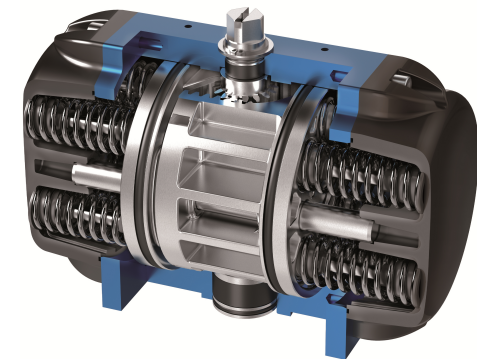


## DOUBLE-PISTON QUARTER TURN ACTUATORS

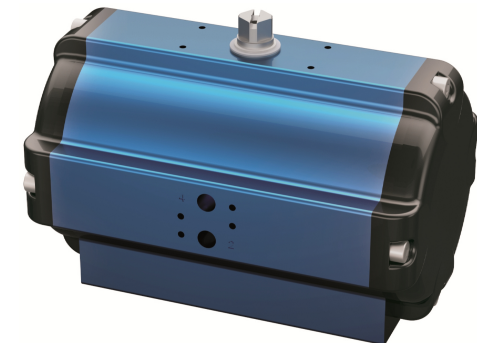
### TYPE BR16 SAD / SAF 90°

#### Technical Data

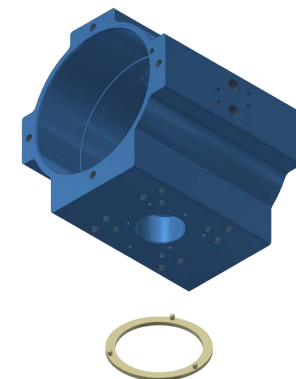
<b>Design :</b>	Pneumatic double-piston quarter turn actuator
<b>Design features :</b>	Rack-and-pinion system, piston guide via guide rods
<b>Angle of rotation :</b>	0°-90°
<b>Air pressure supply :</b>	mind. 2 bar, max. 10 bar
<b>Operating medium :</b>	Dry and filtered compressed air
<b>Ambient temperature :</b>	-25°C to +80°C
<b>Mounting position :</b>	any
<b>Resistance to corrosion :</b>	Industrial atmosphere
<b>Lubrication :</b>	Life time lubrication with grease ISO 51825-K2K-30
<b>Seals :</b>	NBR-O-Rings, 70 Shore
<b>Coatings :</b>	Housing anodized and colour sealed End caps - CED cathodic electrodeposition
<b>Maintenance and inspection :</b>	AMG actuators are free of maintenance within the life time. Provided that: <ul style="list-style-type: none"> <li>• the actuator is properly mounted</li> <li>• the operating medium used is clean and non-aggressive</li> <li>• the actuator is operated under normal ambient conditions</li> <li>• the actuator is used in compliance with the intended use (see assembly and maintenance manual)</li> </ul>
<b>Applied standard:</b>	DIN EN ISO 5211, DIN EN 15714-3, VDI / VDE 3845, DIN 79
<b>Options:</b>	Extended angle of rotation 120°, 135°, 180° Adjustable inner / outer travel stops up to +/- 5° via travel-stop-module (TSM) Ambient temperature up to +100°C Ambient temperature down to -40°C Sealing elements made of FKM (viton) or alternatively fluorosilicone Tailor made mounting kits and dimensioning acc. To customer requirements Variable cycle times (fast / slow) Variable sens of rotation (clockwise / counterclockwise) Coating options: Hard-Coat, chemical nickelplating, plastic coating, special lacquer



SAF



SAD



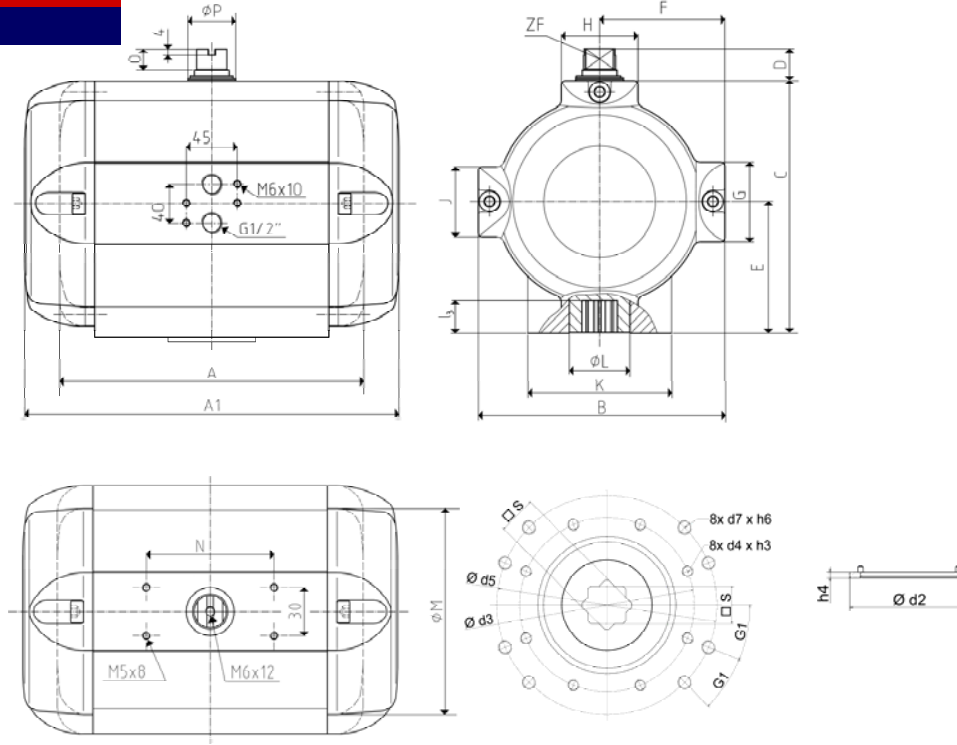


**DOUBLE-PISTON QUARTER TURN ACTUATORS**  
**TYPE BR16 SAD / SAF 90°**

Size	50	
Weight [kg]		
Type SAD	126	
Type SAF	170	
Stroke volume [dm³]		
Type SAD	43,8	
Type SAF	25,0	
Operating times [sec.] <sup>1)</sup>		
Type SAD OPEN	7,0	
Type SAD CLOSE	7,0	
Type SAF <sup>2)</sup> OPEN	11,0	
Type SAF <sup>2)</sup> CLOSE	4,0	

1) operating times at 4,5 bar air pressure supply without load (standard values)

2) Type SAF with 9 springs



Type	number of springs n	spring-torque		air torque Ma [Nm] at operating pressure pe [bar]																											
		Ms [Nm]		2 bar		2,5 bar		3 bar		3,5 bar		4 bar		4,5 bar		5 bar		5,5 bar		6 bar		6,5 bar		7 bar		7,5 bar		8 bar			
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX		
SAD 50	-	-	-	1576	2039	2503	2952	3411	3879	4333	4792	5256	5724	6164	6604	7045															
SAF 50	4	622	1033	543	954	1006	1417	1470	1881	1919	2330	2378	2789	2846	3257	3300	3711	3759	4170	4223	4634	4691	5102	5131	5542	5571	5982	6012	6423		
	5	777	1291	285	799	748	1262	1212	1726	1661	2175	2120	2634	2588	3102	3042	3556	3501	4015	3965	4479	4433	4947	4873	5387	5313	5827	5754	6268		
	6	933	1550	26	643	489	1106	953	1570	1402	2019	1861	2478	2329	2946	2783	3400	3242	3859	3706	4323	4174	4791	4614	5231	5054	5671	5495	6112		
	7	1088	1808			231	951	695	1415	1144	1864	1603	2323	2071	2791	2525	3245	2984	3704	3448	4168	3916	4636	4356	5076	4796	5516	5237	5957		
	8	1244	2066					437	1259	886	1708	1345	2167	1813	2635	2267	3089	2726	3548	3190	4012	3658	4480	4098	4920	4538	5360	4979	5801		
	9	1399	2324					179	1104	628	1553	1087	2012	1555	2480	2009	2934	2468	3393	2932	3857	3400	4325	3840	4765	4280	5205	4721	5646		
	10	1555	2583						369	1397	828	1856	1296	2324	1750	2778	2209	3237	2673	3701	3141	4169	3581	4609	4021	5049	4462	5490			
	11	1710	2841						111	1242	570	1701	1038	2169	1492	2623	1951	3082	2415	3546	2883	4014	3323	4454	3763	4894	4204	5335			
	12	1866	3099								312	1545	780	2013	1234	2467	1693	2926	2157	3390	2625	3858	3065	4298	3505	4738	3946	5179			
	special version																														
	13	2021	3368								43	1390	511	1858	965	2312	1424	2771	1888	3235	2356	3703	2796	4143	3236	4583	3677	5024			
	14	2177	3616											263	1702	717	2156	1176	2615	1640	3079	2108	3547	2548	3987	2988	4427	3429	4868		

Design	SAD / SAF
Size	50
A (double-acting)	567
A1 (single-acting)	817
B	390
C	389
D	30
E	197
F	195
G	84
H	150
K	265
Ø L	132
J	84
Ø M	345
N	130
O	18
Ø P	110
ZF	46
Connection ISO 5211	F25
Ø d2	200
h4	5
Ø d3	254
8x d4xh3	8x M16x25
Ø d5	320
l <sub>3</sub>	60
s	55
4x d6xh5	-
8x d7xh6	8x M20x31
Y	-
Z	-
W1	-
X1	-
G1	8x 22,5°