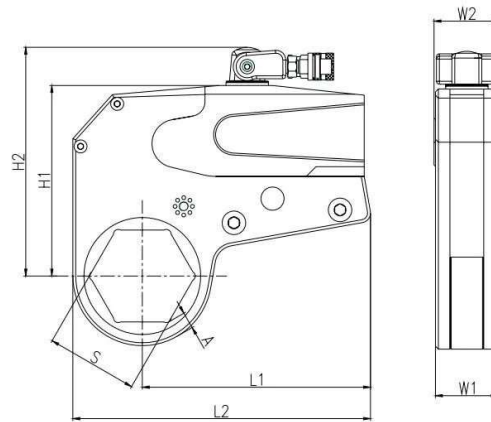


TH SERIES DIRECT HEX TYPE HYDRAULIC TORQUE WRENCHES



	Units	TH - 2		TH - 4		TH - 8		TH - 14	TH - 32	
Min. Torque	Nm	230	240	575	640	1050	1160	1850	4100	4450
Max. Torque	Nm	2350	2420	5865	6480	10950	11780	18525	41890	44600
Min. Torque	Ft.lbs	180	176	400	474	777	860	1370	3038	3297
Max. Torque	Ft.lbs	1850	1784	4500	4800	8111	8726	13722	31030	33038
Across Flat	mm	19-55	55-60	34-65	70-80	41-95	100-105	50-117	110-155	160-175
	inch	3/4-2.3/16	2.3/16-2.3/8	1.5/16-2.9/16	2.3/4-3.1/8	1.5/8-3.3/4	3.7/8-4.1/8	2-4.1/2	4.1/4-6.1/8	6.1/8-6.7/8
Weight	Kg	1	1	2	2	3.3	3.3	5.5	11.4	11.4
Drive Unit	lbs	2.2	2.2	4.4	4.4	7.2	7.2	12.1	25.3	25.3
Weight	Kg	1.6	1.7	4.4	4.6	8	8.4	11.6	29	30
Ratchet Unit	lbs	3.5	3.7	9.6	10.1	17.6	18.4	25.5	63.8	66



		TH - 2		TH - 4		TH - 8		TH - 14	TH - 32	
Overall Length (L)	mm	196	196	221	221	274	274	361	430	441
	Inch	7.7	7.7	8.7	8.7	10.79	10.79	14.27	16.92	17.36
(H1)	mm	125.9	128.5	171.3	171.3	206	206	239	303	315
	Inch	4.95	5.05	6.74	6.74	8.11	8.11	9.4	11.9	12.4
(H2)	mm	1023	105	125	125	157	157	204	272	285
	Inch	4.02	4.13	4.92	4.92	6.18	6.18	8.03	10.7	11.22
Width at Link (W1)	mm	32	32	41.6	41.6	52.2	52.2	64	85	85
	Inch	1.25	1.25	1.64	1.64	2.055	2.055	2.55	3.34	3.34
Width at Cylinder (W2)	mm	51	51	63.5	63.5	78	78	99	131	131
	Inch	2	2	2.49	2.49	3.07	3.07	3.89	5.15	5.15
Nose Radius (R)	mm	27-43	43-46	36-53	56-61	46-71	75-78	60-87	85-155	160-175
R Min	mm	9.5	10.1	10.7	11.7	14.7	15.69	18.1	25.6	24.8
R Max	mm	12.2	10.5	13.8	14.6	15.2	18.7	20.7	31.3	27.3

LINK SELECTION



Features:

- Compact design with longer arm improves the reliability
More accurate and easier to use, since the wrench directly operates on the nuts.
- 360x160 degree swivel or 360x360 degree swivel allows the wrench to operate freely in confined areas.

THL-2 Link	Hex Size	
	Imperial	Metric
HL-2-19	3/4"	19mm
HL-2-20	13/16"	-
HL-2-21	-	21mm
HL-2-23	15/16"	-
HL-2-25	1"	-
HL-2-28	1-1/8"	-
HL-2-31	1-1/4"	-
HL-2-33	1-5/16"	-
HL-2-35	1-3/8"	35mm
HL-2-37	1-7/16"	-
HL-2-38	1-1/2"	38mm
HL-2-39	1-9/16"	-
HL-2-42	1-11/16"	-
HL-2-46	1-13/16"	46mm
HL-2-47	1-7/8"	-
HL-2-49	1-15/16"	49mm
HL-2-50	-	50mm
HL-2-51	2"	-
HL-2-52	2-1/16"	-
HL-2-54	2-1/8"	-
HL-2-57	2-1/4"	-
HL-2-60	2-3/8"	60mm

THL-4 Link	Hex Size	
	Imperial	Metric
HL-4-33	1-5/16"	-
HL-4-34	-	34mm
HL-4-35	1-3/8"	-
HL-4-36	-	36mm
HL-4-37	1-7/16"	-
HL-4-38	1-1/2"	38mm
HL-4-39	1-9/16"	-
HL-4-41	1-5/8"	41mm
HL-4-42	1-11/16"	-
HL-4-44	1-3/4"	-
HL-4-46	1-13/16"	46mm
HL-4-47	1-7/8"	-
HL-4-49	1-15/16"	49mm
HL-4-50	-	50mm
HL-4-51	2"	-
HL-4-52	2-1/16"	-
HL-4-53	2-1/8"	-
HL-4-55	2-3/16"	55mm
HL-4-57	2-1/4"	-
HL-4-58	2-5/16"	-
HL-4-60	2-3/8"	60mm
HL-4-61	2-7/16"	-
HL-4-63	2-1/2"	-
HL-4-65	2-9/16"	65mm
HL-4-66	2-5/8"	-
HL-4-68	2-11/16"	-
HL-4-70	2-3/4"	70mm
HL-4-71	2-13/16"	-
HL-4-73	2-7/8"	-
HL-4-75	2-15/16"	75mm
HL-4-76	3"	-
HL-4-77	3-1/16"	-
HL-4-79	3-1/8"	-
HL-4-80	-	80mm

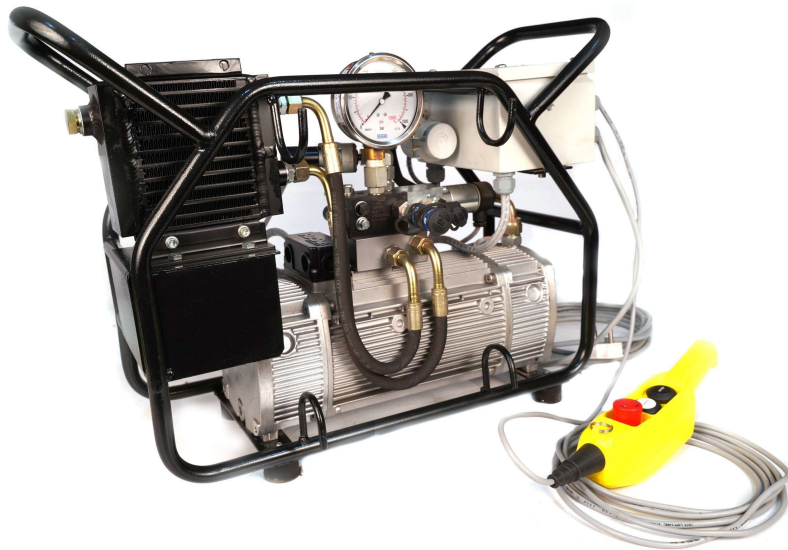
THL-8 Link	Hex Size	
	Imperial	Metric
HL-8-41	1-5/8"	41mm
HL-8-42	1-11/16"	-
HL-8-44	1-3/4"	-
HL-8-46	1-13/16"	46mm
HL-8-47	1-7/8"	-
HL-8-49	1-15/16"	49mm
HL-8-50	-	50mm
HL-8-51	2"	-
HL-8-52	2-1/16"	-
HL-8-54	2-1/8"	-
HL-8-55	2-3/16"	55mm
HL-8-57	2-1/4"	-
HL-8-58	2-5/16"	-
HL-8-60	2-3/8"	60mm
HL-8-61	2-7/16"	-
HL-8-63	2-1/2"	-
HL-8-65	2-9/16"	65mm
HL-8-68	2-11/16"	-
HL-8-71	2-13/16"	-
HL-8-75	2-15/16"	75mm
HL-8-77	3-1/16"	-
HL-8-79	3-1/8"	-
HL-8-80	-	80mm
HL-8-81	3-3/16"	-
HL-8-82	3-1/4"	-
HL-8-84	3-5/16"	-
HL-8-85	-	85mm
HL-8-86	3-3/8"	-
HL-8-87	3-7/16"	-
HL-8-88	3-1/2"	-
HL-8-90	-	90mm
HL-8-91	3-9/16"	-
HL-8-92	3-5/8"	-
HL-8-93	3-11/16"	-
HL-8-95	3-3/4"	95mm
HL-8-96	3-13/16"	-
HL-8-98	3-7/8"	-
HL-8-100	3-15/16"	100mm
HL-8-101	4"	-
HL-8-103	4-1/16"	-
HL-8-105	4-1/8"	105mm

THL-14 Link	Hex Size	
	Imperial	Metric
HL-14-50	-	50mm
HL-14-51	2"	-
HL-14-52	2-1/16"	-
HL-14-53	2-1/8"	-
HL-14-55	2-3/16"	55mm
HL-14-57	2-1/4"	-
HL-14-58	2-5/16"	-
HL-14-60	2-3/8"	60mm
HL-14-62	2-7/16"	-
HL-14-63	2-1/2"	-
HL-14-65	2-9/16"	65mm
HL-14-66	2-5/8"	-
HL-14-68	2-11/16"	-
HL-14-70	2-3/4"	70mm
HL-14-71	2-13/16"	-
HL-14-73	2-7/8"	-
HL-14-75	2-15/16"	75mm
HL-14-77	3-1/16"	-
HL-14-80	-	80mm
HL-14-82	3-1/4"	-
HL-14-85	-	85mm
HL-14-87	3-7/16"	-
HL-14-90	-	90mm
HL-14-92	3-5/8"	-
HL-14-95	3-3/4"	95mm
HL-14-98	3-7/8"	-
HL-14-101	4"	-
HL-14-105	4-1/8"	105mm
HL-14-107	4-1/4"	-
HL-14-110	-	110mm
HL-14-112	4-7/16"	-
HL-14-115	-	115mm

THL-32 Link	Hex Size	
	Imperial	Metric
H -32-108	4-1/4"	-
H -32-109	4-5/16"	-
H -32-110	-	110mm
H -32-112	4-7/16"	-
H -32-115	-	115mm
H -32-117	4-5/8"	117mm
H -32-119	4-11/16"	-
H -32-120	-	120mm
H -32-121	4-3/4"	-
H -32-122	4-13/16"	-
H -32-123	4-7/8"	-
H -32-125	-	125mm
H -32-127	5"	127mm
H -32-130	5-1/8"	-
H -32-133	5-1/4"	-
H -32-134	5-5/16"	135mm
H -32-136	5-3/8"	-
H -32-140	5-1/2"	140mm
H -32-141	5-9/16"	-
H -32-142	5-5/8"	-
H -32-145	-	145mm
H -32-146	5-3/4"	-
H -32-147	5-13/16"	-
H -32-150	-	150mm
H -32-151	5-15/16"	-
H -32-152	6"	-
H -32-153	6-1/16"	-
H -32-155	-	155mm
H -32-156	6-1/8"	-
H -32-157	6-3/16"	-
H -32-160	-	160mm
H -32-162	6-3/8"	-
H -32-165	6-1/2"	165mm
H -32-166	6-9/16"	-
H -32-168	6-5/8"	-
H -32-170	6-11/16"	170mm
H -32-171	6-3/4"	-
H -32-174	6-7/8"	-

TORSO ELECTRIC PUMP FOR HYDRAULIC TORQUE WRENCHES

FULLY AUTOMATIC ELECTRIC POWER PACK



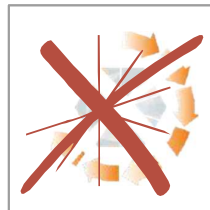
EQUIPPED WITH SAFETY FEATURES

NOTE: Also available as Conventional Electric Power pack. Pump will be supplied with Remote Control Pendant

With Auto Cycle



Without Auto Cycle



Technical Specification:

Fully Automatic Power Pack

- Faster and reliable in operations
- High repeatability of the bolting process without pressing the button again and again.

Temperature Management

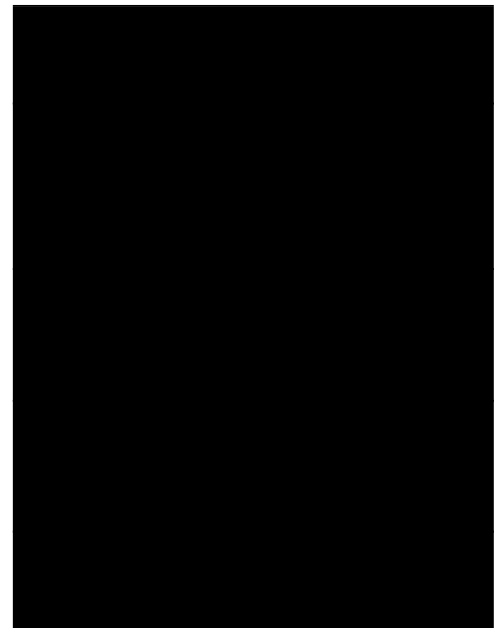
- In-built heat exchanger to cool the system
- The unique concept of the high-speed cooling and heat exchanger optimizes cooling for
- Continuous operation
- Power pack switches off automatically if temperature rises above 80°C

Oil immersed Motor

- Noiseless and vibration free operations Effective temperature equalisation by cooling .
- motor, pump & oil at the same time

PLC Controlled System

- Effectively controlled operations of power packs.
- If the power pack remains idle continuously more than 3 minutes, it gets switched off automatically.



AIR OPERATED POWERPACK FOR HYDRAULIC TORQUE WRENCHES

700 Bar, TwoSpeed
0.9/0.45 - 7.9/0.9cm OilFlow

Model	Pressure 1st-2nd Stage Bar (PSI)	Flow Rate 1st-2nd Stage l/mm (g/min)	Motor	RPM	Reservoir Capacity Liter (Gallon)	Weight Kg (Lbs)
APL-100	70/700	7.9/0.9	Pneumatic	3000	8.5 (2.24)	36 (79)

ADVANTAGES OF AIR OPERATE POWER PACKS

- Powered by a rotary air vane, 4HP motor(3,000RPM) Equipped with a filter-lubricator assembly, air muffler, adjustable relief and 10" remote controlled pendant on all models.
- High performance two-stage pump provides higher cross-over pressure for faster cycle times and tool operation; 55 cubic inches/minute@10,000 PSI.



APL-100

ATEX CERTIFIED ELECTRIC PUMP FOR HAZARDOUS ZONES

TORSO MODEL: PHE-ATEX

FEATURES:

Hydraulic Pump with Three Phase Electric Motor
ATEX Certified Version CE Ex li 2 G K T3
ATEX Zone-2 Class T3 Gas Group IIA

- Three Phase Electric Motor 1.1 kW 440V
- Axial-piston pump mod
- Oil flow 9.4 Litres/min @ 0-70 Bar (2.48 g/min@1015 PSI) and 0.9 Litres/min @ 700 Bar (0.23 g/min@ 10000 PSI)
- 3/2 solenoid valve 24DC and inversion valve
- Pressure regulator on P Line to set the torque value
- Adjustable Relief Valve on return line
- Pressure Gauge DN 100 range 0 -1000 Bar (14500 PSI)
- Reservoir Capacity 10 Litres (2.64 Gallon)
- Recommended Hydraulic Oil ISO 32 and above Also available in Air Operated Type (PAE - ATEX)
- The pump includes remote control and electric box

