



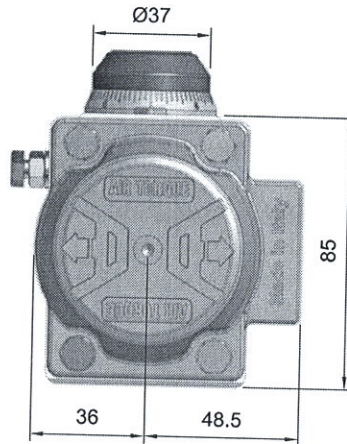
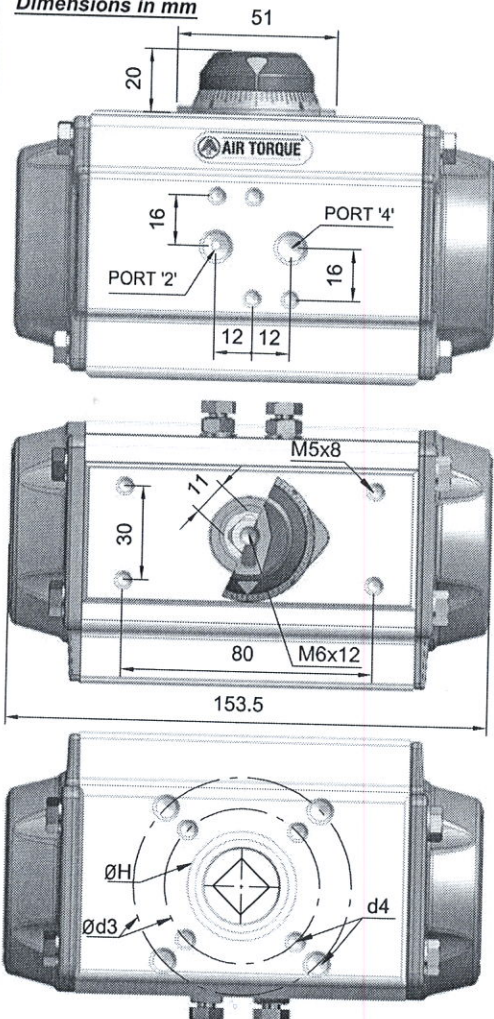
# AIR TORQUE

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**Model AT101 U**  
**D/S - 90°**

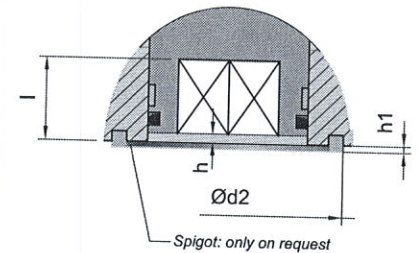
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**Dimensions in mm**



**ISO 5211 Flange Dimensions Available**

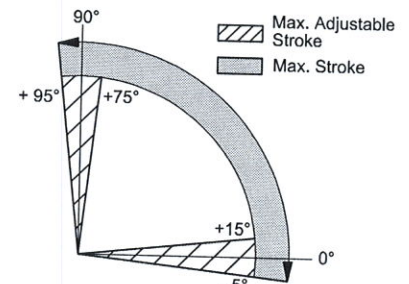
ISO 5211	STD		OPTIONAL				
	F05 + F07	F03 + F05	F04 + F07	F05	F06	F08	
Ø d2	35	NA	25	NA	30	NA	35
Ø d3	50	70	36	50	42	70	50
d4	M6x9	M8x12	M5x8	M6x9	M5x8	M8x12	M6x9
Ø H	35	25	30	35	30	35	35
Ch x l	9x11 - 14x16						
min. DS	11x19 - 14x16						
h min.	0,5	0,5	0,5	0,5	0,5	0,5	0,5
h1	2	NA	1,5	NA	2	NA	2



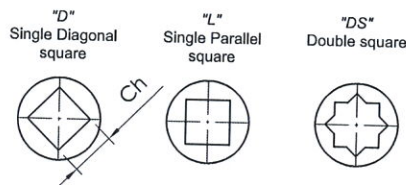
**Connection / Attachment**

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 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	14,7	17,6	20,5	23,5	24,6	26,4	29,3	32	35,2	41	46,9		1,61

Pressure	OUTPUT TORQUE FOR SPRING RETURN IN Nm												Spring stroke	APPROX. WEIGHT (KG)	
	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	Start End		
S 05	9,1 6,2	12,0 9,2	15,0 12,1	17,9 15	19,1 16,2	20,8 17,9	23,8 20,9							8,4 5,5	1,71
S 06	8,0 4,5	10,9 7,5	13,9 10,4	16,8 13,3	18 14,5	19,7 16,3	22,7 19,2	25,6 22,1						10,1 6,7	1,73
S 07		9,8 5,8	12,8 8,7	15,7 11,6	16,9 12,8	18,6 14,6	21,5 17,5	24,5 20,4	27,4 23,4					11,8 7,8	1,75
S 08			11,6 7	14,6 10,0	15,7 11,1	17,5 12,9	20,4 15,8	23,4 18,7	26,3 21,7	32,2 27,5				13,5 8,9	1,77
S 09				13,5 8,3	15 9,4	16,4 11,2	19,3 14,1	22,3 17,1	25,2 20	31,1 25,9	36,9 31,7			15,2 10	1,79
S 10						15,3 9,5	18,2 12,4	21,1 15,4	24,1 18,3	29,9 24,2	35,8 30			16,9 11,1	1,81
S 11							17,1 10,8	20 13,7	23 16,6	28,8 22,5	34,7 28,3			18,6 12,2	1,83
S 12								18,9 12	21,9 14,9	27,7 20,8	33,6 26,7			20,2 13,3	1,85

**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 1/6 Turn	63	0,16	0,26	D 0,25 S 0,30	D 0,30 S 0,35

**Operating Temperature Range Options**

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.





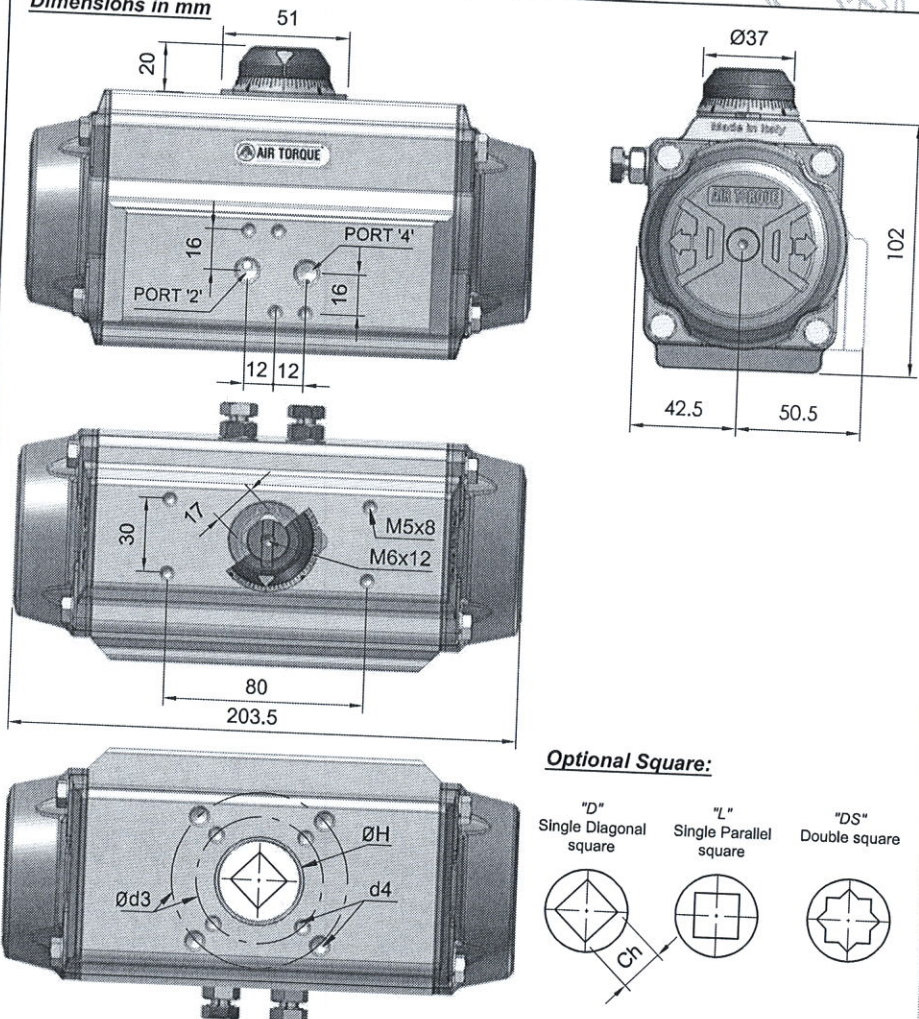
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**Model AT201 U**  
**D/S - 90°**

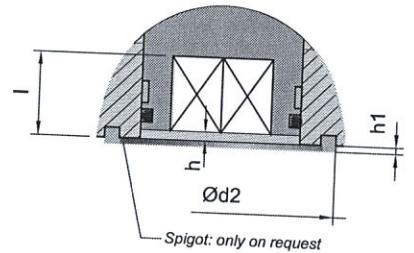
T.D.S. n° **AT201U-DM**  
 Issued on: 04/10 - Page 1/1

**Dimensions in mm**



**ISO 5211 Flange Dimensions Available**

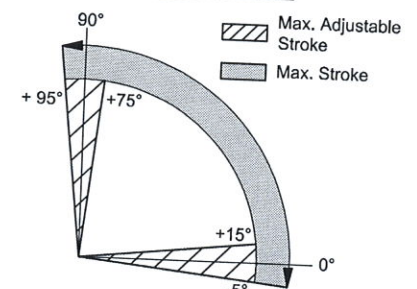
ISO 5211	STD		OPTIONAL		
	F05 + F07	F05	F05	F04 + F07	F07
Ø d2	35	NA	35	NA	NA
Ø d3	50	70	50	42	70
d4	M6x9	M8x12	M6x9	M5x8	M8x12
Ø H	35		35	NA	
Ch x l	11x19 - 14x16				
min. DS	14x19 - 17x19				
h min.	0,5	0,5	0,5	0,5	0,5
h1	2	NA	2	NA	



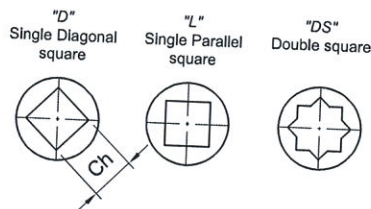
**Connection / Attachment**

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 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	29,1	34,9	40,7	46,5	48,9	52,4	58,2	64	69,8	81,4	93,1	2,68		

Pressure	OUTPUT TORQUE FOR SPRING RETURN IN Nm												Spring stroke 90° 0°	APPROX. WEIGHT (Kg)																
	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°																			
S 05	18	11,8	23,8	17,6	29,7	23,4	35,5	29,2	37,8	31,6	41,3	35,0	47,1	40,9																
S 06	15,8	8,3	21,6	14,1	27,5	19,9	33,3	25,8	35,6	28,1	39,1	31,6	44,9	37,4																
S 07			19,4	10,7	25,2	16,5	31,1	22,3	33,4	24,6	36,9	28,1	42,7	33,9	50,7	43,2				17,3	11,1	2,83								
S 08					23	13	28,8	18,8	31,2	21,2	34,7	24,7	40,5	30,5	48,5	39,8	54,3	45,6			20,8	13,3	2,86							
S 09							26,6	15,4	29	17,7	32,5	21,2	38,3	27	46,3	36,3	52,1	42,1	63,7	53,7			24,2	15,5	2,89					
S 10											30,2	17,7	36,1	23,6	44,1	32,8	49,9	38,6	61,5	50,3	73,2	61,9			27,7	17,7	2,92			
S 11															39,7	25,9	45,5	31,7	57,1	43,4	68,7	55	71	58,5			31,2	19,9	2,95	
S 12															33,8	20,1	37,5	22,4	43,3	28,3	54,9	39,9	66,5	51,5	41,5	26,5			3,01	
																														3,04

**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 1/6 Turn	75	0,31	0,49	D 0,30 S 0,40	D 0,35 S 0,50

**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.





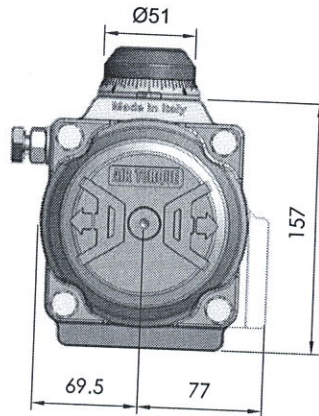
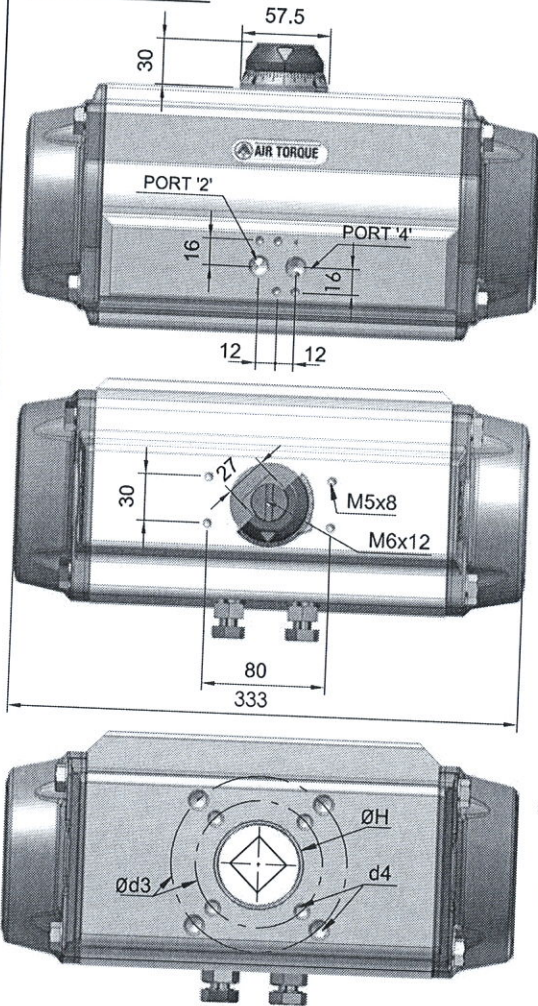
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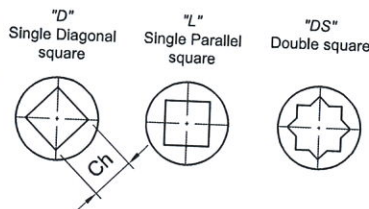
**Model AT401 U**  
**D/S - 90°**

T.D.S. n° AT401U-DM  
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**Dimensions in mm**

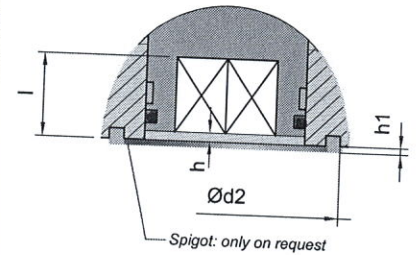


**Optional Square:**



**ISO 5211 Flange Dimensions Available**

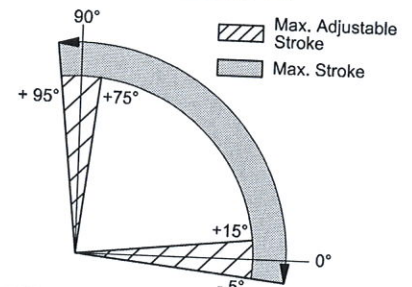
ISO 5211	STD		OPTIONAL
	F07 + F10	F10	F10
Ø d2	55	NA	70
d3	70	102	102
Ø d4	M8x12	M10x15	M10x15
Ø H	55		70
Ch x l	17x25 - 22x24		
min. DS	22x35 - 27x29		
h min.	1,5	1,5	1,5
h1	2	NA	1,5



**Connection / Attachment**

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

**Rotation and stroke adjustment**



**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		
D	138	166	194	222	233	249	277	305	332	388	443	9,97	

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						
S 05	86	56,1	114	83,8	141	111	169	139	180	150	197	167	224	195	82,4	52,5	10,97
S 06	75,5	39,6	103	67,3	131	95	159	123	170	134	186	150	214	178	98,9	63	11,17
S 07			92,7	50,8	120	78,5	148	106	159	117	176	134	203	162	115	73,5	11,37
S 08					110	62	138	89,7	149	101	165	117	193	145	132	84	11,57
S 09					127	73,3	138	84,3	155	101	182	129	210	156	148	94,5	11,77
S 10									144	84,5	172	112	200	140	165	105	11,97
S 11									161	95,7	189	123	217	151	181	116	12,17
S 12									179	107	206	135	262	190	198	126	12,37

**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	125	1,54	2,34	D 0,9	D 1,1
						S 1,2	S 1,4

**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.**

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