



**AIR TORQUE**

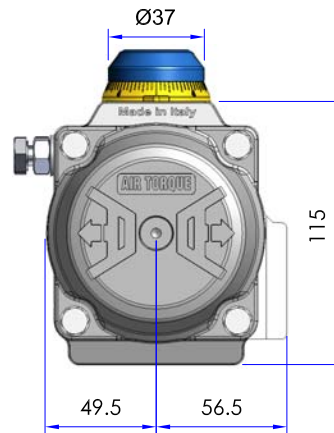
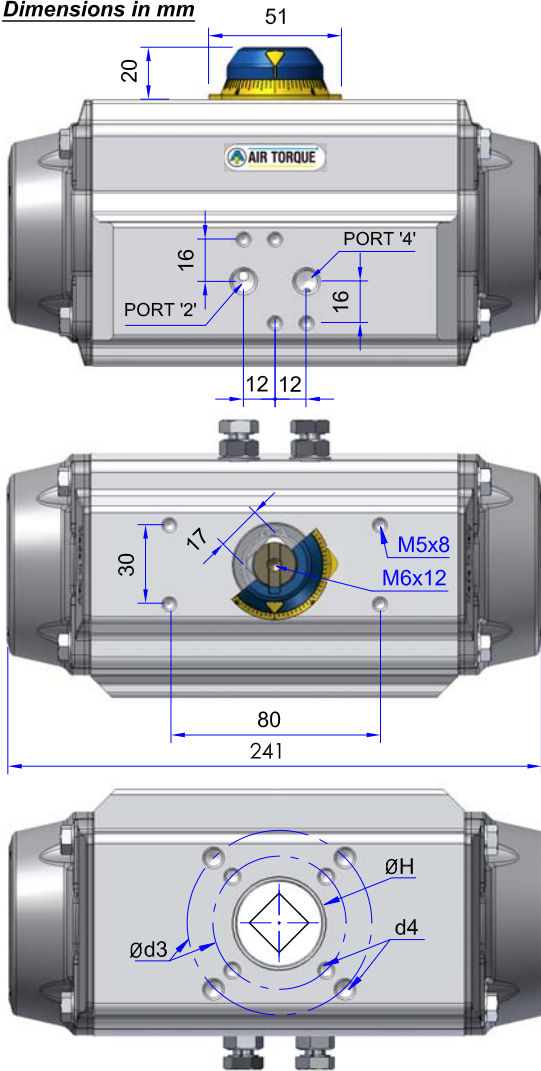
AIR TORQUE S p A



**Model AT251 U**  
**D/S - 90°**

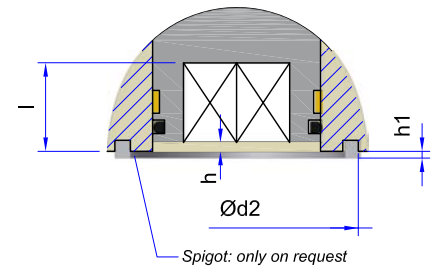
T.D.S. n° **AT251U-DM**  
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**Dimensions in mm**



**ISO 5211 Flange Dimensions Available**

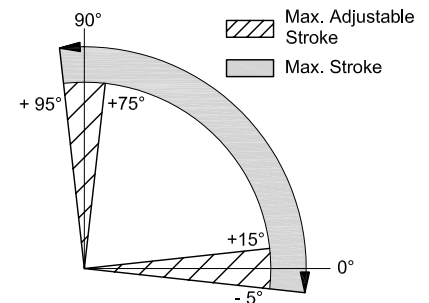
ISO 5211	STD		OPTIONAL
	F05 + F07	NA	F07
Ø d2	40	NA	55
Ø d3	50	70	70
d4	M6x9	M8x12	M8x12
Ø H	40		55
Ch x l	11x12 - 14x19 - 17x19		
min. DS	17x19		
h min.	1,5	1,5	1,5
h1	1,5	NA	2



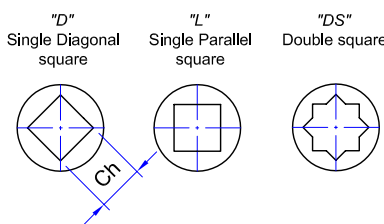
**Connection / Attachment**

Pressure connection: Port 2 and 4	G1/8"
Ancillary Attachment	AA 1

**Rotation and stroke adjustment**



**Optional Square:**



**Output Torque**

Pressure	OUTPUT TORQUE FOR DOUBLE ACTING IN Nm											APPROX. WEIGHT (Kg)
	2,5 bar	3 bar	3,5 bar	4 bar	4,2 bar	4,5 bar	5 bar	5,5 bar	6 bar	7 bar	8 bar	
0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	0° 90°	3,82
D	45,8	54,9	64,1	73,2	76,9	82,4	91,5	101	110	128	146	

Pressure	OUTPUT TORQUE FOR SPRING RETURN IN Nm												Spring stroke	APPROX. WEIGHT (Kg)				
	2,5 bar	3 bar	3,5 bar	4 bar	4,2 bar	4,5 bar	5 bar	5,5 bar	6 bar	7 bar	8 bar							
Spring Set	0° Start	0° End	0° Start	0° End	0° Start	0° End	0° Start	0° End	0° Start	0° End	0° Start	0° End	90° Start	0° End				
S 05	27,4	16,9	36,6	26	45,7	35,2	54,9	44,3	58,5	48	64	53,5	73,2	62,6	28,9	18,3	4,07	
S 06	23,8	11,1	32,9	20,3	42,1	29,4	51,2	38,6	54,9	42,2	60,4	47,7	69,5	56,9	34,7	22	4,12	
S 07			29,2	14,5	38,4	23,6	47,5	32,8	51,2	36,4	56,7	41,9	65,8	51,1	40,4	25,7	4,17	
S 08					34,7	17,9	43,9	27	47,5	30,7	53	36,2	62,2	45,3	46,2	29,3	4,22	
S 09					40,2	21,2	43,9	24,9	49,4	30,4	58,5	39,5	67,7	48,7	52	33	4,27	
S 10								45,7	24,6	54,8	33,8	64	42,9	73,1	52,1	57,8	36,7	4,32
S 11									51,2	28	60,3	37,1	69,5	46,3	63,5	40,3	4,37	
S 12											56,7	31,4	65,8	40,5	69,3	44	4,42	

**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 1/5 Turn	88	0,51	0,78	D 0,40	D 0,50
						S 0,50	S 0,60

**Operating Temperature Range**

ST (standard)	Operating Temperature (°C) (B)	
	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.