

## LINEAR PNEUMATIC ACTUATORS PA45

### DESCRIPTION

Pneumatic multi-spring linear actuators PA series for modulating and open-close duty, ideal for demanding industrial valve control tasks.

### MAIN FEATURES

Direct and reverse action actuators for a maximum of 50 mm valve stroke.

Operation with compressed air, nitrogen or clean water.

OPTIONS:                   Limit switches.  
                                Different types of positioners.

USE:                         Actuation of V series ADCATrol control valves, or others on request.

MAX.

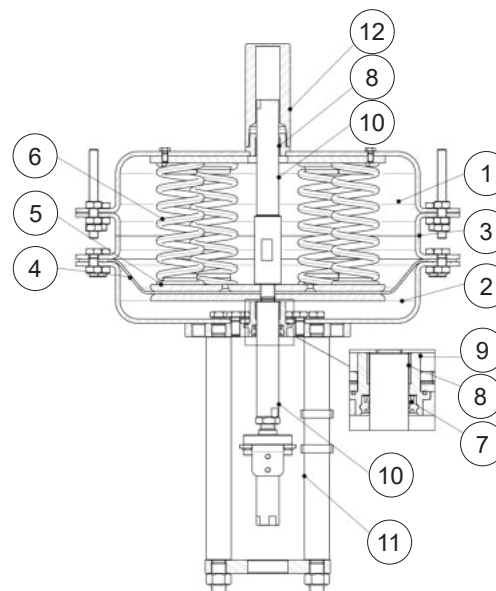
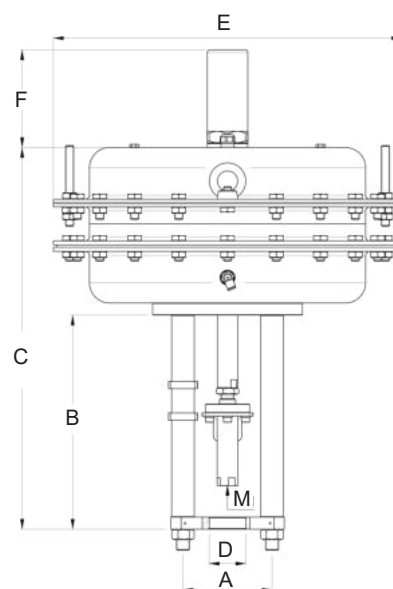
AIR SUPPLY:             6,5 bar.

AIR CONNECTION: 1/4"

AVAIL. MODELS:     PA45.

AMBIENT

TEMPERATURE:     -20 °C to 80 °C.



### DIMENSIONS (mm)

MODEL	A	B	C	D	E	F *	M	WEIGHT (kg) **
PA45.B	110	265	473	45	430	121	M16	45
PA45.C	155	272	480	65	430	121	M16	45

\* Only for versions with 10, 12 or 14 springs;

\*\* Approximate values, consult manufacturer for certified weights.

### MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Top cover	DD12 / 1.0398
2	Bottom cover	DD12 / 1.0398
3	Spacer	DD12 / 1.0398
4	* Diaphragm	Reinforced NBR
5	Diaphragm plate	S235JRG2 / 1.0038
6	Springs	Spring steel
7	* Seal ring	Polyurethane
8	Plain bearing	Steel / PTFE
9	Guide	AISI 304 / 1.4301
10	Stem	AISI 316L / 1.4404
11	Yoke	C45E / 1.1191
12	Cap	C45E / 1.1191

\* Available spare parts.

**MAX. PERM. PRESSURE DROP (bar) – N.C. (fluid to open) – Reverse action PA45 series actuator (air signal to close)**

ACTUATOR TYPE	SPRING RANGE (bar)	STROKE (mm)	AIR SUPPLY (bar)	SIZES					
				DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
PA45.5B	1,1 ÷ 2,1	30	2,5	22	16	10	–	–	–
PA45.8B	1,7 ÷ 3,3	30	3,8	28	24	17	–	–	–
PA45.8C	1,7 ÷ 3,3	40	3,8	–	–	–	6,5	5	–
	1,3 ÷ 3,3	50		–	–	–	5	4	1,5
PA45.10B	2,1 ÷ 4,1	30	4,5	–	–	22	–	–	–
PA45.10C	2,1 ÷ 4,1	40	4,5	–	–	–	8	5	–
	1,6 ÷ 4,1	50		–	–	–	6	3	2,5
PA45.12C	2,5 ÷ 4,9	40	5,5	–	–	–	9	7	–
	1,9 ÷ 4,9	50		–	–	–	8	4,5	3
PA45.14C	2,9 ÷ 5,7	40	6	–	–	–	14	8	–
	2,2 ÷ 5,7	50		–	–	–	10	6	4

Remarks: The pressure drop values must be used within the body rating limits. The pressure drop values refer to closed valves. For different valve strokes, plug designs (perforated and on/off) or other actuators, please consult the respective datasheets or the manufacturer.

**ORDERING CODES PA45**

Group designation	P.	14	D	A
Multi-spring pneumatic linear actuator	P.			
<b>Actuator size</b>				
PA45.4B		14		
PA45.4C		24		
PA45.5B *		15		
PA45.8B *		18		
PA45.8C *		28		
PA45.10B *		110		
PA45.10C *		210		
PA45.12C *		212		
PA45.14C *		214		
<b>Actuator type</b>				
Direct action (air to close)			D	
Reverse action (air to open)			R	
<b>Control type</b>				
Option A				A
Option B				B

\* Reverse action only.

**SPRING RANGES (bar)**

OPTION	4B, C	5B	8B, C	10B, C	12C	14C
A	0,4 – 4	1,1 – 2,1	1,7 – 3,3	2,1 – 4,1	2,5 – 4,9	2,9 – 5,7
B	–	0,5 – 2,1	1,3 – 3,3	1,6 – 4,1	1,9 – 4,9	2,2 – 5,7