

DOUBLE-PISTON QUARTER TURN ACTUATORS

TYPE BR16 SAD / SAF 180°

Technical Data

Design :	Pneumatic double-piston quarter turn actuator
Design features :	Rack-and-pinion system, piston guide via guide rods
Angle of rotation :	0°-180°, with adjustable end position 180° -5° / +3°
Air pressure supply :	mind. 2 bar, max. 8 bar
Operating medium :	Dry and filtered compressed air
Ambient temperature :	-25°C to +80°C
Mounting position :	any
Resistance to corrosion :	Industrial atmosphere
Lubrication :	Life time lubrication with grease ISO 51825-K2K-30
Seals :	NBR-O-Rings, 70 Shore
Coatings :	Housing anodized and colour sealed End caps - CED Cathodic electrodeposition
Maintenance and inspection :	AMG actuators are free of maintenance within the life time. Provided that: <ul style="list-style-type: none"> • the actuator is properly mounted • the operating medium used is clean and non-aggressive • the actuator is operated under normal ambient conditions • the actuator is used in compliance with the intended use (see assembly and maintenance manual)
Applied standard:	DIN EN ISO 5211, DIN EN 15714-3, VDI / VDE 3845, DIN 79



SAD - 180°



SAF - 180°

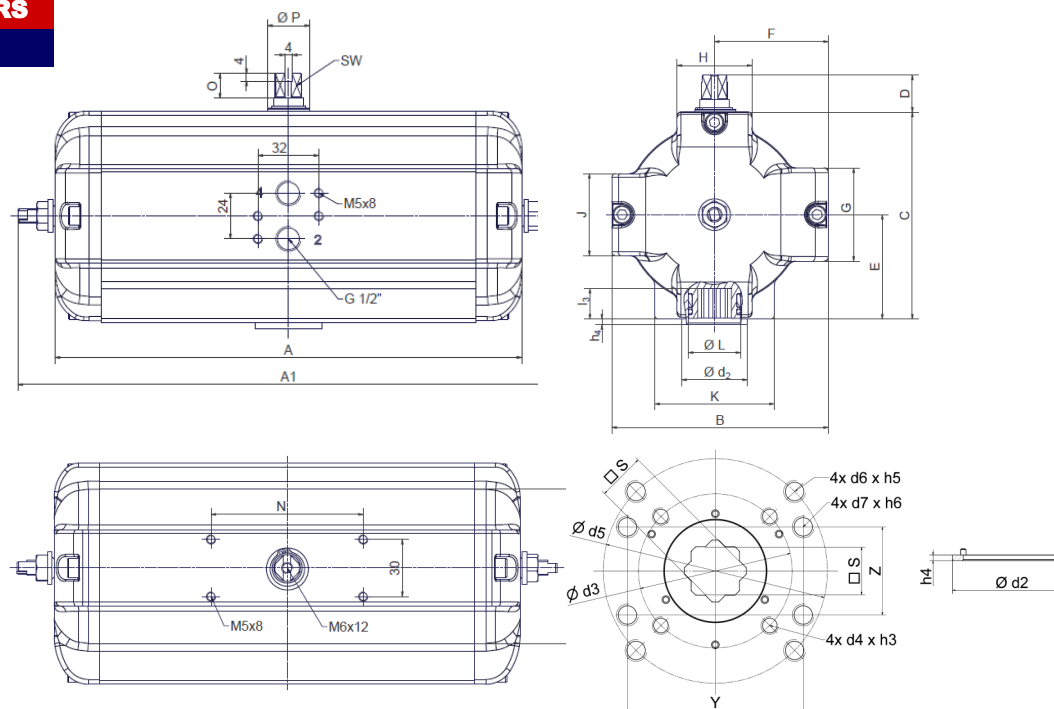
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Size	45
Weight [kg]	
Type SAD	113
Type SAF	182
Stroke volume [dm³]	
Type SAD	51,5
Type SAF	30,5
Operating times [sec.] ¹⁾	
Type SAD OPEN	6,0
Type SAD CLOSE	6,0
Type SAF ²⁾ OPEN	11
Type SAF ²⁾ CLOSE	5,0

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

2) Type SAF with 18 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 45	-	-		893		1156		1419		1674		1934		2199		2457		2717		2980		3245		3495		3744		3994			
SAF 45	8	352	585	308	541	571	804	834	1067	1089	1322	1349	1582	1614	1847	1872	2105	2132	2365	2395	2628	2660	2893	2910	3143	3159	3392	3409	3642		
	10	440	732	161	453	424	716	687	979	942	1234	1202	1494	1467	1759	1725	2017	1985	2277	2248	2540	2513	2805	2763	3055	3012	3304	3262	3554		
	12	528	878			278	628	541	891	796	1146	1056	1406	1321	1671	1579	1929	1839	2189	2102	2452	2367	2717	2617	2967	2866	3216	3116	3466		
	14	616	1025			131	540	394	803	649	1058	909	1318	1174	1583	1432	1841	1692	2101	1955	2364	2220	2629	2470	2879	2719	3128	2969	3378		
	16	705	1171					248	714	503	969	763	1229	1028	1494	1286	1752	1546	2012	1809	2275	2074	2540	2324	2790	2573	3039	2823	3289		
	18	793	1317					102	626	357	881	617	1141	882	1406	1140	1664	1400	1924	1663	2187	1928	2452	2178	2702	2427	2951	2677	3201		
	20	881	1464							210	793	470	1053	735	1318	993	1576	1253	1836	1516	2099	1781	2364	2031	2614	2280	2863	2530	3113		
	22	969	1610							64	705	324	965	589	1230	847	1488	1107	1748	1370	2011	1635	2276	1885	2526	2134	2775	2384	3025		
	24	1057	1756									178	877	443	1142	701	1400	961	1660	1224	1923	1489	2188	1739	2438	1988	2687	2238	2937		

Design	SAD / SAF
Size	45
A / A1 (double-acting)	786 / 886
A2 (single-acting)	1431
B	330
C	337
D	30
E	175
F	165
G	84
H	125
K	150
Ø L	106
J	84
Ø M	292
N	130
O	18
Ø P	90
SW	46
Connection ISO 5211	F16
Ø d2	130
h4	3
Ø d3	165
4x d4xh3	4x M20x32
Ø d5	-
l3	50
s	46
4x d6xh5	-
8x d7xh6	8x M16x24
Y	170
Z	96
W1	220
X1	116
G1	-