

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°



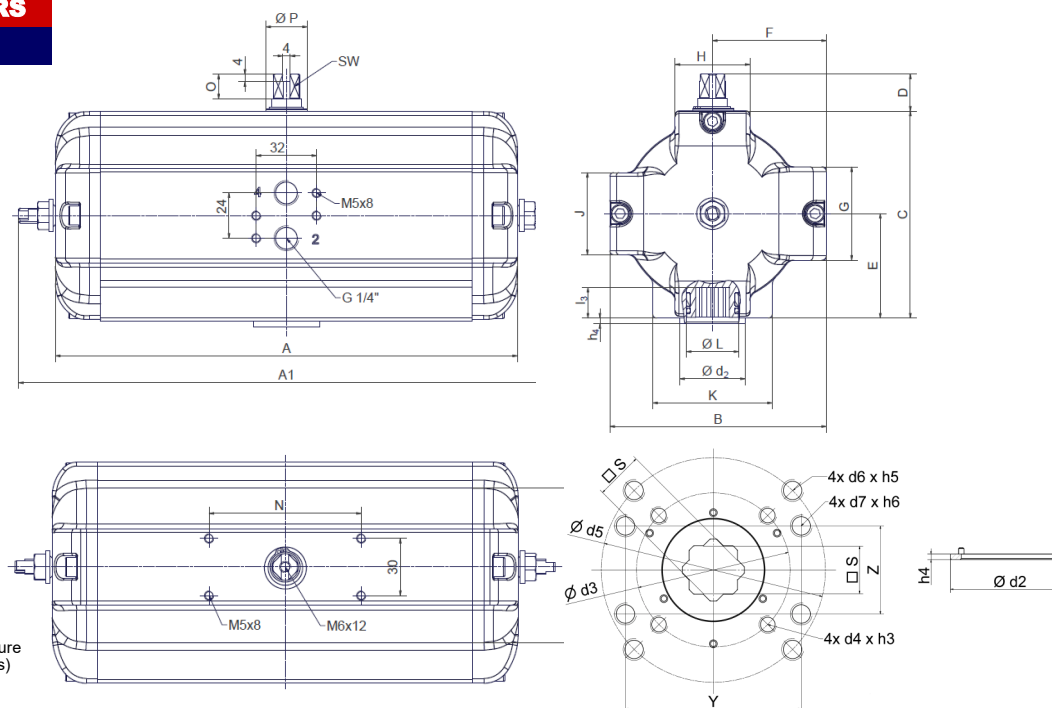
SAF - 180°

DOUBLE-PISTON QUARTER TURN ACTUATORS TYPE BR16 SAD / SAF 180°

Size	33
Weight [kg]	
Type SAD	21,8
Type SAF	32,6
Stroke volume [dm³]	
Type SAD	10,5
Type SAF	6,4
Operating times [sec.] ¹⁾	
Type SAD OPEN	1,8
Type SAD CLOSE	1,8
Type SAF ²⁾ OPEN	2,0
Type SAF ²⁾ CLOSE	1,0

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]																											
				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 33	-	-		166		215		264		312		360		410		458		506		555		605		651		698		744			
SAF 33	8	66	109	57	100	106	149	155	198	203	246	251	294	301	344	349	392	397	440	446	489	496	539	542	585	589	632	635	678		
	10	82	136	30	84	79	133	128	182	176	230	224	278	274	328	322	376	370	424	419	473	469	523	515	569	562	616	608	662		
	12	98	163	3	68	52	117	101	166	149	214	197	262	247	312	295	360	343	408	392	457	442	507	488	553	535	600	581	646		
	14	115	190			25	100	74	149	122	197	170	245	220	295	268	343	316	391	365	440	415	490	461	536	508	583	554	629		
	16	131	217					47	133	95	181	143	229	193	279	241	327	289	375	338	424	388	474	434	520	481	567	527	613		
	18	148	244					20	116	68	164	116	212	166	262	214	310	262	358	311	407	361	457	407	503	454	550	500	596		
	20	164	271							41	148	89	196	139	246	187	294	235	342	284	391	334	441	380	487	427	534	473	580		
	22	180	299							13	132	61	180	111	230	159	278	207	326	256	375	306	425	352	471	399	518	445	564		
	24	197	326									34	163	84	213	132	261	180	309	229	358	279	408	325	454	372	501	418	547		

Design	SAD / SAF	
Size	33	
A / A1 (double-acting)	413 / 460	
A2 (single-acting)	696 / 790	
B	204	
C	202	
D	20	
E	103	
F	102	
G	50	
H	90	
K	108	
Ø L	56	
J	50	
Ø M	175	
N	80	
O	12	
Ø P	45	
SW	22	
Connection ISO 5211	F12	F10
Ø d2	85	70
h4	2,5	2,5
Ø d3	102	
4x d4xh3	4x M10x16	
Ø d5	125	
l3	30	
s	27	
4x d6xh5	4x M12x20	
4x d7xh6	4x M16x19	
Y	138	
Z	76	
W1	-	
X1	-	
G1	-	