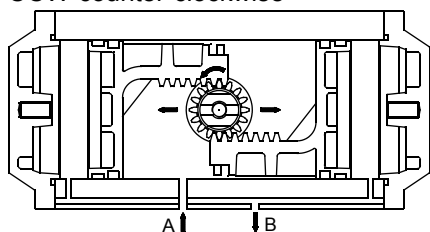


The operating principle of double acting actuator

Sizing example of HAITIMA double acting actuator:

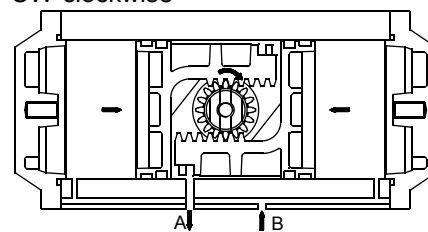
Valve torque 100Nm plus 30% safety factor= 130N.m. Minimum operating pressure 6bar. By reading down the 6bar column the figure below 130N.m is 136.4N.m, The model number shown in the left hand column is therefore HTD-092.

CCW-counter-clockwise



Air to port A forces the pistons outwards, causing the piston to turn counter-clockwise while air is being exhausted from port B.

CW-clockwise



Air to port B forces the pistons inwards, causing the piston to turn clockwise while air is being exhausted from port A.

## Torque Table of Double Acting Actuator Unit: in.lbs

Model	Air Supply Pressure						
	40 Psi	50 Psi	60 Psi	70 Psi	80 Psi	90 Psi	100 Psi
HTD-032	34	44	55	64	73	81	90
HTD-052	102	127	152	178	203	229	254
HTD-063	179	223	268	313	357	402	447
HTD-075	289	360	430	502	574	646	718
HTD-083	362	453	544	634	725	816	906
HTD-092	555	694	834	972	1110	1249	1388
HTD-105	829	1040	1251	1452	1657	1865	2072
HTD-125	1423	1779	2135	2491	2847	3203	3559
HTD-140	2142	2678	3213	3749	4284	4820	5356
HTD-160	3264	4080	4897	5713	6529	7345	8161
HTD-190	5261	6576	7891	9207	10522	11838	13153
HTD-210	7230	9038	10845	12653	14460	16267	18075
HTD-240	11333	14166	16999	19832	22666	25499	28332
HTD-270	15937	19921	23905	27889	31873	35857	39841
HTD-300	19557	24450	29344	34234	39123	44012	48901
HTD-350	29283	36606	43931	51255	58575	65896	73221
HTD-400	41816	52216	62599	73030	83462	93893	104325

Unit: N.m

Model	Air Supply Pressure					
	3 Bar	4 Bar	5 Bar	6 Bar	7 Bar	8 Bar
HTD-032	4.2	6	7.5	9	10	11.5
HTD-052	12.48	16.64	20.8	24.96	29.12	33.28
HTD-063	21.96	29.28	36.6	43.92	51.24	58.56
HTD-075	35.5	47	58.8	70.5	82.3	94
HTD-083	44.5	59.4	74.2	89.1	103.9	118.8
HTD-092	68.2	91.1	113.7	136.4	159.2	181.9
HTD-105	101.82	136.76	169.7	203.64	237.58	271.52
HTD-125	174.9	233.2	291.5	349.8	408.1	466.4
HTD-140	263.22	350.96	438.7	526.44	614.18	701.92
HTD-160	401.1	534.8	668.5	802.2	935.9	1069.6
HTD-190	646.44	861.9	1077.4	1292.9	1508.4	1723.8
HTD-210	888.4	1184.5	1480.6	1776.7	2072.8	2369
HTD-240	1392.5	1856.6	2320.8	2785	3249.1	3713.3
HTD-270	1958.2	2610.9	3263.6	3916.3	4569	5221.8
HTD-300	2403	3205	4006	4807	5608	6409
HTD-350	3598	4798	5998	7197	8397	9596
HTD-400	5138	6837	8546	10255	11964	13673