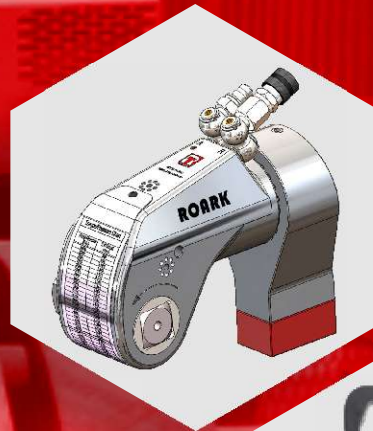




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Hydraulic Torque Wrenches Series RSD - Features



Mono Body Housing

Highest quality aircraft grade 7075 aluminium housing for unrivalled strength



360° swivels

Dual 360° swivel allows free 360° individual movement of duplex hoses across all applications.



Multi tooth ratchet assembly

Highest strength teeth assures 28° torque stroke with greatest accuracy



Non-drip quick-connect couplers

4:1 safety ratio couplers. Assure safe operation with ease for engaging and disengaging of hoses.



Square drive

"Push through" square drive that easily pushes through to switch from loosen to tighten.



Anti-backlash mechanism

Allows hands free working.



Laser engraved torque chart

Laser engraved shroud for on the spot torque chart viewing.



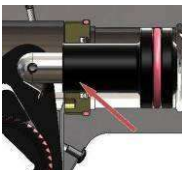
Drive plate

Single piece high strength alloy drive plate for maximum life. Allows small nose radius for the tool.



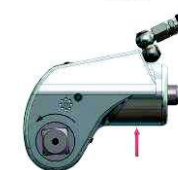
Piston assembly

Smooth leak proof functioning of enclosed alloy steel piston provides required torque. Uses a single seal for maximum maintenance free operation.



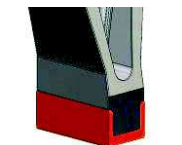
Direct housing reaction

Allows use without reaction arm.



Boot

Replaceable pad allowing on site change over. Protects costly replacement of reaction arm.



Reaction arm release button

Housed within the reaction arm.



Reaction Arm

Long length reaction arm allows multi positioning. Allows taking reaction on most applications.



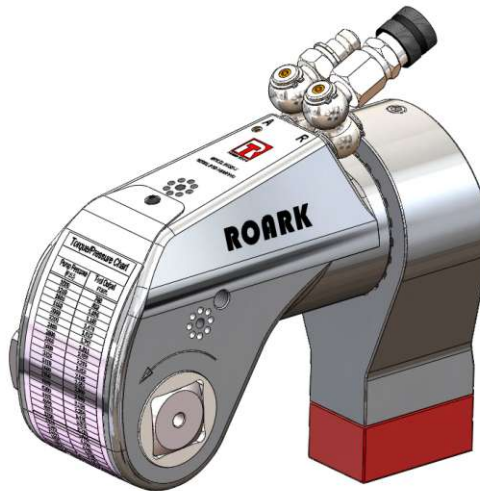
Drive segment

Ensures tool will never lock up.



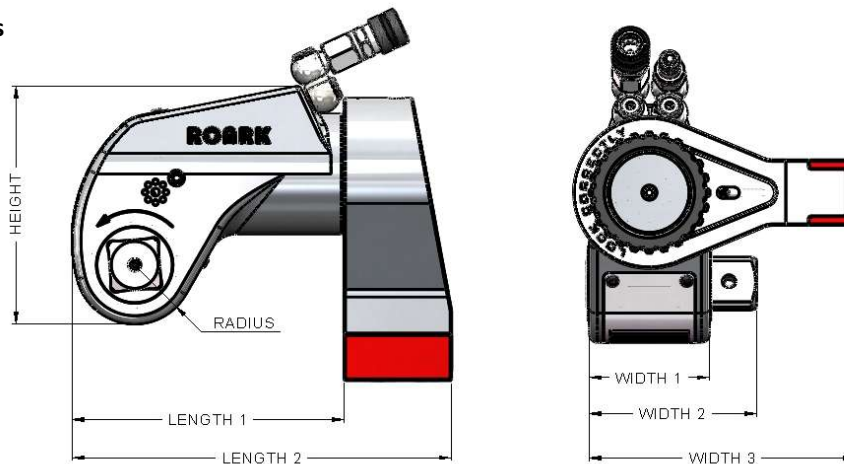
Hydraulic Torque Wrenches Series RSD

Technical features



Model	RSD-2	RSD-3	RSD-5	RSD-7	RSD-11	RSD-20	RSD-27	RSD-60
Square Drive	3/4"	1"	1.1/2"	1.1/2"	1.1/2"	2.1/2"	2.1/2"	2.1/2"
Min. Torque Kg-m(Ft/Lbs)	17(127)	45(330)	86(627)	102(740)	152(1,100)	267(1,940)	376(2,720)	801(5,800)
Max. Torque Kg-m(Ft/Lbs)	175(1,270)	460(3,330)	752(5,490)	1020(7,400)	1520(11,010)	2852(20,625)	3760(27,200)	8018(58,000)
Output Accuracy	+/-3%	+/-3%	+/-3%	+/-3%	+/-3%	+/-3%	+/-3%	+/-3%
Repeatability	100%	100%	100%	100%	100%	100%	100%	100%
Duty Cycle	100%	100%	100%	100%	100%	100%	100%	100%
Tool Weight Kgs/(Lbs)	1.85/(4.00)	4.20/(9.30)	8.40/(18.60)	8.90/(19.60)	13.60/(30.00)	28.5/(62.7)	32.75/(72.20)	60.80/(134.00)

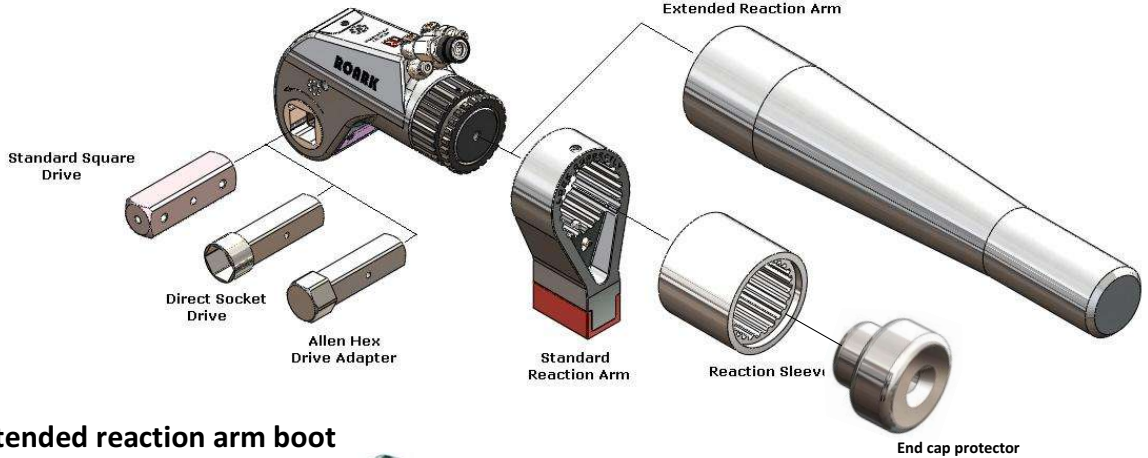
Dimensions



Model	RSD-2		RSD-3		RSD-5		RSD-7		RSD-11		RSD-20		RSD-27		RSD-60	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Height	105.00	4.13	131.00	5.15	161.60	6.36	175.90	6.92	198.20	7.80	235.5	9.27	259.70	10.22	295.00	11.61
Length 1	121.00	4.76	157.00	6.18	181.58	7.15	205.00	8.07	240.00	9.44	240.2	9.45	318.30	12.53	393.30	15.48
Length 2	160.00	6.29	207.7	8.17	251.76	9.91	276.00	10.86	313.33	12.33	410.1	16.14	415.70	16.36	521.00	20.51
Radius	25.00	0.98	33.00	1.30	41.27	1.62	43.25	1.70	49.70	1.95	59.2	2.33	61.90	2.43	73.80	2.90
Width 1	51.20	2.01	68.50	2.70	79.40	3.13	93.50	3.68	99.90	3.93	124.2	4.88	133.80	5.26	167.50	6.60
Width 2	71.60	2.81	94.70	3.72	111.20	4.38	130.40	5.13	139.00	5.47	182.1	7.16	198.00	7.79	227.00	8.93
Width 3	108.00	4.25	148.70	5.85	175.10	6.89	202.00	7.95	222.50	8.75	279.4	11.0	297.00	11.70	370.00	14.56

Hydraulic Torque Wrenches Series RSD

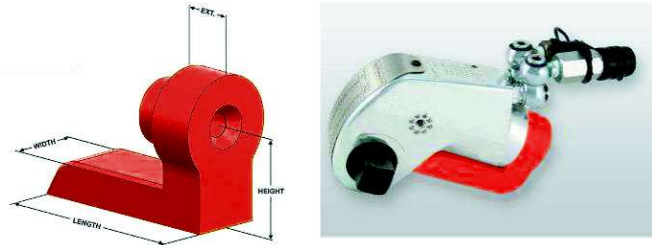
Accessories Series RSD



Extended reaction arm boot



In Line reaction pad



Part No.	Ext.	Length	Width
ARSD2-03-EXT1	1.00	1.520	1.00
ARSD2-03-EXT2	2.00		
ARSD2-03-EXT3	3.00		
ARSD3-03-EXT1	1.00	2.000	1.25
ARSD3-03-EXT2	2.00		
ARSD3-03-EXT3	3.00		
ARSD7-03-EXT1	1.00	2.741	1.75
ARSD7-03-EXT2	2.00		
ARSD7-03-EXT3	3.00		
ARSD11-03-EXT1	1.00	3.000	2.00
ARSD11-03-EXT2	2.00		
ARSD11-03-EXT3	3.00		
ARSD27-03-EXT1	1.00	4.000	2.50
ARSD27-03-EXT2	2.00		
ARSD27-03-EXT3	3.00		

• All Dimensions are in inches.

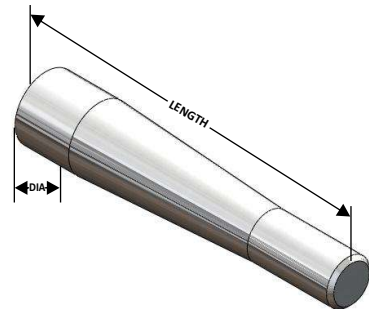
Tool Model	Length	Height	Width	Ext.
RSD-2	3.55	1.65	1.13	0.83
RSD-3	4.50	2.15	1.52	1.09
RSD-7	6.25	2.90	2.05	1.65

• All Dimensions are in inches.

Extended reaction tube

Model	Extended Reaction Tube Model	Dia.	Length
RSD-2	ARSD-2-03-ERT	2.00	18.57
RSD-3	ARSD-3-03-ERT	2.63	23.75
RSD-7	ARSD-7-03-ERT	3.50	23.00
RSD-11	ARSD-11-03-ERT	3.75	25.13
RSD-27	ARSD-27-03-ERT	5.00	16.50

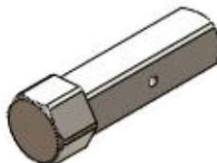
• All Dimensions are in inches.



Direct socket drive



Allen hex drive adapter



End cap protector



Model	End Cap Protector Model
RSD-2	RSD-2-EC
RSD-3	RSD-3-EC
RSD-7	RSD-7-EC
RSD-11	RSD-11-EC
RSD-27	RSD-27-EC

Available in all metric and imperial sizes! Specify A/F size

Hydraulic Torque Wrench Series RXD - Features



High Strength body

Cylinder and link body are manufactured from high grade, high strength alloy



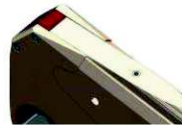
Multi tooth ratchet

Highest strength teeth ensures 28° torque stroke with greatest accuracy.



Flat design

Equal width of cylinder and link ensures tool sits flat on flange surface. Allows use in most confined areas



Never lock drive segment

Never lock drive segment does not let the wrench lock and thus eliminates the requirement of a ratchet release mechanism.



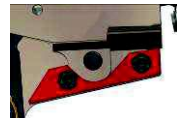
360° swivels

Dual 360° swivel allows free 360° individual movement of duplex hoses across all applications.



In-Line reaction pad

This ensures torsion free reaction during use.



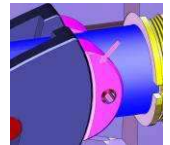
Quick-connect couplers

4:1 safety ratio couplers. Assure safe operation with ease for engaging and disengaging of hoses.



Silders

Reduce friction and prevent wear on the piston



Link pin

One single pin for cassette link to cylinder engagement without using any additional or specail tool.



Alignment pins

Ensure equal load distribution between the 2 side plates.



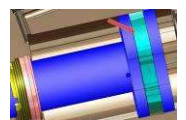
Drive plate

Single piece high strength alloy drive plate for maximum life. Allows small nose radius for the tool.



Piston seals

High temperature polyurethane seals ensure years of maintenance free operation.



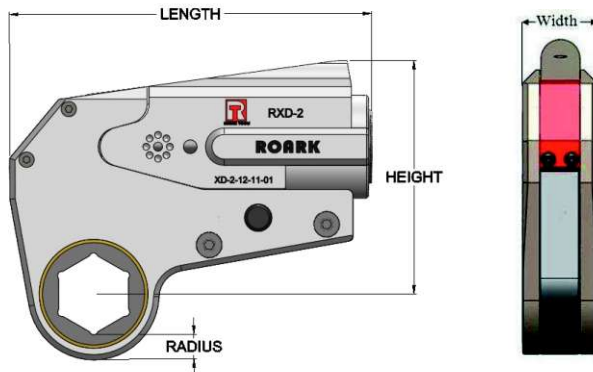
Hydraulic Torque Wrench Series RXD

Technical data series RXD

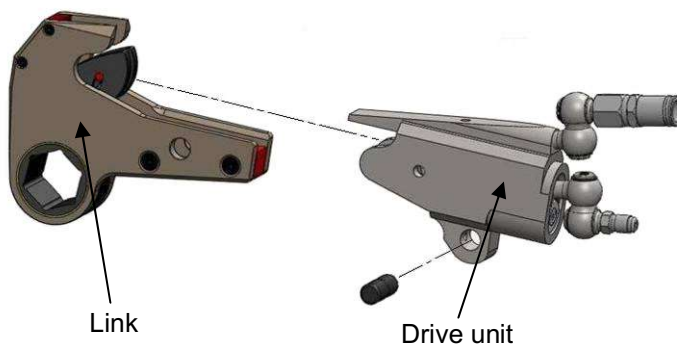


Model No.	RXD-1	RXD-2	RXD-4	RXD-8	RXD-16	RXD-32	RXD-45
Tool Hex from	13mm / 1/2"	19mm / 3/4"	25mm / 1"	50mm / 1.7/8"	65mm / 2.5/8"	80mm / 3.1/8"	80mm / 2.7/16"
to	41mm / 1.5/8"	60mm / 2.3/8"	80mm / 3.1/8"	105mm / 4"	115mm / 4.5/8"	155mm / 6.1/8"	155 / 6.1/2"
Min. Torque Kg-m (Ft/Lbs)	6 (45)	26 (192)	54 (395)	115 (830)	215 (1,560)	445 (3,220)	658 / (4,865)
Max. Torque Kg-m (Ft/Lbs)	77 (560)	260 (1,928)	540 (3,950)	1192 (8,630)	2293 (16,600)	4924 (35,650)	6410 (47,380)
Output Accuracy	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%
Repeatability	100%	100%	100%	100%	100%	100%	100%
Duty Cycle	100%	100%	100%	100%	100%	100%	100%
Corrosion Protection	Standard						
Cylinder Weight Kgs / (Lbs)	0.50 / (1)	1.73 / (3.80)	2.97 / (6.50)	5.79 / (12.80)	7.48 / (16.50)	12.17 / (26.90)	13.7 / (30.2)
Link Weight from Kgs / (Lbs)	0.50 / (1)	1.14 / (2.50)	2.57 / (5.70)	5.68 / (12.50)	9.85 / (21.70)	13.80 / (30.40)	13.18 / (29.00)
to Kgs / (Lbs)	0.50 / (1)	1.66 / (3.70)	3.62 / (8.00)	6.91 / (15.20)	13.00 / (28.60)	18.30 / (40.30)	17.95 / (39.50)

Dimensions

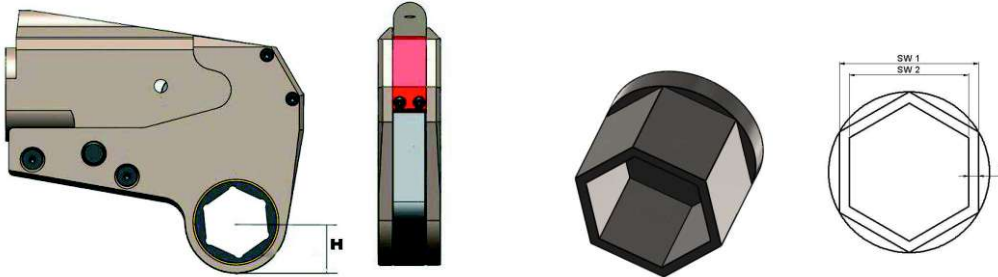


Model	RXD-1		RXD-2		RXD-4		RXD-8		RXD-16		RXD-32		RXD-45	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Length	111.00	4.37	147.00	5.78	203.20	8.00	253.00	9.96	330.00	13.00	390.00	15.35	450.00	17.71
Height	82.60	3.25	103.00	4.05	144.00	5.66	179.50	7.06	193.80	7.63	278.00	10.94	278.00	10.94
Width	19.80	0.78	38.00	1.49	50.70	1.99	59.50	2.34	65.00	2.56	84.00	3.30	84.00	3.30
Radius	5.80	0.23	9.30	0.36	11.85	0.46	13.90	0.54	16.80	0.66	23.75	0.94	23.75	0.94



Hydraulic Torque Wrench Series RXD

Links and Hex Reducers



RXD-2 Link Number	Hex Size	RXD-4 Link Number	Hex Size	RXD-8 Link Number	Hex Size	RXD-16 Link Number	Hex Size	RXD-32 Link Number	Hex Size
RXD-2RL012	3/4"	RXD-4RL100	1"	RXD-8RL114	1.7/8"	RXD-16RL210	2.5/8"	RXD-32RL302	3.1/8"
RXD-2RL013	13/16"	RXD-4RL101	1.1/16"	RXD-8RL115	1.15/16"	RXD-16RL211	2.11/16"	RXD-32RL303	3.3/16"
RXD-2RL014	7/8"	RXD-4RL102	1.1/8"	RXD-8RL200	2"	RXD-16RL212	2.3/4"	RXD-32RL304	3.1/4"
RXD-2RL015	15/16"	RXD-4RL103	1.3/16"	RXD-8RL201	2.1/16"	RXD-16RL213	2.13/16"	RXD-32RL305	3.5/16"
RXD-2RL100	1"	RXD-4RL104	1.1/4"	RXD-8RL202	2.1/8"	RXD-16RL214	2.7/8"	RXD-32RL306	3.3/8"
RXD-2RL101	1.1/16"	RXD-4RL105	1.5/16"	RXD-8RL203	2.3/16"	RXD-16RL215	2.15/16"	RXD-32RL307	3.7/16"
RXD-2RL102	1.1/8"	RXD-4RL106	1.3/8"	RXD-8RL204	2.1/4"	RXD-16RL300	3"	RXD-32RL308	3.1/2"
RXD-2RL103	1.3/16"	RXD-4RL107	1.7/16"	RXD-8RL205	2.5/16"	RXD-16RL301	3.1/16"	RXD-32RL309	3.9/16"
RXD-2RL104	1.1/4"	RXD-4RL108	1.1/2"	RXD-8RL206	2.3/8"	RXD-16RL302	3.1/8"	RXD-32RL310	3.5/8"
RXD-2RL105	1.5/16"	RXD-4RL109	1.9/16"	RXD-8RL207	2.7/16"	RXD-16RL303	3.3/16"	RXD-32RL311	3.11/16"
RXD-2RL106	1.3/8"	RXD-4RL110	1.5/8"	RXD-8RL208	2.1/2"	RXD-16RL304	3.1/4"	RXD-32RL312	3.3/4"
RXD-2RL107	1.7/16"	RXD-4RL111	1.11/16"	RXD-8RL209	2.9/16"	RXD-16RL305	3.5/16"	RXD-32RL313	3.13/16"
RXD-2RL108	1.1/2"	RXD-4RL112	1.3/4"	RXD-8RL210	2.5/8"	RXD-16RL306	3.3/8"	RXD-32RL314	3.7/8"
RXD-2RL109	1.9/16"	RXD-4RL113	1.13/16"	RXD-8RL211	2.11/16"	RXD-16RL307	3.7/16"	RXD-32RL315	3.15/16"
RXD-2RL110	1.5/8"	RXD-4RL114	1.7/8"	RXD-8RL212	2.3/4"	RXD-16RL308	3.1/2"	RXD-32RL400	4"
RXD-2RL111	1.11/16"	RXD-4RL115	1.15/16"	RXD-8RL213	2.13/16"	RXD-16RL309	3.9/16"	RXD-32RL401	4.1/16"
RXD-2RL112	1.3/4"	RXD-4RL200	2"	RXD-8RL214	2.7/8"	RXD-16RL310	3.5/8"	RXD-32RL402	4.1/8"
RXD-2RL113	1.13/16"	RXD-4RL201	2.1/16"	RXD-8RL215	2.15/16"	RXD-16RL311	3.11/16"	RXD-32RL403	4.3/16"
RXD-2RL114	1.7/8"	RXD-4RL202	2.1/8"	RXD-8RL300	3"	RXD-16RL312	3.3/4"	RXD-32RL404	4.1/4"

Hydraulic Torque Wrenches Series RXD



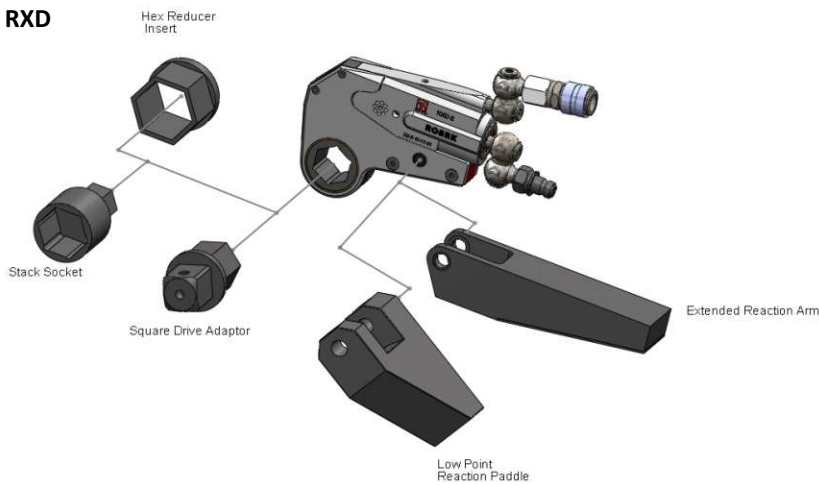
RXD-2 Link Number	Hex Size	RXD-4 Link Number	Hex Size	RXD-8 Link Number	Hex Size	RXD-16 Link Number	Hex Size	RXD-32 Link Number	Hex Size
RXD-2RL115	1.15/16"	RXD-4RL203	2.3/16"	RXD-8RL301	3.1/16"	RXD-16RL313	3.13/16"	RXD-32RL405	4.5/16"
RXD-2RL200	2"	RXD-4RL204	2.1/4"	RXD-8RL302	3.1/8"	RXD-16RL314	3.7/8"	RXD-32RL406	4.3/8"
RXD-2RL201	2.1/16"	RXD-4RL205	2.5/16"	RXD-8RL303	3.3/16"	RXD-16RL315	3.15/16"	RXD-32RL407	4.7/16"
RXD-2RL202	2.1/8"	RXD-4RL206	2.3/8"	RXD-8RL304	3.1/4"	RXD-16RL400	4"	RXD-32RL408	4.1/2"
RXD-2RL203	2.3/16"	RXD-4RL207	2.7/16"	RXD-8RL305	3.5/16"	RXD-16RL401	4.1/16"	RXD-32RL409	4.9/16"
RXD-2RL204	2.1/4"	RXD-4RL208	2.1/2"	RXD-8RL306	3.3/8"	RXD-16RL402	4.1/8"	RXD-32RL410	4.5/8"
RXD-2RL205	2.5/16"	RXD-4RL209	2.9/16"	RXD-8RL307	3.7/16"	RXD-16RL403	4.3/16"	RXD-32RL411	4.11/16"
RXD-2RL206	2.3/8"	RXD-4RL210	2.5/8"	RXD-8RL308	3.1/2"	RXD-16RL404	4.1/4"	RXD-32RL412	4.3/4"
		RXD-4RL211	2.11/16"	RXD-8RL309	3.9/16"	RXD-16RL405	4.5/16"	RXD-32RL413	4.13/16"
		RXD-4RL212	2.3/4"	RXD-8RL310	3.5/8"	RXD-16RL406	4.3/8"	RXD-32RL414	4.7/8"
		RXD-4RL213	2.13/16"	RXD-8RL311	3.11/16"	RXD-16RL407	4.7/16"	RXD-32RL415	4.15/16"
		RXD-4RL214	2.7/8"	RXD-8RL312	3.3/4"	RXD-16RL408	4.1/2"	RXD-32RL500	5"
		RXD-4RL215	2.15/16"	RXD-8RL313	3.13/16"	RXD-16RL409	4.9/16"	RXD-32RL501	5.1/16"
		RXD-4RL300	3"	RXD-8RL314	3.7/8"	RXD-16RL410	4.5/8"	RXD-32RL502	5.1/8"
		RXD-4RL301	3.1/16"	RXD-8RL315	3.15/16"			RXD-32RL503	5.3/16"
		RXD-4RL302	3.1/8"	RXD-8RL400	4"			RXD-32RL504	5.1/4"
								RXD-32RL505	5.5/16"
								RXD-32RL506	5.3/8"
								RXD-32RL507	5.7/16"
								RXD-32RL508	5.1/2"
								RXD-32RL509	5.9/16"
								RXD-32RL510	5.5/8"
								RXD-32RL511	5.11/16"

Hydraulic Torque Wrenches Series RXD

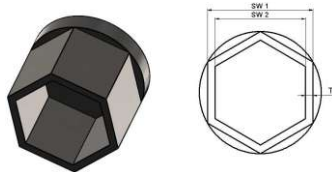
RXD-2 Link Number	Hex Size	RXD-4 Link Number	Hex Size	RXD-8 Link Number	Hex Size	RXD-16 Link Number	Hex Size	RXD-32 Link Number	Hex Size
								RXD-32RL512	5.3/4"
								RXD-32RL513	5.13/16"
								RXD-32RL514	5.7/8"
								RXD-32RL515	5.15/16"
								RXD-32RL600	6"
								RXD-32RL601	6.1/16"
								RXD-32RL602	6.1/8"



Accessories series RXD



Hex reducer inserter



Interchangeable insert to reduce nominal size-link.

One link could be used for different sizes.

Please refer to charts shown on page 7-9

Other sizes available on request.

Square drive adaptor



For use of standard impact-sockets along with the RXD-wrenches.

Available in all sizes on request.

Hydraulic Torque Wrenches Series RXD

Stack-sockets

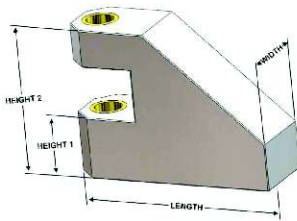
Direct socket drive without using a square-drive adaptor.



Available in all sizes on request.



Standard Reaction arm

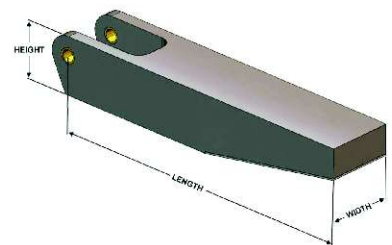


Tool Model	Low Point Reaction Arm Model	Length	Width	Height 1	Height 2
RXD-2	RXD-2 RP	4.35	1.03	1.49	3.26
RXD-4	RXD-4 RP	5.65	1.23	2.02	4.23
RXD-8	RXD-8 RP	7.15	1.78	2.53	5.35
RXD-16	RXD-16 RP	9.05	2.51	3.04	6.36
RXD-32	RXD-32 RP	11.20	3.26	3.95	8.30

• All Dimensions are in inches.

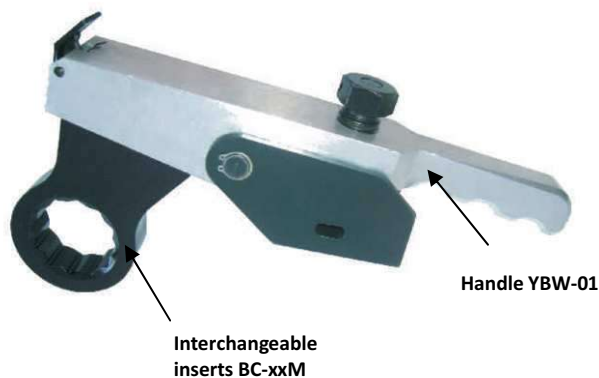
Extension reaction arm

Tool Model	Extended Reaction Arm Model	Length	Height	Width
RXD-2	RXD-2-EXT	19.80	1.54	1.90
RXD-4	RXD-4-EXT	20.29	2.05	2.40
RXD-8	RXD-8-EXT	20.85	2.52	3.03
RXD-16	RXD-16-EXT	21.50	3.04	3.65
RXD-32	RXD-32-EXT	22.28	3.90	4.52



• All Dimensions are in inches.

Back-up wrench



Model	Article		A/F mm
	Handle	Insert	
YBW-01 Article 12700521	BC-19M	12700522	19
	BC-22M	12700523	22
	BC-24M	12700524	24
	BC-27M	12700525	27
	BC-30M	12700526	30
	BC-32M	12700527	32
	BC-36M	12700528	36
	BC-41M	12700529	41
	BC-46M	12700530	46
	BC-50M	12700531	50
	BC-55M	12700532	55
	BC-60M	12700533	60
	BC-65M	12700534	65
	BC-70M	12700535	70
	BC-75M	12700536	75
	BC-80M	12700537	80

Also available in imperial sizes !

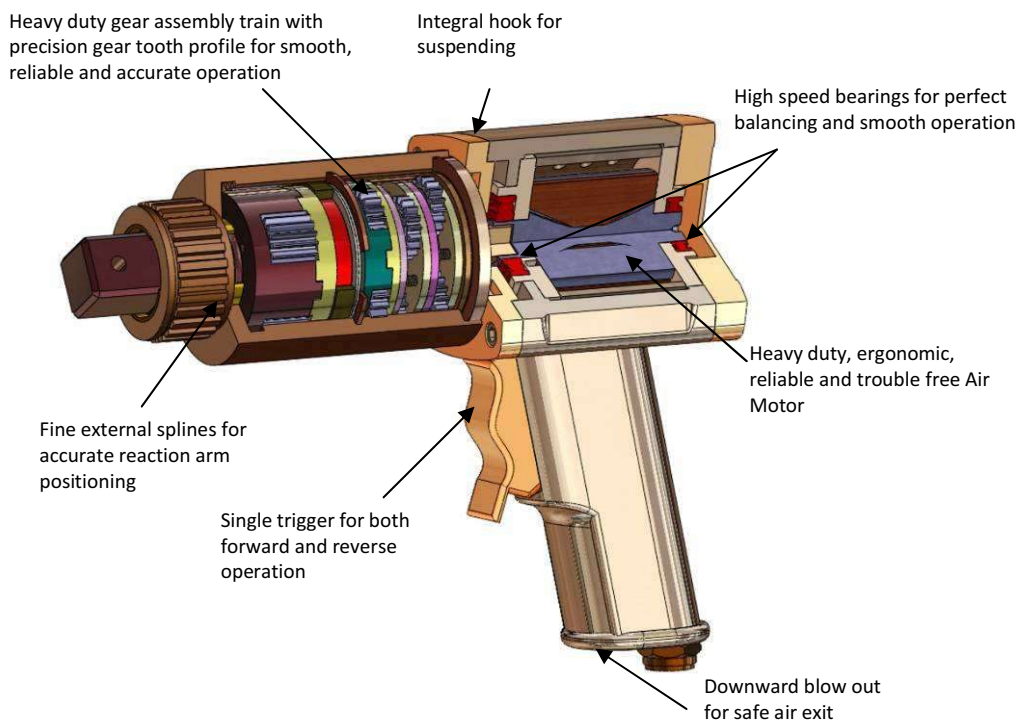
Pneumatic Torque Wrenches Series YPTW



- Light weight rugged construction for better torque to weight ratio.
- Accuracy better than +/- 5% with repeatability within 2%.
- Max. operating pressure 90 psi (6 bar).
- Air consumption 12 cfm (339l/min).
- Different reaction arms available for standard & deep reaches as required.
- Reaction arm blanks available for different customized requirements.
- Wheel extensions available for ease & accuracy of operation.
- Available with portable handy FRL unit for easy & accurate applications.
- Available for torques of 50-4000 Nm.
- Accessories like universal socket, universal joint & thinwall sockets available.



The advantages at a glance

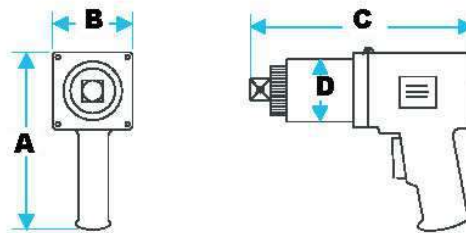


Pneumatic Torque Wrenches Series YPTW

Technical data series PTW

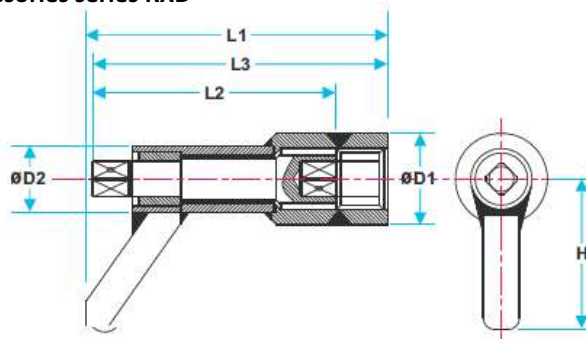
Model	Article	drive inch	torque min Nm	torque max. Nm	accuracy %	weight kg
YPTW-400	12701346	1/2	50	400	5	4,5
YPTW-600	12701347	3/4	120	600	5	4,9
YPTW-1000	12701348	3/4	200	1000	5	5,7
YPTW-2000	12701349	1	450	2000	5	7,2
YPTW-4000	12701350	1 1/2	1300	4000	5	9,1

Dimensions



Model	A mm	B mm	C mm	D mm
YPTW-400	220	86	195	76
YPTW-600	220	86	252	76
YPTW-1000	220	86	255	76
YPTW-2000	220	86	270	81
YPTW-4000	220	86	360	90

Accessories series RXD



Wheel extensions are used to reach the wheel hub bolts & nuts, where fitment of tool is not feasible.

Model	Article	drive inch	L1 mm	L2 mm	L3 mm	D1 mm	D2 mm	H mm
YTWP-E210	12701351	3/4	210	150	185	70	45	100
YTWP-E260	12701352	3/4	260	200	235	70	45	100
YTWP-E310	12701353	3/4	310	250	285	70	45	100
YTWP-E265	12701354	1	265	200	235	70	52	100
YTWP-E315	12701355	1	315	250	285	70	52	100
YTWP-E265H	12701356	1	265	200	235	90	60	130



Blank Reaction



Double End Blank



Standard Reaction



Deep Reaction

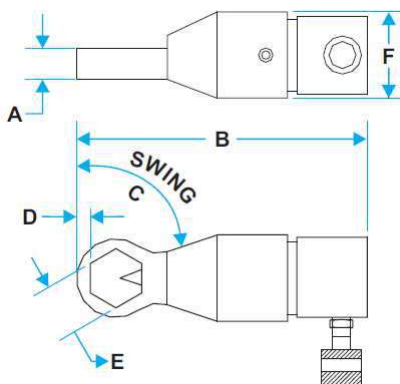
Hydraulic Nut Splitters Series YNS/YNS-AH



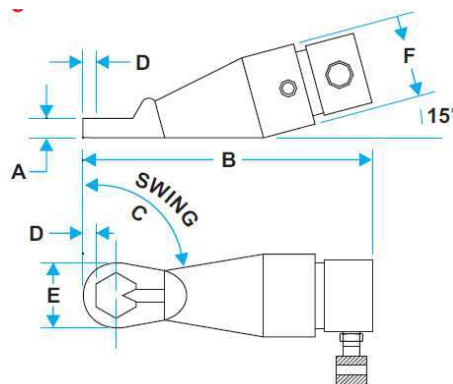
- Safe: No sparks. No flames. No risk to volatile surroundings. No hammers or impact needed. No flying fragments.
- Fast: Cuts a 3" nut in 20 to 30 seconds vs. Approx. 20 minutes with a hammer& chisel or torch.
- Easy setup: You can be up and away in less than 5 minutes.
- No damage to bolt or stud threads by calibrating the chisel so that only the nut is cut.
- Versatile: Nut splitters cut the hardest nuts. A wide range for nuts A/F 136 mm are available.

Technical Data / Dimensions Series YNS

Model	Article	Stud diameter mm	Nut A/F mm	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg
YNS-AH1324	12701358	11-16	13-24	17,5	190,0	30°	6,0	65,0	72,0	7,0
YNS-AH1636	12701359	11-22	16-36	38,0	280,0	60°	10,0	70,0	105,0	9,0
YNS-AH3651	12701360	22-32	36-51	38,0	290,0	45°	13,0	95,0	108,0	10,0
YNS-AH4660	12701361	32-38	46-60	57,0	410,0	30°	15,0	108,0	164,0	24,0
YNS-AH5770	12701362	35-45	57-70	57,0	420,0	30°	18,0	130,0	164,0	26,0
YNS-AH7089	12701363	45-57	70-89	78,0	500,0	30°	20,0	160,0	214,0	44,0
YNS-AH7998	12701364	50-64	79-98	80,0	510,0	30°	23,0	175,0	214,0	46,0
YNS-95108	12701365	64-70	95-108	95,0	579,0	60°	29,0	118,0	251,0	114,0
YNS-114127	12701366	76-83	114-127	105,0	590,0	50°	29,0	137,0	251,0	116,
YNS-124136	12701367	83-89	124-136	105,0	589,0	60°	29,0	149,0	251,0	119,



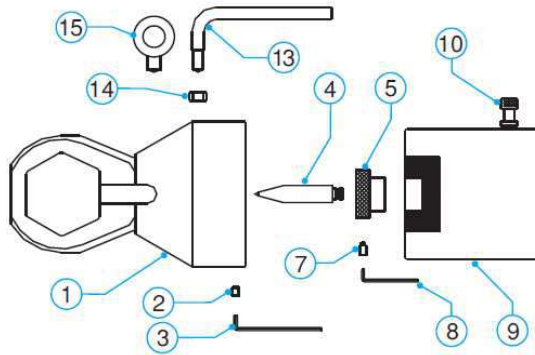
Model YNS-95108 to YNS-124136



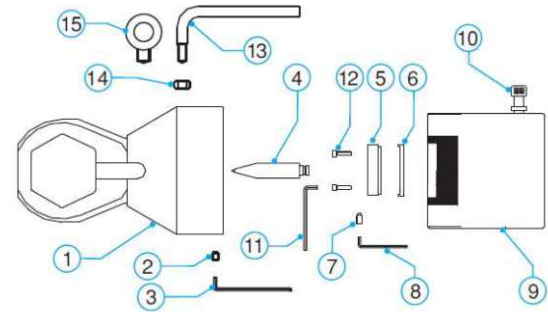
Model YNS-AH1324 to YNS-AH7989



Hydraulic Nut Splitters Series YNS/YNS-AH



version 1



version 2

No	Description	Type									
		version 1					version 2				
		YNS-AH1324	YNS-AH1636	YNS-AH3651	YNS-AH4660	YNS-AH5770	YNS-AH7089	YNS-AH7998	YNS-95108	YNS-114127	YNS-124136
1	Housing	11000327	11000328	11000329	11000330	11000331	11000332	11000333	11000334	11000335	11000336
2	Set screw	1			2		3		4		
3	Allen key	11000337			11000338		11000339		11000340		
4	Chisel	11000341	11000342		11000343		11000344	11000345	11000346	11000347	
5	Chisel holder	11000348	11000349	11000350	11000351	11000352	11000353	11000354	11000355	11000356	
6	Spacers set	11000357	11000358	11000359	11000360	11000361	11000362	11000363	11000364	11000365	11000366
7	Set screw chisel holder	1					2		3		
8	Allen key f. chisel holder	11000367					11000368		11000369		
9	Hydraulic cylinder	11000370	11000371		11000372		11000373		11000374		
10	Female coupler	1									
11	Allen key f. cap screw	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11000375		
12	socket head cap screw	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11000376		
13	Handle for housing	N/A	N/A	N/A	11000377		11000378		11000379		
14	Hex nut for handle	N/A	N/A	N/A	1		2		3		
15	Lifting eye	N/A	N/A	N/A	N/A	N/A	11000380		11000381		
16	Tool box (not shown)	11000382			11000383		11000384		11000385		



Hydraulic pumps for nut-splitters



Handpumps series HPS



Foot-pump series FPS



Mini-Hydraulic pump series PAY

Please see pages 29-31 for further informations.

Hydraulic Flange Spreaders Series FS



Model FS-10H



Model FS-10M

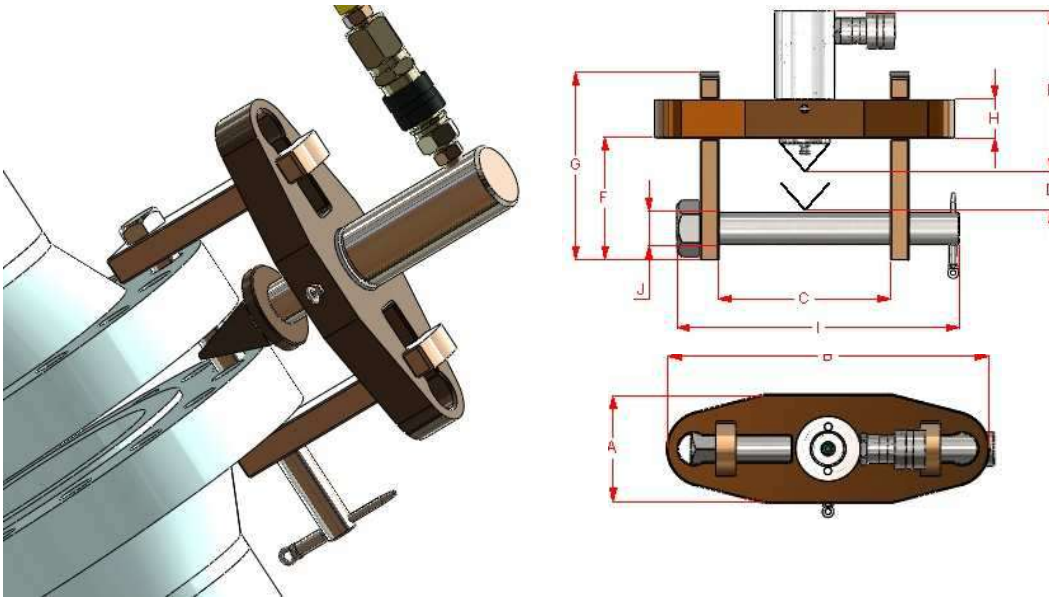
Technical features

- Lightweight, only 7.7 kg (17 lbs)
- Jaws open parallel
- No drift. It stays where you place it
- Easy one person operation
- Universal. One-Size-Fits-All
- 4535 kg (10.000 lbs) applied force at tips
- Opens to 76.2 mm (3 inches)

Model	Article
FS-10H	12700538
FS-10M	12700539

With the hydraulic spreader **FS-10H** a hydraulic cylinder replaces the ratchet handle. A standard hand pump powers 1 spreader, or a pair, with ease. Again, you are supplied with 4535 kg (10.000 lbs) of force and 76.2 mm (3") of gap.

Using the manual spreader **FS-10M** simply place the tips between the flange faces and turn the ratcheted handle. The ratcheting action is transformed into 4535 kg (10.000 lbs) of spreading force and creates up to 76.2 mm (3") gap.



Hydraulic flange spreaders are used for safely opening pipe flanges. Available in capacities of 5 tonnes and 10 tonnes the versatility of both models enables the user to open flanges up to 92mm thickness. Operated with a standard hydraulic hand pump and connecting hose and supplied in a handy storage case, hydraulic flange spreaders can be operated individually, or as a pair when opening large diameter flanges. With hydraulic flange spreaders it takes minutes to open the toughest flanges with our the risk of sparks caused by hammer blows and chisels.

Technical data series FS-5T/FS-10T

Model	Article	Force to	stroke mm	Flange dimensions		Stud-Ø mm	Wedge mm	Wedge optional mm
				mm	mm(inch)			
FS-5T	12700540	5	39	2x58	1150(45")	19-29	3-29	30-56
FS-10T	12700541	10	55	2x93	1900(75")	32-41	3-29	30-56

Dimensions

Model	A mm	B mm	C		D mm	E mm	F mm	G mm	H mm	I mm	J mm
			min	max							
FS-5T	77	210	61	157	10	192	69	131	25	205	18
FS-10T	110	290	61	226	30	165	89	180	38	274	31

For suitable hydraulic pumps please refer to page



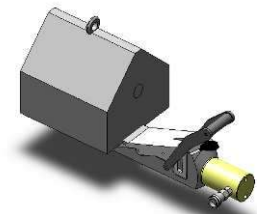
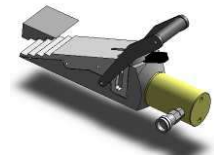
Hydraulic Lifting Wedge HK-16T



The hydraulic lifting wedge has been developed as an easy to use/cost effective way to find solutions to heavy lifting where minimal clearance is available. It will lift objects vertically where an access gap of 3/8" (9.5 mm) or more is available. The HK-16T will lift an object fast, secure and safe with a lifting force of 16 tons per tool. Multiple units can be used if greater lifting force is needed.

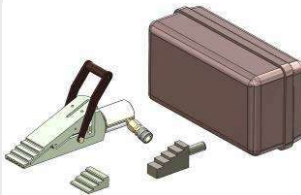
Features

- Access gap of only 3/8" (9.5mm) needed
- 3/4" (19.0 mm) of vertical lift available from each step
- Max. height of 50 mm on 4th step
- Automatic spring return retraction
- Interlocking first step ensures safe hold
- No slippage due to locking
- Will lift in a straight vertical place



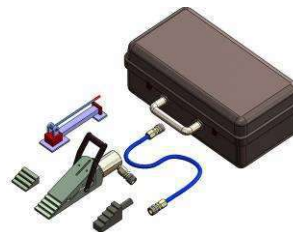
Mini-Kit (article 12700542)

- 1x lifting wedge HK-16T
- 1x Safety block
- 1x Stepped block
- 1x Instruction manual
- 1x Carry case

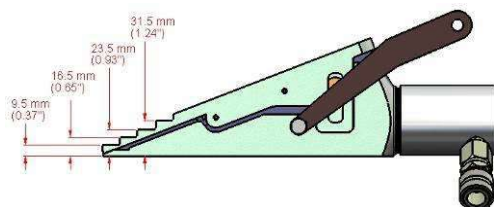


Standard Kit (article 12701802)

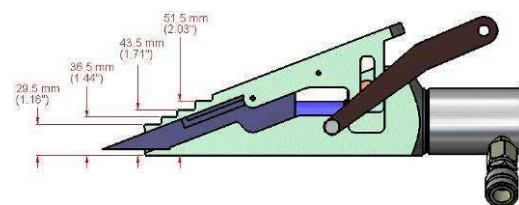
- 1x lifting wedge HK-16T
- 1x 700bar Hydr. Hand-pump 2-stage
- 1x 700bar Hydraulic hose
- 1x Safety block
- 1x Stepped block
- 1x Instruction manual
- 1x Carry case



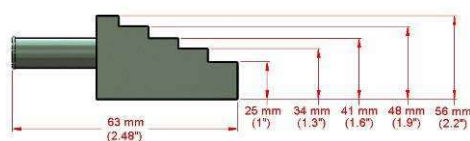
Dimensions



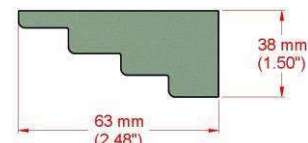
Wedge closed



Wedge opened



Safety block



Stepped block

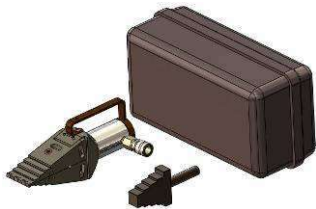
Hydraulic Spreading Wedge YSW-14T



The spreading wedge YSW-14T has been developed as the simple cost-effective solution for flanges spreading.

Features

- Access gap of only 1/4" (6.0 mm) needed
- Robust Light weight tool – just 7.2 kgs (lbs)
- 10.000 psi (700 bar) generates 14.0 tons spreading force
- Automatic spring return
- Locking at first step ensures no slippage, increased safety



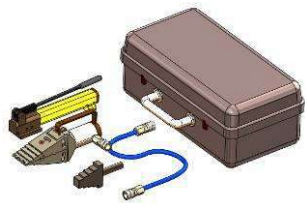
Mini Kit (article 12700543)

- 1x lifting wedge YSW-14T
- 1x Safety block
- 1x Instruction manual
- 1x Carry case



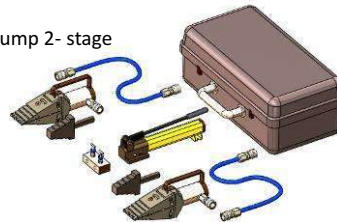
Stepped block (article 12701815)

- 2x Stepped block
- 2x Screws CSK M6x12mm
- 1x Allen key



Standard Kit (article 12701813)

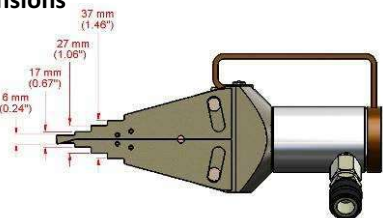
- 1x lifting wedge YSW-14T
- 1x 700bar Hydraulic-Hand-pump 2- stage
- 1x 700bar Hydraulic hose
- 1x Safety block
- 1x Instruction manual
- 1x Carry case



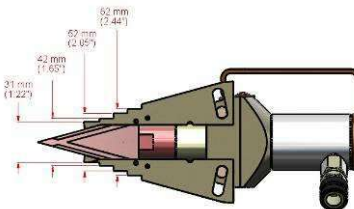
Maxi Kit (article 12701814)

- 2x lifting wedge YSW-14T
- 1x 700bar Hydr.-Pump 2 stage
- 2x 700bar Hydraulic hose
- 2x Safety block
- 1x Instruction manual
- 1x Twin manifold block
- 1x Carry case

Dimensions



Wedge closed



Wedge opened



Safety block, side view



Safety block, top view



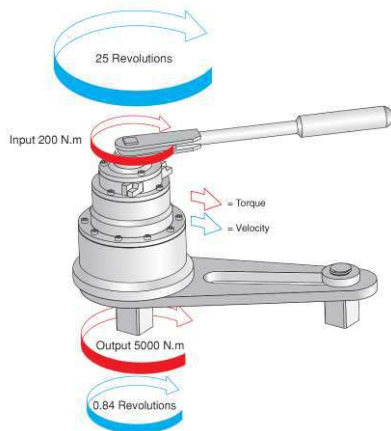
Manual Torque Multiplier Series YTM



The given load at the input gets multiplied as per the multiplication factor & transmitted at the output, there by with a minimum efforts you achieve greater load.

Features

- Accuracy better than $\pm 4\%$
- Precision tightening and loosening of all heavy duty fasteners.
- Low energy input with high torque transfer.
- Higher capacity multipliers are furnished with strong ratchets (Anti-wind up mechanism) allowing jobs to be performed easily, efficiently, and safely.
- Precision manufacturing ensures long life and premier quality
- A groove on out put square breaks if over loaded in excess of 20% of ist capacity
- Highest possible load factor is guaranteed due to design and use of forged components.



Hand torque multipliers incorporate an 'Epicyclic' or 'Planetary' gear train having one or more stages. Each stage of gearing increases the torque applied by a factor of 5, allowing to offer multipliers in ratios of 5:1, 25:1 and 125:1. In the planetary gear system, torque is applied to the in put gear or 'Sun' gear. Three or four planet gears whose teeth are engaged with the sun gear and therefore rotate. The out side casing of the multiplier, or 'Annulus' is also engaged with the planet gear teeth, and would normally rotate in the opposite direction to the sun gear. A reaction arm prevents the annulus from rotating, and this causes the planet gears to orbit around the sun. The planet gears are held between in put & output plate which also holds the out put square drive. Therefore as the planetary gears orbit around the sun gear, output plate the and so the square drive turns. Without the reaction arm to keep the annulus stationary, the out put square will not apply torque.

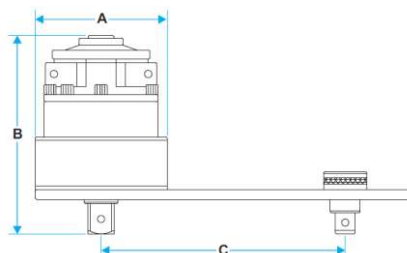
Technical data series YTM

model	article	torque max.	ratio	drive input	drive output	A	B	C min	C max	weight	RS	torque wrench manual
		Nm		inch	inch							
YTM-2/25	12700561	1700	1:25	1/2	1	115	151	75	164	7	nein	YTR-600
YTM-5	12700562	2700	1:5	3/4	1	136	135	89	260	8.4	nein	YTR-5000
YTM-5/25	12700563	2700	1:25	1/2	1	136	163	89	260	11.5	nein	YTR-1200
YTM-6	12700564	3400	1:5	3/4	1.1/2	136	149	105	260	9.2	nein	YTR-7200
YTM-6/25	12700565	3400	1:25	1/2	1.1/2	136	176	105	260	12.0	nein	YTR-1200
YTM-7	12700566	6000	1:5	3/4	1.1/2	168	174	115	310	18.0	nein	YTR-12300
YTM-7/25	12700567	6000	1:25	1/2	1.1/2	168	226	115	310	22.0	ja	YTR-3000
YTM-9/25	12700568	9500	1:25	3/4	1.1/2	195	256	150	350	33.0	ja	YTR-5000
YTM-9/125	12700569	9500	1:125	1/2	1.1/2	195	301	150	350	35.5	ja	YTR-1200
YTM-11/25	12700570	17000	1:25	3/4	2.1/2	220	360	164	480	52	ja	YTR-7200
YTM-11/125	12700571	17000	1:125	1/2	2.1/2	220	404	164	480	57	ja	YTR-1200
YTM-13/125	12700572	47500	1:125	3/4	2.1/2	315	550	164	480	80	ja	YTR-5000

RS = Ratchet mechanism yes/no

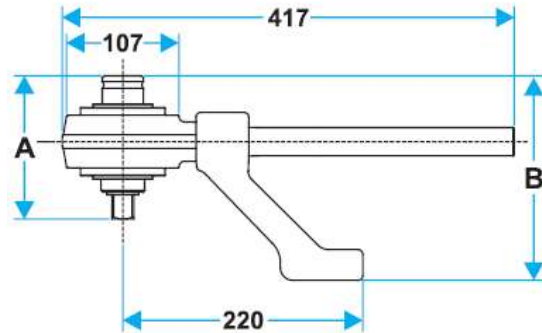
In the right column there commended manual torque wrenches are shown, see pages 20-22

Dimensions



Manual Torque Multiplier Series YSTN/YSTM

Model YSTN



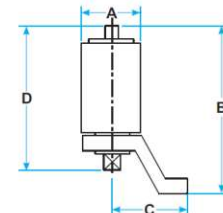
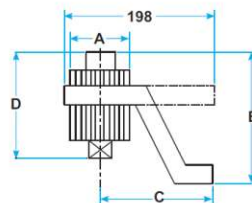
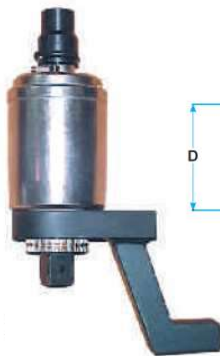
Features

- Compact, Heavy Duty Torque Multiplier with a torque multiplication of 5:1.
- Accuracy better than 4% with high repeatability.
- Provided with detachable reaction handle.
- Optional offset reaction arm also available on demand
- Supplied in sturdy molded plastic carrying case for better storage & handling

Technical data series YSTN

model	article	torque max.	ratio	drive input	drive output	A	B	weight	torque wrench manual
		Nm		inch	inch				
YSTN-17	12700556	1700	1:5	1/2	3/4	107	115	3,8	YTR-3000
YSTN-28	12700557	2800	1:5	1/2	3/4	107	126	3,9	YTR-5000

Model YSTM



Features


- **Compact Size:** Compact in size hence can be used in constrained areas. Ratio : Higher reduction ratio for low input.
- **Safety:** Safety shear pin at the input provisioned to prevent over loading.
- **AWUR:** In built Anti-Windup Mechanism reduces operators effort. Can be used with non-ratchet type torque wrench.
- **Pin Lock:** Pin Lock mechanism at output Sq. Drive for positive locking of socket.
- **Reaction Arm:** Different type of reaction arm available as per user requirement.
- **Accuracy:** Better than $\pm 4\%$ with very high repeatability.
- Supplied in sturdy molded plastic carrying case for better storage & handling

Technical data series YSTM

model	article	torque max.	ratio	drive input	drive output	A	B	C	D	weight	torque wrench manual
		Nm		inch	inch						
YSTM-1	12700558	2500	1:8	1/2	3/4	81	133-175	165	149	4,3	YTR-3000
YSTM-2	12700559	3200	1:10	1/2	3/4	88	272	141	207	6,3	YTR-3000
YSTM-3	12700560	4200	1:10	3/4	3/4	88	272	151	217	6,8	YTR-5000



Manual Torque Wrenches Series YTR/YQW

<p>Accurate in use Mechanism pivots on the square drive. Guaranteed accuracy wherever the wrench is grasped.</p>	<p>Durable Hard-wearing, heavy-duty mechanism. Retains original accuracy $\pm 3\%$ for up to 10.000 operations without recalibration</p>	<p>Safety in use Progressive torque build-up to the selected setting easily detected by sight, sound and feel.</p>	<p>Accurate in design Guaranteed accuracy of $\pm 3\%$ throughout the torque range.</p>	<p>Easy to use torque scale Large, clear scale markings in Nm, kg/m, lbf/in and lbf/ft. Accurate setting easily obtained</p>
				
<p>Convenience in use Push-through, user replaceable square drive. Enables wrench to be turned over and used in opposite direction.</p>	<p>Compact Head no wider than a typical socket. Improved access in confined spaces.</p>	<p>Robust Extremely strong construction. Resists all but the most severe accidental damage.</p>	<p>Easy in use Length calculated to enable a controlled effort at all torque settings essential in all torque limiting situations.</p>	<p>Security Secure and rapid torque setting adjustment. Impossible to alter by accident - ensures accurate setting at all times.</p>



Torque wrenches without ratcheting mechanism

series YT-100A to YT-12300
series YQW-10 and YQW-11
series YTW-75 to YTW-300



Torque wrenches with ratcheting mechanism

series YTR-100 to YTR-12300
series YQW-R-10 to YQW-R-11

3/8"



Technical data series YT/YTR

Model	article	Ratchet?	torque		Square drive	Length	Weight
			Nm		inch		
YT-100	12701910	no	2.5-11		3/8	318	0.56
YTR-100	12701911	yes	2.5-11		3/8	334	0.65
YT-300	12701912	no	5-34		3/8	422	0.60
YTR-300	12701913	yes	5-34		3/8	443	0.75
YTR-600	12701914	yes	12-68		3/8	499	1.10



Manual Torque Wrench Series YTR/YQW

1/2"



Technical data series YT/YTR

Model	article	Ratchet?	torque	Square drive	Length	Weight
			Nm	inch	mm	kg
YT-600	12701915	no	12-68	1/2	476	1.02
YT-1200	12701916	no	25-135	1/2	546	1.62
YTR-1200	12701917	yes	25-135	1/2	555	2.00
YT-2000	12701918	no	50-225	1/2	597	2.38
YTR-2000	12700544	yes	50-225	1/2	626	2.49
YT-3000	12701919	no	70-330	1/2	825	3.12
YTR-3000	12700545	yes	70-330	1/2	840	4.00

3/4"

1"



Technical data series YT/YTR/YQW

Model	article	Ratchet?	torque	Square drive	Length	Weight
			Nm	inch	mm	kg
YT-5000	12701917	no	140-560	3/4	1130	5.9
YTR-5000	12700546	yes	140-560	3/4	1210	6.58
YT-7200	12701918	no	200-810	3/4	1181	6.5
YTR-7200	12700547	yes	200-810	3/4	1261	7.0
YT-8400	12701919	no	480-940	1	1397	11.3
YTR-8400	12700548	yes	480-940	3/4	1471	12.7
YT-12300	12701920	no	700-1400	1	1505	15.5
YTR-12300	12700549	yes	700-1400	1	1505	17.0
YQW-10	12701921	no	1015-1900	1	1356	16.5
YQW-R-10	12701922	yes	1015-1900	1	1356	18.0
YQW-11	12700550	no	1350-2700	1	1498	19.5
YQW-R-11	12700551	yes	1350-2700	1	1498	20.6



Manual Torque Wrench Series YTW



Features

- **Material** : Light weight high strength alloy body reduces its weight to half of the equivalent conventional Torque Wrenches.
- **Compact Size** : Compact in size with multiple extensions, ensures use at restricted places. Light Weight & Compact Packing makes handling & transportation easy.
- **Torque Indication** : Short path actuation of gears provide clear impulse & audible signal on reaching set torque values.
Variable Extension : Extension bars can be adjusted to get different extension length as per the operator's requirement.
Pin Locking: Pin Lock mechanism at Sq. Drive for positive safe locking.
- **Graduation** : Single Scale Graduation for clear reading, Standard scale graduation is in Nm but can be supplied in other scales as required on request.
- **Longer Range** :140 Nm to 3000 Nm covered in just four models. Accuracy: Better than +_3% with very high repeatability.
- **Calibration** : Calibration Traceable to National Standards.
- **Ratcheting Action** : Suitable Ratchet Adaptors available to convert to ratchet type Torque Wrench.
- **Packing** : Standard packing is in individual sturdy cardboard box. On request also available in metallic case.

Technical data series YTW

Model	article	torque range	Square drive	Length	extension	Weight
		Nm	inch	mm	mm	kg
YTW-75	12700552	140-760	3/4	810	~	3.5
YTW-100	12700552	520-1000	3/4	810	+520	5.5
YTW-200	12700552	750-2000	1	935	+675/1075	11.5
YTW-300	12700552	1500-3000	1.1/2	935	+675/1075	14



Hydraulic Bolt Tensioners Series YST

Bolt tensioning is now the preferred method of tightening bolts & studs on all critical applications. YST range of bolt tensioners provides optimum solutions to bolt tensioning requirements.

YST series bolt tensioners are designed for operation in a wide variety of applications including pipeline flanges, heat exchangers, pressure vessels, compress or covers, boilers feed pumps, anchor bolts and many others.

Features

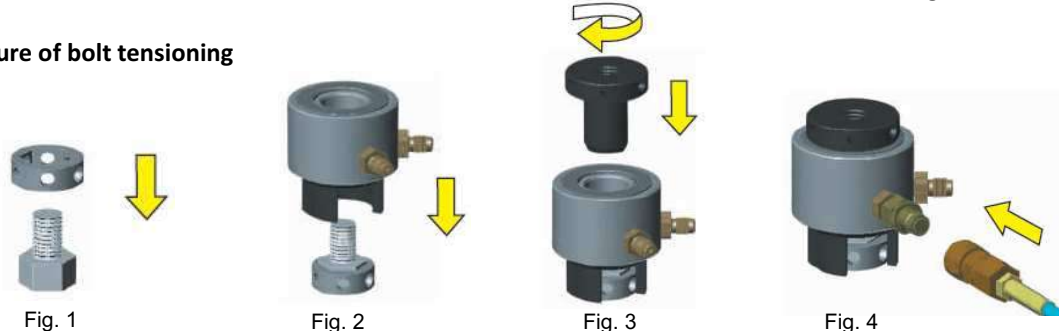
- **Versatile Design** : YST Series standard variable tensioners are designed to provide a wide range of flexibility, covering stud sizes 3/4" to 5.3/4". Different stud sizes are accommodated by simply changing adaptor kit consisting of Puller, Bridge & Nut Driver, while utilizing the same Load cell.
- **High Strength Alloy Steel** : The YST Series tensioners operate at a maximum pressure of 1500 Bar & utilizes high strength AISI 4340 steel parts for long lasting performance.
- **Stroke Indicator** : The YST Series tensioner has an exception stroke of 15 mm. Integral stroke indicator allows piston stroke to be viewed & measured indication of stroke is provisioned with over stroke limit indication.
- **Safe Design** : The YST series tensioners are designed so that in event of over-stroke the high pressure fluid will be released from inner side of the load cell & thus saving the operator from exposure.
- **Multi Tensioning** : The YST Series load cell is provisioned with two connections & this acts as manifold for multi tensioning applications. By using high pressure link hoses any number of bolt tensioners can be connected & tightened simultaneously. This ensures equal tightening of all bolts in the assy. & reduce the work time.
- **Anti Roll Seals** : Low frictions, anti roll seals & rigid backup rings incorporated for improved life & reliability.
- **Floating Piston** : The unique piston design allows 2° tilt without any loss of load, preventing piston seizure or damage of piston bore.



YST bolt tensioner is very simple to use consisting of four i.e. Load Cell, puller, nut driver & bridge.

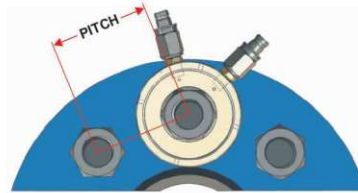
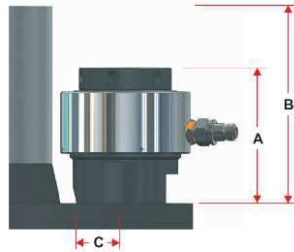


Procedure of bolt tensioning



The nut-driver is placed over the nut (fig.1) The bridge and the load cell is then place over the bolt (fig.2). The puller is then screwed over the stud protruding above the nut face (fig.3) making sure that at least 1x diameter of bolt is engaged with the threaded puller. Desired hydraulic pressure is now applied to load cell, which stretches the bolt (fig.4). The nut is turned down using the nut-driver and tommy bar. The pressure is then released leaving the stud loaded to the desired value.

Hydraulic Bolt Tensioners Series YST



Technical data series YST

Model		thread		force		Hydr. Area		Ø	A	B	C	D	Weight	
Load cell	Adaptor kit	Article	inch	mm	ton	KN	in ²	mm ²	mm	mm	mm	mm	kg	
YST-01 12700573	YST-A1-0.12	12700574	3/4		38.1	339	3.50	2257	84	76	145	26	46	3.5*
	YST-A1-M20	12700575		20						76	145	26	47	1.3
	YST-A1-0.14	12700576	7/8							84	153	30	53	1.4
	YST-A1-M24	12700577		24						84	153	30	54	1.4
	YST-A1-1.00	12700578	1							84	153	30	55	1.4
YST-02 12700585	YST-A2-M27	12700586		27	44.7	397	4.11	2649	98	88	157	29	56	4.5*
	YST-A2-1.02	12700587	1.1/8							89	158	32	59	1.8
	YST-A2-M30	12700588		30						89	162	32	62	1.9
	YST-A2-1.04	12700589	1.1/4							91	167	35	67	2.0
	YST-A2-M33	12700590		33						91	168	35	68	2.1
	YST-A2-1.06	12700591	1.3/8							93	173	38	72	2.3
YST-03 12700601	YST-A3-1.04	12700602	1.1/4		71.8	639	6.60	4259	115	92	162	37	69	5.9*
	YST-A3-M33	12700603		33						92	162	37	70	2.4
	YST-A3-1.06	12700604	1.3/8							94	166	40	74	2.9
	YST-A3-M36	12700605		36						94	167	40	75	2.9
	YST-A3-1.08	12700606	1.1/2							98	175	43	80	3.0
	YST-A3-M39	12700607		39						98	175	43	80	3.0
YST-04 12700615	YST-A4-1.06	12700616	1.3/8		81.1	721	7.45	4808	128	94	167	41	75	7.7*
	YST-A4-M36	12700617		36						94	167	41	76	3.4
	YST-A4-1.08	12700618	1.1/2							98	172	43	81	3.6
	YST-A4-M39	12700619		39						98	172	43	81	3.6
	YST-A4-1.10	12700620	1.5/8							100	172	46	86	3.9
	YST-A4-M42	12700621		42						100	176	46	86	3.9
	YST-A4-1.12	12700622	1.3/4							101	177	49	91	4.0
	YST-A4-M45	12700623		45						101	181	49	91	4.0
YST-05 12700615	YST-A5-1.10	12700634	1.5/8		105.9	942	9.73	6280	145	102	182	47	87	11.4*
	YST-A5-M42	12700635		42						102	184	47	87	5.2
	YST-A5-1.12	12700636	1.3/4							106	189	50	92	5.4
	YST-A5-M45	12700637		45						106	190	50	93	5.4
	YST-A5-1.14	12700638	1.7/8							109	196	53	98	5.6
	YST-A5-M48	12700639		48						109	196	53	98	5.6
	YST-A5-2.00	12700640	2							109	201	56	104	6.3
	YST-A5-M52	12700641		52						109	201	56	105	5.9
YST-06 12700651	YST-A6-1.14	12700652	1.7/8		152.2	1354	13.99	9028	165	109	194	54	99	14.8*
	YST-A6-M48	12700653		48						109	194	54	99	7.1
	YST-A6-2.00	12700654	2							112	199	57	105	7.6
	YST-A6-M52	12700655		52						112	199	57	106	7.6
	YST-A6-M56	12700656		56						116	208	61	113	7.8
	YST-A6-2.04	12700657	2.1/4							116	209	61	114	7.8
	YST-A6-M60	12700658		60						117	209	61	114	7.8



Hydraulic Bolt Tensioners Series YST



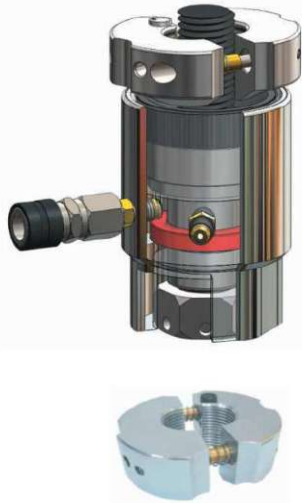
Technical data series YST

load cell	Model		thread		force		Hyd. Area		Ø	A	B	C	D	Weight
	Adaptor kit	Article	inch	mm	ton	KN	in ²	mm ²						
YST-07 12700667	YST-A7-M56	12700668		56	185.6	1651	17.06	11006	180	117	205	59	112	18.1*
	YST-A7-2.04	12700669	2.1/4							117	207	59	112	9.3
	YST-A7-M60	12700670		60						122	214	61	117	9.4
	YST-A7-2.08	12700671	2.1/2							125	221	66	125	9.7
	YST-A7-M64	12700672		64						125	221	66	125	9.7
	YST-A7-M68	12700673		68						130	231	66	129	10.0
	YST-A7-2.12	12700674	2.3/4							133	237	72	136	11.5
YST-08 12700683	YST-A8-2.08	12700684	2.1/2		222.4	1978	20.44	13188	198	127	226	70	129	23.4*
	YST-A8-M64	12700685		64						127	226	70	129	12.1
	YST-A8-M68	12700686		68						132	233	69	132	12.3
	YST-A8-2.12	12700687	2.3/4							132	235	75	139	12.5
	YST-A8-M72	12700688		72						135	240	75	141	12.5
YST-09 12700695	YST-A9-2.12	12700696	2.3/4		253.7	2257	23.30	16485	215	137	241	75	139	29.3*
	YST-A9-M72	12700697		72						137	241	75	141	15.6
	YST-A9-M76	12700698		76						141	249	80	150	17.2
	YST-A9-3.00	12700699	3							141	255	80	150	17.2
	YST-A9-M80	12700700		80						141	255	80	150	17.2
	YST-A9-3.04	12700701	3.1/4							141	255	80	150	17.2
YST-10 12700709	YST-A10-M80	12700710		80	342.5	3047	31.48	20312	244	152	258	87	160	40.3*
	YST-A10-3.04	12700711	3.1/4							152	261	87	162	24.0
	YST-A10-M85	12700712		85						154	264	87	164	24.5
	YST-A10-3.08	12700713	3.1/2							158	268	93	174	22.6
	YST-A10-M90	12700714		90						158	269	93	175	22.6
	YST-A10-M95	12700715		95						164	280	93	179	22.8
	YST-A10-3.12	12700716	3.3/4							164	280	105	191	22.9
	YST-A10-M100	12700717		100						171	293	105	195	22.1
	YST-A10-4.00	12700718	4							171	293	105	197	22.1
YST-11 12700709	YST-A11-3.12	12700730	3.3/4		423.5	3768	38.94	25120	280	167	282	106	192	52.7*
	YST-A11-M100	12700731		100						174	289	106	196	31.4
	YST-A11-4.00	12700732	4							174	291	106	198	31.4
	YST-A11-4.04	12700733	4.1/4							181	304	111	209	36.4
	YST-A11-M110	12700734		110						181	305	111	210	36.4
	YST-A11-4.08	12700735	4.1/2							186	316	118	222	39.7
	YST-A11-M120	12700736		120						193	198	118	226	41.4
	YST-A11-4.12	12700737	4.3/4							197	334	121	229	42.3
	YST-A11-M125	12700738		125						197	338	121	233	43.3
	YST-A12-M125	12700750		125						199	346	124	236	89.6*
YST-12 12700749	YST-A12-5.00	12700751	5		534.4	4754	49.13	31694	325	199	351	129	243	60.3
	YST-A12-M130	12700752		130						202	354	126	243	63.1
	YST-A12-5.04	12700753	5.1/4							205	357	135	254	63.1
	YST-A12-5.08	12700754	5.1/2							212	372	141	266	70.4
	YST-A12-M140	12700755		140						212	372	135	260	70.6
	YST-A12-5.3/4	12700756	5.3/4							213	381	145	276	70.8
	YST-A12-M150	12700757		150						216	388	141	275	73.3



Hydraulic Bolt Tensioners Series TSS

TSS Series Bolt Tensioners are specially designed for sub sea applications. These Tensioners are suitable for higher pressure rating flanges also. It's ergonomic design makes it very easy to handle and use by divers under the harsh sea conditions. These tensioners are designed to provide a wide range of flexibility, covering stud sizes 3/4" to 3.1/2"(M-18 to M-85). The tool consists of two basic parts- Tensioning Unit and Puller Nut as shown below:



- **High Strength Stainless Steel Construction** : The Complete tool is made from high strength stainless steel for use in corrosive sea environment and to minimize maintenance.
- **Versatile Design** : Designed to provide a wide range of flexibility, covering stud sizes 3/4" to 3.1/2" (M-18 to M-85) using just 8 load cells.
- **Higher Load Generation** : Generates higher load making it suitable for higher pressure rating flanges (API 170 - 10K).
- **Long Stroke And Stroke Indication** : All tensioners have a 25mm long stroke with piston marked with fluorescent rings for indication of stroke and over stroke limit.
- **Safe Design in event of Piston 'Over Stroke'** : Designed to release high pressure hydraulic oil inwards in the event of over-stroke, thus saving the operator from any potential exposure.
- **Multi Tensioning** : The tensioning unit cell is provisioned with two connections that act as a manifold for multi tensioning applications.
- **Anti Roll, Composite Material Seals** : Fitted with Anti Roll, Composite Material seals for longer life and high reliability. The seals used have a low coefficient of friction so that the piston can be returned to a closed position with minimal effort. Sub Sea tensioners can be provided with machined PU (polyurethane) seals if requested by the customer.
- **Split Nut** : Optional Split Nut available for fast and easy fitment which ensures most efficient use of expensive diver time.

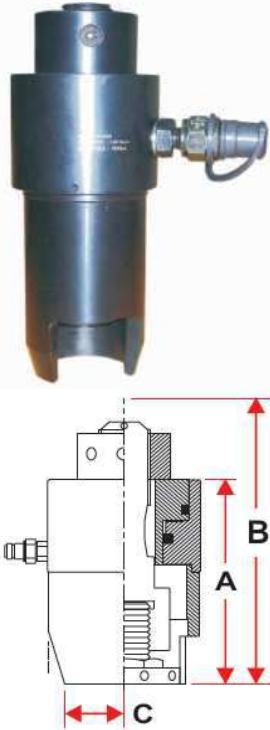
Technical data series YSS

Model		thread		force		Hydr. Area		A	B	C	D	E	Weight	
load cell	Adaptor kit	Article	inch	mm	ton	KN	in ²	mm ²	mm	mm	mm	mm	kg	
YSS-01 12701723	YSS-PT01-0.12	12701724	3/4		21.2	188	1.95	1256	122	65	30	100	46	3.6*
	YSS-PT01-M20	12701725		M20										0.4
	YSS-PT01-0.14	12701726	7/8											0.4
YSS-02 12701723	YSS-PT02-M24	12701731		M24	34.7	309	3.19	2061	153	83	30	123	64	6.1*
	YSS-PT02-1.00	12701732	1											0.8
	YSS-PT02-M27	12701733		M27										0.8
	YSS-PT02-1.02	12701734	1.1/8											0.8
	YSS-PT02-M30	12701735		M30										0.8
YSS-03 12701741	YSS-PT02-1.04	12701742	1.1/4		54.2	482	4.98	3215	171	98	30	138	78	7.7*
	YSS-PT02-M33	12701743		M33					1.4					
	YSS-PT02-1.06	12701744	1.3/8						1.4					
	YSS-PT02-M36	12701745		M36					1.4					
YSS-04 12701750	YSS-PT04-1.08	12701751	1.1/2		79.4	706	7.30	4710	186	113	30	147	93	11.3*
	YSS-PT04-M39	12701752		M39					2.1					
	YSS-PT04-1.10	12701753	1.5/8						2.1					
	YSS-PT04-M42	12701754		M42					2.1					
YSS-05 12701759	YSS-PT05-1.12	12701760	1.3/4		119.1	1060	10.95	7065	197	136	60	152	113	19.0*
	YSS-PT05-M45	12701761		M45					3.5					
	YSS-PT05-1.14	12701762	1.7/8						200					
	YSS-PT05-M48	12701763		M48					203					
	YSS-PT05-2.00	12701764	2						206					
	YSS-PT05-M52	12701765		M52					209					
YSS-06 12701772	YSS-PT06-M56	12701773		M56	174.7	1554	16.06	10362	229	162	60	171	141	31.4*
	YSS-PT06-2.04	12701774	2.1/4						229					
	YSS-PT06-M60	12701775		M60					229					
	YSS-PT06-2.08	12701776	2.1/2						233					
	YSS-PT06-M64	12701777		M64					233					
YSS-07 12701783	YSS-PT07-2.12	12701784	2.3/4		219.4	1952	20.17	13011	266	190	60	194	166	45.0*
	YSS-PT07-M72	12701785		M72					266					
	YSS-PT07-M76	12701786		M76					269					
	YSS-PT07-3.00	12701787	3						269					
YSS-08 12701792	YSS-PT08-M80	12701793		M80	268.7	2390	24.70	15935	288	214	60	208	191	62.5*
	YSS-PT07-3.04	12701794	3.1/4						288					
	YSS-PT07-M85	12701795		M85					293					
	YSS-PT07-3.08	12701796	3.1/2						293					

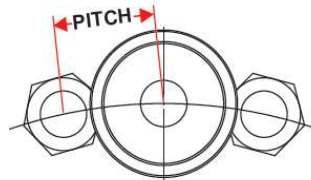


Hydraulic Bolt Tensioners Series CST

CST Series are slimmer, variable type Bolt Tensioners consisting of five parts-Puller, Puller Nut, Load Cell, Bridge & Nut Driver as shown below:



- Versatile Design: Designed to provide a wide range of flexibility, covering stud sizes 3/4" to 2.1/2" (M-20 to M-64).
- High Strength Alloy Steel Construction : All Parts are made from high strength Aircraft Quality alloy steel for long lasting performance and better safety factor.
- Stroke Indication: Marked Piston indicates stroke and provides an over stroke indication.
- Safe Design: Designed to release high pressure hydraulic oil inwards in event of over-stroke, thus saving the operator from exposure.
- Anti Roll, Composite Material Seals: Fitted with Anti Roll, Composite Material seals for longer life and high reliability.
- The seals used have a low coefficient of friction so that the piston can be returned to a closed position with minimal effort. Sub Sea tensioners can be provided with machined PU (poly urethane) seals if requested by the customer. Floating Piston: The unique piston design allows 2° tilt with out any loss of load and prevents piston seizure or damage of piston.



Technical data series CST

Model			thread		force		Hydr. Area		Ø	Pitch min	A	B	C
load cell	Adaptor kit	Article	inch	mm	ton	KN	in ²	mm ²	mm	mm	mm	mm	mm
CST-01 12701816	CST-A1-0.12	12701817	3/4		26,4	235,1	2,43	1568	68	42	173	192	37
	CST-A1-M20	12701818		M20						43	173	193	38
	CST-A1-0.14	12701819	7/8							44	175	197	41
	CST-A1-M24	12701820		M24						46	177	201	44
	CST-A1-1.00	12701821	1							47	178	203	46
	CST-A1-M27	12701822		M27						49	180	207	50
CST-02 12701829	CST-A2-1.02	12701830	1.1/8		47,6	423,2	4,37	2822	88	53	240	269	53
	CST-A2-M30	12701831		M30						55	241	271	55
	CST-A2-1.04	12701832	1.1/4							56	243	274	58
	CST-A2-M33	12701883		M33						57	244	277	60
	CST-A2-1.06	12701884	1.3/8							59	246	281	63
	CST-A2-M36	12701885		M36						61	247	283	65
CST-03 12701892	CST-A3-M36	12701893		M36	59,8	531,6	5,49	3545	103	76	267	303	65
	CST-A3-1.08	12701894	1.1/2							78	269	307	69
	CST-A3-M39	12701895		M39						79	270	309	70
	CST-A3-1.10	12701896	1.5/8							81	272	314	74
	CST-A3-M42	12701897		M42						82	273	315	75
										92	296	338	75
CST-04 12701851	CST-A4-M42	12701852		M42	84,6	752,7	7,78	5019	118	93	298	343	80
	CST-A4-1.12	12701853	1.3/4							94	299	344	81
	CST-A4-M45	12701854		M45						96	302	349	85
	CST-A4-1.14	12701855	1.7/8							97	302	350	86
	CST-A4-M48	12701856		M48						104	327	375	86
CST-05 12701862	CST-A5-M48	12701863		M48	104,1	926,2	9,57	6176	130	106	330	381	91
	CST-A5-2.00	12701864	2							107	331	383	93
	CST-A5-M52	12701865		M52						109	335	391	100
	CST-A5-M56	12701866		M56						109	336	393	102
	CST-A5-2.04	12701867	2.1/4							117	367	424	102
										120	370	430	107
CST-06 12701873	CST-A6-2.04	12701874	2.1/4		191,8	1261,6	13,04	8413	148	121	374	437	113
	CST-A6-M60	12701875		M60						122	374	438	113
	CST-A6-2.08	12701876	2.1/2										
	CST-A6-M64	12701877		M64									



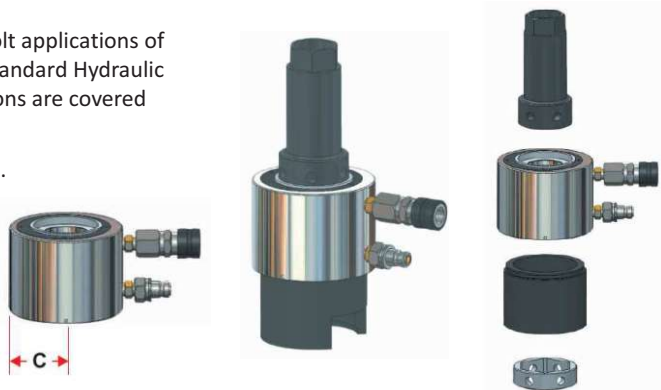
Hydraulic Bolt Tensioners Series YDA/YWM

The wind mill bolting applications has its own restrictions for use of tools due poor open working environment and restricted space for application. Towers are high and pneumatic supply is normally not practical for tools. Tools required must be light in weight compact in size and must use energy source readily available at site.

We have two types of tensioners for WIND MILL Applications i.e. DA Series and CAT Series. The 700 bar “DA Series” are specially designed for Base Bolt applications, while the “CAT Series”, 1500 bar tensioners are for versatile applications from Tower Base to Turbine Blades.

These tensioners are specially designed for Base Bolt applications of Wind Mill Towers. Tensioning is carried out using standard Hydraulic Torque Wrench Powerpack. Though most applications are covered by our two models as referred below.

Customised sizes are available against requirement.

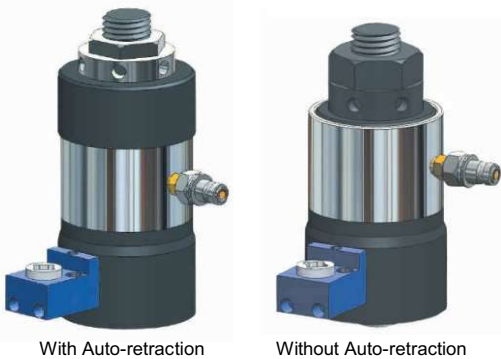


Technical data / dimensions series YDA

Model	Article	thread	Max Load	Max Dia.	Stroke	Dim. C	OAL	Weight
			KN	mm	mm	mm	mm	kg
YDA-3336	12701923	M33-M36	385	116,0	25	54	138	4,3
YDA-3033	12701924	M30-M33	357	102,0	25	49	138	5,2

Model YWM

These 1500 bar working pressure tensioners are specially developed from our Compact series to meet auto retract and ease of operation requirement of wind mill application.



Technical data series YWM

Model	Article	thread	Max Load	Max Dia.	Stroke	
			KN	mm	Standard	Long
YWM-18	12701925	M16-M18	114	53,0	10	~
YWM-22	12701926	M20-M22	188	64,0	10	~
YWM-27	12701927	M24-M27	271	74,0	15	25
YWM-33	12701928	M30-M33	369	86,0	15	25
YWM-39	12701929	M36-M39	458	97,0	15	25

- **Compact Design** : The tensioners are designed with smaller dia for ease of tool fitment.
- **Higher Working Pressure** : 1500 bar working pressure to generate higher load with smaller hydraulic area of tensioner.
- **Geared Nut Drive** : Geared Nut Driver to move the nut faster and with ease using standard ½” Square Drive Wrench.
- **Longer Stroke** : Tool is available with standard and long stroke as per application.
- **Alloy Steel Construction** : All parts are made from High Strength Alloy Steel better strength and compact design.
- **Customised Adaptor Kits** : CAT series tensioners are available with both standard and customised adaptor kit.
- **Optional Auto Spring Return**: Standard tensioners are available with optional auto spring retraction for fast and easy retraction of piston.



Hydraulic Pumps for Nut Splitters/Flange Spreaders

Nut Splitters

Model	Oil volume cm ³	Hand-pump					Foot-pump FPS-2/0,5A	Mini-hydraulic-pump	
		HPS-1/0,7A	HPS-2/0,7A	HPS-2/2A	HPS-2/4A	HPS-2/6,5A		PAY-6	PAY-6-5
YNS-AH1324	120	+++	+++	-	-	-	+++	+++	-
YNS-AH1636	300	+++	+++	+++	-	-	+++	+++	-
YNS-AH3651	300	+++	+++	+++	-	-	+++	+++	-
YNS-AH4660	1100	-	-	+++	-	-	-	+++	-
YNS-AH5770	1100	-	-	+++	-	-	-	+++	-
YNS-AH7089	2200	-	-	-	+++	+++	-	-	+++
YNS-AH7998	2200	-	-	-	+++	+++	-	-	+++
YNS-95108	3000	-	-	-	+++	+++	-	-	+++
YNS-114127	3000	-	-	-	+++	+++	-	-	+++
YNS-124136	3000	-	-	-	+++	+++	-	-	+++

Flange Spreaders / Lifting Wedges

Model	Oil-volume cm ³	Hand-pump					Foot-pump FPS-2/0,5A	Mini-Hydraulic-pump	
		HPS-1/0,7A	HPS-2/0,7A	HPS-2/2A	HPS-2/4A	HPS-2/6,5A		PAY-6	PAY-6-5
FS-10H	47	+++	+++	-	-	-	+++	+++	-
FS-5T	25	+++	+++	-	-	-	+++	+++	-
FS-10T	78	+++	+++	++	-	-	+++	+++	-
YSW-14T	78	+++	+++	++	-	-	+++	+++	-
HK-16T	78	+++	+++	++	-	-	+++	+++	-

Hand Pumps for single-acting cylinders Model HPS

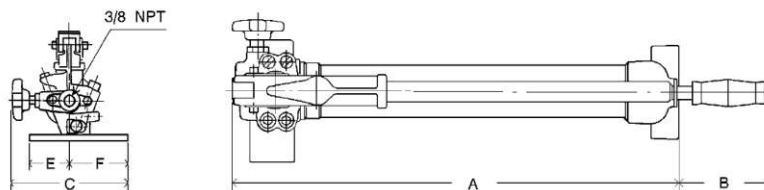


- Operating pressure max. 700 bar.
- Two-stage operation with automatic switch-over (except HPS-1/0,7 A).
- Large reservoir volumes.
- With pressure relief valves, adjustable from the outside
- Precision-adjustable relief valve (handwheel).
- Robust all-steel construction.
- HPH pumps are equipped with a 4-way control valve plus a precision-adjustable relief valve.
- Oil port thread 3/8 NPT.
- Incl. oil filling.
- Pressure gauges with corresponding adaptors are also available as accessories.

Tecnical data model HPS

Modell	EAN-Nr.	displacement	reservoir volume cm ³	displacement 1st stage cm ³	displacement 2nd stage cm ³	weight kg
	4025092*					
HPS-1/0,7A	159081	single-stage	700	-	2	7,0
HPS-2/0,7A	159098	2-stage	700	5	2	7,0
HPS-2/2A	159104	2-stage	2.000	11	2	10,0
HPS-2/4A	159111	2-stage	4.000	11	2	13,0
HPS-2/6,5A	159135	2-stage	6.500	11	2	21,0

Dimensions model HPS



Modell	HPS-1/0,7A	HPS-2/0,7A	HPS-2/2A	HPS-2/4A	HPS-2/6,5A
A, mm	590	590	595	715	715
B, mm	95	95	65	65	65
C, mm	160	160	160	160	200
D, mm	165	165	165	180	180
E, mm	55	55	55	55	55
F, mm	80	80	80	80	80

Hydraulic-Pumps for Nut Splitters/Flange-Spreaders

Foot-pump model FPS



Features

- Operating pressure max. 700 bar.
- Absolute stability due to large base plate.
- Minimized labour fatigue.
- Operating pressure adjustable. Valves accessible from the outside.
- Return stroke of cylinder also controlled by foot operation.
- Oil port 3/8 NPT.

Technical data model FPS

Model	EAN-Nr. 4025092*	reservoir volume cm ³	displacement 1st stage cm ³	displacement 2nd stage cm ³	Weight kg
FPS-2/0,5A	*160155	500	11	2	7

Mini-Hydraulicpump Model PAY



These mini-pumps are driven by an air-powered motor and can be connected to any supply source of compressed air. These compact low-cost pumps can operate all single-acting or double-acting hydraulic cylinders up to a max. operating pressure of 700 bar.

Due to large reservoirs, large cylinders or multiple cylinders can be operated. The use of an inline air filter lubricator is recommended. The hydraulic pressure can be infinitely adjusted on the regulator of the air-lubricator unit. The air-driven motor guarantees 100 % explosion protection.

Pumps for double-acting hydraulic cylinders are equipped with an additional 4-way control valve type VHH-4/3.

The connected hydraulic cylinder is controlled—advance—stop—return—by the universal pedal, which can be either hand or foot-operated.

Technical data model PAY

Model	EAN-Nr. 4025092*	for cylinders	reservoir volume ltr.	pressure max. bar	displacement l/min	required air pressure bar	air consumption l/min	Oil-port	Air-port	Weight kg
PAY-6	*153270	single-stage	1,5	700	0,85 bis 0,08	7	560	3/8 NPT	1/4 NPT	6,3
PAY-6-5	*160735	single-stage	5	700	0,85 bis 0,08	7	560	3/8 NPT	1/4 NPT	12

Manifold model MY



Manifolds with shut-off valves are used when different pressures must be maintained in each hydraulic line and therefore allow the lifting of unequal loads. The manifolds are fully assembled and can be screwed directly to a hand pump or power pack. Depending on the way of assembly a short hose HHC-10 and a coupler half CFY-1 can be helpful.

Manifolds models MY ... GYA are equipped with the corresponding number of shut-off valves plus pressure gauge sets (GYA-63) which allow a permanent reading of each individual load.



Assembly example
HPS-2/2 with MY-44



Hydraulic Pump



Pressure gauge model GYA-63

Consisting of pressure gauge GGY-632 (diameter Ø63 mm, glycerine-damped) and corresponding gauge adaptor. This pressure gauge set is suitable for connection to all HPS hand pumps.

Assembled ready to use, compact design with 45° inclination for easy reading.

Technical data model GYA-63

Model	EAN-No. 4025092*	Pressure gauge bar	Oil port pump	Oil port hose	Weight kg
GYA-63	*156103	0 - 1000 bar, Ø 63 mm, glycerine-damped	3/8-NPT outer	3/8-NPT inner	0.5

Hydraulic hoses model HHC

Durable but highly flexible thermoplast hydraulic hoses guarantee a very long life.

The 4-layer build-up includes 2 layers of high tensile steel fabric and robust fitting with 19 mm hexagon.

The volumetric expansion is very low. Hydraulic hoses model HHC...are equipped with a male coupler half as standard.

Standard lengths are as per the chart below, further lengths or hoses with larger diameters are quoted on request.



Technical data model HHC

Model	EAN-No. 4025092*	Length	Width	Operating pressure	Burst pressure	Connection 2 male coupler half CMY-1	Connection 1 thread nipple 3/8-NPT, outer	External diameter approx.	Bend radius min.	Width
		m	mm	bar	bar			mm	mm	mm
HHC-5	*155786	0.5	6.3	700	2800			14	100	6.3
HHC-10	*155687	1	6.3	700	2800			14	100	6.3
HHC-20	*155380	2	6.3	700	2800			14	100	6.3
HHC-30	*155793	3	6.3	700	2800			14	100	6.3
HHC-40	*155397	4	6.3	700	2800			14	100	6.3
HHC-60	*155595	6	6.3	700	2800			14	100	6.3
HHC-80	*155731	8	6.3	700	2800			14	100	6.3
HHC-100	*155809	10	6.3	700	2800			14	100	6.3
HHC-120	*156370	12	6.3	700	2800			14	100	6.3
HHC-150	*156387	15	6.3	700	2800			14	100	6.3



Impact-Sockets and Accessories



- All Impact Sockets are made from high strength alloy steel.
- All Impact Sockets are heat treated for the best combination of strength and impact resistance.
- All Impact Sockets have an optimum wall thickness for strength and access on fasteners having restrictions.
- The depth of the Hex openings is designed to accommodate the full standard fastener head.
- All Impact Sockets have chamfered openings for ease in engagement with the drive tool and the fastener.
- Concentric openings and large clearance holes to meet industrial specifications.
- All Impact Sockets have a Ring-N-Pin arrangement for securing them to the drive.
- Sockets are plated and black oxidized coated for increased protection from rusting.

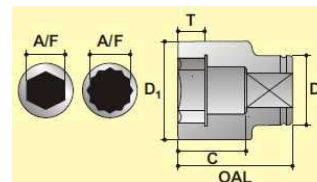
3/4" - square-drive standard length

SW	Model	Article	D1	D2	T	C	OAL	Weight (kg)
			(mm)	(mm)	(mm)	(mm)	(mm)	
19	YS-3/4-SW19	12700748	32,0	42,0	12,0	21,0	45,0	0,303
21	YS-3/4-SW21	12700749	36,0	42,0	13,0	24,0	48,0	0,336
22	YS-3/4-SW22	12700750	37,0	42,0	13,0	24,0	48,0	0,338
23	YS-3/4-SW23	12700751	39,0	42,0	13,0	24,0	48,0	0,348
24	YS-3/4-SW24	12700752	39,0	42,0	15,0	24,0	48,0	0,342
26	YS-3/4-SW26	12700753	41,0	44,0	15,0	24,0	48,0	0,376
27	YS-3/4-SW27	12700754	44,0	44,0	16,0	24,0	48,0	0,396
28	YS-3/4-SW28	12700755	44,0	44,0	16,0	24,0	48,0	0,388
30	YS-3/4-SW30	12700756	47,0	44,0	18,0	27,0	51,0	0,443
32	YS-3/4-SW32	12700757	49,0	44,0	18,0	27,0	51,0	0,453
33	YS-3/4-SW33	12700758	50,0	44,0	18,0	27,0	51,0	0,459
34	YS-3/4-SW34	12700759	52,0	44,0	20,0	30,0	54,0	0,509
36	YS-3/4-SW36	12700760	54,0	54,0	20,0	30,0	54,0	0,647
38	YS-3/4-SW38	12700761	57,0	54,0	23,0	35,0	59,0	0,754
41	YS-3/4-SW41	12700762	61,0	54,0	23,0	35,0	59,0	0,811
42	YS-3/4-SW42	12700763	62,0	54,0	25,0	35,0	59,0	0,814
43	YS-3/4-SW43	12700764	63,0	54,0	25,0	38,0	62,0	0,862
46	YS-3/4-SW46	12700765	67,0	54,0	25,0	38,0	62,0	0,941
50	YS-3/4-SW50	12700766	70,0	54,0	28,0	41,0	65,0	0,968

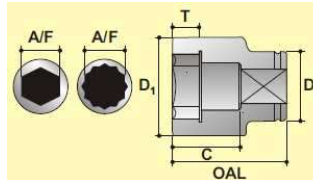


3/4" - square-drive long version

SW	Model	Article	D1	D2	T	C	OAL	Weight (kg)
			(mm)	(mm)	(mm)	(mm)	(mm)	
19	YS-3/4-SW19L	12700923	32,0	42,0	12,0	61,0	85,0	0,479
21	YS-3/4-SW21L	12700924	36,0	42,0	13,0	61,0	85,0	0,542
22	YS-3/4-SW22L	12700925	37,0	42,0	13,0	61,0	85,0	0,551
23	YS-3/4-SW23L	12700926	39,0	42,0	13,0	61,0	85,0	0,586
24	YS-3/4-SW24L	12700927	40,0	42,0	15,0	61,0	85,0	0,595
26	YS-3/4-SW26L	12700928	41,0	42,0	15,0	66,0	90,0	0,618
27	YS-3/4-SW27L	12700929	43,0	43,0	16,0	66,0	90,0	0,674
28	YS-3/4-SW28L	12700930	44,0	44,0	16,0	66,0	90,0	0,699
30	YS-3/4-SW30L	12700931	47,0	44,0	18,0	66,0	90,0	0,769
32	YS-3/4-SW32L	12700932	49,0	44,0	18,0	66,0	90,0	0,798
33	YS-3/4-SW33L	12700933	50,0	44,0	18,0	66,0	90,0	0,812
34	YS-3/4-SW34L	12700934	52,0	44,0	20,0	66,0	90,0	0,869
36	YS-3/4-SW36L	12700935	54,0	54,0	20,0	66,0	90,0	1,034
38	YS-3/4-SW38L	12700936	57,0	54,0	23,0	66,0	90,0	1,125
41	YS-3/4-SW41L	12700937	61,0	54,0	23,0	66,0	90,0	1,229
42	YS-3/4-SW42L	12700938	62,0	54,0	25,0	66,0	90,0	1,241
43	YS-3/4-SW43L	12700939	63,0	54,0	25,0	66,0	90,0	1,255
46	YS-3/4-SW46L	12700940	67,0	54,0	25,0	76,0	100,0	1,563
50	YS-3/4-SW50L	12700941	70,0	54,0	28,0	76,0	100,0	1,573



Impact-Sockets and Accessories



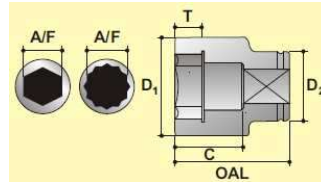
1" - square-drive standard length

1" - square-drive long version

SW	Model	Article	D1 (mm)	D2 (mm)	T (mm)	C (mm)	OAL (mm)	Weight (kg)	SW	Model	Article	D1 (mm)	D2 (mm)	T (mm)	C (mm)	OAL (mm)	Weight (kg)
19	YS-1-SW19	12700768	36,0	51,0	14,0	25,0	55,0	0,510	19	YS-1-SW19L	12700942	36,0	51,0	14,0	72,0	102,0	0,790
20	YS-1-SW20	12700769	36,0	51,0	14,0	25,0	55,0	0,510	20	YS-1-SW20L	12700943	36,0	51,0	14,0	72,0	102,0	0,760
21	YS-1-SW21	12700770	38,0	51,0	14,0	25,0	55,0	0,520	21	YS-1-SW21L	12700944	38,0	51,0	14,0	72,0	102,0	0,520
22	YS-1-SW22	12700771	40,0	51,0	14,0	25,0	55,0	0,530	22	YS-1-SW22L	12700945	40,0	51,0	14,0	72,0	102,0	0,860
23	YS-1-SW23	12700772	40,0	51,0	14,0	25,0	55,0	0,520	23	YS-1-SW23L	12700946	40,0	51,0	14,0	72,0	102,0	0,840
24	YS-1-SW24	12700773	42,0	51,0	16,0	27,0	57,0	0,550	24	YS-1-SW24L	12700947	42,0	51,0	16,0	72,0	102,0	0,890
25	YS-1-SW25	12700774	43,0	51,0	16,0	27,0	57,0	0,550	25	YS-1-SW25L	12700948	43,0	51,0	16,0	72,0	102,0	0,900
26	YS-1-SW26	12700775	45,0	51,0	16,0	27,0	57,0	0,560	26	YS-1-SW26L	12700949	45,0	51,0	16,0	72,0	102,0	0,950
27	YS-1-SW27	12700776	46,0	51,0	16,0	27,0	57,0	0,570	27	YS-1-SW27L	12700950	46,0	51,0	16,0	72,0	102,0	0,970
28	YS-1-SW28	12700777	47,0	51,0	16,0	27,0	57,0	0,570	28	YS-1-SW28L	12700951	47,0	51,0	16,0	72,0	102,0	0,980
29	YS-1-SW29	12700778	48,0	51,0	18,0	29,0	59,0	0,590	29	YS-1-SW29L	12700952	48,0	51,0	18,0	72,0	102,0	0,990
30	YS-1-SW30	12700779	49,0	54,0	18,0	29,0	59,0	0,660	30	YS-1-SW30L	12700953	49,0	54,0	18,0	72,0	102,0	1,070
31	YS-1-SW31	12700780	50,0	54,0	18,0	29,0	59,0	0,660	31	YS-1-SW31L	12700954	50,0	54,0	18,0	72,0	102,0	1,090
32	YS-1-SW32	12700781	52,0	54,0	18,0	29,0	59,0	0,680	32	YS-1-SW32L	12700955	52,0	54,0	18,0	72,0	102,0	1,140
33	YS-1-SW33	12700782	54,0	54,0	18,0	29,0	59,0	0,690	33	YS-1-SW33L	12700956	54,0	54,0	18,0	72,0	102,0	1,190
34	YS-1-SW34	12700783	54,0	54,0	20,0	31,0	61,0	0,700	34	YS-1-SW34L	12700957	54,0	54,0	20,0	72,0	102,0	1,160
35	YS-1-SW35	12700784	54,0	54,0	20,0	31,0	61,0	0,690	35	YS-1-SW35L	12700958	54,0	54,0	20,0	72,0	102,0	1,130
36	YS-1-SW36	12700785	57,0	54,0	20,0	31,0	61,0	0,780	36	YS-1-SW36L	12700959	57,0	54,0	20,0	69,0	102,0	1,310
37	YS-1-SW37	12700786	57,0	54,0	20,0	31,0	61,0	0,760	37	YS-1-SW37L	12700960	57,0	54,0	20,0	69,0	102,0	1,280
38	YS-1-SW38	12700787	59,0	54,0	22,0	34,0	64,0	0,840	38	YS-1-SW38L	12700961	59,0	54,0	22,0	69,0	102,0	1,380
39	YS-1-SW39	12700788	60,0	54,0	22,0	34,0	64,0	0,880	39	YS-1-SW39L	12700962	60,0	54,0	22,0	69,0	102,0	1,410
40	YS-1-SW40	12700789	60,0	54,0	22,0	34,0	64,0	0,850	40	YS-1-SW40L	12700963	60,0	54,0	22,0	69,0	102,0	1,370
41	YS-1-SW41	12700790	62,0	54,0	22,0	34,0	64,0	0,900	41	YS-1-SW41L	12700964	62,0	54,0	22,0	69,0	102,0	1,450
42	YS-1-SW42	12700791	64,0	54,0	24,0	36,0	66,0	0,970	42	YS-1-SW42L	12700965	64,0	54,0	24,0	69,0	102,0	1,530
43	YS-1-SW43	12700792	65,0	54,0	24,0	36,0	66,0	0,980	43	YS-1-SW43L	12700966	66,0	54,0	24,0	69,0	102,0	1,610
44	YS-1-SW44	12700793	66,0	54,0	24,0	36,0	66,0	0,980	44	YS-1-SW44L	12700967	66,0	54,0	24,0	69,0	102,0	1,560
45	YS-1-SW45	12700794	68,0	54,0	24,0	36,0	66,0	1,030	45	YS-1-SW45L	12700968	68,0	54,0	24,0	69,0	102,0	1,650
46	YS-1-SW46	12700795	68,0	54,0	26,0	38,0	68,0	1,020	46	YS-1-SW46L	12700969	68,0	54,0	26,0	69,0	102,0	1,590
47	YS-1-SW47	12700796	71,0	54,0	26,0	38,0	68,0	1,120	47	YS-1-SW47L	12700970	71,0	54,0	26,0	67,0	102,0	1,730
48	YS-1-SW48	12700797	71,0	54,0	26,0	38,0	68,0	1,080	48	YS-1-SW48L	12700971	71,0	54,0	26,0	67,0	102,0	1,680
49	YS-1-SW49	12700798	74,0	54,0	28,0	40,0	70,0	1,170	49	YS-1-SW49L	12700972	74,0	54,0	28,0	80,0	110,0	1,960
50	YS-1-SW50	12700799	74,0	54,0	28,0	40,0	70,0	1,170	50	YS-1-SW50L	12700973	74,0	54,0	28,0	80,0	110,0	1,960
51	YS-1-SW51	12700800	77,0	62,0	28,0	40,0	70,0	1,400	51	YS-1-SW51L	12700974	77,0	62,0	28,0	75,0	110,0	2,230
52	YS-1-SW52	12700801	77,0	62,0	28,0	40,0	70,0	1,400	52	YS-1-SW52L	12700975	77,0	62,0	28,0	75,0	110,0	2,230
54	YS-1-SW54	12700802	79,0	62,0	28,0	40,0	70,0	1,420	54	YS-1-SW54L	12700976	79,0	62,0	28,0	75,0	110,0	2,260
55	YS-1-SW55	12700803	79,0	62,0	30,0	44,0	74,0	1,450	55	YS-1-SW55L	12700977	79,0	62,0	40,0	75,0	110,0	2,190
56	YS-1-SW56	12700804	80,0	62,0	30,0	44,0	74,0	1,460	56	YS-1-SW56L	12700978	80,0	62,0	30,0	75,0	110,0	2,210
57	YS-1-SW57	12700805	84,0	62,0	30,0	44,0	74,0	1,590	57	YS-1-SW57L	12700979	84,0	62,0	30,0	75,0	110,0	2,420
58	YS-1-SW58	12700806	84,0	62,0	30,0	44,0	74,0	1,590	58	YS-1-SW58L	12700980	84,0	62,0	30,0	75,0	110,0	2,420
59	YS-1-SW59	12700807	87,0	62,0	32,0	47,0	77,0	1,750	59	YS-1-SW59L	12700981	87,0	62,0	32,0	80,0	115,0	2,710
60	YS-1-SW60	12700808	87,0	62,0	32,0	47,0	77,0	1,750	60	YS-1-SW60L	12700982	87,0	62,0	32,0	80,0	115,0	2,710
62	YS-1-SW62	12700809	90,0	62,0	34,0	49,0	79,0	1,890	62	YS-1-SW62L	12700983	90,0	62,0	32,0	80,0	115,0	2,860
65	YS-1-SW65	12700810	93,0	62,0	36,0	51,0	81,0	1,990	65	YS-1-SW65L	12700984	93,0	62,0	34,0	80,0	115,0	2,900
70	YS-1-SW70	12700811	99,0	86,0	38,0	54,0	84,0	2,810	70	YS-1-SW70L	12700985	99,0	62,0	36,0	85,0	120,0	3,280
75	YS-1-SW75	12700812	104,0	86,0	40,0	56,0	89,0	3,080	75	YS-1-SW75L	12700986	104,0	86,0	38,0	85,0	120,0	4,170
80	YS-1-SW80	12700813	112,0	86,0	42,0	58,0	91,0	3,540	80	YS-1-SW80L	12700987	112,0	86,0	40,0	85,0	120,0	4,730
85	YS-1-SW85	12700814	119,0	86,0	44,0	60,0	93,0	3,850	85	YS-1-SW85L	12700988	119,0	86,0	42,0	90,0	125,0	5,270
90	YS-1-SW90	12700815	122,0	86,0	46,0	62,0	95,0	3,840	90	YS-1-SW90L	12700989	122,0	86,0	44,0	90,0	125,0	5,150
95	YS-1-SW95	12700816	130,0	106,0	48,0	64,0	97,0	5,130	95	YS-1-SW95L	12700990	130,0	106,0	46,0	95,0	130,0	6,910
100	YS-1-SW100	12700817	134,0	106,0	50,0	66,0	99,0	5,200	100	YS-1-SW100L	12700991	134,0	106,0	48,0	95,0	130,0	6,880
105	YS-1-SW105	12700818	142,0	106,0	52,0	68,0	101,0	5,830	105	YS-1-SW105L	12700992	142,0	106,0	50,0	95,0	130,0	7,580
110	YS-1-SW110	12700819	147,0	106,0	54,0	72,0	105,0	6,000	110	YS-1-SW110L	12700993	147,0	106,0	52,0	105,0	140,0	8,380
115	YS-1-SW115	12700820	153,0	127,0	56,0	72,0	105,0	7,360	115	YS-1-SW115L	12700994	153,0	127,0	54,0	105,0	140,0	9,810



Impact-Sockets and Accessories



1 1/2"

1 1/2" - square-drive standard version

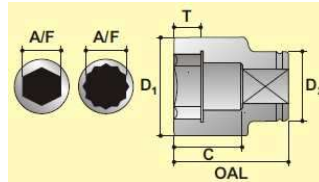
1 1/2" - square-drive long version

SW	Model	Article	D1	D2	T	C	OAL	Weight (kg)	SW	Model	Article	D1	D2	T	C	OAL	Weight (kg)
			(mm)	(mm)	(mm)	(mm)	(mm)					(mm)	(mm)	(mm)	(mm)		
32	YS-1.1/2-SW32	12700821	58,0	82,0	19,0	33,0	75,0	1,910	32	YS-1.1/2-SW32L	12700995	58,0	82,0	19,0	78,0	120,0	2,550
33	YS-1.1/2-SW33	12700822	59,0	82,0	19,0	33,0	75,0	1,910	33	YS-1.1/2-SW33L	12700996	59,0	82,0	19,0	78,0	120,0	2,570
34	YS-1.1/2-SW34	12700823	60,0	82,0	20,0	33,0	75,0	1,910	34	YS-1.1/2-SW34L	12700997	60,0	82,0	20,0	78,0	120,0	2,580
35	YS-1.1/2-SW35	12700824	62,0	82,0	21,0	35,0	77,0	1,970	35	YS-1.1/2-SW35L	12700998	62,0	82,0	21,0	78,0	120,0	2,650
36	YS-1.1/2-SW36	12700825	63,0	82,0	21,0	35,0	77,0	1,970	36	YS-1.1/2-SW36L	12700999	63,0	82,0	21,0	78,0	120,0	2,670
37	YS-1.1/2-SW37	12700826	64,0	82,0	21,0	35,0	77,0	1,970	37	YS-1.1/2-SW37L	12701000	64,0	82,0	21,0	78,0	120,0	2,690
38	YS-1.1/2-SW38	12700827	65,0	84,0	21,0	35,0	77,0	2,070	38	YS-1.1/2-SW38L	12701001	65,0	82,0	21,0	78,0	120,0	2,700
39	YS-1.1/2-SW39	12700828	67,0	84,0	22,0	36,0	78,0	2,120	39	YS-1.1/2-SW39L	12701002	67,0	84,0	22,0	78,0	120,0	2,910
40	YS-1.1/2-SW40	12700829	68,0	84,0	22,0	36,0	78,0	2,130	40	YS-1.1/2-SW40L	12701003	68,0	84,0	22,0	78,0	120,0	2,920
41	YS-1.1/2-SW41	12700830	69,0	84,0	23,0	37,0	79,0	2,140	41	YS-1.1/2-SW41L	12701004	69,0	84,0	23,0	83,0	125,0	3,030
42	YS-1.1/2-SW42	12700831	70,0	84,0	23,0	37,0	79,0	2,150	42	YS-1.1/2-SW42L	12701005	70,0	84,0	23,0	83,0	125,0	3,050
43	YS-1.1/2-SW43	12700832	71,0	84,0	24,0	38,0	80,0	2,170	43	YS-1.1/2-SW43L	12701006	71,0	84,0	24,0	83,0	125,0	3,070
44	YS-1.1/2-SW44	12700833	73,0	84,0	24,0	38,0	80,0	2,200	44	YS-1.1/2-SW44L	12701007	73,0	84,0	24,0	83,0	125,0	3,160
45	YS-1.1/2-SW45	12700834	74,0	84,0	25,0	39,0	81,0	2,220	45	YS-1.1/2-SW45L	12701008	74,0	84,0	25,0	83,0	125,0	3,170
46	YS-1.1/2-SW46	12700835	75,0	86,0	26,0	40,0	82,0	2,350	46	YS-1.1/2-SW46L	12701009	75,0	86,0	26,0	83,0	125,0	3,300
47	YS-1.1/2-SW47	12700836	77,0	86,0	26,0	40,0	82,0	2,380	47	YS-1.1/2-SW47L	12701010	77,0	86,0	26,0	83,0	125,0	3,390
48	YS-1.1/2-SW48	12700837	78,0	86,0	26,0	40,0	82,0	2,390	48	YS-1.1/2-SW48L	12701011	78,0	86,0	26,0	83,0	125,0	3,410
49	YS-1.1/2-SW49	12700838	79,0	86,0	27,0	41,0	83,0	2,410	49	YS-1.1/2-SW49L	12701012	79,0	86,0	27,0	83,0	125,0	3,420
50	YS-1.1/2-SW50	12700839	80,0	86,0	27,0	41,0	83,0	2,420	50	YS-1.1/2-SW50L	12701013	80,0	86,0	27,0	83,0	125,0	3,440
51	YS-1.1/2-SW51	12700840	81,0	86,0	27,0	41,0	83,0	2,420	51	YS-1.1/2-SW51L	12701014	81,0	86,0	27,0	83,0	125,0	3,460
52	YS-1.1/2-SW52	12700841	82,0	86,0	28,0	42,0	84,0	2,450	52	YS-1.1/2-SW52L	12701015	82,0	86,0	28,0	88,0	130,0	3,640
54	YS-1.1/2-SW54	12700842	84,0	86,0	28,0	42,0	84,0	2,470	54	YS-1.1/2-SW54L	12701016	84,0	86,0	28,0	88,0	130,0	3,670
55	YS-1.1/2-SW55	12700843	86,0	86,0	29,0	43,0	85,0	2,520	55	YS-1.1/2-SW55L	12701017	86,0	86,0	29,0	88,0	130,0	3,800
56	YS-1.1/2-SW56	12700844	88,0	86,0	29,0	43,0	85,0	2,710	56	YS-1.1/2-SW56L	12701018	88,0	86,0	29,0	88,0	130,0	4,120
57	YS-1.1/2-SW57	12700845	88,0	86,0	29,0	43,0	85,0	2,670	57	YS-1.1/2-SW57L	12701019	88,0	86,0	29,0	88,0	130,0	4,050
58	YS-1.1/2-SW58	12700846	90,0	86,0	30,0	44,0	86,0	2,780	58	YS-1.1/2-SW58L	12701020	90,0	86,0	30,0	88,0	130,0	4,040
59	YS-1.1/2-SW59	12700847	90,0	86,0	32,0	46,0	88,0	2,750	59	YS-1.1/2-SW59L	12701021	90,0	86,0	32,0	88,0	130,0	4,040
60	YS-1.1/2-SW60	12700848	90,0	86,0	32,0	46,0	88,0	2,750	60	YS-1.1/2-SW60L	12701022	94,0	86,0	32,0	88,0	130,0	4,350
61	YS-1.1/2-SW61	12700849	94,0	86,0	32,0	46,0	88,0	2,920	61	YS-1.1/2-SW61L	12701023	94,0	86,0	32,0	88,0	130,0	4,350
62	YS-1.1/2-SW62	12700850	94,0	86,0	32,0	46,0	88,0	2,920	62	YS-1.1/2-SW62L	12701024	99,0	86,0	34,0	98,0	140,0	5,050
65	YS-1.1/2-SW65	12700851	98,0	86,0	34,0	48,0	90,0	3,090	65	YS-1.1/2-SW65L	12701025	101,0	86,0	36,0	98,0	140,0	5,110
67	YS-1.1/2-SW67	12700852	101,0	86,0	36,0	50,0	92,0	3,260	67	YS-1.1/2-SW67L	12701026	101,0	86,0	36,0	98,0	140,0	5,110
70	YS-1.1/2-SW70	12700853	104,0	86,0	38,0	53,0	95,0	3,400	70	YS-1.1/2-SW70L	12701027	104,0	86,0	38,0	98,0	140,0	5,230
73	YS-1.1/2-SW73	12700854	108,0	86,0	40,0	55,0	97,0	3,710	73	YS-1.1/2-SW73L	12701028	109,0	86,0	40,0	98,0	140,0	3,710
75	YS-1.1/2-SW75	12700855	111,0	86,0	42,0	59,0	101,0	4,040	75	YS-1.1/2-SW75L	12701029	111,0	86,0	42,0	108,0	150,0	6,270
76	YS-1.1/2-SW76	12700856	118,0	86,0	44,0	61,0	103,0	4,410	76	YS-1.1/2-SW76L	12701030	118,0	86,0	44,0	108,0	150,0	6,820
80	YS-1.1/2-SW80	12700857	118,0	86,0	44,0	61,0	103,0	4,410	80	YS-1.1/2-SW80L	12701031	118,0	86,0	44,0	108,0	150,0	6,820
85	YS-1.1/2-SW85	12700858	124,0	86,0	48,0	66,0	108,0	4,880	85	YS-1.1/2-SW85L	12701032	124,0	86,0	48,0	118,0	160,0	7,790
86	YS-1.1/2-SW86	12700859	124,0	86,0	50,0	68,0	110,0	4,820	86	YS-1.1/2-SW86L	12701033	124,0	86,0	50,0	118,0	160,0	7,570
90	YS-1.1/2-SW90	12700860	130,0	106,0	53,0	71,0	113,0	6,240	90	YS-1.1/2-SW90L	12701034	130,0	106,0	53,0	128,0	170,0	9,680
95	YS-1.1/2-SW95	12700861	135,0	106,0	56,0	74,0	116,0	6,560	95	YS-1.1/2-SW95L	12701035	135,0	106,0	56,0	128,0	170,0	9,970
100	YS-1.1/2-SW100	12700862	143,0	106,0	59,0	77,0	119,0	7,480	100	YS-1.1/2-SW100L	12701036	143,0	106,0	59,0	128,0	170,0	11,030
105	YS-1.1/2-SW105	12700863	148,0	106,0	62,0	82,0	124,0	7,930	105	YS-1.1/2-SW105L	12701037	148,0	106,0	62,0	138,0	180,0	11,990
110	YS-1.1/2-SW110	12700864	154,0	106,0	65,0	85,0	127,0	8,510	110	YS-1.1/2-SW110L	12701038	154,0	106,0	65,0	138,0	180,0	12,610
115	YS-1.1/2-SW115	12700865	161,0	127,0	68,0	88,0	130,0	10,480	115	YS-1.1/2-SW115L	12701039	161,0	127,0	68,0	138,0	180,0	14,690
120	YS-1.1/2-SW120	12700866	168,0	127,0	71,0	91,0	133,0	11,380	120	YS-1.1/2-SW120L	12701040	167,0	127,0	71,0	148,0	190,0	16,250
125	YS-1.1/2-SW125	12700867	174,0	127,0	74,0	96,0	138,0	12,310	125	YS-1.1/2-SW125L	12701041	174,0	127,0	74,0	148,0	190,0	17,350
130	YS-1.1/2-SW130	12700868	180,0	127,0	77,0	99,0	141,0	13,090	130	YS-1.1/2-SW130L	12701042	180,0	127,0	77,0	148,0	190,0	18,110



Impact-Sockets and Accessories

2 1/2"



2 1/2" - square drive standard version

2 1/2" - square drive long version

SW	Model	Article	D1 (mm)	D2 (mm)	T (mm)	C (mm)	OAL (mm)	Weight (kg)	SW	Model	Article	D1 (mm)	D2 (mm)	T (mm)	C (mm)	OAL (mm)	Weight (kg)
43	YS-2.1/2-SW43	12700869	86,0	116,0	28,0	46,0	104,0	5,240	43	YS-2.1/2-SW43L	12701043	86,0	106,0	26,0	110,0	168,0	6,430
44	YS-2.1/2-SW44	12700870	86,0	116,0	28,0	46,0	104,0	5,200	44	YS-2.1/2-SW44L	12701044	86,0	106,0	26,0	110,0	168,0	6,360
45	YS-2.1/2-SW45	12700871	86,0	116,0	28,0	46,0	104,0	5,150	45	YS-2.1/2-SW45L	12701045	86,0	106,0	26,0	110,0	168,0	6,290
46	YS-2.1/2-SW46	12700872	86,0	116,0	28,0	46,0	104,0	5,110	46	YS-2.1/2-SW46L	12701046	86,0	106,0	27,0	110,0	168,0	6,220
47	YS-2.1/2-SW47	12700873	86,0	116,0	28,0	46,0	104,0	5,060	47	YS-2.1/2-SW47L	12701047	86,0	106,0	28,0	110,0	168,0	6,140
48	YS-2.1/2-SW48	12700874	86,0	116,0	28,0	46,0	104,0	5,010	48	YS-2.1/2-SW48L	12701048	86,0	116,0	28,0	110,0	168,0	7,030
49	YS-2.1/2-SW49	12700875	86,0	116,0	28,0	46,0	104,0	4,970	49	YS-2.1/2-SW49L	12701049	86,0	116,0	28,0	110,0	168,0	6,950
50	YS-2.1/2-SW50	12700876	86,1	116,0	28,0	46,0	104,0	4,920	50	YS-2.1/2-SW50L	12701050	86,0	116,0	29,0	110,0	168,0	6,860
51	YS-2.1/2-SW51	12700877	90,0	116,0	29,0	46,0	104,0	5,070	51	YS-2.1/2-SW51L	12701051	90,0	116,0	29,0	110,0	168,0	7,240
52	YS-2.1/2-SW52	12700878	90,0	116,0	29,0	46,0	104,0	5,020	52	YS-2.1/2-SW52L	12701052	90,0	116,0	29,0	110,0	168,0	7,160
54	YS-2.1/2-SW54	12700879	92,5	124,0	30,0	46,0	104,0	5,870	54	YS-2.1/2-SW54L	12701053	92,5	124,0	30,0	110,0	168,0	8,110
55	YS-2.1/2-SW55	12700880	93,8	124,0	32,0	52,0	110,0	6,080	55	YS-2.1/2-SW55L	12701054	93,8	124,0	32,0	110,0	168,0	8,180
56	YS-2.1/2-SW56	12700881	95,0	124,0	32,0	52,0	110,0	6,100	56	YS-2.1/2-SW56L	12701055	95,0	124,0	32,0	117,0	175,0	8,510
57	YS-2.1/2-SW57	12700882	96,3	124,0	32,0	52,0	110,0	6,120	57	YS-2.1/2-SW57L	12701056	96,3	124,0	32,0	117,0	175,0	8,580
58	YS-2.1/2-SW58	12700883	97,5	124,0	32,0	52,0	110,0	6,140	58	YS-2.1/2-SW58L	12701057	97,5	124,0	32,0	117,0	175,0	8,650
59	YS-2.1/2-SW59	12700884	98,8	127,0	34,0	54,0	112,0	6,550	59	YS-2.1/2-SW59L	12701058	98,8	127,0	34,0	117,0	175,0	9,040
60	YS-2.1/2-SW60	12700885	100,0	127,0	36,0	56,0	114,0	6,640	60	YS-2.1/2-SW60L	12701059	100,0	127,0	36,0	117,0	175,0	9,100
62	YS-2.1/2-SW62	12700886	103,0	127,0	36,0	56,0	114,0	6,690	62	YS-2.1/2-SW62L	12701060	103,0	127,0	36,0	127,0	185,0	9,660
65	YS-2.1/2-SW65	12700887	106,0	127,0	38,0	58,0	116,0	6,830	65	YS-2.1/2-SW65L	12701061	106,0	127,0	38,0	127,0	185,0	9,900
67	YS-2.1/2-SW67	12700888	109,0	127,0	38,0	58,0	116,0	6,890	67	YS-2.1/2-SW67L	12701062	109,0	127,0	38,0	127,0	185,0	10,130
70	YS-2.1/2-SW70	12700889	113,0	127,0	40,0	60,0	118,0	7,050	70	YS-2.1/2-SW70L	12701063	113,0	127,0	40,0	127,0	185,0	10,370
73	YS-2.1/2-SW73	12700890	116,0	127,0	40,0	60,0	118,0	7,130	73	YS-2.1/2-SW73L	12701064	116,0	127,0	40,0	127,0	185,0	10,620
75	YS-2.1/2-SW75	12700891	119,0	127,0	42,0	64,0	122,0	7,380	75	YS-2.1/2-SW75L	12701065	119,0	127,0	42,0	127,0	185,0	10,780
76	YS-2.1/2-SW76	12700892	120,0	127,0	44,0	64,0	122,0	7,390	76	YS-2.1/2-SW76L	12701066	120,0	127,0	44,0	127,0	185,0	10,850
80	YS-2.1/2-SW80	12700893	125,0	127,0	44,0	64,0	122,0	7,500	80	YS-2.1/2-SW80L	12701067	125,0	127,0	44,0	127,0	185,0	11,200
85	YS-2.1/2-SW85	12700894	129,0	127,0	48,0	68,0	126,0	8,060	85	YS-2.1/2-SW85L	12701068	129,0	127,0	48,0	137,0	195,0	12,420
86	YS-2.1/2-SW86	12700895	132,0	127,0	50,0	68,0	129,0	8,590	86	YS-2.1/2-SW86L	12701069	132,0	127,0	50,0	134,0	195,0	13,030
90	YS-2.1/2-SW90	12700896	136,0	127,0	52,0	70,0	130,0	8,870	90	YS-2.1/2-SW90L	12701070	136,0	127,0	52,0	135,0	195,0	13,400
95	YS-2.1/2-SW95	12700897	142,0	127,0	54,0	72,0	132,0	9,370	95	YS-2.1/2-SW95L	12701071	142,0	127,0	54,0	139,0	199,0	14,470
100	YS-2.1/2-SW100	12700898	148,0	127,0	56,0	78,0	138,0	10,200	100	YS-2.1/2-SW100L	12701072	148,0	127,0	56,0	135,0	195,0	15,070
105	YS-2.1/2-SW105	12700899	154,0	127,0	60,0	82,0	142,0	10,990	105	YS-2.1/2-SW105L	12701073	154,0	127,0	60,0	145,0	205,0	16,330
110	YS-2.1/2-SW110	12700900	161,0	127,0	64,0	86,0	146,0	11,890	110	YS-2.1/2-SW110L	12701074	161,0	127,0	64,0	149,0	109,0	17,670
115	YS-2.1/2-SW115	12700901	165,0	127,0	67,0	89,0	149,0	12,190	115	YS-2.1/2-SW115L	12701075	165,0	127,0	67,0	150,0	210,0	17,720
120	YS-2.1/2-SW120	12700902	173,0	127,0	70,0	92,0	152,0	13,300	120	YS-2.1/2-SW120L	12701076	173,0	127,0	70,0	150,0	210,0	19,230
125	YS-2.1/2-SW125	12700903	179,0	127,0	73,0	95,0	153,0	13,680	125	YS-2.1/2-SW125L	12701077	179,0	127,0	73,0	157,0	215,0	20,570
130	YS-2.1/2-SW130	12700904	185,0	127,0	76,0	98,0	156,0	14,520	130	YS-2.1/2-SW130L	12701078	185,0	127,0	76,0	157,0	215,0	21,440
135	YS-2.1/2-SW135	12700905	192,0	152,0	79,0	103,0	161,0	18,370	135	YS-2.1/2-SW135L	12701079	192,0	152,0	79,0	162,0	220,0	25,670
140	YS-2.1/2-SW140	12700906	196,0	152,0	82,0	106,0	164,0	18,580	140	YS-2.1/2-SW140L	12701080	196,0	152,0	82,0	167,0	225,0	26,220
145	YS-2.1/2-SW145	12700907	204,0	152,0	85,0	109,0	167,0	20,220	145	YS-2.1/2-SW145L	12701081	204,0	152,0	85,0	172,0	230,0	28,820
150	YS-2.1/2-SW150	12700908	211,0	152,0	88,0	112,0	170,0	21,370	150	YS-2.1/2-SW150L	12701082	211,0	152,0	88,0	172,0	230,0	30,380
155	YS-2.1/2-SW155	12700909	215,0	152,0	91,0	117,0	175,0	22,040	155	YS-2.1/2-SW155L	12701083	215,0	152,0	91,0	177,0	235,0	30,970
160	YS-2.1/2-SW160	12700910	223,0	152,0	94,0	120,0	178,0	23,920	160	YS-2.1/2-SW160L	12701084	223,0	152,0	94,0	177,0	235,0	33,490
165	YS-2.1/2-SW165	12700911	229,0	175,0	96,0	122,0	180,0	27,190	165	YS-2.1/2-SW165L	12701085	229,0	175,0	96,0	182,0	240,0	37,530
170	YS-2.1/2-SW170	12700912	235,0	175,0	98,0	126,0	184,0	28,930	170	YS-2.1/2-SW170L	12701086	235,0	175,0	98,0	182,0	240,0	39,220
175	YS-2.1/2-SW175	12700913	242,0	175,0	100,0	128,0	186,0	30,200	175	YS-2.1/2-SW175L	12701087	242,0	175,0	100,0	182,0	240,0	40,860
180	YS-2.1/2-SW180	12700914	246,0	175,0	103,0	131,0	189,0	30,280	180	YS-2.1/2-SW180L	12701088	246,0	175,0	103,0	187,0	245,0	41,630
185	YS-2.1/2-SW185	12700915	254,0	175,0	106,0	134,0	192,0	32,540	185	YS-2.1/2-SW185L	12701089	254,0	175,0	106,0	192,0	250,0	45,610
190	YS-2.1/2-SW190	12700916	261,0	175,0	109,0	137,0	195,0	34,040	190	YS-2.1/2-SW190L	12701090	261,0	175,0	109,0	192,0	250,0	46,930
195	YS-2.1/2-SW195	12700917	265,0	175,0	112,0	142,0	200,0	34,800	195	YS-2.1/2-SW195L	12701091	265,0	175,0	112,0	199,0	257,0	48,280
200	YS-2.1/2-SW200	12700918	273,0	175,0	115,0	145,0	203,0	37,490	200	YS-2.1/2-SW200L	12701092	273,0	175,0	115,0	202,0	260,0	51,890
210	YS-2.1/2-SW210	12700919	285,0	175,0	120,0	150,0	208,0	39,910	210	YS-2.1/2-SW210L	12701093	285,0	175,0	120,0	202,0	260,0	54,710
215	YS-2.1/2-SW215	12700920	292,0	175,0	123,0	153,0	211,0	41,940	215	YS-2.1/2-SW215L	12701094	292,0	175,0	123,0	212,0	270,0	59,420
225	YS-2.1/2-SW225	12700921	304,0	175,0	130,0	160,0	218,0	45,710	225	YS-2.1/2-SW225L	12701095	304,0	175,0	130,0	220,0	270,0	62,420



Hydraulic Pumps for Torque Wrenches - Electric



REP1000 with Mono Port



REP1000 with Quadra-Port

Technical Features

- Quadra-Port Multi-Port Manifold (Max. 4 Ports).
- Cool running continuous duty axial piston pump.
- Single phase induction motor.
- 115V and 230V available.
- Starts under full load.
- Runs on reduced voltage.
- Quiet operation (approx. 80 dBA @ 10,000 PSI).
- Rugged remote pendant to control motor and valve.
- Easily adjustable pressure control knob.
- Auto-dump relieves oil pressure from hoses.
- Completely enclosed motor housing and electronics.
- 2 Gallon oil reservoir.
- Precise PSI/BAR pressure gauge.
- Quick-connect no-drip couplers with safety locking collar.
- Supplied with dual non-conductive high pressure hose with couplers.



Resvr. Size (Gal.)	Valve		Motor Specifications	Flow Rate @ 115 VAC		Weight	
	Control	Type		600 psi	10,000 psi	kg	lbs
2	Solenoid	3 Way/2 Pos.	1.5 HP Single Phase	11.47 lpm	0.82 lpm	38	84

Retract pressure is preset at 1,300 PSI.

Hydraulic Pumps for Torque Wrenches - Pneumatic



RAP1000 with Mono Port



RAP1000 with Quadra-Port

Technical Features

- Quadra-Port Multi-Port Manifold (Max. 4 Ports).
- Cool running continuous duty axial piston pump.
- Powerful 1.5HP industrial duty air motor.
- Runs on 50 cfm / 80 PSI of air.
- Quiet operation (approx. 80 dBA @ 10,000 PSI).
- Rugged remote pendant to control motor and valve
- Easily adjustable pressure control knob.
- Auto-dump relieves oil pressure from hoses.
- Filter-lubricator for long trouble free operation.
- 2 Gallon oil reservoir.
- Precise PSI/BAR pressure gauge.
- Quick-connect no-drip couplers with safety locking collar.
- Supplied with dual non-conductive high pressure hose with couplers.



Resvr. Size (Gal.)	Valve		Motor Specifications	Flow Rate @ 50 cfm/ 90psi		Weight	
	Control	Type		600 psi	10,000 psi	kg	lbs
2	Solenoid	3 Way/2 Pos.	1.5 HP Rotary Air	9.83 lpm	0.82 lpm	27	59

Retract pressure is preset at 1,300 PSI.
Standard Roll Bar Dimensions : 25-7/16" L x 20-1/2" H x 196-3/4" W

Hydraulic Pumps for Torque Wrenches

The primary focus of the Quadra-Port System is to eliminate the common "Criss-Cross" bolt tightening pattern that causes crushing or over torquing of gaskets. With the Quadra-Port System multi Roark Tools torque wrenches are utilized along with our Quadra-Port Hydraulic Pumps.

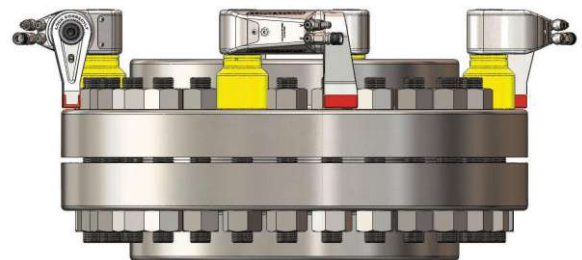
Once the Roark Tools wrenches are in place a single operator can apply even load at the push of a button. The Quadra-Port System will evenly close the gap and apply equal torque to + 3% accuracy!



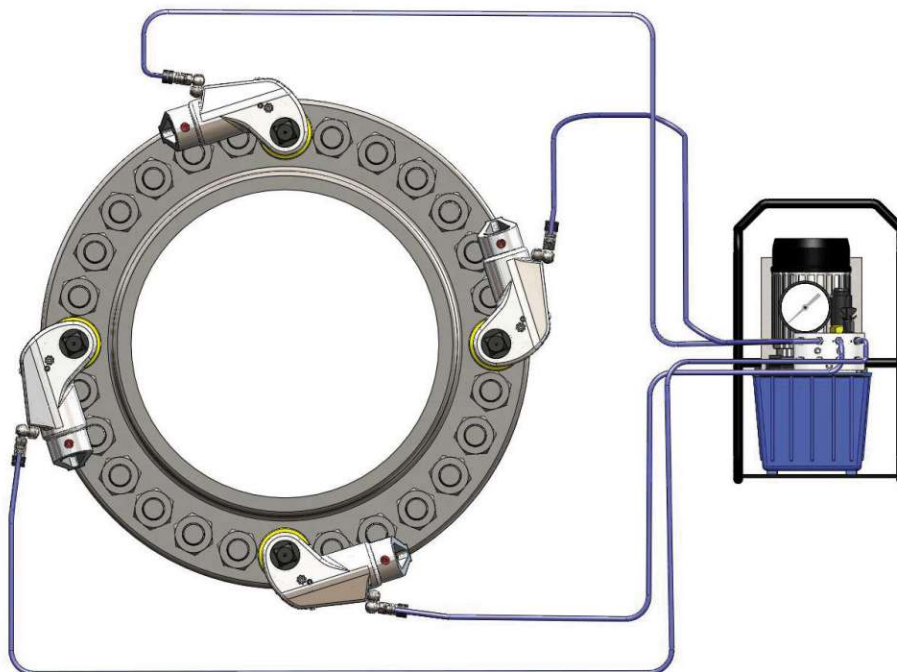
Quadra-Port - Ensures Even Load Distribution !



Uneven load using one tool



Even and precise loading with Quadra-Port 4 tool system.



Quadra-Port 4-tool system

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