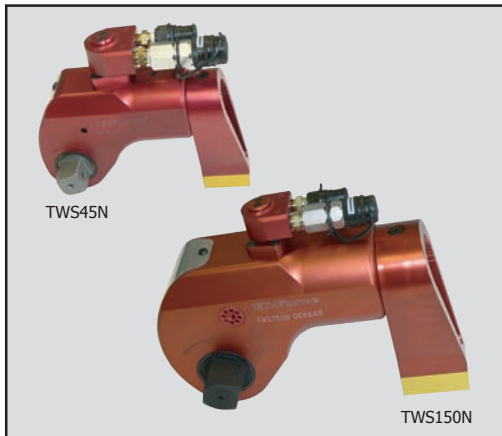


TWS-N - HYDRAULIC TORQUE WRENCHES - SQUARE DRIVE



Working pressure 700 bar

Compact, lightweight, aluminium construction

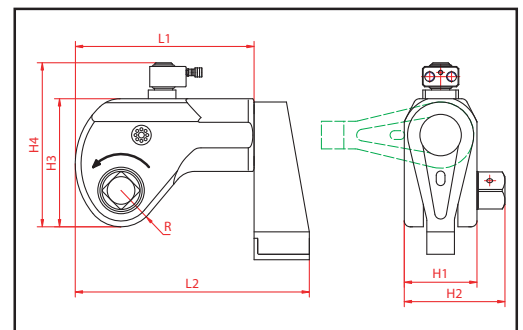
Fitted with 360° Uni-Swivel quick release couplings

Hi-Force TWS-N series lightweight aluminium hydraulic torque wrenches are designed to handle the toughest bolting jobs accurately and quickly. All models provide a torque accuracy of +/- 3% with a handy torque chart clearly engraved on the tool. The internal reaction arm spline allows the operator to easily position the tool and, if necessary, react directly off the tool body in very confined access applications. All models incorporate an easily reversible high grade alloy steel square drive enabling the operator to quickly switch from tightening to loosening applications. Uni-Swivel quick release couplers are fitted as standard to all models enabling easy positioning of the hydraulic hoses away from any possible "pinch points". Optional allen hex drives are available (see below) along with a comprehensive range of high quality torque wrench sockets (see pages 82 - 83).

- >> Accurate to +/- 3% with calibration chart supplied
- >> Multi-position reaction foot with safety lock feature
- >> Reversible square drive for tightening and loosening applications
- >> Suitable for continuous operation at maximum pressure
- >> Body shroud engraved with torque/pressure chart

Allen Hex Drive

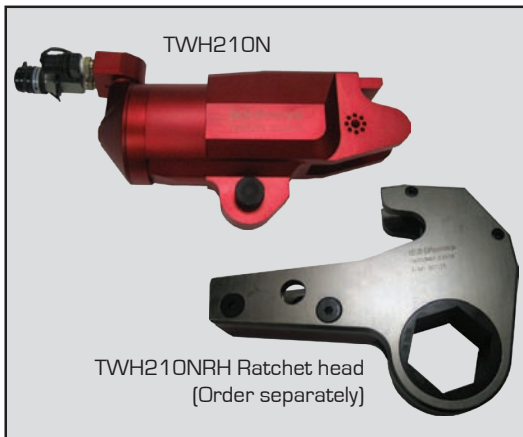
Optional allen hex drive adaptors are available in metric and imperial sizes. Further details on request.



Model number	Torque capacity [nominal]		Square drive size	Weight incl. reaction foot kg
	Nm	lbf.ft		
TWS17N	1700	1254	3/4"	1.9
TWS45N	4500	3320	1"	4.8
TWS100N	10000	7375	1 1/2"	9.0
TWS150N	15000	11063	1 1/2"	14.8
TWS370N	37000	27290	2 1/2"	32.5

Dimensions in mm						
L1	L2	H1	H2	H3	H4	R
127	167	51	73	90	124	25
162	213	68	95	122	170	34
222	292	92	132	163	211	46
246	322	100	138	177	226	50
329	431	137	200	240	289	66

TWH-N - HYDRAULIC TORQUE WRENCH - DRIVE CYLINDERS



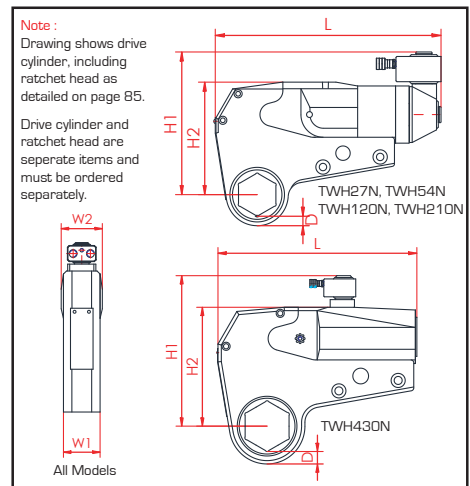
Working pressure 700 bar

Powerful and low clearance design

Fitted with 360° x 360° Uni-Swivel couplings

Hi-Force TWH-N series female hexagon cassette head hydraulic torque wrenches offer a choice of 5 models, with output torque capacities from 2700 Nm to 48181 Nm [1990 to 35536 lbf.ft]. Manufactured from high grade aluminium (except TWH430N), all models provide direct in-line reaction and a minimal radius clearance for easy fitment in confined spaces. The user friendly design of the tool simply requires the operator to withdraw/insert a single pin to change the ratchet head. Ratchet heads are available in all standard metric and imperial AF sizes from 24 to 145mm [1 1/16" to 6 7/8"] with low cost hexagon reducer bushes also available (see pages 87 - 88). Uni-Swivel quick release couplers are fitted as standard to all models, enabling easy positioning of the hydraulic hoses.

- >> Compact, lightweight, aluminium drive unit (except TWH430N)
- >> Accurate to +/- 3% with standard torque chart supplied
- >> Low profile design for limited access applications
- >> Minimum radius cassette head for fitment in confined spaces
- >> Suitable for continuous operation at maximum pressure



Model number (drive unit)	Torque capacity (nominal)		Hexagon AF size		Imperial		Approx. weight kg
	Nm	lbf. ft	Metric min	max	min	max	
TWH27N	2700	1990	24 to	46	1 1/16" to	1 13/16"	3.0
	3068	2263	50 to	60	2" to	2 3/8"	3.0
TWH54N	5400	3983	30 to	65	1 1/16" to	2 9/16"	6.0
	6037	4453	70 to	80	2 3/4" to	3 1/8"	6.0
TWH120N	12000	8850	50 to	80	2 3/16" to	3 1/8"	11.5
	14349	10583	85 to	100	3 1/2" to	3 7/8"	11.5
TWH210N	21000	15489	70 to	100	2 3/4" to	3 7/8"	16.0
	23124	17055	105 to	115	4 1/4" to	4 5/8"	16.0
TWH430N	43000	31715	80 to	115	3 1/8" to	4 5/8"	28.0
	48181	35536	130 to	145	5" to	6 7/8"	28.0

Dimensions in mm						
L	H1	H2	W1	W2	D min - max	
193	125	97	32	51	10 - 15	
193	136	108	32	51	10 - 12	
250	158	125	41	64	11 - 20	
250	169	136	41	64	12 - 24	
310	189	157	52	78	14 - 17	
310	214	182	52	78	16 - 21	
378	223	191	64	97	18 - 21	
378	236	204	64	97	19 - 23	
405	291	242	83	93	26 - 31	
425	309	260	83	93	25 - 32	

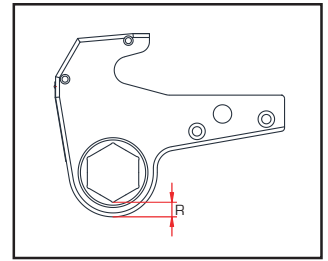
Note: Above selection table is for drive unit only. Ratchet head(s) to be ordered separately - see page 85.

Exact weight & radius size [D] varies according to ratchet AF size selected.

TWH-NRH - HYDRAULIC TORQUE WRENCH - RATCHET HEADS



- >> Choice of standard metric and imperial sizes
- >> Easily fitted to TWH-N drive units
- >> Strong steel construction
- >> Non standard and special design ratchet heads can be made to order



		RATCHET HEAD SELECTION TABLE:											
	Bolt size	Nut AF size	For TWH27N		For TWH54N		For TWH120N		For TWH210N		For TWH430N		
			Model number	R mm	Model number	R mm	Model number	R mm	Model number	R mm	Model number	R mm	
I M P E R I A L (Sizes in inches)	5/8"	1 1/16"	TWH27NRH1.1/16	10.5	TWH54NRH1.1/16	19.0							
	3/4"	1 1/4"	TWH27NRH1.1/4	10.8	TWH54NRH1.1/4	17.3							
	7/8"	1 7/16"	TWH27NRH1.7/16	10.1	TWH54NRH1.7/16	13.8							
	1"	1 5/8"	TWH27NRH1.5/8	10.1	TWH54NRH1.5/8	10.9							
	1 1/8"	1 13/16"	TWH27NRH1.13/16	10.6	TWH54NRH1.13/16	10.8							
	1 1/4"	2"	TWH27NRH2	10.5	TWH54NRH2	12.2							
	1 3/8"	2 3/16"	TWH27NRH2.3/16	10.2	TWH54NRH2.3/16	12.2	TWH120NRH2.3/16	15.1					
	1 1/2"	2 3/8"	TWH27NRH2.3/8	10.5	TWH54NRH2.3/8	12.0	TWH120NRH2.3/8	15.0					
	1 5/8"	2 9/16"			TWH54NRH2.9/16	11.7	TWH120NRH2.9/16	14.9					
	1 3/4"	2 3/4"			TWH54NRH2.3/4	11.8	TWH120NRH2.3/4	14.9	TWH210NRH2.3/4	18.3			
	1 7/8"	2 15/16"			TWH54NRH2.15/16	12.0	TWH120NRH2.15/16	14.8	TWH210NRH2.15/16	18.2			
	2"	3 1/8"			TWH54NRH3.1/8	11.8	TWH120NRH3.1/8	14.8	TWH210NRH3.1/8	18.2	TWH430NRH3.1/8	25.7	
	2 1/4"	3 1/2"					TWH120NRH3.1/2	16.4	TWH210NRH3.1/2	18.8	TWH430NRH3.1/2	28.1	
	2 1/2"	3 7/8"					TWH120NRH3.7/8	18.8	TWH210NRH3.7/8	18.7	TWH430NRH3.7/8	28.6	
	2 3/4"	4 1/4"							TWH210NRH4.1/4	18.5	TWH430NRH4.1/4	25.9	
	3"	4 5/8"							TWH210NRH4.5/8	21.0	TWH430NRH4.5/8	27.5	
	3 1/4"	5"									TWH430NRH5	28.8	
	3 1/2"	5 3/8"									TWH430NRH5.3/8	26.9	
3 3/4"	5 3/4"									TWH430NRH5.3/4	25.6		
4"	6 1/8"									TWH430NRH6.1/8	25.6		
4 1/4"	6 1/2"									TWH430NRH6.1/2	25.3		
4 1/2"	6 7/8"									TWH430NRH6.7/8	25.3		
M E T R I C (Sizes in mm)	16	24	TWH27NRH-24	12.2									
	18	27	TWH27NRH-27	10.5									
	20	30	TWH27NRH-30	10.8	TWH54NRH-30	17.3							
	24	36	TWH27NRH-36	10.1	TWH54NRH-36	13.8							
	27	41	TWH27NRH-41	10.1	TWH54NRH-41	10.9							
	30	46	TWH27NRH-46	10.6	TWH54NRH-46	10.8							
	33	50	TWH27NRH-50	10.5	TWH54NRH-50	12.2	TWH120NRH-50	15.0					
	36	55	TWH27NRH-55	10.2	TWH54NRH-55	12.2	TWH120NRH-55	15.1					
	39	60	TWH27NRH-60	10.5	TWH54NRH-60	12.0	TWH120NRH-60	15.0					
	42	65			TWH54NRH-65	11.7	TWH120NRH-65	14.9					
	45	70			TWH54NRH-70	11.8	TWH120NRH-70	14.9	TWH210NRH-70	18.3			
	48	75			TWH54NRH-75	12.0	TWH120NRH-75	14.8	TWH210NRH-75	18.2			
	52	80			TWH54NRH-80	11.8	TWH120NRH-80	14.8	TWH210NRH-80	18.2	TWH430NRH-80	25.7	
	56	85					TWH120NRH-85	16.5	TWH210NRH-85	18.3	TWH430NRH-85	28.1	
	60	90					TWH120NRH-90	16.4	TWH210NRH-90	18.8	TWH430NRH-90	31.5	
	64	95					TWH120NRH-95	16.0	TWH210NRH-95	18.7	TWH430NRH-95	28.6	
	68	100					TWH120NRH-100	18.8	TWH210NRH-100	18.7	TWH430NRH-100	25.7	
	72	105							TWH210NRH-105	18.5	TWH430NRH-105	28.7	
	76	110							TWH210NRH-110	18.5	TWH430NRH-110	25.9	
	80	115							TWH210NRH-115	21.0	TWH430NRH-115	27.5	
90	130									TWH430NRH-130	25.9		
100	145									TWH430NRH-145	25.6		





Suitable for TWH-N range up to 23124 Nm

Square drive sizes from 1" to 2½"

Easily fitted, no special tools needed

Hi-Force SDC square drive conversion kits, suitable for Hi-Force TWH-N hexagon drive hydraulic torque wrenches (see page 84) are available for all models, excluding TWH430N. All imperial and metric models are supplied complete with easily attachable reaction foot and a standard hexagon AF size, suitable for fitment to a commonly used size of ratchet head, per tool type (see table for more details). These SDC square drive conversion kits provide the most flexible and cost effective method of transforming a female hexagon drive hydraulic torque wrench into a square drive unit.

- >> Supplied complete with reaction foot
- >> Easily fitted
- >> Makes your hexagon drive torque wrench even more versatile
- >> Full range of impact sockets available (see pages 82 & 83)



Flexibility ...

The combination of a Hi-Force drive unit, standard ratchet heads and square drive conversion kit gives the user maximum flexibility. Whether a low height or square drive unit is required, this combination provides it all !

Model number	Square drive	Hexagon AF Size	Maximum torque Nm	Maximum torque lbf.ft	Suitable for drive cylinder incl. ratchet head	Weight kg
SDC27-I	1"	1 ¹³ / ₁₆ "	3068	2263	TWH27N TWH27NRH-1 ¹³ / ₁₆ "	1.1
SDC27-M	1"	46mm	3068	2263	TWH27N TWH27NRH-46	1.1
SDC54-I	1½"	2 ⁹ / ₁₆ "	6037	4453	TWH54N TWH54NRH-2 ⁹ / ₁₆ "	3.0
SDC54-M	1½"	65mm	6037	4453	TWH54N TWH54NRH-65	3.0
SDC120-I	1½"	3 ¹ / ₈ "	14349	10583	TWH120N TWH120NRH-3 ¹ / ₈ "	4.4
SDC120-M	1½"	80mm	14349	10583	TWH120N TWH120NRH-80	4.4
SDC210-I	2½"	3 ⁷ / ₈ "	23124	17055	TWH210N TWH210NRH-3 ⁷ / ₈ "	9.1
SDC210-M	2½"	100mm	23124	17055	TWH210N TWH210NRH-100	9.1