-Silver	8433 0015 20
RBU-Gold	8433 0020 20
Tools Talk Power Focus W10, 1-user license	8092 1190 01



Power Focus 4000 Graph



Stacklight

Tool cables

Designation	Ordering No.
ST cable, 5m	4220 2636 05
ST cable, 10m	4220 2636 10
ST cable, 15m	4220 2636 15

CONTROLLERS AND SOFTWARE FOR TENSOR REVO



Power Focus 4000

The Power Focus range controls tools from the Tensor DS, ST, SR, STR, STB and ETX families. With its built-in functions, it also participates in controlling the station or line segment. The PowerFocus and associated software packages provide easy-to-understand information for everyone, from operators to plant managers.

The Power Focus is based on standard hardware and software components which, when combined, will fulfill all demands, from the most basic stand-alone installation to full integration into the factory network. The modules fit together using the “plug-and-play” concept. Assembly process control and quality assurance is made easy by advanced control functions. On receipt of assembly information, the Power Focus automatically selects the correct tightening sequence and parameters. The operator is guided through the process, avoiding mistakes that can result in costly quality problems.

Programming software ToolsTalk PF

ToolsTalk PF is the user-friendly tool that enables you to communicate with your Power Focus tool controller. It makes programming and process analysis of a tightening station simple.

General Functionality Level / RBU Runs Tool Types	Power Focus 4000		
	Bronze	Silver	Gold
	ST/SR/STR	ST/SR/STR	ST/SR/STR
Tensor controllers			
Compact hardware	x	x	x
LED display	x	x	x
6 button keyboard	x	x	x
Graph hardware		x	x
LCD display		x	x
Full keyboard		x	x
Functionality			
Number of tools	1	1	1
Number of Psets	64	250	250
Batch count	x	x	x
Open end spanner	x	x	x
Quick programming	x	x	x
Cross thread / Rehit detection	x	x	x
Tool service indicator	x	x	x
Autoset	x	x	x
Lock on reject	x	x	x
Line control		x	x
Transducer torque traceability	x	x	x
Tightening status storage (default)	5 000	5 000	5 000
Tightening data storage (default)	5 000	5 000	5 000
MultiStages		8	8
Trace storage	8	8	8
Real time statistics	x	x	x
SPC	x	x	x
RBU	x	x	x
Bar code reading		x	x
ID input to select Pset		x	x
Job function		x	x
Number of jobs (default)		99	99
ID input to select job		x	x
Logic Configurator (4000 only)		x	x
Cell programming		x	x
Label printer (via Open protocol)		x	x
Cell Job			x
Strategies and options			
Two stage/Quick step/Ergoramp	x	x	x
Torque control and angle monitoring	x	x	x
DS control		x	x
Auto zoom step	x	x	x
CW / CCW operation	x	x	x
Rundown angle monitoring	x	x	x
Self tap / PVT monitoring	x	x	x
Reverse angle	x	x	x
Rotate spindle	x	x	x
Click wrench input	x	x	x
Torque and angle control	x	x	x
Angle control and torque monitoring	x	x	x
Current monitoring	x	x	x
Post view torque		x	x
Yield control (PF 4000 and ETX combination only)			x
StepSync, SynchroTork (PF 4000 only)			x
Home position			x
Snug gradient			x
I/O			
RS232 programming port	x	x	x
USB port (PF 4000 only)	x	x	x
Discrete I/O	x	x	x
Remote start	x	x	x
Socket selector (optional)	x	x	x
RE Alarm (optional)	x	x	x
Parallel printer port	x	x	x
I/O Expander (optional)	x	x	x
Expandable I/O (up to 124 in / 124 out)	x	x	x
Operator ID card input		x	x
Fieldbus card		Optional	Optional
RS232 bar code reader port		x	x
Easily programmed fieldbus protocol		x	x
Ethernet port for remote prog		x	x
Ethernet port for data collection		x	x
Protocols			
Open protocol serial	x	x	x
Open protocol Siemens 3964R serial	x	x	x
Open protocol Ethernet		x	x

CONTROLLERS AND SOFTWARE FOR TENSOR REVO

Advanced process control and monitoring functions

Power Focus is a modular range of controllers, with full flexibility, designed for applications ranging from single spindle hand-held operations to fixtured multiple nutrunning systems. Advanced process control and monitoring functions make it easy to view and collect data using the Internet infrastructure.

- Choose your controller – either Graph or Compact.
- Choose your RBU software key to run a tool.
- Choose from various ways to use the controller, as a stand-alone or in a network.
- Run many different kinds of tool, stand-alone, FS, crowfoot or open tools.
- Realtime statistics analysis.
- Error-proofing solution.
- Advanced tightening control and/or monitoring method.
- Trace view.
- Logic configurator.
- Can handle different level of communication.

The Power Focus 4000 is available in two versions, Compact and Graph. The difference between them is the user interface, where the Graph features the color display and a full keyboard.

Compact

This version offers full functionality at a lower cost, but requires a PC with the ToolsTalk PF software for process set-up.

Graph

With the Graph hardware, you have full stand-alone programming possibilities. When networked, the Graph can function as a programming terminal for other Power Focus units.

RBU cuts downtime

Atlas Copco's patented Rapid Backup Unit (RBU) concept transfers functionality to a non-configured hardware unit, ensuring that hardware can easily be upgraded should functionality requirements change. The RBU also acts as back-up for programming and configuration. If a change of hardware is required, just fit the RBU to the new hardware, switch on the unit and you're ready. All programming and network configurations are transferred in seconds. The RBU cuts downtime to a minimum.



Compact



Graph

Power Focus 4000 for Tensor DS, ST, SR, STR, STB and ETX

Model	Ordering No.
Power Focus 4000 W 10	
PF 4000-G-HW	8433 7100 00
PF 4000-C-HW	8433 7100 05
PF 4000-G-DN- HW	8433 7140 00
PF 4000-C-DN-HW	8433 7140 05
PF 4000-G-FLN-HW	8433 7141 00
PF 4000-C-FLN-HW	8433 7141 05
PF 4000-G-PB-HW	8433 7142 00
PF 4000-C-PB-HW	8433 7142 05
PF 4000-G-CC-HW	8433 7143 00
PF 4000-C-CC-HW	8433 7143 05
PF 4000-G-IB-HW	8433 7145 00
PF 4000-C-IB-HW	8433 7145 05
PF 4000-G-MB-HW	8433 7147 00
PF 4000-C-MB-HW	8433 7147 05
PF 4000-G-PN-HW	8433 7148 00
PF 4000-C-PN-HW	8433 7148 05
PF 4000-G-EIP-HW	8433 7149 00
PF 4000-C-EIP-HW	8433 7149 05

Controller functionality

Hardware key	Ordering No.
RBU-Bronze	8433 0010 10
RBU-Silver	8433 0015 20
RBU-Gold	8433 0020 20
RBU-DS	8433 0005 10
RBU-X	8433 0080 20



RBU

Power Focus 4002 for Tensor SL

Model	Ordering No.
Power Focus 4002 W 07	
PF 4002-G-HW	8433 3100 00
PF 4002-C-HW	8433 3100 05
PF 4002-G-DN-HW	8433 3140 00
PF 4002-C-DN-HW	8433 3140 05
PF 4002-G-PB-HW	8433 3142 00
PF 4002-C-PB-HW	8433 3142 05
PF 4002-G-IB-HW	8433 3145 00
PF 4002-C-IB-HW	8433 3145 05
PF 4002-G-MB-HW	8433 3147 00
PF 4002-C-MB-HW	8433 3147 05
PF 4002-G-PN-HW	8433 3148 00
PF 4002-C-PN-HW	8433 3148 05
PF 4002-G-EIP-HW	8433 3149 00
PF 4002-C-EIP-HW	8433 3149 05

IRC Focus for STwrench and Tensor STB

Model	Ordering No.
IRC Focus W 10	
IRC FOCUS-B-G-HW	8433 6500 00
IRC FOCUS-B-C-HW	8433 6500 02
IRC FOCUS-B-G-DN-HW	8433 6500 04
IRC FOCUS-B-C-DN-HW	8433 6500 06
IRC FOCUS-B-G-FLN-HW	8433 6500 08
IRC FOCUS-B-C-FLN-HW	8433 6500 10
IRC FOCUS-B-G-PB-HW	8433 6500 12
IRC FOCUS-B-C-PB-HW	8433 6500 14
IRC FOCUS-B-G-IB-HW	8433 6500 16
IRC FOCUS-B-C-IB-HW	8433 6500 18
IRC FOCUS-B-G-MB-HW	8433 6500 20
IRC FOCUS-B-C-MB-HW	8433 6500 22
IRC FOCUS-B-G-PN-HW	8433 6500 24
IRC FOCUS-B-C-PN-HW	8433 6500 26
IRC FOCUS-B-G-EIP-HW	8433 6500 28
IRC FOCUS-B-C-EIP-HW	8433 6500 30

CONTROLLERS AND SOFTWARE FOR TENSOR REVO

ToolsTalk PF

ToolsTalk PF provides tightening parameter set-up, fieldbus and Logic Configurator set-up, plus customized reporting and presentation of statistics. With a simple click, results can be exported into other commercial file formats.

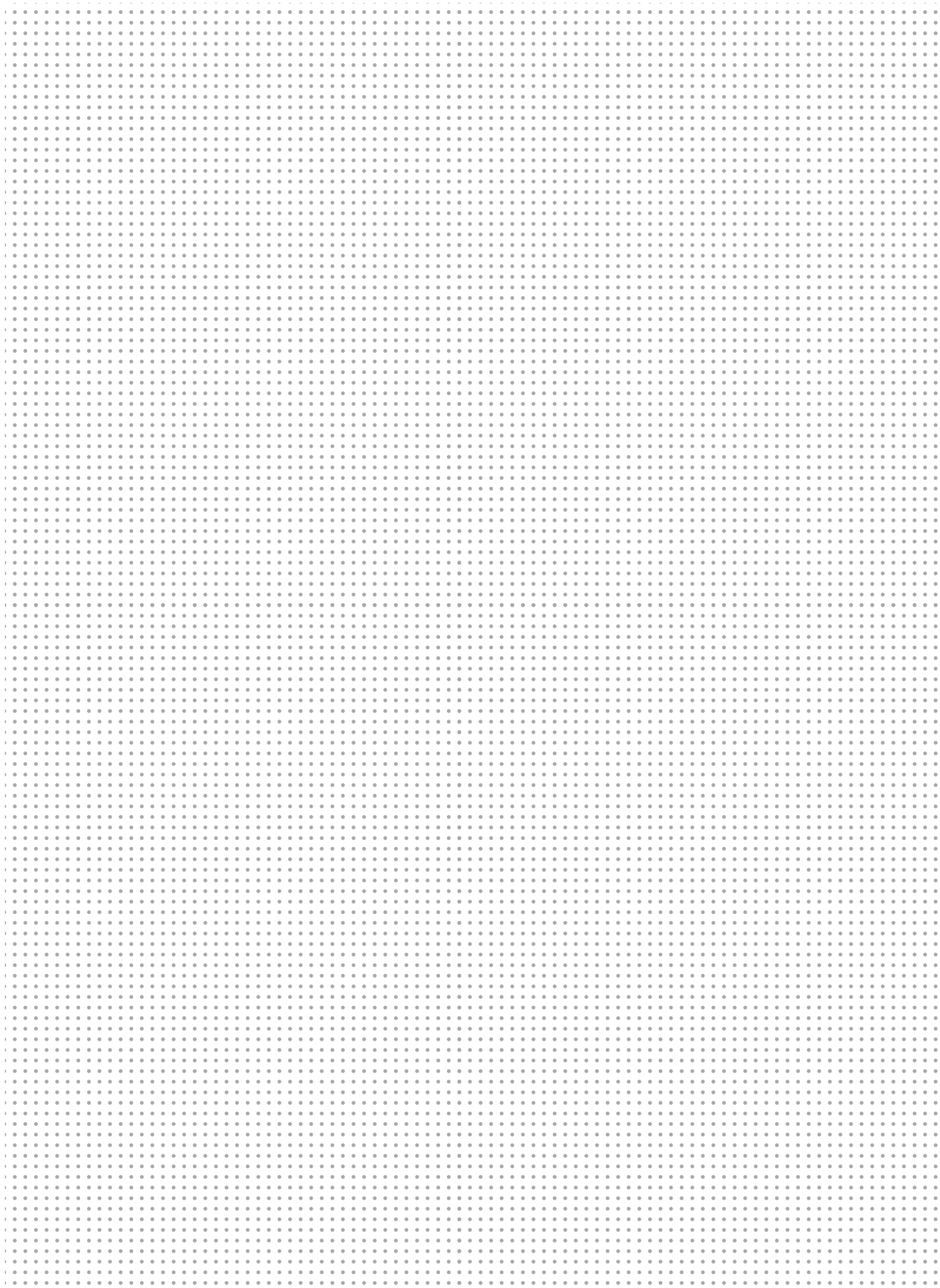
ToolsTalk communicates with the PowerFocus via Ethernet, USB or serial RS232. If you are networking from your office desk, ToolsTalk PF allows for quickest access to the different control units connected.

Model	Ordering No.
ToolsTalk PF W10	
1-user license	8092 1190 01
5-user license	8092 1190 05
10-user license	8092 1190 10
Plant license	8092 1190 99

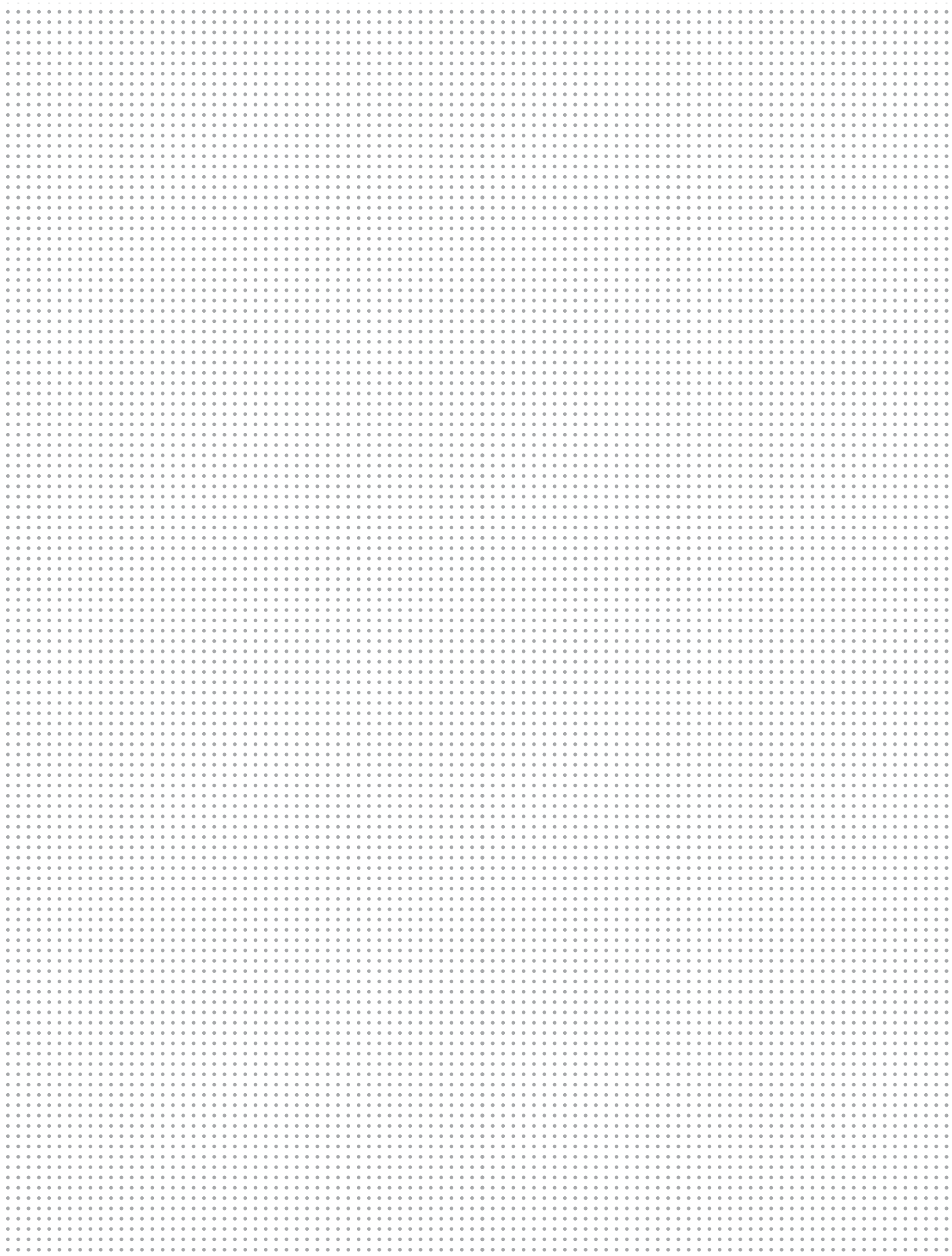
ToolsTalk PF Functionality

General			
Functionality Level of RBU	Bronze	Silver	Gold
Serial connection	x	x	x
Off line programming	x	x	x
Real time analysis	x	x	x
Tightening database to PC (Excel)	x	x	x
Tightening simulation	x	x	x
Operator monitor	x	x	x
Picture monitor	x	x	x
Fieldbus quick set-up		x	x
Job monitor		x	x
Bar code reader configuration		x	x
Ethernet connection		x	x
Remote programming		x	x
View tightening traces	x	x	x
Overlay traces	x	x	x
Logic Configurator (PF 4000 only)		x	x
Multiple identifiers		x	x
Tensor ST sound files		x	x

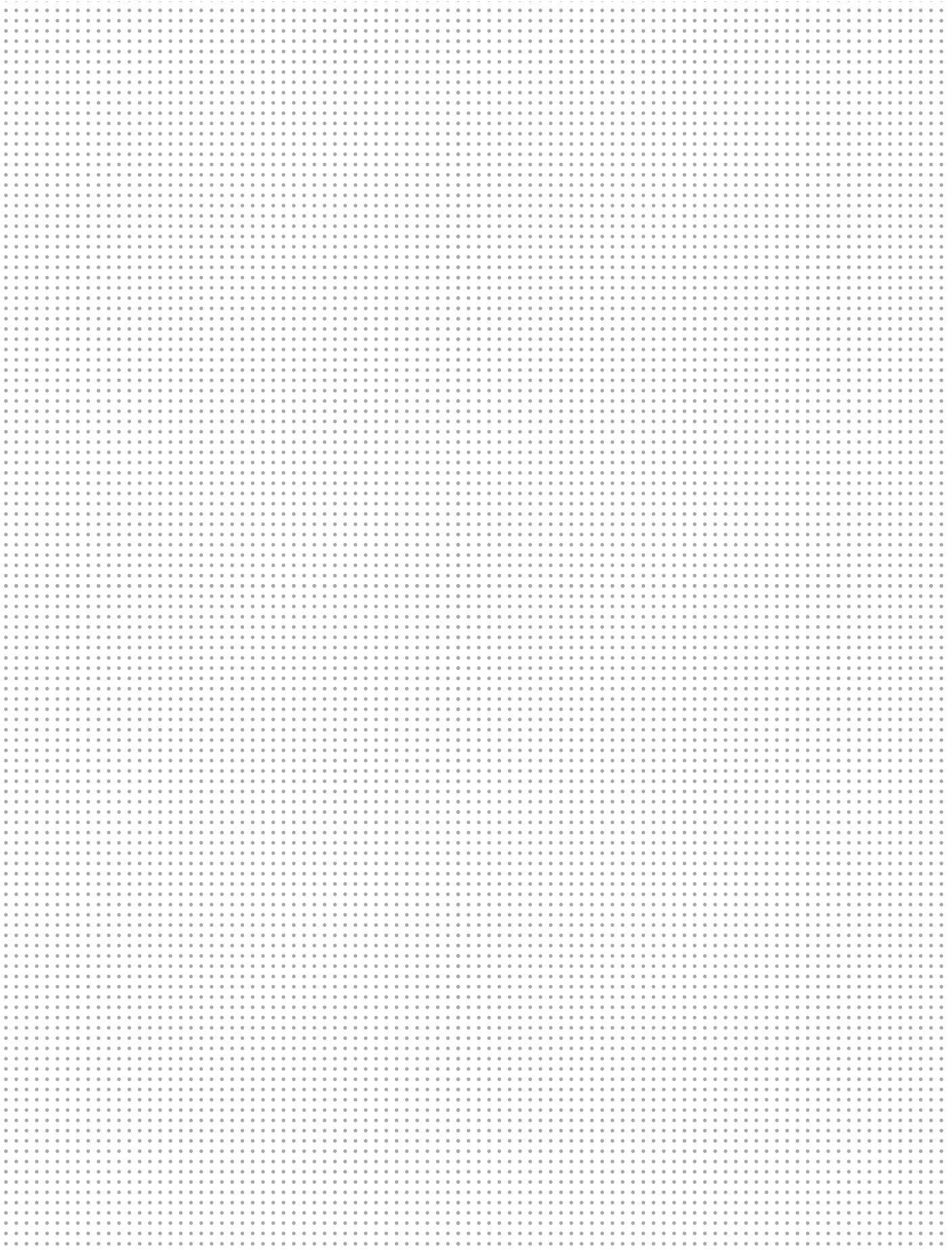
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COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call - Sustainable Productivity.

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