

hydratight®

Torque Solutions



Because ensuring a leak-free solution is critical. It has to be Hydratight.

For more than 100 years, Hydratight has provided world-class bolted joint solutions, assessing and managing joints to ensure leak-free start-ups. Today, we continue to set international standards in joint integrity—but we're so much more than just a bolting and on-site machining company.

Because even the tiniest leak can be costly and time consuming to repair, we manage every joint on a project for leak-free start-ups and production, which in turn removes the threat of environmental impact caused by unsafe joints. Safety continues to be the most important aspect of our business. We are a global organization making a real difference to the industries and communities we work in, committed to improving safety, operational efficiency and uptime.

Because you require the support of an innovative partner committed to your success, we not only offer unrivalled service on a global scale, including customer training and software development; but also design and manufacture quality tools and equipment for bolted joint solutions to the highest standards. Our certified teams are dedicated to working closely with you, assessing and managing every joint on your project to prevent leaks from ever occurring, year in, year out.

Because you value safety and reliability, we work to ISO 9001, ISO 14001 and OHSAS 18001 standards in everything we produce, from manufacturing torque and tension bolting equipment to mechanical connectors, from on-site service to creating custom solutions in line with client specifications.

It means that whenever you need a complete joint integrity solution, whichever industry sector you're in, you can rely on us to get it 100% right first time, every time. **This is why it has to be Hydratight.**



Engineering Driven Safety Focused Solutions



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Torque Products

At Hydratight we have a strong reputation for our range of hydraulic torque wrenches—based on a steel alloy, they are strong, reliable and designed with the user in mind.



We design and manufacture all of our Hydraulic Wrenches in accordance with our documented and registered QA system, and maintain full control throughout the build process. We also offer a choice of interchangeable tools; with the square drive being replaced by a low profile cassette to provide increased flexibility, or a dedicated square drive and low profile option so that weight and size can be optimal.



Hydraulic Torque Wrenches

Hydratight's series of lightweight hydraulic torque wrenches has been designed to tighten and loosen nuts and bolts for professional applications across the oil & gas, powergen and industrial markets.

Safe

- Innovative design that completely encloses all moving parts and minimizes pinch points

Fast

- 30–35° of operating stroke provides added productivity while avoiding “tool lock on” which is common with some torque wrench designs

Versatile

- Interchangeable head design
- Power head / square drive combination for flexible use with standard impact quality sockets
- Power head / hex head combination for limited height in line solutions
- Wide range of hex sizes available for all applications
- 360° movement of reaction arm with simple dial lock for rapid change
- For use topside and subsea

Compact

- Designed to give optimum strength to weight and torque to weight ratios
- Minimum nose radius for trouble-free tool fit

Durable

- Simple robust design with a minimum of moving parts
- Proven to perform even in the harshest environments
- RSL2 – RSL20 model bodies and reaction arms are manufactured from high strength stainless steel. Reaction arms are available in weld-able cast steel. RSL30 bodies are made from high strength steel and reaction arms are made from high strength aluminium

Dependable

- Just three moving parts for reduced maintenance and covered by a three year warranty

Available as:

- Individual modules – power head, square drive head or low clearance hex heads

Complete Tools:

- Square Drive Set (SDS) – power head, square drive wrench head, reaction arm
- Hex Wrench Set – power head, hex wrench head, reaction arm; full range of hex, bi-hex and special made to order
- PARKER ‘screw’ type connection as standard, high flow—quick release CEJN ‘none screw’ type connections also available

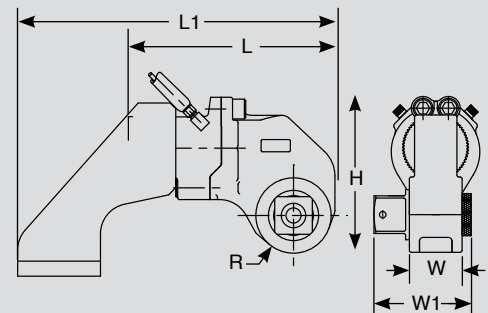


Square Drive Wrench Dimensions and Specifications



Square Drive Wrench Accessories

- Sockets – full range of hex, bi-hex, castellated and special made to order
- Direct-drive hexagon bits for socket head screws
- Direct-drive sockets, peg drive sockets, allen head driver



Square Drive Dimensions and Specifications

Part Number	Model	Wrench Head	Max. Torque Output		Sq. Drive Size	W (width)		W1 (width1)		H (height)		L (length)		L1 (length1)		R (radius)		Weight					
																		Power Head		Reaction Arm		Square Drive Head	
			lb-ft	N-m	in	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	lb	kg	lb	kg
A0102B0012AA-SK	RSL2	Sq. Drive	1408	1909	0.75	1.25	32	2.30	58	4.48	114	6.29	160	7.45	189	0.94	24	3.4	1.55	1.0	0.45	2.8	1.27
A0202B0100AA-SK	RSL4	Sq. Drive	3080	4176	1.00	1.50	38	2.88	73	5.57	141	7.67	195	10.30	262	1.25	32	5.6	2.55	2.2	1.00	5.2	2.36
A0302A0108AA-SK	RSL6	Sq. Drive	5303	7190	1.50	1.75	45	3.71	94	6.42	163	9.27	235	11.67	296	1.52	39	8.9	4.05	4.0	1.81	9.1	4.14
A0402B0108AA-SK	RSL8	Sq. Drive	7862	10659	1.50	2.40	61	4.14	105	6.65	169	9.47	241	11.78	300	1.52	39	10.6	4.82	4.3	1.95	11.6	5.27
A0502B0108AA-SK	RSL14	Sq. Drive	11154	15123	1.50	2.50	64	4.63	118	7.93	201	11.20	284	12.40	315	1.88	48	11.6	5.27	6.6	3.00	18.4	8.36
A0602B0208AA-SK	RSL20	Sq. Drive	18843	25547	2.50	3.25	83	6.38	162	9.48	241	13.46	342	18.97	482	2.50	64	20.0	9.09	15.7	7.12	28.9	13.14
A0702B0208AA-SK	RSL30	Sq. Drive	28002	37965	2.50	3.50	89	6.54	166	10.35	263	14.09	358	21.07	536	2.50	64	22.0	10.00	11.1	5.03	39.3	17.86

These part numbers represent Square Drive Wrenches with Parker Quick Connects, Moly Paste, no swivels, and with no certifications. For additional options, please contact solutions@hydratight.com.

Hex Wrench Accessories

- Inserts—full range of hex, bi-hex and special made to order
- Hexagon reducing inserts, made to order reaction arms, hose swivels—individual and multi-directional



RSL Reaction Tube

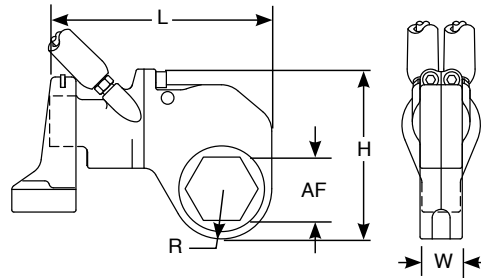
The Reaction Tube is used in place of the standard Reaction Arm to extend the reaction point of the wrench along the axis of the Power head. This tool may be necessary on applications where the standard reaction arm will not reach a suitable reaction point.

- Only usable with RSL Hex wrench
- One piece steel design—durable and simple
- Fits over powerhead of wrench and held in place with a quick turn of a bolt retainer
- Comes in any length, standard lengths are 6" (152.4 mm) increments from 6" to 48" (152.4 mm to 1219.2 mm)
- When ordering, proper length is determined by placing the tool on the application and measuring from Power head end-face to the desired reaction point. Then add the applicable length from the adjacent table to this measurement to guarantee that the Reaction Tube will completely and securely abut against the reaction point.

Reaction Tube Added Lengths

Model	in
RSL2	3.00
RSL4	3.75
RSL6	4.00
RSL8	4.00
RSL14	4.00
RSL20	4.50
RSL30	6.00

Hex Wrench Dimensions and Specifications



Hex Wrench Model and Housing	Max. AF Size		Max. Torque Output		R		L		W		H		Weight	
	mm	in	N-m	lb-ft	mm	in	mm	in	mm	in	mm	in	kg	lb
RSL2H014	22	7/8	433.9	320	20.1	0.79	152.4	6.00	31.8	1.25	110.0	4.33	1.00	2.20
101	27	1-1/16	867.7	640	24.1	0.95	153.7	6.05	31.8	1.25	114.3	4.50	1.01	2.23
104	31	1-1/4	867.7	640	26.2	1.03	155.4	6.12	31.8	1.25	116.1	4.57	1.02	2.25
107	36	1-7/16	1220.2	900	29.2	1.15	158.5	6.24	31.8	1.25	119.1	4.69	1.07	2.35
110	42	1-5/8	1909.0	1408	33.4	1.31	162.8	6.41	31.8	1.25	123.4	4.86	1.23	2.70
113	46	1-13/16	1909.0	1408	35.5	1.40	164.8	6.49	31.8	1.25	125.5	4.94	1.23	2.70
200	50	2	1909.0	1408	37.7	1.48	167.1	6.58	31.8	1.25	127.8	5.03	1.23	2.70
203	55	2-3/16	1909.0	1408	40.1	1.58	169.7	6.68	31.8	1.25	130.3	5.13	1.23	2.70
206	60	2-3/8	1909.0	1408	43.2	1.70	172.5	6.79	31.8	1.25	133.1	5.24	1.25	2.75
RSL4H104	32	1-1/4	813.5	600	26.2	1.03	189.2	7.45	35.1	1.38	135.9	5.35	1.52	3.35
107	36	1-7/16	1220.2	900	30.0	1.18	193.5	7.62	35.1	1.38	139.4	5.49	1.59	3.50
110	41	1-5/8	1627.0	1200	33.5	1.32	197.4	7.77	35.1	1.38	143.0	5.63	1.75	3.85
113	46	1-13/16	2576.0	1900	37.3	1.47	199.9	7.87	35.1	1.38	146.8	5.78	1.82	4.00
200	50	2	3525.1	2600	40.6	1.60	204.2	8.04	35.1	1.38	150.4	5.92	2.05	4.50
203	55	2-3/16	4175.9	3080	44.7	1.76	207.3	8.16	35.1	1.38	154.4	6.08	2.11	4.65
206	60	2-3/8	4175.9	3080	46.7	1.84	209.6	8.25	35.1	1.38	156.2	6.15	2.17	4.77
209	65	2-9/16	4175.9	3080	49.5	1.95	206.8	8.14	35.1	1.38	159.0	6.26	2.07	4.55
212	70	2-3/4	4175.9	3080	51.8	2.04	209.0	8.23	35.1	1.38	161.5	6.36	2.01	4.43
215	74	2-15/16	4175.9	3080	54.9	2.16	211.8	8.34	35.1	1.38	166.1	6.54	2.14	4.70
RSL6H200	50	2	3525.1	2600	40.9	1.61	230.6	9.08	44.5	1.75	165.6	6.52	2.98	6.55
203	55	2-3/16	4745.3	3500	43.4	1.71	233.2	9.18	44.5	1.75	168.1	6.62	2.95	6.50
206	60	2-3/8	6101.1	4500	47.5	1.87	237.2	9.34	44.5	1.75	172.2	6.78	3.18	7.00
209	65	2-9/16	7189.8	5303	51.1	2.01	240.8	9.48	44.5	1.75	175.8	6.92	3.18	6.99
212	70	2-3/4	7189.8	5303	54.9	2.16	244.6	9.63	44.5	1.75	179.6	7.07	3.42	7.52
215	75	2-15/16	7189.8	5303	56.9	2.24	246.6	9.71	44.5	1.75	181.6	7.15	3.41	7.50
302	80	3-1/8	7189.8	5303	57.4	2.26	247.1	9.73	44.5	1.75	182.1	7.17	3.27	7.20
RSL8H203	55	2-3/16	4745.3	3500	43.4	1.71	238.0	9.37	57.2	2.25	173.7	6.84	3.8	8.45
206	60	2-3/8	6101.1	4500	47.5	1.87	242.1	9.53	57.2	2.25	177.8	7.00	4.0	8.90
209	65	2-9/16	7863.6	5800	51.1	2.01	245.6	9.67	57.2	2.25	181.1	7.13	4.1	8.95
212	70	2-3/4	10659.3	7862	54.9	2.16	249.4	9.82	57.2	2.25	184.9	7.28	4.3	9.56
215	75	2-15/16	10659.3	7862	56.9	2.24	251.5	9.90	57.2	2.25	186.9	7.36	4.4	9.62
302	—	3-1/8	10659.3	7862	57.4	2.26	252.0	9.92	57.2	2.25	187.7	7.39	4.2	9.29
302	80	—	9897.3	7300	57.4	2.26	252.0	9.92	57.2	2.25	187.7	7.39	4.2	9.29
RSL14H209	65	2-9/16	7863.6	5800	50.3	1.98	254.0	10.00	63.5	2.50	204.0	8.03	6.4	14.15
212	70	2-3/4	9897.3	7300	55.6	2.19	284.5	11.20	63.5	2.50	209.0	8.23	6.7	14.75
215	75	2-15/16	12202.2	9000	58.2	2.29	287.3	11.31	63.5	2.50	211.8	8.34	6.7	14.82
302	79	3-1/8	15122.6	11154	61.7	2.43	290.6	11.44	63.5	2.50	215.1	8.47	6.9	15.20
308	89	3-1/2	15122.6	11154	66.0	2.60	297.4	11.71	63.5	2.50	219.5	8.64	7.6	16.64
314	98	3-7/8	15122.6	11154	73.2	2.88	302.0	11.89	63.5	2.50	226.6	8.92	7.8	17.17
404	108	4-1/4	15122.6	11154	75.7	2.98	304.8	12.00	63.5	2.50	229.4	9.03	7.4	16.35
410	117	4-5/8	15122.6	11154	82.6	3.25	311.7	12.27	63.5	2.50	236.2	9.30	8.0	17.61
RSL20H302	79	3-1/8	14913.8	11000	62.2	2.45	323.1	12.72	69.9	2.75	239.8	9.44	9.8	21.50
308	89	3-1/2	21692.8	16000	70.4	2.77	331.2	13.04	69.9	2.75	247.9	9.76	10.3	22.62
314	98	3-7/8	25547.3	18843	74.9	2.95	335.8	13.22	69.9	2.75	252.5	9.94	10.8	23.84
404	108	4-1/4	25547.3	18843	83.8	3.30	344.7	13.57	69.9	2.75	261.1	10.28	11.5	25.25
410	117	4-5/8	25547.3	18843	87.4	3.44	348.2	13.71	69.9	2.75	264.9	10.43	11.6	25.57
RSL30H308	89	3-1/2	21692.8	16000	65.0	2.56	364.7	14.36	76.2	3.00	267.7	10.54	12.6	27.63
314	98	3-7/8	29827.6	22000	74.2	2.92	364.7	14.36	76.2	3.00	273.6	10.77	13.1	28.80
404	108	4-1/4	37965.1	28002	83.6	3.29	367.5	14.47	76.2	3.00	283.0	11.14	14.4	31.71
410	117	4-5/8	37965.1	28002	87.1	3.43	371.1	14.61	76.2	3.00	286.5	11.28	14.3	31.51
500	127	5	37965.1	28002	92.7	3.65	376.7	14.83	76.2	3.00	292.1	11.50	15.2	33.45
506	136	5-3/8	37965.1	28002	96.3	3.79	380.2	14.97	76.2	3.00	295.7	11.64	15.1	33.17
512	146	5-3/4	37965.1	28002	102.9	4.05	386.8	15.23	76.2	3.00	302.3	11.90	15.2	33.49
602	155	6-1/8	37965.1	28002	107.2	4.22	393.2	15.48	76.2	3.00	308.6	12.15	15.7	34.53

Hex Wrench Selection Table

Hex Sizes	Nut Size (A/F)		Stud Size (Dia)		RSL2H	RSL4H	RSL6H	RSL8H	RSL14H	RSL20H	RSL30H
	inch	mm	inch	metric	1408/1909 lbf-ft/N-m	3080/4180 lbf-ft/N-m	5325/7220 lbf-ft/N-m	7860/10660 lbf-ft/N-m	11150/15120 lbf-ft/N-m	18843/25548 lbf-ft/N-m	28000/37970 lbf-ft/N-m
H10M		10		6BR 12S							
H12MF		12		14S							
H006	1/2		1/4H 5/16BR 5/8S								
H13M		13		8B6 10L							
H14MF		14		16S							
H009	9/16		3/8BR 5/16H								
H15M		15		12F 10L							
H010	5/8		7/16B 3/4S								
H16M		16		10BR							
H17MF		17		20S							
H011	11/16		3/8H 7/16R								
H18M		18		12BR 14L							
H19MF		19		24S							
H012	3/4		7/16 1/2BR 7/8 1S								
H013	13/16		9/16B								
H21M		21		12BH 14BR 16L							
H22MF		22		30S							
H014	7/8		9/16R 1/2BH 1-1/8S 1-1/4 S		320/434						
H015	15/16		5/8BR 9/16H								
H24M		24		16BRH 14BH							
H100F	1		1-3/8S 1-1/2S								
H101	1-1/16	27	5/8BH	36S	640/868						
H102	1-1/8RB		3/4								
H30M		30		20RB							
H104	1-1/4H		3/4		640/868	600/814					
H105	1-5/16R		7/8								
H32M		32		42S							
H34M		34		20H							
H35M		35									
H36M		36		24RB 22H 48S							
H107	1-7/16H		7/8		900/1220	900/1220					
H32MF		32		42S							
H106	1-1/2RB		1								
H40M		40									
H42M											
H110	1-5/8H	41	1	24H	1408*/1909	1200/1627					
H111	1-11/16B		1-1/8								
H45M		45									
H113	1-13/16H	46	1-1/8	30RB 27H	1408*/1909	1900/2576					
H114	1-7/8B		1-1/4								
H50M		50		30H							
H200	2H		1-1/4		1408*/1909	2600/3525	2600/3525				
H201	2-1/16B		1-3/8								
H55M		55		36RB							
H203	2-3/16H		1-3/8		1408*/1909	3080*/4176	3500/4745	3500/4745			
H204	2-1/4B		1-1/2								
H60M		60		36H							
H206	2-3/8H		1-1/2		1408*/1909	3080*/4176	4500/6101	4500/6101			
H209	2-9/16H	65	1-5/8	42RB		3080*/4176	5303/7190	5800/7864	5800/7864		
H210	2-5/8B		1-3/4								
H212	2-3/4H	70	1-3/4	42H		3080*/4176	5303/7190	7860/10660	7300/9897		
H213	2-13/16B		1-7/8								
H215	2-15/16H	75	1-7/8	48RB		3080*/4176	5303/7190	7860*/10660	9000/12202		
H300	3B		2								
H302	3-1/8H		2				5303/7190	7860*/10660	11150/15120	11000/14916	
H80M		80		48H			5303/7190	7300*/9900			
H85M		85		56RB							
H306	3-3/8B		2-1/4								
H306	3-1/2H		2-1/4						11150*/15120	16000/21700	16000/21700
H90M		90		56H							
H312	3-3/4	95	2-1/2	64RB							
H314	3-7/8		2-1/2						11150*/15120	18843/25547	22000/29840
H100M		100		64H							
H402	4-1/8B	105	2-3/4	72RB					11150*/15120	18843/25547	28000/37970
H404	4-1/4H		2-3/4								
H110M		110		72H							
H408	4-1/2B		3								
H115M		115		80RB							
H410	4-5/8		3						11150*/15120	18843/25547	28000*/37970
H120M		120		80H							
H414	4-7/8B		3-1/4								
H500	5H		3-1/4								28000*/37970
H130M		130		90RB							
H504	5-1/4B		3-1/2								
H135M		135		90H							
H506	5-3/8H		3-1/2								28000*/37970
H510	5-5/8B		3-3/4								
H145M		145		100RB							
H512	5-3/4		3-3/4								28000*/37970
H150M		150		100H							
H600	6B		4								
H155M		155									
H602	6-1/8H		4								28000*/37970

Legend: R=Regular Hex
B=Hex Bolt
M=Metric
H=Heavy Hex
L=Flange Screw
S=Socket Head Cap Screw

*Use 503 (Moly Paste Lubricant) to reduce loosening/tightening torque, for temperatures below 650°F

Producible Available Suggested selection Not available

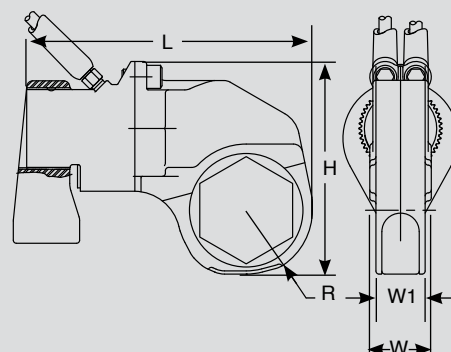
BOP Hex Wrenches

This versatile, high performance thin nose tool has been specifically created for arduous applications with limited clearances.



A purpose-designed modification of a standard wrench, it has a narrowed tip on the nose of the housing which makes it uniquely equipped to access tight spaces offering little room for maneuver, such as over the top of awkwardly-located studs on Blow Out Preventors. The max torque output is reduced, with less than half of the torque value of a standard sized wrench and a narrowed width of W1 for increased accessibility.

This narrow dimension makes the BOP Hex Tool supremely well equipped for any bolted flange where space is severely restricted.



Model Number		Max. AF Size		Max. Torque Output		W		W1	
		inch	mm	lb-ft	N-m	inch	mm	inch	mm
RSL2	RSL2H104BOP	1-1/4	31	375	509	1.250	31.75	1.000	25.4
	RSL2H107BOP	1-7/16	36	658	893	1.250	31.75	1.086	27.6
	RSL2H107BOPA	1-7/16	36	531	720	1.250	31.75	1.000	25.4
	RSL2H110BOP	1-5/8	41	831	1127	1.250	31.75	1.000	25.4
	RSL2H113BOP	1-13/16	46	831	1127	1.250	31.75	1.000	25.4
	RSL2H113BOPA	1-13/16	46	669	908	1.250	31.75	0.930	23.6
	RSL2H200BOP	2	50	831	1127	1.250	31.75	1.000	25.4
	RSL2H200BOPA	2	50	669	908	1.250	31.75	0.930	23.6
RSL4	RSL4H200BOP	2	50	1354	1836	1.376	34.95	1.126	28.6
	RSL4H203BOP	2-3/16	55	1604	2175	1.376	34.95	1.126	28.6
	RSL4H206BOP	2-3/8	60	1604	2175	1.376	34.95	1.126	28.6
	RSL4H209BOP	2-9/16	65	1604	2175	1.376	34.95	1.126	28.6
	RSL4H212BOP	2-3/4	69	1604	2175	1.376	34.95	1.126	28.6
	RSL4H215BOP	2-15/16	74	1604	2175	1.376	34.95	1.126	28.6
RSL6	RSL6H212SLIM	2-3/4	69	4173	5658	1.750	44.45	1.620	41.15
	RSL6H302SLIM	3-1/8	79	4173	5658	1.750	44.45	1.620	41.15
RSL8	RSL8H203BOP	2-3/16	55	2487	3372	2.250	57.15	2.000	50.8
	RSL8H206BOP	2-3/8	60	3198	4336	2.250	57.15	2.000	50.8
	RSL8H209BOP	2-9/16	65	4122	5589	2.250	57.15	2.000	50.8
	RSL8H212BOP	2-3/4	69	5587	7575	2.250	57.15	2.000	50.8
	RSL8H215BOP	2-15/16	74	5587	7575	2.250	57.15	2.000	50.8
	RSL8H302BOP	3-1/8	79	5587	7575	2.250	57.15	2.000	50.8
	RSL8H303BOP	3-3/16	80	4740	6427	2.250	57.15	2.000	50.8

Length, height and radius values are the same as the Hex Wrench on page 6

503 Moly Paste Lubricant

Hydratight 503 Moly Paste reduces friction on threaded fasteners—bolts, nuts, and studs. The low and uniform friction coefficient of 0.06 (torque coefficient, K, of 0.11) creates reliable assembly conditions. This lubricant stays in place through heat, load and vibration to insure trouble-free disassembly from -29°C to 399°C (-20°F to 750°F).



The Safe T™

The Safe T™ is Hydratight's latest accessory to the RSL line of torque wrenches: a handle designed to safely enable the bolting operation to be carried out by one operator.

The Safe T simultaneously operates both the hydraulic pump and the torque wrench at the same time, allowing for full operational control by a single operator.



The innovative features of the Safe T address two key operational risks with bolting:

- Any chance of miscommunication in a loud field environment in a two-person bolting operation is removed
- The possibility of pinching is reduced because the operation of the torque wrench or hydraulic pump ceases immediately if the operator's hands disengage from the Safe T

Both operational buttons on the Safe T must be pressed at the same time to engage the application, ensuring safe operation.

Features and Benefits

- Low profile design to work with hex wrenches in tight spots
- Large diameter buttons improves ease of use with gloves
- Easily removable if torque wrench needs to be placed in a tight space, can still advance pump using handle when disconnected
- Included hose sleeve (electric version only) protects hoses from abrasion and is burst rated to 10,000 psi



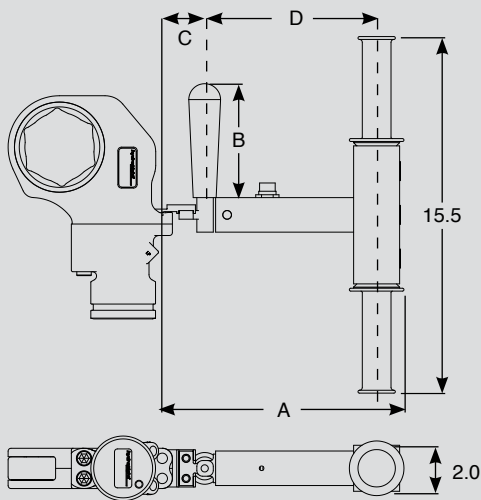
The Safe T assures safe single operator application

Please select a handle from the table below to suit your RSL wrench size and hose length requirement. Once the handle is selected, please pair it with the applicable bracket/fastener option from the last table. Multiple bracket options can be purchased with the handles for additional tool compatibility.

Part Number (Note 1 & 2)	Description	Tool Size	Consoles	Type	Unit of Measure	Twin Line Hose Length
A0014C0015CA	Safe T Handle - RSL2-RSL14 (Electrical, 15 ft.-0 in. Twin Line Hoses)	RSL2 thru RSL14	ZU	Electrical	Std - in	15-0
					Metric - mm	4.57
A0014C0015CF	Safe T Handle - RSL20-RSL30 (Electrical, 15 ft.-0 in. Twin Line Hoses)	RSL20 & RSL30	ZU	Electrical	Std - in	15-0
					Metric - mm	4.57
A0014C0000CA	Safe T Handle - RSL2-RSL14 (Electrical, 50 ft.-0 in. Twin Line Hoses)	RSL2 thru RSL14	ZU	Electrical	Std - in	50-0
					Metric - mm	15.24
A0014C0000CF	Safe T Handle - RSL20-RSL30 (Electrical, 50 ft.-0 in. Twin Line Hoses)	RSL20 & RSL30	ZU	Electrical	Std - in	50-0
					Metric - mm	15.24
A0014C0023CB	Safe T Handle - RSL2-RSL14 (Air, 20 ft.-0 in. Twin Line Hoses)	RSL2 thru RSL14	ZA	Air	Std - in	20-0
					Metric - mm	6.10
A0014C0023CC	Safe T Handle - RSL20-RSL30 (Air, 20 ft.-0 in. Twin Line Hoses)	RSL20 & RSL30	ZA	Air	Std - in	20-0
					Metric - mm	6.10
A0014C0053CB	Safe T Handle - RSL2-RSL14 (Air, 50 ft.-0 in. Twin Line Hoses)	RSL2 thru RSL14	ZA	Air	Std - in	50-0
					Metric - mm	15.24
A0014C0053CC	Safe T Handle - RSL20-RSL30 (Air, 50 ft.-0 in. Twin Line Hoses)	RSL20 & RSL30	ZA	Air	Std - in	50-0
					Metric - mm	15.24
A0014C0023CD	Safe T Handle - RSL2-RSL14 (Air, 20 ft.-0 in. Twin Line Hoses)	RSL2 thru RSL14	PowaPak	Air	Std - in	20-0
					Metric - mm	6.10
A0014C0023CE	Safe T Handle - RSL20-RSL30 (Air, 20 ft.-0 in. Twin Line Hoses)	RSL20 & RSL30	PowaPak	Air	Std - in	20-0
					Metric - mm	6.10
A0014C0053CD	Safe T Handle - RSL2-RSL14 (Air, 50 ft.-0 in. Twin Line Hoses)	RSL2 thru RSL14	PowaPak	Air	Std - in	50-0
					Metric - mm	15.24
A0014C0053CE	Safe T Handle - RSL20-RSL30 (Air, 50 ft.-0 in. Twin Line Hoses)	RSL20 & RSL30	PowaPak	Air	Std - in	50-0
					Metric - mm	15.24

NOTE: 1. Order brackets to assemble these Safe T Handle sub-assemblies to the given RSL tool.
2. These part numbers do not include twin line hoses.

The Safe T™



Safe T™ Handles Mounting Brackets & Fasteners

Part Number	Description	Tool Size	Unit of Measure	A	B	C	D
005AU0069603	RSL2 Safe T - Bracket and Fasteners	RSL2	Std - in	10.19	4.95	1.71	7.48
			Metric - mm	259	126	43	190
005AU0069604	RSL4 Safe T - Bracket and Fasteners	RSL4	Std - in	10.22	4.95	1.75	7.48
			Metric - mm	260	126	44	190
005AU0069605	RSL6 Safe T - Bracket and Fasteners	RSL6	Std - in	10.32	4.95	1.84	7.48
			Metric - mm	262	126	47	190
005AU0069606	RSL8 Safe T - Bracket and Fasteners	RSL8	Std - in	10.46	4.95	1.98	7.48
			Metric - mm	266	126	50	190
005AU0069607	RSL14 Safe T - Bracket and Fasteners	RSL14	Std - in	10.46	4.95	1.98	7.48
			Metric - mm	266	126	50	190
005AU0069608	RSL20 Safe T - Bracket and Fasteners	RSL20	Std - in	11.42	5.06	1.375	9.046
			Metric - mm	290	129	35	230
005AU0069609	RSL20 Safe T - Bracket and Fasteners	RSL30	Std - in	11.42	5.06	1.375	9.046
			Metric - mm	290	129	35	230

NOTE: These brackets are required to assemble the Safe T Handle sub-assembly to the given RSL tool.

Complementary Products

Hydratight offers complementary products to our RSL Torque Wrench line, which carry on our tradition of innovation and exacting standards.

Gripping Sockets

The unique patented ball and taper grip design of Hydratight's Gripping Sockets enables hand-free wrench power cycle operation on standard hexagonal nuts. Gripping Sockets enable the operator to minimize exposure to pinch points and high pressure hydraulic connections during operation, thereby resulting in greater operator safety. Gripping sockets are available in both Hydratight RSL dedicated formats, and in universal square drive formats.

Handle Kit for RSL Torque Wrenches

The RSL Accessory Handle Kit is compatible with both the square drive and the hex head wrenches in the RSL line. This handle accessory kit provides users with safe, easy positioning capabilities while keeping hands away from pinch points.

These handles can be used in multiple configurations depending on the application, and are available in standard and low clearance options.

Direct Drive Hex Bits for Square Drive Wrenches

Allows direct torquing of allen cap screws.

- Heat treated alloy steel
- Available in standard or custom sizes
- Compatible with existing tool and retainer



Power Consoles

The Hydratight range of portable 10,000 psi ultra high performance pumps has been designed and developed specifically for use with hydraulic torque wrenches. Pumps operate from two primary power sources: air and electric, providing optimum performance of power and speed, even in the most arduous conditions. Each Hydratight pump ensures user safety—operation via a remote control handset comes as standard.

ZU4 Electric Pumps

A selection of high pressure electric torque wrench pumps with backlit LCD display and microprocessor control (except for models D3044B0207AA and D3044B0207AB), combining performance with long life and low maintenance.

ZA4 Air Pump

A high pressure air powered hydraulic torque wrench pump, designed specifically for bolting applications.

PowaPak Air Ultra Pump

A high efficiency air powered, torque wrench pump which maximizes operational speeds of hydraulic wrenches. The three stage hydraulic design can reduce wrench cycle operations by up to 60%.



ZU4 Electric



ZA4 Air



PowaPak Air Ultra

ZU4 Electric Pumps

Part Number	Motor Size	100 psi	700 psi	5,000 psi	10,000 psi	Motor Electrical Specification	Sound Level (dBA)	Description	Weight
D3044B0207AF	1.7	700	535	76	60	115 VAC, 1-ph	85–90	115V 4 Liter (1 gal.) with heat exchanger	82 lbs.
D3044B0207AJ	1.7	700	535	76	60	115 VAC, 1-ph	85–90	230V 4 Liter (1 gal.) with heat exchanger	83 lbs.
D3044B0207AE	1.7	700	535	76	60	115 VAC, 1-ph	85–90	115V 4 Liter (1 gal.) with heat exchanger	82 lbs.
D3044B0207AH	1.7	700	535	76	60	115 VAC, 1-ph	85–90	220V 4 Liter (1gal) with heat exchanger	82 lbs.
D3044B0207AB	1.7	700	535	76	60	115 VAC, 1-ph	85–90	115V 4 Liter w/heat exc analog gauge	82 lbs.
D3044B0207AA	1.7	700	535	76	60	115 VAC, 1-ph	85–90	115V 4 Liter w/heat exc analog gauge	82 lbs.
030EF0046297	ZU4 Electric Pump Roll Cage								

ZA4 Air Pumps

Part Number	100 psi	700 psi	5,000 psi	10,000 psi	Dynamic Air Pressure Range (psi)	Air Consumption (scfm)	Sound Level at 100 psi Dynamic (dBA)	Hydraulic Flow Rate	Weight
D3043B0107AA	600	500	80	60	60–100	20–100	80–95	700 in³ min at 1,000 psi 60 in³/min at 10,000 psi	94 lbs
030EF0046285	ZA4 Air Pump Roll Cage								

PowaPak Air Ultra Pump

Part Number	Description	PSI (in³/min)			(CFM)	(dBA)	lbs	Bar (l/min)			(LPM)	(dBA)	Kg
D3004B0107FA	Parker QD (with hose)	1000	4,200	10,000	60	82–86	97	69	290	690	1,700	82–86	44
D3004B0107FB	CEJN 117 QD (with hose)	458	232	60				7.5	3.8	1			

Digital Torque Multipliers

Hydratight's Sweeney brand of digital torque multipliers are compact and lightweight, offer a digital readout, and are designed to accurately measure output torque. The Sweeney digital torque multiplier series was developed to perform high tolerance bolt up and break out operations within the Aero, Industrial and Oil and Gas industries.



For increased control and operation the torque multipliers within this series are equipped with a high resolution 7" (177.8 mm) display. During use relevant measuring values appear on screen including torque, angle of turn as well as a graph depicting torque over time. Values appear in full color large format type enabling the operator to easily view and interpret data. The icon based menu driven system is controlled using an ultra-sensitive touch screen which responds to input even when gloves are worn.

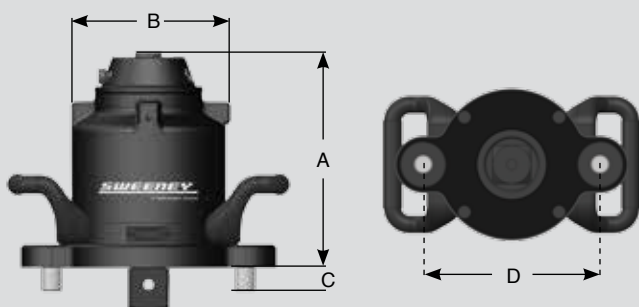
When an operation is complete all data is stored on the device for future export using the available USB port.

Features

- Output accuracies of +/- 0.4% full scale
- Ergonomic handles aid in positioning
- 7" (177.8 mm) full color high resolution monitoring screen
- Battery powered monitoring screen with 8 hour run time
- Accurate digital angle of turn readings
- Available measuring units include Nm, Ncm, lb ft, lb in, oz in, kNm, klb ft, kg m, kg cm



Check monitoring screen with relevant torque operation values



Specifications

Part Number	Max Output		Max Input		Torque Ratio	Input Sq. Size	Output Sq. Size	Overload Protection	Anti-Backlash
	ft-lbs	Nm	ft-lbs	Nm					
SWE8510D	1000	1356	196	266	5.1:1	1/2	3/4	No	Yes
SWE8550D	5000	6780	189	256	26.5:1	1/2	1-1/2	Yes	Yes

Dimensions

Part Number	A - Height		B - Width		C - Reaction Stick Out		D - Reaction Points		Weight	
	in	mm	in	mm	in	mm	in	mm	lb	kg
SWE8510D	5.1	129.5	4.4	112	0.53	13.5	3	76.2	14.5	6.6
SWE8550D	7.6	192.9	5.6	142.3	0.86	21.9	7	177.8	32	14.5

Pneumatic Torque Guns

Designed to combine simplicity with smart bolting technology, Hydratight's Electric Torque Wrench Guns deliver fast, accurate and safe fastening for controlled bolting applications that require speed, precision and traceability.



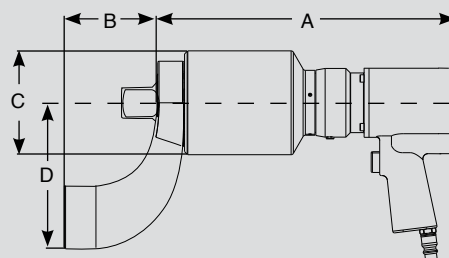
Hydratight's Pneumatic Torque Gun is a user friendly power bolting solution which provides consistent high speed rotations for constant torque output during high torque bolting applications. These user friendly and ergonomic tools offer fast, precise and safe torquing for any application that requires controlled bolting.

The Pneumatic Torque Guns are durable and reliable enough to withstand harsh on site conditions especially in the oil & gas, power generation, and mining industries. Each standard tool kit includes a fully calibrated pneumatic torque gun, a filter, regulator, lubricator, a 10' (3.05 m) hose, and quick connect fittings.



Features and Benefits

- Provides consistent high speed rotations for constant torque output during high torque bolting applications
- Low friction planetary gearbox ensures minimal wear while maximizing uptime
- Ergonomic trigger style handle with easily accessible tightening/loosening controls
- Low vibration design helps prevent vibration related injuries and reduces operator fatigue
- Low noise air motor enables quiet bolting operation
- Standard reaction arm included with a large selection of custom arms and accessories available on request



Part Number	Model Number	Minimum Torque		Nominal Torque		Square Drive	Speed	A		B		C		D		Weight*	
		ft-lbs	Nm	ft-lbs	Nm	in	RPM	in	mm	in	mm	in	mm	in	mm	lbs	kg
A4041E1000AA	HPW1000	300	407	1000	1356	1	12.6	10.7	272	3.27	83	2.83	72	5.12	130	18	8.2
A4041E2000AA	HPW2000	500	678	2000	2712	1	8.0	11.26	286	3.27	83	3.11	79	5.24	133	20	8.8
A4041E3000AA	HPW3000	900	1220	3000	4067	1	3.1	13.5	343	3.27	83	3.74	95	5.24	133	23	10.4
A4041E6000AA	HPW6000	1300	1763	6000	8135	1-1/2	2.5	14.4	366	4.49	114	5.0	127	7.0	178	39	17.7

*Weight does not include reaction arm. Reaction arm weight for HPW1000, HPW2000, HPW3000 is 1.3 kg (2.9 lbs.) and for HPW6000 is 3.5 kg (7.75 lbs.).

Electric Torque Guns

Hydratight's Electric Torque Guns are an ergonomic smart bolting solution which provide high speed continuous rotations for constant torque output during high torque bolting applications.

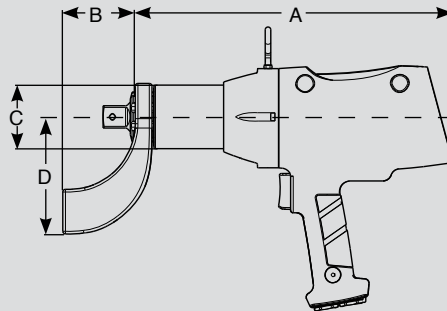


These user friendly and ergonomic tools offer fast, precise, and safe torquing for any application that requires controlled bolting.

The Electric Torque Guns are operated using a 7" (177.8 mm) touchscreen which allows the user to directly input the number of bolts, desired torque value, and change the direction of rotation. These smart bolting tools additionally house an LED display control panel at the back which can be used to input torque values and monitor the bolting process.

Features and Benefits

- Large 7" (177.8 mm) touchscreen and rear LED control panel simplify tool operation and monitoring
- Torque and angle functionality allows input of nominal torque value followed by a specific angle of rotation
- Pass/Fail LED indicator on back of tool verifies fastening has been completed according to specified input
- Low friction planetary gearbox ensures minimal wear while maximizing uptime
- Low vibration design helps prevent vibration related injuries and reduces operator fatigue
- Standard reaction arm included with a large selection of custom arms and accessories available on request



Rear LED control panel



Touchscreen control box in robust case

Part Number	Model Number	Minimum Torque		Maximum Torque		Square Drive	Voltage	RPMs	A		B		C		D		Weight*	
		ft-lbs	Nm	ft-lbs	Nm				in	mm	in	mm	in	mm	in	mm	lbs	kg
A4041E1000BA	HEW1000B	200	270	1000	1355	1	115V 60 Hz	9.8	14.4	365.8	3.3	83.8	2.8	71.1	5.2	132.1	18.1	8.2
A4041E1000BB	HEW1000I	200	270	1000	1355	1	230V 60 Hz	15.2	14.4	365.8	3.3	83.8	2.8	71.1	5.2	132.1	18.1	8.2
A4041E1000BC	HEW1000E	200	270	1000	1355	1	230V 50 Hz	15.2	14.4	365.8	3.3	83.8	2.8	71.1	5.2	132.1	18.1	8.2
A4041E2000BA	HEW2000B	400	540	2000	2710	1	115V 60 Hz	5.8	15.0	381.0	3.3	83.8	3.1	78.7	5.2	132.1	19.7	8.9
A4041E2000BB	HEW2000I	400	540	2000	2710	1	230V 60 Hz	9.0	15.0	381.0	3.3	83.8	3.1	78.7	5.2	132.1	19.7	8.9
A4041E2000BC	HEW2000E	400	540	2000	2710	1	230V 50 Hz	9.0	15.0	381.0	3.3	83.8	3.1	78.7	5.2	132.1	19.7	8.9
A4041E3000BA	HEW3000B	600	810	3000	4065	1	115V 60 Hz	2.8	17.1	434.3	3.3	83.8	3.7	94.0	5.2	132.1	26.3	11.9
A4041E3000BB	HEW3000I	600	810	3000	4065	1	230V 60 Hz	4.3	17.1	434.3	3.3	83.8	3.7	94.0	5.2	132.1	26.3	11.9
A4041E3000BC	HEW3000E	600	810	3000	4065	1	230V 50 Hz	4.3	17.1	434.3	3.3	83.8	3.7	94.0	5.2	132.1	26.3	11.9
A4041E6000BA	HEW6000B	1200	1625	6000	8135	1.5	115V 60 Hz	1.9	17.8	452.1	4.5	114.3	5.0	127.0	7.0	177.8	42.1	19.1
A4041E6000BB	HEW6000I	1200	1625	6000	8135	1.5	230V 60 Hz	2.9	17.8	452.1	4.5	114.3	5.0	127.0	7.0	177.8	42.1	19.1
A4041E6000BC	HEW6000E	1200	1625	6000	8135	1.5	230V 50 Hz	2.9	17.8	452.1	4.5	114.3	5.0	127.0	7.0	177.8	42.1	19.1

* Weight of gun only without reaction arm. Reaction arm weight for HEW1000, HEW2000, HEW3000 is 2.9 lbs. and for the HEW6000 is 7.75 lbs. Weight of control box is 20 lbs.



Our global network means that you can rely on the right people, products, and services wherever you are in the world.

Email us at: solutions@hydratight.com
Or find your local representative at:
hydratight.com/contact

Hydratight provides support through strategic service centers, and in additional locations worldwide through channel partners.

