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ENERPAC 

Bolting Solutions

Professional Hydraulic and Mechanical Tools for the Bolting Industry



Enerpac Bolting Solutions

ENERPAC 
POWERFUL SOLUTIONS. GLOBAL FORCE.

Enerpac's Bolting Solutions caters to the complete bolting work-flow, ensuring joint integrity in a variety of applications throughout industry:

Joint Assembly

From simple pipe alignment to complex joint positioning of large structural assemblies, our comprehensive line of joint assembly products range from hydraulic and mechanical alignment tools to PLC-controlled multi-point positioning systems.

Controlled Tightening

Enerpac offers a variety of controlled tightening options to best meet the requirements of your application. From mechanical torque multipliers to hydraulically driven square drive wrenches, and from low profile torque wrenches to inter-connectable bolt tensioning tools; we offer the products you need for accurate and simultaneous tightening of multiple bolts.

Joint Separation

Enerpac also provides hydraulic nut splitters and a variety of mechanical and hydraulic spreading tools for joint separation during inspection, maintenance and decommissioning operations.

High quality bolting solutions from the brand you can trust. See how Enerpac can make your bolting work-flow more accurate, safer and efficient.



Bolting Integrity Software

Visit www.enerpac.com to access our free on-line bolting software application and obtain information on tool selection, bolt load calculations and tool pressure settings. A combined application data sheet and joint completion report is also available.



Bolting Theory

See our 'Yellow Pages' for information on torque tightening and tensioning.

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All information in this catalog can be changed due to product improvements without prior notice.

Bolting Tools Overview

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Bolting Solutions

ATM-Series, Flange Alignment Tools



Misaligned joints

Joints must be pulled together and correctly aligned prior to tightening. Current methods of manipulation tend to be dangerous and involve a high degree of manual lifting using slings, hooks and lifting gear. These methods can damage joint components, are time consuming in setup and disassembly, operational time and the amount of manpower required.

Solution: Flange Alignment Tools

The Enerpac ATM series Flange Alignment Tools are developed to rectify twist and rotational misalignment without additional stress in pipelines. Hydraulic cylinders, jacks and lifting wedges can also be used to assist in positioning and aligning.

E-Series, Manual Torque Multipliers



Controlled tightening when external power is unavailable

Applications are often located where external power sources to drive air or electric powered tools are unavailable but controlled bolting is required, typically at values higher than an operator can generate using manual wrenches.

Solution: Manual Torque Multipliers

Enerpac E-series manual torque multipliers offer a range of output torques from manual inputs that can easily be achieved by an operator, providing accurate, efficient torque multiplication for make-up or break-out of joint fasteners.

S and W-Series, Torque Wrenches



Industrial Applications

Controlled Tightening of Multiple sized fasteners for industrial applications.

Solution: Hydraulic Torque Wrenches

Professional tools for industrial applications. Truly versatile tools which utilize standard Impact Sockets, optional direct Allen Drives or Interchangeable cassettes to provide controlled tightening of multiple sized fasteners per tool. Optional accessories further extend the application range of these products.

SQD and HXD-Series, Torque Wrenches



General Applications

Controlled Tightening of Multiple sized fasteners.

Solution: Hydraulic Torque Wrenches

Lightweight aluminium tools for controlled bolting.

Controlled Bolting

Increasing Health and Safety, Environmental and Productivity requirements demand even and parallel joint closure to ensure a sound assembly, especially on pressure containing vessels. This often requires the simultaneous tightening of multiple fasteners.

Solution: Bolt Tensioners

Enerpac GT Series Bolt Tensioners can achieve accurate preload in single or multiple fastener applications simultaneously, without inducing rotational twist or contending with the uncertainties of friction and lubrication.

GT-Series, Bolt Tensioners



Frozen or Corroded Nuts

Often nuts are difficult to remove, while loosening using tightening tools is possible it generally requires larger equipment and is time consuming. The use of cutting torches or hammers and chisels can cause damage to the joint components, requires significantly longer setup and operational time and can present a potential safety risk.

Solution: Hydraulic Nut Cutters

Nut splitting with the NC and NS-Series Hydraulic Nut Cutters is the safest method. It takes less time and avoids costly damage to joint components. The head design fitted with heavy-duty chisels permits the splitting of nuts on a wide variety of applications.

NC and NS-Series, Nut Cutters



Joint Separation

Separation of stubborn joints for inspection and maintenance particularly those fitted with ring grooves or those with external forces acting on them are often difficult to separate. The use of hammers and wedges, chain blocks and lever bars can damage joint components and present a potential safety risk.

Solution: Parallel Wedge Spreaders

The FSH, FSM-Series parallel wedge spreaders offer controlled separation without bending or risk of slipping from the joint. The FS-Series spreaders are ideally suited to flanged joint applications.

FSH, FSM-Series, Wedge Spreaders



Pumps and Accessories

A wide range of Pumps and Accessories are available including: Manual, Air and Electrically operated pump units, hoses, gauges, manifolds and fittings.

Pumps and Accessories



**For Bolting Solutions
Think Enerpac**

E-Series, Manual Torque Multipliers

▼ Shown from left to right: E291, E393, E494



- High-efficiency planetary gear sets achieve high output torque from low input torque
- Most models operator protected by anti-backlash device
- Multiplier output accuracy $\pm 5\%$ of input torque
- Reversible, tighten or loosen bolts
- Reaction bar or reaction plate type
- Angle-of-turn protractor standard on E300 models
- Reaction plate models offer increased versatility with reaction point locations
- E300 and E400 series replaceable shear drives provide overload protection of internal power train (one replacement shear drive is included).

Accurate, Efficient Torque Multiplication

When accurate make-up or break-out of stubborn fasteners requires high torque



Typical Torque Multiplier Applications

- Locomotives
- Power plants
- Pulp and paper mills
- Refineries
- Chemical plants
- Mining and construction
- Off-road equipment
- Shipyards
- Cranes.



MTW-250 Manual Torque Wrench

Available to power manual torque multipliers.

Technical information:

- 1/2" Square Drive
- 60-330 Nm (45-250 Ft.lbs)



◀ Enerpac Reaction Bar Torque Multiplier E393 used to manually torque bolts up to 4300 Nm.

▼ SELECTION CHART

Torque Multiplier Type	Output Torque Capacity		Model Number
	(Nm)	(Ft.lbs)	
Reaction Bar Multiplier	1015	750	E290PLUS
	1355	1000	E291
	1625	1200	E391
	2980	2200	E392
	4340	3200	E393
Reaction Plate Multiplier	2980	2200	E492
	4340	3200	E493
	6780	5000	E494
	10.845	8000	E495

Manual Torque Multipliers



Manual Torque Multipliers

Enerpac manual torque multipliers provide efficient torque multiplication in wide clearance applications and when external power sources are not available.

Manual torque multipliers are used in most industrial, construction, and equipment maintenance applications. Hydraulic torque wrenches are better suited for tight tolerance, flange and repetitious bolting applications.

Use Reaction Bar Models:

- where space is limited
- where multiple reaction points are available
- when portability is desirable.

Use Reaction Plate Models:

- above 3.200 Nm output torque
- on flanges and applications where neighboring bolt or nut is available to react against
- when extreme reaction forces are generated.

E Series



Maximum Output Torque:

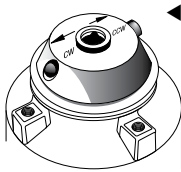
1015 - 10.845 Nm

Torque Ratio:

3:1 - 52:1

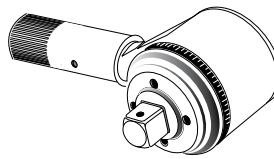
Multiplier Output Ratio Accuracy:

± 5 %



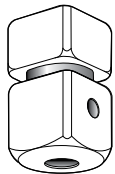
Selector Pawl

Models with anti-backlash protection have directional selector pawls. Set the pawl for clockwise or counter-clockwise rotation.



Angle-of-Turn Protractor

E391, E392 and E393 models include an angle-of-turn protractor (scale) to tighten fasteners using a "torque turn" method. Allows accurate measuring of a specific number of degrees of rotation.



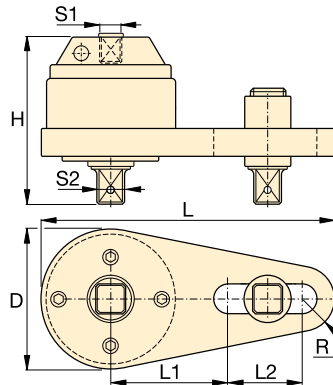
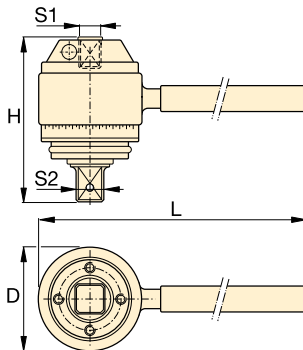
Shearable Square Drive

Provides overload protection on E300- and E400-series multiplier's power train by shearing at 103-110% of rated capacity. Internal shear pin prevents tool from falling off bolt.



CAUTION!

Never use impact type air tools for power driving torque multipliers. Torque multiplier drive train damage will occur.



Reaction Bar Type ¹⁾

Reaction Plate Type ¹⁾



Hydraulic Torque Wrenches

Enerpac offers a complete range of square drive and hexagon cassette torque wrenches.

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Input Torque		Torque Ratio	Input Female Square Drive S1 (inch)	Output Male Square Drive		Over-load Protection	Anti-Back-lash	Dimensions (mm)							Model Number
				S2 (inch)	Replaceable Shear Drive Model No.			D	H	L	L1	L2	R		
(Nm)	(Ft.lbs)													(kg)	
338	250	3 : 1	½	¾	—	No	No	71	84	218	—	—	—	1,8	E290PLUS
451	333	3 : 1	½	¾	—	No	No	71	84	442	—	—	—	2,5	E291
271	200	6 : 1	½	¾	E391SDK	Yes	No	100	102	498	—	—	—	4,1	E391
220	162	13,6 : 1	½	1	E392SDK	Yes	Yes	103	146	498	—	—	—	6,9	E392
235	173	18,5 : 1	½	1	E393SDK	Yes	Yes	103	165	498	—	—	—	8,3	E393
220	162	13,6 : 1	½	1	E392SDK	Yes	Yes	124	140	356	140	124	32	7,8	E492
235	173	18,5 : 1	½	1	E393SDK	Yes	Yes	124	163	356	140	124	32	8,9	E493
256	189	26,5 : 1	½	1½	E494SDK	Yes	Yes	143	222	378	178	89	41	15,4	E494
209	154	52 : 1	½	1½	E495SDK	Yes	Yes	148	293	387	178	89	48	22,8	E495

¹⁾ E200 and E400-series do not have an Angle-of-Turn Protractor (scale).

User must verify manual torque wrench accuracy prior to use to ensure accurate final output torque.

▼ From left to right: S3000, S6000, S1500



Simplicity

- 360° click-on, multi-position reaction arm
- Push button square drive release for quickly reversing the square drive for tightening or loosening
- Fine tooth ratchet prevents tool “lock-on”
- Single 360° hydraulic swivel manifold, complete with screw lock couplings, increases wrench and hose maneuverability.

Design

- Compact, high-strength uni-body construction for a small operating radius
- Robust design with minimal parts enables easy on-site maintenance without special tools
- Lightweight, ergonomic design for easy handling and an easy fit, even in applications where access is limited
- Optimised strength-to-weight ratio
- Fast operation due to the large nut rotation per wrench cycle (35 degree rotation angle) and rapid return stroke.

Reliability

- All wrenches are nickel-plated for excellent corrosion protection and improved durability in harsh environments.

Accuracy

- Constant torque output provides high accuracy across the full stroke
- Uni-body construction ensures accuracy by reducing internal deflections.

Rigid Steel Design

The *Professional* Square Drive Solution



S-Series, Square Drive Wrenches

This product range has been designed using state-of-the-art CAD techniques to bring you the most advanced square drive torque wrench on the market.

To ensure that the tools you buy meet our own exacting requirements, during the design process every prototype was put through finite element stress analysis, photo-elastic modeling, rigorous cyclic testing and strain gauging.



TSP - Pro Series Swivel

Featuring Tilt & Swivel technology the TSP provides 360° X-axis rotation and 160° Y-axis rotation.

How to Order

Order as an accessory which can be fitted to existing S-Series wrenches.

Factory fitted to new S-Series wrenches: Suffix the wrench model number with “-P” e.g.: **S1500-P**.

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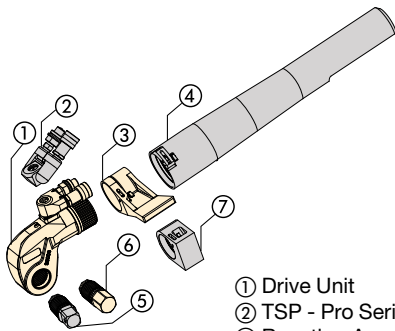


Torque Wrench Hoses

Use Enerpac THQ-700 Series torque wrench hoses with S-Series torque wrenches to ensure the integrity of your hydraulic system.

6 m long, 2 hoses	THQ-706T
12 m long, 2 hoses	THQ-712T

Double-Acting Square Drive Hydraulic Torque Wrenches



- ① Drive Unit
- ② TSP - Pro Series Swivel
- ③ Reaction Arm
- ④ Extended Reaction Arm
- ⑤ Square Drive
- ⑥ Allen Key Drive
- ⑦ Short Reaction Arm



Select the Right Torque

Choose your Enerpac Torque Wrench using the untightening rule of thumb: Loosening torque equals about 250% of tightening torque.

S Series



Maximum Torque at 700 bar:

34.079 Nm

Square Drive Range:

3/4 - 2 1/2 inch

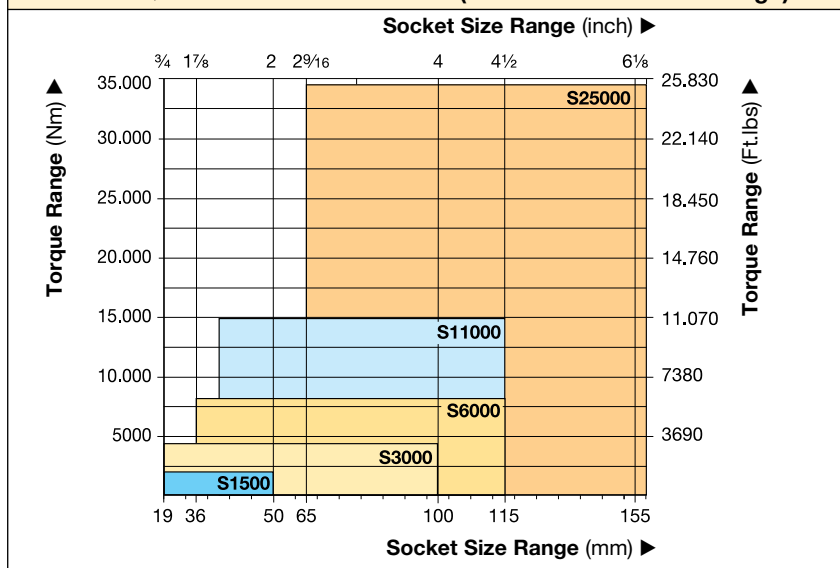
Nose Radius:

25,0 - 63,5 mm

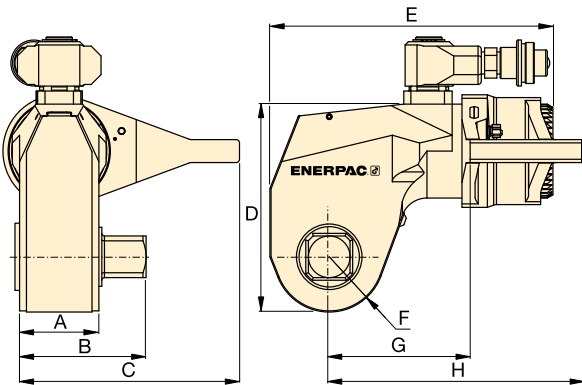
Maximum Operating Pressure:

700 bar

* TORQUE WRENCH SELECTION (based on socket size range)



* Additional socket sizes available upon request. See page 10 for BSH-series sockets.



The rigid steel design of S-Series torque wrenches guarantee durability, reliability and safety. These wrenches can be powered by the portable ZU4T-Series pumps.



Torque Wrench and Pump Selection Matrix

For optimum speed and performance see the torque wrench and pump matrix.

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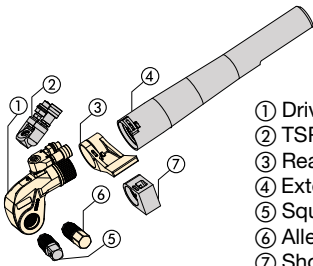


Maximum Torque at 700 bar		Square Drive		Torque Wrench Model Nr. *	Dimensions (mm)								(kg)
		Size (inch)	Model No. (included with wrench)		A	B	C	D	E	F	G	H	
Nm	(Ft.lbs)												
1898	1400	3/4"	SD15-012	S1500	39	63	110	95	136	25,0	69	119	2,7
4339	3200	1"	SD30-100	S3000	48	77	134	126	172	33,0	90	159	5,0
8144	6010	1 1/2"	SD60-108	S6000	57	90	179	162	201	42,0	112	187	8,5
14.914	11.000	1 1/2"	SD110-108	S11000	71	111	196	185	226	49,5	132	227	15,0
34.079	25.140	2 1/2"	SD250-208	S25000	87	143	244	240	292	63,5	182	292	31,0

See "Yellow Pages" section for torque conversions.

* To order a S-series wrench fitted with the TSP swivel, suffix the model number with "-P". e.g., **S1500-P**.

SDA-Series, Allen Key Drives



- ① Drive Unit
- ② TSP - Pro Series Swivel
- ③ Reaction Arm
- ④ Extended Reaction Arm
- ⑤ Square Drive
- ⑥ Allen Key Drive
- ⑦ Short Reaction Arm

Maximum Torque at 700 bar:

34.079 Nm

Square Drive Range:

3/4 - 2 1/2 inch

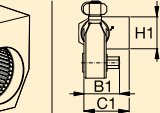
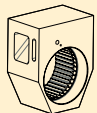
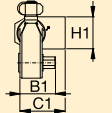
Hexagon Size Allen Drive:

14 - 85 mm | 1/2-2 1/4"

For
S
Series



▼ SELECTION CHART

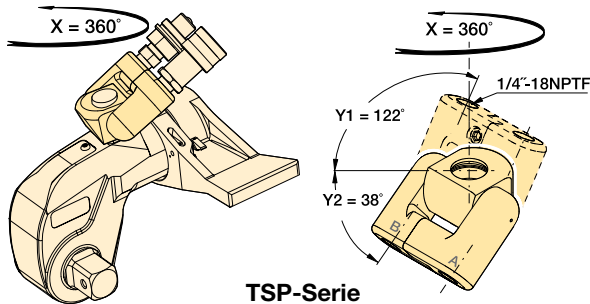
TORQUE WRENCH	OPTIONAL ALLEN DRIVES, IMPERIAL				OPTIONAL ALLEN DRIVES, METRIC				SHORT REACTION ARM FOR ALLEN DRIVES		
											
Model Number	Hexagon Size (inch)	Maximum Torque (Nm)	Model Number	Dim. B1 (mm)	Hexagon Size (mm)	Maximum Torque (Nm)	Model Number	Dim. B1 (mm)	Model Number	Dimensions (mm)	
S1500 (1898 Nm)	1/2	481	SDA15-008	66	14	644	SDA15-14	66	SRA15	67,5	65
	5/8	935	SDA15-010	67	17	1152	SDA15-17	68			
	3/4	1619	SDA15-012	71	19	1606	SDA15-19	70			
	7/8	1897	SDA15-014	74	22	1897	SDA15-22	73			
	1	1897	SDA15-100	77	24	1897	SDA15-24	74			
S3000 (4339 Nm)	5/8	935	SDA30-010	77	17	1152	SDA30-17	77	SRA30	80,0	74
	3/4	1619	SDA30-012	80	19	1606	SDA30-19	79			
	7/8	2568	SDA30-014	83	22	2486	SDA30-22	82			
	1	3828	SDA30-100	86	24	3232	SDA30-24	84			
	1 1/8	4336	SDA30-102	88	27	4336	SDA30-27	85			
	1 1/4	4336	SDA30-104	89	30	4336	SDA30-30	87			
	-	-	-	-	32	4336	SDA30-32	88			
S6000 (8144 Nm)	5/8	935	SDA60-010	85	17	1152	SDA60-17	86	SRA60	91,5	89
	3/4	1619	SDA60-012	89	19	1606	SDA60-19	88			
	7/8	2568	SDA60-014	92	22	2486	SDA60-22	91			
	1	3828	SDA60-100	95	24	3232	SDA60-24	93			
	1 1/8	5454	SDA60-102	97	27	4600	SDA60-27	94			
	1 1/4	7480	SDA60-104	98	30	6308	SDA60-30	96			
	-	-	-	-	32	7656	SDA60-32	97			
S11000 (14.911 Nm)	1 1/4	7480	SDA110-104	115	30	6308	SDA110-30	112	SRA110	127,5	106
	1 3/8	9953	SDA110-106	117	32	7656	SDA110-32	114			
	1 1/2	12.920	SDA110-108	118	36	10.894	SDA110-36	117			
	1 5/8	14.905	SDA110-110	122	41	14.905	SDA110-41	121			
	1 3/4	14.905	SDA110-112	125	46	14.905	SDA110-46	127			
S25000 (34.079 Nm)	1 1/2	12.920	SDA250-108	141	36	10.894	SDA250-36	140	SRA250	158,5	135
	1 5/8	16.423	SDA250-110	145	41	16.098	SDA250-41	144			
	1 3/4	20.508	SDA250-112	148	46	22.730	SDA250-46	148			
	1 7/8	25.230	SDA250-114	149	50	29.194	SDA250-50	151			
	2	30.617	SDA250-200	151	55	34.079	SDA250-55	154			
	2 1/4	34.079	SDA250-204	154	60	34.079	SDA250-60	158			
	-	-	-	-	65	34.079	SDA250-65	161			
	-	-	-	-	70	34.079	SDA250-70	164			
	-	-	-	-	75	34.079	SDA250-75	168			
	-	-	-	-	85	34.079	SDA250-85	175			

Accessories for S-Series Torque Wrenches

TSP-Series, Pro Series Swivels

- Featuring Tilt and Swivel technology
- 360° X-axis and 160° Y-axis rotation
- Increases tool fit in restricted access areas
- Simplifies hose placement.

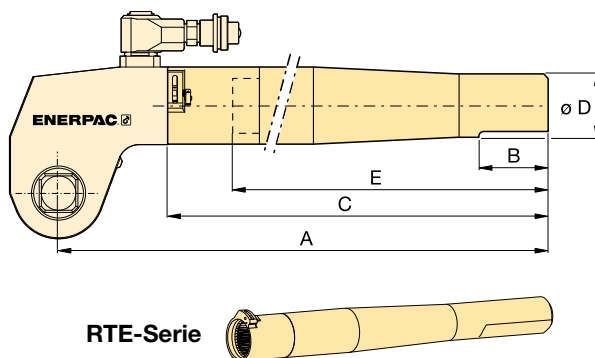
**TSP
RTE
SRS
Series**



For Torque Wrench Model Number	Model Number	Maximum Pressure (bar)	 (kg)
S1500, S3000	TSP100	700	0,2
S6000, S11000, S25000	TSP200	700	0,2

To order an S-series wrench fitted with the TSP swivel, add suffix "P" to the model number. Example: **S1500-P**. TSP-swivel does not include couplers.

RTE-Series, Reaction Tube Extensions



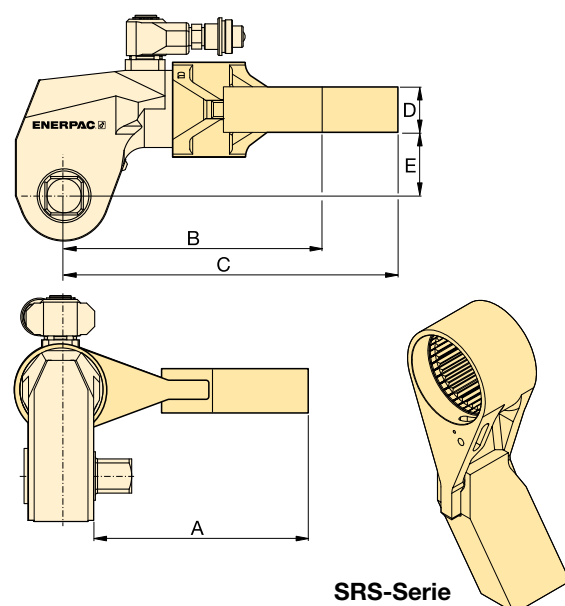
- Full torque rated
- Increases tool fit in restricted access areas.

For Torque Wrench Model Number	Model Number	Dimensions (mm)					 (kg)*
		A	B	C	D	E	
S1500	RTE15	706	152	636	58	600	4,6
S3000	RTE30	733	152	647	57	600	5,5
S6000	RTE60	747	152	659	65	600	7,7
S11000	RTE110	769	152	675	76	600	11,2
S25000	RTE250	813	152	685	100	600	17,3

* Weights indicated are for the accessories only and do not include the wrench.

SRS-Series, Extended Reaction Arms

- Lightweight interchangeable design.



For Wrench Model	Max. Torque (Nm)	Model Number	Dimensions (mm)					 (kg)*
			A	B	C	D	E	
S1500	1800	SRS151	97	87	128	24	34	0,8
	1640	SRS152	122	98	139	24	34	1,0
	1533	SRS153	147	109	150	24	34	1,2
S3000	3918	SRS301	111	104	170	34	48	1,6
	3712	SRS302	137	119	185	34	48	2,0
	3574	SRS303	162	133	200	34	48	2,5
S6000	7842	SRS601	148	134	198	39	62	2,3
	7454	SRS602	173	149	213	39	62	2,7
	7175	SRS603	198	163	228	39	62	3,4
S11000	14.650	SRS1101	151	158	233	46	76	4,4
	13.957	SRS1102	176	173	248	46	76	5,1
	13.391	SRS1103	201	187	262	46	76	5,8
S25000	33.538	SRS2501	183	225	314	50	100	7,6
	32.049	SRS2502	208	240	329	50	100	8,4
	30.750	SRS2503	233	254	344	50	100	10,0

* Weights indicated are for the accessories only and do not include the wrench.

BSH-Series, Heavy-Duty Sockets

- Heavy-duty impact sockets
- Supplied with "Pin and Ring"

METRIC SOCKETS							
3/4" Square Drive		1" Square Drive		1 1/2" Square Drive		2 1/2" Square Drive	
Model Number	A/F (mm)	Model Number	A/F (mm)	Model Number	A/F (mm)	Model Number	A/F (mm)
BSH7519	19	BSH1019	19	BSH1536	36	BSH2565	65
BSH7524	24	BSH1024	24	BSH15163	41	BSH2570	70
BSH7527	27	BSH1027	27	BSH1546	46	BSH2575	75
BSH7530	30	BSH1030	30	BSH1550	50	BSH2580	80
BSH7532	32	BSH1032	32	BSH1555	55	BSH2585	85
BSH7536	36	BSH1036	36	BSH1560	60	BSH2590	90
BSH75163	41	BSH10163	41	BSH1565	65	BSH2595	95
BSH7546	46	BSH1046	46	BSH1570	70	BSH25100	100
BSH7550	50	BSH1050	50	BSH1575	75	BSH25105	105
-	-	BSH1055	55	BSH1580	80	BSH25110	110
-	-	BSH1060	60	BSH1585	85	BSH25115	115
-	-	BSH1065	65	BSH1590	90	BSH25120	120
-	-	BSH1070	70	BSH1595	95	BSH25125	125
-	-	BSH1075	75	BSH15100	100	BSH25135	135
-	-	BSH1080	80	BSH15105	105	BSH25140	140
-	-	BSH1085	85	BSH15110	110	BSH25145	145
-	-	BSH1090	90	BSH15115	115	BSH25150	150
-	-	BSH1095	95	-	-	BSH25155	155
-	-	BSH10100	100	-	-	-	-

BSH Series



Hexagon Size:

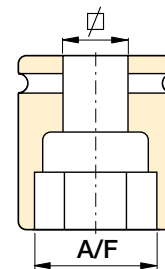
19 - 155 mm | 3/4" - 6 1/8"



Select the Right Torque

Choose your Enerpac Torque Wrench using the untightening rule of thumb: Loosening torque equals about 250% of tightening torque.

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Hexagon Bolt and Nut Sizes

See the table of hexagon sizes of bolts, nuts and related thread diameters.

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IMPERIAL SOCKETS													
¾" Square Drive		1" Square Drive				1½" Square Drive				2½" Square Drive			
Model Number	A/F (inch)	Model Number	A/F (inch)	Model Number	A/F (inch)	Model Number	A/F (inch)	Model Number	A/F (inch)	Model Number	A/F (inch)	Model Number	A/F (inch)
BSH7519	¾"	BSH1019	¾"	BSH10231	2 ⅝"	BSH15144	1 ⅞"	BSH15281	2 ⅜"	BSH25244	2 ⅞"	BSH25419	4 ⅜"
BSH75088	⅞"	BSH10088	⅞"	BSH10238	2 ⅜"	BSH1538	1 ½"	BSH15288	2 ⅞"	BSH25250	2 ½"	BSH25425	4 ¼"
BSH75094	15/16"	BSH10094	15/16"	BSH10244	2 7/16"	BSH15156	1 9/16"	BSH1575	2 15/16"	BSH2565	2 13/16"	BSH25110	45/16"
BSH7527	1 1/16"	BSH1027	1 1/16"	BSH10250	2 ½"	BSH15163	1 ⅝"	BSH15300	3"	BSH25263	2 ⅝"	BSH25438	4 ⅜"
BSH7530	1 3/16"	BSH1030	1 3/16"	BSH1065	2 9/16"	BSH1543	1 11/16"	BSH15306	3 1/16"	BSH25269	2 11/16"	BSH25450	4 ½"
BSH75125	1 ¼"	BSH10125	1 ¼"	BSH10263	2 ⅝"	BSH15175	1 ¾"	BSH15313	3 ⅛"	BSH2570	2 ¾"	BSH25463	4 ⅝"
BSH75131	1 5/16"	BSH10131	1 5/16"	BSH10269	2 11/16"	BSH1546	1 13/16"	BSH15319	3 3/16"	BSH25281	2 11/16"	BSH25475	4 ¾"
BSH7535	1 ⅜"	BSH1035	1 ⅜"	BSH1070	2 ¾"	BSH15188	1 ⅞"	BSH15325	3 ¼"	BSH25288	2 ⅞"	BSH25488	4 ⅞"
BSH75144	1 7/16"	BSH10144	1 7/16"	BSH10281	2 13/16"	BSH15194	1 15/16"	BSH15338	3 ⅜"	BSH2575	2 15/16"	BSH25500	5"
BSH7538	1 ½"	BSH1038	1 ½"	BSH10288	2 ⅞"	BSH15200	2"	BSH15350	3 ½"	BSH25300	3"	BSH25513	5 ⅛"
BSH75156	1 9/16"	BSH10156	1 9/16"	BSH1075	2 15/16"	BSH15206	2 1/16"	BSH15363	3 ⅝"	BSH25306	3 1/16"	BSH25519	5 3/16"
BSH75163	1 ⅝"	BSH10163	1 ⅝"	BSH10300	3"	BSH15213	2 ⅛"	BSH1595	3 ¾"	BSH25313	3 ⅛"	BSH25525	5 ¼"
BSH7543	1 11/16"	BSH1043	1 11/16"	BSH10306	3 1/16"	BSH15219	2 3/16"	BSH15388	3 ⅞"	BSH25319	3 3/16"	BSH25538	5 ⅜"
BSH75175	1 ¾"	BSH10175	1 ¾"	BSH10313	3 ⅛"	BSH15225	2 ¼"	BSH15100	3 15/16"	BSH25325	3 ¼"	BSH25140	5 ½"
BSH7546	1 3/16"	BSH1046	1 13/16"	BSH10319	3 3/16"	BSH15231	2 5/16"	BSH15400	4"	BSH25338	3 ⅜"	BSH25575	5 ¾"
BSH75188	1 ⅞"	BSH10188	1 ⅞"	BSH10325	3 ¼"	BSH15238	2 ⅜"	BSH15105	4 ⅛"	BSH25350	3 ½"	BSH25150	5 ⅞"
BSH75194	1 15/16"	BSH10194	1 15/16"	BSH10338	3 ⅜"	BSH15244	2 7/16"	BSH15419	4 3/16"	BSH25363	3 ⅝"	BSH25600	6"
BSH75200	2"	BSH10200	2"	BSH10350	3 ½"	BSH15250	2 ½"	BSH15425	4 ¼"	BSH2595	3 ¾"	BSH25613	6 ⅛"
—	—	BSH10206	2 1/16"	BSH10363	3 ⅝"	BSH1565	2 9/16"	BSH15110	4 5/16"	BSH25388	3 ⅞"	—	—
—	—	BSH10213	2 ⅛"	BSH1095	3 ¾"	BSH15263	2 ⅝"	BSH15438	4 ⅜"	BSH25100	3 15/16"	—	—
—	—	BSH10219	2 3/16"	BSH10388	3 ⅞"	BSH15269	2 11/16"	BSH15450	4 ½"	BSH25400	4"	—	—
—	—	BSH10225	2 ¼"	—	—	BSH1570	2 ¾"	BSH15463	4 ⅝"	BSH25105	4 ⅛"	—	—

Bolting Application Ideas

Enerpac professional series steel torque wrenches provide reliable controlled tightening solutions across the industry.

S3000 Square Drive Torque Wrench on Wind Tower erection and maintenance ►

S3000 used to connect wind tower segments during assembly and maintenance. A robust but compact solution is required for tightening of bolts on wind tower sections. Large numbers of fasteners require precise application of torque to ensure joint integrity is achieved and maintained.

The Enerpac S-Series wrench was selected as it offers simple and reliable operation while providing accurate and repeatable results.



◄ W4000 Low Profile Torque Wrench on an ANSI Pipe Flange

Throughout the Oil and Gas, Petrochemical and Processing Industries, pipeline joints, valves, pumps and machinery present challenges for controlled bolting.

The restricted access on this pipeline elbow was easily overcome by the selection of an Enerpac W-Series Torque Wrench.

The W-Series Wrenches offer reliability and control resulting in even and consistent torque being applied to all bolts.

S6000 on a High Volume Pump Unit ►

High vibration requires long studs to be accurately tightened to the calculated preload.

During maintenance quick turnaround times are essential; S Series wrenches are chosen as they provide a large angle of nut rotation per stroke, offering speed and accuracy in a compact ergonomic tool.



▼ Shown: Drive units with interchangeable cassettes



Simplicity

- No tools are needed for changing the hexagon cassettes
- Innovative, pinless wrench construction incorporates quick release cylinder and automatic crank engagement
- Single 360° hydraulic swivel manifold complete with screw lock couplings increases wrench and hose manoeuvrability.

Design

- Cylinders and low profile cassettes have been engineered to give ultra slim, compact low clearance tooling with a small nose radius
- Robust design with minimal parts enables easy on-site maintenance without special tools
- Nut sizes covered range from 30 - 155 mm (1 1/8 - 6 1/8 inch)
- Optimized strength-to-weight ratio
- Fast operation due to the large nut rotation per wrench cycle (30 degree rotation angle) and rapid return stroke.

Reliability

- All wrenches are nickel-plated for excellent corrosion protection and improved durability in harsh environments
- All wrenches are fitted with bronze bushings to ensure the ratchet will never seize in the sideplates, thus eliminating costly repairs.

Accuracy

- Constant torque output provides high accuracy across the full stroke
- In-line reaction foot ensures accuracy by reducing internal deflections.

Rigid Steel Design

The Professional Low Profile Solution



W-Series, Low Profile Torque Wrenches

This product range has been designed using state-of-the art CAD techniques to bring you the most advanced low profile torque wrench on the market. Safety, quality, toughness and reliability are built in.

During the design process every prototype was put through finite element stress analysis, photo-elastic modelling, rigorous cyclic testing and strain gauging.



TSP - Pro Series Swivel

Featuring Tilt and Swivel technology the TSP provides 360° X-axis rotation and 160° Y-axis rotation.

How to Order

Order as an accessory which can be fitted to existing W-Series wrenches.

Factory fitted to new W-Series wrenches: Suffix the wrench model number with "P" e.g.: **W2000-P**.

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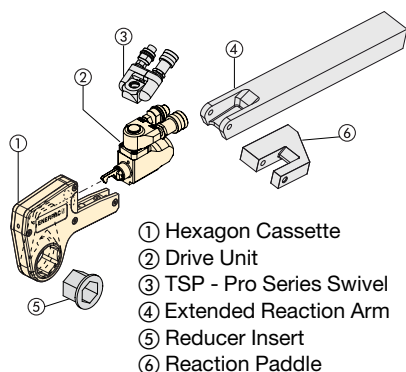


Torque Wrench Hoses

Use Enerpac THQ-700 Series hoses with W-Series torque wrenches to ensure the integrity of your hydraulic system.

6 m long, 2 hoses	THQ-706T
12 m long, 2 hoses	THQ-712T

Double-Acting Hydraulic Hexagon Torque Wrenches



Hexagon Cassettes and Reducer Inserts

Maximum versatility with the full range of interchangeable

hexagon cassettes and hexagon reducing inserts is available in metric and inch sizes.

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W Series



Maximum Torque at 700 bar:

47.450 Nm

Hexagon Range:

30 - 155 mm, 1 1/8 - 6 1/8"

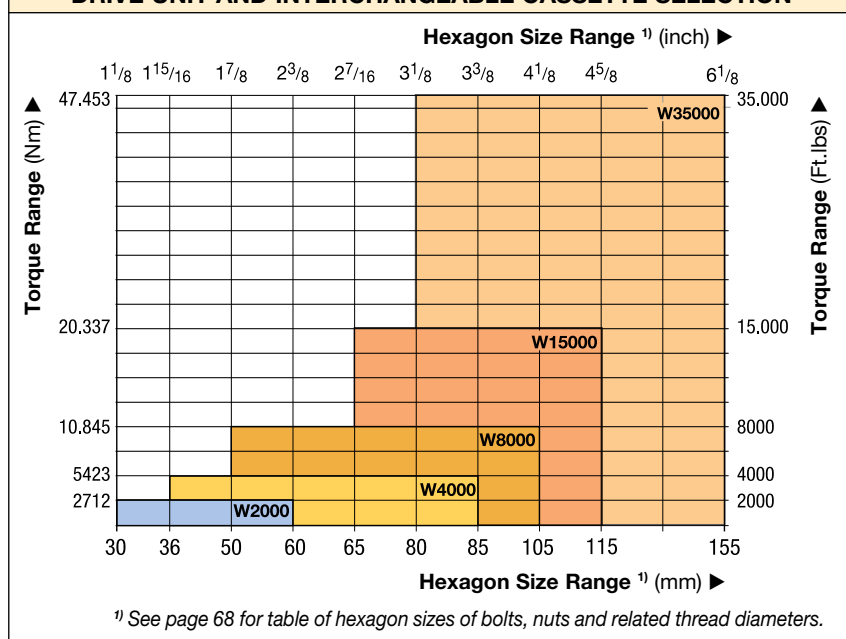
Nose Radius:

31 - 115 mm

Maximum Operating Pressure:

700 bar

DRIVE UNIT AND INTERCHANGEABLE CASSETTE SELECTION

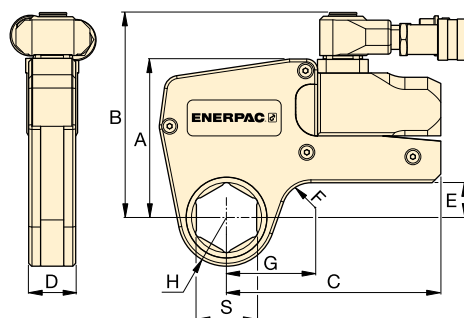


Torque Wrench Pump Selection Matrix

For optimum speed and performance see the torque wrench and pump matrix.

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▼ These rigid steel wrenches with low profile interchangeable hexagon cassettes guarantee durability and maximum versatility in bolting applications.



▼ SELECTION CHART

Hexagon Range *		Maximum Torque at 700 bar		Drive Unit Model Number **	Minimum Torque		Dimensions (mm) (see pages 14-20 for dimensions H, G and S)						Weight (drive unit without hexagon cassette)
(mm)	(inch)	(Nm)	(Ft.lbs)		(Nm)	(Ft.lbs)	A	B	C	D	E	F	(kg)
30 - 60	1 1/8 - 2 3/8	2712	2000	W2000	271	200	109	141	148	32	24	20	1,4
36 - 85	1 5/16 - 3 3/8	5423	4000	W4000	542	400	136	167	178	41	33	20	2,0
50 - 105	1 7/8 - 4 1/8	10.846	8000	W8000	1084	800	172	205	208	53	42	25	3,0
65 - 115	2 7/16 - 4 5/8	20.337	15.000	W15000	2033	1500	207	240	253	63	50	20	5,0
80 - 155	3 1/8 - 6 1/8	47.450	35.000	W35000	4745	3500	268	303	345	91	69-73	50	12,0

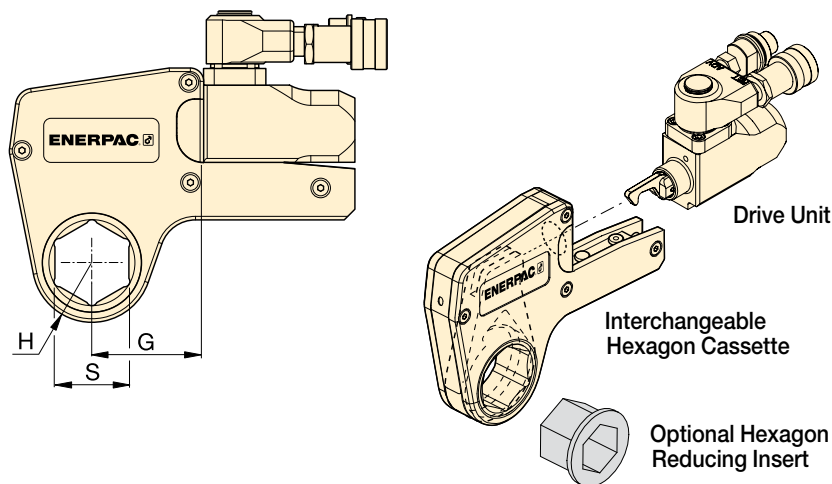
* With in-line reaction foot.

** To order a W-series wrench fitted with the TSP swivel, suffix the model number with "-P". Example: W2000-P.

ENERPAC

W2000, Inch-Cassettes & Reducer Inserts

ENERPAC 
POWERFUL SOLUTIONS. GLOBAL FORCE.



W Series



Maximum Torque at 700 bar:

2712 Nm

Hexagon Range:

1 1/8 - 2 3/8 inch

Maximum Operating Pressure:

700 bar



Metric Sizes

For metric sizes of hexagon cassettes and reducer inserts see:

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Hexagon Bolt and Nut Sizes

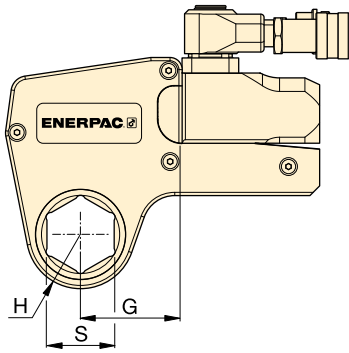
See the table for hexagon sizes of bolts, nuts and related thread diameters.

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▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size S	Nose Radius H	G	Model Nr. Cassette	 (kg)						
						Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer
W2000	1 1/8	31,0	53,7	W2102	2,1	—	—	—	—	—	—
	1 3/16	31,0	53,7	W2103	2,1	—	—	—	—	—	—
	1 1/4	31,0	53,7	W2104	2,1	—	—	—	—	—	—
	1 5/16	31,0	53,7	W2105	2,1	—	—	—	—	—	—
	1 3/8	31,0	53,7	W2106	2,1	—	—	—	—	—	—
	1 7/16	31,0	53,7	W2107	2,1	1 7/16 - 1 1/8	W2107R102	—	—	—	—
	1 1/2	33,5	58,2	W2108	2,2	—	—	—	—	—	—
	1 9/16	33,5	58,2	W2109	2,2	—	—	—	—	—	—
	1 5/8	33,5	58,2	W2110	2,2	1 5/8 - 1 1/4	W2110R104	1 5/8 - 1 3/16	W2110R103	—	—
	1 11/16	36,5	60,5	W2111	2,2	—	—	—	—	—	—
	1 3/4	36,5	60,5	W2112	2,2	—	—	—	—	—	—
	1 13/16	36,5	60,5	W2113	2,2	1 13/16 - 1 7/16	W2113R107	1 13/16 - 1 1/4	W2113R104	—	—
	1 7/8	39,0	63,1	W2114	2,2	—	—	—	—	—	—
	1 15/16	39,0	63,1	W2115	2,2	—	—	—	—	—	—
	2	39,0	63,1	W2200	2,2	2 - 1 5/8	W2200R110	2 - 1 7/16	W2200R107	—	—
	2 1/16	41,8	68,6	W2201	2,3	—	—	—	—	—	—
	2 1/8	41,8	68,6	W2202	2,3	—	—	—	—	—	—
	2 3/16	41,8	68,6	W2203	2,3	2 3/16 - 1 13/16	W2203R113	2 3/16 - 1 5/8	W2203R110	2 3/16 - 1 7/16	W2203R107
	—	—	—	—	—	—	—	—	—	—	—
	2 1/4	44,5	64,8	W2204	2,2	—	—	—	—	—	—
	2 5/16	44,5	64,8	W2205	2,2	—	—	—	—	—	—
	2 3/8	44,5	64,8	W2206	2,2	2 3/8 - 2	W2206R200	2 3/8 - 1 7/8	W2206R114	2 3/8 - 1 13/16	W2206R113
	—	—	—	—	—	2 3/8 - 1 1/2	W2206R108	2 3/8 - 1 7/16	W2206R107	—	—

W4000, Inch-Cassettes & Reducer Inserts



Maximum Torque at 700 bar:

5423 Nm

Hexagon Range:

1⁵/₁₆ - 3³/₈ inch

Maximum Operating Pressure:

700 bar

W
Series



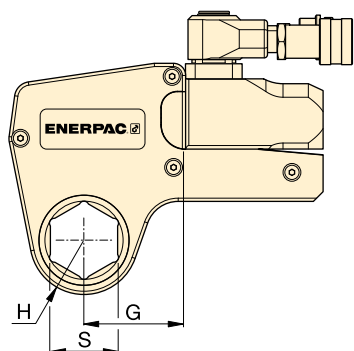
▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size ¹⁾ S (inch)	Nose Radius H (mm)	G (mm)	Model Nr. Cassette	 (kg)						
						Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer
W4000	1 ⁵ / ₁₆	37,0	61,0	W4105	3,7	—	—	—	—	—	—
	1 ³ / ₈	37,0	61,0	W4106	3,7	—	—	—	—	—	—
	1 ⁷ / ₁₆	37,0	61,0	W4107	3,7	—	—	—	—	—	—
	1 ¹ / ₂	37,0	61,0	W4108	3,7	—	—	—	—	—	—
	1 ⁹ / ₁₆	37,0	61,0	W4109	3,7	—	—	—	—	—	—
	1 ⁵ / ₈	37,0	61,0	W4110	3,7	—	—	—	—	—	—
	1 ¹¹ / ₁₆	39,5	64,0	W4111	3,8	—	—	—	—	—	—
	1 ³ / ₄	39,5	64,0	W4112	3,8	—	—	—	—	—	—
	1 ¹³ / ₁₆	39,5	64,0	W4113	3,8	—	—	—	—	—	—
	1 ⁷ / ₈	41,5	66,7	W4114	3,9	—	—	—	—	—	—
	1 ¹⁵ / ₁₆	41,5	66,7	W4115	3,9	—	—	—	—	—	—
	2	41,5	66,7	W4200	3,9	2 - 1 ⁷ / ₈	W4200R107	—	—	—	—
	2 ¹ / ₁₆	44,0	73,4	W4201	4	—	—	—	—	—	—
	2 ¹ / ₈	44,0	73,4	W4202	4	—	—	—	—	—	—
	2 ³ / ₁₆	44,0	73,4	W4203	4	2 ³ / ₁₆ - 1 ⁵ / ₈	W4203R110	2 ³ / ₁₆ - 1 ⁷ / ₁₆	W4203R107	2 ³ / ₁₆ - 1 ¹ / ₄	W4203R104
	2 ¹ / ₄	46,5	70,6	W4204	4,1	—	—	—	—	—	—
	2 ⁵ / ₁₆	46,5	70,6	W4205	4,1	—	—	—	—	—	—
	2 ³ / ₈	46,5	70,6	W4206	4,1	2 ³ / ₈ - 2	W4206R200	2 ³ / ₈ - 1 ¹³ / ₁₆	W4206R113	2 ³ / ₈ - 1 ⁷ / ₁₆	W4206R107
	—	—	—	—	—	2 ³ / ₈ - 1 ³ / ₈	W4206R106	—	—	—	—
	2 ⁷ / ₁₆	49,5	76,2	W4207	4,1	2 ⁷ / ₁₆ - 2	W4207R200	—	—	—	—
	2 ¹ / ₂	49,5	76,2	W4208	4,1	2 ¹ / ₂ - 2	W4208R200	2 ¹ / ₂ - 1 ¹³ / ₁₆	W4208R113	—	—
	2 ⁹ / ₁₆	49,5	76,2	W4209	4,1	2 ⁹ / ₁₆ - 2 ³ / ₁₆	W4209R203	2 ⁹ / ₁₆ - 2 ¹ / ₈	W4209R202	2 ⁹ / ₁₆ - 2 ¹ / ₁₆	W4209R201
	—	—	—	—	—	2 ⁹ / ₁₆ - 2	W4209R200	2 ⁹ / ₁₆ - 1 ¹³ / ₁₆	W4209R113	—	—
	2 ⁵ / ₈	52,5	78,3	W4210	4,2	—	—	—	—	—	—
	2 ¹¹ / ₁₆	52,5	78,3	W4211	4,2	—	—	—	—	—	—
	2 ³ / ₄	52,5	78,3	W4212	4,2	2 ³ / ₄ - 2 ³ / ₈	W4212R206	2 ³ / ₄ - 2 ³ / ₁₆	W4212R203	2 ³ / ₄ - 2 ¹ / ₈	W4212R202
	2 ¹³ / ₁₆	55,3	81,6	W4213	4,3	—	—	—	—	—	—
	2 ⁷ / ₈	55,3	81,6	W4214	4,3	—	—	—	—	—	—
	2 ¹⁵ / ₁₆	55,3	81,6	W4215	4,3	2 ¹⁵ / ₁₆ - 2 ⁹ / ₁₆	W4215R209	2 ¹⁵ / ₁₆ - 2 ³ / ₈	W4215R206	2 ¹⁵ / ₁₆ - 2 ³ / ₁₆	W4215R203
	—	—	—	—	—	2 ¹⁵ / ₁₆ - 2	W4215R200	—	—	—	—
	3	58,5	83,5	W4300	4,4	3 - 2 ³ / ₁₆	W4300R203	—	—	—	—
	3 ¹ / ₁₆	58,5	83,5	W4301	4,4	—	—	—	—	—	—
	3 ¹ / ₈	58,5	83,5	W4302	4,4	3 ¹ / ₈ - 2 ³ / ₄	W4302R212	3 ¹ / ₈ - 2 ⁹ / ₁₆	W4302R209	3 ¹ / ₈ - 2 ³ / ₈	W4302R206
	—	—	—	—	—	3 ¹ / ₈ - 2 ⁹ / ₁₆	W4302R205	3 ¹ / ₈ - 2 ¹ / ₄	W4302R204	3 ¹ / ₈ - 2 ³ / ₁₆	W4302R203
	—	—	—	—	—	3 ¹ / ₈ - 2 ¹ / ₈	W4302R202	3 ¹ / ₈ - 2	W4302R200	—	—
	3 ³ / ₁₆	62,0	85,5	W4303	4,5	—	—	—	—	—	—
	3 ¹ / ₄	62,0	85,5	W4304	4,5	—	—	—	—	—	—
	3 ⁵ / ₁₆	62,0	85,5	W4305	4,5	—	—	—	—	—	—
	3 ³ / ₈	62,0	85,5	W4306	4,5	—	—	—	—	—	—

¹⁾ See page 68 for table of hexagon sizes of bolts, nuts and related thread diameters.

W8000, Inch-Cassettes & Reducer Inserts

ENERPAC 
POWERFUL SOLUTIONS. GLOBAL FORCE.



Maximum Torque at 700 bar:

10.846 Nm

Hexagon Range:

1 7/8 - 4 1/8 inch

Maximum Operating Pressure:

700 bar

W
Series

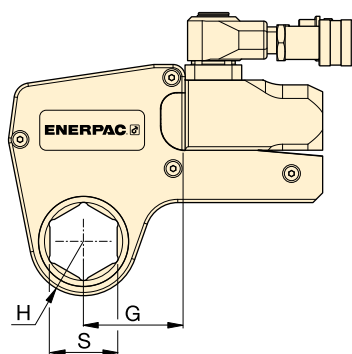


▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size ¹⁾ S	Nose Radius H	G	Model Nr. Cassette	 (kg)						
						Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer
W8000	1 7/8	45,0	78,2	W8114	8,1	—	—	—	—	—	—
	1 15/16	45,0	78,2	W8115	8,1	—	—	—	—	—	—
	2	45,0	78,2	W8200	8,1	—	—	—	—	—	—
	2 1/16	48,0	80,0	W8201	8,1	—	—	—	—	—	—
	2 1/8	48,0	80,0	W8202	8,1	—	—	—	—	—	—
	2 3/16	48,0	80,0	W8203	8,1	—	—	—	—	—	—
	2 1/4	51,0	82,5	W8204	8,1	—	—	—	—	—	—
	2 5/16	51,0	82,5	W8205	8,1	—	—	—	—	—	—
	2 3/8	51,0	82,5	W8206	8,1	—	—	—	—	—	—
	2 7/16	52,5	85,9	W8207	8,1	—	—	—	—	—	—
	2 1/2	52,5	85,9	W8208	8,1	—	—	—	—	—	—
	2 9/16	52,5	85,9	W8209	8,1	2 9/16 - 2	W8209R200	—	—	—	—
	2 5/8	56,0	84,8	W8210	8,1	—	—	—	—	—	—
	2 11/16	56,0	84,8	W8211	7,9	—	—	—	—	—	—
	2 3/4	56,0	84,8	W8212	7,9	2 3/4 - 2 3/16	W8212R203	—	—	—	—
	2 13/16	58,0	85,0	W8213	7,9	—	—	—	—	—	—
	2 7/8	58,0	85,0	W8214	7,9	—	—	—	—	—	—
	2 15/16	58,0	85,0	W8215	7,9	2 15/16 - 2 3/8	W8215R206	2 15/16 - 2 3/16	W8215R203	—	—
	3	60,5	89,5	W8300	8,0	—	—	—	—	—	—
	3 1/16	60,5	89,5	W8301	8,0	—	—	—	—	—	—
	3 1/8	60,5	89,5	W8302	8,0	3 1/8 - 2 9/16	W8302R209	3 1/8 - 2 3/8	W8302R206	3 1/8 - 2 3/16	W8302R203
	—	—	—	—	—	3 1/8 - 2	W8302R200	—	—	—	—
	3 3/16	66,0	92,2	W8303	8,2	—	—	—	—	—	—
	3 1/4	66,0	92,2	W8304	8,2	—	—	—	—	—	—
	3 5/16	66,0	92,2	W8305	8,2	—	—	—	—	—	—
	3 3/8	66,0	92,2	W8306	8,2	—	—	—	—	—	—
	3 7/16	66,0	92,2	W8307I	8,2	—	—	—	—	—	—
	3 1/2	66,0	92,2	W8308	8,2	3 1/2 - 3	W8308R300	3 1/2 - 2 15/16	W8308R215	3 1/2 - 2 3/4	W8308R212
	3 9/16	74,0	102,9	W8309	8,8	—	—	—	—	—	—
	3 5/8	74,0	102,9	W8310	8,8	—	—	—	—	—	—
	3 11/16	74,0	102,9	W8311	8,8	—	—	—	—	—	—
	3 3/4	74,0	102,9	W8312	8,8	3 3/4 - 3 1/8	W8312R302	3 3/4 - 2 15/16	W8312R215	3 3/4 - 2 3/4	W8312R212
	3 13/16	74,0	102,9	W8313	8,8	—	—	—	—	—	—
	3 7/8	74,0	102,9	W8314	8,8	3 7/8 - 3 1/8	W8314R302	3 7/8 - 2 15/16	W8314R215	—	—
	3 15/16	79,5	110,0	W8315	9,3	—	—	—	—	—	—
	4	79,5	110,0	W8400	9,3	—	—	—	—	—	—
	4 1/16	79,5	110,0	W8401I	9,3	—	—	—	—	—	—
	4 1/8	79,5	110,0	W8402	9,3	—	—	—	—	—	—

¹⁾ See page 68 for table of hexagon sizes of bolts, nuts and related thread diameters.

W15000, Inch-Cassettes & Reducer Inserts



Maximum Torque at 700 bar:

20.337 Nm

Hexagon Range:

2⁷/₁₆ - 4⁵/₈ inch

Maximum Operating Pressure:

700 bar

W
Series



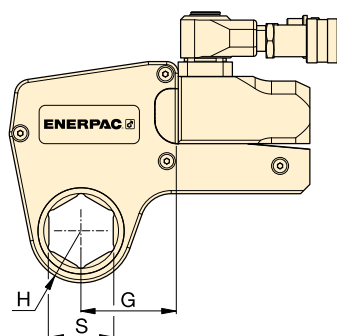
▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size ¹⁾ S	Nose Radius H	G	Model Nr. Cassette							
						Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer	Hexagon Reducer (inch)	Model Number Reducer
W15000	2 ⁷ / ₁₆	59,0	88,6	W15207	13,6	—	—	—	—	—	—
	2 ¹ / ₂	59,0	88,6	W15208	13,6	—	—	—	—	—	—
	2 ⁹ / ₁₆	59,0	88,6	W15209	13,6	—	—	—	—	—	—
	2 ⁵ / ₈	59,0	88,6	W15210	13,6	—	—	—	—	—	—
	2 ¹¹ / ₁₆	59,0	88,6	W15211	13,6	—	—	—	—	—	—
	2 ³ / ₄	59,0	88,6	W15212	13,6	—	—	—	—	—	—
	2 ¹³ / ₁₆	62,0	90,5	W15213	13,7	—	—	—	—	—	—
	2 ⁷ / ₈	62,0	90,5	W15214	13,7	—	—	—	—	—	—
	2 ¹⁵ / ₁₆	62,0	90,5	W15215	13,7	—	—	—	—	—	—
	3	64,5	92,9	W15300	13,8	3 - 2 ¹ / ₈	W15300R202	—	—	—	—
	3 ¹ / ₁₆	64,5	92,9	W15301	13,8	—	—	—	—	—	—
	3 ¹ / ₈	64,5	92,9	W15302	13,8	3 ¹ / ₈ - 2 ⁹ / ₁₆	W15302R209	—	—	—	—
	3 ³ / ₁₆	69,5	96,6	W15303	14,1	—	—	—	—	—	—
	3 ¹ / ₄	69,5	96,6	W15304	14,1	—	—	—	—	—	—
	3 ⁵ / ₁₆	69,5	96,6	W15305	14,1	—	—	—	—	—	—
	3 ³ / ₈	69,5	96,6	W15306	14,1	—	—	—	—	—	—
	3 ⁷ / ₁₆	69,5	96,6	W15307I	14,1	—	—	—	—	—	—
	3 ¹ / ₂	69,5	96,6	W15308	14,1	3 ¹ / ₂ - 2 ¹⁵ / ₁₆	W15308R215	3 ¹ / ₂ - 2 ³ / ₄	W15308R212	—	—
	3 ⁹ / ₁₆	75,0	101,8	W15309	14,6	—	—	—	—	—	—
	3 ⁵ / ₈	75,0	101,8	W15310	14,6	—	—	—	—	—	—
	3 ¹¹ / ₁₆	75,0	101,8	W15311	14,6	—	—	—	—	—	—
	3 ³ / ₄	75,0	101,8	W15312	14,6	3 ³ / ₄ - 3 ¹ / ₈	W15312R302	3 ³ / ₄ - 2 ¹⁵ / ₁₆	W15312R215	—	—
	3 ¹³ / ₁₆	75,0	101,8	W15313	14,5	—	—	—	—	—	—
	3 ⁷ / ₈	75,0	101,8	W15314	14,5	3 ⁷ / ₈ - 3 ¹ / ₈	W15314R302	3 ⁷ / ₈ - 2 ¹⁵ / ₁₆	W15314R215	—	—
	3 ¹⁵ / ₁₆	80,5	103,1	W15315	14,8	—	—	—	—	—	—
	4	80,5	103,1	W15400	14,8	—	—	—	—	—	—
	4 ¹ / ₁₆	80,5	103,1	W15401I	14,8	—	—	—	—	—	—
	4 ¹ / ₈	80,5	103,1	W15402	14,8	4 ¹ / ₈ - 3 ¹ / ₂	W15402R308	4 ¹ / ₈ - 3 ⁵ / ₁₆	W15402R305	4 ¹ / ₈ - 3 ¹ / ₄	W15402R304
	4 ³ / ₁₆	80,5	103,1	W15403I	14,8	—	—	—	—	—	—
	4 ¹ / ₄	80,5	103,1	W15404	14,8	4 ¹ / ₄ - 3 ¹ / ₂	W15404R308	4 ¹ / ₄ - 3 ¹ / ₈	W15404R302	—	—
	4 ⁵ / ₁₆	87,5	114,8	W15405	15,1	—	—	—	—	—	—
	4 ³ / ₈	87,5	114,8	W15406	15,1	—	—	—	—	—	—
	4 ⁷ / ₁₆	87,5	114,8	W15407	15,1	—	—	—	—	—	—
	4 ¹ / ₂	87,5	114,8	W15408I	15,1	—	—	—	—	—	—
	4 ⁹ / ₁₆	87,5	114,8	W15409I	15,1	—	—	—	—	—	—
	4 ⁵ / ₈	87,5	114,8	W15410I	15,1	4 ⁵ / ₈ - 3 ¹⁵ / ₁₆	W15410R315	4 ⁵ / ₈ - 3 ⁷ / ₈	W15410R314	4 ⁵ / ₈ - 3 ³ / ₄	W15410R312
	—	—	—	—	—	4 ⁵ / ₈ - 3 ¹ / ₂	W15410R308	—	—	—	—

¹⁾ See page 68 for table of hexagon sizes of bolts, nuts and related thread diameters.

W35000, Inch-Cassettes & Reducer Inserts

ENERPAC 
POWERFUL SOLUTIONS. GLOBAL FORCE.



▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size ¹⁾ S	Nose Radius H	G	Model Nr. Cassette	 (kg)		
						Hexagon Reducer (inch)	Model Number Reducer
W35000	3 1/8	76,0	126,8	W35302	32,8	3 1/8 - 2	W35302R200
	3 3/16	76,0	126,8	W35303	32,7	—	—
	3 1/4	76,0	126,8	W35304	32,5	—	—
	3 5/16	76,0	126,8	W35305	32,4	—	—
	3 3/8	76,0	126,8	W35306	32,2	—	—
	3 7/16	76,0	126,8	W35307	32,0	—	—
	3 1/2	76,0	126,8	W35308	31,8	3 1/2 - 2 5/16	W35308R205
	3 9/16	81,5	132,5	W35309	32,4	—	—
	3 5/8	81,5	132,5	W35310	33,3	—	—
	3 11/16	81,5	132,5	W35311	33,1	—	—
	3 3/4	81,5	132,5	W35312	32,9	—	—
	3 13/16	81,5	132,5	W35313	32,7	—	—
	3 7/8	81,5	132,5	W35314	32,4	3 7/8 - 2 11/16	W35314R211
	3 15/16	87,0	137,0	W35315	34,1	3 15/16 - 2 13/16	W35315R213
	4	87,0	137,0	W35400	33,9	—	—
	4 1/16	87,0	137,0	W35401	33,7	—	—
	4 1/8	87,0	137,0	W35402	33,5	—	—
	4 3/16	87,0	137,0	W35403	33,3	—	—
	4 1/4	87,0	137,0	W35404	33,0	4 1/4 - 3 1/16	W35404R301
	4 5/16	93,0	143,0	W35405	34,9	—	—
	4 3/8	93,0	143,0	W35406	34,7	—	—
	4 7/16	93,0	143,0	W35407	34,5	—	—
	4 1/2	93,0	143,0	W35408	34,3	—	—
	4 9/16	93,0	143,0	W35409	34,1	—	—
	4 5/8	93,0	143,0	W35410	33,7	4 5/8 - 3 5/8	W35410R310
	4 3/4	98,5	148,5	W35412	35,6	4 3/4 - 3 3/4	W35412R312
	4 7/8	98,5	148,5	W35414	34,9	—	—
	5	98,5	148,5	W35500	34,3	5 - 4	W35500R400
	5 1/8	103,0	153,0	W35502	35,8	5 1/8 - 4 1/8	W35502R402
	5 3/16	103,0	153,0	W35503	35,6	—	—
	5 1/4	103,0	153,0	W35504	35,2	—	—
	5 3/8	103,0	153,0	W35506	34,6	5 3/8 - 4 5/16	W35506R405
	5 1/2	108,5	158,5	W35508	36,2	—	—
	5 9/16	108,5	158,5	W35509	36,0	—	—
	5 5/8	108,5	158,5	W35510	35,6	—	—
	5 3/4	108,5	164,0	W35512	34,9	5 3/4 - 4 3/4	W35512R412
	5 7/8	114,0	164,0	W35514	36,7	5 7/8 - 4 7/8	W35514R414
	6	114,0	164,0	W35600	36,1	—	—
	6 1/8	114,0	164,0	W35602	35,3	6 1/8 - 5 1/8	W35602R502

¹⁾ See page 68 for table of hexagon sizes of bolts, nuts and related thread diameters.

W Series



Maximum Torque at 700 bar:

47.453 Nm

Hexagon Range:

3 1/8 - 6 1/8 inch

Maximum Operating Pressure:

700 bar

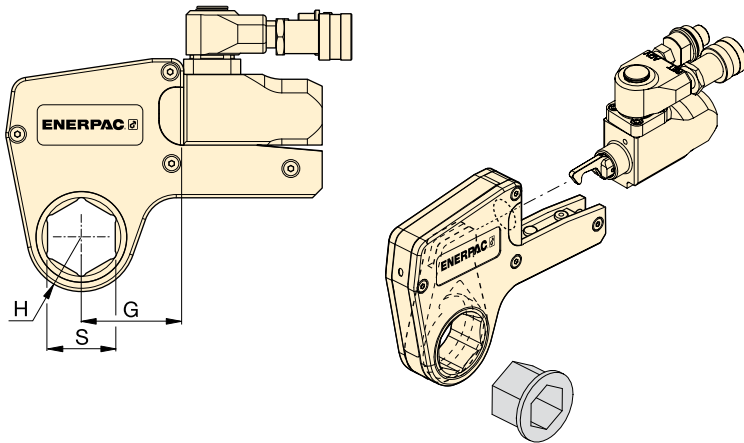


Hexagon Bolt and Nut Sizes

See the table for hexagon sizes of bolts, nuts and related thread diameters.

Page: 68

W2000, W4000, W8000, Metric Cassettes and Reducers



W Series



Hexagon Range:

30 - 105 mm

Maximum Operating Pressure:

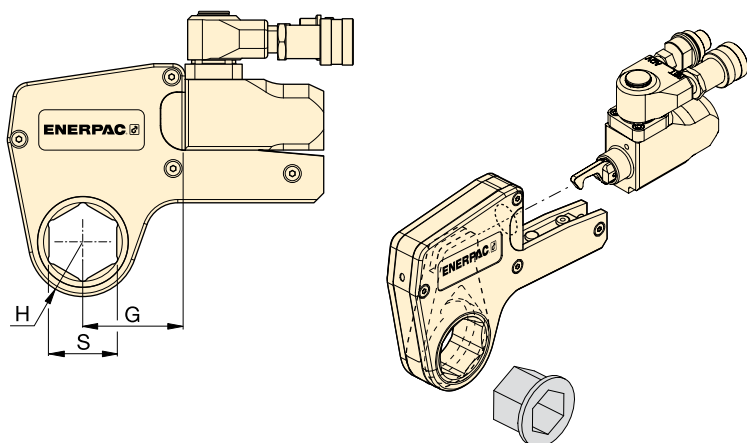
700 bar

▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size ¹⁾	Nose Radius	Dim.	Model Nr. Cassette							
						Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer
W2000	30	31	54	W2103	2,1	–	–	–	–	–	–
	32	31	54	W2104	2,1	–	–	–	–	–	–
	36	31	54	W2107	2,1	–	–	–	–	–	–
	38	34	58	W2108	2,2	–	–	–	–	–	–
	41	34	58	W2110	2,2	41 - 32	W2110R104	41 - 30	W2110R103	41 - 24	W2110R024M
	46	34	61	W2113	2,2	46 - 36	W2113R107	46 - 32	W2113R104	–	–
	50	39	63	W2200	2,2	50 - 41	W2200R110	50 - 36	W2200R107	–	–
	55	42	69	W2203	2,3	55 - 46	W2203R113	55 - 41	W2203R110	55 - 36	W2203R107
	60	45	65	W2206	2,2	60 - 50	W2206R200	60 - 46	W2206R113	60 - 41	W2206R110
	–	–	–	–	–	60 - 36	W2206R107	–	–	–	–
W4000	36	37	61	W4107	3,7	–	–	–	–	–	–
	41	37	61	W4110	3,7	–	–	–	–	–	–
	46	40	64	W4113	3,8	–	–	–	–	–	–
	50	42	67	W4200	3,9	50 - 36	W4200R107	–	–	–	–
	55	44	73	W4203	4,0	55 - 41	W4203R110	55 - 36	W4203R107	55 - 32	W4203R104
	60	47	71	W4206	4,1	60 - 50	W4206R200	60 - 46	W4206R113	60 - 36	W4206R107
	65	50	76	W4209	4,1	65 - 55	W4209R203	65 - 50	W4209R200	65 - 46	W4209R113
	70	53	78	W4212	4,2	70 - 60	W4212R206	70 - 55	W4212R203	–	–
	75	55	82	W4215	4,3	75 - 65	W4215R209	75 - 60	W4215R206	–	–
	–	–	–	W4215	–	75 - 55	W4215R203	75 - 50	W4215R200	–	–
	80	59	84	W4302	4,4	80 - 75	W4302R215	80 - 70	W4302R212	80 - 65	W4302R209
	–	–	–	W4302	–	80 - 55	W4302R203	80 - 50	W4302R200	–	–
	85	62	86	W4085M	4,5	–	–	–	–	–	–
	50	45	78	W8200	8,1	–	–	–	–	–	–
	55	48	80	W8203	8,1	–	–	–	–	–	–
W8000	60	51	83	W8206	8,1	–	–	–	–	–	–
	65	56	85	W8209	8,1	65 - 50	W8209R200	–	–	–	–
	70	56	85	W8212	7,9	70 - 55	W8212R203	–	–	–	–
	75	58	85	W8215	7,9	75 - 60	W8215R206	75 - 55	W8215R203	–	–
	80	61	90	W8302	8	80 - 65	W8302R209	80 - 60	W8302R206	80 - 55	W8302R203
	–	–	–	–	–	80 - 50	W8302R200	–	–	–	–
	85	66	92	W8085M	8,2	85 - 70	W8085R070M	85 - 65	W8085R065M	85 - 60	W8085R060M
	–	–	–	–	–	85 - 55	W8085R055M	–	–	–	–
	90	74	103	W8090M	8,8	90 - 75	W8090R075M	–	–	–	–
	95	74	103	W8312	8,8	95 - 80	W8312R302	95 - 75	W8312R215	–	–
	100	80	110	W8315	9,3	–	–	–	–	–	–
	105	80	110	W8402	9,3	–	–	–	–	–	–

¹⁾ See page 68 for table of hexagon sizes of bolts, nuts and related thread diameters.

W-Series, Metric Cassettes and Reducers



W Series



Hexagon Range:

65 - 155 mm

Maximum Operating Pressure:

700 bar



Hexagon Bolt and Nut Sizes

See the table for hexagon sizes of bolts, nuts and related thread diameters.

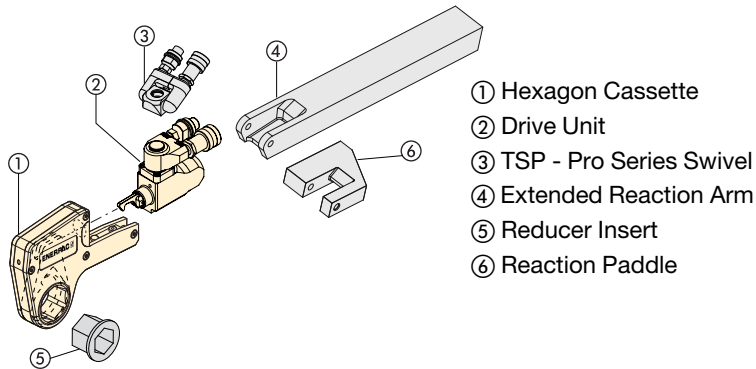
Page: **68**

▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size ¹⁾	Nose Radius	Dim.	Model Nr. Cassette							
						Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer
W15000	65	59	89	W15209	13,6	–	–	–	–	–	–
	70	59	89	W15212	13,6	–	–	–	–	–	–
	75	62	91	W15215	13,7	–	–	–	–	–	–
	80	65	93	W15302	13,8	80 - 65	W15302R209	–	–	–	–
	85	70	97	W15085M	14,1	85 - 70	W15085R070M	–	–	–	–
	90	75	102	W15090M	14,5	90 - 75	W15090R75M	–	–	–	–
	95	75	102	W15312	14,6	95 - 80	W15312R302	95 - 75	W15312R215	–	–
	100	81	103	W15315	14,8	–	–	–	–	–	–
	105	81	103	W15402	14,8	105 - 90	W15402R090M	–	–	–	–
	110	88	115	W15405	15,1	110 - 95	W15110R095M	–	–	–	–
	115	88	115	W15115M	15,1	115 - 100	W15115R100M	–	–	–	–
W35000	80	77	129	W35302	32,8	80 - 50	W35302R200	–	–	–	–
	85	77	129	W35085M	32,3	–	–	–	–	–	–
	90	82	135	W35090M	33,5	90 - 60	W35090R206	–	–	–	–
	95	82	135	W35312	32,9	–	–	–	–	–	–
	100	88	139	W35315	34,1	–	–	–	–	–	–
	105	88	139	W35402	33,5	–	–	–	–	–	–
	110	94	146	W35405	34,9	110 - 85	W35405R085M	–	–	–	–
	115	94	146	W35115M	34,2	–	–	–	–	–	–
	120	100	153	W35412	35,6	120 - 95	W35412R312	–	–	–	–
	123	100	153	W35123M	35,0	–	–	–	–	–	–
	130	104	160	W35502	35,8	130 - 105	W35502R402	–	–	–	–
	135	104	160	W35506	34,6	135 - 110	W35506R405	–	–	–	–
	140	110	163	W35508	36,2	140 - 115	W35508R115M	–	–	–	–
	145	110	163	W35512	34,9	145 - 120	W35512R412	–	–	–	–
	150	115	169	W35514	36,7	–	–	–	–	–	–
	151	115	169	W35151M	36,5	–	–	–	–	–	–
	155	115	169	W35602	35,3	155 - 130	W35602R502	–	–	–	–

¹⁾ See page 68 for table of hexagon sizes of bolts, nuts and related thread diameters.

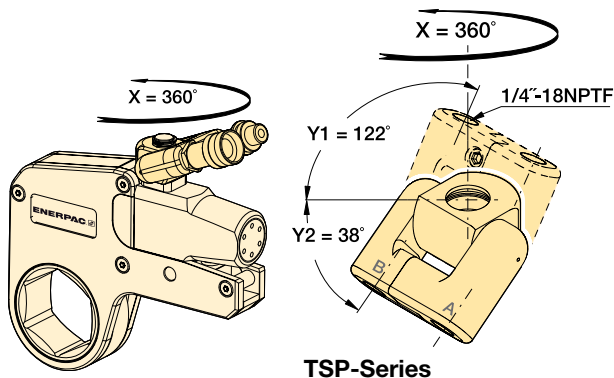
Accessories for W-Series Torque Wrenches



TSP WTE WRP Series



TSP-Series, Pro Series Swivels

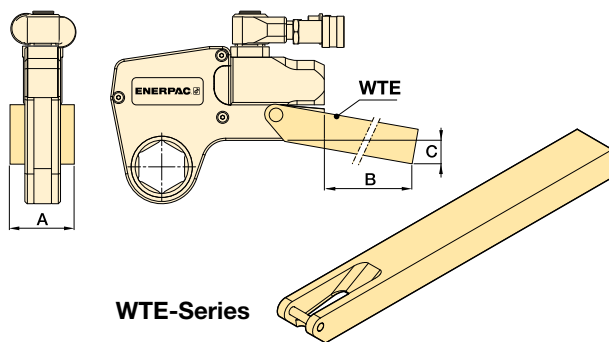


- Featuring Tilt and Swivel technology
- 360° X-axis and 160° Y-axis rotation
- Increases tool fit in restricted access areas
- Simplifies hose placement.

For Torque Wrench Model Number	Model Number	Maximum Pressure (bar)	 (kg)
W2000, W4000	TSP100	700	0,2
W8000, W15000	TSP200	700	0,2

To order an W-series wrench fitted with the TSP swivel, add suffix "P" to the model number. Example: **W2000-P**. TSP-swivel does not include couplers.

WTE-Series, Extended Reaction Arm

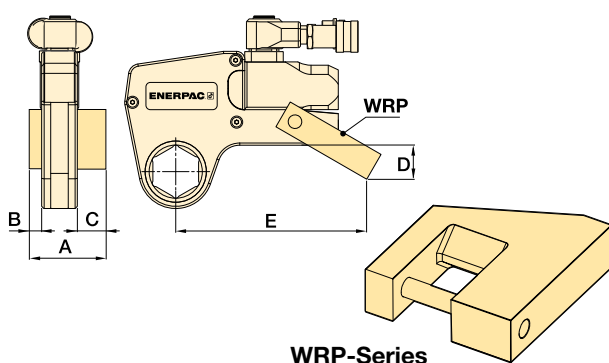


- Full torque rated
- Increases tool fit in restricted access areas.

For Torque Wrench Model Number	Model Number	Dimensions (mm)			 (kg)*
		A	B	C	
W2000	WTE20	56	398	76	2,6
W4000	WTE40	66	436	74	4,6
W8000	WTE80	85	449	66	7,6
W15000	WTE150	102	498	72	12,0

* Weights indicated are for the accessories only and do not include the wrench.

WRP-Series, Low Profile Reaction Paddles



- Lightweight interchangeable design
- Allows for offset reaction when in-line reaction is not available.

For Torque Wrench Model Nr.	Model Number	Dimensions (mm)					 (kg)*
		A	B	C	D	E	
W2000	WRP20	84	16	35	45	148	0,4
W4000	WRP40	109	21	47	59	190	0,8
W8000	WRP80	137	26	57	69	223	2,0
W15000	WRP150	165	32	69	87	257	3,9

* Weights indicated are for the accessories only and do not include the wrench.

▼ Shown: **SQD-50-I**



- Very high torque-to-weight ratio
- High speed, double-acting operation
- High degree of rotation angle for increased productivity
- Never-jam mechanism
- High repeatability, with accuracy $\pm 3\%$
- Slim nose radius and 360° swivel hose connection allow easier positioning in confined areas
- Few moving parts means durability and low maintenance
- Push-button drive release; no tools needed to reverse square or Allen drives for tightening or loosening
- Storage case (included) protects from damage, water and dirt
- Lock-ring couplers are standard on all torque wrenches, pumps and hoses.

Lightweight Aluminium High-Power Wrench for Sockets or Allen Drives



Swivel Hose Connection

All Enerpac torque wrenches feature a 360° swivel connection to allow easy access in all positions.



Twin 3,5:1 Safety Hoses

Use only Enerpac THC-700 series twin 3,5:1 safety hoses with SQD-Series double-acting wrenches to ensure the integrity of your system.

Length 6 m, 2 hoses	THC-7062
Length 12 m, 2 hoses	THC-7122



Optional Allen Drives

Expanded versatility with a wide range of metric and imperial Allen drives.

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◀ Easy and reliable service in the field using Enerpac SQD-series torque wrenches.

Double-Acting, Square Drive Hydraulic Wrenches



▲ All wrenches come standard with swivel coupler, square drive and reaction arm.

SQD Series

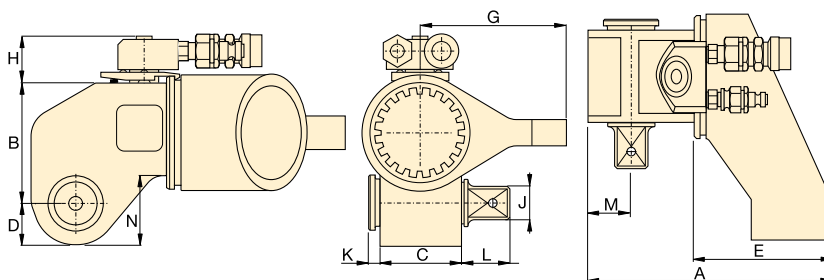
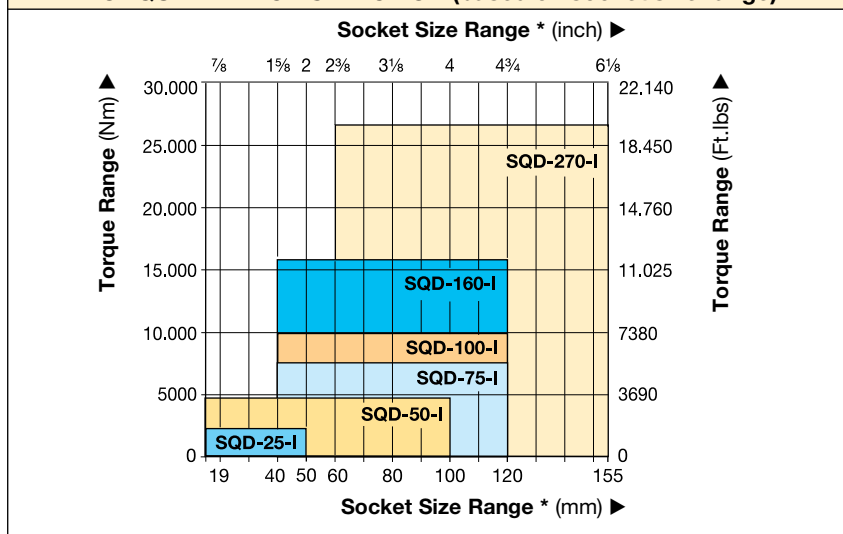


Maximum Torque:
27.000 Nm

Square Drive Range:
3/4 - 2 1/2 inch

Maximum Operating Pressure:
800 bar

TORQUE WRENCH SELECTION (based on socket size range)



Use only heavy-duty Impact Sockets for power driven torquing equipment, according to ISO 2725 and ISO 1174; DIN 3129 and DIN 3121 or ASME-B107.2/1995.

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Torque Wrench Pumps and Hoses

Enerpac system matched air and electric torque wrench pumps provide control to operate hydraulic torque wrenches.

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Hexagon Bolt and Nut Sizes

See the table for hexagon sizes of bolts, nuts and related thread diameters.

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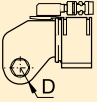
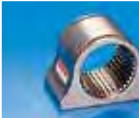
▼ SELECTION CHART

Square Drive Size	Maximum Torque @ 800 bar		Torque Wrench Model Number	Dimensions (mm)												Weight (including reaction arm and square drive)
	(inch)	(Nm)	(Ft.lbs)													
3/4	2350	1735	SQD-25-I	167	72	53	24	108	95	35	3/4	6	28	27	36	2,5
1	4800	3550	SQD-50-I	204	92	68	31	135	115	35	1	15	33	34	52	4,3
1 1/2	7560	5570	SQD-75-I	226	107	76	36	153	122	35	1 1/2	12	43	39	64	6,7
1 1/2	10.000	7360	SQD-100-I	253	115	84	39	164	130	35	1 1/2	13	39	43	68	8,0
1 1/2	16.000	11.835	SQD-160-I	272	134	100	48	178	150	50	1 1/2	11	45	54	81	12,0
2 1/2	27.000	19.875	SQD-270-I	342	164	119	59	218	200	50	2 1/2	18	76	63	99	24,5

* See page 10 for BSH-series Heavy-Duty Sockets.

SQD-Series, Imperial Allen Drives

▼ SELECTION CHART

TORQUE WRENCH		OPTIONAL ALLEN DRIVES, IMPERIAL			REACTION ARM FOR ALLEN DRIVE
					
Model Number (max. capacity)	Nose Radius D (mm)	Hexagon Size (inch)	Maximum Torque (Nm)	Model Number	Model Number
SQD-25-I (2350 Nm)	24	1/2	530	25A-050	RAH-25
		5/8	1000	25A-063	
		3/4	1800	25A-075	
		7/8	2350	25A-088	
		1	2350	25A-100	
SQD-50-I (4800 Nm)	31	5/8	1000	50A-063	RAH-50
		3/4	1800	50A-075	
		7/8	2800	50A-088	
		1	4200	50A-100	
		1 1/8	4800	50A-113	
		1 1/4	4800	50A-125	
		–	–	–	
SQD-75-I (7560 Nm)	31	5/8	1000	75A-063	RAH-75
		3/4	1800	75A-075	
		7/8	2800	75A-088	
		1	4200	75A-100	
		1 1/8	5900	75A-113	
		1 1/4	7560	75A-125	
		–	–	–	
SQD-100-I (10.000 Nm)	39	7/8	2800	100A-088	RAH-100
		1	4200	100A-100	
		1 1/8	5900	100A-113	
		1 1/4	8500	100A-125	
		1 3/8	10.000	100A-138	
		1 1/2	10.000	100A-150	
SQD-160-I (16.000 Nm)	48	1 1/4	8500	160A-125	RAH-160
		1 3/8	10.500	160A-138	
		1 1/2	14.000	160A-150	
		1 5/8	16.000	160A-163	
		1 3/4	16.000	160A-175	
SQD-270-I (27.000 Nm)	59	1 1/2	14.000	270A-150	RAH-270
		1 5/8	18.000	270A-163	
		1 3/4	22.000	270A-175	
		1 7/8	27.000	270A-188	
		2	27.000	270A-200	
		2 1/4	27.000	270A-225	
		–	–	–	
		–	–	–	

For SQD Series



Maximum Torque at 800 bar:

27.000 Nm

Allen Drive Range:

1/2 - 2 1/4 inch

Nose Radius:

24 - 59 mm



Torque Wrench Pumps and Hoses

Enerpac system matched air and electric torque wrench pumps provide control to operate hydraulic torque wrenches.

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NS and NC-Series Nut Splitters

Remove rusted or corroded nuts easily with Enerpac Nut Cutters. Cuts hexagon nut sizes up to 130 mm.

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Hexagon Bolt and Nut Sizes

See the table for hexagon sizes of bolts, nuts and related thread diameters.

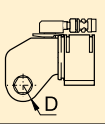
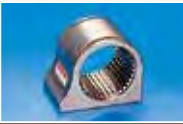
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▼ SQD-100-I with RAH-100 Reaction Arm and Allen drive used for loosening hexagon socket head cap screws.



SQD-Series, Metric Allen Drives

▼ SELECTION CHART

TORQUE WRENCH		OPTIONAL ALLEN DRIVES, METRIC			REACTION ARM FOR ALLEN DRIVE
					
Model Number (max. capacity)	Nose Radius D (mm)	Hexagon Size (mm)	Maximum Torque (Nm)	Model Number	Model Number
SQD-25-I (2350 Nm)	24	14	750	25A-14	RAH-25
		17	1300	25A-17	
		19	1800	25A-19	
		22	2350	25A-22	
		24	2350	25A-24	
SQD-50-I (4800 Nm)	31	17	1300	50A-17	RAH-50
		19	1800	50A-19	
		22	2800	50A-22	
		24	3500	50A-24	
		27	4800	50A-27	
		30	4800	50A-30	
		32	4800	50A-32	
SQD-75-I (7560 Nm)	31	17	1300	75A-17	RAH-75
		19	1800	75A-19	
		22	2800	75A-22	
		24	3500	75A-24	
		27	5000	75A-27	
		30	7000	75A-30	
		32	7560	75A-32	
SQD-100-I (10.000 Nm)	39	22	2800	100A-22	RAH-100
		24	3500	100A-24	
		27	5000	100A-27	
		30	7000	100A-30	
		32	8500	100A-32	
		36	10.000	100A-36	
SQD-160-I (16.000 Nm)	48	30	7000	160A-30	RAH-160
		32	8500	160A-32	
		36	12.000	160A-36	
		41	16.000	160A-41	
		46	16.000	160A-46	
SQD-270-I (27.000 Nm)	59	36	12.000	270A-36	RAH-270
		41	18.000	270A-41	
		46	25.000	270A-46	
		50	27.000	270A-50	
		55	27.000	270A-55	
		60	27.000	270A-60	
		65	27.000	270A-65	
		70	27.000	270A-70	

For SQD Series



Maximum Torque at 800 bar:

27.000 Nm

Allen Drive Range:

14 - 70 mm

Nose Radius:

24 - 59 mm



Optional Allen Drives and Reaction Arm

The RAH-Reaction Arm for Allen drives must be used instead of reaction arm for square drives.



Flange Spreaders

Separates pipe flanges with ease, enabling efficient maintenance tasks.

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Select the Right Torque

Choose your Enerpac Torque Wrench using the loosening torque rule of thumb:

Loosening torque may require 250% of tightening torque depending on the condition of the fastener.

▼ SQD-50-I with 50A-22 Allen drive with RAH-50 Reaction Arm for Allen drives.



▼ Shown from left to right: HXD-60 with CC-680, HXD-30 with CC-360



- High torque-to-weight ratio, slim nose radius and flat design
- High speed, high degree of rotation angle
- Snap in, interchangeable cassettes, no tools required
- 360° swivel hose connection allows easier positioning in confined areas
- High repeatability, with accuracy $\pm 3\%$
- Strong unibody design, integrated reaction arm and few moving parts make wrenches durable and reliable
- Extensive range of metric and imperial hexagon cassettes and reducers
- Drive unit and cassette come in storage case to protect from damage, water and dirt
- Lock-ring couplers are standard.

▼ The HXD-30 drive unit combined with cassette CC-3238 is the best solution for this turbine application. The slim nose radius and swivel couplers allow easy access in all positions.



Aluminium, Low Profile



Twin 3,5:1 Safety Hoses

Use only Enerpac THC-700 series twin 3,5:1 safety hoses with HXD double-acting wrenches to ensure the

integrity of your system.

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Nut Cutters

Remove rusted or corroded nuts easily with Enerpac Nut Cutters. Cuts hexagon nut sizes up to 130 mm.

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Select the Right Torque

Choose your Enerpac Torque Wrench using the loosening torque rule of thumb:

Loosening torque may require 250% of tightening torque depending on the condition of the fastener.

▼ An Enerpac HXD hydraulic wrench brings safety and efficiency to this flange maintenance job at a refinery.



Double-Acting Hydraulic Torque Wrenches

▼ Shown from left to right: CC-3238, HXD-30



Torque Wrench Selection in 2 steps:

- 1. Drive Unit**
Select the HXD-drive Unit using the quick selection chart below.
- 2. Cassette**
Select the appropriate CC-cassette from pages 28 and 29.

HXD Series



Maximum Torque:

24.210 Nm

Hexagon Range:

32-130 mm / 1¼-5 inch

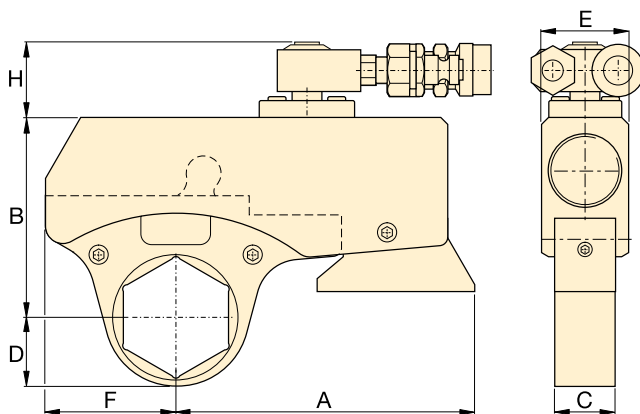
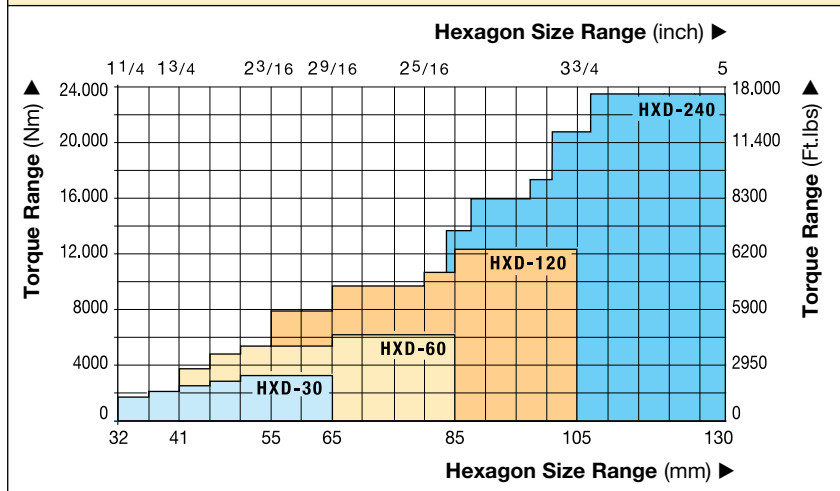
Nose Radius:

28,5 - 96,0 mm

Maximum Operating Pressure:

800 bar

DRIVE UNIT AND INTERCHANGEABLE CASSETTE SELECTION



Drive Unit with Cassette

▼ QUICK SELECTION CHART

Cassette Range		Maximum Torque at 800 bar	Drive Unit * Model Number	Drive Unit and Cassette Dimensions (mm)							Weight (including smallest cassette)
(mm)	(inch)			A	B	C	D	E	F	H	
32 - 60	1¼ - 2¾	3290	HXD-30	135	91 - 103	28	28,5 - 47,5	40	60	38	1,6
41 - 80	1⅝ - 3⅛	6190	HXD-60	156	115 - 130	35	34,5 - 60,5	50	75	38	2,5
55 - 100	2⅜ - 3⅞	12.500	HXD-120	200	141 - 156	47	46,5 - 73,5	65	96	38	4,8
80 - 130	3⅜ - 5	24.210	HXD-240	259	182 - 202	56	62,0 - 96,0	82	125	50	8,2

* With integrated reaction arm.



Metric and Imperial Sizes

Expanded versatility with the full range of metric and imperial Reducer Inserts and Holding Rings.

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Hexagon Bolt and Nut Sizes

See the table for hexagon sizes of bolts, nuts and related thread diameters.

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Torque Wrench Pumps

System matched air and electric pumps provide control to operate Enerpac HXD Torque Wrenches.

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HXD-Series, Inch-Cassettes and Inserts

ENERPAC 
POWERFUL SOLUTIONS. GLOBAL FORCE.



Maximum Torque at 800 bar:

24.210 Nm

Hexagon Range:

1¼ - 5 inch

◀ The optional Reducer Insert must be secured in the Cassette with a Holding Ring.

**CC
IN
HR
Series**



▼ SELECTION CHART

DRIVE UNIT	INTERCHANGEABLE CASSETTE, IMPERIAL					OPTIONAL ADD-ON REDUCER INSERTS, IMPERIAL				HOLDING RINGS
	Max. Torque	Hex. Size ¹⁾	Nose Radius D	Model Number		Hexagon Size	Model Number	Hexagon Size	Model Number	
(max. capacity)	(Nm)	(inch)	(mm)		(kg)	(inch)		(inch)		Model Number
HXD-30 (3290 Nm)	1700	1¼	28,5	CC-3125	0,6	–	–	–	–	–
	2100	1⅞	31,5	CC-3144	0,7	1⅞ – 1¼	IN3144-125	–	–	HR-36
	2500	1⅝	34,5	CC-3163	0,7	1⅝ – 1⅞	IN3163-144	1⅝ – 1¼	IN3163-125	HR-41
	2890	1⅜	38,5	CC-3181	0,8	1⅜ – 1⅝	IN3181-163	1⅜ – 1⅞	IN3181-144	HR-46
	3290	2	42,0	CC-3200	0,9	2 – 1⅜	IN3200-181	2 – 1⅝	IN3200-163	HR-50
		2⅞	45,0	CC-3219	1,0	2⅞ – 2	IN3219-200	2⅞ – 1⅜	IN3219-181	HR-55
		2⅝	47,5	CC-3238	1,1	2⅝ – 2⅞	IN3238-219	2⅝ – 2	IN3238-200	HR-60
HXD-60 (6190 Nm)	3840	1⅝	34,5	CC-6163	1,2	–	–	–	–	–
	4805	1⅜	39,5	CC-6181	1,3	1⅜ – 1⅝	IN6181-163	–	–	HR-46
	5410	2	43,5	CC-6200	1,4	2 – 1⅜	IN6200-181	2 – 1⅝	IN6200-163	HR-50
		2⅞	46,5	CC-6219	1,5	2⅞ – 2	IN6219-200	2⅞ – 1⅜	IN6219-181	HR-55
		2⅝	48,5	CC-6238	1,6	2⅝ – 2⅞	IN6238-219	2⅝ – 2	IN6238-200	HR-60
	6190	2⅞	52,5	CC-6256	1,8	2⅞ – 2⅝	IN6256-238	2⅞ – 2⅝	IN6256-219	HR-65
		2¾	55,5	CC-6275	1,9	2¾ – 2⅞	IN6275-256	2¾ – 2⅝	IN6275-238	HR-70
		2⅝	57,5	CC-6293	2,0	2⅝ – 2¾	IN6293-275	2⅝ – 2⅞	IN6293-256	HR-75
		3⅞	60,5	CC-6313	2,1	3⅞ – 2⅝	IN6313-293	3⅞ – 2¾	IN6313-275	HR-80
HXD-120 (12.500 Nm)	8000	2⅞	46,5	CC-12219	2,6	2⅞ – 2	IN12219-200	2⅞ – 1⅜	IN12219-181	HR-55
		2⅝	48,5	CC-12238	2,7	2⅝ – 2⅞	IN12238-219	2⅝ – 2	IN12238-200	HR-60
	9800	2⅞	52,5	CC-12256	2,7	2⅞ – 2⅝	IN12256-238	2⅞ – 2⅝	IN12256-219	HR-65
		2¾	55,5	CC-12275	2,8	2¾ – 2⅞	IN12275-256	2¾ – 2⅝	IN12275-238	HR-70
		2⅝	57,5	CC-12293	2,9	2⅝ – 2¾	IN12293-275	2⅝ – 2⅞	IN12293-256	HR-75
		3	57,5	CC-12300	2,9	3 – 2¾	IN12300-275	3 – 2⅞	IN12300-256	HR-75
	10.860	3⅞	60,5	CC-12313	3,0	3⅞ – 2⅝	IN12313-293	3⅞ – 2¾	IN12313-275	HR-80
	12.500	3⅞	64,5	CC-12338	3,5	3⅞ – 3	IN12338-300	3⅞ – 2⅝	IN12338-293	HR-85
		3½	67,5	CC-12350	3,6	3½ – 3⅞	IN12350-313	3½ – 3	IN12350-300	HR-90
		3¾	70,5	CC-12375	3,7	3¾ – 3½	IN12375-350	3¾ – 3⅞	IN12375-338	HR-95
		3⅞	73,5	CC-12388	3,8	3⅞ – 3½	IN12388-350	3⅞ – 3⅞	IN12388-338	HR-100
		–	–	–	–	–	–	–	–	–
HXD-240 (24.210 Nm)	14.000	3⅞	62,0	CC-24313²⁾	5,1	3⅞ – 2⅝	IN24313-293	3⅞ – 2¾	IN24313-275	HR-80
	15.840	3⅞	66,0	CC-24338	5,2	3⅞ – 3⅞	IN24338-313	3⅞ – 3	IN24338-300	HR-85
	16.570	3½	69,0	CC-24350	5,2	3½ – 3⅞	IN24350-313	3½ – 3	IN24350-300	HR-90
	17.320	3¾	72,0	CC-24375	5,4	3¾ – 3½	IN24375-350	3¾ – 3⅞	IN24375-338	HR-95
	18.050	3⅞	76,0	CC-24388³⁾	5,6	4⅞ – 3⅞	IN24413-388	3⅞ – 3⅞	IN24388-338	HR-100
	21.000	4⅞	80,0	CC-24413	5,7	4¼ – 3⅞	IN24425-388	4⅞ – 3¾	IN24413-375	HR-105
	24.210	4¼	84,0	CC-24425	6,8	4⅞ – 4¼	IN24463-425	4¼ – 3¾	IN24425-375	HR-110
		4⅞	90,0	CC-24463	7,3	5 – 4⅞	IN24500-463	4⅞ – 4⅞	IN24463-413	HR-120
		5	96,0	CC-24500	7,4	–	–	5 – 4¼	IN24500-425	HR-130
	–	–	–	–	–	–	–	–	–	–

Other Reducer Insert dimensions available upon request.

¹⁾ See the table of hexagon bolt and nut sizes and related thread diameters on page 68.

²⁾ Additional Reducer Insert: 3⅞"–2⅞" **IN24313-256** fits **CC-24313** Cassette. Use **HR-80** Holding Ring.

³⁾ Additional Reducer Insert: 3¾"–2⅞" **IN24375-313** fits **CC-24388** Cassette. Use **HR-100** Holding Ring.

HXD-Series, Metric Cassettes and Reducer Inserts



Maximum Torque at 800 bar:

24.210 Nm

Hexagon Range:

32 - 130 mm

**CC
IN
HR
Series**



◀ The optional Reducer Insert must be secured in the Cassette with a Holding Ring.

▼ SELECTION CHART

DRIVE UNIT	INTERCHANGEABLE CASSETTES, METRIC					OPTIONAL ADD-ON REDUCER INSERTS, METRIC						HOLDING RINGS
												
Model Number (max. capacity)	Max. Torque (Nm)	Hex. Size ¹⁾ (mm)	Nose Radius D (mm)	Model Number (kg)		Hexagon Size (mm)	Model Number	Hexagon Size (mm)	Model Number	Hexagon Size (mm)	Model Number	Model Number
HXD-30 (3290 Nm)	1700	32	28,5	CC-332	0,6	–	–	–	–	–	–	–
	2100	36	31,5	CC-336	0,7	–	–	–	–	–	–	–
	2500	41	34,5	CC-341	0,7	41/36	IN3-4136	41/32	IN3-4132	41/30	IN3-4130	HR-41
	2890	46	38,5	CC-346	0,8	46/41	IN3-4641	46/36	IN3-4636	46/32	IN3-4632	HR-46
	3290	50	42,0	CC-350	0,9	50/46	IN3-5046	50/41	IN3-5041	50/36	IN3-5036	HR-50
		55	45,0	CC-355	1,0	55/50	IN3-5550	55/46	IN3-5546	55/41	IN3-5541	HR-55
		60	47,5	CC-360	1,1	60/55	IN3-6055	60/50	IN3-6050	60/46	IN3-6046	HR-60
HXD-60 (6190 Nm)	3840	41	34,5	CC-641	1,2	41/36	IN6-4136	–	–	–	–	HR-41
	4805	46	39,5	CC-646	1,3	–	–	–	–	–	–	–
	5410	50	43,5	CC-650	1,4	50/46	IN6-5046	50/41	IN6-5041	50/36	IN6-5036	HR-50
		55	46,5	CC-655	1,5	55/50	IN6-5550	55/46	IN6-5546	55/41	IN6-5541	HR-55
		60	48,5	CC-660	1,6	60/55	IN6-6055	60/50	IN6-6050	60/46	IN6-6046	HR-60
	6190	65	52,5	CC-665	1,8	65/60	IN6-6560	65/55	IN6-6555	65/50	IN6-6550	HR-65
		70	55,5	CC-670	1,9	70/65	IN6-7065	70/60	IN6-7060	70/55	IN6-7055	HR-70
		75	57,5	CC-675	2,0	75/70	IN6-7570	75/65	IN6-7565	75/60	IN6-7560	HR-75
		80	60,5	CC-680	2,1	80/75	IN6-8075	80/70	IN6-8070	80/65	IN6-8065	HR-80
	HXD-120 (12.500 Nm)	8000	55	46,5	CC-1255	2,6	55/50	IN12-5550	55/46	IN12-5546	55/41	IN12-5541
60			48,5	CC-1260	2,7	60/55	IN12-6055	60/50	IN12-6050	60/46	IN12-6046	HR-60
9800		65	52,5	CC-1265	2,7	65/60	IN12-6560	65/55	IN12-6555	65/50	IN12-6550	HR-65
		70	55,5	CC-1270	2,8	70/65	IN12-7065	70/60	IN12-7060	70/55	IN12-7055	HR-70
		75	57,5	CC-1275	2,9	75/70	IN12-7570	75/65	IN12-7565	75/60	IN12-7560	HR-75
–		–	–	–	–	–	–	–	–	–	–	–
10.860		80	60,5	CC-1280	3,0	80/75	IN12-8075	80/70	IN12-8070	80/65	IN12-8065	HR-80
12.500		85	64,5	CC-1285	3,5	85/80	IN12-8580	85/75	IN12-8575	85/70	IN12-8570	HR-85
		90	67,5	CC-1290	3,6	90/85	IN12-9085	90/80	IN12-9080	90/75	IN12-9075	HR-90
		95	70,5	CC-1295	3,7	95/90	IN12-9590	95/85	IN12-9585	95/80	IN12-9580	HR-95
	100	73,5	CC-12100	3,8	100/95	IN12-10095	100/90	IN12-10090	100/85	IN12-10085	HR-100	
HXD-240 (24.210 Nm)	13.890	80	62,0	CC-2480	5,1	80/75	IN24-8075	80/70	IN24-8070	80/65	IN24-8065	HR-80
	16.030	85	66,0	CC-2485	5,2	85/80	IN24-8580	85/75	IN24-8575	85/70	IN24-8570	HR-85
	16.560	90	69,0	CC-2490	5,2	90/85	IN24-9085	90/80	IN24-9080	90/75	IN24-9075	HR-90
	17.100	95	72,0	CC-2495	5,4	95/90	IN24-9590	95/85	IN24-9585	95/80	IN24-9580	HR-95
	18.170	100	76,0	CC-24100	5,6	100/95	IN24-10095	100/90	IN24-10090	100/85	IN24-10085	HR-100
	20.840	105	80,0	CC-24105	5,7	105/100	IN24-105100	105/95	IN24-10595	105/90	IN24-10590	HR-105
	24.210	110	84,0	CC-24110	5,8	110/105	IN24-110105	110/100	IN24-110100	110/95	IN24-11095	HR-110
		115	87,0	CC-24115	7,1	115/110	IN24-115110	115/105	IN24-115105	115/100	IN24-115100	HR-115
		120	90,0	CC-24120	7,3	120/115	IN24-120115	120/110	IN24-120110	120/105	IN24-120105	HR-120
		125	93,0	CC-24125	7,3	125/120	IN24-125120	125/115	IN24-125115	125/110	IN24-125110	HR-125
		130	96,0	CC-24130	7,4	130/125	IN24-130125	130/120	IN24-130120	130/115	IN24-130115	HR-130

Other Reducer Insert dimensions available upon request.

¹⁾ See the table of hexagon bolt and nut sizes and related thread diameters on page 68.



Selection Matrix

Optimum Torque Wrench and Pump Combinations

For optimum speed and performance Enerpac recommends the following system set-up with wrench-pump-hose combinations.

For optimum speed and performance Enerpac recommends the following system set-up with wrench-pump-hose combinations.	ELECTRIC PUMPS				AIR DRIVEN PUMPS		TWIN HOSES		
	PME, PMU-Series		ZU4T-Series	ZE4T, ZE5T-Series	PTA-Series	ZA4T-Series	THQ, THC-Series		
									
									
700 bar Torque Wrenches Model Nr.	Flow at rated pressure: 0,33 l/min 115V, 1 ph	Flow at rated pressure: 0,33 l/min 230V, 1 ph	Flow at rated pressure: 1,0 l/min 115V, 1 ph	Flow at rated pressure: 0,8 - 1,6 l/min 115V, 1 ph 230V, 1 ph 230V, 3 ph	Flow at rated pressure: 0,33 l/min	Flow at rated pressure: 1,0 l/min	Hose lengths: 6 or 12 m.		
		S1500 S3000 S6000 S11000 S25000	PMU-10427-Q PMU-10422-Q	Any ZU4T-Series pump may be used.	Any ZE4T, ZE5T or ZE4TW-Series pump may be used.	PTA-1404-Q	Any ZA4T-Series pump may be used.	THQ-706T THQ-712T	
		W2000 W4000 W8000 W15000 W35000	PMU-10427-Q PMU-10422-Q			PTA-1404-Q			
	800 bar Torque Wrenches Model Nr.								
		SQD-25-I SQD-50-I SQD-75-I SQD-100-I SQD-160-I SQD-270-I	PMU-10427 PMU-10422	Any ZU4T-Series pump may be used.	Any ZE4T or ZE5T-Series pump may be used.	PTA-1404	Any ZA4T-Series pump may be used.		THC-7062 THC-7122
	HXD-30 HXD-60 HXD-120 HXD-240	PMU-10427 PMU-10422			PTA-1404				



Select the right torque

Choose your Enerpac torque wrench using the untightening rule of thumb:

- Be aware that when loosening a nut or bolt more torque is usually required than when tightening.
- Do not apply more than 75% of the maximum torque output of the tool when loosening nuts or bolts.

Conditions of bolted joints

- For fully threaded UNC nuts and bolts do not exceed **1½ times** nominal torque for a friction coefficient of 0,1.
- Humidity corrosion (rust) requires up to **2 times** the torque required for tightening.
- Sea water and chemical corrosion requires up to **2½ times** the torque required for tightening.
- Heat corrosion requires up to **3 times** the torque required for tightening.



IMPORTANT!

Always make sure that the torque scale on the pump matches the torque wrench size for accurate torque settings.



Call Enerpac!

For other combinations, consult your Enerpac bolting expert or your authorized Enerpac distributor.

Portable Electric Torque Wrench Pumps

▼ Shown: **PMU-10422**



- Powerful two-speed pump is lightweight and easy to carry
- Standard heat exchanger package on PMU-Series keeps pump cool under extreme use
- Glycerin filled gauge with scales reading in psi and bar
- Transparent overlays in Nm and Ft.lbs for all Enerpac torque wrenches provide a quick torque reference
- Universal motor for a high power-to-weight ratio; generates full pressure on as little as 50% of the rated line voltage
- Adjustable pressure relief valve for accurate torque adjustments and precise repeatability.

PME PMU Series



Reservoir Capacity:

1,9 - 3,8 litres

Flow at Rated Pressure:

0,33 l/min

Motor Size:

0,37 kW

Maximum Operating Pressure:

700 - 800 bar



Torque Wrench Hoses

Use Enerpac twin safety hoses to connect your torque wrench to the pump.

For 700 bar	Model-Nr.
6 m long, 2 hoses	THQ-706T
12 m long, 2 hoses	THQ-712T
For 800 bar	
6 m long, 2 hoses	THC-7062
12 m long, 2 hoses	THC-7122



Gauge Overlay Kit

Available separately for use with PME, PMU-Series pumps: **GT-4015-Q** includes overlays for all S- and

W-Series torque wrenches.

GT-4015 includes overlays for all SQD and HXD torque wrenches.

▼ SELECTION CHART

For Use with Torque Wrenches		Maximum Pressure Rating (bar)		Oil Flow Rate (l/min)		Model Number with Heat Exchanger *	Useable Oil Capacity (litres)	Electric Motor (Volt-phase-Hz)	Dimensions L x W x H (mm)	 (kg)
		1 st stage	2 nd stage	1 st stage	2 nd stage					
S1500 S3000	W2000 W4000	48	700	3,3	0,33	PMU-10427-Q	1,9	115 - 1 - 50/60	431x280x381	24
		48	700	3,3	0,33	PMU-10447-Q	3,8	115 - 1 - 50/60	431x330x381	27
		48	700	3,3	0,33	PMU-10422-Q	1,9	230 - 1 - 50/60	431x280x381	24
		48	700	3,3	0,33	PMU-10442-Q	3,8	230 - 1 - 50/60	431x330x381	27
SQD-25-I SQD-50-I	HXD-30 HXD-60	48	800	3,3	0,33	PMU-10427	1,9	115 - 1 - 50/60	431x280x381	24
		48	800	3,3	0,33	PMU-10447	3,8	115 - 1 - 50/60	431x330x381	27
		48	800	3,3	0,33	PMU-10422	1,9	230 - 1 - 50/60	431x280x381	24
		48	800	3,3	0,33	PMU-10442	3,8	230 - 1 - 50/60	431x330x381	27

* For pump without heat exchanger change PMU into PME. Example **PME-10442-Q**.

PME-Series pump size: 250 x 250 x 360 mm. Weight 17 kg (1,9 litres) and 20 kg (3,8 litres).

ZU4T, Electric Torque Wrench Pumps

ENERPAC 
POWERFUL SOLUTIONS. GLOBAL FORCE.

▼ ZU4204TE-Q (Pro Electric serie), ZU4204BE-Q (Classic Electric serie)



- Features **Z-Class** high-efficiency pump design; higher oil flow and bypass pressure, cooler running and requires 18% less current draw than comparable pumps
- Powerful 1,25 kW universal electric motor provides high power-to-weight ratio and excellent low-voltage operating characteristics
- High-strength, molded composite shroud protects motor and electrical components, while providing an ergonomic, non-conductive handle for easy transport
- Pendant provides additional safety for the operator

Pro Series pump only

- LCD readout provides pressure display and a number of diagnostic and readout capabilities never before offered on a portable electric pump
- AutoCycle feature provides continuous cycle operation of the torque wrench as long as the advance button is pressed (pump can be used with or without auto cycle).



◀ Any brand of hydraulic torque wrench can be powered by the portable ZU4T-Series torque wrench pump.

Z

**Tough,
Dependable
Innovative
CLASS**



FIRMWARE 7.0, for Pro-Series

- Display torque in Nm or Ft.lbs
- Display pressure in bar, MPa or psi
- Torque wrench model is selectable
- “Auto cycle” setting easily programmable.



Classic Electrical

Basic electrical package includes mechanical contactor, ON/OFF toggle switch, pendant with electro-mechanical push buttons, 24V transformer timer and operator accessible circuit breaker.



Pro-Series

Back-lit LCD and Pressure Transducer featuring Auto-Cycle Technology.

- Digital read-out and “Autocycle” setting
- Pump usage information, hour and cycle counts
- Low-voltage warning and recording
- Self-test and diagnostic capabilities
- Information can be displayed in English, French, German, Italian, Spanish and Portuguese
- Pressure transducer is more accurate and durable than analog gauges
- Easy-viewing variable rate display
- Display pressure in bar, MPa or psi.

ZU4T-Series, Torque Wrench Pumps



Z-Class – A Pump For Every Application

Patented **Z-Class** pump technology provides high by-pass pressures for increased productivity – important in applications using long hose runs and high pressure-drop circuits, like heavy lifting or certain double-acting tools.

Enerpac ZU4T-Series pumps are built to power small to large torque wrenches. Choosing the right ZU4T-Series torque wrench pump for your application is easy.

Classic Electric Torque Wrench Pump

- The Classic has traditional electro-mechanical components (transformers, relays and switches) in place of solid-state electronics. The Classic delivers durable, safe and efficient hydraulic power.

Pro Series Electric Torque Wrench Pump

- Digital (LCD) display features a built-in hour meter, pressure display and shows self-diagnostic, cycle-count and low voltage warning information. These premium features are not available on any other pump – anywhere!
- Auto-Cycle feature provides continuous cycle operation of the torque wrench as long as the advance button is pressed (pump can be used with or without Auto-Cycle feature).

ZU4T Series



Reservoir Capacity:

4,0 - 6,6 litres

Flow at Rated Pressure:

1,0 l/min

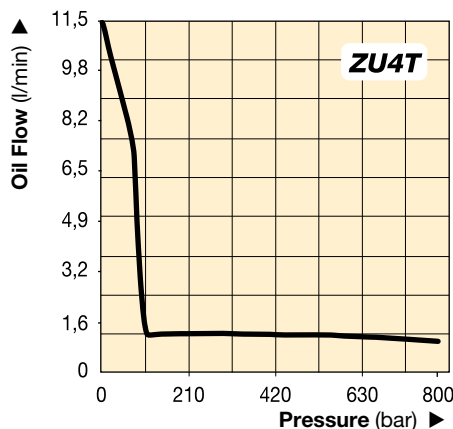
Motor Size:

1,25 kW

Maximum Operating Pressure:

700 - 800 bar

OIL FLOW VS. PRESSURE



Torque Wrench Pump Selection Matrix

For optimum speed and performance see the torque wrench pump and hose selection matrix.

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Pump Ratings

-Q suffix pumps are for 700 bar torque wrenches, and include spin-on couplers.

-E suffix pumps are for use with Enerpac SQD and HXD 800 bar torque wrenches, and include polarized lock-ring safety couplers.

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COMMON PUMP MODELS

	For Use With Torque Wrenches	Model Number ^{1) 4)}	Motor Electrical Specification	Usable Oil Capacity (litres)	(kg)
Pro Series	All wrenches	ZU4204TB-Q	115 VAC, 1-ph	4,0	32
		ZU4208TB-Q	115 VAC, 1-ph	6,6	34
		ZU4204TE-Q ²⁾	208-240 VAC, 1-ph	4,0	32
		ZU4208TE-Q ²⁾	208-240 VAC, 1-ph	6,6	34
		ZU4204TI-Q ³⁾	208-240 VAC, 1-ph	4,0	32
		ZU4208TI-Q ³⁾	208-240 VAC, 1-ph	6,6	34
Classic	All wrenches	ZU4204BB-QH	115 VAC, 1-ph	4,0	37
		ZU4204BB-Q	115 VAC, 1-ph	4,0	33
		ZU4208BE-QH ²⁾	208-240 VAC, 1-ph	6,6	38
		ZU4204BE-Q ²⁾	208-240 VAC, 1-ph	4,0	34
		ZU4208BI-QH ³⁾	208-240 VAC, 1-ph	6,6	40
		ZU4208BI-Q ³⁾	208-240 VAC, 1-ph	6,6	36



Gauge Overlay Kit

Available separately for use with ZU4T-Series Classic: **GT-4015-Q** includes overlays for all S- and

W-Series torque wrenches.

GT-4015 includes overlays for all SQD and HXD torque wrenches.

¹⁾ All models meet CE safety requirements and all CSA requirements.

²⁾ European plug and CE EMC directive compliant

³⁾ With NEMA 6-15 plug

⁴⁾ Select -E suffixed pumps for Enerpac SQD and HXD 800 bar torque wrenches, see page 35.

ZU4T-Series, Pump Options



4-Wrench Manifold

- For simultaneous operation of multiple torque wrenches
- Can be factory installed or ordered separately.

Accessory Kit * Model Nr.	Can be used on ZU4-Series torque wrench pumps
ZTM-E	for 800 bar torque wrenches
ZTM-Q	for 700 bar torque wrenches

* Add suffix **M** for factory installation.
Weight 4,0 kg.

Ordering Example: ZU4208TE-QM



Skid Bar

- Provides greater pump stability on soft or uneven surfaces
- Provides easy two-handed lift.

Accessory Kit * Model Nr.	Can be used on ZU4-Series torque wrench pumps
SBZ-4	4 and 6,6 litres reservoir ¹⁾
SBZ-4L	4 and 6,6 litres reservoir ²⁾

* Add suffix **K** to pump model number for factory installation.

¹⁾ Without heat exchanger 2,2 kg.

²⁾ With heat exchanger 3,2 kg.

Ordering Example: ZU4208TE-QK



Heat Exchanger

- Removes heat from the bypass oil to provide cooler operation
- Stabilizes oil viscosity, increasing oil life and reduces wear of pump and other hydraulic components.

Accessory Kit * Model Nr.	Can be used on ZU4-Series torque wrench pumps
ZHE-U4	4 and 6,6 litres reservoir

* Add suffix **H** to pump model number for factory installation.

Heat Exchanger adds 4,1 kg to pump weight.

Ordering Example: ZU4208TE-QH

▼ Most hydraulic torque wrenches can be powered by the Enerpac ZU4-Series torque wrench pump.



Roll Cage

- Protects pump
- Provides greater pump stability.

Accessory Kit * Model Nr.	Can be used on ZU4-Series torque wrench pumps
ZRC-04	4 and 6,6 litres reservoir ¹⁾
ZRC-04H	4 and 6,6 litres reservoir ²⁾

* Add suffix **R** for factory installation.

¹⁾ Without heat exchanger 5 kg.

²⁾ With heat exchanger 7 kg.

Ordering Example: ZU4208TE-QR

Thermal Transfer *	Max. Pressure	Max. Oil Flow	Voltage
(Btu/h)	(bar)	(l/min)	(VDC)
900	20,7	26,5	12

* At 1,9 l/min at 21 °C ambient temperature.
Do not exceed maximum oil flow and pressure ratings.
Heat exchanger is not suitable for water-glycol or high water-based fluids.

ZU4T-Series, Ordering Matrix and Specifications

▼ This is how a ZU4T-Series pump model number is built up:

1	2	3	4	5	6	7	8	8	8
Product Type	Motor Type	Flow Group	Valve Type	Reservoir Size	Valve Operation	Voltage	Must be E or Q	Options	Options

1 Product Type

Z = Pump series

2 Motor Type

U = Universal electric motor

3 Flow Group

4 = 1,0 l/min @ 700 bar

4 Valve Type

2 = Torque wrench valve

5 Reservoir Size (useable oil)

04 = 4,0 litres

08 = 6,6 litres

6 Valve Operation

T = **Pro Electric Serie pump** with solenoid valve and pendant, LCD Electric and pressure transducer

B = **Classic Electric pump** with solenoid valve and pendant.

7 Voltage

B = 115V, 1 ph, 50/60 Hz

E = 208-240V, 1 ph, 50/60 Hz (with European plug CE RF compliant)

I = 208-240V, 1 ph, 50/60 Hz (with NEMA 6-15 plug)

8 Options

E = **800 bar coupler** for use with HXD and SQD-Series or other wrenches

Q = **700 bar coupler** for use with S and W-Series or other wrenches

H = Heat exchanger

K = Skid bar

M = 4-wrench manifold

R = Roll cage

ZU4T Series



Reservoir Capacity:

4,0 - 6,6 litres

Flow at Rated Pressure:

1,0 l/min

Motor Size:

1,25 kW

Maximum Operating Pressure:

700 - 800 bar



How to order your ZU4T-Series torque wrench pump

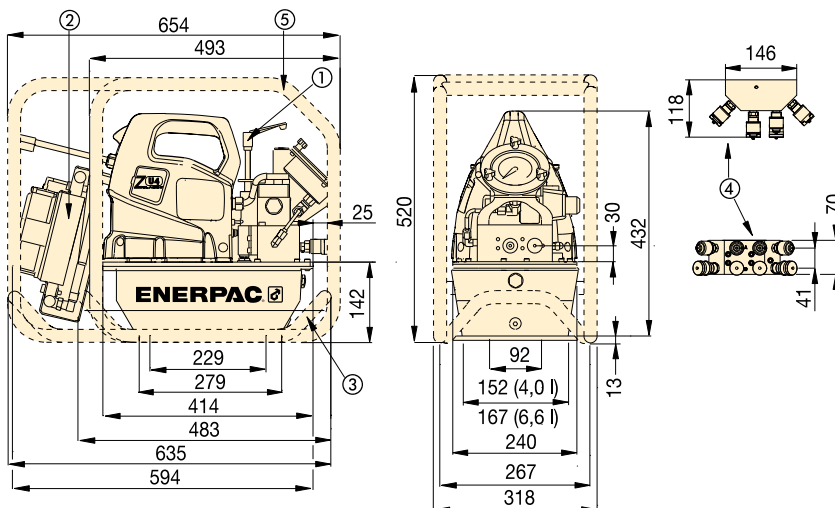
Ordering Example

Model No. ZU4208TE-QMHK

700 bar Pro Electric Series pump for use with Enerpac S and W-Series and other 700 bar torque wrenches, 230V motor, 6,6 litres reservoir, 4-wrench manifold, heat exchanger and skidbar.

Refer to the torque wrench pump selection matrix for optimum wrench, pump and hose combinations.

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ZU4T-Series Torque Wrench Pumps

- ① User adjustable relief valve
- ② Heat Exchanger (optional)
- ③ Skidbar (optional)
- ④ 4-wrench manifold (optional)
- ⑤ Roll cage (optional)

ZU4T-Series Performance Chart							
Motor Size (kW)	Output Flow Rate (l/min)				Motor Electrical Specification (Volt - Phase - Hz)	Sound Level (dBA)	Relief Valve Adjustment Range (bar)
	7 bar	50 bar	350 bar	700 bar			
1,25	11,5	8,8	1,2	1,0	115 - 1 - 50/60 208-240 - 1 - 50/60	85-90	124-700 *

* Pump type (-Q) shown, (-E) range is 124-800 bar.



Torque Wrench Hoses

Use Enerpac twin safety hoses to connect your torque wrench to the pump.

For 700 bar	Model-Nr.
6 m long, 2 hoses	THQ-706T
12 m long, 2 hoses	THQ-712T
For 800 bar	
6 m long, 2 hoses	THC-7062
12 m long, 2 hoses	THC-7122