

▼ Shown: S3000PX



## Setting New Standards in Safety, Simplicity and Performance

### Safety and Performance

- Compact, high-strength uni-body construction provides a small operating radius without sacrificing endurance
- 35° rotation angle and rapid return stroke for fast operation
- Tough manifold design with added safety feature for enhanced operator safety

### Simplicity

- 360° click-on reaction arm with quick release lever provides easier handling, even with gloves on
- Includes robust handle which mounts on both sides of tool for extra maneuverability
- Push button square drive release for quickly reversing the square drive for tightening or loosening

### Versatility

- Available with optional enhanced tilt and swivel TSP300 manifold for horizontal and vertical maneuverability, with greater durability <sup>1)</sup>

### Accuracy

- Constant torque output provides accuracy of ±3% across full stroke
- Optional Angle-of-Turn Indicator provides measurement of rotation.



#### Two Handle Styles

Robust angled positioning handle comes standard with every S-Series (X-Edition) tool. Straight positioning handles are available as accessories.

Compatible S-Series (X-Edition) wrenches	Model Nr. Angled positioning handles (standard)	Model Nr. Straight positioning handles (optional)
S1500X, S3000X	<b>SWH6A</b>	<b>SWH6S</b>
S6000X, S11000X	<b>SWH10A</b>	<b>SWH10S</b>
S25000X	<b>SWH10EA</b> <sup>2)</sup>	

<sup>2)</sup> SWH10EA is an eyebolt handle.



#### TSP - Pro Series Swivel

The optional TSP300 tilt and swivel manifold with robust interlocking design provides 360° X-axis rotation and 160° Y-axis rotation.

#### How to Order <sup>1)</sup>

Factory fitted to S-Series (X-Edition) wrenches: Insert a "P" prior to the "X" in the tool model number, example: **S1500PX**.

Order as an accessory using the model number: **TSP300**, which can be fitted to existing S-Series (X-Edition) wrenches. Includes male and female couplers.

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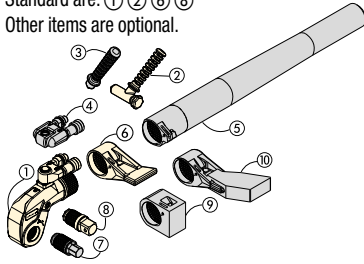
#### ATEX declared. Calibration certificate included.

All X-edition tools are CE - ATEX declared and are shipped complete with a calibration certificate.

<sup>1)</sup> TSP300 is designed for X-Edition tools only, and is not compatible with previous edition tools. For replacement components for existing tools, refer to repair sheet on [www.enerpac.com](http://www.enerpac.com)

# X-Edition, Square Drive Torque Wrenches

Standard are: ① ② ⑥ ⑧  
Other items are optional.



- ① Drive Unit
- ② Angeled Positioning Handle
- ③ Straight Positioning Handle
- ④ Pro Series Swivel
- ⑤ Reaction Tube Extension
- ⑥ Standard Reaction Arm
- ⑦ Allen Drive
- ⑧ Square Drive
- ⑨ Short Reaction Arm
- ⑩ Extended 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 X-Edition

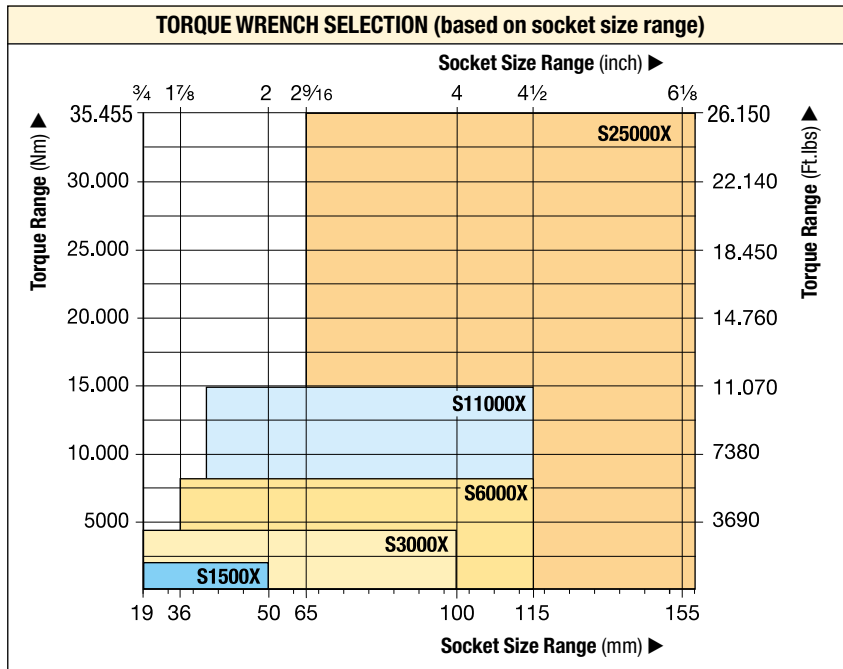


Nominal Torque Output:  
**35.455 Nm**

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

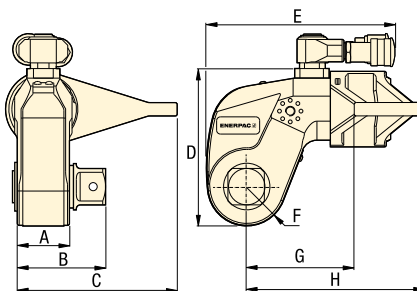
Nose Radius:  
**25 - 64 mm**

Maximum Operating Pressure:  
**690 bar**



**Use only Heavy Duty Impact Sockets**  
For power driven torquing equipment, according to ISO2725 and ISO1174; DIN 3129 and DIN 3121 or ASME-B107.2/1995.

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**Accessory Options**  
A full list of optional accessories is available for maximum versatility.

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▼ The rigid steel design of the S-Series torque wrenches provides durability, reliability and safety.



Nominal Torque at 690 bar		Minimum Torque at 69 bar		Square Drive Size (inch)		Angle-of-Turn Model Nr. (optional)	Torque Wrench Model Number *	Dimensions (mm)								Weight (kg)
(Nm)	(Ft.lbs)	(Nm)	(Ft.lbs)	Model Nr. (included with wrench)	Model Nr. (optional)			A	B	C	D	E	F	G	H	
1952	1440	195	144	3/4	SD15-012	AOT15	<b>S1500X</b>	39	65	108	97	136	25	70	129	3,2
4373	3225	438	323	1	SD30-100	AOT30	<b>S3000X</b>	48	78	135	128	173	33	90	161	5,6
8338	6150	834	615	1 1/2	SD60-108	AOT60	<b>S6000X</b>	55	92	169	157	192	40	110	188	9,2
15.151	11.175	1516	1118	1 1/2	SD110-108	AOT110	<b>S11000X</b>	72	114	197	190	228	50	133	229	15,8
35.455	26.150	3545	2615	2 1/2	SD250-208	AOT250	<b>S25000X</b>	89	143	246	244	287	64	182	295	32,2

\* To order a S-Series (X-edition) torque wrench fitted with a TSP300 tilt and swivel manifold, insert a "P" prior to the "X" in the tool model number, example: **S1500PX**.

Maximum Torque at 690 bar:

**35.455 Nm**

Hexagon Size Allen Drive:


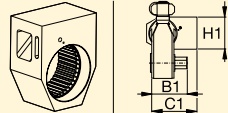
**½ - 2¼ inch**

Hexagon Size Allen Drive:

**14 - 85 mm**

For  
**S**  
Series



Torque Wrench 	Optional Allen Drives, Imperial				Optional Allen Drives, Metric				Short Reaction Arm for Allen Drives 		
	Hexagon Size <sup>1)</sup> (inch)	Maximum Torque (Nm)	Model Number	Dim. B1 (mm)	Hexagon Size <sup>1)</sup> (mm)	Maximum Torque (Nm)	Model Number	Dim. B1 (mm)	Model Number	Dimensions (mm) C1   H1	
<b>S1500X</b> (1952 Nm)	½	481	SDA15-008	66	14	644	SDA15-14	66	<b>SRA15X</b>	67,5	74
	5/8	936	SDA15-010	67	17	1152	SDA15-17	68			
	¾	1620	SDA15-012	71	19	1607	SDA15-19	70			
	7/8	1952	SDA15-014	74	22	1952	SDA15-22	73			
	1	1952	SDA15-100	77	24	1952	SDA15-24	74			
<b>S3000X</b> (4373 Nm)	5/8	936	SDA30-010	77	17	1152	SDA30-17	77	<b>SRA30X</b>	80,0	74
	¾	1620	SDA30-012	80	19	1607	SDA30-19	79			
	7/8	2569	SDA30-014	83	22	2488	SDA30-22	82			
	1	3830	SDA30-100	86	24	3234	SDA30-24	84			
	1 1/8	4373	SDA30-102	88	27	4373	SDA30-27	85			
	1 1/4	4373	SDA30-104	89	30	4373	SDA30-30	87			
	-	-	-	-	32	4373	SDA30-32	88			
<b>S6000X</b> (8338 Nm)	5/8	936	SDA60-010	85	17	1152	SDA60-17	86	<b>SRA60X</b>	91,5	89
	¾	1620	SDA60-012	89	19	1607	SDA60-19	88			
	7/8	2569	SDA60-014	92	22	2488	SDA60-22	91			
	1	3830	SDA60-100	95	24	3234	SDA60-24	93			
	1 1/8	5457	SDA60-102	97	27	4603	SDA60-27	94			
	1 1/4	7484	SDA60-104	98	30	6311	SDA60-30	96			
	-	-	-	-	32	7660	SDA60-32	97			
<b>S11000X</b> (15.151 Nm)	1 1/4	7484	SDA110-104	115	30	6311	SDA110-30	112	<b>SRA110X</b>	127,5	106
	1 3/8	9958	SDA110-106	117	32	7660	SDA110-32	114			
	1 1/2	12.928	SDA110-108	118	36	10.901	SDA110-36	117			
	1 5/8	15.151	SDA110-110	122	41	15.151	SDA110-41	121			
	1 3/4	15.151	SDA110-112	125	46	15.151	SDA110-46	127			
<b>S25000X</b> (35.455 Nm)	1 1/2	12.928	SDA250-108	141	36	10.901	SDA250-36	140	<b>SRA250X</b>	158,5	135
	1 5/8	16.433	SDA250-110	145	41	16.107	SDA250-41	144			
	1 3/4	20.520	SDA250-112	148	46	22.744	SDA250-46	148			
	1 7/8	25.245	SDA250-114	149	50	29.211	SDA250-50	151			
	2	30.635	SDA250-200	151	55	35.455	SDA250-55	154			
	2 1/4	35.455	SDA250-204	154	60	35.455	SDA250-60	158			
	-	-	-	-	65	35.455	SDA250-65	161			
	-	-	-	-	70	35.455	SDA250-70	164			
	-	-	-	-	75	35.455	SDA250-75	168			
	-	-	-	-	85	35.455	SDA250-85	175			

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.

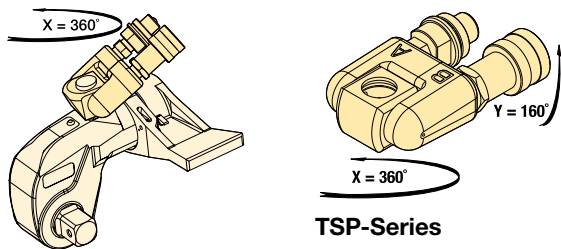
# Accessories for S-Series, X-Edition Wrenches

## TSP RTEX SRSX Series



### TSP-Series, Pro Series Swivel

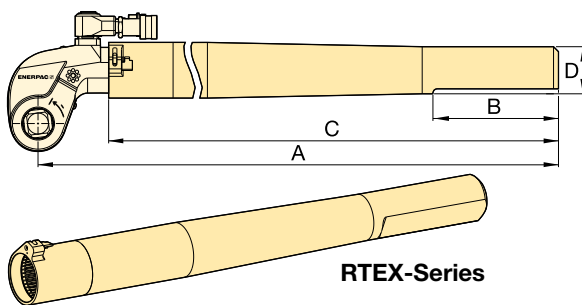
- Robust interlocking design
- 360° X-axis and 160° Y-axis rotation
- Increases tool fit in restricted access areas
- Simplifies hose placement
- Includes male and female couplers



For Torque Wrench Model Number	Model Number <sup>1)</sup>	Maximum Pressure (bar)	Weight (kg)
S1500X, S3000X, S6000X, S11000X, S25000X	TSP300	690	0,2

<sup>1)</sup> To order a S-Series (X-edition) torque wrench fitted with a TSP300 tilt and swivel manifold, insert a "P" prior to the "X" in the tool model number, example: **S1500PX**. TSP300 is designed for X-Edition tools only, and is not compatible with standard edition tools. For replacement components for existing tools, refer to repair sheet on [www.enerpac.com](http://www.enerpac.com)

### RTEX-Series, Reaction Tube Extensions

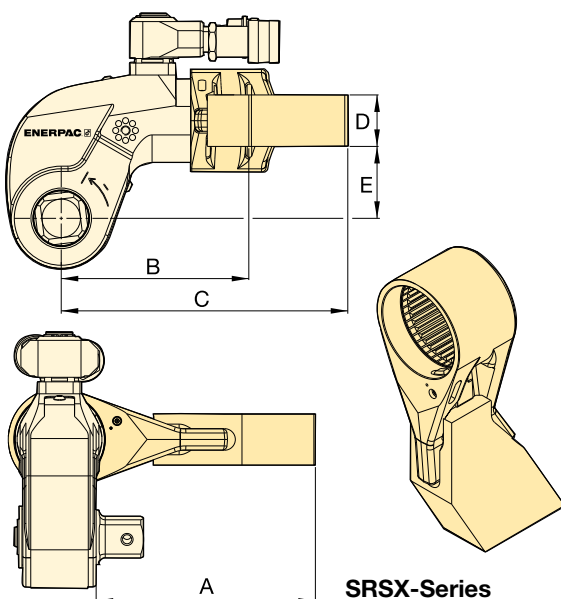


- Full torque rated
- Increases tool fit in restricted access areas

For Torque Wrench Model Number	Model Number	Dimensions (mm)				Weight (kg) *
		A	B	C	D	
S1500X	RTE15X	706	152	636	58	4,6
S3000X	RTE30X	733	152	647	57	5,5
S6000X	RTE60X	747	152	659	65	7,7
S11000X	RTE110X	769	152	675	76	11,2
S25000X	RTE250X	813	152	685	100	17,3

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

### SRSX-Series, Extended Reaction Arms



- Lightweight interchangeable design

For Wrench Model	Max. Torque (Nm)	Model Number	Dimensions (mm)					Weight (kg) *
			A	B	C	D	E	
S1500X	1801	SRS151X	94	86	127	24	34	0,8
	1641	SRS152X	119	97	138	24	34	1,0
	1533	SRS153X	145	109	148	24	34	1,2
S3000X	3918	SRS301X	111	106	168	34	48	1,6
	3712	SRS302X	137	117	182	34	48	2,0
	3574	SRS303X	162	132	198	34	48	2,5
S6000X	7842	SRS601X	138	128	192	39	62	2,3
	7454	SRS602X	163	144	207	39	62	2,7
	7175	SRS603X	189	159	222	39	62	3,4
S11000X	14.650	SRS1101X	149	157	232	46	76	4,4
	13.957	SRS1102X	175	172	247	46	76	5,1
	13.391	SRS1103X	200	187	261	46	76	5,8
S25000X	33.538	SRS2501X	183	209	295	50	100	7,6
	32.049	SRS2502X	208	222	310	50	100	8,4
	30.750	SRS2503X	233	236	326	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

¾" Square Drive		1" Square Drive		1½" Square Drive		2½" 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:

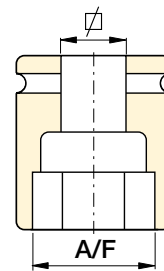
**19 - 155 mm | ¾" - 6 1/8"**



### 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 5/16"	BSH15144	1 7/16"	BSH15281	2 13/16"	BSH25244	2 7/16"	BSH25419	4 3/16"
BSH75088	7/8"	BSH10088	7/8"	BSH10238	2 3/8"	BSH1538	1 1/2"	BSH15288	2 7/8"	BSH25250	2 1/2"	BSH25425	4 1/4"
BSH75094	15/16"	BSH10094	15/16"	BSH10244	2 7/16"	BSH15156	1 9/16"	BSH1575	2 15/16"	BSH2565	2 13/16"	BSH25110	4 5/16"
BSH7527	1 1/16"	BSH1027	1 1/16"	BSH10250	2 1/2"	BSH15163	1 5/8"	BSH15300	3"	BSH25263	2 5/8"	BSH25438	4 3/8"
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 1/2"
BSH75125	1 ¼"	BSH10125	1 ¼"	BSH10263	2 5/8"	BSH15175	1 ¾"	BSH15313	3 1/8"	BSH2570	2 ¾"	BSH25463	4 5/8"
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 3/8"	BSH1035	1 3/8"	BSH1070	2 ¾"	BSH15188	1 7/8"	BSH15325	3 ¼"	BSH25288	2 7/8"	BSH25488	4 7/8"
BSH75144	1 7/16"	BSH10144	1 7/16"	BSH10281	2 13/16"	BSH15194	1 15/16"	BSH15338	3 3/8"	BSH2575	2 15/16"	BSH25500	5"
BSH7538	1 1/2"	BSH1038	1 1/2"	BSH10288	2 7/8"	BSH15200	2"	BSH15350	3 1/2"	BSH25300	3"	BSH25513	5 1/8"
BSH75156	1 9/16"	BSH10156	1 9/16"	BSH1075	2 15/16"	BSH15206	2 1/16"	BSH15363	3 5/8"	BSH25306	3 1/16"	BSH25519	5 3/16"
BSH75163	1 5/8"	BSH10163	1 5/8"	BSH10300	3"	BSH15213	2 1/8"	BSH1595	3 ¾"	BSH25313	3 1/8"	BSH25525	5 1/4"
BSH7543	1 11/16"	BSH1043	1 11/16"	BSH10306	3 1/16"	BSH15219	2 3/16"	BSH15388	3 7/8"	BSH25319	3 3/16"	BSH25538	5 3/8"
BSH75175	1 ¾"	BSH10175	1 ¾"	BSH10313	3 1/8"	BSH15225	2 ¼"	BSH15100	3 15/16"	BSH25325	3 ¼"	BSH25140	5 1/2"
BSH7546	1 13/16"	BSH1046	1 13/16"	BSH10319	3 3/16"	BSH15231	2 5/16"	BSH15400	4"	BSH25338	3 3/8"	BSH25575	5 ¾"
BSH75188	1 7/8"	BSH10188	1 7/8"	BSH10325	3 ¼"	BSH15238	2 3/8"	BSH15105	4 1/8"	BSH25350	3 1/2"	BSH25150	5 7/8"
BSH75194	1 15/16"	BSH10194	1 15/16"	BSH10338	3 3/8"	BSH15244	2 7/16"	BSH15419	4 3/16"	BSH25363	3 5/8"	BSH25600	6"
BSH75200	2"	BSH10200	2"	BSH10350	3 1/2"	BSH15250	2 1/2"	BSH15425	4 ¼"	BSH2595	3 ¾"	BSH25613	6 1/8"
-	-	BSH10206	2 1/16"	BSH10363	3 5/8"	BSH1565	2 9/16"	BSH15110	4 5/16"	BSH25388	3 7/8"	-	-
-	-	BSH10213	2 1/8"	BSH1095	3 ¾"	BSH15263	2 5/8"	BSH15438	4 3/8"	BSH25100	3 15/16"	-	-
-	-	BSH10219	2 3/16"	BSH10388	3 7/8"	BSH15269	2 11/16"	BSH15450	4 1/2"	BSH25400	4"	-	-
-	-	BSH10225	2 ¼"	-	-	BSH1570	2 ¾"	BSH15463	4 5/8"	BSH25105	4 1/8"	-	-



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

### ***S3000X Square Drive Torque Wrench on wind tower erection and maintenance***

*S3000X 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.*



### ***W4000X Low Profile Torque Wrench on an API 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 flange was easily overcome with an Enerpac W-Series Torque Wrench. These wrenches offer reliability and control, ensuring even and consistent torque is applied to all bolts.*



### ***S3000X on an oil and gas flange***

*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: W4206X hexagon cassette with W4000PX drive unit



## Safety and Performance

- Superior strength to size ratio provides easy access to difficult to reach applications without sacrificing endurance
- 30° rotation angle and rapid return stroke provide fast operation
- Tough manifold design with added safety feature for enhanced operator safety

## Simplicity

- Fast release drive unit enables rapid exchange of cassettes, no tools required
- Quick and easy disassembly for maintenance without special tools
- Include robust handle which mounts on both sides and the tops of cassettes to allow for extra maneuverability

## Versatility

- Available with optional enhanced tilt and swivel TSP300 manifold for horizontal and vertical maneuverability, with greater durability <sup>1)</sup>
- X-Edition drive units, cassettes and most accessories are compatible with standard edition tools <sup>1)</sup>
- Drive unit compatible with UltraSlim and WCR-Series cassettes

## Accuracy

- Constant torque output provides accuracy of  $\pm 3\%$  across full stroke.

## Setting New Standards in Safety, Simplicity and Performance



### Two Handle Styles

Robust angled positioning handle comes standard with every W-Series (X-Edition) cassette.

Straight positioning handles designed for extreme limited access applications are available as accessories.

Compatible with W-Series (X-Edition) Cassettes	Model Nr. Angled positioning handles (standard)	Model Nr. Straight positioning handles (optional)
W2000X, W4000X	<b>SWH6A</b>	<b>SWH6S</b>
W8000X, W15000X	<b>SWH10A</b>	<b>SWH10S</b>
W22000X, W35000X	<b>SWH10EA</b> <sup>2)</sup>	

<sup>2)</sup> SWH10EA is an eyebolt handle.



### TSP - Pro Series Swivel

The optional TSP300 tilt and swivel manifold with robust interlocking design provides 360° X-axis rotation and 160° Y-axis rotation.

### How to Order <sup>1)</sup>

Factory fitted to W-Series (X-Edition) drive units: Insert a "P" prior to the "X" in the tool model number, example: **W2000PX**.

Order as an accessory using the model number: **TSP300**, which can be fitted to existing W-Series (X-Edition) drive units. Includes male and female couplers.

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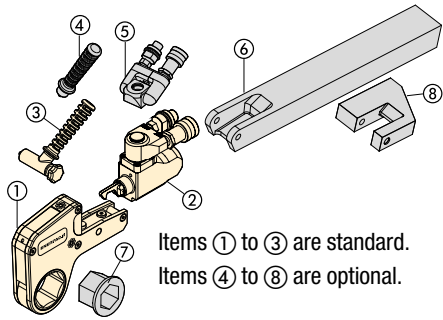
### ATEX declared. Calibration certificate included.

All X-edition tools are CE - ATEX declared and are shipped complete with a calibration certificate.



<sup>1)</sup> TSP300 is designed for X-Edition tools only, and is not compatible with previous edition tools. For replacement components for existing tools, refer to repair sheet on [www.enerpac.com](http://www.enerpac.com)

# Double-Acting Hydraulic Hexagon Torque Wrenches, X-Edition



- ① Hexagon Cassette (pages 188-195)
- ② Drive Unit
- ③ Angled Positioning Handle (page 186)
- ④ Straight Positioning Handle
- ⑤ Pro Series Swivel (page 199)
- ⑥ Extended Reaction Arm (page 199)
- ⑦ Reducer Insert (pages 188-195)
- ⑧ Reaction Paddle (page 199)

Items ① to ③ are standard.  
Items ④ to ⑧ are optional.

## W Series X-Edition



Nominal Torque at 690 bar:

**47.454 Nm**

Hexagon Range:

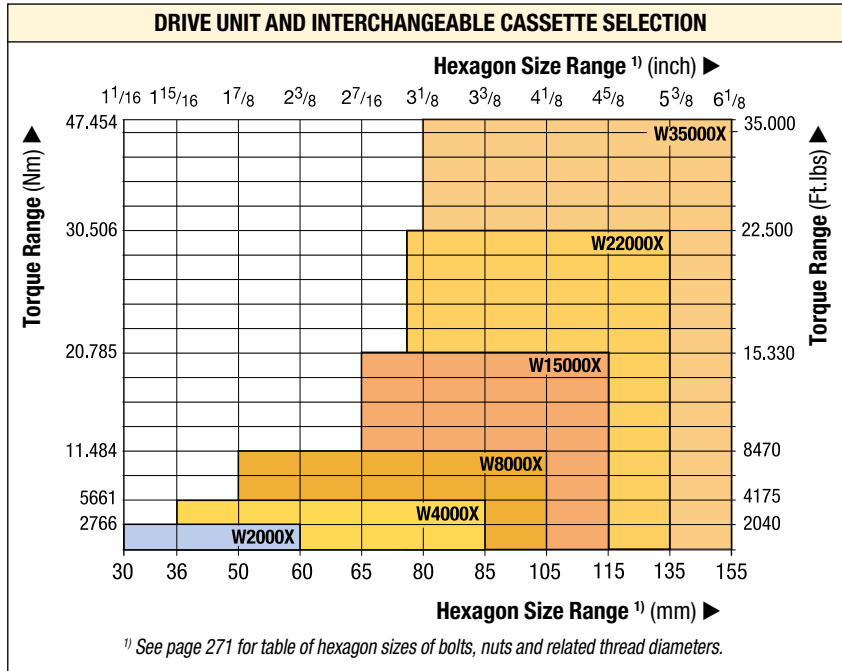
**30 - 155 mm / 1 1/16 - 6 1/8"**

Nose Radius:

**31 - 115 mm**

Maximum Operating Pressure:

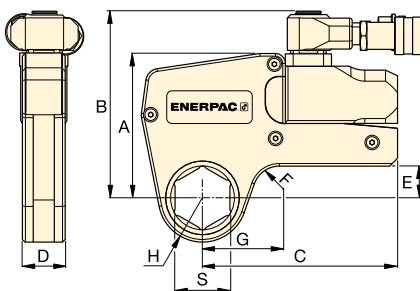
**690 bar**



### 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 *		Nominal Torque at 690 bar		Drive Unit Model Number **	Minimum Torque		Dimensions (mm) (see pages 188-195 for dimensions G, H and S)						Weight (drive unit without hexagon cassette) (kg)
(mm)	(inch)	(Nm)	(Ft.lbs)		(Nm)	(Ft.lbs)	A	B	C	D	E	F	
30 - 60	1 1/16 - 2 3/8	2766	2040	<b>W2000X</b>	276	204	109	141	148	32	24	20	1,4
36 - 85	1 5/16 - 3 3/8	5661	4175	<b>W4000X</b>	566	417	136	167	178	41	33	20	2,0
50 - 105	1 7/8 - 4 1/8	11.484	8470	<b>W8000X</b>	1148	847	172	205	208	53	42	25	3,0
65 - 115	2 7/16 - 4 5/8	20.785	15.330	<b>W15000X</b>	2078	1533	207	240	253	63	50	20	5,0
75 - 135	2 15/16 - 5 3/8	30.506	22.500	<b>W22000X</b>	3050	2250	227	266	297	77	48	35	7,7
80 - 155	3 1/8 - 6 1/8	47.454	35.000	<b>W35000X</b>	4745	3500	268	301	345	91	69-73	50	11,4

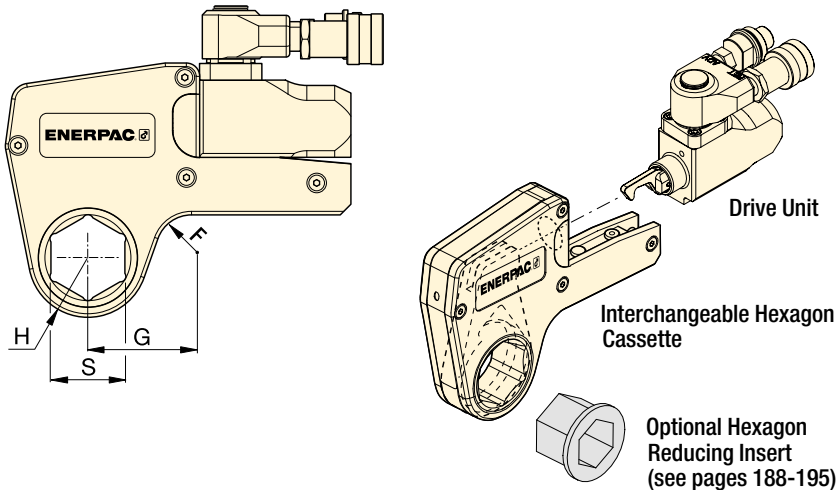
\* With in-line reaction foot.

\*\* To order a W-series wrench fitted with the TSP swivel, suffix the model number with "-P". Example: **W2000PX**.

www.enerpac.com



# W2000X, Inch-Cassettes & Reducer Inserts



## W Series X-Edition



Nominal Torque at 690 bar:

**2766 Nm**

Hexagon Range:

**1<sup>1</sup>/<sub>16</sub> - 2<sup>3</sup>/<sub>8</sub> inch**

Maximum Operating Pressure:

**690 bar**



### Metric Sizes

For metric sizes of hexagon cassettes and reducer inserts see:

Page: **194**



### Hexagon Bolt and Nut Sizes

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

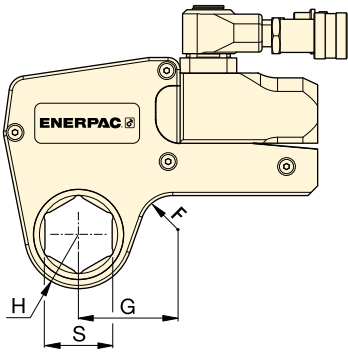
Page: **271**

## ▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size <sup>1)</sup>	Nose Radius	Dim.	Model Number	Weight (kg)	Hexagon Reducer		Hexagon Reducer		Hexagon Reducer	
						Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number
<b>W2000X</b>	1 <sup>1</sup> / <sub>16</sub>	31,0	53,7	<b>W2101X</b>	2,1	-	-	-	-	-	-
	1 <sup>1</sup> / <sub>8</sub>	31,0	53,7	<b>W2102X</b>	2,1	-	-	-	-	-	-
	1 <sup>3</sup> / <sub>16</sub>	31,0	53,7	<b>W2103X</b>	2,1	-	-	-	-	-	-
	1 <sup>1</sup> / <sub>4</sub>	31,0	53,7	<b>W2104X</b>	2,1	-	-	-	-	-	-
	1 <sup>5</sup> / <sub>16</sub>	31,0	53,7	<b>W2105X</b>	2,1	-	-	-	-	-	-
	1 <sup>3</sup> / <sub>8</sub>	31,0	53,7	<b>W2106X</b>	2,1	-	-	-	-	-	-
	1 <sup>7</sup> / <sub>16</sub>	31,0	53,7	<b>W2107X</b>	2,1	1 <sup>7</sup> / <sub>16</sub> - 1 <sup>1</sup> / <sub>8</sub>	<b>W2107R102</b>	-	-	-	-
	1 <sup>1</sup> / <sub>2</sub>	33,5	58,2	<b>W2108X</b>	2,2	-	-	-	-	-	-
	1 <sup>9</sup> / <sub>16</sub>	33,5	58,2	<b>W2109X</b>	2,2	-	-	-	-	-	-
	1 <sup>5</sup> / <sub>8</sub>	33,5	58,2	<b>W2110X</b>	2,2	1 <sup>5</sup> / <sub>8</sub> - 1 <sup>1</sup> / <sub>4</sub>	<b>W2110R104</b>	1 <sup>5</sup> / <sub>8</sub> - 1 <sup>3</sup> / <sub>16</sub>	<b>W2110R103</b>	-	-
	1 <sup>11</sup> / <sub>16</sub>	36,5	60,5	<b>W2111X</b>	2,2	-	-	-	-	-	-
	1 <sup>3</sup> / <sub>4</sub>	36,5	60,5	<b>W2112X</b>	2,2	-	-	-	-	-	-
	1 <sup>13</sup> / <sub>16</sub>	36,5	60,5	<b>W2113X</b>	2,2	1 <sup>13</sup> / <sub>16</sub> - 1 <sup>7</sup> / <sub>16</sub>	<b>W2113R107</b>	1 <sup>13</sup> / <sub>16</sub> - 1 <sup>1</sup> / <sub>4</sub>	<b>W2113R104</b>	-	-
	1 <sup>7</sup> / <sub>8</sub>	39,0	63,1	<b>W2114X</b>	2,2	-	-	-	-	-	-
	1 <sup>5</sup> / <sub>8</sub>	39,0	63,1	<b>W2115X</b>	2,2	-	-	-	-	-	-
	2	39,0	63,1	<b>W2200X</b>	2,2	2 - 1 <sup>5</sup> / <sub>8</sub>	<b>W2200R110</b>	2 - 1 <sup>7</sup> / <sub>16</sub>	<b>W2200R107</b>	-	-
	2 <sup>1</sup> / <sub>16</sub>	41,8	68,6	<b>W2201X</b>	2,3	-	-	-	-	-	-
	2 <sup>1</sup> / <sub>8</sub>	41,8	68,6	<b>W2202X</b>	2,3	-	-	-	-	-	-
	2 <sup>3</sup> / <sub>16</sub>	41,8	68,6	<b>W2203X</b>	2,3	2 <sup>3</sup> / <sub>16</sub> - 1 <sup>13</sup> / <sub>16</sub>	<b>W2203R113</b>	2 <sup>3</sup> / <sub>16</sub> - 1 <sup>5</sup> / <sub>8</sub>	<b>W2203R110</b>	2 <sup>3</sup> / <sub>16</sub> - 1 <sup>7</sup> / <sub>16</sub>	<b>W2203R107</b>
	2 <sup>1</sup> / <sub>4</sub>	44,5	64,8	<b>W2204X</b>	2,2	-	-	-	-	-	-
2 <sup>5</sup> / <sub>16</sub>	44,5	64,8	<b>W2205X</b>	2,2	-	-	-	-	-	-	
2 <sup>3</sup> / <sub>8</sub>	44,5	64,8	<b>W2206X</b>	2,2	2 <sup>3</sup> / <sub>8</sub> - 2	<b>W2206R200</b>	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>7</sup> / <sub>8</sub>	<b>W2206R114</b>	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>13</sup> / <sub>16</sub>	<b>W2206R113</b>	
-	-	-	-	-	-	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>1</sup> / <sub>2</sub>	<b>W2206R108</b>	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>7</sup> / <sub>16</sub>	<b>W2206R107</b>	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>5</sup> / <sub>16</sub>	<b>W2206R110</b>

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.

# W4000X-Series, Inch-Cassettes & Reducer Inserts



Nominal Torque at 690 bar:

**5661 Nm**

Hexagon Range:

**1<sup>5</sup>/<sub>16</sub> - 3<sup>3</sup>/<sub>8</sub> inch**

Maximum Operating Pressure:

**690 bar**

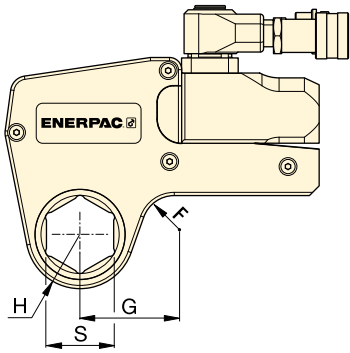
**W**  
Series  
X-Edition



Drive Unit Model Number	Hexagon Size <sup>1)</sup>	Nose Radius	Dim.	Model Number	Weight	Hexagon Reducer		Hexagon Reducer		Hexagon Reducer	
						Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number
W4000X	1 <sup>5</sup> / <sub>16</sub>	37,0	61,0	W4105X	3,7	-	-	-	-	-	-
	1 <sup>3</sup> / <sub>8</sub>	37,0	61,0	W4106X	3,7	-	-	-	-	-	-
	1 <sup>7</sup> / <sub>16</sub>	37,0	61,0	W4107X	3,7	-	-	-	-	-	-
	1 <sup>1</sup> / <sub>2</sub>	37,0	61,0	W4108X	3,7	-	-	-	-	-	-
	1 <sup>9</sup> / <sub>16</sub>	37,0	61,0	W4109X	3,7	-	-	-	-	-	-
	1 <sup>5</sup> / <sub>8</sub>	37,0	61,0	W4110X	3,7	-	-	-	-	-	-
	1 <sup>11</sup> / <sub>16</sub>	39,5	64,0	W4111X	3,8	-	-	-	-	-	-
	1 <sup>3</sup> / <sub>4</sub>	39,5	64,0	W4112X	3,8	-	-	-	-	-	-
	1 <sup>13</sup> / <sub>16</sub>	39,5	64,0	W4113X	3,8	-	-	-	-	-	-
	1 <sup>7</sup> / <sub>8</sub>	41,5	66,7	W4114X	3,9	-	-	-	-	-	-
	1 <sup>15</sup> / <sub>16</sub>	41,5	66,7	W4115X	3,9	-	-	-	-	-	-
	2	41,5	66,7	W4200X	3,9	2 - 1 <sup>7</sup> / <sub>16</sub>	W4200R107	-	-	-	-
	2 <sup>1</sup> / <sub>16</sub>	44,0	73,4	W4201X	4,0	-	-	-	-	-	-
	2 <sup>1</sup> / <sub>8</sub>	44,0	73,4	W4202X	4,0	-	-	-	-	-	-
	2 <sup>3</sup> / <sub>16</sub>	44,0	73,4	W4203X	4,0	2 <sup>3</sup> / <sub>16</sub> - 1 <sup>5</sup> / <sub>8</sub>	W4203R110	2 <sup>3</sup> / <sub>16</sub> - 1 <sup>7</sup> / <sub>16</sub>	W4203R107	2 <sup>3</sup> / <sub>16</sub> - 1 <sup>1</sup> / <sub>4</sub>	W4203R104
	2 <sup>1</sup> / <sub>4</sub>	46,5	70,6	W4204X	4,1	-	-	-	-	-	-
	2 <sup>5</sup> / <sub>16</sub>	46,5	70,6	W4205X	4,1	-	-	-	-	-	-
	2 <sup>3</sup> / <sub>8</sub>	46,5	70,6	W4206X	4,1	2 <sup>3</sup> / <sub>8</sub> - 2	W4206R200	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>13</sup> / <sub>16</sub>	W4206R113	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>7</sup> / <sub>16</sub>	W4206R107
	-	-	-	-	-	2 <sup>3</sup> / <sub>8</sub> - 1 <sup>3</sup> / <sub>8</sub>	W4206R106	-	-	-	-
	2 <sup>7</sup> / <sub>16</sub>	49,5	76,2	W4207X	4,1	2 <sup>7</sup> / <sub>16</sub> - 2	W4207R200	-	-	-	-
	2 <sup>1</sup> / <sub>2</sub>	49,5	76,2	W4208X	4,1	2 <sup>1</sup> / <sub>2</sub> - 2	W4208R200	2 <sup>1</sup> / <sub>2</sub> - 1 <sup>7</sup> / <sub>16</sub>	W4208R113	2 <sup>1</sup> / <sub>2</sub> - 2 <sup>1</sup> / <sub>16</sub>	W4208R201
	2 <sup>9</sup> / <sub>16</sub>	49,5	76,2	W4209X	4,1	2 <sup>9</sup> / <sub>16</sub> - 2 <sup>3</sup> / <sub>16</sub>	W4209R203	2 <sup>9</sup> / <sub>16</sub> - 2 <sup>1</sup> / <sub>8</sub>	W4209R202	2 <sup>9</sup> / <sub>16</sub> - 2 <sup>1</sup> / <sub>16</sub>	W4209R201
	-	-	-	-	-	2 <sup>9</sup> / <sub>16</sub> - 2	W4209R200	2 <sup>9</sup> / <sub>16</sub> - 1 <sup>13</sup> / <sub>16</sub>	W4209R113	-	-
	2 <sup>5</sup> / <sub>8</sub>	52,5	78,3	W4210X	4,2	-	-	-	-	-	-
	2 <sup>11</sup> / <sub>16</sub>	52,5	78,3	W4211X	4,2	-	-	-	-	-	-
	2 <sup>3</sup> / <sub>4</sub>	52,5	78,3	W4212X	4,2	2 <sup>3</sup> / <sub>4</sub> - 2 <sup>3</sup> / <sub>8</sub>	W4212R206	2 <sup>3</sup> / <sub>4</sub> - 2 <sup>3</sup> / <sub>16</sub>	W4212R203	2 <sup>3</sup> / <sub>4</sub> - 2 <sup>1</sup> / <sub>8</sub>	W4212R202
	2 <sup>13</sup> / <sub>16</sub>	55,3	81,6	W4213X	4,3	-	-	-	-	-	-
	2 <sup>7</sup> / <sub>8</sub>	55,3	81,6	W4214X	4,3	-	-	-	-	-	-
	2 <sup>15</sup> / <sub>16</sub>	55,3	81,6	W4215X	4,3	2 <sup>15</sup> / <sub>16</sub> - 2 <sup>9</sup> / <sub>16</sub>	W4215R209	2 <sup>15</sup> / <sub>16</sub> - 2 <sup>3</sup> / <sub>8</sub>	W4215R206	2 <sup>15</sup> / <sub>16</sub> - 2 <sup>3</sup> / <sub>16</sub>	W4215R203
	-	-	-	-	-	2 <sup>15</sup> / <sub>16</sub> - 2	W4215R200	-	-	-	-
	3	58,5	83,5	W4300X	4,4	3 - 2 <sup>9</sup> / <sub>16</sub>	W4300R203	-	-	-	-
	3 <sup>1</sup> / <sub>16</sub>	58,5	83,5	W4301X	4,4	-	-	-	-	-	-
3 <sup>1</sup> / <sub>8</sub>	58,5	83,5	W4302X	4,4	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>4</sub>	W4302R212	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>9</sup> / <sub>16</sub>	W4302R209	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>8</sub>	W4302R206	
-	-	-	-	-	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>5</sup> / <sub>16</sub>	W4302R205	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>1</sup> / <sub>4</sub>	W4302R204	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>16</sub>	W4302R203	
-	-	-	-	-	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>16</sub>	W4302R203	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>1</sup> / <sub>8</sub>	W4302R202	3 <sup>1</sup> / <sub>8</sub> - 2	W4302R200	
3 <sup>3</sup> / <sub>16</sub>	62,0	85,5	W4303X	4,5	-	-	-	-	-	-	
3 <sup>1</sup> / <sub>4</sub>	62,0	85,5	W4304X	4,5	-	-	-	-	-	-	
3 <sup>5</sup> / <sub>16</sub>	62,0	85,5	W4305X	4,5	-	-	-	-	-	-	
3 <sup>3</sup> / <sub>8</sub>	62,0	85,5	W4306X	4,5	-	-	-	-	-	-	

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.

# W8000X-Series, Inch-Cassettes & Reducers



Nominal Torque at 690 bar:

**11.484 Nm**

Hexagon Range:

**1 7/8 - 4 1/8 inch**


Maximum Operating Pressure:

**690 bar**

**W**  
Series  
X-Edition

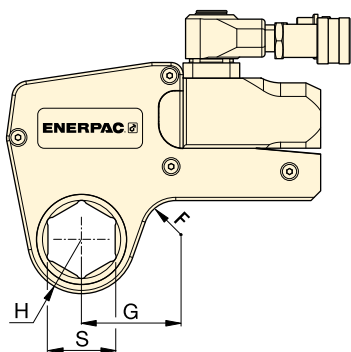


▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size <sup>1)</sup>	Nose Radius	Dim.	Model Number	Weight (kg)	Hexagon Reducer		Hexagon Reducer		Hexagon Reducer	
						Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number
W8000X	S (inch)	H (mm)	G (mm)		(kg)	Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number
	1 7/8	45,0	78,2	<b>W8114X</b>	8,1	–	–	–	–	–	–
	1 15/16	45,0	78,2	<b>W8115X</b>	8,1	–	–	–	–	–	–
	2	45,0	78,2	<b>W8200X</b>	8,1	–	–	–	–	–	–
	2 1/16	48,0	80,0	<b>W8201X</b>	8,1	–	–	–	–	–	–
	2 1/8	48,0	80,0	<b>W8202X</b>	8,1	–	–	–	–	–	–
	2 3/16	48,0	80,0	<b>W8203X</b>	8,1	–	–	–	–	–	–
	2 1/4	51,0	82,5	<b>W8204X</b>	8,1	–	–	–	–	–	–
	2 5/16	51,0	82,5	<b>W8205X</b>	8,1	–	–	–	–	–	–
	2 3/8	51,0	82,5	<b>W8206X</b>	8,1	–	–	–	–	–	–
	2 7/16	52,5	85,9	<b>W8207X</b>	8,1	–	–	–	–	–	–
	2 1/2	52,5	85,9	<b>W8208X</b>	8,1	–	–	–	–	–	–
	2 9/16	52,5	85,9	<b>W8209X</b>	8,1	2 9/16 - 2	<b>W8209R200</b>	–	–	–	–
	2 5/8	56,0	84,8	<b>W8210X</b>	8,1	–	–	–	–	–	–
	2 1 1/16	56,0	84,8	<b>W8211X</b>	7,9	–	–	–	–	–	–
	2 3/4	56,0	84,8	<b>W8212X</b>	7,9	2 3/4 - 2 3/16	<b>W8212R203</b>	–	–	–	–
	2 13/16	58,0	85,0	<b>W8213X</b>	7,9	–	–	–	–	–	–
	2 7/8	58,0	85,0	<b>W8214X</b>	7,9	–	–	–	–	–	–
	2 15/16	58,0	85,0	<b>W8215X</b>	7,9	2 15/16 - 2 3/8	<b>W8215R206</b>	2 15/16 - 2 3/16	<b>W8215R203</b>	–	–
	3	60,5	89,5	<b>W8300X</b>	8,0	–	–	–	–	–	–
	3 1/16	60,5	89,5	<b>W8301X</b>	8,0	–	–	–	–	–	–
	3 1/8	60,5	89,5	<b>W8302X</b>	8,0	3 1/8 - 2 9/16	<b>W8302R209</b>	3 1/8 - 2 3/8	<b>W8302R206</b>	3 1/8 - 2 3/16	<b>W8302R203</b>
	–	–	–	–	–	3 1/8 - 2	<b>W8302R200</b>	–	–	–	–
	3 3/16	66,0	92,2	<b>W8303X</b>	8,2	–	–	–	–	–	–
	3 1/4	66,0	92,2	<b>W8304X</b>	8,2	–	–	–	–	–	–
	3 5/16	66,0	92,2	<b>W8305X</b>	8,2	–	–	–	–	–	–
	3 3/8	66,0	92,2	<b>W8306X</b>	8,2	–	–	–	–	–	–
	3 7/16	66,0	92,2	<b>W8307IX</b>	8,2	–	–	–	–	–	–
	3 1/2	66,0	92,2	<b>W8308X</b>	8,2	3 1/2 - 3	<b>W8308R300</b>	3 1/2 - 2 15/16	<b>W8308R215</b>	3 1/2 - 2 3/4	<b>W8308R212</b>
	3 9/16	74,0	102,9	<b>W8309X</b>	8,8	–	–	–	–	–	–
	3 5/8	74,0	102,9	<b>W8310X</b>	8,8	–	–	–	–	–	–
	3 1 1/16	74,0	102,9	<b>W8311X</b>	8,8	–	–	–	–	–	–
3 3/4	74,0	102,9	<b>W8312X</b>	8,8	3 3/4 - 3 1/8	<b>W8312R302</b>	3 3/4 - 2 15/16	<b>W8312R215</b>	3 3/4 - 2 3/4	<b>W8312R212</b>	
3 13/16	74,0	102,9	<b>W8313X</b>	8,8	–	–	–	–	–	–	
3 7/8	74,0	102,9	<b>W8314X</b>	8,8	3 7/8 - 3 1/8	<b>W8314R302</b>	3 7/8 - 2 15/16	<b>W8314R215</b>	–	–	
3 15/16	79,5	110,0	<b>W8315X</b>	9,3	–	–	–	–	–	–	
4	79,5	110,0	<b>W8400X</b>	9,3	–	–	–	–	–	–	
4 1/16	79,5	110,0	<b>W8401IX</b>	9,3	–	–	–	–	–	–	
4 1/8	79,5	110,0	<b>W8402X</b>	9,3	–	–	–	–	–	–	

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.

# W15000X-Series, Inch-Cassettes & Reducer Inserts



Nominal Torque at 690 bar:

**20.785 Nm**

Hexagon Range:

**2<sup>1</sup>/<sub>8</sub> - 4<sup>5</sup>/<sub>8</sub> inch**

Maximum Operating Pressure:

**690 bar**

**W**  
Series  
X-Edition



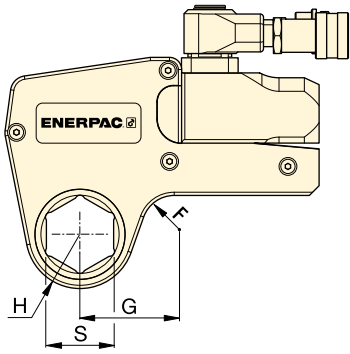
## ▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size <sup>1)</sup>	Nose Radius	Dim.	Model Number	Weight	Hexagon Reducer		Hexagon Reducer		Hexagon Reducer	
						Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number	Hexagon Reducer (inch)	Model Number
W15000X	S (inch)	H (mm)	G (mm)		(kg)						
	2 <sup>7</sup> / <sub>16</sub>	59,0	88,6	W15207X	13,6	-	-	-	-	-	-
	2 <sup>1</sup> / <sub>2</sub>	59,0	88,6	W15208X	13,6	-	-	-	-	-	-
	2 <sup>9</sup> / <sub>16</sub>	59,0	88,6	W15209X	13,6	-	-	-	-	-	-
	2 <sup>5</sup> / <sub>8</sub>	59,0	88,6	W15210X	13,6	-	-	-	-	-	-
	2 <sup>11</sup> / <sub>16</sub>	59,0	88,6	W15211X	13,6	-	-	-	-	-	-
	2 <sup>3</sup> / <sub>4</sub>	59,0	88,6	W15212X	13,6	-	-	-	-	-	-
	2 <sup>13</sup> / <sub>16</sub>	62,0	90,5	W15213X	13,7	-	-	-	-	-	-
	2 <sup>7</sup> / <sub>8</sub>	62,0	90,5	W15214X	13,7	-	-	-	-	-	-
	2 <sup>15</sup> / <sub>16</sub>	62,0	90,5	W15215X	13,7	-	-	-	-	-	-
	3	64,5	92,9	W15300X	13,8	3 - 2 <sup>1</sup> / <sub>8</sub>	W15300R202	-	-	-	-
	3 <sup>1</sup> / <sub>16</sub>	64,5	92,9	W15301X	13,8	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>8</sub>	64,5	92,9	W15302X	13,8	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>9</sup> / <sub>16</sub>	W15302R209	-	-	-	-
	3 <sup>3</sup> / <sub>16</sub>	69,5	96,6	W15303X	14,1	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>4</sub>	69,5	96,6	W15304X	14,1	-	-	-	-	-	-
	3 <sup>5</sup> / <sub>16</sub>	69,5	96,6	W15305X	14,1	-	-	-	-	-	-
	3 <sup>3</sup> / <sub>8</sub>	69,5	96,6	W15306X	14,1	-	-	-	-	-	-
	3 <sup>7</sup> / <sub>16</sub>	69,5	96,6	W15307IX	14,1	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>2</sub>	69,5	96,6	W15308X	14,1	3 <sup>1</sup> / <sub>2</sub> - 2 <sup>15</sup> / <sub>16</sub>	W15308R215	3 <sup>1</sup> / <sub>2</sub> - 2 <sup>3</sup> / <sub>4</sub>	W15308R212	-	-
	3 <sup>9</sup> / <sub>16</sub>	75,0	101,8	W15309X	14,6	-	-	-	-	-	-
	3 <sup>5</sup> / <sub>8</sub>	75,0	101,8	W15310X	14,6	-	-	-	-	-	-
	3 <sup>11</sup> / <sub>16</sub>	75,0	101,8	W15311X	14,6	-	-	-	-	-	-
	3 <sup>3</sup> / <sub>4</sub>	75,0	101,8	W15312X	14,6	3 <sup>3</sup> / <sub>4</sub> - 3 <sup>1</sup> / <sub>8</sub>	W15312R302	3 <sup>3</sup> / <sub>4</sub> - 2 <sup>15</sup> / <sub>16</sub>	W15312R215	-	-
	3 <sup>13</sup> / <sub>16</sub>	75,0	101,8	W15313X	14,5	-	-	-	-	-	-
	3 <sup>7</sup> / <sub>8</sub>	75,0	101,8	W15314X	14,5	3 <sup>7</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>8</sub>	W15314R302	3 <sup>7</sup> / <sub>8</sub> - 2 <sup>15</sup> / <sub>16</sub>	W15314R215	-	-
	3 <sup>15</sup> / <sub>16</sub>	80,5	103,1	W15315X	14,8	-	-	-	-	-	-
	4	80,5	103,1	W15400X	14,8	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>16</sub>	80,5	103,1	W15401IX	14,8	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>8</sub>	80,5	103,1	W15402X	14,8	4 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>2</sub>	W15402R308	4 <sup>1</sup> / <sub>8</sub> - 3 <sup>5</sup> / <sub>16</sub>	W15402R305	4 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	W15402R304
	4 <sup>3</sup> / <sub>16</sub>	80,5	103,1	W15403IX	14,8	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>4</sub>	80,5	103,1	W15404X	14,8	4 <sup>1</sup> / <sub>4</sub> - 3 <sup>1</sup> / <sub>2</sub>	W15404R308	4 <sup>1</sup> / <sub>4</sub> - 3 <sup>1</sup> / <sub>8</sub>	W15404R302	-	-
	4 <sup>5</sup> / <sub>16</sub>	87,5	114,8	W15405X	15,1	-	-	-	-	-	-
4 <sup>3</sup> / <sub>8</sub>	87,5	114,8	W15406X	15,1	-	-	-	-	-	-	
4 <sup>7</sup> / <sub>16</sub>	87,5	114,8	W15407X	15,1	-	-	-	-	-	-	
4 <sup>1</sup> / <sub>2</sub>	87,5	114,8	W15408IX	15,1	-	-	-	-	-	-	
4 <sup>9</sup> / <sub>16</sub>	87,5	114,8	W15409IX	15,1	-	-	-	-	-	-	
4 <sup>5</sup> / <sub>8</sub>	87,5	114,8	W15410IX	15,1	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>15</sup> / <sub>16</sub>	W15410R315	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>7</sup> / <sub>8</sub>	W15410R314	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>3</sup> / <sub>4</sub>	W15410R312	
-	-	-	-	-	-	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>2</sub>	W15410R308	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.



# W22000X, Inch-Cassettes & Reducers



Nominal Torque at 690 bar:

**30.506 Nm**

Hexagon Range:

**2<sup>15</sup>/<sub>16</sub> - 5<sup>3</sup>/<sub>8</sub> inch**






Maximum Operating Pressure:

**690 bar**

**W**  
Series  
X-Edition

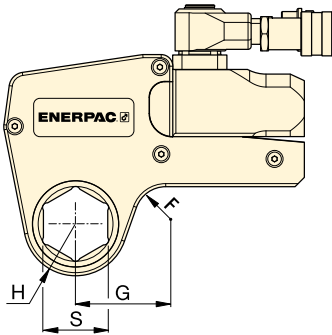


▼ **SELECTION CHART**

Drive Unit Model Number	Hexagon Size <sup>1)</sup> 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
<b>W22000X</b>	2 <sup>15</sup> / <sub>16</sub>	67,0	102,1	<b>W22215X</b>	22,1	-	-	-	-	-	-
	3	67,0	102,1	<b>W22300X</b>	22,0	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>16</sub>	67,0	102,1	<b>W22301X</b>	21,9	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>8</sub>	67,0	102,1	<b>W22302X</b>	21,6	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>8</sub>	<b>W22302R206</b>	3 <sup>1</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>16</sub>	<b>W22302R203</b>	-	-
	3 <sup>3</sup> / <sub>16</sub>	72,4	107,4	<b>W22303X</b>	22,9	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>4</sub>	72,4	107,4	<b>W22304X</b>	22,8	-	-	-	-	-	-
	3 <sup>5</sup> / <sub>16</sub>	72,4	107,4	<b>W22305X</b>	22,6	-	-	-	-	-	-
	3 <sup>3</sup> / <sub>8</sub>	72,4	107,4	<b>W22306X</b>	22,5	-	-	-	-	-	-
	3 <sup>7</sup> / <sub>16</sub>	72,4	107,4	<b>W22307IX</b>	22,8	-	-	-	-	-	-
	3 <sup>1</sup> / <sub>2</sub>	72,4	107,4	<b>W22308X</b>	22,2	3 <sup>1</sup> / <sub>2</sub> - 2 <sup>3</sup> / <sub>4</sub>	<b>W22308R212</b>	3 <sup>1</sup> / <sub>2</sub> - 2 <sup>9</sup> / <sub>16</sub>	<b>W22308R209</b>	3 <sup>1</sup> / <sub>2</sub> - 2 <sup>3</sup> / <sub>8</sub>	<b>W22308R206</b>
	3 <sup>9</sup> / <sub>16</sub>	77,9	113,0	<b>W22309X</b>	23,4	-	-	-	-	-	-
	3 <sup>5</sup> / <sub>8</sub>	77,9	113,0	<b>W22310X</b>	23,3	-	-	-	-	-	-
	3 <sup>11</sup> / <sub>16</sub>	77,9	113,0	<b>W22311X</b>	23,1	-	-	-	-	-	-
	3 <sup>3</sup> / <sub>4</sub>	77,9	113,0	<b>W22312X</b>	22,9	3 <sup>3</sup> / <sub>4</sub> - 2 <sup>15</sup> / <sub>16</sub>	<b>W22312R215</b>	-	-	-	-
	3 <sup>13</sup> / <sub>16</sub>	77,9	113,0	<b>W22313X</b>	22,8	-	-	-	-	-	-
	3 <sup>7</sup> / <sub>8</sub>	77,9	113,0	<b>W22314X</b>	22,6	3 <sup>7</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>8</sub>	<b>W22314R302</b>	3 <sup>7</sup> / <sub>8</sub> - 2 <sup>15</sup> / <sub>16</sub>	<b>W22314R215</b>	3 <sup>7</sup> / <sub>8</sub> - 2 <sup>3</sup> / <sub>4</sub>	<b>W22314R212</b>
	3 <sup>15</sup> / <sub>16</sub>	85,1	119,9	<b>W22315X</b>	24,3	-	-	-	-	-	-
	4	85,1	119,9	<b>W22400X</b>	24,1	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>16</sub>	85,1	119,9	<b>W22401IX</b>	24,0	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>8</sub>	85,1	119,9	<b>W22402X</b>	23,6	-	-	-	-	-	-
	4 <sup>3</sup> / <sub>16</sub>	85,1	119,9	<b>W22403IX</b>	23,6	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>4</sub>	85,1	119,9	<b>W22404X</b>	24,6	4 <sup>1</sup> / <sub>4</sub> - 3 <sup>1</sup> / <sub>2</sub>	<b>W22404R308</b>	4 <sup>1</sup> / <sub>4</sub> - 3 <sup>1</sup> / <sub>8</sub>	<b>W22404R302</b>	4 <sup>1</sup> / <sub>4</sub> - 2 <sup>15</sup> / <sub>16</sub>	<b>W22404R215</b>
	4 <sup>5</sup> / <sub>16</sub>	89,9	125,0	<b>W22405X</b>	24,6	-	-	-	-	-	-
	4 <sup>3</sup> / <sub>8</sub>	89,9	125,0	<b>W22406X</b>	24,5	-	-	-	-	-	-
	4 <sup>7</sup> / <sub>16</sub>	89,9	125,0	<b>W22407X</b>	24,3	-	-	-	-	-	-
	4 <sup>1</sup> / <sub>2</sub>	89,9	125,0	<b>W22408IX</b>	24,1	-	-	-	-	-	-
	4 <sup>9</sup> / <sub>16</sub>	89,9	125,0	<b>W22409IX</b>	23,9	-	-	-	-	-	-
	4 <sup>5</sup> / <sub>8</sub>	89,9	125,0	<b>W22410IX</b>	23,6	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>7</sup> / <sub>8</sub>	<b>W22410R314</b>	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>3</sup> / <sub>4</sub>	<b>W22410R312</b>	4 <sup>5</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>2</sub>	<b>W22410R308</b>
	4 <sup>3</sup> / <sub>4</sub>	95,0	130,0	<b>W22412X</b>	24,7	-	-	-	-	-	-
	4 <sup>7</sup> / <sub>8</sub>	95,0	130,0	<b>W22414X</b>	24,3	-	-	-	-	-	-
	5	95,0	130,0	<b>W22500X</b>	23,8	5 - 4 <sup>1</sup> / <sub>4</sub>	<b>W22500R404</b>	5 - 4 <sup>1</sup> / <sub>8</sub>	<b>W22500R402</b>	5 - 3 <sup>7</sup> / <sub>8</sub>	<b>W22500R314</b>
	5 <sup>1</sup> / <sub>8</sub>	100,0	134,8	<b>W22502X</b>	25,0	-	-	-	-	-	-
5 <sup>3</sup> / <sub>16</sub>	100,0	134,8	<b>W22503X</b>	24,8	-	-	-	-	-	-	
5 <sup>1</sup> / <sub>4</sub>	100,0	134,8	<b>W22504X</b>	24,5	-	-	-	-	-	-	
5 <sup>3</sup> / <sub>8</sub>	100,0	134,8	<b>W22506X</b>	23,9	5 <sup>3</sup> / <sub>8</sub> - 4 <sup>5</sup> / <sub>8</sub>	<b>W22506R410</b>	5 <sup>3</sup> / <sub>8</sub> - 4 <sup>1</sup> / <sub>4</sub>	<b>W22506R404</b>	5 <sup>3</sup> / <sub>8</sub> - 4 <sup>1</sup> / <sub>8</sub>	<b>W22506R402</b>	
-	-	-	<b>W22506X</b>	23,9	5 <sup>3</sup> / <sub>8</sub> - 3 <sup>7</sup> / <sub>8</sub>	<b>W22506R314</b>	-	-	-	-	

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.

# W35000X, Inch-Cassettes & Reducer Inserts



## ▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size S	Nose Radius H	G	Model Nr. Cassette	Weight (kg)	Reducer	
						Hexagon Reducer (inch)	Model Number Reducer
W35000X	3 1/8	76,0	126,8	W35302X	32,8	3 1/8 - 2	W35302R200
	3 3/16	76,0	126,8	W35303X	32,7	-	-
	3 1/4	76,0	126,8	W35304X	32,5	-	-
	3 5/16	76,0	126,8	W35305X	32,4	-	-
	3 3/8	76,0	126,8	W35306X	32,2	-	-
	3 7/16	76,0	126,8	W35307X	32,0	-	-
	3 1/2	76,0	126,8	W35308X	31,8	3 1/2 - 2 5/16	W35308R205
	3 9/16	81,5	132,5	W35309X	32,4	-	-
	3 5/8	81,5	132,5	W35310X	33,3	-	-
	3 11/16	81,5	132,5	W35311X	33,1	-	-
	3 3/4	81,5	132,5	W35312X	32,9	-	-
	3 13/16	81,5	132,5	W35313X	32,7	-	-
	3 7/8	81,5	132,5	W35314X	32,4	3 7/8 - 2 11/16	W35314R211
	3 15/16	87,0	137,0	W35315X	34,1	3 15/16 - 2 13/16	W35315R213
	4	87,0	137,0	W35400X	33,9	-	-
	4 1/16	87,0	137,0	W35401IX	33,7	-	-
	4 1/8	87,0	137,0	W35402X	33,5	-	-
	4 3/16	87,0	137,0	W35403IX	33,3	-	-
	4 1/4	87,0	137,0	W35404X	33,0	4 1/4 - 3 1/16	W35404R301
	4 5/16	93,0	143,0	W35405X	34,9	-	-
	4 3/8	93,0	143,0	W35406X	34,7	-	-
	4 7/16	93,0	143,0	W35407X	34,5	-	-
	4 1/2	93,0	143,0	W35408X	34,3	-	-
	4 9/16	93,0	143,0	W35409X	34,1	-	-
	4 5/8	93,0	143,0	W35410IX	33,7	4 5/8 - 3 5/8	W35410R310
	4 3/4	98,5	148,5	W35412X	35,6	4 3/4 - 3 3/4	W35412R312
	4 7/8	98,5	148,5	W35414X	34,9	-	-
	5	98,5	148,5	W35500X	34,3	5 - 4	W35500R400
	5 1/8	103,0	153,0	W35502X	35,8	5 1/8 - 4 1/8	W35502R402
	5 3/16	103,0	153,0	W35503IX	35,6	-	-
	5 1/4	103,0	153,0	W35504X	35,2	-	-
	5 3/8	103,0	153,0	W35506X	34,6	5 3/8 - 4 5/16	W35506R405
5 1/2	108,5	158,5	W35508X	36,2	-	-	
5 9/16	108,5	158,5	W35509X	36,0	-	-	
5 5/8	108,5	158,5	W35510X	35,6	-	-	
5 3/4	108,5	164,0	W35512X	34,9	5 3/4 - 4 3/4	W35512R412	
5 7/8	114,0	164,0	W35514X	36,7	5 7/8 - 4 7/8	W35514R414	
6	114,0	164,0	W35600X	36,1	-	-	
6 1/8	114,0	164,0	W35602X	35,3	6 1/8 - 5 1/8	W35602R502	

## W Series X-Edition



Nominal Torque at 690 bar:

**47.454 Nm**

Hexagon Range:

**3 1/8 - 6 1/8 inch**

Maximum Operating Pressure:

**690 bar**

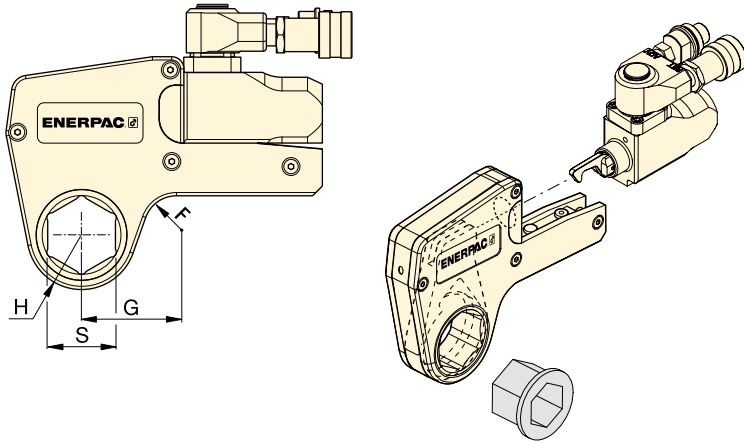


### Hexagon Bolt and Nut Sizes

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

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# W-Series, Metric Cassettes and Reducers



## W Series X-Edition







Hexagon Range:

**24 - 105 mm**

Maximum Operating Pressure:

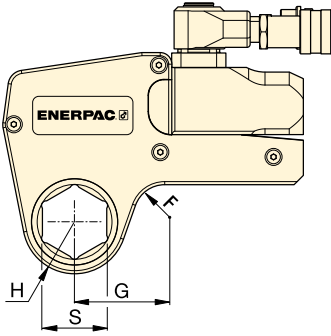
**690 bar**

### ▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size <sup>1)</sup>	Nose Radius	Dim.	Model Nr. Cassette							
						Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer
<b>W2000X</b> (2766 Nm)	30	31	54	W2103X	2,1	-	-	-	-	-	-
	32	31	54	W2104X	2,1	-	-	-	-	-	-
	36	31	54	W2107X	2,1	-	-	-	-	-	-
	38	34	58	W2108X	2,2	-	-	-	-	-	-
	41	34	58	W2110X	2,2	41 - 32	W2110R104	41 - 30	W2110R103	41 - 24	W2110R024M
	46	34	61	W2113X	2,2	46 - 36	W2113R107	46 - 32	W2113R104	-	-
	50	39	63	W2200X	2,2	50 - 41	W2200R110	50 - 36	W2200R107	-	-
	55	42	69	W2203X	2,3	55 - 46	W2203R113	55 - 41	W2203R110	55 - 36	W2203R107
	60	45	65	W2206X	2,2	60 - 50	W2206R200	60 - 46	W2206R113	60 - 41	W2206R110
	-	-	-	-	-	-	60 - 36	W2206R107	-	-	-
<b>W4000X</b> (5661 Nm)	36	37	61	W4107X	3,7	-	-	-	-	-	-
	41	37	61	W4110X	3,7	-	-	-	-	-	-
	46	40	64	W4113X	3,8	-	-	-	-	-	-
	50	42	67	W4200X	3,9	50 - 36	W4200R107	-	-	-	-
	55	44	73	W4203X	4,0	55 - 41	W4203R110	55 - 36	W4203R107	55 - 32	W4203R104
	60	47	71	W4206X	4,1	60 - 50	W4206R200	60 - 46	W4206R113	60 - 36	W4206R107
	65	50	76	W4209X	4,1	65 - 55	W4209R203	65 - 50	W4209R200	65 - 46	W4209R113
	70	53	78	W4212X	4,2	70 - 60	W4212R206	70 - 55	W4212R203	-	-
	75	55	82	W4215X	4,3	75 - 65	W4215R209	75 - 60	W4215R206	-	-
	-	-	-	W4215X	-	75 - 55	W4215R203	75 - 50	W4215R200	-	-
	80	59	84	W4302X	-	-	-	80 - 70	W4302R212	80 - 65	W4302R209
-	-	-	W4302X	-	80 - 55	W4302R203	80 - 50	W4302R200	-	-	
85	62	86	W4085MX	4,5	-	-	-	-	-	-	
<b>W8000X</b> (11.484 Nm)	50	45	78	W8200X	8,1	-	-	-	-	-	-
	55	48	80	W8203X	8,1	-	-	-	-	-	-
	60	51	83	W8206X	8,1	-	-	-	-	-	-
	65	56	85	W8209X	8,1	65 - 50	W8209R200	-	-	-	-
	70	56	85	W8212X	7,9	70 - 55	W8212R203	-	-	-	-
	75	58	85	W8215X	7,9	75 - 60	W8215R206	75 - 55	W8215R203	-	-
	80	61	90	W8302X	8	80 - 65	W8302R209	80 - 60	W8302R206	80 - 55	W8302R203
	-	-	-	-	-	80 - 50	W8302R200	-	-	-	-
	85	66	92	W8085MX	8,2	85 - 70	W8085R070M	85 - 65	W8085R065M	85 - 60	W8085R060M
	-	-	-	-	-	85 - 55	W8085R055M	-	-	-	-
	90	74	103	W8090MX	8,8	90 - 75	W8090R075M	-	-	-	-
	95	74	103	W8312X	8,8	95 - 80	W8312R302	95 - 75	W8312R215	-	-
	100	80	110	W8315X	9,3	-	-	-	-	-	-
105	80	110	W8402X	9,3	-	-	-	-	-	-	

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.

# W-Series, Metric Cassettes and Reducers



Hexagon Range:  
**50 - 155 mm**

Maximum Operating Pressure:  
**690 bar**

**W**  
Series  
X-Edition



## ▼ SELECTION CHART

Drive Unit Model Number	Hexagon Size <sup>1)</sup>	Nose Radius	Dim.	Model Nr. Cassette	Weight (kg)	Hexagon Reducer		Model Number Reducer	
						Hexagon Reducer (mm)	Model Number Reducer	Hexagon Reducer (mm)	Model Number Reducer
<b>W15000X</b> (20.785 Nm)	65	59	89	W15209X	13,6	-	-	-	-
	70	59	89	W15212X	13,6	-	-	-	-
	75	62	91	W15215X	13,7	-	-	-	-
	80	65	93	W15302X	13,8	80 - 65	W15302R209	-	-
	85	70	97	W15085MX	14,1	85 - 70	W15085R070M	-	-
	90	75	102	W15090MX	14,5	90 - 75	W15090R75M	-	-
	95	75	102	W15312X	14,6	95 - 80	W15312R302	95 - 75	W15312R215
	100	81	103	W15315X	14,8	-	-	-	-
	105	81	103	W15402X	14,8	105 - 90	W15402R090M	-	-
	110	88	115	W15405X	15,1	110 - 95	W15110R095M	-	-
	115	88	115	W15115MX	15,1	115 - 100	W15115R100M	-	-
<b>W22000X</b> (30.506 Nm)	75	67	102	W22215X	22,0	-	-	-	-
	80	67	102	W22302X	21,6	80-60	W22302R206	80 - 55	W22302R203
	85	73	107	W22085MX	22,5	85-65	W22085MR209	85 - 60	W22085MR206
	90	78	113	W22090MX	23,4	90-70	W22090M212	90 - 60	W22090MR206
	95	78	113	W22312X	22,9	95-75	W22312R215	-	-
	100	85	120	W22315X	24,3	-	-	-	-
	105	85	120	W22402X	23,4	-	-	-	-
	110	90	125	W22405X	24,6	-	-	-	-
	115	90	125	W22115MX	24,0	-	-	-	-
	120	95	130	W22412X	24,7	-	-	-	-
	123	95	130	W22123MX	24,4	-	-	-	-
	130	100	135	W22502X	25,0	-	-	-	-
	135	100	135	W22506X	23,9	135 - 105	W22506R402	-	-
<b>W35000X</b> (47.454 Nm)	80	77	129	W35302X	32,8	80 - 50	W35302R200	-	-
	85	77	129	W35085MX	32,3	-	-	-	-
	90	82	135	W35090MX	33,5	90 - 60	W35090R206	-	-
	95	82	135	W35312X	32,9	-	-	-	-
	100	88	139	W35315X	34,1	-	-	-	-
	105	88	139	W35402X	33,5	-	-	-	-
	110	94	146	W35405X	34,9	110 - 85	W35405R085M	-	-
	115	94	146	W35115MX	34,2	-	-	-	-
	120	100	153	W35412X	35,6	120 - 95	W35412R312	-	-
	123	100	153	W35123MX	35,0	-	-	-	-
	130	104	160	W35502X	35,8	130 - 105	W35502R402	-	-
	135	104	160	W35506X	34,6	135 - 110	W35506R405	-	-
	140	110	163	W35508X	36,2	140 - 115	W35508R115M	-	-
	145	110	163	W35512X	34,9	145 - 120	W35512R412	-	-
	150	115	169	W35514X	36,7	-	-	-	-
	151	115	169	W35151MX	36,5	-	-	-	-
	155	115	169	W35602X	35,3	155 - 130	W35602R502	-	-

<sup>1)</sup> See page 271 for table of hexagon sizes of bolts, nuts and related thread diameters.



# W-SL, Series, UltraSlim Bi-Hexagonal Cassettes

▼ W4206SL ultraslim bi-hexagonal stepped width cassette with W4000X drive unit



## Versatility

- Lean, stepped width design allows tool to be mounted over bolts where other tools won't fit
- Bi-Hexagonal cassette allows twice as many positioning points on nut or bolt
- Robust top mounted handle stays out of the way, providing safe fastening in hard to reach areas
- Uses same drive unit as standard W-series hexagon cassettes

## Performance

- Premium components provide best-in-class endurance compared to other limited access tools

## Ease of Use

- Few moving parts are easily accessible for quick field maintenance
- Fast release drive unit enables rapid exchange of cassettes, no tools required
- Top mounted straight handle for improved tool handling and safety

## Accuracy

- Constant torque output provides accuracy of  $\pm 3\%$  across the full stroke
- Calibration certificate shipped with every cassette.

*Slim enough to fit and tough enough to last. This UltraSlim wrench is the perfect controlled bolting solution for this oil and gas flange. ►*

## Your easy and long lasting solution to difficult access bolting applications



### UltraSlim: Designed for Tight Spots

Stepped width design provides easy access in confined areas. UltraSlim cassettes fit where standard solutions won't.



### Built to Outperform

High endurance components keep working when others fail.



### Top Mounted Straight Handle

The top mounted straight handle is standard and provides safe and easy positioning and access to hard to reach fasteners.

Straight handle (standard)	<b>SWH6S</b>
Angled handle (optional)	<b>SWH6A</b>



### ATEX declared. Calibration certificate included.

All UltraSlim Series cassettes are CE - ATEX declared and are shipped complete with a calibration certificate.

CE  II 2 GD T4



# UltraSlim Bi-Hexagonal Cassettes

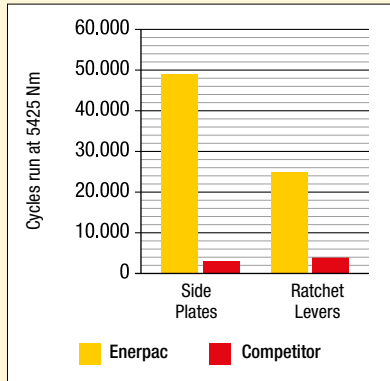


## UltraSlim Bi-Hexagonal Cassettes

Accessing narrow spaces normally requires significantly reducing the width of the torque wrench. For the tool operator, this has always meant vastly reduced tool durability, and/or reduced torque output.

By using the highest grade materials, perfecting the geometry, and placing the positioning handle on top of the tool for safe fastening, Enerpac UltraSlim cassettes are able to provide greater torque, get into tighter spaces, and vastly outperform the competition in product durability\*.

## Durability of Key Components\*



\* Average test results, whereby three Enerpac 46 mm UltraSlim cassettes and three competitor 46 mm cassettes were tested at 5425 Nm for 50,000 cycles. The Enerpac side plates never broke for the full duration of the test.

## W-SL Series UltraSlim



Nominal Torque Output:

**5911 Nm**

Bi-Hexagonal Range:

**46 - 75 mm**

Maximum Operating Pressure:

**690 bar**



## Torque Wrench Pumps

System matched air and electric torque wrench pumps that are ideal for use with hydraulic torque wrenches.

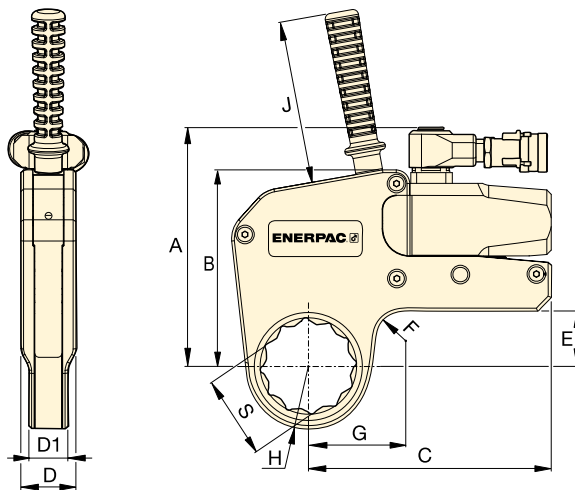
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## Torque Wrench Hoses

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

6 m long, 2 hoses	<b>THQ-706T</b>
12 m long, 2 hoses	<b>THQ-712T</b>



## SELECTION CHART

Bi-Hexagonal Size	Nominal Torque @ 690 bar	UltraSlim Cassette * Model Nr.	Minimum Torque @ 69 bar	Nose Radius	Dimensions (mm)										Drive Unit Model Nr. ** (sold separately)																
					H	G	A	B	C	D	D1	E	F	J		(kg)															
S (mm) (inch)	(Nm)		(Nm)	H (mm)	G	A	B	C	D	D1	E	F	J	(kg)																	
																46	1 <sup>3</sup> / <sub>16</sub>	2685	<b>W2113SL</b>	269	36,5	59,6	140,7	109,3	147,7	32,4	25,4	24,0	20,0	120	2,2
																55	2 <sup>3</sup> / <sub>16</sub>	2685	<b>W2203SL</b>	269	41,5	63,2									2,2
60	2 <sup>3</sup> / <sub>8</sub>	2685	<b>W2206SL</b>	269	44,5	65,1	2,2																								
S	(Nm)		(Nm)	H (mm)	G	A	B	C	D	D1	E	F	J	(kg)																	
																55	2 <sup>3</sup> / <sub>16</sub>	5911	<b>W4203SL</b>	591	44,0	68,7	175,6	144,5	178,5	40,5	28,6	40,8	20,0	120	4,6
																60	2 <sup>3</sup> / <sub>8</sub>	5911	<b>W4206SL</b>	591	48,0	71,6									4,7
																65	2 <sup>3</sup> / <sub>16</sub>	5911	<b>W4209SL</b>	591	50,5	74,1									4,7
																70	2 <sup>3</sup> / <sub>4</sub>	5911	<b>W4212SL</b>	591	53,5	75,6									4,7
75	2 <sup>15</sup> / <sub>16</sub>	5911	<b>W4215SL</b>	591	56,0	76,0	4,7																								

\* Bi-Hexagonal Cassette includes top mounted straight handle.

\*\* Cassette may also be used with W2000PX and W4000PX drive units, featuring double-swivel manifolds. Weight of drive unit W2000X = 1,4 kg; W4000X = 2,0 kg.

# WCR-Series, Roller Cassette Torque Wrench

▼ WCR4000 Roller Cassette with Spanner and W4000X Drive Unit



- Provides a safe and reliable controlled bolting solution for flanges with limited access
- Spanners available to fit most commonly used API flanges
- Small nose radius – resolves bolt to pipe restrictions
- Slim spanner design – reduces bolt height restrictions
- Wide range of spanners ranging from 36 - 80 mm (1<sup>7</sup>/<sub>16</sub> - 3<sup>1</sup>/<sub>8</sub> inch)
- Includes handle to improve tool handling and safety
- Rigid steel body for maximum endurance and minimum downtime.

Bi-Hexagonal Spanner Size:

**36 - 80 mm, 1<sup>7</sup>/<sub>16</sub> - 3<sup>1</sup>/<sub>8</sub>"**

Spanner Nose Radius:

**31 - 55 mm**

Nominal Torque:

**5762 Nm (4250 Ft.lbs)**

Maximum Operating Pressure:

**690 bar**

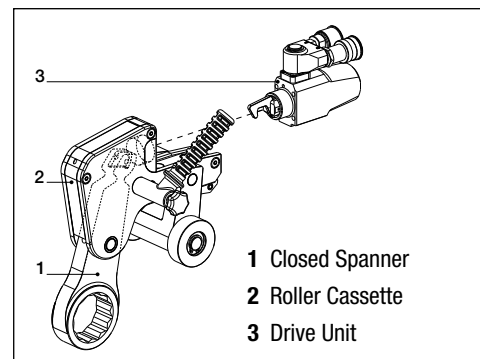



### WCR-4000 Applications

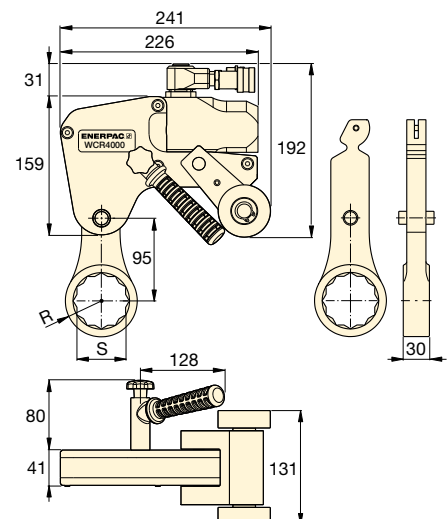
The WCR4000 helps resolve narrow clearance restrictions in bolting of API and BOP flanges.

The Enerpac WCR4000 Roller Cassette has been developed for applications where there are severe clearance restrictions, particularly in height above the nut or between the bolt center and the inside of the joint.

Powered by the standard W4000X drive unit which is compatible with standard W-Series hexagon cassettes. The WCR-wrench must be removed and repositioned after each wrench cycle by operating the pump in the retract direction. The tool contains no spring return.

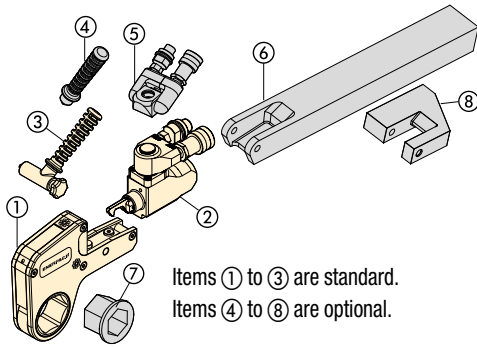


Closed Spanner Hexagon Size S (inch)   (mm)	Closed Spanner Model Number	Nominal Torque (Nm)	Spanner Radius R (mm)	 * (kg)	Roller Cassette Assembly Model Nr.	Drive Unit Model Nr.
1 <sup>7</sup> / <sub>16</sub>   36	W4107CS	5762	31	1,9	WCR4000	W4000X
1 <sup>1</sup> / <sub>2</sub>   38	W4108CS	5762	33	2,0		
1 <sup>5</sup> / <sub>8</sub>   41	W4110CS	5762	33	1,9		
1 <sup>3</sup> / <sub>16</sub>   46	W4113CS	5762	36	1,9		
1 <sup>7</sup> / <sub>8</sub>   48	W4114CS	5762	38	2,1		
2   50	W4200CS	5762	38	1,9		
2 <sup>3</sup> / <sub>16</sub>   55	W4203CS	5762	41	2,0		
2 <sup>3</sup> / <sub>8</sub>   60	W4206CS	5762	45	2,1		
2 <sup>9</sup> / <sub>16</sub>   65	W4209CS	5762	47	2,1		
2 <sup>3</sup> / <sub>4</sub>   70	W4212CS	5762	50	2,1		
2 <sup>15</sup> / <sub>16</sub>   75	W4215CS	5762	52	2,1		
3 <sup>1</sup> / <sub>8</sub>   80	W4302CS	5762	55	2,2		



\* Spanner weight. For total weight add 6,3 kg for WCR4000 and 2,0 kg for W4000X.

# Accessories for W-Series, X-Edition Wrenches



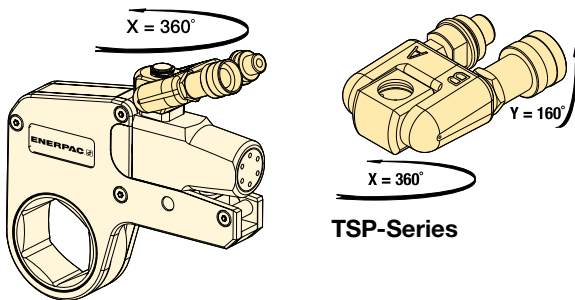
- ① Hexagon Cassette
- ② Drive Unit
- ③ Angled Positioning Handle
- ④ Straight Positioning Handle
- ⑤ Pro Series Swivel
- ⑥ Extended Reaction Arm
- ⑦ Reducer Insert
- ⑧ Reaction Paddle

Items ① to ③ are standard.  
Items ④ to ⑧ are optional.

## TSP WTE WRP Series



### TSP-Series, Pro Series Swivel

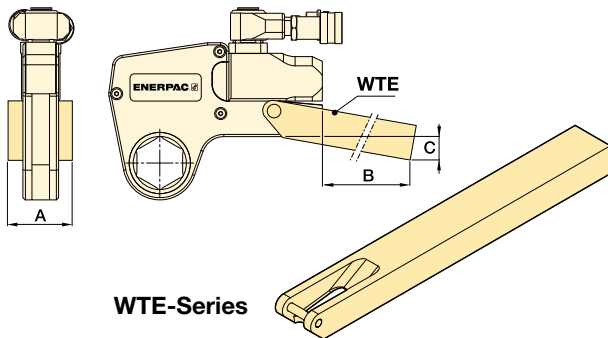


- Robust interlocking design
- 360° X-axis and 160° Y-axis rotation
- Increases tool fit in restricted access areas
- Simplifies hose placement
- Includes male and female couplers

For Torque Wrench Model Number	Model Number <sup>1)</sup>	Maximum Pressure (bar)	Weight (kg)
W2000X, W4000X, W8000X, W15000X, W22000X, W35000X	TSP300	690	0,2

<sup>1)</sup> To order a W-Series (X-edition) drive unit fitted with a TSP300 tilt and swivel manifold, insert a "P" prior to the "X" in the tool model number, example: **W2000PX**. TSP300 is designed for X-Edition tools only, and is not compatible with standard edition tools. For replacement components for existing tools, refer to repair sheet on [www.enerpac.com](http://www.enerpac.com)

### WTE-Series, Extended Reaction Arm

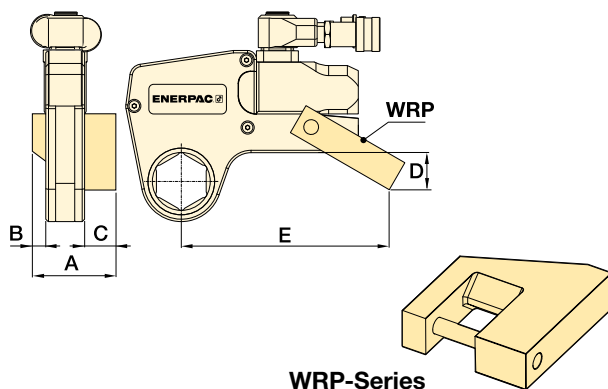


- Full torque rated
- Increases tool fit in restricted access areas.

For Torque Wrench Model Number	Model Number	Dimensions (mm)			Weight (kg) *
		A	B	C	
W2000X	WTE20	56	398	76	2,6
W4000X	WTE40	66	436	74	4,6
W8000X	WTE80	85	449	55	7,6
W15000X	WTE150	102	498	72	12,0
W22000X	WTE220	114	524	77	17,3
W35000X	WTE350	127	419	133	17,8

\* 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)					Weight (kg) *
		A	B	C	D	E	
W2000X	WRP20	84	16	35	45	148	0,4
W4000X	WRP40	109	21	47	59	190	0,8
W8000X	WRP80	137	26	57	69	223	2,0
W15000X	WRP150	165	32	69	87	257	3,9
W22000X	WRP220	207	37	91	134	317	7,2
W35000X	WRP350	225	42	91	182	367	10,6

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