



# AIR TORQUE

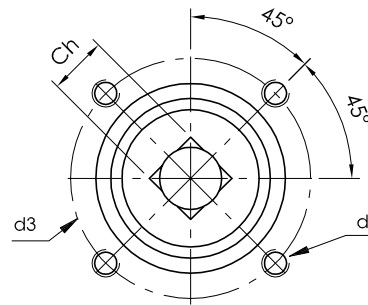
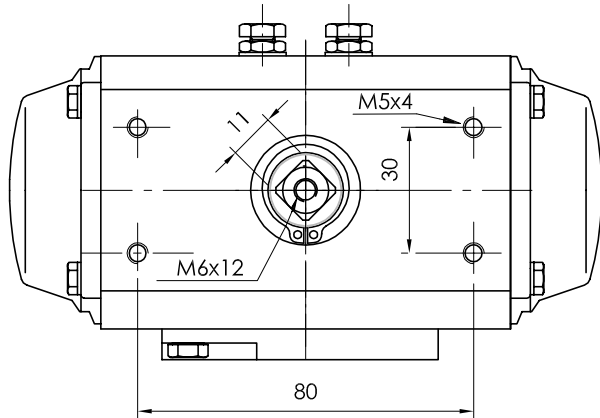
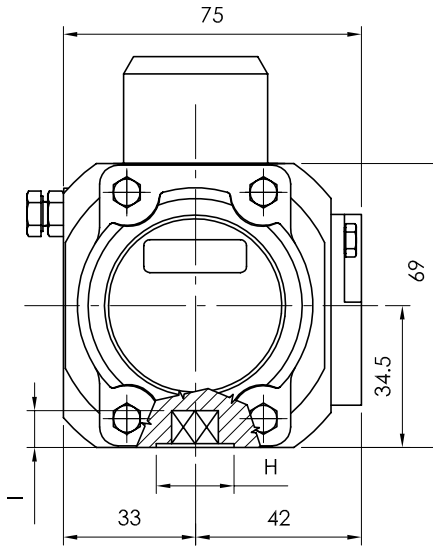
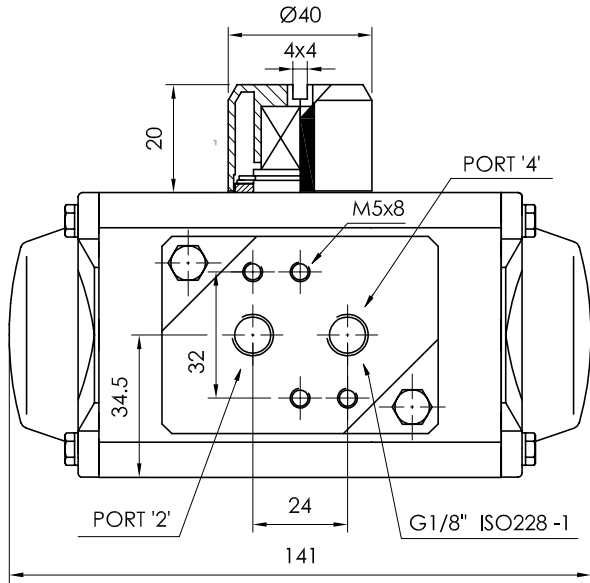
**AIR TORQUE S.p.A.**  
 via Alla Campagna, N°1  
 24060 Costa di Mezzate(Bg) Italy  
 Tel.: +39 035 682299  
 Fax: +39 035 687791  
 E-mail: info@airtorque.it

Technical Data Sheet n° **SAT051DM**  
 Issued on: 06/04

Page: 1/1

**Model S AT051**  
**DA and SR - 90°**

**Dimensions in mm**

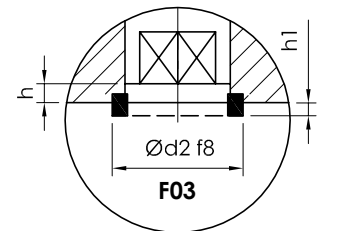
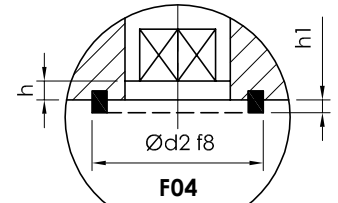


**Spigot available only on request**

**Available flange:**

- ⇒ F04
- ⇒ F03

Flange Dimensions		
ISO 5211	F03	F04
d2 f8	25	30
d3	36	42
d4	M5x8	M5x8
H	25	30
Ch	9	11
l min.	10	12
h min.	0,5	0,5
h1	1,5	1,5
Pressure connection	<b>B 1</b>	
Ancillary Attachment	<b>AA 1</b>	



TYPE	OUTPUT TORQUE FOR DOUBLE ACTING IN Nm											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		
Pressure	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	2,68
D	8,3		10		11,6		13,3		14		15		16,6		18,3		19,9		23,3		26,6		

TYPE	OUTPUT TORQUE FOR SPRING RETURN IN Nm											Spring stroke		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		90°	0°	
Pressure	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	End	Start	
S05	4,9	3,4	6,6	5,1	8,3	6,8	9,9	8,4	10,6	9,1	11,6	10,1	13,2	11,7									4,9	3,4	2,72
S06	4,3	2,5	5,9	4,1	7,6	5,8	9,3	7,4	9,9	8,1	10,9	9,1	12,6	10,8	14,2	12,4							5,8	4	2,73
S07			5,3	3,1	6,9	4,8	8,6	6,5	9,2	7,1	10,2	8,1	11,9	9,8	13,6	11,5	15,2	13,1					6,8	4,7	2,74
S08					6,2	3,8	7,9	5,5	8,6	6,2	9,6	7,2	11,2	8,8	12,9	10,5	14,6	12,1	17,9	15,5			7,8	5,4	2,75
S09							7,2	4,5	7,9	5,2	8,9	6,2	10,6	7,8	12,2	9,5	13,9	11,2	17,2	14,5	20,5	17,8	8,8	6,1	2,76
S10											8,2	5,2	9,9	6,9	11,5	8,5	13,2	10,2	16,5	13,5	19,8	16,8	9,7	6,7	2,77
S11													9,2	5,9	10,9	7,6	12,5	9,2	15,9	12,5	19,2	15,9	10,7	7,4	2,78
S12															10,2	6,6	11,9	8,2	15,2	11,6	18,5	14,9	11,7	8,1	2,79

Max. Pressure	Rotation	Screw stroke Adjustment	Chamber φ (mm)	Air Volume (L)		Moving Time (Sec.) (A)		Operating Temperature (°C) (B)		
				Opening	Closing	Opening	Closing	STD (standard)	HT (high temperature)	LT (low temperature)
8 bar	90° ±4° at 0° and 90°	For 1° adj. need 1/6 Turn	50	0,09	0,15	D 0,20 S 0,25	D 0,25 S 0,30	NBR "O" ring - 20 to + 80	FPM "O" ring - 15 to + 150	Silicone "O" ring - 40 to + 80

**Notes:**  
 (A) The above indicated moving time of the actuator, are 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. **Cautions: obviously on the field applications when one or more of the above parameter are different, the moving time will be different.**  
 (B) For HT (high temperature) and LT (low temperature) services, a special Lubricant is requested. Please contact Air Torque factory.

**Operating Medium:**  
 The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µm (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice, when actuator work 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).