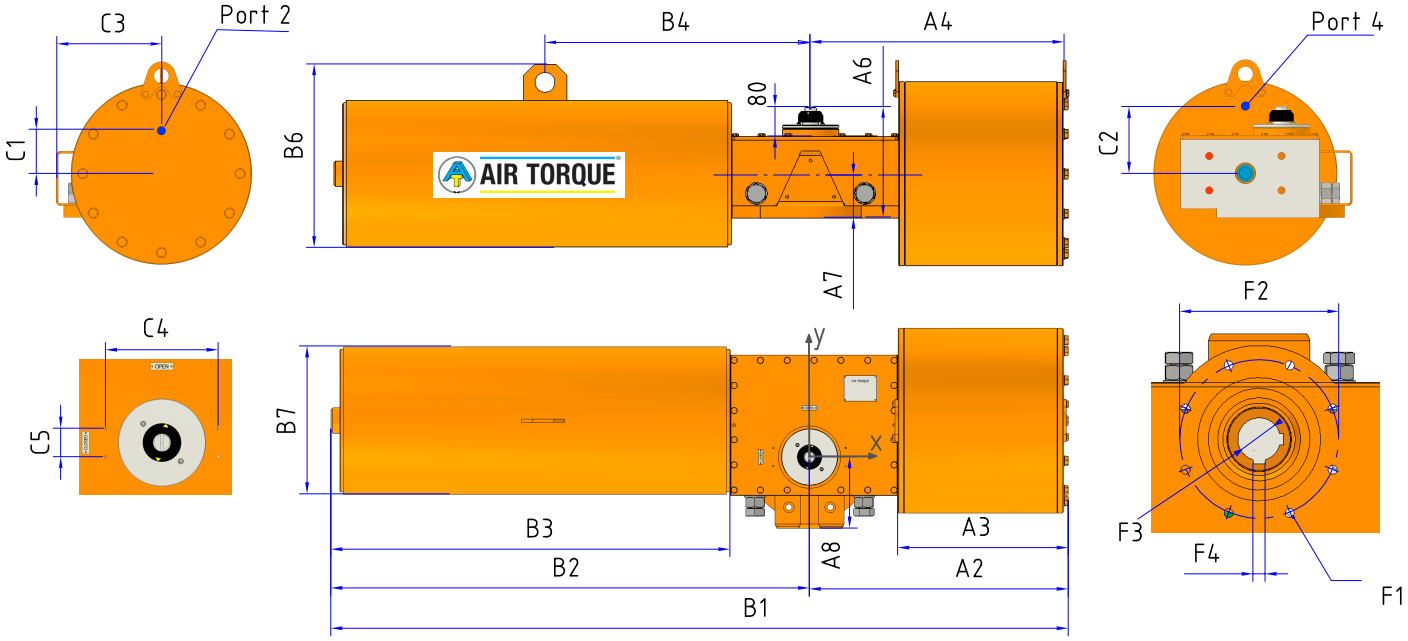
AIR TORQUE S.p.A.
via dei Livelli di Sopra, 8/11
24060 Costa di Mezzate(Bg) Italy
Tel.: +39 035 682299
Fax: +39 035 687791
E-mail: info@airtorque.it

Model
AT-HD-100-P435I

*T.D.S. n° **AT-HD-100-P435I***

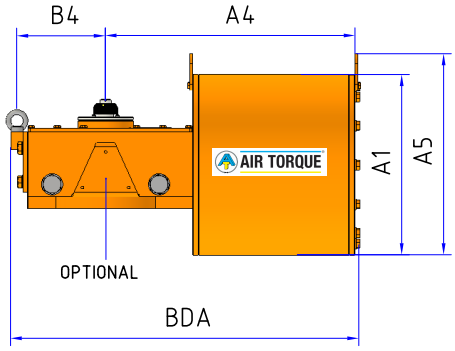
Dimensions in inches

SPRING RETURN



Center of gravity			
	SET	X	Y
DA	-	11,30	3,27
SR	02	-1,42	3,50
	04	-2,60	3,54
	06	-3,43	3,54
	08	-9,69	3,62

DOUBLE ACTING

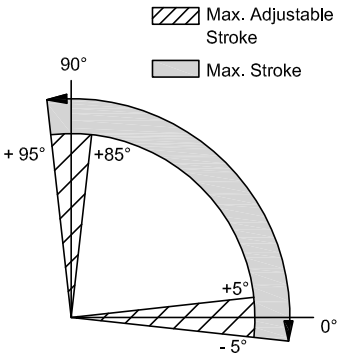


Actuator dimension					
SPRING SET	02	04	06	08	DA
A1	18,03	18,03	18,03	18,03	18,03
A2	27,95	27,95	27,95	27,95	27,95
A3	18,35	18,35	18,35	18,35	18,35
A4	27,60	27,60	27,60	27,60	27,60
A5	20,43	20,43	20,43	20,43	20,43
A6	12,09	12,09	12,09	12,09	12,09
A7	4,84	4,84	4,84	4,84	4,84
A8	7,72	7,72	7,72	7,72	7,72
B1	65,67	68,43	68,43	79,88	-
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	-	-	-	-	38,43
B6	19,92	19,92	19,92	19,92	-
B7	15,98	15,98	15,98	15,98	-
WEIGHT (lbs)	1189,00	1228	1273,00	1497	735,00

Pressure connection	
PORT 2 AND 4	G3/4"
	3/4"NPT
C1	4,72
C2	6,30
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°	2455	2361	2360	2512	1,0	1,0	2,3 ÷ 3,5	2,2 ÷ 3,3	-40 to +176	+5 to +302	-

Note:

A- Moving time test conditions: 90° stroke; Kv Supply system 4,0; 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	51.683	51.116	64.603	63.895	77.524	76.675	90.444	89.454	103.365	102.233						
Run	30.130	29.800	37.663	37.250	45.196	44.701	52.728	52.151	60.261	59.601	M.O.P. exceeded					
End	57.425	56.796	71.781	70.995	86.137	85.194	100.494	99.393	114.850	113.592						

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		29.696	42.616	55.537	68.458			M.O.P. exceeded
	Run	22.398		15.265	22.797	30.330	37.862			
	End	34.907		20.447	34.803	49.159	63.515			
SPRING SET 04	Start	61.955			35.394	48.315	61.235	87.077		M.O.P. exceeded
	Run	27.033			18.163	25.696	33.228	48.293		
	End	42.130			24.182	38.538	52.895	81.607		
SPRING SET 06	Start	77.887				37.482	50.402	76.243	102.085	
	Run	33.984				18.744	26.277	41.342	56.407	
	End	52.963				22.607	36.963	65.676	94.388	
SPRING SET 08	Start	92.933						66.012	91.853	130.615
	Run	40.549						34.777	49.842	72.440
	End	63.194						50.629	79.342	122.410

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	73.997	40.800	92.496	51.000	110.995	61.200	129.494	71.399								
Run	29.584	29.425	36.980	36.781	44.375	44.137	51.771	51.493	M.O.P. exceeded							
End	44.498	78.802	55.622	98.502	66.746	118.203	77.871	137.903								

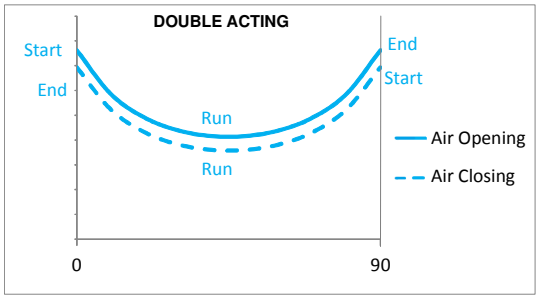
SPRING RETURN OUTPUT TORQUE (Lb-in)

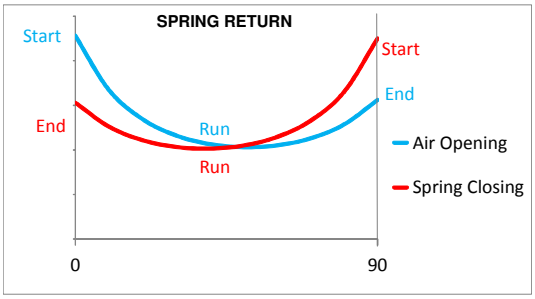
	Position	Spring - torque	Supply pressure - opening							
			40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	100 PSI	120 PSI	150 PSI
SPRING SET 02	Start	41.696		41.715	60.214	78.713	97.212			
	Run	23.798		13.182	20.578	27.974	35.370		M.O.P. exceeded	
	End	50.781		13.926	25.050	36.175	47.299			
SPRING SET 04	Start	50.175				68.390	86.889	123.888		
	Run	28.636				23.135	30.531	45.323	M.O.P. exceeded	
	End	61.104				27.696	38.820	61.069		
SPRING SET 06	Start	63.106					71.141	108.139		
	Run	36.017					23.151	37.943	M.O.P. exceeded	
	End	76.852					25.889	48.138		
SPRING SET 08	Start	76.285						91.537	128.535	M.O.P. exceeded
	Run	43.626						30.333	45.125	
	End	93.454						34.959	57.208	

- 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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