

## HS Series HI-POWER Square Drive Hydraulic Torque Wrenches



Button change square driver

Steel boot

### HS

#### Square Drive Wrenches

#### Lightweight High Power Wrench for Sockets or Allen-key

- Dual Pawl Mechanism-Heavy duty.
- 360 degree Reaction Arm-Easy to working in any position.
- One-way Ratchet-the only way to assure hands-free and multi-tool operation.
- Aviation material Body housing-Aluminum-Titanium alloy and high strength steel.
- Anti-Rust Finish-Special surface treatment.
- Small Operating Radius.
- "Drop Hole" will protect over pressure operating.

Torque Accuracy :  $\pm$  / -3%

Repeatability : 100%



Reaction Pawl- Prevent ratchet reverse



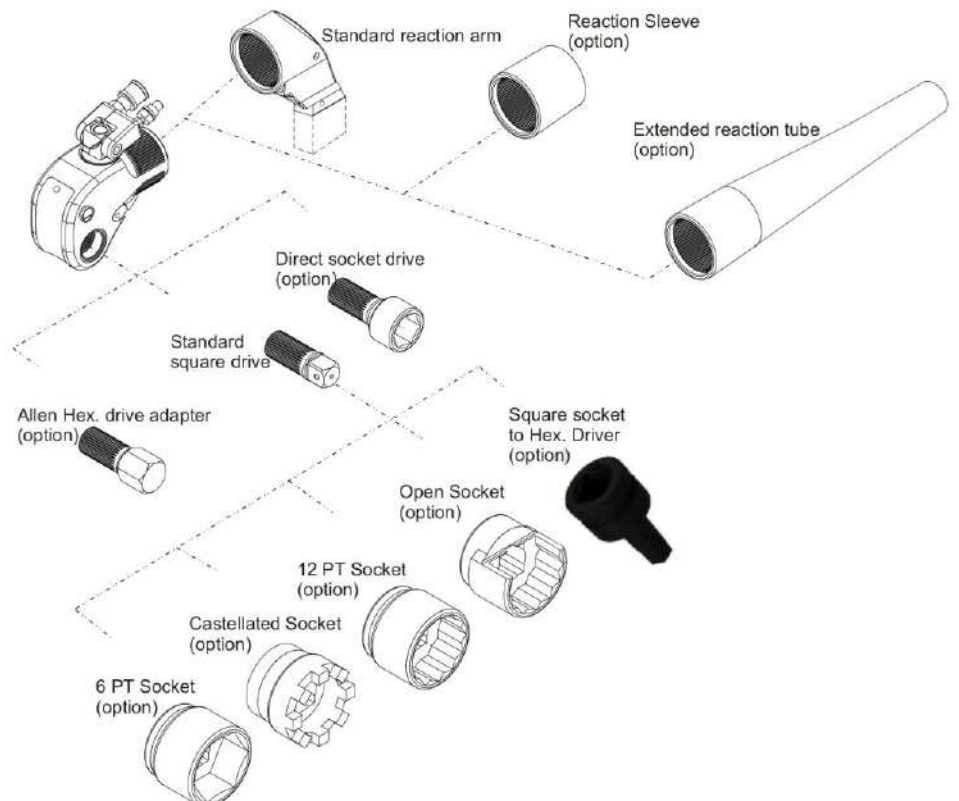
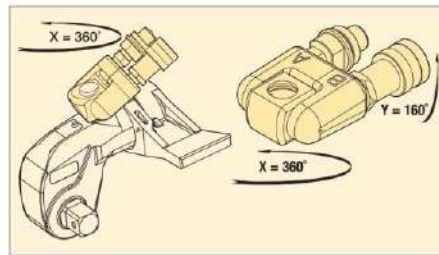
Opt Removable handle



Warning drop hole

Warning wrong coupler connect or over pressure which leaking oil.

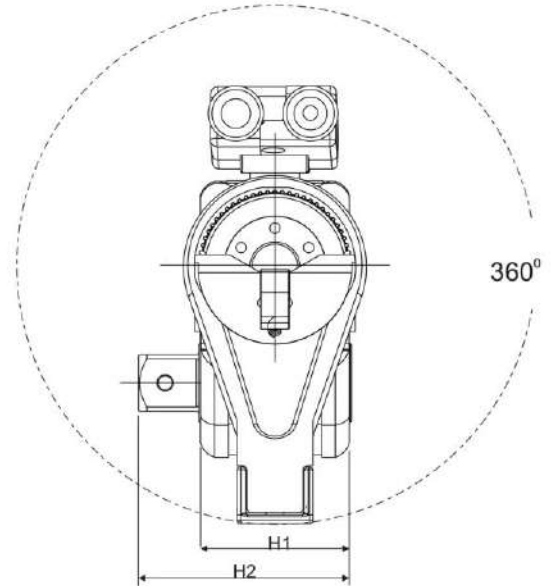
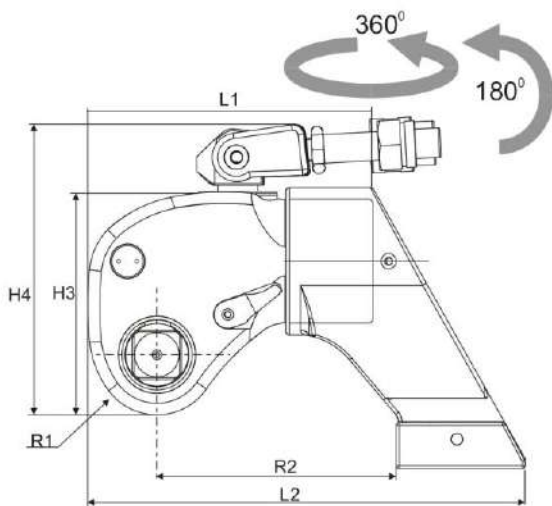
How to build Torque Wrench drive and socket	
	Model DS Hex. Socket size Example: HS-3DS1-13/16"
	Model AH Hex. Drive size Example: HS-3AH32mm
	6PTS- Drive size - Socket size Example: 6PTS-1"-50
	CS- Drive size   Socket size Example: HH-1"-2-3/4"
	12PTS- Drive size - Socket size Example: 12TPS-1"-50
	OPS- Drive size - Socket size Example: OPS-1"-6PT50
	SMX-4F Square socket   Hex. Drive Example: HS-4F1"-6M22mm



## HS Series HI-POWER Square Drive Hydraulic Torque Wrenches

Model No.	Square Drive	Min. Torque		Max. Torque		Bolt size	Weight	
		(lbf.ft)	(N.m)	(lbf.ft)	(N.m)		(lb)	(kg)
HS-1	3/4"	201	273	1409	1911	16~36	5.29	2.40
HS-3	1"	475	645	3328	4512	22~48	11.34	5.35
HS-5	1-1/2"	810	1099	5672	7690	27~56	19.50	9.08
HS-8	1-1/2"	1136	1540	6951	10780	30~64	28.20	13.97
HS-10	1-1/2"	1670	2264	11688	15847	36~72	35.90	16.00
HS-20	2-1/2"	2864	3883	20049	27183	42~90	66.98	30.41
HS-25	2-1/2"	3659	4961	25611	34725	48~100	85.90	39.00
HS-35	2-1/2"	5376	7289	37632	51022	64~120	95.15	43.20

Model No.	Square Drive	L1		L2		H1		H2		H3		H4		R1		R2	
		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
HS-1	3/4"	5.62	143	7.52	191	2.17	55.0	2.95	75.0	3.96	100.5	5.76	146.3	1.12	28.5	4.02	102.0
HS-3	1"	6.35	161	9.58	243	2.63	66.8	3.70	94.0	4.87	123.7	6.52	165.7	1.29	33.0	5.26	133.7
HS-5	1-1/2"	8.22	209	10.63	270	3.14	80.0	4.80	122.0	5.86	149.0	7.62	193.5	1.53	39.0	5.47	139.0
HS-8	1-1/2"	8.74	222	11.57	294	3.54	90.0	5.11	130.0	6.57	167.0	8.61	218.6	1.85	47.0	6.02	153.0
HS-10	1-1/2"	9.56	243	14.52	369	3.93	100.0	5.67	144.0	7.34	186.6	9.08	230.7	1.95	49.7	10.26	202.0
HS-20	2-1/2"	12.20	310	15.24	387	4.72	120.0	7.20	183.0	8.66	220.0	10.71	272.0	2.32	59.0	7.32	186.0
HS-25	2-1/2"	12.99	330	16.06	408	5.38	136.6	7.83	198.9	9.72	247.0	11.77	299.0	2.59	66.0	7.79	198.0
HS-35	2-1/2"	13.89	353	21.22	539	5.81	147.8	8.62	218.7	10.90	276.9	12.35	313.9	2.98	75.7	12.68	322.1



Reaction arm  
small tooth orientation

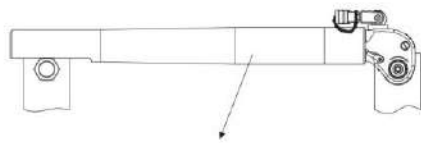


Fixed Button

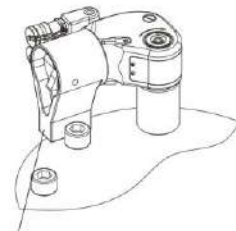


Small tooth driver

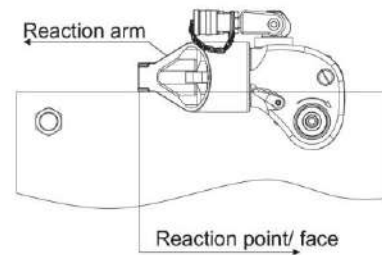
## HS Series HI-POWER Square Drive Hydraulic Torque Wrenches



Extended reaction tube  
HS-model ER-length  
ex.: HS-3ER-800



Extended reaction arm  
HS-model EA-length  
ex.: HS-3EA-200

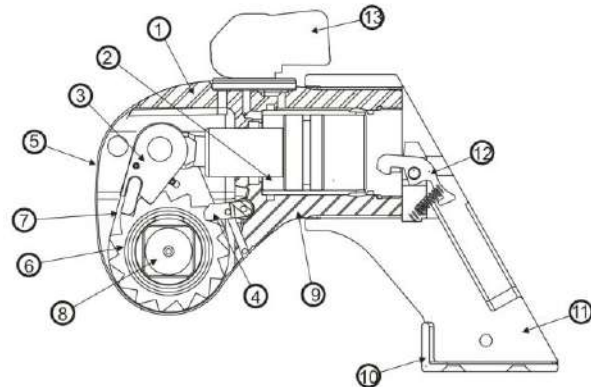


Reaction point/ face

### HS Series Torque Conversion Chart

Work pressure		HS-1			HS-3			HS-5			HS-8			HS-10			HS-20			HS-25		
psi	bar	lbf.ft	kgf.m	N.m	lbf.ft	kgf.m	N.m	lbf.ft	kgf.m	N.m	lbf.ft	kgf.m	N.m	lbf.ft	kgf.m	N.m	lbf.ft	kgf.m	N.m	lbf.ft	kgf.m	N.m
1450	100	201	28	273	475	66	645	810	112	1099	1136	157	1540	1670	231	2264	2864	396	3883	3659	506	4961
1740	120	242	33	328	571	79	774	972	134	1318	1363	188	1848	2004	277	2717	3437	475	4660	4391	607	5953
2031	140	282	39	382	666	92	902	1134	157	1538	1590	220	2156	2338	323	3169	4010	554	5437	5122	708	6945
2321	160	322	45	437	761	105	1031	1296	179	1758	1817	251	2464	2672	369	3622	4583	634	6213	5854	809	7937
2611	180	362	50	491	856	118	1160	1459	202	1977	2044	283	2772	3006	416	4075	5155	713	6990	6586	911	8929
2901	200	403	56	546	951	131	1289	1621	224	2197	2272	314	3080	3339	462	4528	5728	792	7766	7318	1012	9921
3191	220	443	61	601	1046	145	1418	1783	246	2417	2499	345	3388	3673	508	4980	6301	871	8543	8049	1113	10913
3481	240	483	67	655	1141	158	1547	1945	269	2637	2726	377	3696	4007	554	5433	6874	950	9320	8781	1214	11906
3771	260	524	72	710	1236	171	1676	2107	291	2856	2953	408	4004	4341	600	5886	7447	1030	10096	9513	1315	12898
4061	280	564	78	764	1331	184	1805	2269	314	3076	3180	440	4312	4675	646	6339	8020	1109	10873	10245	1416	13890
4351	300	604	84	819	1426	197	1934	2431	336	3296	3407	471	4620	5009	693	6792	8592	1188	11650	10976	1518	14882
4641	320	644	89	874	1521	210	2063	2593	358	3515	3635	503	4928	5343	739	7244	9165	1267	12426	11708	1619	15874
4931	340	685	95	928	1616	223	2192	2755	381	3735	3862	534	5236	5677	785	7697	9738	1346	13203	12440	1720	16866
5221	360	725	100	983	1712	237	2321	2917	403	3955	4089	565	5544	6011	831	8150	10311	1426	13980	13172	1821	17858
5511	380	765	106	1037	1807	250	2449	3079	426	4175	4316	597	5852	6345	877	8603	10884	1505	14756	13903	1922	18850
5802	400	805	111	1092	1902	263	2578	3241	448	4394	4543	628	6160	6679	923	9055	11457	1584	15533	14635	2023	19843
6092	420	846	117	1147	1997	276	2707	3403	471	4614	4770	660	6468	7013	970	9508	12029	1663	16310	15367	2125	20835
6382	440	886	122	1201	2092	289	2836	3565	493	4834	4998	691	6776	7347	1016	9961	12602	1742	17086	16099	2226	21827
6672	460	926	128	1256	2187	302	2965	3727	515	5054	5225	722	7084	7681	1062	10414	13175	1822	17863	16830	2327	22819
6962	480	966	134	1310	2282	316	3094	3889	538	5273	5452	754	7392	8015	1108	10866	13748	1901	18640	17562	2428	23811
7252	500	1007	139	1365	2377	329	3223	4051	560	5493	5679	785	7700	8349	1154	11319	14321	1980	19416	18294	2529	24803
7542	520	1047	145	1420	2472	342	3352	4213	583	5713	5906	817	8008	8683	1200	11772	14893	2059	20193	19026	2630	25795
7832	540	1087	150	1474	2567	355	3481	4376	605	5932	6133	848	8316	9017	1247	12225	15466	2138	20969	19757	2732	26787
8122	560	1128	156	1529	2662	368	3610	4538	627	6152	6361	879	8624	9350	1293	12678	16039	2217	21746	20489	2833	27780
8412	580	1168	161	1583	2757	381	3739	4700	650	6372	6588	911	8932	9684	1339	13130	16612	2297	22523	21221	2934	28772
8702	600	1208	167	1638	2853	394	3868	4862	672	6592	6815	942	9240	10018	1385	13583	17185	2376	23299	21953	3035	29764
8992	620	1248	173	1693	2948	408	3997	5024	695	6811	7042	974	9548	10352	1431	14036	17758	2455	24076	22684	3136	30756
9282	640	1289	178	1747	3043	421	4125	5186	717	7031	7269	1005	9856	10686	1477	14489	18330	2534	24853	23416	3237	31748
9572	660	1329	184	1802	3138	434	4254	5348	739	7251	7496	1036	10164	11020	1524	14941	18903	2613	25629	24148	3339	32740
9863	680	1369	189	1856	3233	447	4383	5510	762	7470	7724	1068	10472	11354	1570	15394	19476	2693	26406	24880	3440	33732
10153	700	1409	195	1911	3328	460	4512	5672	784	7690	7951	1099	10780	11688	1616	15847	20049	2772	27183	25611	3541	34725

## HS Series HI-POWER Square Drive Hydraulic Torque Wrenches



Work pressure		HS-35			
psi	bar	lbf.ft	kgf.m	N.m	
1450	100	5376	743	7289	
1740	120	6451	892	8747	
2031	140	7526	1041	10204	
2321	160	8601	1189	11662	
2611	180	9677	1338	13120	
2901	200	10752	1486	14578	
3191	220	11827	1635	16035	
3481	240	12902	1784	17493	
3771	260	13977	1932	18951	
4061	280	15053	2081	20409	
4351	300	16128	2230	21866	
4641	320	17203	2378	23324	
4931	340	18278	2527	24782	
5221	360	19353	2676	26240	
5511	380	20429	2824	27697	
5802	400	21504	2973	29155	
6092	420	22579	3122	30613	
6382	440	23654	3270	32071	
6672	460	24729	3419	33528	
6962	480	25804	3568	34986	
7252	500	26880	3716	36444	
7542	520	27955	3865	37902	
7832	540	29030	4014	39359	
8122	560	30105	4162	40817	
8412	580	31180	4311	42275	
8702	600	32256	4459	43733	
8992	620	33331	4608	45190	
9282	640	34406	4757	46648	
9572	660	35481	4905	48106	
9863	680	36556	5054	49564	
10153	700	37632	5203	51022	

1		High-strength Aluminum Alloy Housing HS series housing processed from solid block of 7075 AQ Aluminum and anti-rust finish-special surface treatment.
2		Strong piston Assembly Smooth leak proof functioning of enclosed alloy steel piston and single seal provides required torque.
3		Driving Segment Ensures tool will never lock up.
4		Anti-Back & Lock Allows hands free working.
5		Laser Engraved Torque Chart Opt two sided shroud is laser engraved with the torque chart for the HS series.
6		Multi-Tooth Driving & Ratchet Assembly Strong strength, high accuracy and best speed.
7		Drive Plate High strength alloy drive plate for maximum life. Allows small nose radius for the tool.
8		Square Driving "Push through" Square Drive that easily pushes through to switch from loosens to tighten.
9		Direct Housing Reaction Allows use without reaction arm.
10		Steel Reaction Boot Replaceable pad allowing on site change over. Protects costly replacement of reaction arm.
11		Long Length Reaction Arm Long length reaction arm allows multi positioning. Allows taking reaction on most applications.
12		Reaction Arm Release Button Housed within the reaction arm as a safety feature, protecting the arm from accidental disengagement.
13		360°*180° Swivel-Hose-Free Operation

