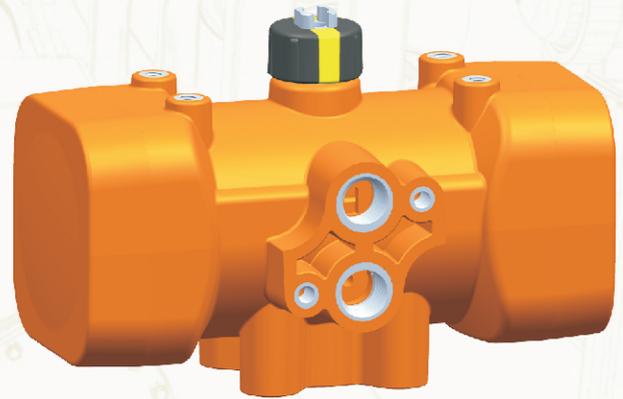


## Pneumatic Actuator PA 100

# Full-plastic Chemical-type



PA100 of KOSCN 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

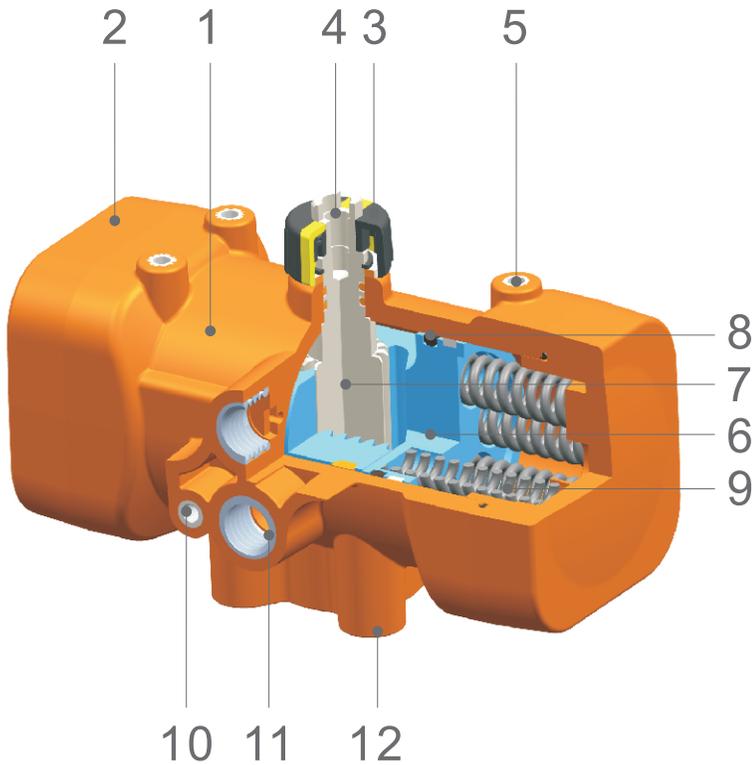
- \* PPGF full-plastic casing
- \* 0.5-3S fast opening and closing
- \* Available with different limit switches and regulation with multi-function modules

### 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

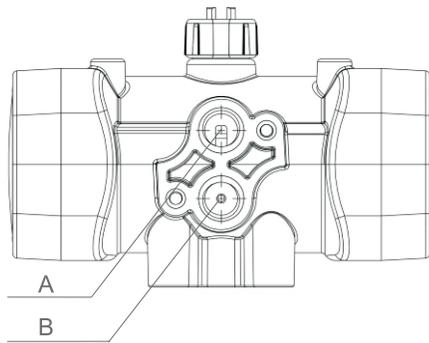
Project item	Technical conditions
Driving medium	Compressed air and non-corrosive clean gas Compressed air grade according to ISO 8573-1
Driving pressure	The max controllable driving pressure is 7 bar, single action and double action are the same
Working temperature	The max allowable temperature of the 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
	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



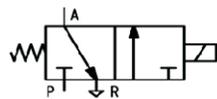
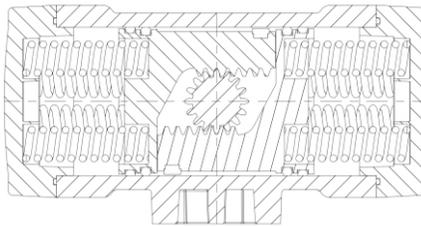
Air source interface size:

A air inlet G1/4 threaded; B air inlet G1/4 threaded

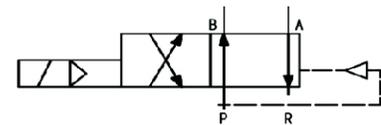
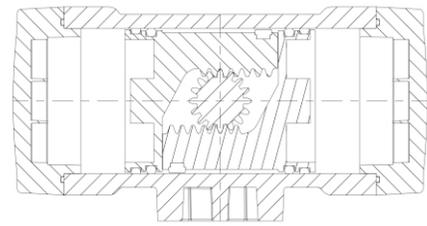
SR: air source connected to port B, the pinion to turn anticlockwise, port A is empty

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 3/2 solenoid valve



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

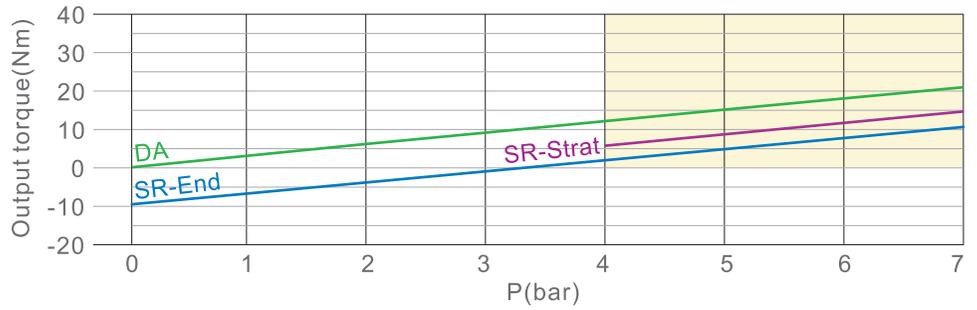
# Selection reference table

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

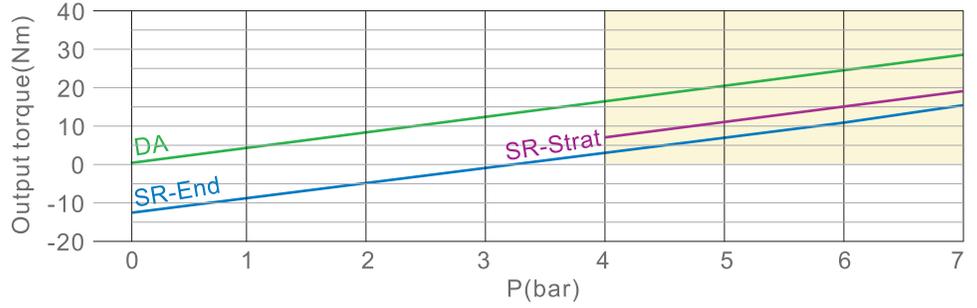
The reference table is not an absolutely appropriate configuration parameter. Before configuration, it is necessary to confirm whether the valve torque matches the actuator.

# Actuator Output torque

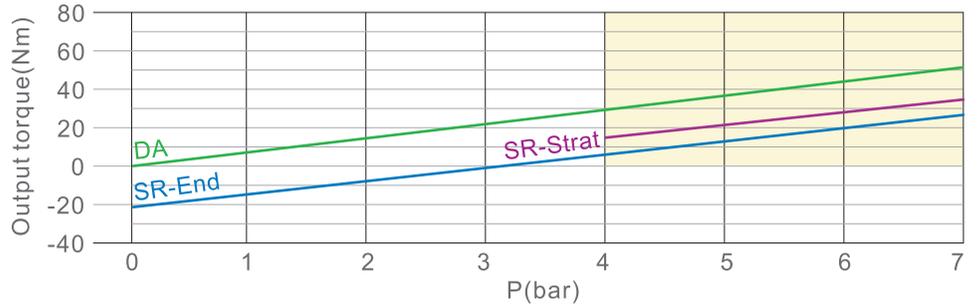
PA00/01



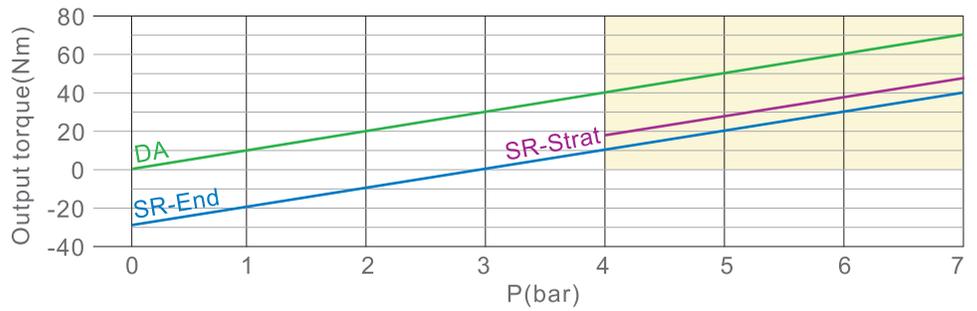
PA10/11



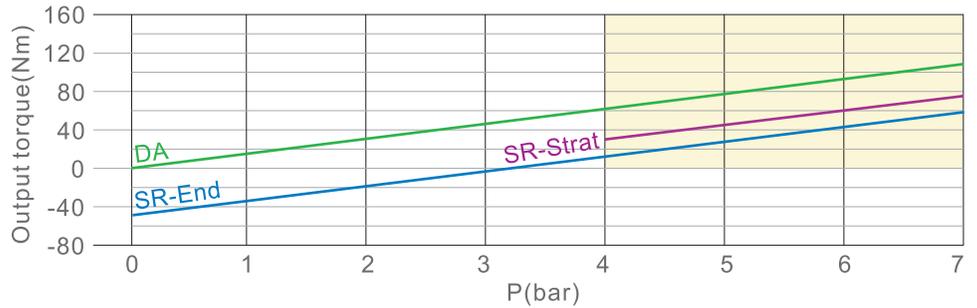
PA20/21



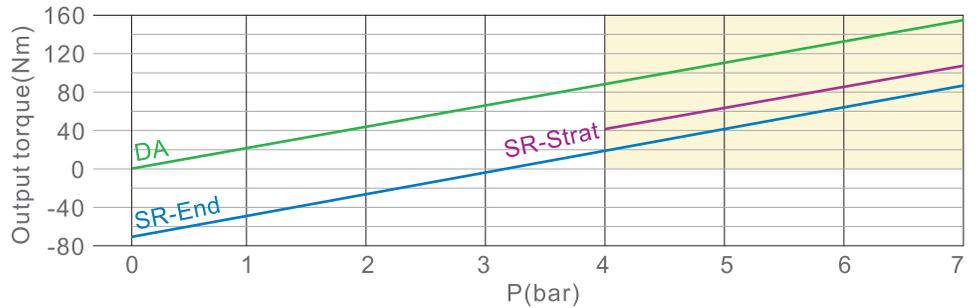
PA30/31



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



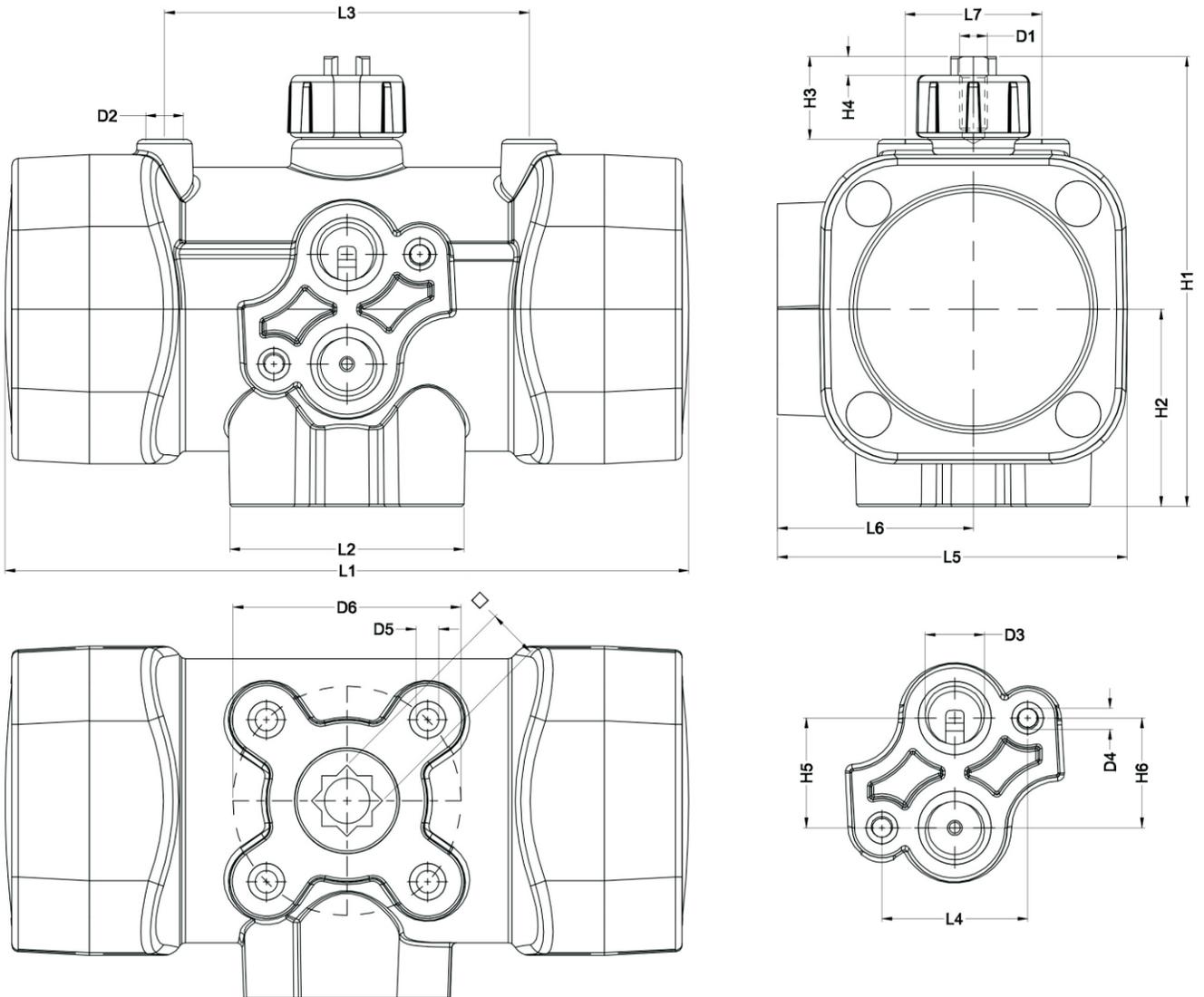
CRMO-FPM

<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

**contact**  
customer center  
[www.koscn.cn](http://www.koscn.cn)



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