

THE **LPC-SERIES** LOW PROFILE HYDRAULIC HEXAGON TORQUE WRENCHES ARE AN ESSENTIAL TOOL FOR LIMITED CLEARANCE APPLICATIONS.

The versatile LPC-Series torque wrenches support an extensive range of interchangeable hexagon ratchet cassettes that deliver a torque range of 232 to 44,593 Newton Metres (172 to 32,999 ft/lb). A convenient Carry Case is included for models LPC2 to LPC14.



All wrenches supplied with a calibration certificate of accuracy, traceable to international standards. Refer to Calibration & Certification section at the rear of the catalogue.



TW RANGE
112 - 72,000 Nm

LPC RANGE
232 - 44,593 Nm

MAXIMUM OPERATING PRESSURE
700 bar

BOLTING SOLUTIONS

**ADJUSTABLE
REMOVABLE
CARRY HANDLE**

included with LPC2 to LPC14 models for enhanced safety and efficiency

LPC4 with Hexagon Ratchet Cassette

360° X 180° SWIVEL
with screw couplings

ACCURACY
within + / - 3%

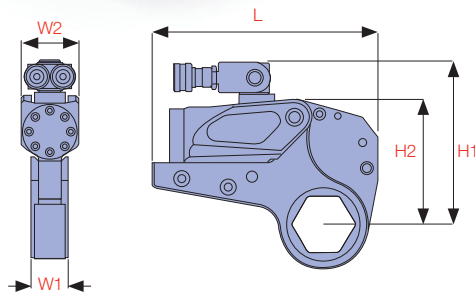
WIDE RANGE
of metric and imperial interchangeable hexagon ratchet cassettes available

REDUCER INSERTS
are available in metric and imperial sizes

HIGH STRENGTH
titanium aluminium alloy body

LASER ENGRAVED

hexagon ratchet cassettes show model number, serial number and maximum capacity



Model No.	Range of Torque @ 700 bar (Nm)	Range of Torque @ 700 bar (ft/lb)	Hexagon Size Range (mm)	Hexagon A/F Size Range	L (mm)	H1 (mm)	H2 (mm)	W1 (mm)	W2 (mm)	Weight Of Power Head (kg)	Weight Of Hexagon Cassettes (kg)*
LPC2	232 - 2,328	172 - 1,723	19 - 55	3/4" - 2-3/16"	197	126	102	32	51	1.0	1.6
	241 - 2,414	178 - 1,786	60	2-3/8"	197	129	105	32	51	1.0	1.7
LPC4	585 - 5,858	433 - 4,335	34 - 65	1-7/16" - 2-9/16"	245	177	136	42	66	2.0	4.4
	647 - 6,474	479 - 4,791	70 - 80	2-3/4" - 3-1/8"	246	187	146	42	66	2.0	4.6
LPC8	1,094 - 10,941	809 - 8,096	41 - 95	1-5/8" - 3-7/8"	300	207	169	53	83	3.3	8.0
	1,177 - 11,774	871 - 8,713	100 - 105	4-1/4"	301	216	178	53	83	3.3	8.4
LPC14	1,852 - 18,521	1,370 - 13,706	50 - 117	2" - 4-5/8"	361	239	204	64	99	5.5	11.6
LPC30	4,188 - 41,882	3,099 - 30,993	85 - 155	3-1/2" - 6-1/8"	430	303	272	85	131	11.4	29.0
	4,459 - 44,593	3,299 - 32,999	160 - 175	6-1/2" - 6-7/8"	441	315	285	85	131	11.4	30.0

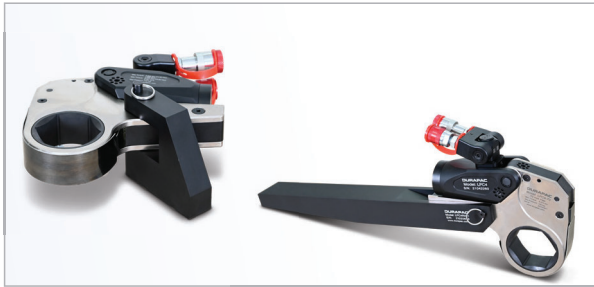
* Weight of hexagon ratchet cassettes will vary by model ordered

METRIC HEXAGON CASSETTES



Metric Hexagon Cassette Table

Bolt Diameter (mm)	A/F Size (mm)	LPC2	R (mm)	A (mm)	Max. Torque (Nm)	LPC4	R (mm)	A (mm)	Max. Torque (Nm)	LPC8	R (mm)	A (mm)	Max. Torque (Nm)	LPC14	R (mm)	A (mm)	Max. Torque (Nm)
12	19	LPC2-19	27	16	1,663												
14	22	LPC2-22	27	14	1,663												
18	27	LPC2-27	27	11	1,929												
20	30	LPC2-30	29	12	2,328												
	32	LPC2-32	29	11	2,328												
22	34	LPC2-34	31	11	2,328	LPC4-34	36	16	2,510								
24	36	LPC2-36	31	10	2,328	LPC4-36	36	15	2,510								
27	41	LPC2-41	34	10	2,328	LPC4-41	39	15	5,021	LPC8-41	46	22	8,128				
30	46	LPC2-46	37	10	2,328	LPC4-46	42	15	5,858	LPC8-46	46	19	10,941				
33	50	LPC2-50	40	11	2,328	LPC4-50	44	15	5,858	LPC8-50	46	17	10,941	LPC14-50	60	31	14,552
36	55	LPC2-55	43	11	2,328	LPC4-55	46	14	5,858	LPC8-55	50	18	10,941	LPC14-55	60	28	18,521
39	60	LPC2-60	46	11	2,414	LPC4-60	50	15	5,858	LPC8-60	52	17	10,941	LPC14-60	60	25	18,521
42	65					LPC4-65	53	15	5,858	LPC8-65	55	17	10,941	LPC14-65	60	22	18,521
45	70					LPC4-70	56	15	6,474	LPC8-70	58	17	10,941	LPC14-70	60	19	18,521
48	75					LPC4-75	59	15	6,474	LPC8-75	60	17	10,941	LPC14-75	63	19	18,521
52	80					LPC4-80	61	15	6,474	LPC8-80	63	16	10,941	LPC14-80	66	19	18,521
56	85									LPC8-85	66	16	10,941	LPC14-85	69	19	18,521
60	90									LPC8-90	69	17	10,941	LPC14-90	72	20	18,521
64	95									LPC8-95	71	16	10,941	LPC14-95	74	19	18,521
68	100									LPC8-100	75	17	11,774	LPC14-100	77	19	18,521
72	105									LPC8-105	78	17	11,774	LPC14-105	80	19	18,521
76	110													LPC14-110	83	19	18,521
80	115													LPC14-115	87	20	18,521
	117													LPC14-117	87	19	18,521
85	120																
	125																
90	130																
95	135																
	140																
100	145																
105	150																
110	155																
	160																
115	165																
120	170																
	175																



Durapac offer extension reaction arms and low point reaction paddles to suit the LPC2-LPC14 low profile hydraulic hexagon wrenches

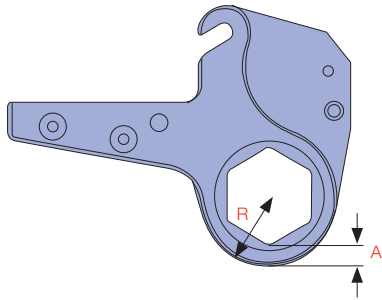


Metric Hexagon Reducer Bushes Table

LPC30	R (mm)	A (mm)	Max. Torque (Nm)	Bolt Diameter (mm)	A/F Size (mm)
				12	19
				14	22
				18	27
				20	30
					32
				22	34
				24	36
				27	41
				30	46
				33	50
				36	55
				39	60
				42	65
				45	70
				48	75
				52	80
LPC30-85	78	28	41,882	56	85
LPC30-90	78	26	41,882	60	90
LPC30-95	83	28	41,882	64	95
LPC30-100	83	25	41,882	68	100
LPC30-105	89	28	41,882	72	105
LPC30-110	89	25	41,882	76	110
LPC30-115	95	28	41,882	80	115
LPC30-117	95	27	41,882		117
LPC30-120	95	25	41,882	85	120
LPC30-125	101	29	41,882		125
LPC30-130	101	26	41,882	90	130
LPC30-135	104	26	41,882	95	135
LPC30-140	110	29	41,882		140
LPC30-145	110	26	41,882	100	145
LPC30-150	116	29	41,882	105	150
LPC30-155	116	26	41,882	110	155
LPC30-160	128	36	44,593		160
LPC30-165	128	33	44,593	115	165
LPC30-170	128	30	44,593	120	170
LPC30-175	128	27	44,593		175

Hexagon Cassette	Reducer Insert			Holding Ring
	Model No.	Model No.	Model No.	Model No.
LPC2-32	MR2-32-27	-	-	MHR2-32
LPC2-36	MR2-36-30	MR2-36-27	-	MHR2-36
LPC2-41	MR2-41-32	MR2-41-30	MR2-41-27	MHR2-41
LPC2-46	MR2-46-36	MR2-46-32	MR2-46-30	MHR2-46
LPC4-36	MR4-36-30	MR4-36-27	-	MHR4-36
LPC4-41	MR4-41-32	MR4-41-30	MR4-41-27	MHR4-41
LPC4-46	MR4-46-36	MR4-46-32	MR4-46-30	MHR4-46
LPC4-50	MR4-50-41	MR4-50-36	MR4-50-32	MHR4-50
LPC4-55	MR4-55-46	MR4-55-41	MR4-55-36	MHR4-55
LPC4-60	MR4-60-50	MR4-60-46	MR4-60-41	MHR4-60
LPC4-65	MR4-65-55	MR4-65-50	MR4-65-46	MHR4-65
LPC8-55	MR8-55-46	MR8-55-41	-	MHR8-55
LPC8-60	MR8-60-50	MR8-60-46	-	MHR8-60
LPC8-65	MR8-65-55	MR8-65-50	MR8-65-46	MHR8-65
LPC8-70	MR8-70-60	MR8-70-55	MR8-70-50	MHR8-70
LPC8-75	MR8-75-65	MR8-75-60	MR8-75-55	MHR8-75
LPC8-80	MR8-80-70	MR8-80-65	MR8-80-60	MHR8-80
LPC8-85	MR8-85-75	MR8-85-70	MR8-85-65	MHR8-85
LPC8-90	MR8-90-80	MR8-90-75	MR8-90-70	MHR8-90
LPC14-75	MR14-75-65	-	-	MHR14-75
LPC14-80	MR14-80-70	MR14-80-65	-	MHR14-80
LPC14-85	MR14-85-75	MR14-85-70	MR14-85-65	MHR14-85
LPC14-90	MR14-90-80	MR14-90-75	MR14-90-70	MHR14-90
LPC14-95	MR14-95-85	MR14-95-80	MR14-95-75	MHR14-95
LPC14-100	MR14-100-90	MR14-100-85	MR14-100-80	MHR14-100
LPC14-105	MR14-105-95	MR14-105-90	MR14-105-85	MHR14-105
LPC14-110	MR14-110-100	MR14-110-95	MR14-110-90	MHR14-110
LPC14-115	MR14-115-105	MR14-115-100	MR14-115-95	MHR14-115
LPC30-90	MR30-90-80	-	-	MHR30-90
LPC30-95	MR30-95-85	MR30-95-80	-	MHR30-95
LPC30-100	MR30-100-90	MR30-100-85	MR30-100-80	MHR30-100
LPC30-105	MR30-105-95	MR30-105-90	MR30-105-85	MHR30-105
LPC30-110	MR30-110-100	MR30-110-95	MR30-110-90	MHR30-110
LPC30-115	MR30-115-105	MR30-115-100	MR30-115-95	MHR30-115
LPC30-120	MR30-120-110	MR30-120-105	MR30-120-100	MHR30-120
LPC30-130	MR30-130-120	MR30-130-115	MR30-130-110	MHR30-130
LPC30-145	MR30-145-130	MR30-145-120	MR30-145-115	MHR30-145
LPC30-155	MR30-155-145	MR30-155-130	MR30-155-120	MHR30-155

Not all reducer bushes are listed, for other sizes contact Durapac



Durapac offer extension reaction arms and low point reaction paddles to suit the LPC2-LPC14 low profile hydraulic hexagon wrenches



Imperial Hexagon Cassette Table

Bolt Diameter (inch)	A/F Size (inch)	LPC2	R (mm)	A (mm)	Max. Torque (Nm)	LPC4	R (mm)	A (mm)	Max. Torque (Nm)	LPC8	R (mm)	A (mm)	Max. Torque (Nm)	LPC14	R (mm)	A (mm)	Max. Torque (Nm)
1/2	3/4	* LPC2-012	27	16	1,663												
9/16	7/8	* LPC2-014	27	14	1,663												
5/8	1-1/16	LPC2-101	27	11	1,929												
3/4	1-1/4	* LPC2-104	29	12	2,328												
13/16	1-5/16	* LPC2-105	29	11	2,328												
7/8	1-7/16	* LPC2-107	31	10	2,328	LPC4-107	36	15	2,510								
1	1-5/8	* LPC2-110	34	10	2,328	LPC4-110	39	15	5,021	LPC8-110	46	22	8,128				
1-1/16	1-11/16	* LPC2-111	34	10	2,328	LPC4-111	39	15	5,858	LPC8-111	46	22	10,941				
1-1/8	1-13/16	* LPC2-113	37	10	2,328	LPC4-113	42	15	5,858	LPC8-113	46	19	10,941				
1-1/4	2	* LPC2-200	40	11	2,328	LPC4-200	44	15	5,858	LPC8-200	46	17	10,941	LPC14-200	60	31	14,552
1-3/8	2-3/16	* LPC2-203	43	11	2,328	LPC4-203	46	14	5,858	LPC8-203	50	18	10,941	LPC14-203	60	28	18,521
1-1/2	2-3/8	* LPC2-206	46	11	2,414	LPC4-206	50	15	5,858	LPC8-206	52	17	10,941	LPC14-206	60	25	18,521
1-5/8	2-9/16	*				LPC4-209	53	15	5,858	LPC8-209	55	17	10,941	LPC14-209	60	22	18,521
1-3/4	2-3/4	*				LPC4-212	56	15	6,474	LPC8-212	58	17	10,941	LPC14-212	60	19	18,521
1-7/8	2-15/16	*				LPC4-215	59	15	6,474	LPC8-215	60	17	10,941	LPC14-215	63	19	18,521
2	3-1/8	*				LPC4-302	61	15	6,474	LPC8-302	63	16	10,941	LPC14-302	66	19	18,521
2-1/4	3-1/2	*								LPC8-308	66	16	10,941	LPC14-308	69	19	18,521
2-1/2	3-7/8	*								LPC8-314	71	16	10,941	LPC14-314	74	19	18,521
2-3/4	4-1/4	*												LPC14-404	80	19	18,521
3	4-5/8	*												LPC14-410	87	20	18,521
3-1/4	5																
3-1/2	5-3/8																
3-3/4	5-3/4																
4	6-1/8																
4-1/4	6-1/2																
4-1/2	6-7/8																

* Suitable for use on Grade 2H high temperature nuts as used in the Petro-chemical industry

Imperial Reducer Bush Legend



1st Character = Whole Inches					
2nd & 3rd Characters = Fractional Inches in 1/16" increments					
2nd & 3rd Character	Fraction	Imperial	Code		
00	= 0/16"	Eg. 1"	=	100	
01	= 1/16"	1-1/16"	=	101	
02	= 1/8"	1-1/8"	=	102	
03	= 3/16"	1-3/16"	=	103	
04	= 1/4"	1-1/4"	=	104	
05	= 5/16"	2-5/16"	=	205	
06	= 3/8"	2-3/8"	=	206	
07	= 7/16"	2-7/16"	=	207	
08	= 1/2"	2-1/2"	=	208	
09	= 9/16"	3-9/16"	=	309	
10	= 5/8"	3-5/8"	=	310	
11	= 11/16"	3-11/16"	=	311	
12	= 3/4"	3-3/4"	=	312	
13	= 13/16"	4-13/16"	=	413	
14	= 7/8"	4-7/8"	=	414	
15	= 15/16"	4-15/16"	=	415	

BOLTING SOLUTIONS

Imperial Hexagon Reducer Bushes Table

LPC30	R (mm)	A (mm)	Max. Torque (Nm)	Bolt Diameter (inch)	A/F Size (inch)
				1/2	3/4
				9/16	7/8
				5/8	1-1/16
				3/4	1-1/4
				13/16	1-5/16
				7/8	1-7/16
				1	1-5/8
				1-1/16	1-11/16
				1-1/8	1-13/16
				1-1/4	2
				1-3/8	2-3/16
				1-1/2	2-3/8
				1-5/8	2-9/16
				1-3/4	2-3/4
				1-7/8	2-15/16
				2	3-1/8
LPC30-308	78	28	41,882	2-1/4	3-1/2
LPC30-314	83	28	41,882	2-1/2	3-7/8
LPC30-404	89	28	41,882	2-3/4	4-1/4
LPC30-410	95	28	41,882	3	4-5/8
LPC30-500	101	29	41,882	3-1/4	5
LPC30-506	104	26	41,882	3-1/2	5-3/8
LPC30-512	110	26	41,882	3-3/4	5-3/4
LPC30-602	116	26	41,882	4	6-1/8
LPC30-608	128	33	44,593	4-1/4	6-1/2
LPC30-614	128	27	44,593	4-1/2	6-7/8

Hexagon Cassette	Reducer Insert			Holding Ring
	Model	Model	Model	Model
LPC2-105	IR2-105-101	-	-	IHR2-105
LPC2-107	IR2-107-104	IR2-107-101	-	IHR2-107
LPC2-111	IR2-111-103	IR2-111-105	IR2-111-101	IHR2-111
LPC2-113	IR2-113-107	IR2-113-105	IR2-113-104	IHR2-113
LPC4-107	IR4-107-104	IR4-107-101	-	IHR4-107
LPC4-110	IR4-110-105	IR4-110-104	IR4-110-101	IHR4-110
LPC4-113	IR4-113-107	IR4-113-105	IR4-113-104	IHR4-113
LPC4-200	IR4-200-110	IR4-200-107	IR4-200-105	IHR4-200
LPC4-203	IR4-203-113	IR4-203-110	IR4-203-107	IHR4-203
LPC4-206	IR4-206-200	IR4-206-113	IR4-206-110	IHR4-206
LPC4-209	IR4-209-203	IR4-209-200	IR4-209-113	IHR4-209
LPC8-203	IR8-203-113	IR8-203-110	-	IHR8-203
LPC8-206	IR8-206-200	IR8-206-113	-	IHR8-206
LPC8-209	IR8-209-203	IR8-209-200	IR8-209-113	IHR8-209
LPC8-212	IR8-212-206	IR8-212-203	IR8-212-200	IHR8-212
LPC8-215	IR8-215-209	IR8-215-206	IR8-215-203	IHR8-215
LPC8-302	IR8-302-212	IR8-302-209	IR8-302-206	IHR8-302
LPC8-308	IR8-308-215	IR8-308-215	IR8-308-209	IHR8-308
LPC14-215	IR14-215-209	-	-	IHR14-215
LPC14-302	IR14-302-212	IR14-302-209	-	IHR14-302
LPC14-308	IR14-308-215	IR14-308-212	IR14-308-209	IHR14-308
LPC14-314	IR14-314-302	IR14-314-215	IR14-314-212	IHR14-314
LPC14-404	IR14-404-304	IR14-404-302	IR14-404-215	IHR14-404
LPC14-410	IR14-410-404	IR14-410-304	IR14-410-302	IHR14-410
LPC30-314	IR30-314-304	-	-	IHR30-314
LPC30-404	IR30-404-314	IR30-404-304	-	IHR30-404
LPC30-410	IR30-410-404	IR30-410-314	IR30-410-304	IHR30-410
LPC30-500	IR30-500-410	IR30-500-404	IR30-500-314	IHR30-500
LPC30-506	IR30-506-500	IR30-506-410	IR30-506-404	IHR30-506
LPC30-512	IR30-512-506	IR30-512-500	IR30-512-410	IHR30-512
LPC30-602	IR30-602-512	IR30-602-506	IR30-602-500	IHR30-602

Not all reducer bushes are listed, for other sizes contact Durapac

THE **DET & DAT-SERIES** TORQUE WRENCH POWER UNITS ARE PERFECTLY DESIGNED FOR OPERATING THE TW AND LPC –SERIES HYDRAULIC TORQUE WRENCHES.

They have a three stage pump for faster operation under load and incorporate a hydraulic oil cooler providing cool operation under continuous use. A 6 M remote hand pendant is standard. Standard (-1114) models can operate one or two tools at one time due to the multi outlet pump block. The DET-1114-4 four outlet version allows 1 - 4 tools to be operated at one time.

OIL COOLER

electric fan operated for continuous duty operation

ROLL CAGE

for portability and protection

3 STAGE POWER UNIT

for increased speed under load

6 M REMOTE PENDANT

through a 24 Volt transformer for safety. Incorporates motor ON/OFF button and ADV/AUTO RETRACT button

ELECTRIC MOTOR

1.5 kW/230 Volt 50Hz induction motor 9.2 amp

LIQUID FILLED PRESSURE GAUGE

has 1% accuracy and can be recalibrated. Scale is MPa/psi

ADJUSTABLE TORQUE CONTROL

for accurate torque settings

MULTIPLE TOOL OUTLETS

for operating one or two tools simultaneously

DET-1114-4

for operating 1 - 4 tools simultaneously



DET-1114

Model No.	Motor	Pressure Rating (bar)	Flow (Lpm)			Oil Capacity (L)	Dry Weight (kg)	Dimensions W x L x H (mm)
			1st Stage 0-100 bar	2nd Stage 100-250 bar	3rd Stage 250-700 bar			
DAT-1114	2.7 kW Air	700	7.0	1.6	0.8	7.0	31.5	340 x 530 x 500
DET-1114	230 Volt / 1 Ph. / 50 Hz†	700	8.5	2.2	1.1	5.5	28.0	
DET-1114-4	230 Volt / 1 Ph. / 50 Hz†	700	8.5	2.2	1.1	5.5	28.0	

† Standard motor supplied is 230V, 50 Hz, should 115V, 60 Hz be required; add "-115V" to the end of the model number, eg. "DET-1114-4-115V"

LIQUID FILLED PRESSURE GAUGE

has 1% accuracy and can be recalibrated. Scale is MPa/psi

AIR MOTOR

2.7 kW Ingersoll Rand®

ADJUSTABLE TORQUE CONTROL

for accurate torque settings

MULTIPLE TOOL OUTLETS

for operating one or two tools simultaneously

ROLL CAGE

for portability and protection

AIR FILTER/ LUBRICATOR

for efficient operation

3 STAGE PUMP

for increased speed under load

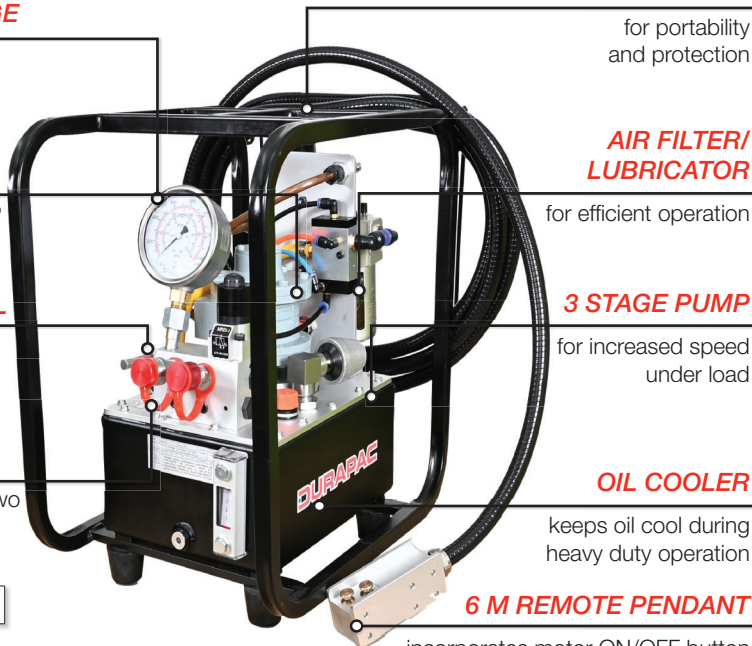
OIL COOLER

keeps oil cool during heavy duty operation

6 M REMOTE PENDANT

incorporates motor ON/OFF button and ADV/AUTO RETRACT button

DAT-1114



POWER REQUIREMENT

Electric 230 Volt 50 Hz
Air 1,400 Lpm @ 6.2 bar

FLOW

3 stage

MAXIMUM OPERATING PRESSURE

700 bar

T

BOLTING SOLUTIONS

Torque Wrench Hoses

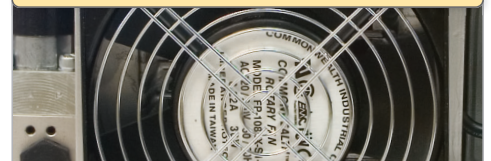
Model No.	Length (m)	Description
TWH-04	4	Twin hose set to suit torque wrenches complete with male and female screw couplers at both ends. 700 bar working pressure. 2,800 bar min. burst.
TWH-06	6	
TWH-10	10	
TWH-15	15	



Hose burst sleeve available. Consult Durapac for further information

The **DET & DAT** hydraulic torque wrench power units are supplied with an oil cooler to allow continuous operation of hydraulic torque wrenches

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Torque Wrench Couplings

Model No.	Thread	Description	Suits Tool Model No.
CH-2	1/8"-NPT Male	Male half screw coupling complete with metal dust cap*	TW07, TW1, LPC2
CR-2	1/8"-NPT Male	Female half screw coupling complete with metal dust cap*	TW07, TW1, LPC2
CS-2	1/8"-NPT Male	Coupling set with metal dust caps* includes CH-2 and CR-2	TW07, TW1, LPC2
CH-4	1/4"-NPT Female	Male half screw coupling complete with metal dust cap*	TW3 THROUGH TW50 LPC4 THROUGH LPC30
CR-4	1/4"-NPT Male	Female half screw coupling complete with metal dust cap*	TW3 THROUGH TW50 LPC4 THROUGH LPC30
CS-4		Coupling set with metal dust caps* includes CH-4 and CR-4	TW3 THROUGH TW50 LPC4 THROUGH LPC30



CH-2



CH-4



CR-2



CR-4



CS-2



CS-4

Snap couplings available. Consult Durapac for further information

* Dust cap/s not shown

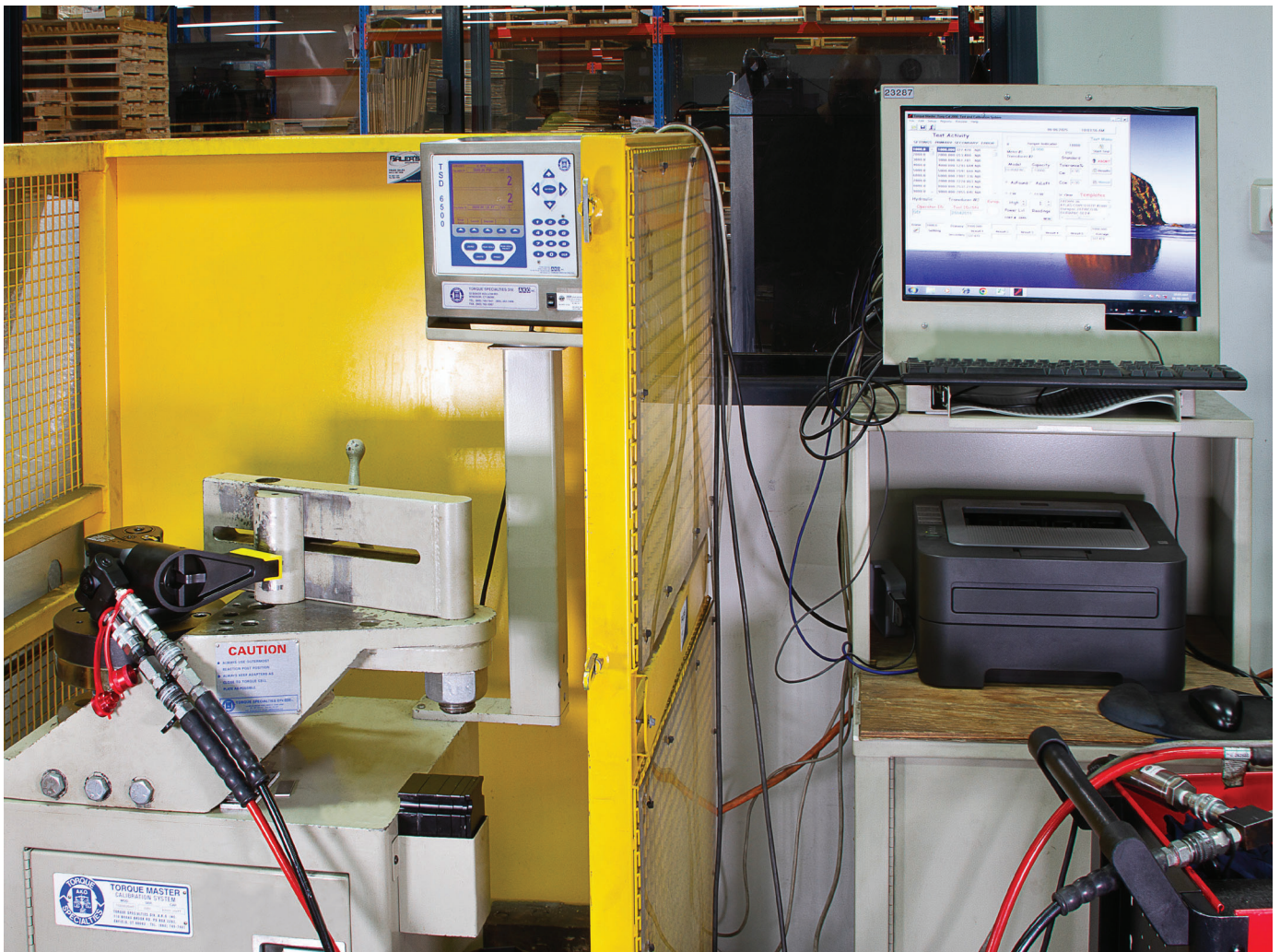
TORQUE WRENCH CALIBRATION



TORQUE CALIBRATION SYSTEM

HYDRAULIC TORQUE WRENCH TOOLS ARE A WIDELY ACCEPTED AND USED DEVICE FOR TIGHTENING AND LOOSENING MEDIUM TO LARGE BOLTS WITH UP TO 72,000 NM OF TORQUE.

The range of applications is very diverse and hydraulic torque wrench tools can be seen in operation in almost every part of industry. Many of these applications are of a critical nature and demand a tool that is not only accurate and reliable, but also certified to be accurate. To ensure all Durapac TW and LPC-Series torque wrenches meet our clients' high expectations, each tool is supplied with a calibration certificate of accuracy that is traceable to international standards. Each test is performed on a calibration rig that has an accuracy of 0.1% and the tool serial number is cross referenced to the test certificate.



CERTIFICATE OF ACCURACY

BELOW IS A SAMPLE CERTIFICATE THAT IS TRACEABLE TO INTERNATIONAL STANDARDS. ALL TW & LPC HYDRAULIC TORQUE WRENCHES ARE SUPPLIED WITH A CERTIFICATE OF ACCURACY.

ABSOLUTE EQUIPMENT PTY LTD
 ABN 69 135 679 195
 73 NORTHLINK PL
 VIRGINIA QLD 4014
 TEL: (07) 3865 4006

DURAPAC
 Certificate of Accuracy

PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY
1000.00	490.00	2000.00	924.00	3000.00	1334.00	4000.00	1792.00	5000.00	2242.00
1100.00	533.40	2100.00	965.00	3100.00	1379.80	4100.00	1837.00	5100.00	2285.80
1200.00	576.80	2200.00	1006.00	3200.00	1425.60	4200.00	1882.00	5200.00	2329.60
1300.00	620.20	2300.00	1047.00	3300.00	1471.40	4300.00	1927.00	5300.00	2373.40
1400.00	663.60	2400.00	1088.00	3400.00	1517.20	4400.00	1972.00	5400.00	2417.20
1500.00	707.00	2500.00	1129.00	3500.00	1563.00	4500.00	2017.00	5500.00	2461.00
1600.00	750.40	2600.00	1170.00	3600.00	1608.80	4600.00	2062.00	5600.00	2504.80
1700.00	793.80	2700.00	1211.00	3700.00	1654.60	4700.00	2107.00	5700.00	2548.60
1800.00	837.20	2800.00	1252.00	3800.00	1700.40	4800.00	2152.00	5800.00	2592.40
1900.00	880.60	2900.00	1293.00	3900.00	1746.20	4900.00	2197.00	5900.00	2636.20

P.S.I.	NM	P.S.I.	NM	P.S.I.	NM	P.S.I.	NM	P.S.I.	NM
6000.00	2680.00	7000.00	3132.00	8000.00	3582.00	9000.00	4046.00	10000.00	4488.00
8100.00	2725.20	7100.00	3177.00	8100.00	3628.40	9100.00	4090.20		
8200.00	2770.40	7200.00	3222.00	8200.00	3674.80	9200.00	4134.40		
8300.00	2815.60	7300.00	3267.00	8300.00	3721.20	9300.00	4178.60		
8400.00	2860.80	7400.00	3312.00	8400.00	3767.60	9400.00	4222.80		
8500.00	2906.00	7500.00	3357.00	8500.00	3814.00	9500.00	4267.00		
8600.00	2951.20	7600.00	3402.00	8600.00	3860.40	9600.00	4311.20		
8700.00	2996.40	7700.00	3447.00	8700.00	3906.80	9700.00	4355.40		
8800.00	3041.60	7800.00	3492.00	8800.00	3953.20	9800.00	4399.60		
8900.00	3086.80	7900.00	3537.00	8900.00	3999.60	9900.00	4443.80		

Comments: DO NOT EXCEED MAXIMUM DESIGN TORQUE CAPACITY OF 4512 NM

Customer: HURLY GOLD MINE
 Address: ALICE SPRINGS, NT 0870 AUSTRALIA
 City/State/Zip: ALICE SPRINGS, NT 0870 AUSTRALIA
 Country: AUSTRALIA
 Model No: DURAPAC TW3
 Description: HYDRAULIC TORQUE WRENCH

Temperature: N/A
 Humidity: N/A
 Wrench ID: 8325
 CERT #: 133

Test Date: 12/05/2020
 Operator: RENE BERNS
 Wrench Due Date: 12/05/2020

Print Date: 12/05/2020
 ** THIS CERTIFICATE MAY BE REPRODUCED ONLY IN IT'S ENTIRETY **

ABSOLUTE EQUIPMENT PTY LTD
 ABN 69 135 679 195
 73 NORTHLINK PL
 VIRGINIA QLD 4014
 TEL: (07) 3865 4006

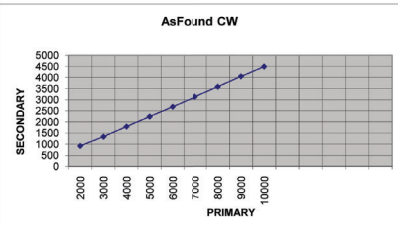
DURAPAC
 Certificate of Accuracy

Customer: HURLY GOLD MINE
 Address: ALICE SPRINGS, NT 0870 AUSTRALIA
 City/State/Zip: ALICE SPRINGS, NT 0870 AUSTRALIA
 Country: AUSTRALIA
 Model No: DURAPAC TW3
 Description: HYDRAULIC TORQUE WRENCH

Testing Procedure: Testing is performed by attaching the above ref torque wrench and Equipment used to AKO model TSD 20035-HT Hydraulic / Pneumatic torque wrench test equipment in accordance with Specialised Force test procedure.

Test equipment used:-
 TSD 20011 Torque Transducer s/n 3650, 0.1% IV accuracy, last calibration certificate # 128620 dated 14/3/2006 with TSD 6000-1 Torque Indicator s/n 40823, 0.1% IV accuracy, last calibration certificate # 128620 dated 14/3/2006,
 TSD 10KPT Pressure Transducer s/n 44815, 0.1% IV accuracy, last calibration certificate # 134681 dated 16/4/2007 with TSD 6000-2 Pressure Indicator s/n 28073, 0.1% IV accuracy, last calibration certificate # 134681 dated 16/4/2007
 Traceability to NIST (National Institute of Standards and Technology) # 822/298626-02.

Comments: DO NOT EXCEED MAXIMUM DESIGN TORQUE CAPACITY OF 4512 NM



SETTING	PRIMARY	SECONDARY
1000	1000	490
2000	2000	924
3000	3000	1334
4000	4000	1792
5000	5000	2242
6000	6000	2680
7000	7000	3132
8000	8000	3582
9000	9000	4046
10000	10000	4488

CERT: 133
 Test Date: 12/05/2020
 Customer PO#: 5643
 Serial #: 8325
 Primary Standard: PSI
 Operator: RENE BERNS
 Secondary Standard: NM

Print Date: 12/05/2020
 ** THIS CERTIFICATE MAY BE REPRODUCED ONLY IN IT'S ENTIRETY **