



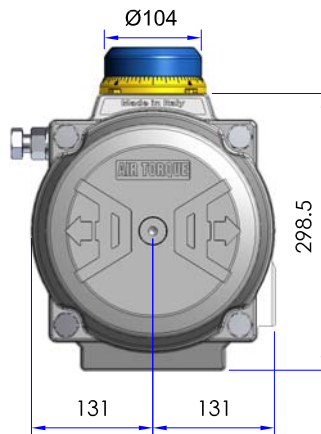
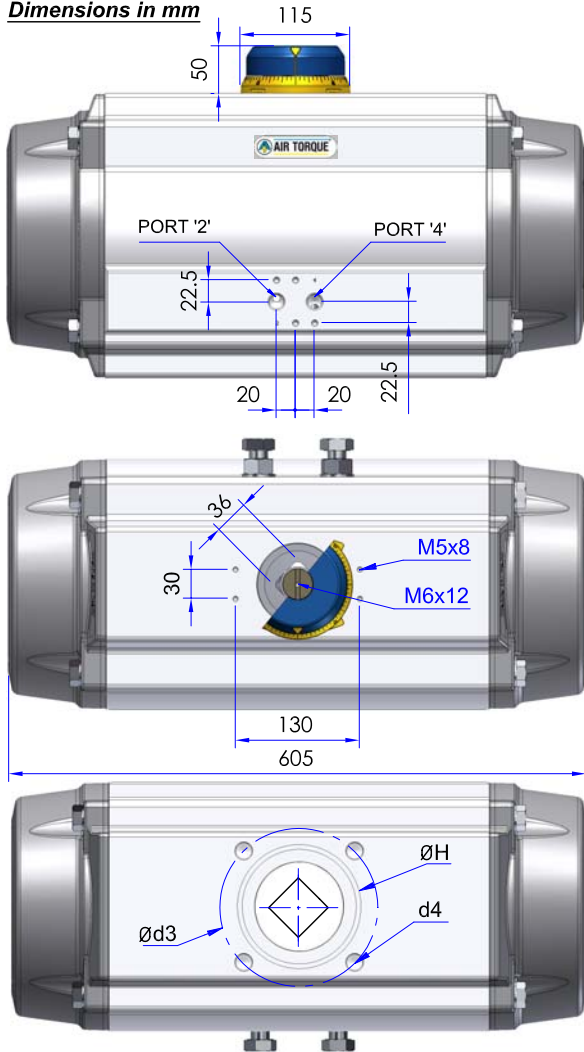
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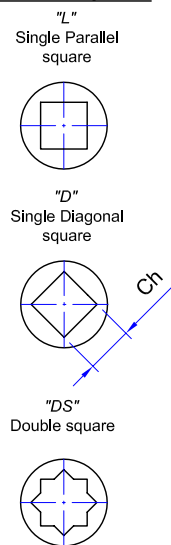
Model AT651 U
D/S - 90°

TDS n° **AT651U-DM**
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Dimensions in mm

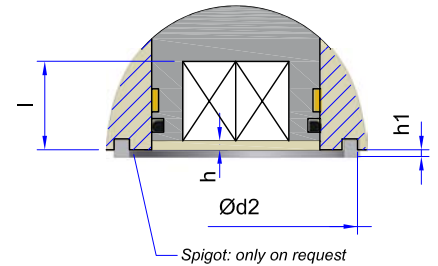


Optional Square:



ISO 5211 Flange Dimensions

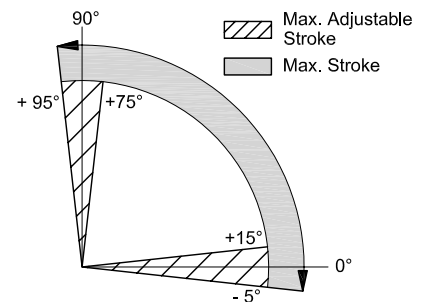
| ISO 5211 | STD | OPTIONAL | |
|-------------|---------------|----------|--------|
| | F16 | F14 | F12 |
| Ø d2 | 130 | 100 | NA |
| Ø d3 | 165 | 140 | 125 |
| d4 | M20x30 | M16x24 | M12x18 |
| Ø H | 130 | 100 | 93 |
| Ch x l min. | 27x40 - 46x48 | | |
| D DS | 36x38 - 46x48 | | |
| h min. | 2,5 | 2,5 | 2,5 |
| h1 | 1,5 | 1,5 | NA |



Connection / Attachment

| | |
|-----------------------------------|--------------|
| Pressure connection: Port 2 and 4 | G3/8" |
| Ancillary Attachment | AA4 |

Rotation and stroke adjustment



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 | |
| | 893 | 1072 | 1251 | 1430 | 1501 | 1608 | 1787 | 1966 | 2144 | 2502 | 2859 | 54,6 | |

| Pressure | OUTPUT TORQUE FOR SPRING RETURN IN Nm | | | | | | | | | | | | Spring stroke 90° 0° | APPROX. WEIGHT (Kg) |
|-------------|---------------------------------------|--------------------|----------------------|--------------------|----------------------|----------------------|--------------------|----------------------|--------------------|--------------------|--------------------|-----|-------------------------|---------------------|
| | 2,5 bar Start End | 3 bar Start End | 3,5 bar Start End | 4 bar Start End | 4,2 bar Start End | 4,5 bar Start End | 5 bar Start End | 5,5 bar Start End | 6 bar Start End | 7 bar Start End | 8 bar Start End | Set | | |
| S 05 | 533 372 | 712 551 | 890 730 | 1069 908 | 1141 980 | 1248 1087 | 1426 1266 | | | | | | 521 360 | 60,6 |
| S 06 | 461 268 | 640 447 | 818 625 | 997 804 | 1068 876 | 1176 983 | 1354 1162 | 1533 1340 | | | | | 625 433 | 61,8 |
| S 07 | | 568 343 | 746 521 | 925 700 | 996 771 | 1104 879 | 1282 1057 | 1461 1236 | 1640 1415 | | | | 730 505 | 63 |
| S 08 | | | 674 417 | 853 596 | 924 667 | 1032 774 | 1210 953 | 1389 1132 | 1568 1310 | 1925 1668 | | | 834 577 | 64,2 |
| S 09 | | | | 781 491 | 852 563 | 959 670 | 1138 849 | 1317 1028 | 1495 1206 | 1853 1564 | 2210 1921 | | 938 649 | 65,4 |
| S 10 | | | | | | 887 566 | 1066 745 | 1245 923 | 1423 1102 | 1781 1459 | 2138 1817 | | 1042 721 | 66,6 |
| S 11 | | | | | | | 994 640 | 1173 819 | 1351 998 | 1709 1355 | 2066 1713 | | 1146 793 | 67,8 |
| S 12 | | | | | | | | 1101 715 | 1279 894 | 1637 1251 | 1994 1608 | | 1251 865 | 69 |

Technical Data

| Max. Pressure | Rotation | Screw stroke Adjustment | Chamber Ø (mm) | Air Volume (L) | | Moving Time (Sec.) (A) | |
|---------------|----------|---------------------------|----------------|----------------|---------|------------------------|----------------|
| | | | | Opening | Closing | Opening | Closing |
| 8 bar | 0° - 90° | For 1° adj. need 1/4 Turn | 240 | 10 | 15,2 | D 3,5 S 4,1 | D 4,0 S 4,6 |

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 11 mm and a flow capacity Qn 6000 L/min., (4) Inside pipe diameter 11 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.**

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

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).