



PAD-20

DOUBLE ACTING PNEUMATIC ACTUATOR

GENERAL FEATURES

1. Operating media

Dry or lubricated air, or the non-corrosive gases

The maximum particle diameter must be less than 30µm

2. Air supply pressure

The minimum supply pressure is 2 Bar

The maximum supply pressure is 8 Bar

3. Operating temperature

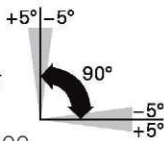
Standard: -20°C ~ +80°C

Low temperature: -40°C ~ +80°C

High temperature: -20°C ~ +160°C

4. Travel adjustment

Have adjustment range of ± 5° for the rotation at 0° and 90°



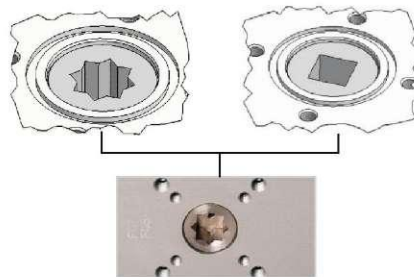
5. Application

Either indoor or outdoor

6. Nominal Size:

For Ball Valves DN15-DN100

For Butterfly Valves DN25-DN300



Bottom mounting connection is designed in accordance with ISO5211 and DIN3337 standards for direct mounting with valve gear boxes or mounting brackets.

Double acting and spring return



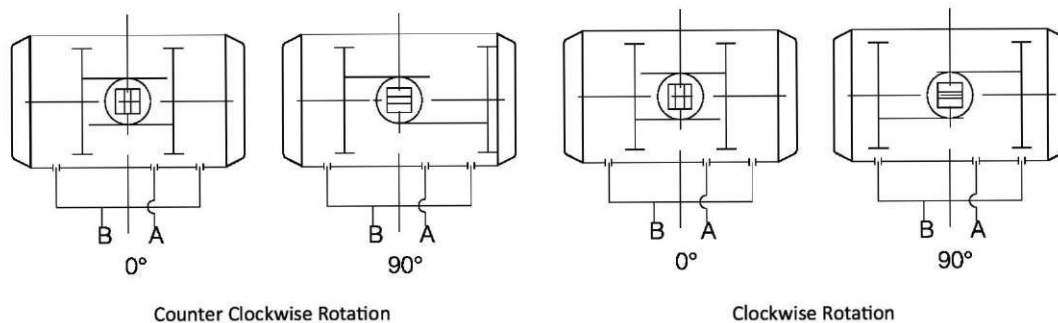
Air supply connection is designed in accordance with NAMUR Standard to install solenoid valves.



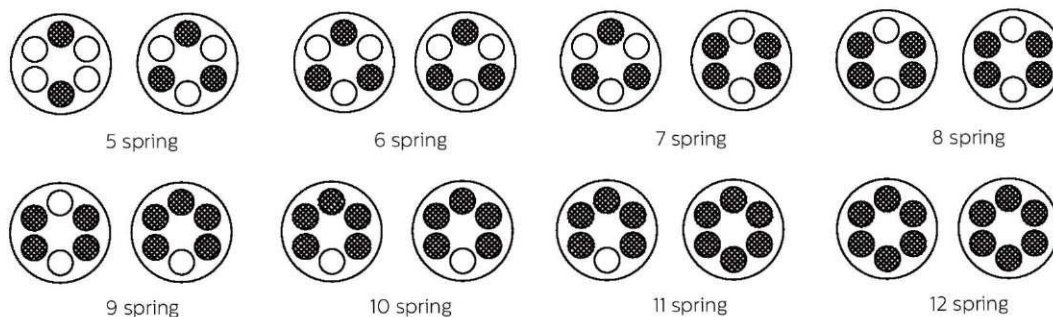
The Namur drive pinion and the Namur top mounting connection permit direct installation of accessories such as limit switch box and positioner.

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WORKING PRINCIPLE

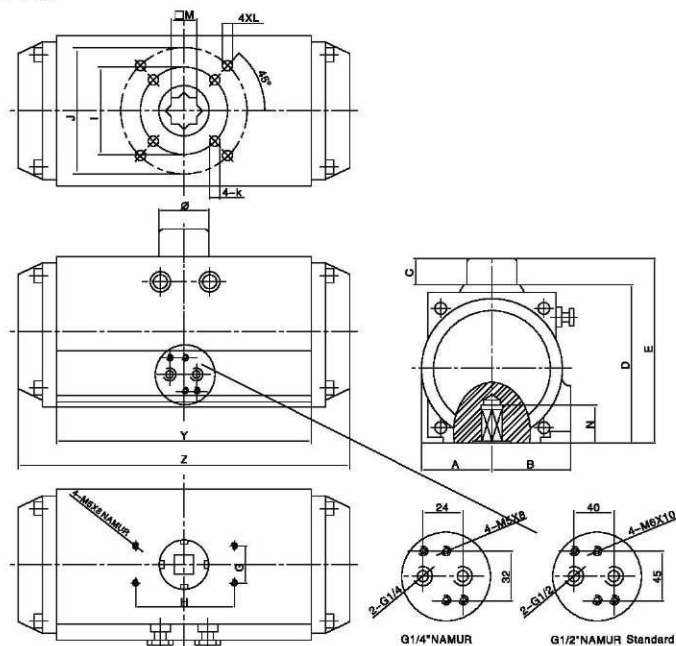


Spring Positions of Spring Return Actuators



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TECHNICAL DRAWING

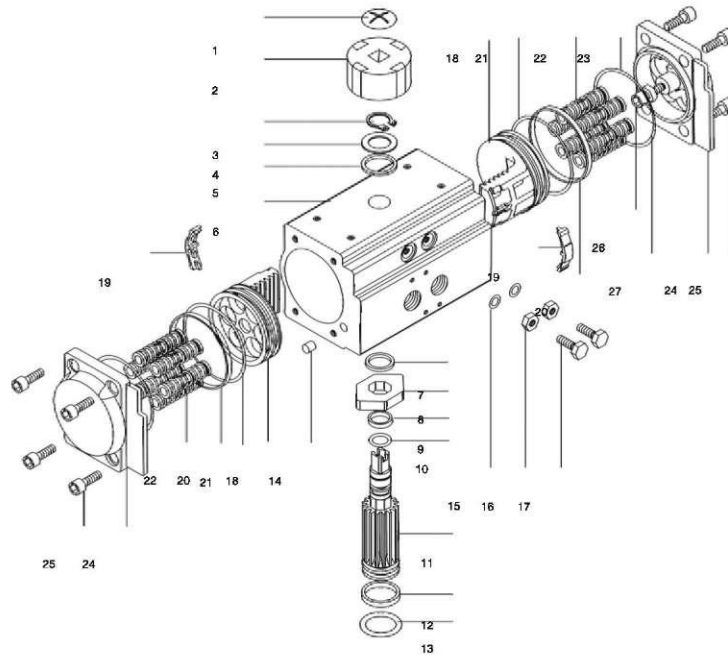


Model	A	B	C	D	E	G	H	I	J	K	L	M	N	Z	Y	Φ	AIR SUPPLY
JAT40	23	33.5	20	60	87	30	50	-	F05	-	M6X10	11X11	13	124	93	ø34	NAMUR1/8"
JAT52	30	41	20	72	92	30	80	F03	F05	M5 × 8	M6 × 10	11 × 11	15	145	120	ø34	NAMUR G1/4 "
JAT63	36	46	20	89	109	30	80	F05	F07	M6 × 10	M8 × 12	14 × 14	15	169	140	ø34	NAMUR G1/4 "
JAT75	42	52	20	100	120	30	80	F05	F07	M6 × 10	M8 × 12	14 × 14	15	201	140	ø34	NAMUR G1/4 "
JAT83	46	55	20	109	129	30	80	F05	F07	M6 × 10	M8 × 12	14 × 14	15	209	160	ø34	NAMUR G1/4 "
JAT92	51	57.5	20	117	137	30	80	F05	F07	M6 × 10	M8 × 12	17 × 17	17	242	195	ø41	NAMUR G1/4 "
JAT105	58	64	20	134	154	30	80	F07	F10	M8 × 12	M10 × 16	22 × 22	25	275	200	ø41	NAMUR G1/4 "
JAT125	67.5	70	30	157	187	30	80	F07	F10	M8 × 12	M10 × 16	22 × 22	25	332	230	ø41	NAMUR G1/4 "
JAT140	76	77	30	174	204	30	130	F10	F12	M10 × 16	M12 × 20	27 × 27	30	404	284	ø41	NAMUR G1/4 "
JAT160	86.5	87.5	30	199	229	30	130	F10	F12	M10 × 16	M12 × 20	27 × 27	30	470	340	ø41	NAMUR G1/4 "
JAT190	103	103	30	233	270	30	130	F10	F12	M10X16	M12X20	36X36	34	537	390	ø79	NAMUR1/4"
JAT210	113	113	30	257	295	30	130	-	F12	-	M12X20	36X36	34	540	395	ø79	NAMUR1/4"
JAT240	129	129	30	293	332	30	130	-	F16	-	M12X24	46X46	34	602	425	ø79	NAMUR1/4"
JAT270	146	146	30	333	371	30	130	-	F16	-	M12X24	46X46	52	732	515	ø79	NAMUR1/4"

* mm

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MATERIAL LIST



No	PART NAME	Quantity	Material	Cover Type	Optional Material
1	Display Bolt	1	Plastic		
2	Display	1	Plastic		
3	Spring	1	Stainless Steel		
4	Pin	1	Stainless Steel		
5	Gasket	1	Plastic		
6	Cylinder Body	1	Aluminum Cast	Eloxal	
7	Inner Gasket	1	Plastic		
8	Stem	1	Alloy Steel		Viton/Silicon Rubber
9	O-Ring	1	NBR		
10	Bearing	1	Plastic		
11	Small Gear	1	Alloy Steel	Nickel Coated	Stainless Steel
12	Bearing	1	Plastic		
13	O-Ring	1	NBR		Viton/Silicon Rubber
14	Tipa	2	NBR		Viton/Silicon Rubber
15	Adj. Bolt O-Ring	2	NBR		Viton/Silicon Rubber
16	Adj. Bolt Nut	2	Stainless Steel		
17	Adjustment Bolt	2	Stainless Steel		
18	Piston	2	Aluminum Cast	Zinc Coated	Stainless Steel
19	Piston Part	2	Plastic		
20	Piston Seat	2	Plastic		
21	Piston O-Ring	2	NBR		Viton/Silicon Rubber
22	Spring	0~12	Spring Steel	Paint	
23	Cover Ring	2	NBR		Viton/Silicon Rubber
24	Cover	2	Aluminum Cast	Dust Coated	
25	Cover Bolt	8	Stainless Steel		
26	Bolt	2	Stainless Steel		
27	Bolt	2	Stainless Steel		

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MATERIAL LIST

Air Supply and Torque (Nm)														Spring Torque (Nm)	
AIR PRESSURE		3Bar		4Bar		5Bar		6Bar		7Bar		8Bar			
Model	Total Spring	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
		Start	Stop	Start	Stop	Start	Stop	Start	Stop	Start	Stop	Start	Stop	Start	Stop
JAT40SR	10			4.0	2.0	6.0	4.1	8.1	6.1	10.1	8.1	12.1	10.1	4.0	6.0
	12					5.2	2.9	7.2	4.9	9.3	6.9	11.3	8.9	4.8	7.2
JAT52SR	10			9.1	6.2	13.3	10.4	17.6	14.7	21.8	18.9	26.1	23.2	10.8	7.9
	12					11.8	8.3	16.0	12.5	20.3	16.8	24.5	21.0	13.0	9.5
JAT63SR	10			16.4	10.0	23.8	17.5	31.3	25.0	38.8	32.5	46.3	40.0	19.9	13.6
	12					21.1	13.5	28.6	21.0	36.1	28.5	43.6	36.0	23.9	16.3
JAT75SR	10			29.2	18.5	41.6	30.9	53.9	43.3	66.3	55.7	78.7	68.0	30.9	20.3
	12					37.5	24.7	49.9	37.1	62.2	49.5	74.6	61.8	37.1	24.4
JAT83SR	10			35.2	21.9	51.5	38.1	67.7	54.4	83.9	70.6	100.2	86.8	43.0	29.7
	12					45.5	29.5	61.8	45.8	78.0	62.0	94.2	78.2	51.6	35.6
JAT92SR	10			49.5	32.5	72.8	55.8	96.0	79.0	119.3	102.3	142.6	125.6	60.6	43.6
	12					64.0	43.7	87.3	66.9	110.6	90.2	133.8	113.5	72.7	52.3
JAT105SR	10			59.9	46.2	94.6	80.8	129.2	115.5	163.9	150.1	198.5	184.7	92.3	78.6
	12					78.9	62.4	113.5	97.0	148.1	131.6	182.8	166.3	110.8	94.3
JAT125SR	10			139	86	201	147	262	209	323	270	385	331	160	106
	12					179	115	241	177	302	238	363	299	191	127
JAT140SR	10			191	103	284	195	376	288	469	380	561	472	267	178
	12					248	142	341	234	433	327	525	419	320	214
JAT160SR	10			291	162	432	303	573	443	713	584	854	725	401	272
	12					377	222	518	363	659	504	800	645	481	326
JAT190SR	10			443	210	670	437	897	664	1124	891	1351	1117	697	464
	12					577	297	804	524	1031	751	1258	978	837	557
JAT210SR	10			653	313	965	625	1276	937	1588	1248	1900	1560	934	594
	12					846	438	1158	750	1469	1062	1781	1373	1121	713
JAT240SR	10			949	355	1437	844	1926	1333	2415	1821	2903	2310	1599	1005
	12					1236	524	1725	1013	2213	1501	2702	1990	1919	1207
JAT270SR	10			1488	682	2175	1369	2862	2056	3549	2743	4237	3430	2066	1260
	12					1923	956	2610	1643	3297	2330	3985	3017	2480	1512
JAT300SR	10			1430	695	2193	1458	2956	2221	3719	2984	4482	3747	2122	1460
	12					1868	986	2631	1749	3394	2512	4157	3275	2546	1752
JAT350SR	10			1963	787	3105	1929	4247	3071	5390	4214	6532	5356	3405	2346
	12					2584	1172	3726	2314	4869	3457	6011	4599	4086	2816
JAT400SR	10	1967	311	3595	1939	4348	2195	5685	3366	7312	4993	8940	6621	4938	3149
	12			3012	1025	3765	1281	5101	2452	6728	4079	8356	5707	5761	3674

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OUTPUT TORQUES (Nm)

Model	Air Supply Pressure (bar)						
	2	3	4	5	6	7	8
JAT52DA	8.5	12.7	17	21.2	25.5	29.7	34
JAT63DA	15	22.5	30	37.5	44.9	52.4	59.7
JAT75DA	21	31.8	42.4	53	63.6	74.2	84.8
JAT83DA	32.5	48.7	65	81.2	97.4	113.7	130
JAT92DA	46.5	69.8	93	116.3	140	162.9	186
JAT105DA	69.3	104	138.5	173.2	207.8	242.5	277
JAT125DA	108	162	216	270	324	378	432
JAT140DA	184.7	277	369.5	461.8	554	646.5	739
JAT160DA	281.5	422	563	704	844	985	1126
JAT190D A	453	680	907	1135	1361	1587	1814
JAT210D A	554	831	1108	1384	1662	1939	2216
JAT240DA	814	1221	1628	2035	2442	2849	3256
JAT270DA	1236	1854	2472	3090	3708	4326	4944
JAT300DA	1526	2289	3052	3815	4578	4578	5341
JAT350DA	2285	3427	4570	5712	6854	7997	9139
JAT400DA	3256	4883	6511	8139	9767	11394	13022

Actuator Weight (Pcs/kg)

Model	PA 52	PA 63	PA 75	PA 83	PA 92	PA 105	PA 125	PA 140	PA 160	PA 190	PA 210	PA 240	PA 270
	1,5	2,2	2,9	3,6	5,5	6,7	10,4	14,4	23,3	46,1	53,2	73,3	115,9



HEAD OFFICE - FACTORY

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