

Pneumatic Actuator

PA 100

Full-plastic Chemical-type



PA100 Pneumatic Actuator is angular-stroke pneumatic actuators with a chemically-full-plastic casing, with more optimized design structure, light weight, and corrosion resistance. The configuration of structural materials is diversified, which is suitable for most corrosive and harsh environment applications.

Easy installation and maintenance

- * All-plastic appearance is beautiful and corrosion resistant
- * Built-in expansion module installation interface of position feedback switch and positioner
- * Built-in mounting base of pilot-operated solenoid valve for quick installation
- * Integrated visual position feedback and easy to observe
- * Super lubricating property, maintenance-free
- * The installation platform complies with ISO standards

High safety performance

- * Embedded nut design to ensure installation strength
- * Design of overpressure allowance to ensure safety application
- * Anti-corrosion configuration to prevent leakage

High Flexibility

- * Configuration options for different anticorrosion levels
- * Appearance color : Orange, Black, Blue
- * Also color can be customized
- * Flange type: F04, F05, F07

Performance characteristics

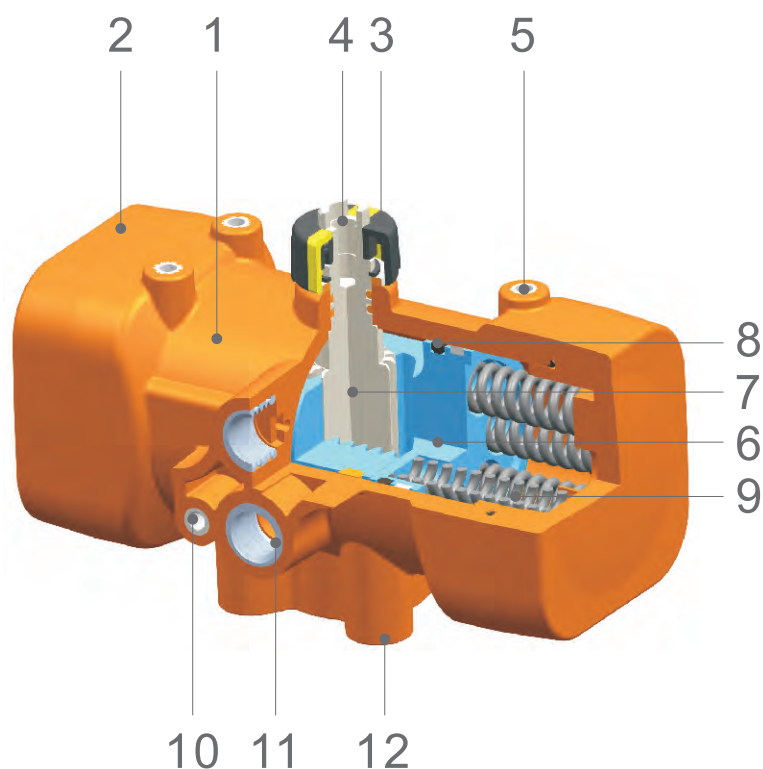
- * PPGF full-plastic casing
- * 0.5-3S fast opening and closing
- * Available with different limit switches and regulation with multi-function modules

Application configuration

- * Plastic ball valve
- * Plastic butterfly valve
- * Metal ball valve
- * Metal butterfly valve



+ Technical characteristics



NO.	Part Name
1	Actuator body
2	End cap
3	Position indicator
4	Electrical module expansion interface
5	Electrical module expansion bracket seat
6	Piston
7	Pinion
8	Piston O-ring
9	Spring
10	Pilot valve mounting seat
11	Air inlet
12	Valve mounting platform

Technical conditions

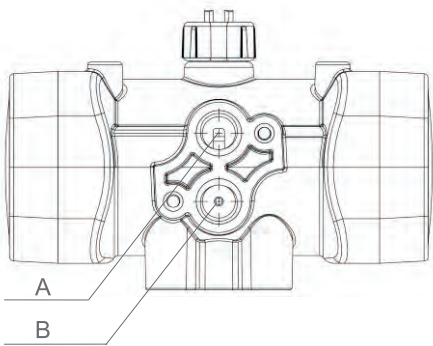
Project item	Technical conditions
Driving medium	Compressed air and non-corrosive clean gas Compressed air grade according to ISO 8573-1
Driving pressure	The max controllable driving pressure is 7 bar, single action and double action are the same
Working temperature	The max allowable temperature of the driving medium is not exceed 40°C
Ambient temperature	-10°C to + 50°C
Ambient humidity	0 to 100%
Lubrication	No maintenance, also no lubricant supplement required under normal operation

Gas consumption

Under the required drive pressure, the compressed air required to fully open or close the valves

Type	DA		SR
L	Inside cavity	Outside cavity	Inside cavity
PA00/01	0.08	0.11	0.08
PA10/11	0.11	0.14	0.11
PA20/21	0.21	0.23	0.21
PA30/31	0.29	0.38	0.29
PA40/41	0.41	0.55	0.41
PA50/51	0.62	0.92	0.62

Driving work instructions

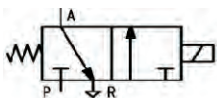
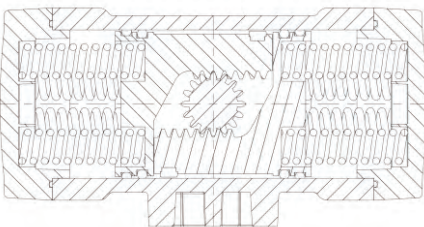


Air source interface size:
A air inlet G1/4 threaded; B air inlet G1/4 threaded

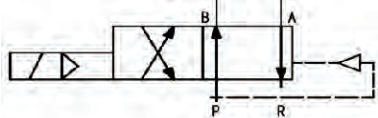
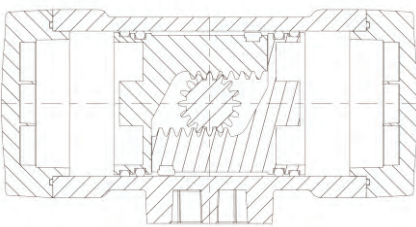
SR: air source connected to port B, the pinion to turn anticlockwise, port A is empty

DA: air source connected to port A, the pinion to turn clockwise

air source connected to port B, the pinion to turn anticlockwise



SR pilot-operated valve:
with 3/2solenoid valve



DA pilot-operated valve:
with 5/2 solenoid valve

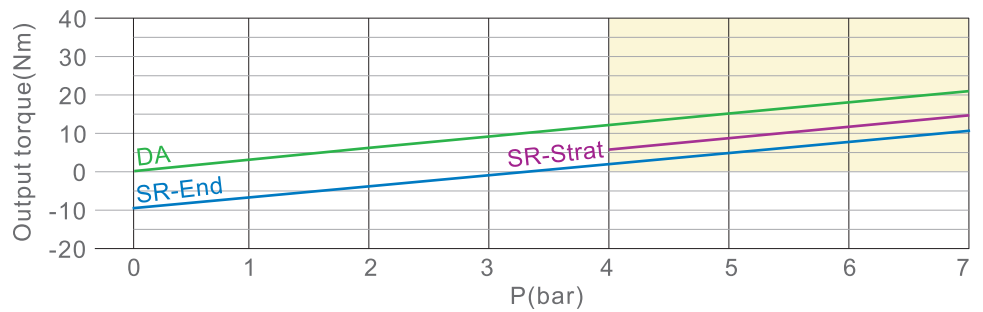
Selection reference table

Type		Plastic valves		Metal valves	
		Ball valve	Butterfly valve	Ball valve	Butterfly valve
SR	PA00	DN15-20	-	-	-
	PA10	DN25-32	-	DN15	-
	PA20	DN40	DN50	DN20	-
	PA30	DN50	DN65	DN25-32	DN50-65
	PA40	DN65	DN80	DN40	DN80
	PA50	DN80	Dn100	DN50	DN100
DA	PA01	DN15-25	-	DN15	-
	PA11	DN32-40	-	DN20-25	-
	PA21	DN50	DN50-65	DN32	DN50-65
	PA31	DN65	DN80-100	DN40	DN80
	PA41	DN80	DN125	DN50-65	DN100-125
	PA51	DN100	DN150	DN80	DN150

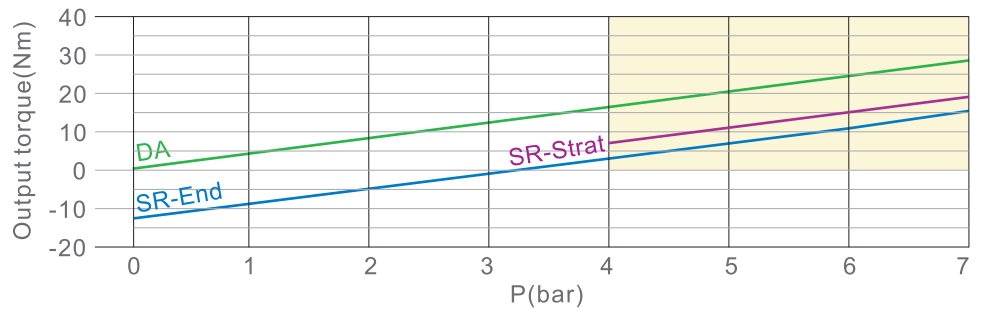
The reference table is not an absolutely appropriate configuration parameter. Before configuration, it is necessary to confirm whether the valve torque matches the actuator.

Actuator Output torque

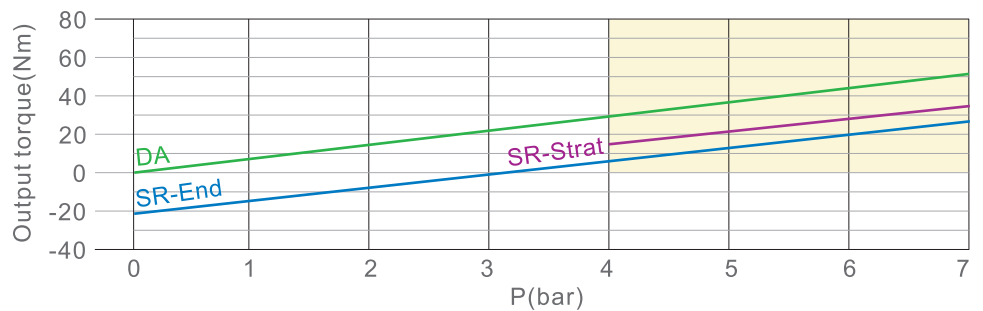
PA00/01



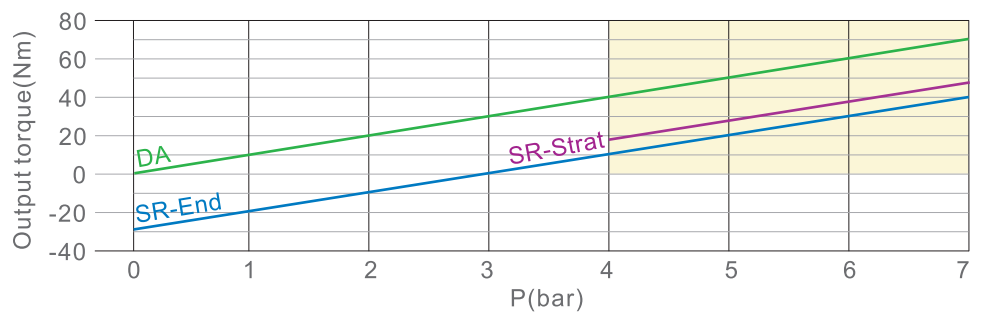
PA10/11



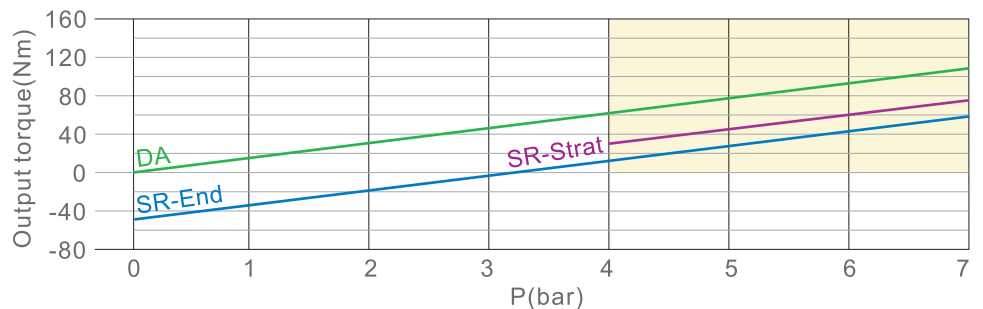
PA20/21



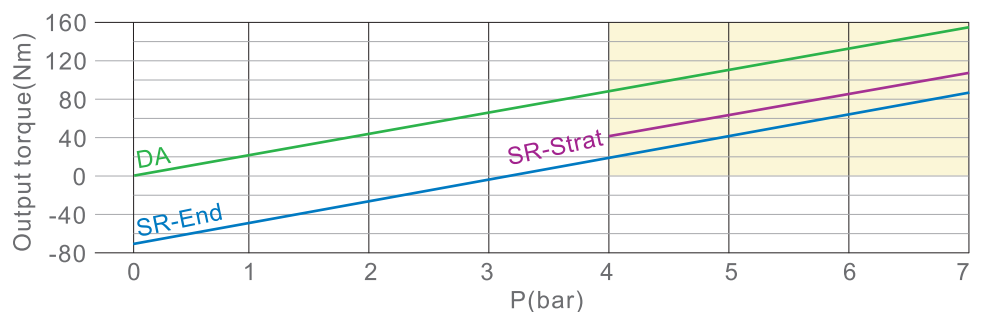
PA30/31



PA40/41



PA50/51



PA100 , PNEUMATIC ACTUATOR , SR



CRMO-FPM

<i>Model</i>	<i>Orange</i>	<i>Black</i>	<i>Blue</i>	<i>KG</i>
PA00	100.012.0445	100.012.1445	100.012.2445	
PA10	100.012.0552	100.012.1552	100.012.2552	
PA20	100.012.0563	100.012.1563	100.012.2563	
PA30	100.012.0575	100.012.1575	100.012.2575	
PA40	100.012.0783	100.012.1783	100.012.2783	
PA50	100.012.0792	100.012.1792	100.012.2792	

SUS-FPM

<i>Model</i>	<i>Orange</i>	<i>Black</i>	<i>Blue</i>	<i>KG</i>
PA00	100.032.0445	100.032.1445	100.032.2445	
PA10	100.032.0552	100.032.1552	100.032.2552	
PA20	100.032.0563	100.032.1563	100.032.2563	
PA30	100.032.0575	100.032.1575	100.032.2575	
PA40	100.032.0783	100.032.1783	100.032.2783	
PA50	100.032.0792	100.032.1792	100.032.2792	

PA100 , PNEUMATIC ACTUATOR , DA



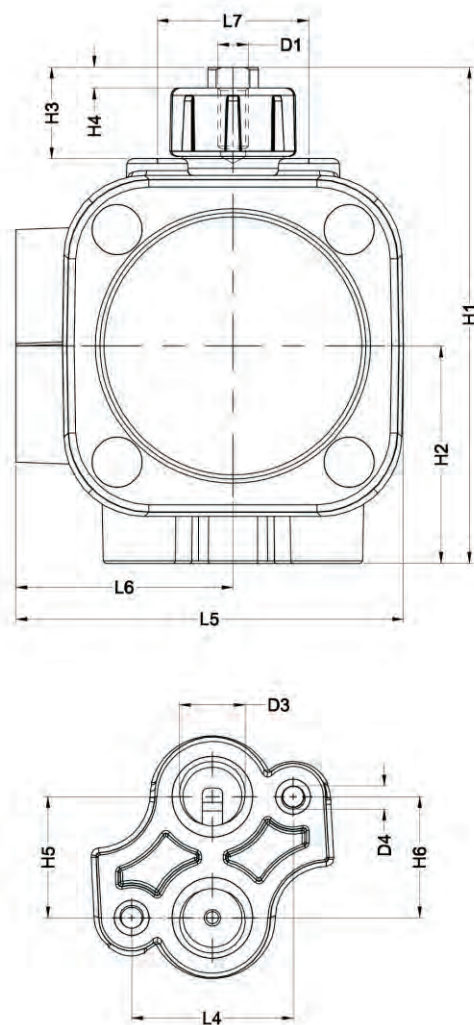
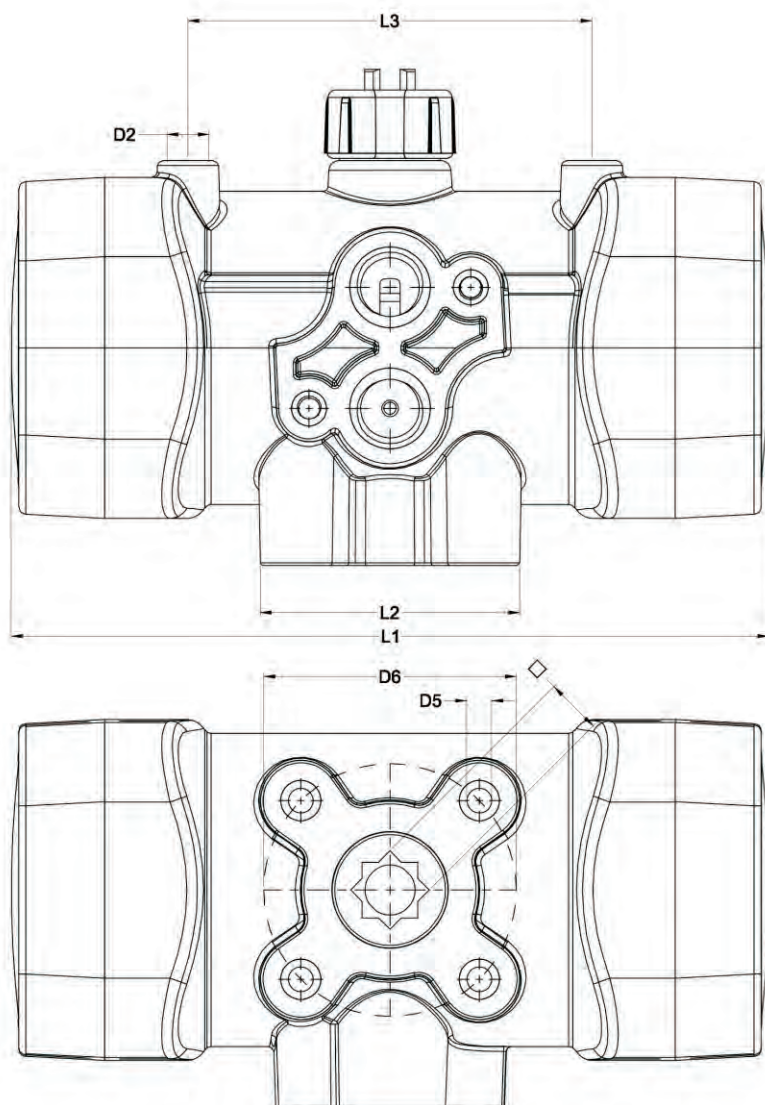
CRMO-FPM

<i>Model</i>	<i>Orange</i>	<i>Black</i>	<i>Blue</i>	<i>KG</i>
PA01	100.016.0445	100.016.1445	100.016.2445	
PA11	100.016.0552	100.016.1552	100.016.2552	
PA21	100.016.0563	100.016.1563	100.016.2563	
PA31	100.016.0575	100.016.1575	100.016.2575	
PA41	100.016.0783	100.016.1783	100.016.2783	
PA51	100.016.0792	100.016.1792	100.016.2792	

SUS-FPM

<i>Model</i>	<i>Orange</i>	<i>Black</i>	<i>Blue</i>	<i>KG</i>
PA01	100.036.0445	100.036.1445	100.036.2445	
PA11	100.036.0552	100.036.1552	100.036.2552	
PA21	100.036.0563	100.036.1563	100.036.2563	
PA31	100.036.0575	100.036.1575	100.036.2575	
PA41	100.036.0783	100.036.1783	100.036.2783	
PA51	100.036.0792	100.036.1792	100.036.2792	

+ Size data



Unit: mm

Model	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	H1	H2	H3	H4	H5
PA00/01	M6	M5	G1/4	M5	M5	F04- ϕ 42	146	43	80	32	69	39	30	95	36	18	14	24
PA10/11	M6	M5	G1/4	M5	M6	F05- ϕ 50	150	52	80	32	77	43	30	98	43	18	14	24
PA20/21	M6	M5	G1/4	M5	M6	F05- ϕ 50	176	55	80	32	90	50	30	118	50	18	14	24
PA30/31	M6	M5	G1/4	M5	M6	F05- ϕ 50	192	55	80	32	104	57	30	130	57	18	14	24
*PA40/41	M6	M5	G1/4	M5	M8	F07- ϕ 70										18	14	24
*PA50/51	M6	M5	G1/4	M5	M8	F07- ϕ 70										18	14	24

Model	H6	☐
PA00/01	24	11*11
PA10/11	24	11*11
PA20/21	24	14*14
PA30/31	24	14*14
*PA40/41	24	17*17
*PA50/51	24	17*17

* Not yet on the market, Data update is subject to manufacturer's notification

