



TYPE **PA200PBY RA**  
**PA250PBY RA**  
**PA310PBY RA**  
**PA400PBY RA**  
**PA500PBY RA**

Normally Close – air opens – rising stem

TYPE **PA200PBY DA**  
**PA250PBY DA**  
**PA310PBY DA**  
**PA400PBY DA**  
**PA500PBY DA**

Normally Open – air closes – extended stem

## DESCRIPTION

Pneumatic control diaphragm actuator with compact design and very hard yoke, manufactured with multisprings technology.  
Signal range 3-15 psi ... 6-18 psi ... 6-30 psi  
Can be equipped with pneumatic, electropneumatic or smart positioners and other accessories.

### NOMINAL SIZES :

- **T200** Area cm<sup>2</sup> 108
- **T250** Area cm<sup>2</sup> 233
- **T310** Area cm<sup>2</sup> 380
- **T400** Area cm<sup>2</sup> 560
- **T500** Area cm<sup>2</sup> 935

### FINISHING :

- Epoxy coated 65 µ RAL 5020

### CONFORMITY :

- PED 2014/68/UE

### TECHNICAL CHARACTERISTICS :

- Actuator : diaphragm type
- Control signals DA version : 3-15 psi
- Control signals RA version : 3-15 psi ... 6-18 psi ... 6-30 psi
- Max air supply pressure : 85 psi (6 bar) T200-250
- Max air supply pressure : 35 psi (2,5 bar) T310-500
- Ambient temperature : -20 ... +70 °C
- Pneumatic connections : ISO 7 Rp – 1/8"

### ON REQUEST :

- Pneumatic-Pneumatic pilot positioner 3-15 psi
- Electro-Pneumatic pilot positioner 4-20 mA /4-12 mA /12-20 mA
- Smart Positioner
- Air filter regulator
- Air Lock-up
- Proximity limit switches
- Mechanical limit switches
- 3-way solenoid valve
- Top-work manual handwheel
- Different RAL colour ( minimum delivery 5 weeks )
- Yoke lock nut

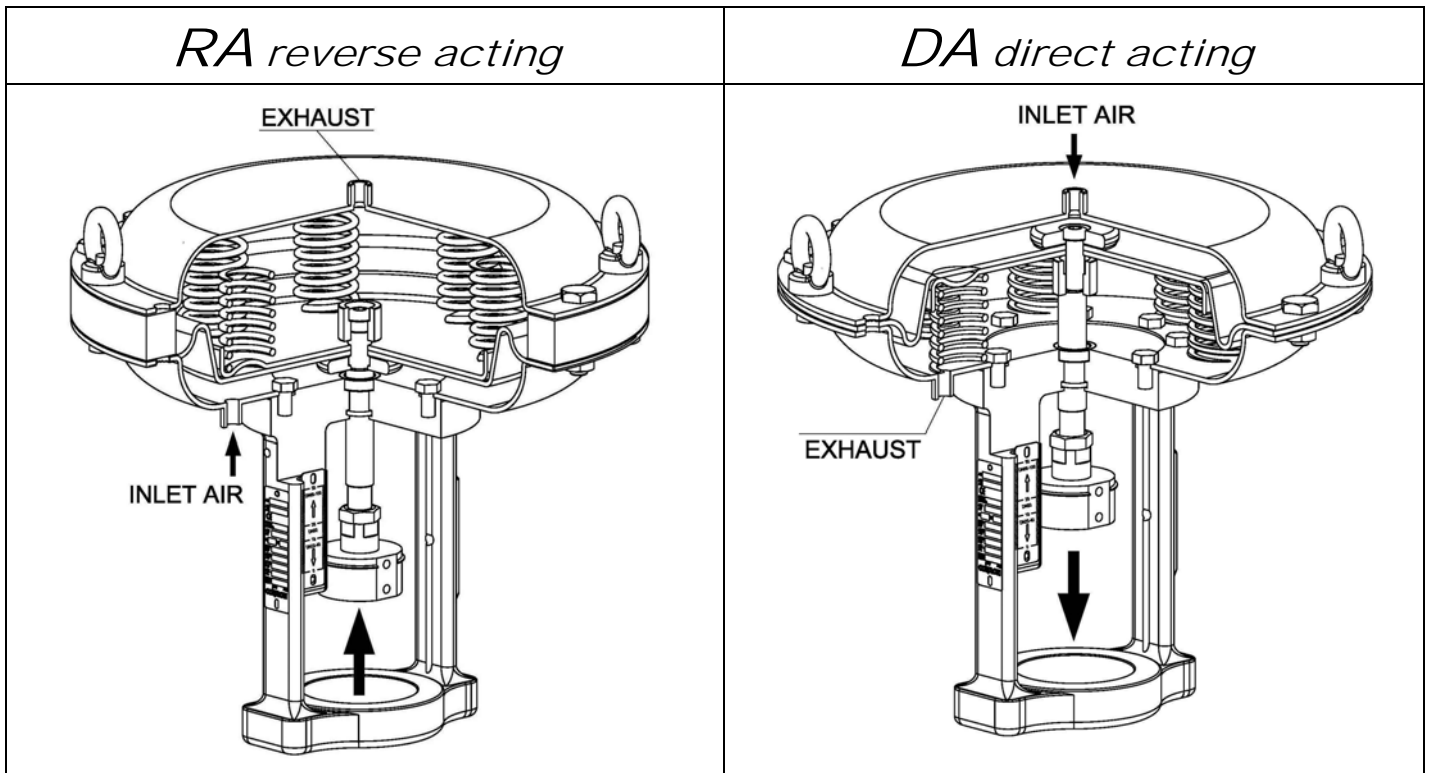
## Performance

Type	PA200		PA250		PA310			PA400				PA500			
Area cm <sup>2</sup>	108		233		380			560				935			
Capacity liter	0,5		1,2		2			3,8				7,1			
Stroke mm	11	19	11	19	11	19	28	11	19	28	50	11	19	28	50
Max supply air Barg	6		6		2,5			2,5				2,5			
Connection air	ISO7 Rp 1/8"														
Spring setting	3-15 psi ( effective signal ) RA - DA version														
	6-18 psi ( effective signal ) RA version														
	6-30 psi ( nominal signal ) RA version														

		Spring Load N				
Stroke mm	Range psi	Type				
		PA200	PA250	PA310	PA400	PA500
11	3-15	224	482	787	1159	1936
11	6-18	447	965	1574	2319	3872
11	6-30 *	1043 (14-26psi)	2090 (13-25psi)	2098 (8-20psi)	3865 (10-17psi)	6453 (10-17psi)
19	3-15	224	482	787	1159	1936
19	6-18	447	965	1574	2319	3872
19	6-30 *	1043 (11-24psi)	1447 (9-21psi)	2623 (10-23psi)	3865 (10-23psi)	6453 (10-23psi)
28	3-15			787	1159	1936
28	6-18			1574	2319	3872
28	6-30 *			2098 (8-24psi)	5024 (13-26psi)	6453 (10-17psi)
50	3-15				1159	1936
50	6-18				2319	3872
50	6-30 *				3865 (10-28psi)	6453 (10-30psi)

\* Nominal Signal

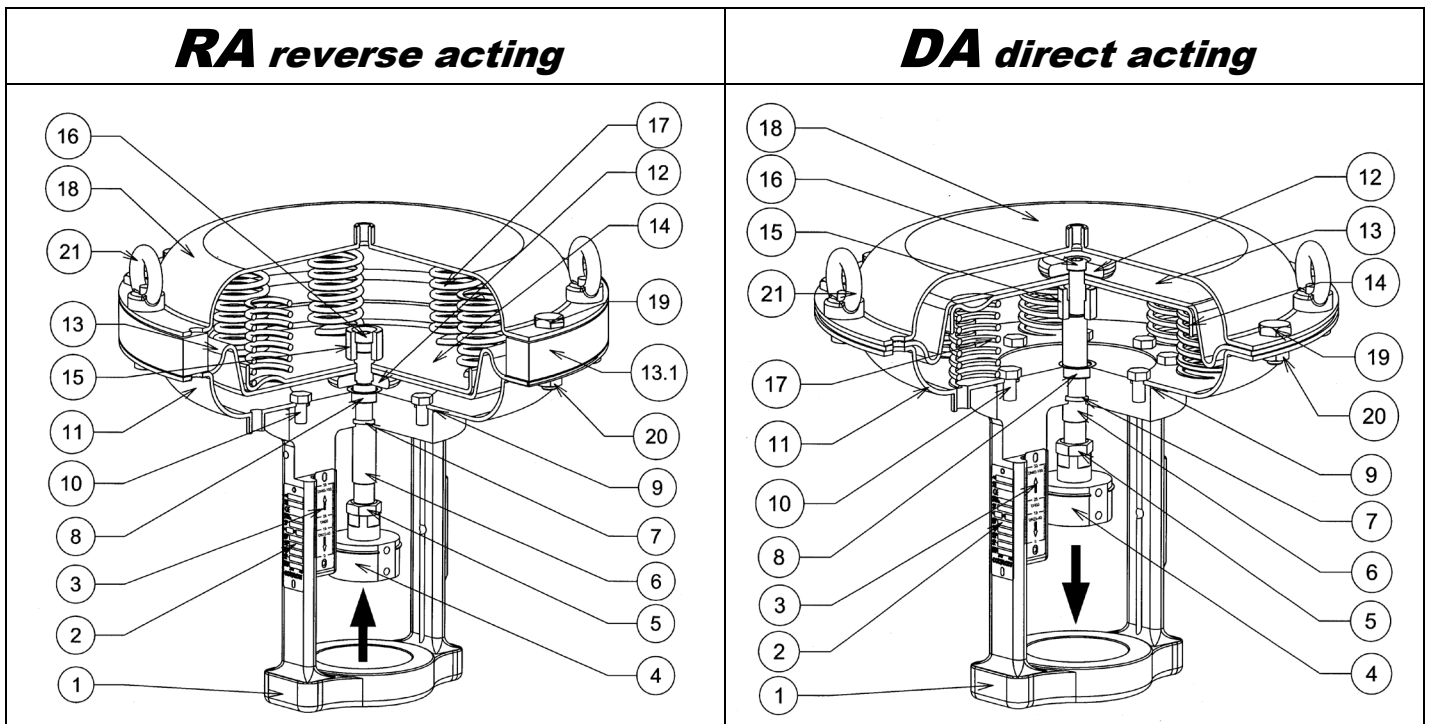
		Spring Load N – DA version 3-15 * psi with thrust 30 psi				
Stroke mm	Range psi	Type				
		PA200	PA250	PA310	PA400	PA500
11	3-15 *	2236	4824	7868	11594	19358
19	3-15 *					
28	3-15 *					
50	3-15 *					



# ***Pneumatic Diaphragm Actuator***

Item	Description	Construction Material
1	Yoke	EN GJS 500 UNI EN 1563 epoxy painted RAL 5020
2	Description plate	S.S. AISI 304
3	Travel indicator	Alluminium
4	Union block IEC 534	S.S. AISI 304
5	Lock nut upper stem	A 194 Gr.8
6	Upper stem	AISI 304
7	Lower "o" ring	NBR
8	Upper Air tight	NBR
9	Gasket	Cork rubber
10	Internal screws	DIN 933 galvanized steel
11	Lower case	P11 steel epoxy painted RAL 5020
12	Diaphragm spacer	Galvanized steel
13	Diaphragm	EPDM
13.1	Spacer 6-30 psi (1)	Carbon steel
14	Diaphragm Plate	P01 steel
15	Diaphragm bush	AISI 303
16	Diaphragm lock screw	ISO 7380 Galvanized steel
17	Springs	C98 UNI 3823
18	Upper case	P11 steel epoxy painted RAL 5020
19	Casing lock screws	DIN 933 galvanized steel
20	Casing locknuts	DIN 933 galvanized steel
21	Eyebolts only on T400/T500	DIN 582 – galvanized C15

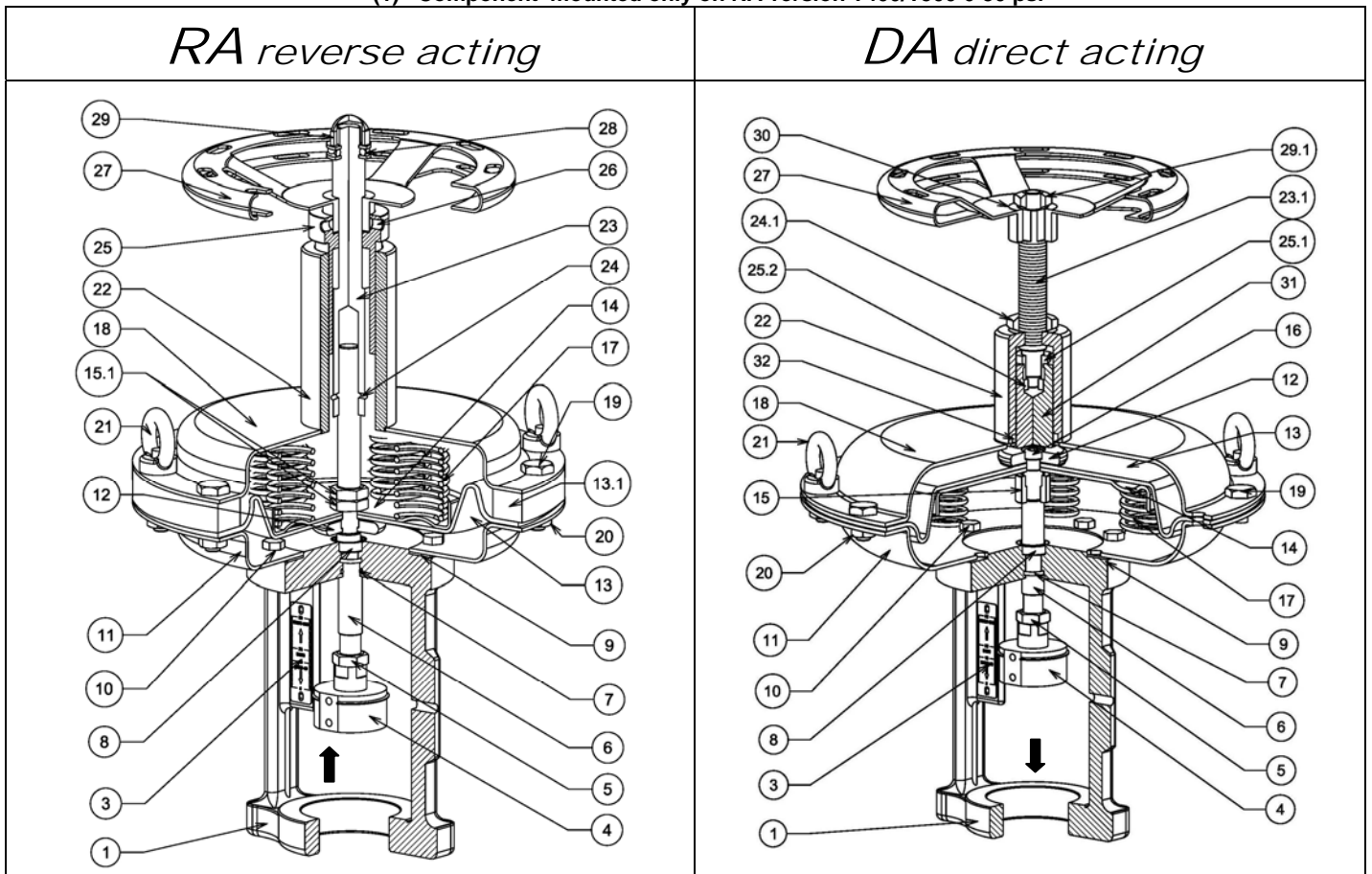
(1) Component mounted only on RA version T400/T500 6-30 psi



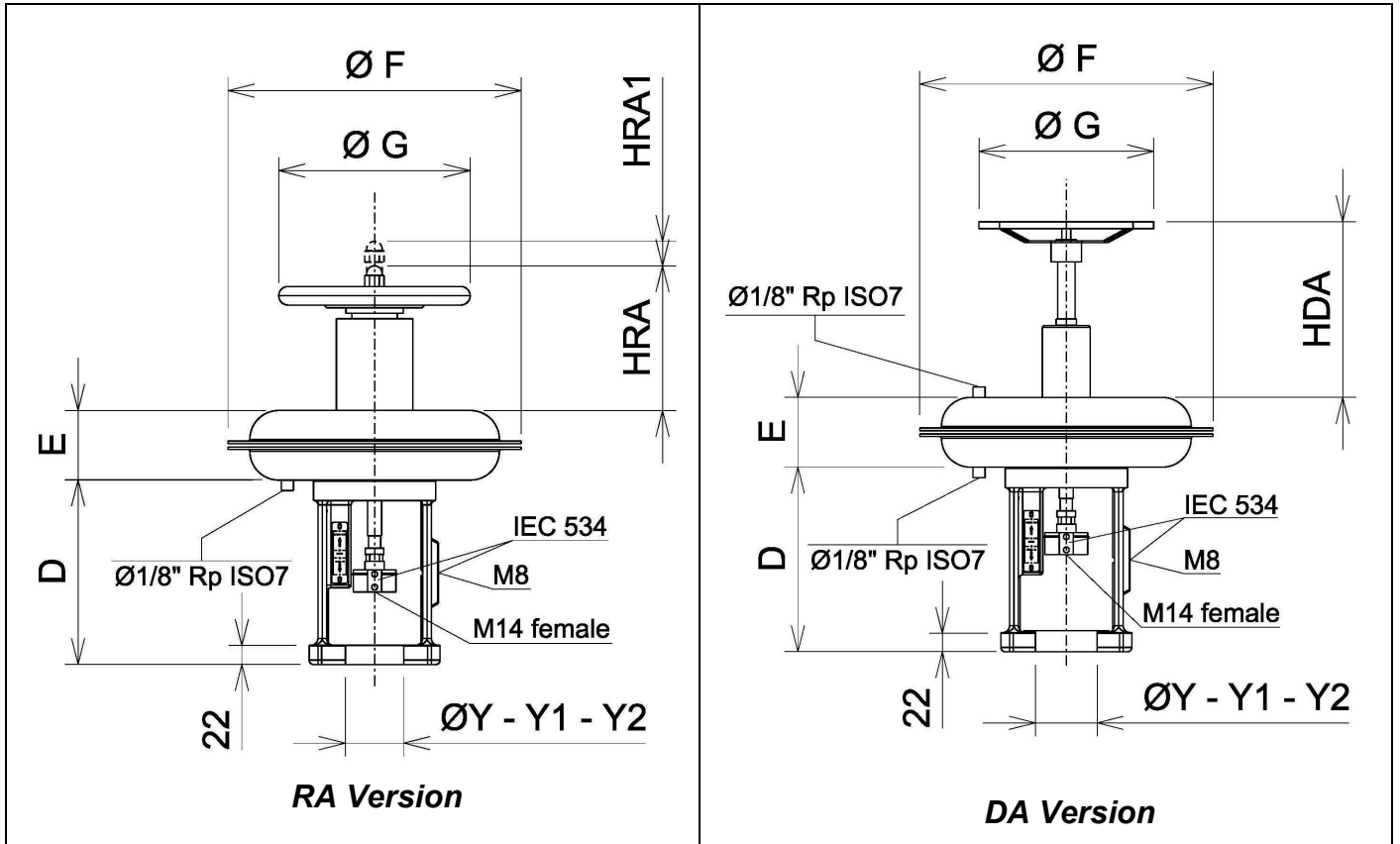
# Pneumatic Diaphragm Actuator + Top Work Manual Handwheel

Item	Description	Construction Material
1	Yoke	EN GJS 500 UNI EN 1563 epoxy painted RAL 5020
2	Description plate	S.S. AISI 304
3	Travel indicator	Alluminium
4	Union block IEC 534	S.S. AISI 304
5	Lock nut upper stem	A 194 Gr.8
6	Upper stem	S.S. AISI 304
7	Lower "o" ring	NBR
8	Upper Air tight	NBR
9	Gasket	Cork rubber
10	Internal screws	DIN 933 galvanized steel
11	Lower case	P11 steel epoxy painted RAL 5020
12	Diaphragm spacer	Galvanized steel
13	Diaphragm	EPDM
13.1	Spacer 6-30 psi (1)	Carbon steel
14	Diaphragm Plate	P01 steel
15	Diaphragm bush DA version	S.S. AISI 303
15.1	Nuts RA version	DIN 936 galvanized steel
16	Diaphragm lock screw	ISO 7380 Galvanized steel
17	Springs	C98 UNI 3823
18	Upper case	P11 steel epoxy painted RAL 5020
19	Casing lock screws	DIN 933 galvanized steel
20	Casing locknuts	DIN 933 galvanized steel
21	Eyebolts	DIN 582 – galvanized C15
22	Body Manual Handwheel	ASTM A 105 epoxy painted RAL 5020
23	Handwheel stem RA version	S.S. AISI 303
23.1	Handwheel stem DA version	A2
24	Grub screws RA version	DIN 914 galvanized steel
24.1	Nut DA version	DIN 936 galvanized steel
25	Handwheel adjusting locknut RA version	A105 nickel plated
25.1	Locknut DA version	AVP galvanized
25.2	Entering catch DA version	AVP
26	Grub screws RA version	DIN 914 A2
27	Handwheel	Carbon steel coil RAL 9005
28	Ball bearing RA version	GCR15
29	Locknut RA version	DIN 1587 galvanized steel
29.1	Locknut DA version	DIN 936 galvanized steel
30	Washer DA version	DIN 433 galvanized steel
31	Piston DA version	S.S. AISI 303
32	"O" ring DA version	NBR

(1) Component mounted only on RA version T400/T500 6-30 psi



## Dimensions (mm) and Weight (Kg)



### Dimension mm

Type	D	E			Ø F	Ø G	HRA	Stroke HRA1	HDA	Ø Y	Ø Y1	Ø Y2
		Type DA	Type RA									
			psi									
			3-15	6-30								
			6-18									
PA200	208	70	70	70	210	200	200	11/19	220	52	67	On request
PA250		70	70	70	292			11/19				
PA310		95	95	95	336			11/19/28				
PA400		119	119	144	408			11/19/28/50				
PA500		119	119	144	520			11/19/28/50				

### Weight Kg

Type	Type DA		Type RA		Extra weight for RA Handwheel	Extra weight for DA Handwheel
	3-15 psi		3-15 psi	6-30 psi		
PA200	7		7	7,5	2,5	4,5
PA250	9,5		10	11		
PA310	13		13,5	14		
PA400	20		20,5	30		
PA500	30		30,5	43		

Specifications given are only indicative and not binding for the manufacturer who reserve the right to carry-out any modifications deemed necessary without prior notice. All data sheets by CONFLOW SpA, are available last update on our internet web site [www.conflo.it](http://www.conflo.it).

## MAIN OFFICES AND FACTORY



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