



AIR TORQUE

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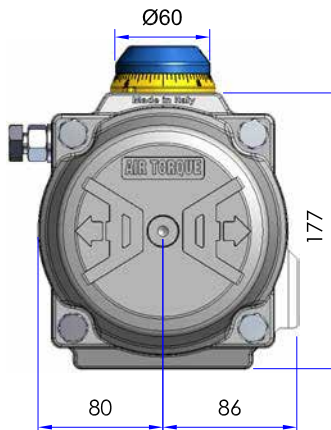
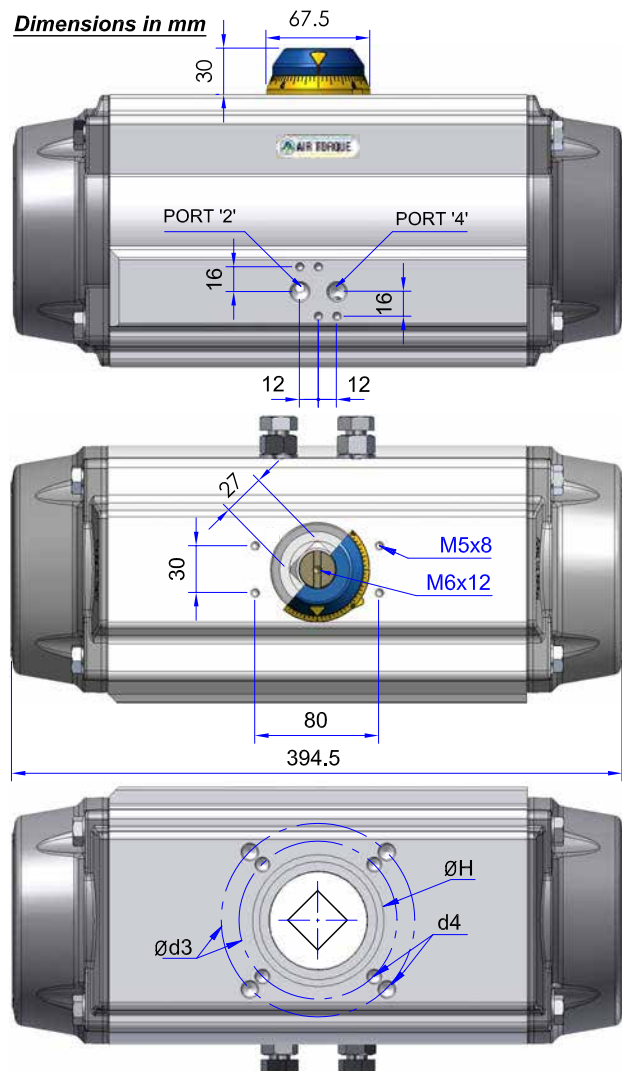
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Model AT451 U D/S - 90°

T.D.S. n° AT451U-DM
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Dimensions in mm

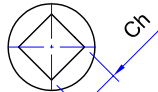


Optional Square:

"L"
Single Parallel
square



"D"
Single Diagonal
square

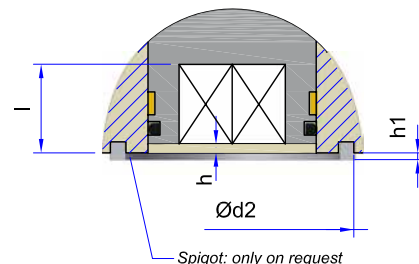


"DS"
Double square



ISO 5211 Flange Dimensions Available

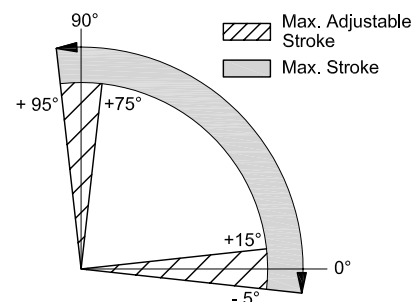
	STD		OPTIONAL
ISO 5211	F10 + F12		F12
Ø d2	70	NA	85
d3	102	125	125
Ø d4	M10x15	M12x18	M12x18
Ø H	70		85
Ch x l min.	D	-	22x32 - 27x29
	DS	27x29	
h min.	1,5	1,5	1,5
h1	3	NA	1,5



Connection / Attachment

Pressure connection: Port 2 and 4	G1/4"
Ancillary Attachment	AA 2

Rotation and stroke adjustment



Output Torque

OUTPUT TORQUE FOR DOUBLE ACTING IN Nm												APPROX. WEIGHT (Kg)
Pressure	2,5 bar 0° 90°	3 bar 0° 90°	3,5 bar 0° 90°	4 bar 0° 90°	4,2 bar 0° 90°	4,5 bar 0° 90°	5 bar 0° 90°	5,5 bar 0° 90°	6 bar 0° 90°	7 bar 0° 90°	8 bar 0° 90°	
D	217	261	304	348	365	391	435	478	522	609	696	14,2

OUTPUT TORQUE FOR SPRING RETURN IN Nm												Spring stroke 90° 0°	APPROX. WEIGHT (Kg)
Pressure	2,5 bar 0° 90°	3 bar 0° 90°	3,5 bar 0° 90°	4 bar 0° 90°	4,2 bar 0° 90°	4,5 bar 0° 90°	5 bar 0° 90°	5,5 bar 0° 90°	6 bar 0° 90°	7 bar 0° 90°	8 bar 0° 90°		
Spring Set	Start End	Start End	Start End	Start End	Start End	Start End	Start End	Start End	Start End	Start End	Start End	Start End	15,4
S 05	135 88,6	179 132	222 176	265 219	283 236	309 262	352 306					129 82,4	
S 06	119 62,8	162 106	206 150	249 193	266 211	293 237	336 280	379 324				155 99	
S 07		146 80,5	189 124	233 167	250 185	276 211	320 254	363 298	406 341			180 115	
S 08			173 98,2	216 142	233 159	260 185	303 229	347 272	390 316	477 403		206 132	
S 09				200 116	217 133	243 159	287 203	330 246	374 290	460 377	547 464	232 148	
S 10						227 134	270 177	314 221	357 264	444 351	531 438	258 165	
S 11							254 151	297 195	341 238	428 325	515 412	283 181	
S 12								281 169	324 213	411 299	498 386	309 198	17,1

Technical Data

Max. Pressure	Rotation (For STD)	Screw stroke Adjustment	Chamber φ (mm)	Air Volume (L)		Moving Time (Sec.) (A)	
				Opening	Closing	Opening	Closing
8 bar	0° - 90°	For 1° adj. need 1/4 Turn	145	2,41	3,78	D 1,2 S 1,5	D 1,4 S 1,8

Operating Temperature Range

Operating Temperature (°C) (B)		
ST (standard)	HT (high temperature)	LLT (Extreme low temperature)
- 40 to + 80	- 15 to + 150	- 55 to + 80

A) - The above indicated moving time of the actuator is obtained in the following test conditions: (1) Room Temperature, (2) Actuator Stroke 90°, (3) Solenoid Valve with Orifice of 4 mm and a flow capacity Qn 400 L/min., (4) Inside pipe diameter 8 mm, (5) Medium clean air, (6) Air supply pressure 5,5 bar (79,75 Psi), (7) Actuator without external resistance load. **Caution: obviously on the field applications when one or more of the above parameters are different, the moving time will be different.**

Operating Medium:

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µ (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice when actuator works below 0°C), the operating medium must have a dew point equal to -20°C or at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).

B) - Every temperature range option requires proper components and lubricant. See technical data-sheet N° T.D.S. U00501E.