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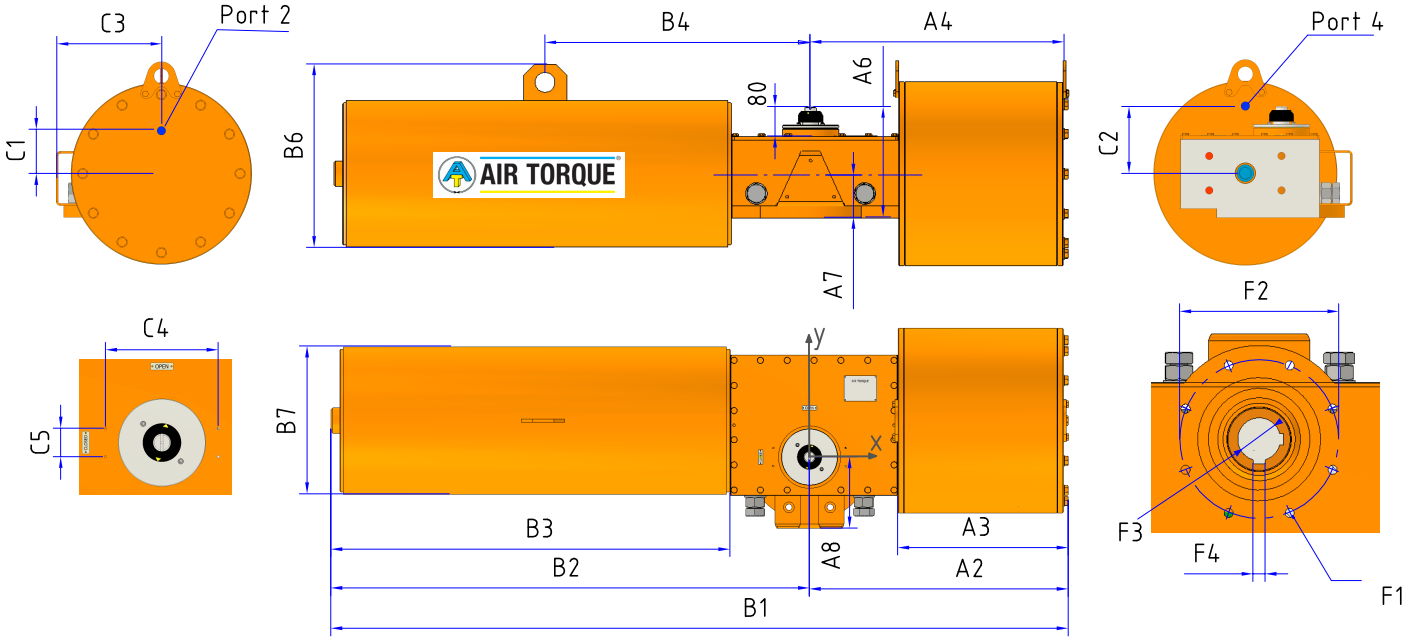
Model
AT-HD-100-P385I

*T.D.S. n° **AT-HD-100-P385I***

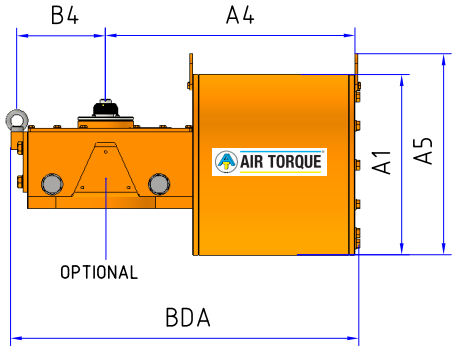
Dimensions in inches

SPRING RETURN



Center of gravity			
	SET	X	Y
DA	-	10,12	3,16
SR	02	-3,17	3,48
	04	-4,44	3,50
	06	-5,25	3,52
	08	-11,51	3,58

DOUBLE ACTING

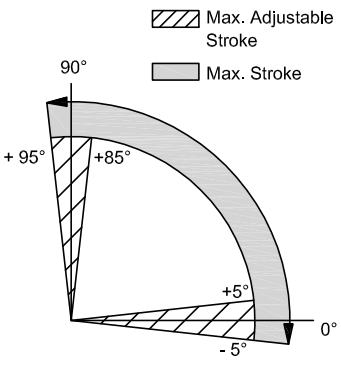


Actuator dimension					
SPRING SET	02	04	06	08	DA
A1	16,02	16,02	16,02	16,02	16,02
A2	27,99	27,99	27,99	27,99	27,99
A3	18,39	18,39	18,39	18,39	18,39
A4	27,60	27,60	27,60	27,60	27,60
A5	18,43	18,43	18,43	18,43	18,43
A6	12,09	12,09	12,09	12,09	12,09
A7	4,84	4,84	4,84	4,84	4,84
A8	7,72	7,72	7,72	7,72	7,72
B1	65,67	68,43	68,43	79,92	-
B2	37,68	40,43	40,43	51,93	-
B3	29,09	31,85	31,85	43,35	-
B4	21,54	22,72	22,72	28,90	9,76
BDA	-	-	-	-	38,50
B6	19,92	19,92	19,92	19,92	-
B7	15,98	15,98	15,98	15,98	-
WEIGHT (lbs)	1092	1129	1173	1400	638

Pressure connection	
PORT 2 AND 4	G1/2"
	1/2"NPT
C1	4,53
C2	5,91
C3	11,65
Ancillary Attachment	
SIZE	AA5
C4	7,87
C5	1,97
HOLES	M6

ISO 5211 Interface		
	STD	OPTIONAL
ISO 5211	F30	F25
F1	M20X1,18	M16X1,18
F2	11,73	10,00
F3	3,15H7	3,15H7
F4	0,866D10	0,866D10
Connection keyed bore depth	9,29	9,29

Rotation and stroke adjustment



Technical data											
Rotation STD	Air volume (in^3)				Approx. Moving time (sec.)(A)				Operating temperature range (°F)		
	Symmetric		Canted		DA		SR				
	opening	closing	opening	closing	opening	closing	opening	closing	S	H	L
0°-90°	1962	1880	1887	1977	1,2	1,1	2,8 ÷ 4,1	2,6 ÷ 4,0	-40 to +176	+5 to +302	-

Note:

A- Moving time test conditions: 90° stroke; Kv Supply system 2,7; no resistance load applied.

B- For operation, maintenance and services refer to the manual instruction IMAT AT-HD.

C- Maximum transmissible torque: 141.611 lbin (see M.O.P. for different configuration).

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SYMMETRIC YOKE

DOUBLE ACTING OUTPUT TORQUE (Lb-in)

Supply pressure	40 PSI		50 PSI		60 PSI		70 PSI		80 PSI		100 PSI		120 PSI		150 PSI	
Position	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing
Start	40.362	39.796	50.453	49.745	60.543	59.694	70.634	69.643	80.724	79.592	100.905	99.490	121.086	119.388	M.O.P. exceeded	
Run	23.531	23.201	29.413	29.001	35.296	34.801	41.179	40.601	47.061	46.401	58.827	58.002	70.592	69.602		
End	44.847	44.218	56.058	55.272	67.270	66.327	78.482	77.381	89.693	88.436	112.117	110.545	134.540	132.654		

SPRING RETURN OUTPUT TORQUE (Lb-in)

	Position	Spring - torque	Supply pressure - opening							
			40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	100 PSI	120 PSI	150 PSI
SPRING SET 02	Start	51.334			25.636	35.726	45.817	65.998		
	Run	22.398			12.898	18.780	24.663	36.428		
	End	34.907			15.936	27.147	38.359	60.782		
SPRING SET 04	Start	61.955					38.595	58.776	78.957	
	Run	27.033					20.029	31.794	43.560	
	End	42.130					27.738	50.161	72.585	
SPRING SET 06	Start	77.887						47.942	68.123	98.395
	Run	33.984						24.843	36.608	54.256
	End	52.963						34.230	56.653	90.289
SPRING SET 08	Start	92.933							57.892	88.164
	Run	40.549							30.043	47.691
	End	63.194							41.607	75.242

CANTED YOKE

DOUBLE ACTING OUTPUT TORQUE (Lb-in)

Supply pressure	40 PSI		50 PSI		60 PSI		70 PSI		80 PSI		100 PSI		120 PSI		150 PSI	
Position	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing	opening	closing
Start	57.789	31.764	72.236	39.705	86.683	47.646	101.130	55.587	115.577	63.528	144.471	79.410	173.366	95.292	216.707	119.115
Run	23.104	22.908	28.880	28.635	34.656	34.362	40.432	40.090	46.207	45.817	57.759	57.271	69.311	68.725	86.639	85.906
End	34.751	61.350	43.439	76.688	52.126	92.025	60.814	107.363	69.502	122.700	86.877	153.375	104.253	184.050	130.316	230.063

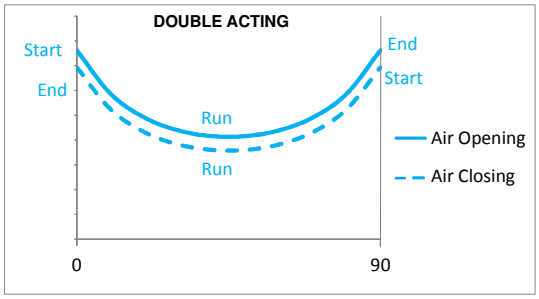
SPRING RETURN OUTPUT TORQUE (Lb-in)

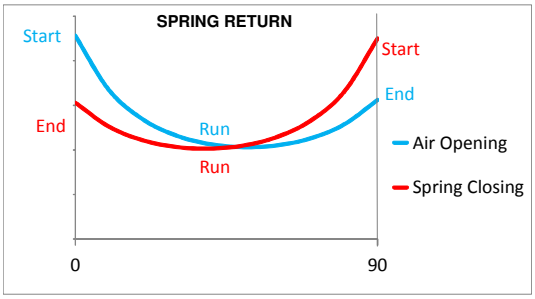
	Position	Spring - torque	Supply pressure - opening							
			40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	100 PSI	120 PSI	150 PSI
SPRING SET 02	Start	41.696			35.902	50.349	64.796	93.691		M.O.P. exceeded
	Run	23.798			10.858	16.634	22.410	33.962		
	End	50.781			10.431	19.118	27.806	45.181		
SPRING SET 04	Start	50.175					54.473	83.368	112.262	M.O.P. exceeded
	Run	28.636					17.571	29.123	40.675	
	End	61.104					19.327	36.702	54.078	
SPRING SET 06	Start	63.106						67.619	96.514	139.855
	Run	36.017						21.743	33.295	50.622
	End	76.852						23.771	41.147	67.210
SPRING SET 08	Start	76.285							79.911	123.253
	Run	43.626							25.685	43.013
	End	93.454							27.968	54.031

- M.O.P.: Maximun Operating Pressure.

- Torque values refer to: Counterclockwise rotation for opening and Clockwise rotation for closing (top view).

- TORQUES / POSITIONS:





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