

LINEAR PNEUMATIC ACTUATORS PA45

DESCRIPTION

Pneumatic multi-spring linear actuators PA series for modulating and open-close duty of control and process technology to operate control valves.

MAIN FEATURES

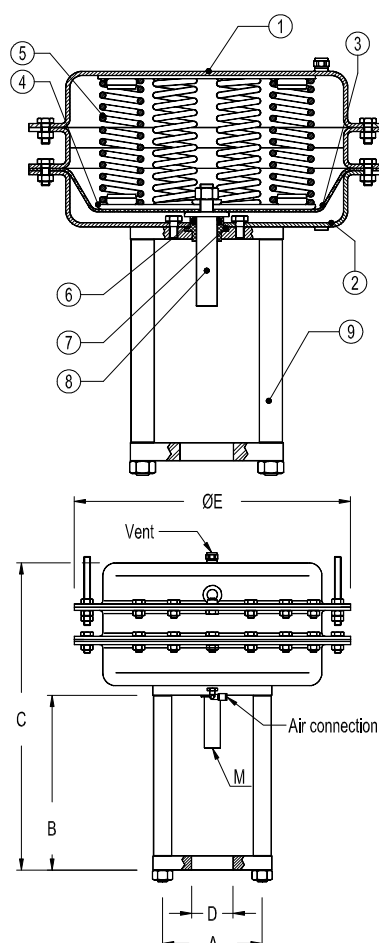
Direct and reverse action actuators for maximum 50mm valve stroke.

Operation with compressed air, nitrogen or clean water.

OPTIONS: Limit switches
Manual operating device
Different kind of positioners
Stainless steel construction

USE: Actuating of V series Adcatrol control valves or others on request.

AIR SUPPLY: Max. 6 bar
CONNECTION: DN 1/4"
AVAILABLE MODELS: PA45
MAX.AMBIENT TEMPERATURE -20 °C to 80 °C



MATERIALS		
POS.	DESIGNATION	MATERIAL
1	Body (Steel)	S235JRG2 / 1.0038
	Body (Stainless steel)	AISI 304 / 1.4301
2	Body (Steel)	S235JRG2 / 1.0038
	Body (Stainless steel)	AISI 304 / 1.4301
3	*Diaphragm	NBR 70
4	Diaphragm plate	S235JRG2 / 1.0038
5	Spring	Spring steel
6	*Seal ring	NBR
7	Guide	Nylon
8	Rod	AISI316 / 1.4401
9	Yoke (Steel)	C45E / 1.1191
9	Yoke (Stainless steel)	AISI 304 / 1.4301

* Available spare parts

DIMENSIONS								
MODEL	A	B	C	D	E	M	WGT	Max.
	mm	mm	mm	mm	mm	mm	Kgs	Stroke
PA-45.B	110	265	473	45	430	M16	45	50
PA-45.C	155	272	480	65	430	M16	45	50

Kvs VALUES FOR ADCATROL CONTROL VALVES V16, V25 AND V40 - STANDARD PARABOLIC PLUGS

SEAT D. mm	VALVE STROKE mm	VALVE SIZES											
		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
4	20	0,1	—	—	—	—	—	—	—	—	—	—	—
4		0,25	—	—	—	—	—	—	—	—	—	—	—
4		0,5	—	—	—	—	—	—	—	—	—	—	—
8		1	—	—	—	—	—	—	—	—	—	—	—
8		1,7	1,7	—	—	—	—	—	—	—	—	—	—
12		2,1	2,5	3	—	—	—	—	—	—	—	—	—
12		2,7	3,7	4	4,3	—	—	—	—	—	—	—	—
15		3,8	4,7	5,8	6,1	6,8	—	—	—	—	—	—	—
20		—	5,1	6,3	7,8	9,3	10,2	—	—	—	—	—	—
25		—	—	9,4	11,7	14,6	17,5	18,7	—	—	—	—	—
32		—	—	—	15,4	19,2	24	28	30,5	—	—	—	—
40		—	—	—	—	22,2	27,7	34,6	40,8	44,7	—	—	—
50		—	—	—	—	—	40,1	49	61	68	74,1	—	—
65	30 / 40	—	—	—	—	—	—	63,4	79,2	91	109,3	119	—
80		—	—	—	—	—	—	—	89,7	112,1	139,8	166	182
100		—	—	—	—	—	—	—	—	136,7	170,8	212,5	243
125	40 / 50	—	—	—	—	—	—	—	—	—	230,6	288,2	359,4
150		—	—	—	—	—	—	—	—	—	—	316,1	396
200	50 / 80	—	—	—	—	—	—	—	—	—	—	—	590

Note: V16 valve series do not have reduced seat option.

MAX. PERM.PRESS.DROP IN bar - NORMALLY CLOSED VALVE (fluid to open)
Reverse action PA45 series actuator (air signal to open)

ACT. TYPE	SPRING RANGE bar	Stk mm	Air Sup. bar	SIZES											
				DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PA45.5B	1,1 ÷ 2,1	40	2,5	—	—	—	—	—	—	22	16	10	—	—	—
	0,5 ÷ 2,1	50		—	—	—	—	—	—	19	14	8	—	—	—
PA45.5C	1,1 ÷ 2,1	40	2,5	—	—	—	—	—	—	—	—	—	4	3	—
	0,5 ÷ 2,1	50		—	—	—	—	—	—	—	—	—	—	—	1
PA45.8B	1,7 ÷ 3,3	40	3,8	—	—	—	—	—	—	40	28	17	—	—	—
	1,3 ÷ 3,3	50		—	—	—	—	—	—	30	22	13	—	—	—
PA45.8C	1,7 ÷ 3,3	40	3,8	—	—	—	—	—	—	—	—	—	9	6	3
	1,3 ÷ 3,3	50		—	—	—	—	—	—	—	—	—	7	5	2
PA45.10B	2,1 ÷ 4,1	40	4,5	—	—	—	—	—	—	—	—	22	—	—	—
	1,6 ÷ 4,1	50		—	—	—	—	—	—	—	—	18	—	—	—
PA45.10C	2,1 ÷ 4,1	40	4,5	—	—	—	—	—	—	—	—	—	12	8	4
	1,6 ÷ 4,1	50		—	—	—	—	—	—	—	—	—	10	7	3,5
PA45.12C	2,5 ÷ 4,9	40	5,5	—	—	—	—	—	—	—	—	—	15	10,5	5,5
	1,9 ÷ 4,9	50		—	—	—	—	—	—	—	—	—	12	8	4,5
PA45.14C	2,9 ÷ 5,7	40	6	—	—	—	—	—	—	—	—	—	18	12	6,5
	2,2 ÷ 5,7	50		—	—	—	—	—	—	—	—	—	14	10	5,5

Important: The pressure drop values must be used within the body rating limits. The pressure drop values are referred to closed valves. In case of different valve strokes, plug designs (perforated and on-off) or different actuator, please consult the right table or if not available consult factory.

ORDERING CODES PA45

ACTUATOR CODES (electric)		P.			
Group Designation					
Multi-spring, pneumatic linear actuator		P.			
Actuator Size					
PA45.5B			15		
PA45.5C			25		
PA45.8B			18		
PA45.8C			28		
PA45.10B			110		
PA45.10C			210		
PA45.12C			212		
PA45.14C			214		
Actuator					
Direct Action				D	
Reverse Action				R	
Control Signal					
Option A					A
Option B					B

→ To be introduced on ".X.", if supplied in combination with the valve.

Example:
V25S valve model EQP metal plug, PTFE/GR stem sealing DN125 complete with PA45.5C reverse action actuator 1,1-2,1bar spring range.

Code: PV.25S13N125.25RA

PA45 SPRING RANGES					
	5B, C	8B, C	10B, C	12C	14C
A	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