



# ATI ENTERPRISES

## TOOL CATALOG

ANTON VILJOEN  
ATI | [ATI@ATI-ENTERPRISES.CO.ZA](mailto:ATI@ATI-ENTERPRISES.CO.ZA)

# HYDRAULIC TOOLS CATALOG

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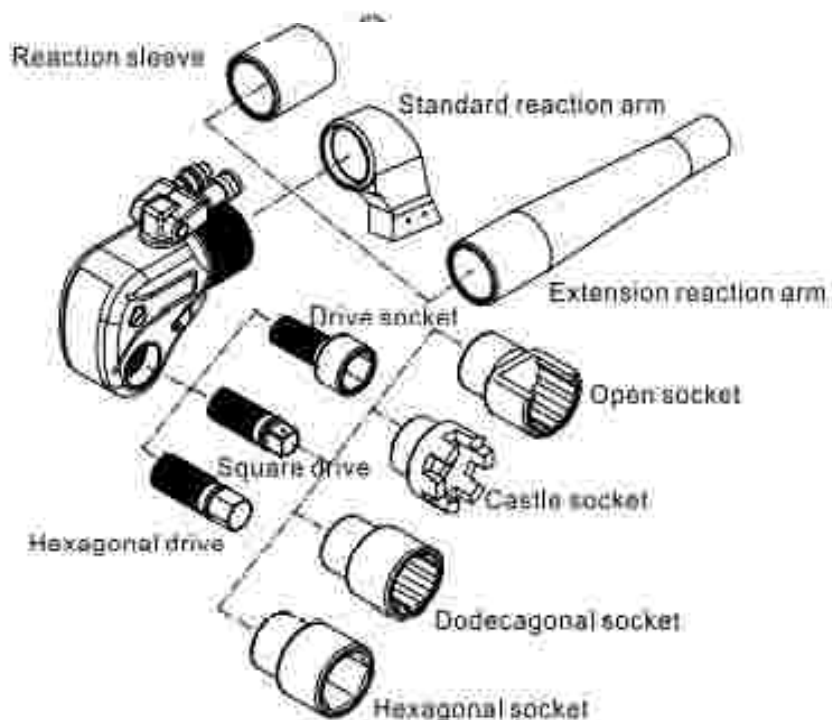
# HYDRAULIC TOOLS CATALOG

## Hydraulic torque wrenches

### MXTD series - Square drive hydraulic torque wrench

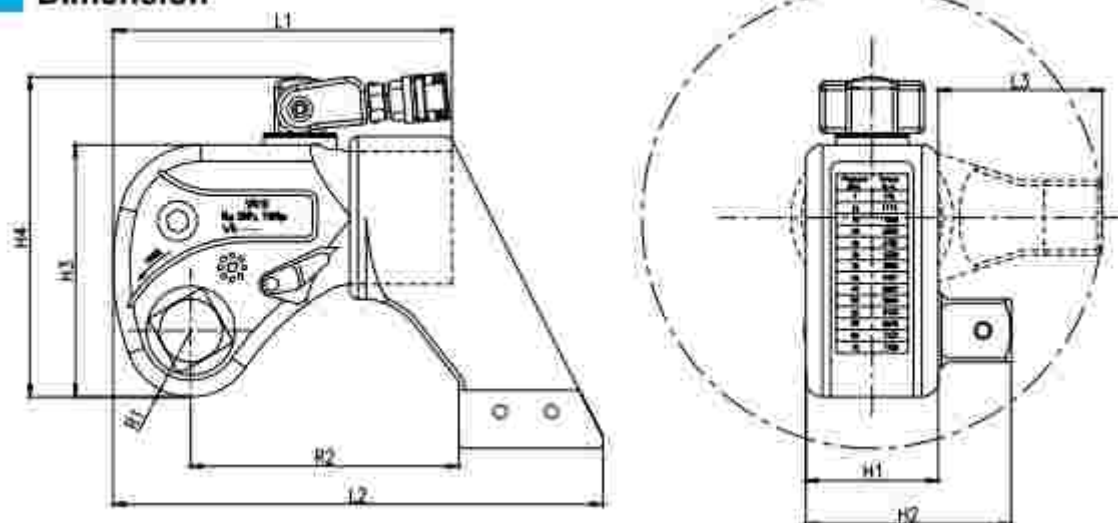


- 70MPa max working pressure
- Torque accuracy up to  $\pm 3\%$
- 12 models from 185Nm-150000Nm
- 360X180 degree swivel joint, no space limitation
- 360 degree reaction arm
- Al-Ti alloy material, integrated design
- Square drive and reaction arm can be customized



# HYDRAULIC TOOLS CATALOG

## Dimension



## Technical parameters

Model	1MXTD	3MXTD	5MXTD	8MXTD	10MXTD	15MXTD	25MXTD	25MXTD	35MXTD	45MXTD	50MXTD	95MXTD
Torque (Nm)	185	436	779	1072	1553	2050	2617	3493	4963	5912	7032	14085
Weight (Kg)	2.7	4.8	8.8	12	14.5	19	25	37.5	44	63	89	220
L1 (mm)	138	168	207	220	250	281	304	331	390	412	418	520
L2 (mm)	104	244	296	328	366	402	442	483	558	570	596	758
L3 (mm)	63	79	99	110	120	132	146	158	177	188	196	246
H1 (mm)	50	70	80	90	100	112	120	138	160	163	166	210
H2 (mm)	73	99	124	133	146	165	183	202	219	229	236	307
H3 (mm)	96	125	152	170	188	206	228	250	282	288	300	415
H4 (mm)	140	165	193	211	227	249	267	291	323	332	366	473
R1 (mm)	28	34	40	46	50	56	60	66	77	80	82	115
R2 (mm)	107	132	162	178	199	218	240	260	298	303	325	400
Square Drive	3/4"	1"	1 1/2"	1 1/2"	1 1/2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	4"

# HYDRAULIC TOOLS CATALOG

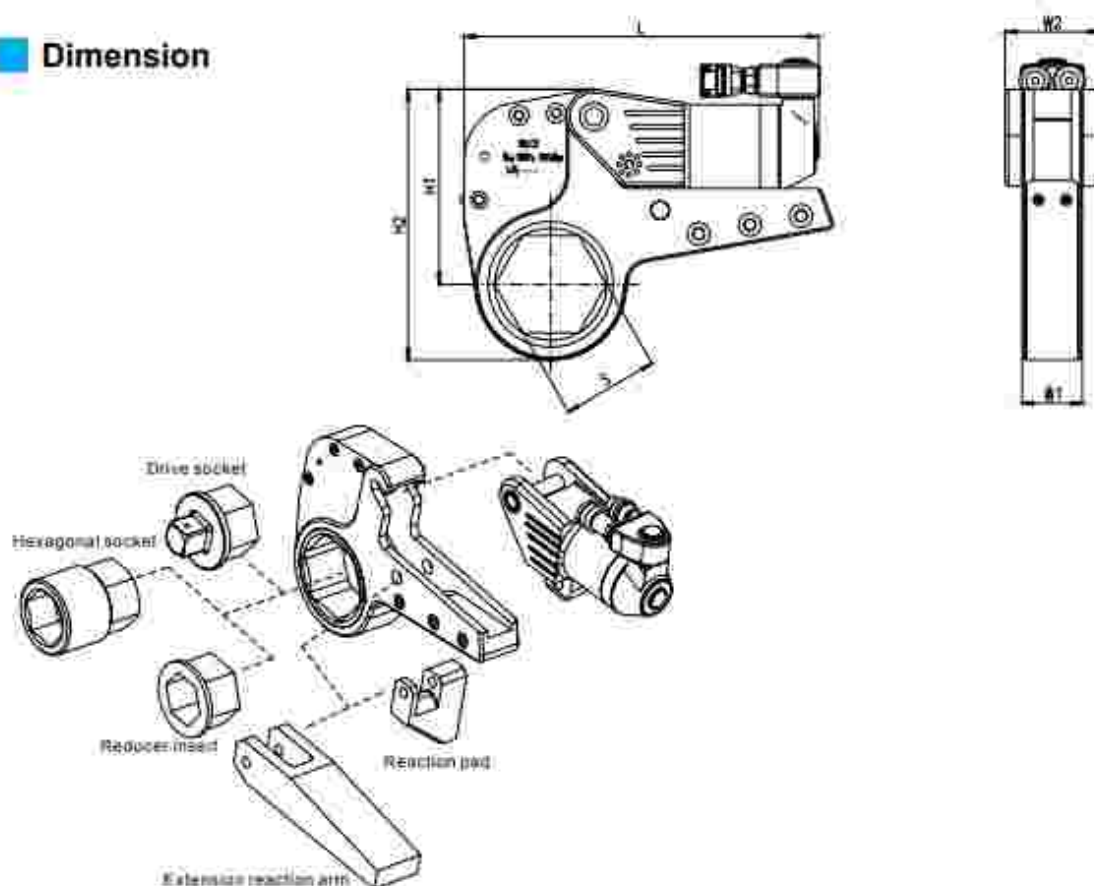
## KLCD series - Low profile hydraulic torque wrench

- 70MPa max working pressure
- Torque repeatability up to 3%
- 11 models with the ranges from 237-85000Nm
- 360°x180 degree swivel joint, no space limitation
- Integral design, high strength and high toughness
- Al-Ti alloy material
- Working head and supporting point are coaxial, perfect structure, long service life
- One power head can match different working heads



# HYDRAULIC TOOLS CATALOG

## Dimension



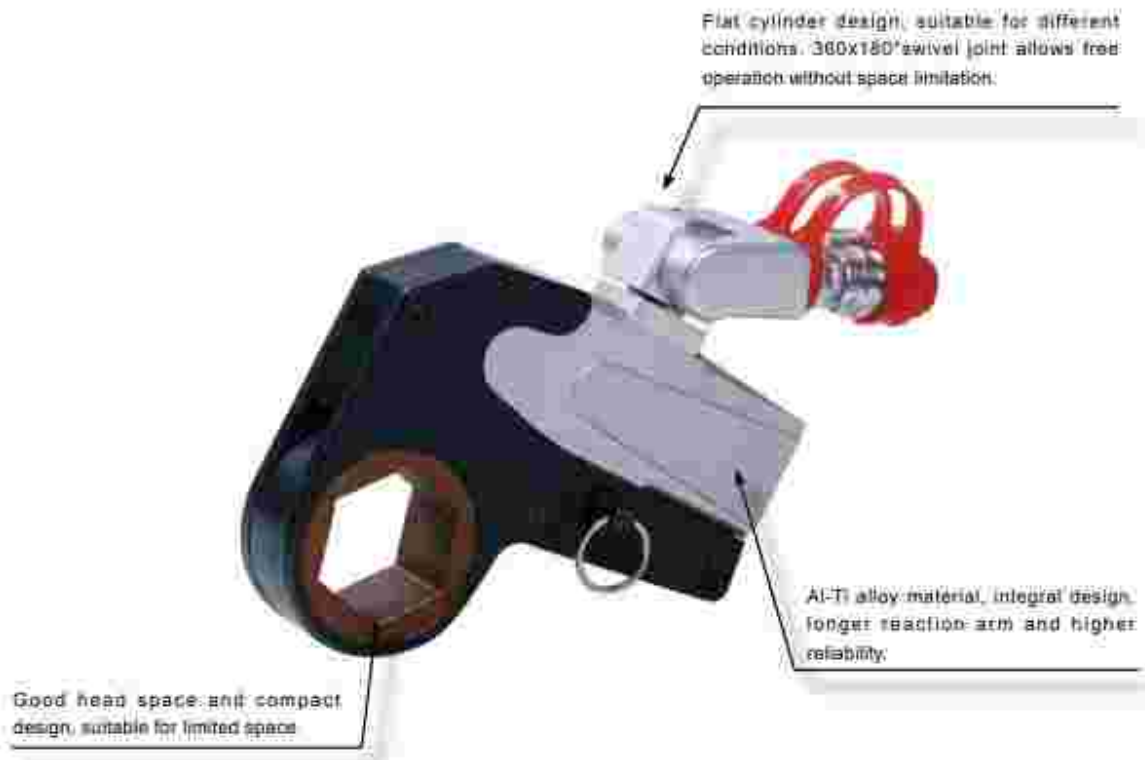
## Technical parameters

Model	2KLCD	3KLCD	4KLCD	6KLCD	14KLCD	18KLCD	20KLCD	30KLCD	40KLCD	45KLCD	60KLCD
Torque (Nm)	237 2370	345 3446	546 5458	1055 10550	1848 18484	2481 24814	2909 29089	4231 42311	5209 52088	6057 60566	8415 84150
A/F (mm)	36-55	36-60	48-80	70-105	80-115	85-120	90-130	95-145	120-145	130-155	135-180
Power head Weight (kg)	0.8	0.8	1.0	4.2	6.8	8.1	10.5	12.7	15.2	16.3	23
Working head weight (kg)	1.5	1.7	3.6	7.6	12.2	19.3	22.3	32.3	47.5	58.7	75
L (mm)	192	218	286	324	382	404	427	479	479	486	514
H1 (mm)	105	118	139	171	205	229	240	268	285	311	336
H2 (mm)	147	156	167	196	231	255	265	289	302	352	375
W1 (mm)	32	32	42	53	64	68	70	85	98	105	117
W2 (mm)	50	50	66	83	99	105	110	132	148	160	177



# HYDRAULIC TOOLS CATALOG

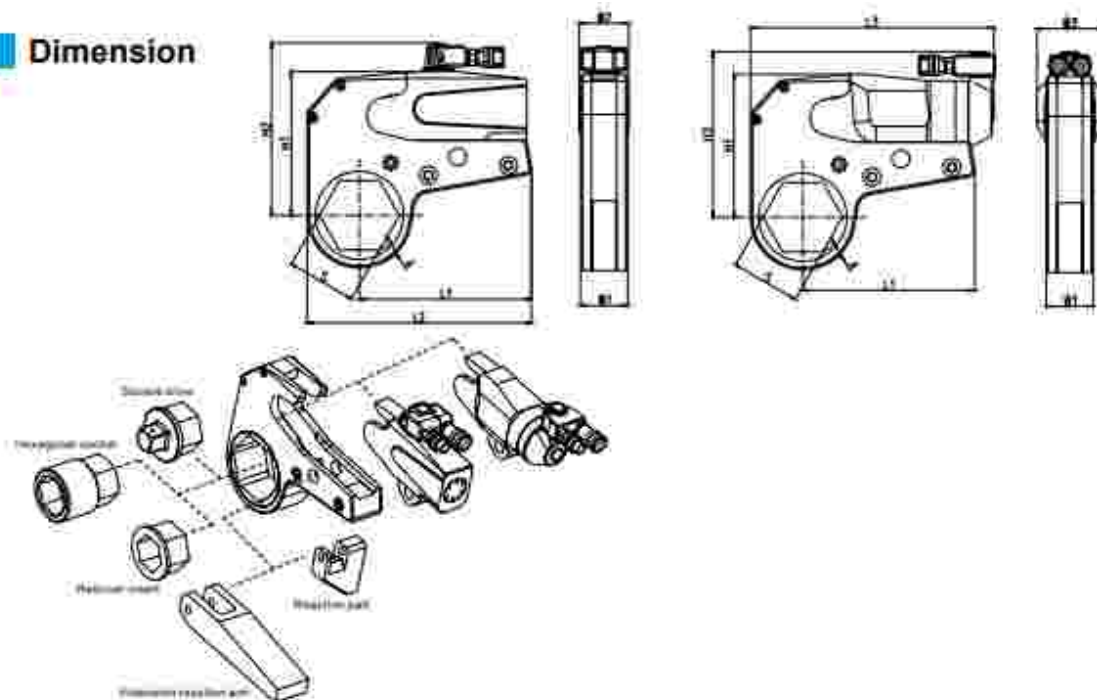
## WHCD series - Low profile hydraulic torque wrench



- 70MPa max working pressure
- Torque repeatability up to 3%
- 10 models with the ranges from 233-140000Nm.
- 360x180 degree swivel joints allow free operation without space limitation.
- Al-Ti alloy material, integral design, longer reaction arm and higher reliability.
- Light weight
- Working head can be changed.

# HYDRAULIC TOOLS CATALOG

## Dimension



## Technical parameters

Model	1WHCD	3WHCD	4WHCD	6WHCD	8WHCD	15WHCD	25WHCD	35WHCD	50WHCD	95WHCD
Torque (Nm)	233 2326	345 3440	540 5399	769 7691	1212 12116	1992 19919	3363 33629	5385 53851	7522 75221	13946 139463
A/F (mm)	36-60	41-60	46-80	55-85	70-105	80-115	90-130	120-145	130-180	155-190
Weight (kg)	2.1	3.7	4.5	7.5	8.9	17.3	25.2	35.5	47.8	204
L1 (mm)	120.5	144	158	179	207	237	273	338	382	492
L2 (mm)	156	185	202	232	270	309	361	447	517	665
L3 (mm)	191	223	232	256	291	335	383	456	539	670
H1 (mm)	100	113	119	145	168	197	230	280	320	400
H2 (mm)	144.5	156	161	187	210	237	272	345	383	458
H3 (mm)	142	148	152	179	200	227	255	294	400	425
W1 (mm)	34	36	42	45	53	64	70	84	94	160
W2 (mm)	36	38	40	49	57	68	79	92	102	168
W3 (mm)	50	55	60	65	75	90	100	118	140	180
A (mm)	8.3	9.5	11.7	12.8	14.2	18.2	21.3	24.8	30.5	61.7



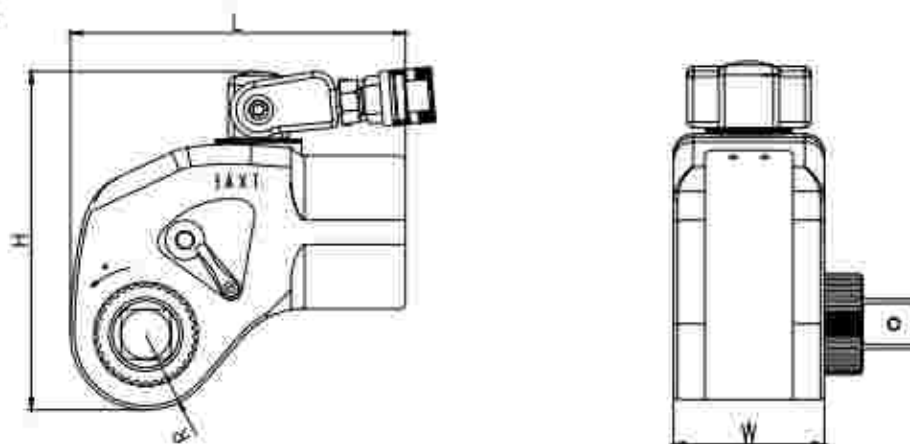
# HYDRAULIC TOOLS CATALOG

## AXT series - Front square drive hydraulic torque wrench



- 70MPa max working pressure
- Torque repeatability up to  $\pm 3\%$
- Front reaction arm, smaller longitudinal size, more suitable for narrow space.
- Reaction arm and square drive are coaxial, better adaptability.
- Wide ranges from 179-19000Nm.
- 360 degree swivel joint, free operation, no space limitation.
- Al-Ti alloy material, high strength
- Reaction arm can be customized.

### Dimension



### Technical parameters

Model	1AXT	3AXT	5AXT	8AXT	10AXT	15AXT
Torque (Nm)	179 1768	408 4062	733 7325	1003 10033	1513 15133	1904 19041
Precision	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$
Weight (Kg)	2.4	5.1	8.4	10.3	14.6	17.8
R (mm)	29.5	38.5	47.5	54.5	62.5	64.5
L (mm)	133	171	210	238	266	296
H (mm)	135	172	205	232	253	255
W (mm)	57	77	88	100	111	120
Square Drive	3/4"	1"	1 1/2"	1 1/2"	1 1/2"	2"

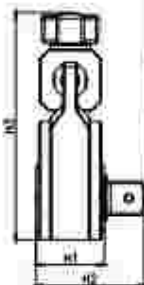
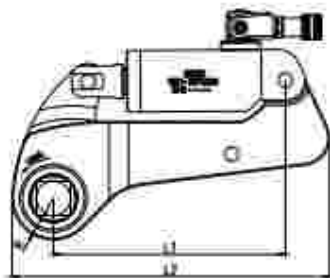
# HYDRAULIC TOOLS CATALOG

## BXTD series - Square drive hydraulic torque wrench



- Max working pressure 70MPa
- Small precise ratchet design, no trigger button, avoid getting stuck caused by bolt reversing.
- 360X180 degree swivel joint, free operation.
- Few transmission parts, simple structure, easy maintenance.
- Compact integrated reaction arm, little unbalance load, more durable.
- Al-Ti alloy cylinder, high strength
- Perfect combination of Al-Ti alloy and alloy steel.
- Torque repeatability up to 3%
- Square drive can be changed and customized.
- Especially suitable for bolt tightening of water turbine rotor etc.

### Dimension



### Technical parameters

Model	3BXTD	8BXTD	10BXTD	15BXTD	20BXTD	25BXTD	40BXTD	60BXTD	85BXTD	120BXTD
Torque (Nm)	485 4847	1071 10712	1512 15121	2013 20130	2909 29089	3679 36795	6058 60582	8440 84403	12017 120176	15936 159355
Weight (Kg)	6.2	12.7	18.5	25	31.5	40.4	56	68	115	163
L1 (mm)	210	258	279	318	340	350	380	422	452	510
L2 (mm)	281	353	385	435	452	472	525	573	660	770
H1 (mm)	55	78	81	88	95	103	112	135	175	235
H2 (mm)	84	120	124	140.5	160	168	182	217	280	352
H3 (mm)	200	255	278	292	313	335	386	403	450	520
R (mm)	35	46	50	58	63	70	80	85	110	125
Square Drive	1"	1 1/2"	1 1/2"	2"	2 1/2"	2 1/2"	2 1/2"	3"	3 1/2"	4"

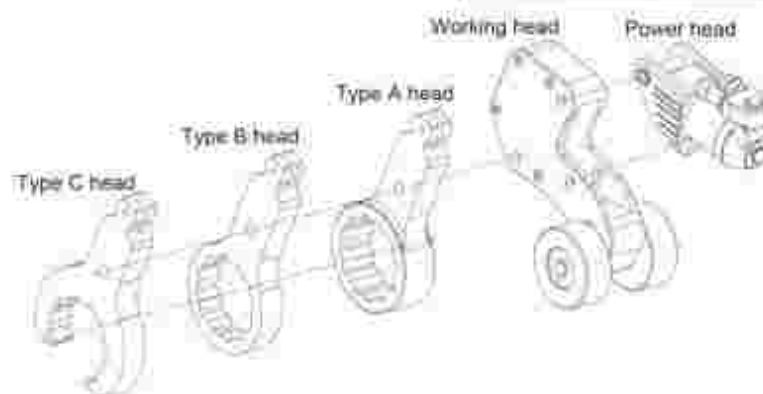
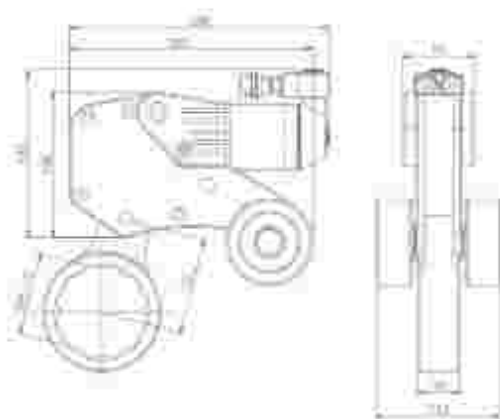
# HYDRAULIC TOOLS CATALOG

## CLCD fork-wheel-type torque wrench



- It solves the problems of small distance between bolts and pipelines, and limited space in height.
- Applicable to match normal API flanges.
- Small head radius; suitable for small space
- Made of high strength alloy steel, more durable.
- The power head is interchangeable with KLCD series.
- Attention: Run the pump as return direction to take wrench down when every cycle is finished, then reposition.
- This model does not have retaining function.

## Dimension



## Technical parameters

Model	Max working pressure	Max torque	Nut range
CLCD	50MPa	11550Nm	75-85mm

# HYDRAULIC TOOLS CATALOG

## JND split type hydraulic wrench



- Applicable to piercing nut working condition
- Especially used for steam turbine shaft tightening
- Small head radius, detachable head
- Pin and shaft combination, easy to detach or combine.
- Made of high strength alloy steel, very durable
- Attention: Run the pump as return direction to take wrench down when every cycle is finished, then reposition.
- This model does not have retaining function.

### Dimension



### Technical parameters

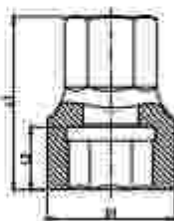
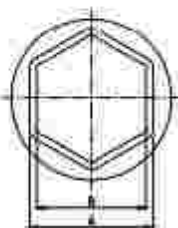
Model	3JND	8JND	14JND	20JND	30JND	35JND
Torque (Nm)	522 5215	1158 11583	1852 18522	2713 27135	4320 43200	5183 51835
Weight (Kg)	9	11	19	23	31	66
L (mm)	300	325	350	366	410	400
H (mm)	160	163	211	226	264	320
W (mm)	45	50	55	60	75	95
R (mm)	130	136	162	168	235	290
S (mm)	50-85	85-115	90-135	95-145	135-200	155-230



# HYDRAULIC TOOLS CATALOG

## Reducers For low profile torque wrenches

### Reducers for low profile torque wrench

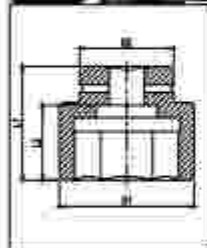


- Made of high strength Cr Mo alloy steel.
- Pass standard heat treatment process, making the socket safe, reliable and durable.
- KLCD series sockets can also be used for WHCD series.
- Non-standard sockets can be customized.

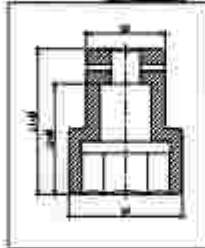
Wrench model	Working head type	A/B	Specifications of metric sockets							
			Model	A/B	Model	A/B	Model	A/B	Model	A/B
9KLCD	29LCD-36	3+36	29CD36	36/36	29CD37	36/37	29CD34	36/34		
	29LCD-41	3+41	29CD41	41/36	29CD44	41/34	29CD40	41/30	29CD42	41/32
	29LCD-46	3+46	29CD46	46/36	29CD47	46/37	29CD44	46/34	29CD45	46/35
	29LCD-50	3+50	29CD50	50/36	29CD54	50/34	29CD51	50/31	29CD52	50/32
	29LCD-55	3+55	29CD55	55/36	29CD59	55/39	29CD56	55/36	29CD57	55/37
	29LCD-60	3+60	29CD60	60/36	29CD62	60/32	29CD61	60/31	29CD63	60/33
48LCD	48LCD-46	3+46	48CD46	46/46	48CD47	46/47	48CD44	46/44		
	48LCD-50	3+50	48CD50	50/41	48CD54	50/36	48CD51	50/31		
	48LCD-55	3+55	48CD55	55/46	48CD54	55/41	48CD52	55/36	48CD53	55/34
	48LCD-60	3+60	48CD60	60/50	48CD64	60/46	48CD61	60/41	48CD62	60/36
	48LCD-66	3+66	48CD66	66/55	48CD62	66/50	48CD64	66/46	48CD61	66/41
	48LCD-70	3+70	48CD70	70/60	48CD72	70/55	48CD71	70/50	48CD73	70/46
	48LCD-75	3+75	48CD75	75/66	48CD78	75/60	48CD76	75/55	48CD77	75/50
	48LCD-80	3+80	48CD80	80/70	48CD82	80/65	48CD81	80/60	48CD83	80/55
	48LCD-85	3+85	48CD85	85/75	48CD88	85/70	48CD86	85/65	48CD87	85/60
	48LCD-90	3+90	48CD90	90/80	48CD92	90/75	48CD91	90/70	48CD93	90/65
8KLCD	8KLCD-70	3+70	8KCD70	70/60	8KCD72	70/55	8KCD71	70/50	8KCD73	70/46
	8KLCD-80	3+80	8KCD80	80/70	8KCD82	80/65	8KCD81	80/60	8KCD83	80/55
	8KLCD-85	3+85	8KCD85	85/75	8KCD88	85/70	8KCD86	85/65	8KCD87	85/60
	8KLCD-90	3+90	8KCD90	90/80	8KCD92	90/75	8KCD91	90/70	8KCD93	90/65
	8KLCD-95	3+95	8KCD95	95/85	8KCD98	95/80	8KCD96	95/75	8KCD97	95/70
	8KLCD-100	3+100	8KCD100	100/90	8KCD102	100/85	8KCD101	100/80	8KCD103	100/75
	8KLCD-105	3+105	8KCD105	105/95	8KCD108	105/90	8KCD106	105/85	8KCD107	105/80
	8KLCD-110	3+110	8KCD110	110/100	8KCD112	110/95	8KCD111	110/90	8KCD113	110/85
	8KLCD-115	3+115	8KCD115	115/105	8KCD118	115/100	8KCD116	115/95	8KCD117	115/90
	8KLCD-120	3+120	8KCD120	120/110	8KCD122	120/105	8KCD121	120/100	8KCD123	120/95
14KLCD	14KLCD-80	3+80	14KCD80	80/70	14KCD82	80/65	14KCD81	80/60	14KCD83	80/55
	14KLCD-85	3+85	14KCD85	85/75	14KCD88	85/70	14KCD86	85/65	14KCD87	85/60
	14KLCD-90	3+90	14KCD90	90/80	14KCD92	90/75	14KCD91	90/70	14KCD93	90/65
	14KLCD-95	3+95	14KCD95	95/85	14KCD98	95/80	14KCD96	95/75	14KCD97	95/70
	14KLCD-100	3+100	14KCD100	100/90	14KCD102	100/85	14KCD101	100/80	14KCD103	100/75
	14KLCD-105	3+105	14KCD105	105/95	14KCD108	105/90	14KCD106	105/85	14KCD107	105/80
	14KLCD-110	3+110	14KCD110	110/100	14KCD112	110/95	14KCD111	110/90	14KCD113	110/85
	14KLCD-115	3+115	14KCD115	115/105	14KCD118	115/100	14KCD116	115/95	14KCD117	115/90
	14KLCD-120	3+120	14KCD120	120/110	14KCD122	120/105	14KCD121	120/100	14KCD123	120/95
	14KLCD-125	3+125	14KCD125	125/115	14KCD128	125/110	14KCD126	125/105	14KCD127	125/100
16KLCD	16KLCD-85	3+85	16KCD85	85/75	16KCD88	85/70	16KCD86	85/65		
	16KLCD-90	3+90	16KCD90	90/80	16KCD92	90/75	16KCD91	90/70	16KCD93	90/65
	16KLCD-95	3+95	16KCD95	95/85	16KCD98	95/80	16KCD96	95/75	16KCD97	95/70
	16KLCD-100	3+100	16KCD100	100/90	16KCD102	100/85	16KCD101	100/80	16KCD103	100/75
	16KLCD-105	3+105	16KCD105	105/95	16KCD108	105/90	16KCD106	105/85	16KCD107	105/80
	16KLCD-110	3+110	16KCD110	110/100	16KCD112	110/95	16KCD111	110/90	16KCD113	110/85
	16KLCD-115	3+115	16KCD115	115/105	16KCD118	115/100	16KCD116	115/95	16KCD117	115/90
	16KLCD-120	3+120	16KCD120	120/110	16KCD122	120/105	16KCD121	120/100	16KCD123	120/95
	16KLCD-125	3+125	16KCD125	125/115	16KCD128	125/110	16KCD126	125/105	16KCD127	125/100
	16KLCD-130	3+130	16KCD130	130/120	16KCD132	130/115	16KCD131	130/110	16KCD133	130/105
20KLCD	20KLCD-95	3+95	20KCD95	95/85	20KCD98	95/80	20KCD96	95/75	20KCD97	95/70
	20KLCD-100	3+100	20KCD100	100/90	20KCD102	100/85	20KCD101	100/80	20KCD103	100/75
	20KLCD-105	3+105	20KCD105	105/95	20KCD108	105/90	20KCD106	105/85	20KCD107	105/80
	20KLCD-110	3+110	20KCD110	110/100	20KCD112	110/95	20KCD111	110/90	20KCD113	110/85
	20KLCD-115	3+115	20KCD115	115/105	20KCD118	115/100	20KCD116	115/95	20KCD117	115/90
	20KLCD-120	3+120	20KCD120	120/110	20KCD122	120/105	20KCD121	120/100	20KCD123	120/95
	20KLCD-125	3+125	20KCD125	125/115	20KCD128	125/110	20KCD126	125/105	20KCD127	125/100
	20KLCD-130	3+130	20KCD130	130/120	20KCD132	130/115	20KCD131	130/110	20KCD133	130/105
	20KLCD-135	3+135	20KCD135	135/125	20KCD138	135/120	20KCD136	135/115	20KCD137	135/110
	20KLCD-140	3+140	20KCD140	140/130	20KCD142	140/125	20KCD141	140/120	20KCD143	140/115
30KLCD	30KLCD-100	3+100	30KCD100	100/90	30KCD102	100/85	30KCD101	100/80	30KCD103	100/75
	30KLCD-105	3+105	30KCD105	105/95	30KCD108	105/90	30KCD106	105/85	30KCD107	105/80
	30KLCD-110	3+110	30KCD110	110/100	30KCD112	110/95	30KCD111	110/90	30KCD113	110/85
	30KLCD-115	3+115	30KCD115	115/105	30KCD118	115/100	30KCD116	115/95	30KCD117	115/90
	30KLCD-120	3+120	30KCD120	120/110	30KCD122	120/105	30KCD121	120/100	30KCD123	120/95
	30KLCD-125	3+125	30KCD125	125/115	30KCD128	125/110	30KCD126	125/105	30KCD127	125/100
	30KLCD-130	3+130	30KCD130	130/120	30KCD132	130/115	30KCD131	130/110	30KCD133	130/105
	30KLCD-135	3+135	30KCD135	135/125	30KCD138	135/120	30KCD136	135/115	30KCD137	135/110
	30KLCD-140	3+140	30KCD140	140/130	30KCD142	140/125	30KCD141	140/120	30KCD143	140/115
	30KLCD-145	3+145	30KCD145	145/135	30KCD148	145/130	30KCD146	145/125	30KCD147	145/120

# HYDRAULIC TOOLS CATALOG

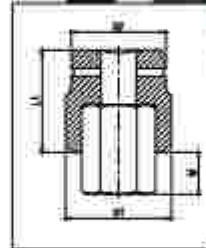
## Sockets for square drive torque wrench



Single cap socket



Double cap socket



Outer hexagonal socket LFB



Outer hexagonal socket F

- Made of high strength Cr Mo alloy steel.
  - Pass standard heat treatment process, making the socket safe, reliable and durable.
  - Non-standard sockets can be customized.
- Heavy duty socket standard DIN3121/3129.

Bolt specification		3/4" (19×19)				1" (25.4×25.4)				1-1/2" (38×38)				2" (51×51)				2-1/2" (64×64)			
Dimension	A/T	D1	D2	L1	L2	D1	D2	L1	L2	D1	D2	L1	L2	D1	D2	L1	L2	D1	D2	L1	L2
M16	24	42	43	50	27																
M20	30	48	44	54	31																
M22	34	52	44	54	31	52	52	58	30												
M24	36	54	44	57	34	55	55	61	33	74	74	76	34								
M27	41	60	44	60	37	63	55	64	34	74	74	79	37								
M30	45	66	44	68	40	70	58	68	40	74	74	82	40								
M33	50	71	44	70	47	75	64	71	43	81	81	85	43								
M36	55					81	66	76	48	87	87	90	48	100	100	97	48	115	115	118	54
M39	60					87	66	79	51	87	87	93	51	103	103	100	51	115	115	118	54
M42	65					92	68	82	54	97	87	96	54	105	105	104	54	120	120	118	54
M45	70					97	75	85	57	102	87	99	57	112	112	107	57	120	120	121	57
M48	75					102	75	91	63	112	87	105	63	119	119	113	63	128	128	127	63
M52	80					108	75	95	67	118	95	108	67	123	123	117	67	130	130	131	67
M56	85					116	78	99	71	123	95	114	72	127	127	122	72	132	132	136	72
M60	90									128	98	118	76	132	115	126	76	139	139	140	76
M64	95									133	98	124	82	138	115	132	82	145	145	145	82
M68	100									139	102	129	86	138	115	136	86	153	142	150	86
M72	105									145	102	132	90	148	115	140	90	160	152	154	90
M76	110									150	105	136	94	154	120	146	96	166	142	160	96
M80	115									155	110	150	105	159	120	150	100	173	142	164	100
M85	120													165	125	158	105	180	142	169	105
M90	130													177	125	160	110	190	160	174	110
M95	135													182	130	165	115	195	160	179	115
M100	145													194	135	175	125	210	160	189	125
M105	150																	215	170	200	130
M110	155																	221	170	210	135
M115	165																	230	170	220	140
M120	170																	240	170	235	150

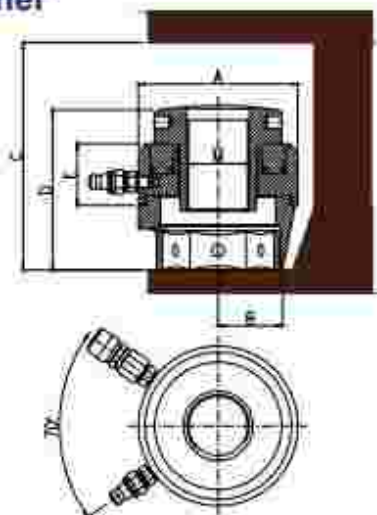


# HYDRAULIC TOOLS CATALOG

## HLD series Single stage hydraulic bolt tensioner



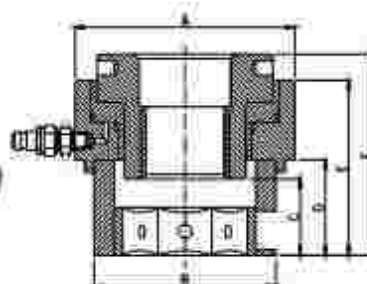
- Maximum working pressure 150Mpa
- Compact design and easy maintenance
- Small size and light weight.
- Easy to replace the rod
- Commonly used in petrochemical industry



Model	Bolt diameter		Max load	Oil pressure area	Weight	A	B	C	D	E	F
	inch	mm	KN	mm <sup>2</sup>	Kg	mm	mm	mm	mm	mm	mm
HLD1		16	226	1506	3.5	73	24	110	74	45	49
	3/4	18	226	1506	3.5	73	24	110	74	45	49
		20	226	1506	3.5	73.5	27	110	74	45	49.5
	7/8	22	226	1506	3	73.5	27	115	74	45	53
	1	24	226	1506	3	73.5	30	125	78	45	56.5
	1 1/8	27	226	1506	3	73.5	32	130	78	45	63.5
HLD2		30	455	3031	5	102	30	160	90	54	69
	1 1/4	33	455	3031	5	102	34	150	90	54	72
	1 3/8	38	455	3031	5	102	36	160	95	54	78
	1 1/2	39	455	3031	5	102	38	170	100	54	80
HLD3	1 1/2	39	803	5357	9	133	42	175	95	56	83.5
	1 5/8	42	803	5357	9	133	42	185	100	56	92.5
	1 3/4	45	803	5357	9	133	44	195	103	56	98
	1 7/8	48	803	5357	9	133	46	205	107	56	101
	2	52	803	5357	9	133	48	210	112	58	106
HLD4	1 7/8	48	1268	8591	15	163	50	205	105	58	108
	2	52	1268	8591	15	163	52	215	108	58	108
	2 1/4	56	1268	8591	15	163	54	235	117	58	118.5
		60	1268	8591	15	163	54	238	120	58	127
	2 1/2	64	1268	8591	15	163	56	254	120	58	130.5
HLD5	2 1/2	64	1978	13188	25	193	64	254	125	60	130.5
		68	1978	13188	25	193	72	258	130	60	138
	2 3/4	72	1978	13188	25	193	72	258	130	60	143
	3	78	1978	13188	25	193	74	258	141	60	153
HLD6	3	78	2717	18114	44	233	76	280	146	64	153
		80	2717	18114	44	233	76	284	146	64	155.5
	3 1/4	85	2717	18114	44	233	78	272	148	64	165.5
	3 1/2	90	2717	18114	44	233	78	280	154	64	174.5
	3 3/4	95	2717	18114	40.5	233	98	300	188	64	189.5
	4	100	2717	18114	40.5	233	108	305	172	64	200

# HYDRAULIC TOOLS CATALOG

## DLD series Simple type hydraulic bolt tensioner

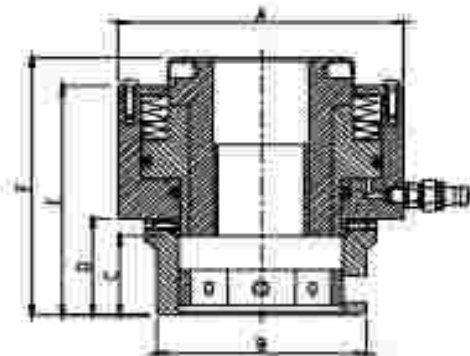


- Maximum working pressure 150Mpa
- Mechanical return
- Replaceable tensioning rod
- Red overstroke warning line
- Polishing surface treatment

Model	Bolt size mm	Max load kN	Dimension (mm)						Stroke mm	Weight kg
			A	B	C	D	E	F		
DLD0	M 20	338	85	55	23	25	74	86	6	3.5
	M 22			58	25	27	76	88		
	M 24			66	27	29	78	90		
DLD1	M 24	488	109	66	27	29	90	105	8	5.5
	M 27			72	30	32	93	108		
	M 30			78	33	35	98	111		
	M 33			85	36	38	99	114		
DLD2	M 36	614	132	90	39	41	102	117	8	8
	M 33			85	36	44	111	127		
	M 36			94	39	47	116	130		
	M 39			98	42	50	119	133		
	M 42			106	45	53	122	136		
DLD3	M 39	889	150	98	41	51	122	135	10	12
	M 42			105	44	54	125	138		
	M 45			110	47	57	128	141		
	M 48			125	50	60	131	144		
DLD4	M 52	1413	174	132	53	56	132	145	10	17
	M 56			135	59	60	138	149		
DLD5	M 56	1649	198	135	59	60	138	154	12	21
	M 60			144	63	65	143	158		
	M 64			150	67	69	147	163		
	M 68			158	71	74	152	168		
DLD6	M 72	2131	222	165	75	77	167	185	12	26
	M 76			170	79	81	175	193		
DLD7	M 76	2544	252	170	79	81	167	187	12	32
	M 80			175	83	85	172	201		
	M 85			185	88	90	178	206		
	M 90			205	93	95	181	211		
DLD8	M 95	3101	262	215	98	100	189	224	12	38
	M 100			235	103	105	194	228		
DLD9	M 105	3793	318	240	108	110	203	238	12	52
	M 110			250	113	115	208	243		
	M 115			260	118	120	213	248		
DLD10	M 115	4836	360	260	120	120	251	297	15	87
	M 120			270	125	125	266	302		
	M 125			285	140	130	271	307		

# HYDRAULIC TOOLS CATALOG

## TSD series-Single stage hydraulic bolt tensioner



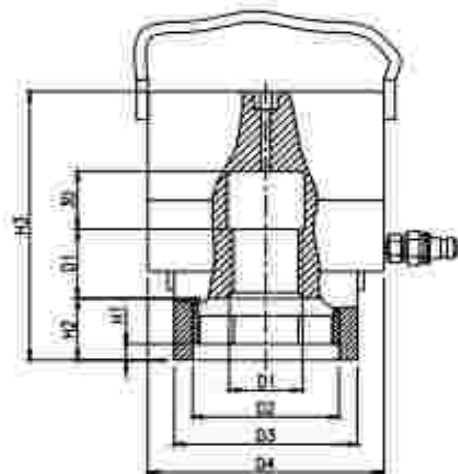
- Maximum working pressure 150Mpa
- Automatic return mechanism design
- Red overstroke warning line to ensure operator safety.
- One tensioner can be used for different size bolts, but the rod and bushing must be changed.

Model	Bolt size mm	Max load KN	Dimension (mm)						Stroke mm	Weight Kg
			A	B	C	D	E	F		
TSD9	M 20	307	109	55	23	25	111	128	8	3
	M 22			60	25	27	113	130		
	M 24			66	27	29	115	132		
TSD1	M 26	486	109	74	27	29	120	138	8	7
	M 27			77	30	32	123	141		
	M 30			80	33	35	126	144		
	M 33			85	36	38	129	147		
	M 36			90	39	41	132	150		
TSD2	M 33	614	132	90	36	44	135	150	8	12
	M 36			96	39	47	138	153		
	M 39			98	42	50	141	156		
	M 42			105	45	53	144	159		
TSD3	M 39	969	150	110	42	42	156	150	10	15
	M 42			113	45	45	160	155		
	M 45			114	50	50	164	161		
	M 48			118	52	52	168	163		
TSD4	M 52	1413	174	132	55	56	154	174	10	20
	M 56			135	59	60	158	178		
TSD5	M 56	1649	198	135	59	60	161	179	12	25
	M 60			143	64	64	166	183		
	M 64			150	68	68	169	187		
	M 68			158	72	72	173	191		
TSD6	M 72	2131	222	165	76	76	184	207	12	35
	M 76			170	80	80	188	211		
TSD7	M 76	2544	252	170	80	80	184	221	12	50
	M 80			175	85	85	187	224		
	M 85			180	90	88	199	228		
	M 90			205	95	95	209	238		
TSD8	M 95	3101	282	215	100	100	214	243	12	85
	M 100			235	105	105	219	248		
TSD9	M 105	3783	318	240	110	110	224	254	12	85
	M 110			248	115	115	234	264		
	M 115			280	125	125	234	264		
TSD10	M 115	4836	360	260	120	120	261	297	12	110
	M 120			270	125	125	266	302		
	M 125			285	140	130	271	307		



# HYDRAULIC TOOLS CATALOG

## ESD series-Single stage hydraulic bolt tensioner

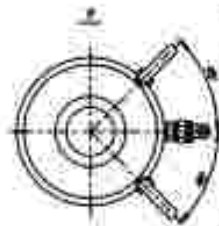
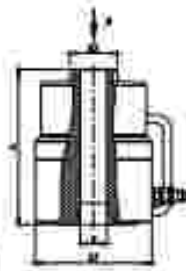


- Maximum working pressure 150Mpa.
- Mainly used for 10.9 grade high strength bolts.
- Automatic return mechanism design, labor intensity is greatly reduced.
- Red overstroke warning line to ensure operator's safety.

Model	Thread D1	A/F	Tensile Force	D2	D3	D4	H1	H2	H3
	mm	S	KN	mm	mm	mm	mm	mm	mm
ESD 20	M 20×2.5	30	200	42	52	65	8	18	94
ESD 24	M 24×3	38	290	48	60	78	8	22	102
ESD 27	M 27×3	41	380	55	67	88	10	25	108
ESD 30	M 30×3.5	48	490	61	74	97	12	27	108
ESD 33	M 33×3.5	50	570	66	81	107	14	29	114
ESD 36	M 36×4	55	675	71	90	117	16	32	118
ESD 39	M 39×4	60	800	77	96	127	18	34	125
ESD 42	M 42×4.5	68	920	83	102	137	20	37	134
ESD 45	M 45×4.5	70	1080	89	110	148	22	39	135
ESD 48	M 48×5	75	1220	94	116	158	24	42	140
ESD 52	M 52×5	80	1450	102	128	188	28	48	151
ESD 56	M 56×5.5	85	1680	106	135	178	31	49	158
ESD 60	M 60×5.5	90	2010	114	142	199	34	52	167
ESD 64	M 64×6	95	2210	120	151	211	37	55	172
ESD 68	M 68×6	100	2500	124	155	228	40	58	180
ESD 72	M 72×6	105	2880	130	168	238	44	62	188
ESD 76	M 76×6	110	3320	138	180	259	48	66	197
ESD 80	M 80×6	115	3610	142	188	267	50	68	202
ESD 90	M 90×6	130	4650	160	210	300	58	77	225
ESD 100	M 100×6	145	5630	178	237	340	68	85	240

# HYDRAULIC TOOLS CATALOG

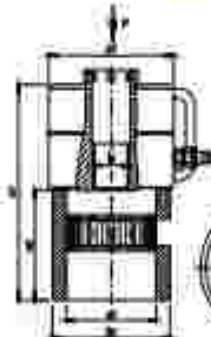
## ZLD series-hydraulic bolt tensioner specially for bridge



- Maximum working pressure 150Mpa
- Automatic return mechanism design.
- Red overstroke warning line to ensure operator safety.
- Polishing surface treatment
- High pressure, light weight

Model	Tensile Force KN	Bolt size	Dimension (mm)				Stroke mm	Pressure MPa	Weight Kg
			D1	D2	d	H			
ZLD30	422	M30	94	47	32	210	40	150	8.3
ZLD33	500	M33	101	51	35	210	40	150	10.1
ZLD36	584	M36	109	56	38	210	40	150	12.7
ZLD39	727	M39	121	61	42	210	40	150	14.4
ZLD42	866	M42	132	66	44	210	40	150	16.4
ZLD45	922	M45	138	71	47	210	40	150	18
ZLD48	1027	M48	147	76	50	210	40	150	21
ZLD52	1354	M52	166	81	54	210	40	150	25
ZLD56	1413	M56	171	86	56	277	40	150	32
ZLD60	1688	M60	185	91	52	277	40	150	39
ZLD64	1630	M64	195	96	56	277	40	150	46

## SJD series-hydraulic bolt tensioner for bridge lock clamping

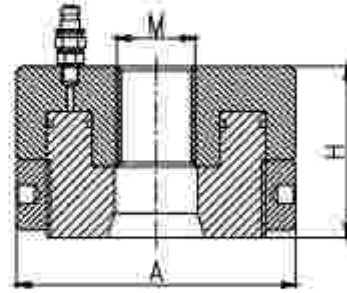
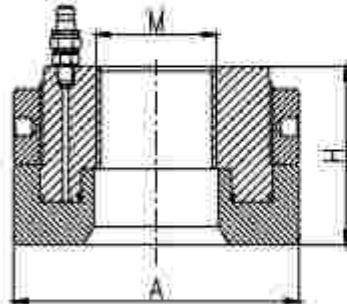


- Maximum working pressure 150Mpa
- Automatic return mechanism design.
- Red overstroke warning line to ensure operator safety.
- Polishing surface treatment
- High pressure, light weight
- One tensioner can be used for different size bolts.

Model	Tensile Force KN	Bolt size	Dimension (mm)				Stroke mm	Pressure MPa	Weight Kg
			D1	D2	d	H			
SJD30	422	M30	94	86	270	135	20	150	8.2
SJD33	500	M33	101	92	273	122	20	150	12
SJD36	584	M36	108	100	276	127	20	150	15
SJD39	727	M39	121	108	279	136	20	150	22
SJD42	866	M42	132	117	283	133	20	150	24
SJD45	922	M45	138	122	285	138	20	150	27
SJD48	1027	M48	147	136	292	145	20	150	31
SJD52	1354	M52	166	156	303	155	20	150	36
SJD56	1413	M56	171	160	322	155	20	150	47
SJD60	1688	M60	185	172	354	165	20	150	51
SJD64	1630	M64	193	180	368	155	20	150	62

# HYDRAULIC TOOLS CATALOG

## DN/HN series-Hydraulic Nut



•Maximum working pressure 150Mpa.

•The preload can be accurately set, the precision is up to  $\pm 3\%$ .

•Adopt no-torque design to avoid the influence of friction, bolt distortion, bolt pre-tightening force and other factors, so the bolt is to be tightened by pure tension force.

•Particularly suitable for heavy-duty vibration mechanical fastening.

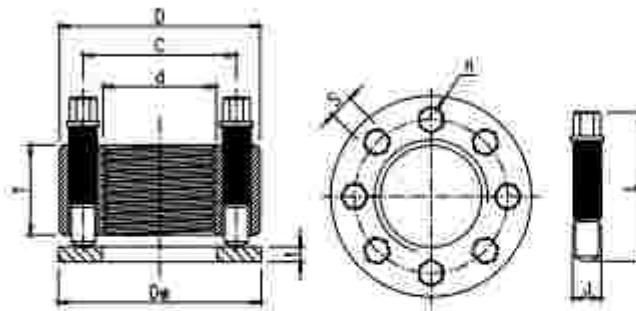
•With stroke indicator, it is allowed to observe, measure and control the tensioner during operation.

Model		Bolt size	Outside diameter	Height	Action area	Max force	Stroke	Weight
Top ring hydraulic nut	Bottom ring hydraulic nut	M	A(mm)	H(mm)	cm <sup>2</sup>	KN	mm	kg
DN30	HN30	30	75	81	17.3	288	8	0.9
DN33	HN33	33	83	84	22.5	336	8	1.1
DN36	HN36	36	88	87	24.5	368	8	1.3
DN39	HN39	39	94	90	28.5	387	8	1.5
DN42	HN42	42	100	93	28.5	427	8	1.8
DN45	HN45	45	105	97	32.4	480	8	2.4
DN48	HN48	48	110	98	40	500	8	2.8
DN52	HN52	52	120	94	42.4	626	8	3.8
DN56	HN56	56	135	88	53.8	804	8	4.8
DN60	HN60	60	147	92	65.9	989	8	5.6
DN64	HN64	64	153	99	69.1	1036	8	6.7
DN68	HN68	68	159	105	72.4	1086	8	8.8
DN72	HN72	72	170	109	88.5	1256	10	9.7
DN76	HN76	76	178	117	90.1	1351	10	11.7
DN80	HN80	80	184	124	106	1580	10	14.9
DN85	HN85	85	200	130	113.9	1708	10	16.4
DN90	HN90	90	212	140	131.7	1976	10	19.8
DN95	HN95	95	223	148	150.7	2261	10	23.4
DN100	HN100	100	238	154	183.3	2450	15	28.3



# HYDRAULIC TOOLS CATALOG

## CY series-Super Nut



- Operating temperature -60 ~ 200 degree
- Bolt stress under standard load 410-890MPa
- CY series super nuts are suitable for high strength machine tightening and all working conditions of big size hexagonal nuts:
- Application: low temperature bolt, compressor, pump, high pressure flange, reduction gearbox, gearbox, split gear, crushing machine, military machine, etc.

Model	Bolt size	Nut			Push bolt				Bore		Standard product		Weight kg
		Outside diameter (mm)	Thickness (mm)	Center distance (mm)	Length (mm)	Number (n)	Distance (mm)	A/F (mm)	Outside diameter (mm)	Thickness (mm)	Tightening force (kN)	Import Fee	
CY-M20	M20	37	17	25	30	8	M20X1.5	8	36	2.3	144	18	0.14
CY-M24	M24	47	24	35	40	8	M24X1.5	8	46	4.8	216	36	0.3
CY-M27	M27	53	24	39	40	8	M27X1.5	8	51	4.8	288	36	0.32
CY-M30	M30	63	24	41	40	8	M30X1.5	8	64	4.8	360	36	0.32
CY-M33	M33	62	32	46	52	8	M33X1.25	8	62	4.8	344	42	0.54
CY-M36	M36	66	32	51	52	8	M36X1.25	8	67	4.8	456	42	0.55
CY-M39	M39	71	32	54	52	10	M39X1.25	8	72	4.8	574	42	0.77
CY-M42	M42	75	32	58	52	12	M42X1.25	8	77	4.8	696	42	0.88
CY-M45	M45	81	38	62	62	8	M45X1.25	10	82	5.4	756	132	1.22
CY-M48	M48	86	38	66	62	10	M48X1.25	10	87	5.4	874	132	1.32
CY-M52	M52	94	38	70	62	12	M52X1.25	10	96	5.4	1048	132	1.63
CY-M56	M56	97	38	74	62	12	M56X1.25	10	98	5.4	1048	132	1.68
CY-M60	M60	107	56	83	91	8	M60X1.5	14	109	8.4	1224	315	3.2
CY-M64	M64	113	56	87	91	10	M64X1.5	14	114	8	1584	315	3.5
CY-M72	M72	119	58	94	91	12	M72X1.5	14	121	8	1936	315	3.8
CY-M80	M80	132	61	105	91	16	M80X1.5	14	134	8	2542	315	4.5
CY-M90	M90	145	61	113	91	16	M90X1.5	14	147	8	2542	315	5.4
CY-M100	M100	162	61	125	91	16	M100X1.5	14	159	8	2542	315	6.4
CY-M110	M110	177	61	133	91	20	M110X1.5	14	174	8	3177	315	8.2
CY-M120	M120	188	61	149	113	16	M120X1.5	17	191	10	4139	647	11.8
CY-M140	M140	215	64	169	128	22	M140X1.5	17	217	10	5762	647	17.2
CY-M160	M160	228	107	186	138	24	M160X1.5	17	228	10	8318	647	19.5

# HYDRAULIC TOOLS CATALOG

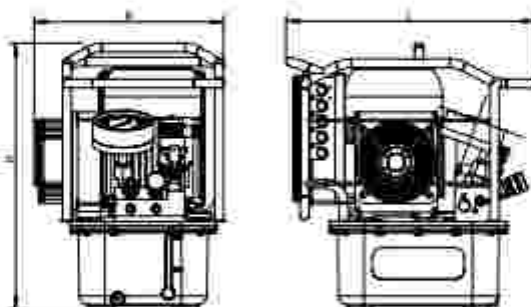
## Hydraulic pumps

### SP304 series - NEW style electric pump for hydraulic wrench



- High efficiency 3 speed flow pressure design, perfect simulation of manual operation, fast speed when light load, low speed when heavy load, the bolt tightening is more precise.
- It can drive 2 hydraulic wrenches simultaneously or 4 if requested.
- Al-Ti alloy pump body, light weight and easy to carry.
- 40-700 bar adjustable output pressure.
- Brushless high power motor, easy maintenance and long life, with starting capacitor, able to start with load, simple operation.

#### Dimension



#### Technical parameters

Model	Output port	Power	Pressure(MPa)			Flow(L/min)			Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Medium	Low	High	Medium	Low			
SP304-2	4X1/4 NPT	220V 1.1KW	70	32	6	0.8	1.8	8	7.6	394*300*420	25
SP304-4	8X1/4 NPT	220V 1.1KW	70	32	6	0.8	1.8	8	7.6	394*300*420	25

# HYDRAULIC TOOLS CATALOG

## DP304 series - High flow 3 speed hydraulic pump



- Dual motor 3 speed, higher flow and higher efficiency.
- It can drive 4 hydraulic wrenches simultaneously or 8 with distributor.
- Al-Ti alloy pump body.
- 40-700 bar adjustable output pressure.
- Brushless high power motor, easy maintenance and long life, with starting capacitor, able to start with load, simple operation.
- High performance radiator, the fan starts automatically when oil temperature reaches 35 degree.

### Technical parameters

Model	Output port	Power	Pressure(MPa)			Flow (L/min)			Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Medium	Low	High	Medium	Low			
DP220-4	8X1/4 NPT	220V 1.1KW	70	32	8	14	32	15	14	350*400*570	61
DP220-6	16X1/4 NPT	220V 1.1KW									
DP300-4	8X1/4 NPT	380V 1.1KW									
DP300-6	16X1/4 NPT	380V 1.1KW									

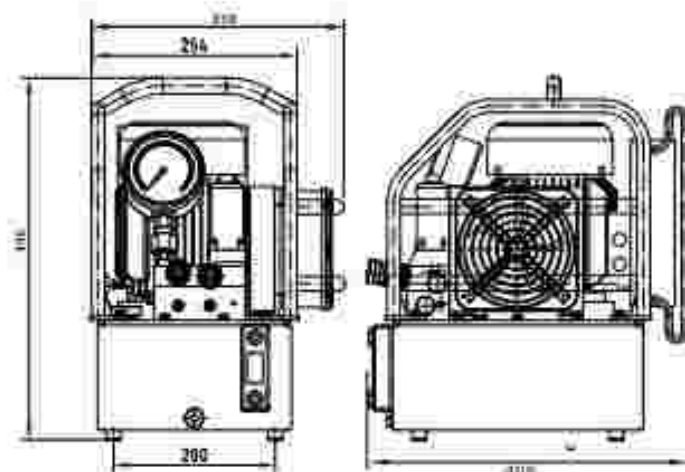
# HYDRAULIC TOOLS CATALOG

## EMP304 - 3 speed hydraulic wrench pump



- High efficiency 3 speed flow pressure design, perfect simulation of manual operation, fast speed when light load, low speed when heavy load, the bolt tightening is more precise.
- It can drive 2 hydraulic wrenches simultaneously or 4 if requested.
- Al-Ti alloy pump body, light weight and easy to carry.
- 40-700 bar adjustable output pressure.
- Brushless high power motor, easy maintenance and long life, with starting capacitor, able to start with load, simple operation.
- High performance radiator, the fan starts automatically when oil temperature reaches 35 degree.

### Dimension



### Technical parameters

Model	Output port	Power	Pressure(MPa)			Flow(L/min)			Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Medium	Low	High	Medium	Low			
EMP304-2	4X1/4 NPT	220V 1.1KW	70	32	6	0.8	1.8	8	7.8	364*300*420	27
EMP304-4	6X1/4 NPT	220V 1.1KW	70	32	6	0.8	1.8	8	7.8	364*300*420	27.5



# HYDRAULIC TOOLS CATALOG

## EMP204 series - 2 speed hydraulic wrench pump



- Adopt standard slide valve, stable reversing and good versatility.
- 2 speed flow design, switch flow automatically.
- Al-Ti alloy pump body, light weight and easy to carry.
- Brushless high power motor, easy maintenance and long life.
- High performance radiator, the fan starts automatically when oil temperature reaches 35 degree, to guarantee long time working.
- The electrical box adopts integrated circuit, able to match hydraulic wrench, hydraulic plier etc.

### Technical parameters

Model	Output port	Power	Pressure(MPa)		Flow(L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
EMP204X-2	4X1/4 NPT	220V 1.1KW	70	5	0.8	5	7.8	304*300*420	27
EMP204X-4	6X1/4 NPT	220V 1.1KW	70	5	0.8	5	7.8	304*300*420	27.5
EMP204-1	2X1/4 NPT	220V 1.5KW	70	6	1.1	5	8	450*325*540	36
EMP204-2	4X1/4 NPT	220V 1.5KW	70	6	1.1	5	8	450*325*540	36.5
EMP204-4	6X1/4 NPT	220V 1.5KW	70	6	1.1	5	8	450*325*540	37
EMP204-380-1	2X1/4 NPT	380V 1.5KW	70	6	1.1	5	8	450*325*540	36
EMP204-380-2	4X1/4 NPT	380V 1.5KW	70	6	1.1	5	8	450*325*540	36.5
EMP204-380-4	6X1/4 NPT	380V 1.5KW	70	6	1.1	5	8	450*325*540	37

# HYDRAULIC TOOLS CATALOG

## AMP304 series - Automatic hydraulic wrench pump



- Integrated circuit control makes it possible to automatically control temperature, automatically stop if no operation after 30s, automatically relief pressure protect the motor and alarm when overload.
- 1.1KW brushless AC motor, high power, free maintenance, long life, long time continuous working.
- Ergonomically designed remote handle, comfortable and durable.
- Solenoid pilot operated valve reverses quickly, pressure relief when shutdown, with starting capacitor, can start with pressure.
- Plug-in hydraulic valve, easy repair and low repair cost.
- Multifunctional digital pressure gauge can switch between MPa, KG, bar and PSI.
- Intelligent one-touch operation, only need press the start button, it will tighten and loose automatically, operator can finish the task very quickly.
- High efficiency 3 speed flow pressure design, perfect simulation of manual operation, fast speed when light load, low speed when heavy load, the bolt tightening is more precise.
- Realize the reversing by pressure numerical signal from integrated circuit and digital pressure gauge, quick response and high efficiency.
- Brushless high power motor, easy maintenance and long life, with starting capacitor, able to start with load, simple operation.
- The reversing valve is controlled by pressure gauge after setting pressure, making regulating valve on OFF position and extend the lifetime greatly.
- Fast speed, high efficiency, 30% higher than normal automatic pump.
- High performance radiator, the fan starts automatically when oil temperature reaches 35 degree, to guarantee long time working.

### Technical parameters

Model	Output port	Power	Pressure(MPa)			Flow(L/min)			Oil temp. (L)	Dimension (mm)	Weight (KG)
			High	Medium	Low	High	Medium	Low			
AMP304-2	4X1/4 NPT	220V 1.1KW	70	32	5	0.8	1.5	8	7.5	394*300*420	28
AMP304-4	8X1/4 NPT	220V 1.1KW	70	32	5	0.8	1.5	8	7.5	394*300*420	28.5



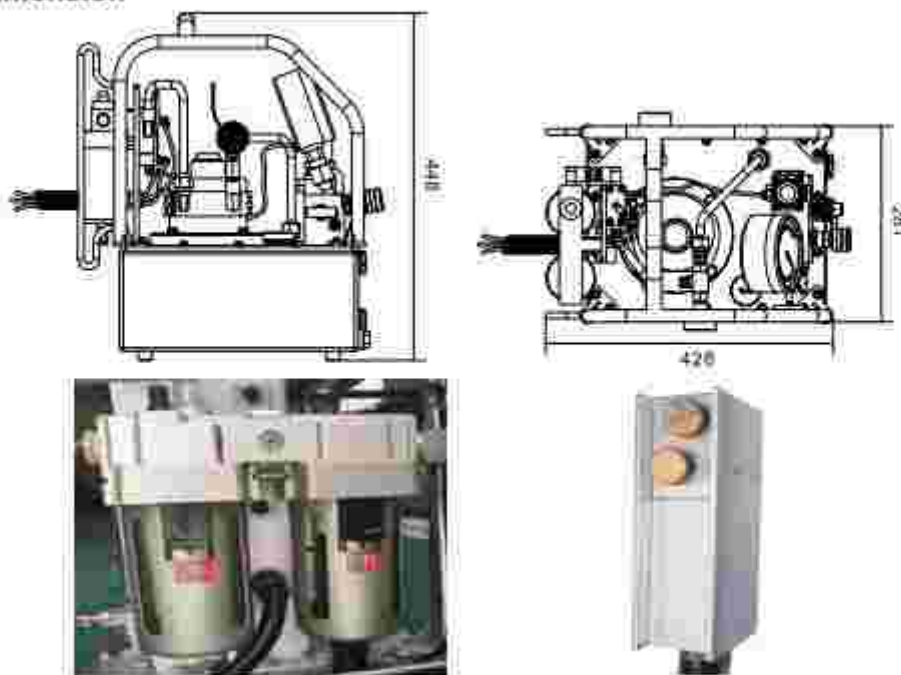
# HYDRAULIC TOOLS CATALOG

## QMP304 - Pneumatic pump for hydraulic wrench

- Use compressed air as the power source, applicable to coal mine etc, with advantages of anti-explosion, safety, no heat and long time working.
- High performance pneumatic reversing valve, safe and reliable, stable performance.
- Al-Ti alloy pump body, light weight, easy to carry.
- It can drive 2 hydraulic wrenches simultaneously or 4 if requested.
- 4-70MPa adjustable pressure.
- Use 4-8 bar air pressure.
- It can be customized as requested.
- The pressure can be released after pressing the button when the pump stops working.
- Steel frame can protect the pump body and makes it easy to carry.
- Aluminium explosion-proof handle, solid and reliable.



### Dimension



### Technical parameters

Model	Gas source			Pressure (MPa)			Flow (L/min)			Oil tank (L)	Dimension (mm)	Weight (kg)
	Pressure (bar)	Rated power (kW)	Air consumption (m³/h)	High	Medium	Low	High	Medium	Low			
QMP304	4-8	1.3	134	20	32	6	63	1.0	8	7.8	420*281*440	21

# HYDRAULIC TOOLS CATALOG

## SP2004 series - ultra high pressure electric pump



- SP2004 is the updated version of EMP2004.
- The oil tank is updated into casting aluminium alloy.
- Pump is made of aircraft aluminium, smaller size and lighter weight.
- Max working pressure is 200MPa.
- High performance safety valve, stable pressure.
- High performance radiator can guarantee long time working.

### Technical parameters

Model	Output port	Power	Pressure (MPa)		Flow (L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
SP2004	G1/4"	220V 1.1KW	200	3	0.3	2.5	8	384*300*420	24

## ISP2004 series - Intelligent electric pump for tensiometer

- Max working pressure 200MPa.
- Applicable to bolt tensioner.
- Adopt Simens controller and human interface, stable performance.
- One-touch operation, just need input tensile force, easy operation.
- Automatic pressure compensation, eliminate pressure loss caused by mechanical deformation, making tensioning more accurate.
- Searchable operation records.
- Automatic pressure relief function.



### Technical parameters

Model	Output port	Power	Pressure (MPa)		Flow (L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
ISP2004	G1/4"	220V 1.1KW	200	3	0.3	2.5	8	400*380*600	65

# HYDRAULIC TOOLS CATALOG

## EMP2004 series - Ultra high pressure electric pump

- Max working pressure 200MPa.
- Automatic switch between high and low pressure, high efficiency.
- Al-Ti alloy pump body, light weight.
- Brushless high power motor, easy maintenance and long life.
- Applicable to bolt tensioner in shipbuilding, wind power etc.
- Plug-in quick connector, easy operation.

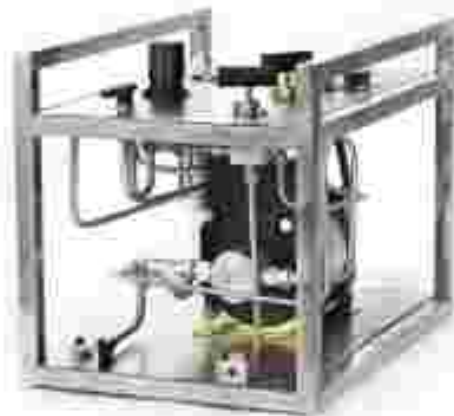


### Technical parameters

Model	Output port	Power	Pressure(MPa)		Flow(L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
EMP2004	G1/4	220V 1.1KW	200	3	0.3	2.5	8	400*310*440	27

## J series gas-liquid booster pump

- J series gas-liquid booster pump adopts single air-controlled unbalanced gas distribution valve to realize automatic reciprocating motion of the pump, and the air drive part is made of aluminum alloy.
- High pressure part is made of carbon steel or stainless steel depending on different materials. All the seals are imported products to ensure the performance of pump.
- The maximum drive pressure is 10 bar, it is suggested to be no more than 5 bar to guarantee the lifetime.



### Technical parameters

Model	Output port	Supercharge ratio	Output pressure		Flow (L/min)	Weight (KG)
			bar	PSI		
J80	G1/4	80:1	640	9280	2.44	25
J100	G1/4	100:1	800	11600	1.82	25
J130	G1/4	130:1	1040	15080	1.4	25
J175	G1/4	175:1	1400	20300	1.14	25
J255	G1/4	255:1	2040	29800	0.75	25
J400	G1/4	400:1	3200	46400	0.48	25

# HYDRAULIC TOOLS CATALOG

## FB204 series Ultra high pressure electric pump



FBS manual reversing



FBD electromagnetic reversing



FBE automatic reversing

- Exd II BT4 three phase asynchronous motor, applicable to explosion proof occasions.
- The electrical control system adopts Exd II BT4 explosion proof magnetic starter, safe.
- External pressure regulating valve, 7-70MPa adjustable pressure.
- 3 stage plunger pump, high efficiency, low pressure fluctuation.
- Equipped with tubular protective frame, easy to move.

### Technical parameters

Model	Output port	Power	Pressure(MPa)			Flow(L/min)			Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Medium	Low	High	Medium	Low			
FBS204-1	2X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBS204-2	4X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBS204-4	8X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBD204-1	2X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBD204-2	4X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBD204-4	8X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBE204-1	2X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBE204-2	4X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75
FBE204-4	8X1/4 NPT	380V 1.5KW	70		6	0.8		6	10	560*370*640	75



# HYDRAULIC TOOLS CATALOG

## EMP204D / EMP204S hydraulic pump station



- 2-speed pressure, automatic switch of two output flows.
- Al-Ti alloy pump body, light weight.
- Brushless high power motor, easy maintenance and long life.
- Electrical control box adopts integrated circuit, applicable to hydraulic cylinder, hydraulic plier etc.
- Built-in check valve, suitable for long time pressure holding condition.
- Match single acting cylinder; double-acting cylinder pump can be customized.

- Light weight and compact design, easy to move.
- 2-speed design, electromagnetic directional control, high flow at low pressure.
- Fast movement of hydraulic parts when no load, high efficiency.
- High pressure high flow, suitable for kinds of hydraulic devices.
- Equipped with tubular protective frame, easy to move.
- Able to customize different capacity oil tank for big ton cylinder.
- Built-in check valve, suitable for long time pressure holding condition.
- Match double-acting cylinder.

### Technical parameters

Model	Output port	Power	Pressure(MPa)		Flow(L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
EMP204D-220	1X3/8 NPT	220V 1.5KW	70	6	1.1	6	6	420*260*530	37
EMP204D-380	1X3/8 NPT	380V 1.5KW	70	6	1.1	6	6	420*260*530	37
EMP204S25-220	2X3/8 NPT	220V 1.5KW	70	6	1.1	6	20	680*570*645	57
EMP204S40-220	2X3/8 NPT	220V 1.5KW	70	6	1.1	6	40	680*570*645	57
EMP204S25-380	2X3/8 NPT	380V 1.5KW	70	6	1.1	6	20	680*570*645	57
EMP204S40-380	2X3/8 NPT	380V 1.5KW	70	6	1.1	6	40	680*570*645	57

# HYDRAULIC TOOLS CATALOG

## EMP086 series - manual electric pump for hydraulic cylinder



- Plastic spray coating, anti-corrosion, good stain resistance.
- Lightweight and compact design, easy to move.
- 2 speed pump, manual reversing control, high flow at low pressure.
- Fast response of hydraulic parts when no load, high efficiency.
- High flow at high pressure, applicable to kinds of hydraulic devices.
- Equipped with tubular protective frame, easy to move.
- Customizable oil tank as request. Single acting pump also available.

### Technical parameters

Model	Output port	Power	Pressure(MPa)		Flow(L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
EMP086-220	2X1/8 NPT	220V 1.5KW	70	6	1.1	8	8	480*440*615	48
EMP086-380	4X1/8 NPT	380V 1.5KW	70	6	1.1	8	8	480*440*615	48

## HP series - single acting aluminium high pressure manual pump



- Reasonable structure and design, beautiful, easy to carry.
- Double speed design, efficiency increases by 80%.
- Built-in safety valve for overload protection.
- Large capacity oil tank, applicable to different models of cylinders and tools.
- Al-Ti alloy pump body, light weight, high strength, anti-corrosion, shock resistance.
- Max working pressure 280MPa.
- Built-in precise high/low pressure switching valve, stable and reliable.

### Technical parameters

Model	Output port	Pressure(MPa)		Flow(ml/stroke)		Oil tank (cm <sup>3</sup> )	Dimension (mm)	Weight (KG)
		High	Low	High	Low			
HP100	G1/4	70	2	1.2	24	2000	558*124*160	8.6
HP160	G1/4	100	2	1.2	24	2000	558*124*160	8.8
HP250	G1/4	250	2	1.2	24	2000	558*124*160	8.8
HP280	G1/4	280	2	1.2	24	2000	558*124*160	8.8



# HYDRAULIC TOOLS CATALOG

## EPS150 series - Ultra high pressure electric pump



- Max working pressure 150MPa.
- Single acting high performance electric pump.
- Al-Ti alloy pump body, light weight.
- Brushless high power motor, easy maintenance, long life.
- Applicable to bolt tensioner in shipbuilding, wind power etc.
- Plug-in quick connector, easy operation.

### Technical parameters

Model	Output port	Power	Pressure (MPa)	Flow (L/min)	Oil tank (L)	Dimension (mm)	Weight (KG)
EPS150-220	G1/4	220V 1.5KW	150	0.8	8	500*260*530	38
EPS150-380	G1/4	380V 1.5KW	150	0.8	8	500*260*530	38

## ZMP2004 series - Automatic pressure relief pump



- Al-Ti alloy pump body, light weight, easy to carry.
- Brushless high power motor, easy maintenance and long life, with starting capacitor, able to start with load, simple operation.
- Applicable to bolt tensioner in shipbuild, wind power etc.
- Plug-in quick connector, easy operation.
- 2 speed flow design, automatic switch between high and low pressure, high efficiency, more accurate tensioning.
- High performance radiator ensures long time continuous working.

### Technical parameters

Model	Output port	Power	Pressure(MPa)		Flow(L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
			High	Low	High	Low			
ZMP2004	G1/4	220V 1.1KW	200	3	0.3	2.5	8	400*310*440	28

# HYDRAULIC TOOLS CATALOG

## PHG series gasoline engine hydraulic pump



- This is a reasonable choice when no power or compressed air at work site.
- Able to match single or double acting hydraulic tools, 70MPa external pressure regulating valve, adjustable between 7-70MPa.
- Equipped with preset one way valve for the engine and hydraulic pump, to prevent the pressure lose from forward position to holding position.
- The pump is driven by a 4 stroke 2.0KW HONDA engine, which has the lowest weighthorse-power and has forced air cooling function compared with normal gasoline engine.
- Equipped with tubular protective frame, easy to move.

### Technical parameters

Model	Output port	Engine		Pressure (MPa)		Flow (L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
		Displacement (cm <sup>3</sup> )	Speed (r/min)	High	Low	High	Low			
PHG120	M16X1.5	163	3000	70		1.1		40	540*430*520	34
PHG220	M16X1.5	163	3000	70	6	1.1	6	40	450*520*540	54

## PEH series gasoline engine hydraulic pump

- As hydraulic power source, this pump mainly works together with professional break-in tools. Main features are compact structure, strong mobility, beautiful appearance, quick connection with tools, good engine cooling conditions.
- Two speed output pressure, switch automatically, high efficiency.
- It can move together with tools on connection status, low noise.



### Technical parameters

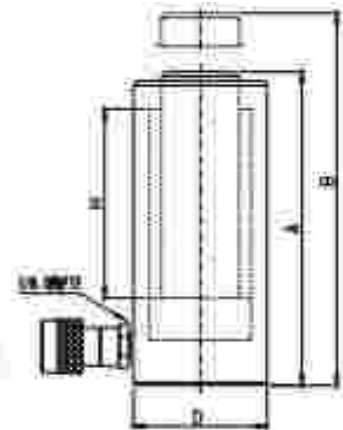
Model	Output port	Engine		Pressure (MPa)		Flow (L/min)		Oil tank (L)	Dimension (mm)	Weight (KG)
		Displacement (cm <sup>3</sup> )	Speed (r/min)	High	Low	High	Low			
PEH220	M16X1.5	96	3600	83	5	0.63	4	40	300*440*470	22

# HYDRAULIC TOOLS CATALOG

## Hydraulic Jacks

### RC series single acting hydraulic cylinder

- Hard chrome plating piston, to avoid scratch and corrosion.
- Anti-corrosion painted surface.
- Dustproof ring extends the service life.
- Single acting, spring return.



### Technical parameters

Capacity (kn/ton)	Series Height	Model	Effective area (mm <sup>2</sup> )	Oil capacity (mm <sup>3</sup> )	Collapsed height A(mm)	Extended height B(mm)	Outside diameter D(mm)	Weight (kg)
5 (4.5)	18	RC05-18	6.5	10	41	57	38	1
	25	RC05-25		18	110	135		1.2
	76	RC05-70		50	165	241		1.5
	127	RC05-127		83	215	342		1.9
	177	RC05-177		118	273	450		2.4
	232	RC05-232		151	323	535		2.8
10 (10.1)	26	RC10-26	14.5	38	88	115	57	1.8
	54	RC10-54		75	121	175		2.3
	108	RC10-108		152	171	278		3.3
	158	RC10-158		228	247	403		4.4
	300	RC10-300		294	288	501		5.4
	357	RC10-357		373	343	606		6.4
	394	RC10-394		441	400	704		6.8
	358	RC10-358		516	450	806		8.2
15 (14.2)	25	RC15-25	20.3	51	124	149	68	3.3
	51	RC15-51		104	148	200		4.1
	101	RC15-101		205	200	301		5
	152	RC15-152		308	271	423		6.8
	203	RC15-203		411	322	525		8.7
	354	RC15-354		816	373	827		8.5
	305	RC15-305		619	423	728		10.0
	356	RC15-356		723	474	830		11.8
25 (23.2)	26	RC25-26	33.2	88	139	165	88	5.0
	50	RC25-50		168	165	215		6.4
	102	RC25-102		338	215	317		8.2
	158	RC25-158		525	273	431		10
	218	RC25-218		887	323	503		12.2
	281	RC25-281		867	374	626		14.1
	311	RC25-311		1033	425	735		16.3
	362	RC25-362		1203	476	838		17.2
30 (29.5)	209	RC30-209	42.1	680	367	596	101	18.1
50 (49.6)	51	RC50-51	71.2	362	179	227	127	15
	101	RC50-101		718	227	328		18.1
	158	RC50-158		1123	283	441		23.5
75 (71.8)	337	RC55-337	102.8	2388	480	787	148	37.6
	158	RC75-158		1601	385	441		29.5
	333	RC75-333		3417	492	825		59
100 (93.1)	168	RC100-168	133.3	2239	357	525	177	58
	260	RC100-260		3468	440	729		72.6



# HYDRAULIC TOOLS CATALOG

## RCH series single acting hollow cylinder



- Single acting, spring return.
- Anti-corrosion painted surface.
- Equipped with 3/8 NPT coupler and protection cap.
- Hard chrome plating piston, to avoid scratch and corrosion.

### Technical parameters

Capacity (KN)	Stroke (mm)	Model	Effective area (cm <sup>2</sup> )	Oil capacity (cm <sup>3</sup> )	Collapsed height (Amm)	Extended height (Bmm)	Outside diameter (Dmm)	Bore diameter (Emm)	Plunger diameter (Fmm)	Hole diameter (Ymm)	Weight (kg)
13(125)	6	RCH13-6	17.9	14	85	63	60	54	35.1	18.6	1.6
	42	RCH13-42	17.9	75	120	162	66	54	35.1	18.6	2.8
	76	RCH13-76	17.9	136	184	200	60	54	35.1	18.6	4.4
20(215)	49	RCH20-49	30.7	150	162	211	98	73	54.1	26.9	7.7
	153	RCH20-153	30.7	476	306	461	98	73	54.1	26.9	14.1
30(326)	84	RCH30-84	46.6	236	179	242	114	89	63.5	33.3	11.9
	153	RCH30-153	46.6	722	330	485	114	88	61.5	33.3	21.8
60(576)	76	RCH60-76	82.3	626	247	323	159	124	91.9	53.8	28.1
	153	RCH60-153	82.3	1258	323	476	159	124	91.9	53.8	39.4
100(931)	76	RCH100-76	133.0	1011	254	330	212	165	127.0	76	63.0

## RRH series double acting hollow cylinder



- Hollow plunger design, applicable to pushing or pulling.
- Anti-corrosion painted surface.
- Equipped with 3/8 NPT coupler and protection cap.
- Longer stroke can be customized as request.

### Technical parameters

Capacity (kg)	Stroke (mm)	Model	Cylinder max capacity (KN)		Effective area (cm <sup>2</sup> )		Oil capacity (cm <sup>3</sup> )		Collapsed height (Amm)	Extended height (Bmm)	Outside diameter (Dmm)	Bore diameter (Emm)	Plunger diameter (Fmm)	Hole diameter (Ymm)	Weight (kg)
			Advance	Retract	Advance	Retract	Advance	Retract							
30	139	RRH30-139	326	213	46.6	30.4	839	941	130	326	114	89	88	33.3	21
	258	RRH30-258	326	213	46.6	30.4	1302	1354	133	326	114	89	88	33.3	27
60	88	RRH60-88	576	388	82.3	54.2	730	412	247	386	159	124	92	53.8	28
	153	RRH60-153	576	388	82.3	54.2	1368	966	323	489	159	124	92	53.8	38
	257	RRH60-257	576	388	82.3	54.2	2116	1393	438	600	159	124	92	53.8	43
100	58	RRH100-58	931	612	133	87.4	506	333	165	205	212	165	127	76.2	53
	76	RRH100-76	931	612	133	87.4	1011	668	254	330	212	165	127	76.2	61
	153	RRH100-153	931	612	133	87.4	2026	1337	342	485	212	165	127	76.2	75
	257	RRH100-257	931	612	133	87.4	3402	2348	468	713	212	165	127	76.2	108
150	76	RRH150-76	1426	718	204.1	130.6	4744	2983	349	552	247	190	132	76.2	111

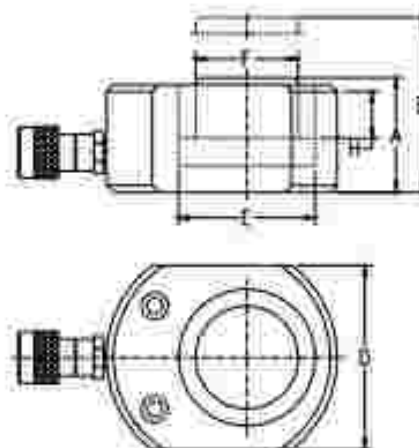
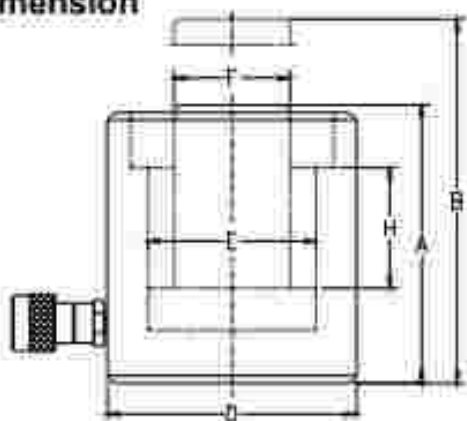
# HYDRAULIC TOOLS CATALOG

## RSM/RCS series Thin hydraulic cylinder



- Compact flat design, suitable for limited space operation.
- Hard chrome plating piston, to avoid scratch and corrosion.
- Anti-corrosion painted surface.
- Dustproof ring extends the service life.
- Spring return piston is optional.

### Dimension



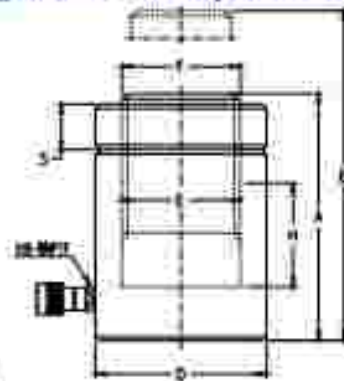
### Technical parameters

Capacity ton(kN)	Stroke H(mm)	Model	Effective area (cm <sup>2</sup> )	Oil capacity (cm <sup>3</sup> )	Collapsed height A(min)	Extended height B(max)	Outside diameter D(mm)	Body diameter E(mm)	Plunger diameter F(mm)	Weight (Kg)
5(45)	6	RSM5-6	6.5	4	32	38	58×41	28.7	19.5	1.0
10(101)	12	RSM10-12	14.5	18	42	54	82×55	42.8	21.5	1.8
20(201)	11	RSM20-11	26.7	32	61	82	101×76	60.5	27.5	3.1
30(298)	13	RSM30-13	42.1	55	68	71	117×85	73.2	38.5	4.5
50(498)	18	RSM50-18	62.2	98	66	82	140×114	88	44.5	6.8
75(734)	18	RSM75-18	102	164	79	95	165×138	114	62	11.3
100(980)	18	RSM100-18	126.8	203	85	101	178×153	127	65	14.5
150(1386)	18	RSM150-18	186.1	317	100	116	215×190	158	80	28.3
10(101)	38	RCS10-38	14.5	55	68	126	58	42.8	38.1	4.1
20(201)	45	RCS20-45	26.7	128	88	143	82	60.5	50.8	5.0
30(298)	62	RCS30-62	42.1	261	117	179	101	73.2	66.5	6.8
50(498)	80	RCS50-80	62.2	373	122	182	124	88	68.8	10.9
100(980)	87	RCS100-87	126.8	722	141	198	155	127	92.2	22.7



# HYDRAULIC TOOLS CATALOG

## CLL series single acting lock nut cylinder



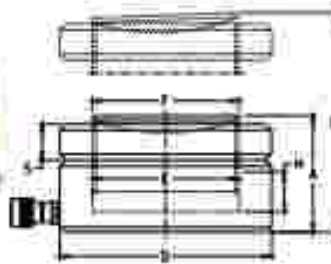
- Single acting, load return.
- Lock nut type, suitable for long time work.
- Overflow hole also has stroke limiting function.
- Cylinder can bear 5% lateral load.

### Technical parameters

Capacity (mm³/s)	Stroke (mm)	Model	Effective area (cm²)	Cl capacity (mm³)	Column height (mm)	Extended height (mm)	Outside diameter (mm)	Rod diameter (mm)	Piston diameter (mm)	Nut height (mm)	Weight (kg)
50 (1400)	100	CLL100-50	70.8	358	164	214	125	35	1190±4	38	13
	125	CLL100-100	70.8	708	214	314	125	35	1390±4	38	20
	150	CLL100-150	70.8	1068	264	414	125	35	1590±4	38	25
	200	CLL100-200	70.8	1418	314	514	125	35	1785±4	38	30
	250	CLL100-250	70.8	1773	364	614	125	35	1985±4	38	33
100 (1400)	100	CLL100-50	132.7	664	187	237	155	130	1130±6	45	30
	125	CLL100-100	132.7	1327	237	337	155	130	1330±6	45	39
	150	CLL100-150	132.7	1991	287	437	155	130	1530±6	45	48
	200	CLL100-200	132.7	2654	337	537	155	130	1730±6	45	56
	250	CLL100-250	132.7	3318	387	637	155	130	1930±6	45	64
150 (1400)	100	CLL150-50	200.8	1005	259	309	207	160	1180±6	47	51
	125	CLL150-100	200.8	2010	289	339	207	160	1380±6	47	60
	150	CLL150-150	200.8	3014	300	409	207	160	1580±6	47	70
	200	CLL150-200	200.8	4019	359	509	207	160	1780±6	47	82
	250	CLL150-250	200.8	5024	400	609	207	160	1980±6	47	104
200 (1688)	100	CLL200-50	266.8	1333	343	393	237	185	1185±6	52	93
	125	CLL200-100	266.8	2667	393	493	237	185	1385±6	52	98
	150	CLL200-150	266.8	4000	443	593	237	185	1585±6	52	117
	200	CLL200-200	266.8	5334	493	693	237	185	1785±6	52	130
	250	CLL200-250	266.8	6668	543	793	237	185	1985±6	52	152
250 (2540)	100	CLL250-50	352.2	1761	459	509	275	215	1215±6	58	136
	125	CLL250-100	352.2	3522	509	609	275	215	1415±6	58	162
	150	CLL250-150	352.2	5283	559	709	275	215	1615±6	58	194
	200	CLL250-200	352.2	7138	609	809	275	215	1815±6	58	224
	250	CLL250-250	352.2	8993	659	909	275	215	2015±6	58	273
300 (3185)	100	CLL300-50	452.2	2281	595	645	310	240	1240±6	65	173
	125	CLL300-100	452.2	4562	645	745	310	240	1440±6	65	200
	150	CLL300-150	452.2	6843	695	845	310	240	1640±6	65	230
	200	CLL300-200	452.2	9124	745	945	310	240	1840±6	65	263
	250	CLL300-250	452.2	11405	795	1045	310	240	2040±6	65	320
400 (3688)	100	CLL400-50	601.2	3005	805	855	350	265	1265±6	75	225
	125	CLL400-100	601.2	6010	855	955	350	265	1465±6	75	257
	150	CLL400-150	601.2	9015	905	1055	350	265	1665±6	75	297
	200	CLL400-200	601.2	12020	955	1155	350	265	1865±6	75	341
	250	CLL400-250	601.2	15025	1005	1255	350	265	2065±6	75	401
500 (5185)	100	CLL500-50	721.1	3605	975	1025	400	305	1305±6	85	267
	125	CLL500-100	721.1	7210	1025	1125	400	305	1505±6	85	311
	150	CLL500-150	721.1	10815	1075	1175	400	305	1705±6	85	365
	200	CLL500-200	721.1	14420	1125	1225	400	305	1905±6	85	417
	250	CLL500-250	721.1	18025	1175	1275	400	305	2105±6	85	487
600 (5984)	100	CLL600-50	854.8	4277	1285	1335	430	330	1330±6	95	345
	125	CLL600-100	854.8	8554	1335	1435	430	330	1530±6	95	405
	150	CLL600-150	854.8	12831	1385	1485	430	330	1730±6	95	465
	200	CLL600-200	854.8	17108	1435	1535	430	330	1930±6	95	525
	250	CLL600-250	854.8	21385	1485	1585	430	330	2130±6	95	605
800 (8145)	100	CLL800-50	1183.5	5918	1905	1955	505	385	1385±6	105	505
	125	CLL800-100	1183.5	11835	1955	2055	505	385	1585±6	105	585
	150	CLL800-150	1183.5	17753	2005	2105	505	385	1785±6	105	675
	200	CLL800-200	1183.5	23670	2055	2155	505	385	1985±6	105	785
	250	CLL800-250	1183.5	29588	2105	2205	505	385	2185±6	105	905
1000 (10184)	100	CLL1000-50	1451.4	7257	2455	2505	560	430	1430±6	115	545
	125	CLL1000-100	1451.4	14514	2505	2605	560	430	1630±6	115	625
	200	CLL1000-200	1451.4	29028	2555	2655	560	430	1830±6	115	745

# HYDRAULIC TOOLS CATALOG

## CLP series thin lock nut hydraulic cylinder



- Compact structure.
- Hard chrome plating piston, to avoid scratch and corrosion.
- Safe lock nut design, suitable for mechanical load support.
- Capable of bearing unbalance loading up to 3% of rated load, no crushing damage.

### Technical parameters

Capacity ton(kN)	Stroke H(mm)	Model	Effective area (cm <sup>2</sup> )	Oil capacity (cm <sup>3</sup> )	Collapsed height A(mm)	Extended height B(mm)	Outside diameter D(mm)	Bore diameter E(mm)	Piston diameter F(mm)	Nut height S(mm)	Weight kg
50(600)	50	CLP50	86.8	432	125	175	140	105	T1105×4	30	15
100(1001)	50	CLP100	143.1	715	137	187	175	135	T1135×6	32	25
150(1500)	45	CLP150	225.8	1021	148	193	220	170	T1170×6	42	44
200(2100)	45	CLP200	283.4	1275	155	200	245	190	T1190×8	44	57
250(2540)	45	CLP250	362.9	1833	158	204	275	215	T1215×6	48	74
400(3850)	45	CLP400	651.3	3411	170	223	350	265	T1265×6	58	134
500(5111)	45	CLP500	720.2	3286	192	237	400	305	T1305×6	65	189

## RTC series extra-high pressure thin jack



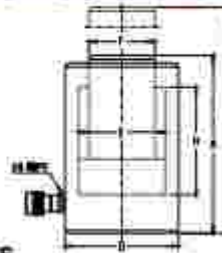
### Technical parameters

Capacity ton(kN)	Stroke H(mm)	Model	Effective area (cm <sup>2</sup> )	Oil capacity (cm <sup>3</sup> )	Collapsed height A(mm)	Extended height B(mm)	Outside diameter D(mm)	Bore diameter E(mm)	Return	Weight kg
5	10	RTC05	3.46	34.6	30	35	60	21	Load return	0.57
10	10	RTC10	7.07	70.7	30	40	70	30	Load return	0.9
25	10	RTC25	17.34	173.4	30	45	90	47	Load return	1.45
50	10	RTC50	38.46	384.6	30	40	118	70	Load return	2.43
100	10	RTC100	69.36	693.6	33	43	152	94	Load return	3.81
150	10	RTC150	105.83	1058.3	34	44	180	115	Load return	5.88
200	10	RTC200	130.79	1307.9	35	45	204	132	Load return	8.15



# HYDRAULIC TOOLS CATALOG

## DS series single acting high tonnage hydraulic cylinder



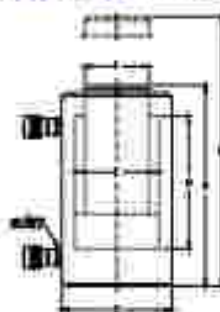
- Single acting, load return.
- Hard chrome plating piston, to avoid scratch and corrosion.
- Anti-corrosion painted surface.
- Dustproof ring extends the service life.
- Cylinder can bear 5% lateral load.

### Technical parameters

Capacity KN/(N)	Stroke	Model	Effective area (mm²)	Oil capacity (L)	Collapsed height	Extended height	Outside diameter	Rod diameter	Piston diameter	Weight (kg)
	mm				mm	mm				
55	100	DS50-100	78.5	39.2	162	212	140	100	75	17
	150	DS50-150	78.5	78.5	212	262	140	100	75	21
	200	DS50-200	78.5	117.7	262	312	140	100	75	27
	250	DS50-250	78.5	157	312	362	140	100	75	30
	300	DS50-300	78.5	196.2	362	412	140	100	75	36
	350	DS50-350	78.5	235	412	462	140	100	75	39
110	50	DS100-50	153.8	76.9	182	232	180	100	100	32
	100	DS100-100	153.8	153.8	232	282	180	100	100	40
	150	DS100-150	153.8	230.8	282	332	180	100	100	48
	200	DS100-200	153.8	307.7	332	382	180	100	100	58
	250	DS100-250	153.8	384.6	382	432	180	100	100	64
	300	DS100-300	153.8	461.5	432	482	180	100	100	72
180	50	DS150-50	201	100.5	188	248	210	100	115	42
	100	DS150-100	201	201	248	308	210	100	115	52
	150	DS150-150	201	301.4	308	368	210	100	115	62
	200	DS150-200	201	401.9	368	428	210	100	115	72
	250	DS150-250	201	502.4	428	488	210	100	115	82
	300	DS150-300	201	602.8	488	548	210	100	115	91
220	50	DS200-50	254	127	218	278	230	100	130	52
	100	DS200-100	254	254	278	338	230	100	130	62
	150	DS200-150	254	381	338	398	230	100	130	72
	200	DS200-200	254	507.5	398	458	230	100	130	82
	250	DS200-250	254	634	458	518	230	100	130	92
	300	DS200-300	254	760.5	518	578	230	100	130	102
280	100	DS250-100	383	191.5	315	375	260	100	150	123
	150	DS250-150	383	287.2	375	435	260	100	150	141
	200	DS250-200	383	382.9	435	495	260	100	150	159
	250	DS250-250	383	478.6	495	555	260	100	150	178
	300	DS250-300	383	574.3	555	615	260	100	150	196
	350	DS250-350	383	670	615	675	260	100	150	215
300	100	DS300-100	452	226	382	442	320	100	180	137
	150	DS300-150	452	339	442	502	320	100	180	155
	200	DS300-200	452	452	502	562	320	100	180	173
	250	DS300-250	452	565	562	622	320	100	180	191
	300	DS300-300	452	678	622	682	320	100	180	209
	350	DS300-350	452	791	682	742	320	100	180	227
400	100	DS400-100	570	285	425	485	360	100	220	167
	150	DS400-150	570	427.5	485	545	360	100	220	185
	200	DS400-200	570	570	545	605	360	100	220	203
	250	DS400-250	570	712.5	605	665	360	100	220	221
	300	DS400-300	570	855	665	725	360	100	220	239
	350	DS400-350	570	997.5	725	785	360	100	220	257
500	100	DS500-100	707	353.5	460	520	400	100	240	216
	150	DS500-150	707	530.2	520	580	400	100	240	234
	200	DS500-200	707	706.9	580	640	400	100	240	252
	250	DS500-250	707	883.6	640	700	400	100	240	270
	300	DS500-300	707	1060.3	700	760	400	100	240	288
	350	DS500-350	707	1237	760	820	400	100	240	306
600	100	DS600-100	838	419	515	575	440	100	270	251
	150	DS600-150	838	628.5	575	635	440	100	270	269
	200	DS600-200	838	838	635	695	440	100	270	287
	250	DS600-250	838	1047.5	695	755	440	100	270	305
	300	DS600-300	838	1257	755	815	440	100	270	323
	350	DS600-350	838	1466.5	815	875	440	100	270	341
800	100	DS800-100	1134	567	624	684	550	100	320	338
	150	DS800-150	1134	850.5	684	744	550	100	320	356
	200	DS800-200	1134	1134	744	804	550	100	320	374
	250	DS800-250	1134	1417.5	804	864	550	100	320	392
	300	DS800-300	1134	1701	864	924	550	100	320	410
	350	DS800-350	1134	1984.5	924	984	550	100	320	428
1000	100	DS1000-100	1481	740.5	814	874	600	100	350	452
	150	DS1000-150	1481	1110.7	874	934	600	100	350	470
	200	DS1000-200	1481	1481	934	994	600	100	350	488
	300	DS1000-300	1481	2221.5	994	1114	600	100	350	544

# HYDRAULIC TOOLS CATALOG

## DQ series double acting high tonnage hydraulic cylinder



- Double acting, hydraulic return, applicable for pushing and pulling.
- Hard chrome plating piston, to avoid scratch and corrosion.
- Anti-corrosion painted surface.
- Capable of bearing unbalance loading up to 5% of rated load, no crushing damage.
- Equipped with 3/8 NPT coupler and protection cap.

Capacity ton(KN)	Stroke H(mm)	Model	Effective area		Oil capacity		Collapsed height A(mm)	Extended height B(mm)	Outside diameter D(mm)	Bore diameter E(mm)	Piston diameter F(mm)	Weight kg
			Advance	Retract	Advance	Retract						
			cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>3</sup>	cm <sup>3</sup>						
50	50	DQ50-50	78.5	40	382.5	200	193	243	140	100	70	18
	100	DQ50-100	78.5	40	765	400	243	343	140	100	70	23
	150	DQ50-150	78.5	40	1177.5	600	293	443	140	100	70	28
	200	DQ50-200	78.5	40	1570	800	343	543	140	100	70	33
	250	DQ50-250	78.5	40	1962.5	1000	393	643	140	100	70	38
100	300	DQ50-300	78.5	40	2355	1200	443	743	140	100	70	42
	50	DQ100-50	163.9	75.4	769	377	208	258	180	140	100	34
	100	DQ100-100	163.9	75.4	1539	754	258	358	180	140	100	42
	150	DQ100-150	163.9	75.4	2308	1131	308	458	180	140	100	50
	200	DQ100-200	163.9	75.4	3077	1508	358	558	180	140	100	58
150	250	DQ100-250	163.9	75.4	3846	1885	408	658	180	140	100	66
	300	DQ100-300	163.9	75.4	4615	2262	458	758	180	140	100	74
	50	DQ150-50	201	97.1	1025	486	237	287	216	160	115	47
	100	DQ150-100	201	97.1	2050	971	287	337	216	160	115	57
	150	DQ150-150	201	97.1	3075	1457	337	387	216	160	115	67
200	200	DQ150-200	201	97.1	4099	1943	387	487	216	160	115	77
	250	DQ150-250	201	97.1	5124	2429	437	587	216	160	115	87
	300	DQ150-300	201	97.1	6148	2914	487	687	216	160	115	97
	50	DQ200-50	314	137.4	1570	687	265	315	268	200	150	82
	150	DQ200-150	314	137.4	4710	2061	365	515	268	200	150	112
250	200	DQ200-200	314	137.4	6280	2748	415	615	268	200	150	127
	300	DQ200-300	314	137.4	9420	4122	515	815	268	200	150	157
	100	DQ250-100	383	149	3829	1619	323	423	285	215	165	123
	150	DQ250-150	383	149	5743	2429	373	523	285	215	165	141
	200	DQ250-200	383	149	7657	3238	423	623	285	215	165	159
300	300	DQ250-300	383	149	10000	4857	523	823	285	215	165	195
	100	DQ300-100	452	168.8	4522	1667	345	445	320	240	190	237
	150	DQ300-150	452	168.8	6783	2531	395	545	320	240	190	261
	200	DQ300-200	452	168.8	9043	3375	445	645	320	240	190	285
	300	DQ300-300	452	168.8	13564	5063	545	845	320	240	190	333
400	100	DQ400-100	572	192	5723	1923	427	527	367	270	220	310
	150	DQ400-150	572	192	8584	2885	477	627	367	270	220	342
	200	DQ400-200	572	192	11445	3847	527	727	367	270	220	374
	300	DQ400-300	572	192	17168	5770	627	927	367	270	220	438
	100	DQ500-100	707	254	7066	2543	474	574	400	300	240	433
500	150	DQ500-150	707	254	10597	3815	524	674	400	300	240	478
	200	DQ500-200	707	254	14130	5067	574	774	400	300	240	521
	300	DQ500-300	707	254	21195	7630	674	974	400	300	240	613
	500	DQ500-500	707	254	35329	12717	874	1374	400	300	240	782
	100	DQ600-100	855	283	8548	2826	484	584	445	330	270	550
600	150	DQ600-150	855	283	12823	4239	534	684	445	330	270	601
	200	DQ600-200	855	283	17097	5652	584	784	445	330	270	668
	300	DQ600-300	855	283	25040	8470	684	984	445	330	270	771
	500	DQ600-500	855	283	42723	14130	884	1384	445	330	270	904
	100	DQ800-100	1194	390	11940	3901	639	839	550	390	320	872
800	150	DQ800-150	1194	390	17910	5883	689	939	550	390	320	984
	200	DQ800-200	1194	390	23880	7903	739	989	550	390	320	1062
	300	DQ800-300	1194	390	35820	11704	839	1039	550	390	320	1178
	500	DQ800-500	1194	390	58860	19507	939	1439	550	390	320	1355
	100	DQ1000-100	1451	490	14515	4898	614	714	600	430	350	1105
1000	150	DQ1000-150	1451	490	21772	7348	664	814	600	430	350	1210
	200	DQ1000-200	1451	490	29029	9797	714	914	600	430	350	1315
	300	DQ1000-300	1451	490	43544	14695	814	1114	600	430	350	1528
	500	DQ1500-500	2205	749	22050	9491	935	935	790	530	400	3070
	200	DQ1500-200	2205	749	44101	18981	935	1135	790	530	400	3590
1500	300	DQ1500-300	2205	749	66151	28472	1035	1335	790	530	400	3040
	500	DQ1500-500	2205	749	110252	47453	1235	1735	790	530	400	5450
	100	DQ2000-100	2921	1123	29210	11124	953	1053	910	610	480	4790
	200	DQ2000-200	2921	1123	58420	22247	1053	1253	910	610	480	5210
	300	DQ2000-300	2921	1123	87630	33371	1153	1453	910	610	480	5715
2000	500	DQ2000-500	2921	1123	146650	55616	1353	1853	910	610	480	7520



# HYDRAULIC TOOLS CATALOG

## Accessories



# HYDRAULIC TOOLS CATALOG

