

THWD SERIES Low Profile Hexagon Hydraulic Torque Wrenches



Features

- The low profile cassettes are made in compact and ultra slim structure to fit into tight spaces
- Rigid steel design ensure the durability, reliability and safety of the tools
- Maximum flexibility with full range Interchangeable hexagon cassettes and reducing inserts, no tools necessary.
- Compact nose radius allows the tool to perform easily in tighter spaces.
- Constant torque output provides accuracy up-to ±3%
- Multi direction high flow swivel manifold (360°X-axis * 180°Y-axis) .
- Fast operation cycle, fine tooth ratchet, corrosion resistance, low weight, high strength design.

How to Choose a Low Profile Hexagon Wrench

Please order drive unit and cassette separately and pay attention to the same size, for example THWD20 and THWL20-2375.



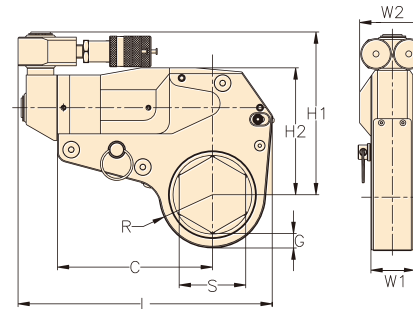
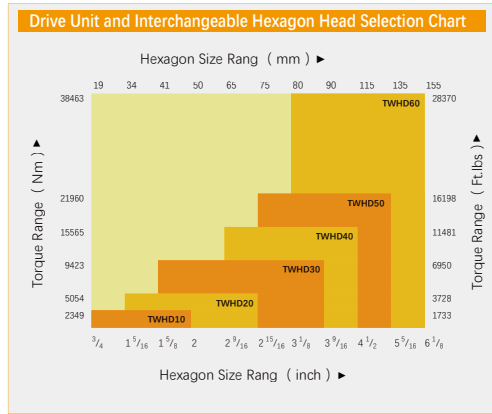
Choose the appropriate Drive unit .



Find the cassettes for your application (nut size) .



Add reducers for additional nut sizes, the combinations of use of different cassettes and reducers provide the maximum capability to achieve diverse jobs .



Hexagon Range		Torque Range		Drive Unit Model Number*	Drive Unit Weight **	Dimensions***						
inch	mm	Ft.lbs	N.m			lbs	L	H1	H2	W1	W2	G
3/4 - 2	19-50	173-1733	235-2349	THWD10	1.5	8.00	5.16	3.78	1.26	1.97	0.47	4.57
1 5/16 - 2 15/16	34-75	373-3728	505-5054	THWD20	3.8	9.80	6.30	4.88	1.65	2.52	0.59	5.96
1 5/8 - 3 9/16	41-90	695-6950	942-9423	THWD30	6.8	12.00	7.72	6.30	2.10	2.95	0.67	7.42
2 9/16 - 4 1/2	65-115	1148-11481	1556-15565	THWD40	9.5	13.07	9.53	7.54	2.52	3.43	0.79	9.21
2 15/16 - 5 5/16	75-135	1620-16198	2196-21960	THWD50	13.2	15.04	14.40	8.46	2.87	3.82	0.90	10.63
3 1/8 - 6 1/8	80-155	2837-28370	3846-38463	THWD60	23.4	17.68	12.01	10.04	3.35	4.72	1.10	12.50

* The above form of drive unit model number.
 ** Weight of drive unit without hexagon cassettes.
 *** Dimensions of Torque wrench with hexagon cassettes.

Maximum Torque: 28370 Ft.lbs
 Hexagon Range: 3/4 - 6 1/8 inch
 Nose Radius: 1.17-4.64 inch
 Maximum Operating Pressure: 10,000 psi

Principle of Torque Wrenches Selecting
 Please refer to the bolt torque recommendation form. See " How to Select Hydraulic Torque Wrench " for details.

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



Torque Wrench Pumps
 Air and electric torque wrench pumps that are idea for use with hydraulic torque wrenches.



Hexagon Cassettes for Low Profile Hexagon Torque Wrenches



Each type of low profile drive unit matches certain range of hexagon cassettes and reducers to cover the maximum range of nut sizes, which are tolerated by the torque value of the same drive unit.

When selecting the proper cassette for the application, pay attention to the distance between the bolt and the wall side.

Also pay attention to the distance between the hexagonal edge in the cassette and the outer edge of the link.

The R value in the following table can guide you choose the right one.

Drive Unit Model Number				TWHD10			Drive Unit Model Number			TWHD20			Drive Unit Model Number			TWHD30							
Maximum Torque				1733 Ft.lbs			Maximum Torque			3728 Ft.lbs			Maximum Torque			6950 Ft.lbs							
Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)				
TWHL10-2000	2	1.61	3.3	TWHL20-75	2 1/16	2.25	9.8	TWHL30-3500	3 1/2	2.70	14.3	TWHL40-4500	4 1/2	3.40	26.2	TWHL50-5375	5 3/8	3.96	39.7	TWHL60-6125	6 1/8	4.63	65.0
TWHL10-46	1 13/16	1.50	3.3	TWHL20-70	2 3/4	2.15	9.8	TWHL30-3375	3 3/8	2.66	14.3	TWHL40-110	4 5/16	3.40	25.6	TWHL50-5125	5 1/4	3.96	40.1	TWHL60-5875	5 7/8	4.55	64.2
TWHL10-1625	1 5/8	1.38	3.1	TWHL20-65	2 5/16	2.06	9.7	TWHL30-3315	3 5/16	2.66	14.3	TWHL40-1250	4 3/4	3.17	25.6	TWHL50-5000	5	3.76	39.2	TWHL60-5750	5 3/4	4.39	63.7
TWHL10-1438	1 7/16	1.24	3.0	TWHL20-2188	2 3/16	1.99	9.7	TWHL30-3125	3 3/8	2.54	13.9	TWHL40-105	4 1/8	3.17	25.1	TWHL50-4938	4 15/16	3.76	39.2	TWHL60-5500	5 1/2	4.24	63.7
TWHL10-1250	1 1/4	1.20	3.1	TWHL20-2188	2 3/16	1.87	9.3	TWHL30-75	2 5/16	2.43	13.9	TWHL40-110	4 5/16	3.17	24.9	TWHL50-4750	4 3/4	3.76	39.5	TWHL60-5375	5 3/8	4.16	63.5
TWHL10-1313	1 5/16	1.24	2.9	TWHL20-2000	2	1.80	9.3	TWHL30-70	2 3/4	2.35	13.4	TWHL40-105	4 1/8	3.17	24.9	TWHL50-4625	4 9/8	3.37	39.5	TWHL60-5125	5 3/8	4.04	62.8
TWHL10-1250	1 1/4	1.20	3.1	TWHL20-46	1 13/16	1.72	8.8	TWHL30-65	2 5/16	2.23	13.0	TWHL40-4250	4 5/8	3.40	26.2	TWHL50-4500	4 3/2	3.37	38.8	TWHL60-5000	5	3.96	62.8
TWHL10-30	1 3/16	1.20	3.1	TWHL20-1625	1 5/8	1.72	9.0	TWHL30-2375	2 5/8	2.11	12.8	TWHL40-100	4 1/8	3.17	25.1	TWHL50-4375	4 3/8	3.37	38.4	TWHL60-4938	4 5/16	3.96	62.8
TWHL10-27	1 1/16	1.17	3.1	TWHL20-2188	1 7/16	1.48	8.4	TWHL30-2188	2 3/16	2.03	12.3	TWHL40-100	4 1/8	3.17	25.1	TWHL50-4250	4 1/4	3.37	38.4	TWHL60-4750	4 3/4	3.74	62.4
TWHL10-0938	1 5/16	1.17	3.1	TWHL20-1313	1 9/16	1.48	8.6	TWHL30-2000	2	1.87	11.7	TWHL40-3500	3 1/2	2.70	14.3	TWHL50-4100	4 1/8	3.17	25.1	TWHL60-4625	4 3/8	3.74	62.4
TWHL10-22	7/8	1.17	3.1					TWHL30-46	1 13/16	1.87	12.1	TWHL40-3315	3 5/8	2.70	14.3	TWHL50-3500	3 1/2	2.70	14.3	TWHL60-4500	4 1/2	3.62	62.4
TWHL10-19	3/4	1.17	3.1					TWHL30-1625	1 5/8	1.87	12.1	TWHL40-3125	3 3/8	2.70	14.3	TWHL50-3315	3 1/2	2.70	14.3	TWHL60-4100	4 1/8	3.62	62.4

Drive Unit Model Number				TWHD40			Drive Unit Model Number			TWHD50			Drive Unit Model Number			TWHD60							
Maximum Torque				11481 Ft.lbs			Maximum Torque			16198 Ft.lbs			Maximum Torque			28370 Ft.lbs							
Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)	Hexagon Cassettes	S (inch)	R (inch)	Weight (lbs)				
TWHL40-4500	4 1/2	3.40	26.2	TWHL50-5375	5 3/8	3.96	39.7	TWHL60-6125	6 1/8	4.63	65.0	TWHL70-6875	7 1/8	5.20	73.6	TWHL80-7625	8 1/8	5.87	81.1	TWHL90-8475	9 1/8	6.54	88.6
TWHL40-110	4 5/16	3.40	25.6	TWHL50-5125	5 1/4	3.96	40.1	TWHL60-5875	5 7/8	4.55	64.2	TWHL70-6625	7 3/8	5.12	71.1	TWHL80-7375	8 1/4	5.79	78.6	TWHL90-8125	9 1/4	6.46	86.1
TWHL40-1250	4 3/4	3.17	25.6	TWHL50-5000	5	3.76	39.2	TWHL60-5750	5 3/4	4.39	63.7	TWHL70-6500	7 1/2	4.96	68.6	TWHL80-7125	8 3/4	5.63	76.1	TWHL90-7875	9 3/4	6.30	83.6
TWHL40-105	4 1/8	3.17	25.1	TWHL50-4938	4 15/16	3.76	39.2	TWHL60-5500	5 1/2	4.24	63.7	TWHL70-6375	7 1/4	4.71	65.6	TWHL80-6925	8 1/2	5.38	73.1	TWHL90-7625	9 1/2	6.04	80.6
TWHL40-100	3 5/8	3.17	24.9	TWHL50-4750	4 3/4	3.76	39.5	TWHL60-5375	5 3/8	4.16	63.5	TWHL70-6250	7 3/4	4.66	65.6	TWHL80-6775	8 3/4	5.33	72.6	TWHL90-7475	9 3/4	6.00	80.1
TWHL40-3875	3 7/8	3.06	24.9	TWHL50-4625	4 9/8	3.37	39.5	TWHL60-5125	5 3/8	4.04	62.8	TWHL70-6125	7 1/2	4.61	64.6	TWHL80-6625	8 1/2	5.28	72.1	TWHL90-7375	9 1/2	5.95	79.6
TWHL40-95	3 3/4	2.94	24.3	TWHL50-4500	4 1/2	3.37	38.8	TWHL60-5000	5	3.96	62.8	TWHL70-6000	7 1/4	4.56	64.6	TWHL80-6500	8 1/4	5.23	71.6	TWHL90-7125	9 1/4	5.90	79.1
TWHL40-3688	3 11/16	2.94	24.3	TWHL50-4375	4 3/8	3.37	38.4	TWHL60-4938	4 5/16	3.96	62.8	TWHL70-5875	7 3/8	4.51	64.6	TWHL80-6375	8 3/8	5.18	71.6	TWHL90-7000	9 1/4	5.85	78.6
TWHL40-3500	3 1/2	2.86	24.3	TWHL50-4250	4 1/4	3.37	38.4	TWHL60-4750	4 3/4	3.74	62.4	TWHL70-5750	7 1/2	4.46	64.6	TWHL80-6250	8 1/2	5.13	71.6	TWHL90-6875	9 1/4	5.80	78.1
TWHL40-3375	3 5/8	2.74	23.8	TWHL50-4100	4 1/8	3.37	38.4	TWHL60-4625	4 3/8	3.74	62.4	TWHL70-5625	7 1/4	4.41	64.6	TWHL80-6125	8 1/4	5.10	71.6	TWHL90-6750	9 1/4	5.75	77.6
TWHL40-3313	3 5/16	2.74	23.8	TWHL50-4000	4 1/2	3.37	38.8	TWHL60-4500	4 1/2	3.62	62.4	TWHL70-5500	7 1/4	4.36	64.6	TWHL80-6000	8 1/4	5.05	71.6	TWHL90-6625	9 1/4	5.70	77.1
TWHL40-3125	3 3/8	2.62	23.6	TWHL50-3875	4 1/8	3.37	38.4	TWHL60-4400	4 1/8	3.54	62.4	TWHL70-5400	7 1/4	4.31	64.6	TWHL80-5875	8 1/4	5.00	71.6	TWHL90-6500	9 1/4	5.65	76.6
TWHL40-75	2 1/8	2.50	23.6	TWHL50-3750	4 1/4	3.37	38.4	TWHL60-4250	4 1/4	3.54	62.4	TWHL70-5300	7 1/4	4.26	64.6	TWHL80-5750	8 1/4	4.95	71.6	TWHL90-6375	9 1/4	5.60	76.1
TWHL40-70	2 1/4	2.31	23.1	TWHL50-3688	4 1/8	3.02	37.3	TWHL60-4100	4 1/8	3.43	61.5	TWHL70-5200	7 1/4	4.21	64.6	TWHL80-5625	8 1/4	4.90	71.6	TWHL90-6250	9 1/4	5.55	75.6
TWHL40-65	2 1/16	2.31	23.4	TWHL50-3500	4 1/2	2.90	37.0	TWHL60-4000	4 1/2	3.27	60.6	TWHL70-5100	7 1/4	4.16	64.6	TWHL80-5500	8 1/4	4.85	71.6	TWHL90-6125	9 1/4	5.50	75.1
				TWHL50-3375	4 3/8	2.78	37.0	TWHL60-3875	4 3/8	3.15	60.6	TWHL70-5000	7 1/4	4.11	64.6	TWHL80-5375	8 1/4	4.80	71.6	TWHL90-6000	9 1/4	5.45	74.6
				TWHL50-3313	3 5/16	2.78	37.0	TWHL60-3750	4 1/8	3.15	60.6	TWHL70-4900	7 1/4	4.06	64.6	TWHL80-5250	8 1/4	4.75	71.6	TWHL90-5875	9 1/4	5.40	74.1
				TWHL50-3125	3 3/4	2.66	36.4	TWHL60-3688	4 1/8	3.15	60.6	TWHL70-4800	7 1/4	4.01	64.6	TWHL80-5125	8 1/4	4.70	71.6	TWHL90-5750	9 1/4	5.35	73.6
				TWHL50-27	2 5/16	2.54	36.4	TWHL60-3500	3 1/2	3.07	60.6	TWHL70-4700	7 1/4	3.96	64.6	TWHL80-5000	8 1/4	4.65	71.6	TWHL90-5625	9 1/4	5.30	73.1
								TWHL60-3375	3 7/8	2.95	59.7	TWHL70-4600	7 1/4	3.91	64.6	TWHL80-4875	8 1/4	4.60	71.6	TWHL90-5500	9 1/4	5.25	72.6
								TWHL60-3313	3 5/16	2.95	59.7	TWHL70-4500	7 1/4	3.86	64.6	TWHL80-4775	8 1/4	4.55	71.6	TWHL90-5375	9 1/4	5.20	72.1
								TWHL60-3125	3 3/8	2.76	59.7	TWHL70-4400	7 1/4	3.81	64.6	TWHL80-4625	8 1/4	4.50	71.6	TWHL90-5250	9 1/4	5.15	71.6

Hexagon Reducers for Low Profile Hexagon Torque Wrenches



Features

- High-strength chromium-molybdenum steel alloy.
- Special sizes available upon request.

Drive Unit Model Number	Hexagon Head Model Number	Hexagon Reducers Model Number								Reducer Lock Model
		Hexagon Size (inch)		Model Number		A-B (inch)		Model Number		
TWHD10	TWHL10-2000	2	IHR10-2000-1625	2-1 5/8	IHR10-2000-1438	2-1 1/4	IHR10-2000-1250	2-1 1/4	IHR-L2000	
	TWHL10-46	1 13/16	IHR10-46-1438	1 13/16-1 7/8	IHR10-46-1250	1 13/16-1 3/4	IHR10-46-30	1 13/16-1 1/8	IHR-L46	
	TWHL10-1625	1 5/8	IHR10-1625-1250	1 5/8-1 1/4	IHR10-1625-30	1 5/8-1 3/8	IHR10-1625-27	1 5/8-1 1/8	IHR-L1625	
	TWHL10-1438	1 7/16	IHR10-1438-30	1 7/16-1 3/8	IHR10-1438-27	1 7/16-1 1/8			IHR-L1438	
	TWHL10-1250	1 1/4	IHR10-1250-27	1 1/4-1 1/8					IHR-L1250	
	TWHL20-75	2 15/16	IHR20-75-65	2 15/16-2 3/8	IHR20-75-2375	2 15/16-2 3/8	IHR20-75-2188	2 15/16-2 3/8	IHR-L75	
TWHD20	TWHL20-70	2 3/4	IHR20-70-2375	2 3/4-2 3/8	IHR20-70-2188	2 3/4-2 3/8	IHR20-70-2000	2 3/4-2 3/8	IHR-L70	
	TWHL20-65	2 5/8	IHR20-65-2188	2 5/8-2 3/8	IHR20-65-2000	2 5/8-2 3/8	IHR20-65-46	2 5/8-1 1/8	IHR-L65	
	TWHL20-2375	2 3/8	IHR20-2375-2000	2 3/8-2 3/8	IHR20-2375-46	2 3/8-1 1/8	IHR20-2375-1625	2 3/8-1 1/8	IHR-L2375	
	TWHL20-2188	2 3/16	IHR20-2188-46	2 3/16-2 15/16	IHR20-2188-1625	2 3/16-1 7/8	IHR20-2188-1438	2 3/16-1 7/8	IHR-L21	