STAINLESS STEEL 90° ACTUATOR

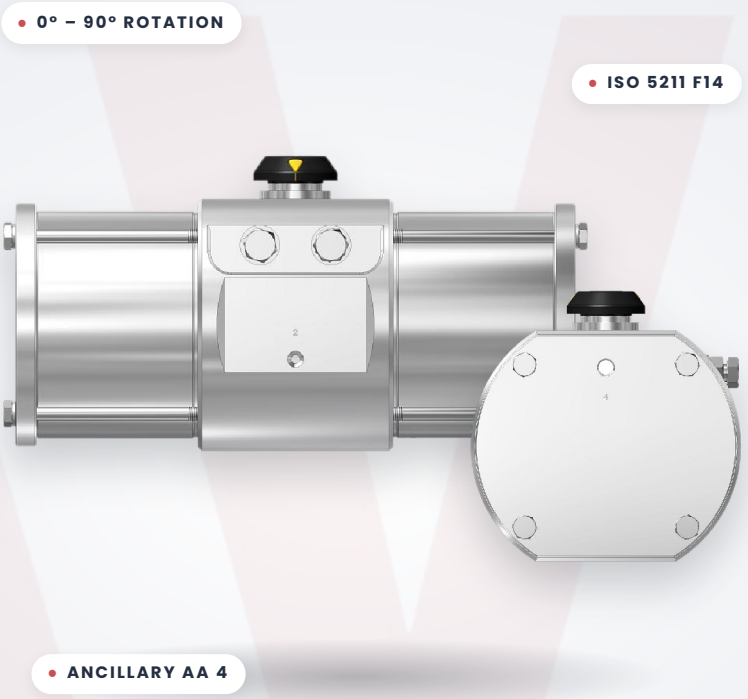
SB AT554

Double acting & spring return · 90°

T.D.S. SB AT554-DM · issued 06/11

Air Torque SB AT554 pneumatic 90° actuator, offered double acting (D) or spring return (S). Full output torque, dimensions and ISO 5211 mounting data from Air Torque T.D.S. SB AT554-DM.

- Double acting (D) and spring return (S) versions
- 8 spring sets, S 05 to S 12
- ISO 5211 F14 standard; F10 + F12 optional
- Pressure connection G1/4", ports 2 and 4
- Drive shaft with integral top, 4x4 · ST / HT / LLT options



8 bar	919 Nm	58 kg	492 mm
MAX. PRESSURE	DA TORQUE AT 6 BAR	APPROX. WEIGHT, D	OVERALL LENGTH

Output torque.

NM AT SUPPLY PRESSURE

DOUBLE ACTING (D)

Pressure	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	Approx. weight (kg)
D	**383**	**459**	**536**	**613**	**643**	**689**	**766**	**842**	**919**	**1072**	**1225**	**58**

SPRING RETURN (S)

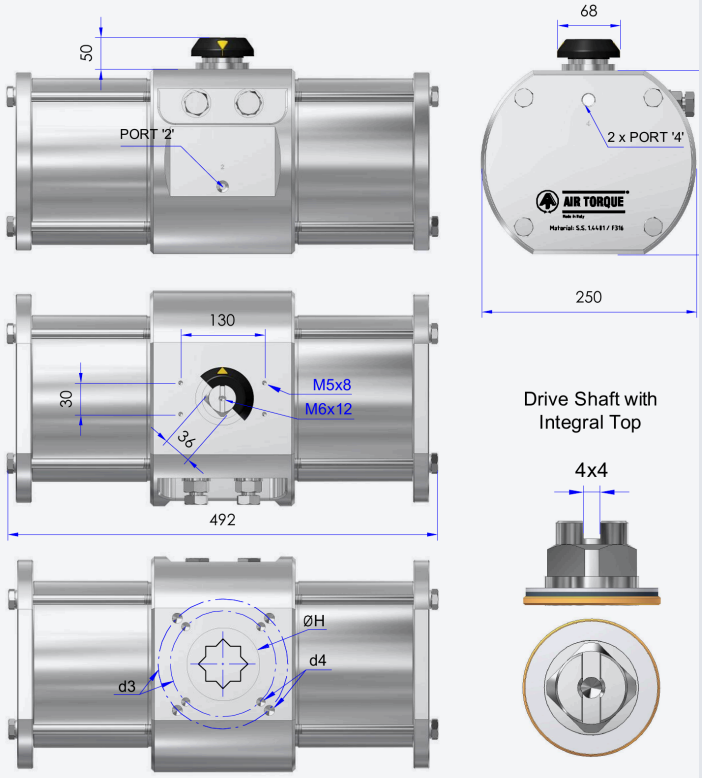
air stroke 0° → 90° · spring stroke 90° → 0°

Spring set	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 stroke		Approx. weight (kg)
	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	**225**	**146**	301	223	378	299	455	376	485	406	531	452	608	529									**237**	**158**	**60.7**
S 06	193	99	**270**	**175**	346	252	423	329	454	359	500	405	576	482	653	558							**284**	**190**	**61.3**
S 07			238	128	**315**	**205**	391	281	422	312	468	358	544	434	621	511	698	587					**332**	**221**	**61.8**
S 08					283	157	**360**	**234**	**390**	**264**	436	310	513	387	589	464	666	540	819	693			**379**	**253**	**62.3**
S 09							328	186	359	217	**405**	**263**	481	340	558	416	634	493	788	646	941	799	**426**	**285**	**62.9**
S 10											373	216	**450**	**292**	526	369	603	445	756	599	909	752	**474**	**316**	**63.4**
S 11													418	245	**495**	**321**	571	398	724	551	877	704	**521**	**348**	**64**
S 12															463	274	**540**	**351**	693	504	846	657	**568**	**379**	**64.5**

Highlighted figures are shown in bold on the Air Torque data sheet. Blank cells: no value given by Air Torque for that spring set and pressure.

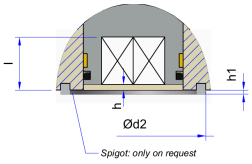
DIMENSIONS

Drawing (mm)

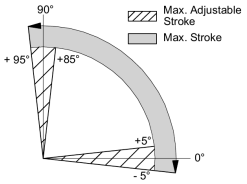


ISO 5211 FLANGE DIMENSIONS

	STD	Optional	
ISO 5211	**F14**	**F10 + F12**	
Ø d2	100	NA	85
Ø d3	140	102	125
d4	M16x24	M10x15	M12x18
Ø H	100	70	
Ch x l min.	DS27x29 – DS36x39		
h min.	2	2	2
h1	3	NA	1.5



Spigot detail



Rotation & stroke adjustment

Technical data.

SB AT554 · T.D.S. SB AT554-DM

Max. pressure	8 bar
Rotation (standard)	0° – 90°
Stroke adjustment	For 1° adjustment, 1/4 turn
Chamber Ø	180 mm
Air volume	Opening 4.26 L · closing 6.89 L
Moving time (A)	D: opening 2.0 s · closing 2.2 s S: opening 2.4 s · closing 2.8 s

Pressure connection	Ports 2 and 4 · G1/4"* **NPT (ANSI B1-20-1) threads available on request*
Ancillary attachment	AA 4
Temperature (B)	ST (standard): -40 to +80 °C HT (high temperature): -15 to +150 °C LLT (extreme low temperature): -55 to +80 °C
Operating medium	Free of dust and oil – see note below

Operating medium. The operating medium must be free of dust and oil. Maximum particle size 30 µm (ISO 8573 Part 1, Class 5). To prevent water condensation and/or solidification (ice when the 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 Part 1, Class 3).

A) The moving times above were obtained under the following test conditions: (1) room temperature, (2) actuator stroke 90°, (3) solenoid valve with 11 mm orifice and 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. In field applications where one or more of these parameters differ, the moving time will be different.

B) Every temperature range option requires proper components and lubricant. See Air Torque technical data sheet T.D.S. S00501E.

Data supplied by Air Torque S.p.A. and provided for reference only. Specifications may change without notice – please confirm details with Actuation Valve & Control before ordering.

Sizing an Air Torque actuator?

Talk to our UK team about torque sizing, spring sets, mounting kits and complete actuated valve packages.

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