



STERIVALVES
Process Advantage



FINE DOSING
ROTODOSER



FINE DOSING ROTODOSER

The Rotodoser valve is the solution for accurate dosing. It consists of two coaxial rotors of different volume individually actuated, which determine product flow and dosing. The main rotor ensures continuous product flow while the secondary rotor ensures accurate dosing.

The main rotor discharges large amount of product, the secondary rotor makes the precise dosage. Rotodoser is the ideal solution whenever accuracy is required. This valve provides many advantages and peculiarities: it has a highly performing rotor inside the main one. Its double rotor design put together the discharge capacity with the accurate dosing.

MAIN TECHNICAL CHARACTERISTICS

BODY AND ROTORS MATERIALS

- Body in stainless steel EN 1.4404 (AISI 316L)
- Main rotor in stainless steel EN 1.4404 (AISI 316L)
- Secondary rotor stainless steel EN 1.4404 (AISI 316L)

FINISHING

- Parts in contact with product: $Ra < 0,5\mu m$.
- Other parts: $Ra < 1,2\mu m$
- Welds: completely grounded and polished
- Electropolishing upon request
- Other finishing upon request

GASKET MATERIAL

- Silicone
- EPDM
- FKM

CONNECTION

- Machined-out spigot $H=15mm$; thickness 3 mm
- BS4825-3 Tri-Clamp $H=15mm$
- DIN 32676 Reihe A, B or C, Tri-Clamp $H=15mm$
- ISO 2582 Tri-Clamp $H=15mm$
- Connection flange for SteriFlange and aseptic gasket
- Connection for Steriflange with Bayonet system: to facilitate the SteriFlange mounting

High productivity

Lightness and Compactness

Flexibility

SECTORS

Pharmaceutical, API.

FIELD OF APPLICATION

Weighing and packaging machines, feeding of hoppers.

ACTUATION

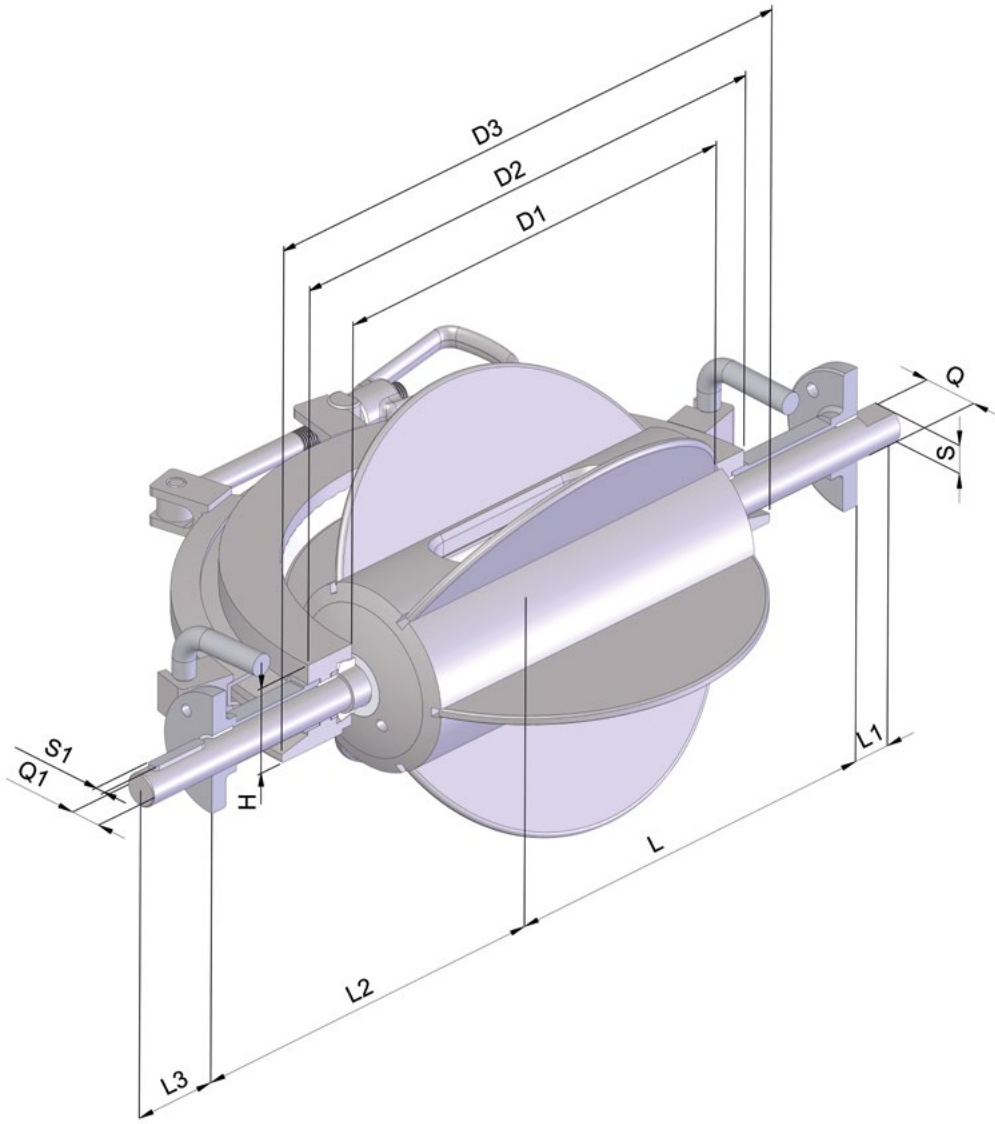
- Pneumatic actuator (main rotor)
- Pneumatic or electric motor (secondary rotor)
- Pneumatic actuator (secondary rotor)
- Control system
- Inductive sensor switches
- Position Cam
- PLC Control Panel

CERTIFICATES AND DECLARATIONS

- Material certificate EN 10204-3.1 for metallic parts
- FDA 21 CFR 177.2600 or FDA 21 CFR 177.1550 for polymeric parts compound
- CE declaration of incorporation as per Directive 2006/42/EC
- Torque measurement test
- Gas tightness test to EN12266-1, test P12
- USP class VI biocompatibility declaration (*)
- Traceability report
- Roughness test map (*)
- ATEX 2014/34/EU (*)
- Declaration BSE/TSE free for elastomers
- Declaration Bisphenols/Phtalates free for elastomers (*)
- Dichiarazione per gli elastomeri di assenza bisfenoli (*)

*Available upon request



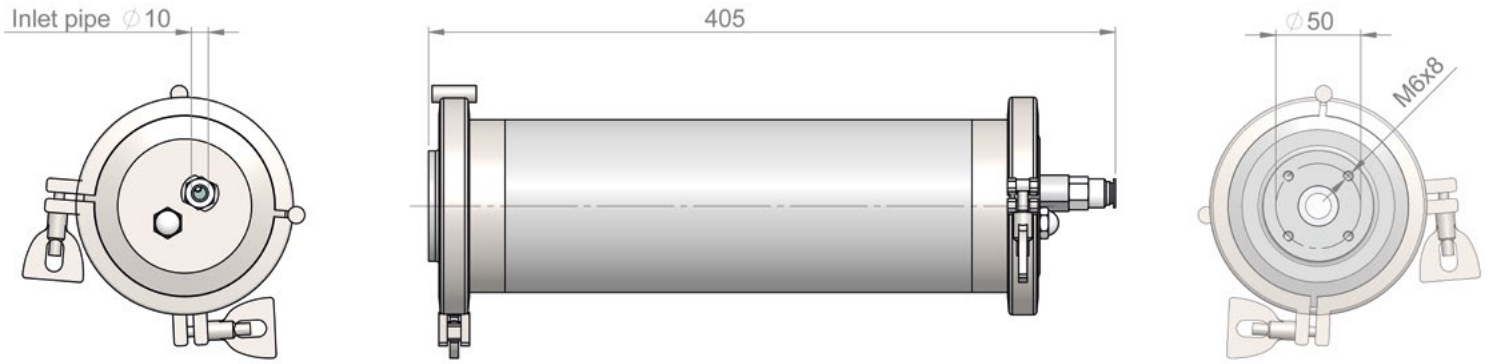


ROTODOSER WEIGHT [KG] E DIMENSIONS [MM]

D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q [mm]	Q1 [mm]	S [mm]	S1 [mm]	Weight [kg]
100	150	180	36	130	12	130	30	15	15	10	5	6
150	200	230	40	165	16	155	40	18	15	10	5	9
200	250	280	40	190	16	180	40	18	15	14	5	15
250	300	330	45	225	20	225	38	22	15	14	5	21

FUNCTIONAL PARAMETERS

ND [mm]	Main rotor max working speed		Displaced volume		Expected gasket max. working life [cycles]		Secondary rotor max working speed		Doser displaced volume	
	[cycles/min]	[m/s]	Volume per cycle [l/cycle]	Flow rate [l/h]	Silicone	EPDM, PTFE, FKM	RPM	[m/s]	Volume/pocket	Flow rate [l/h]
100	35	0,18	0,3	630	50'000	15'000	30	0,05	0,003	1
150	25	0,19	1,2	1'800	50'000	15'000	30	0,05	0,008	2,8
200	20	0,20	2,6	3'100	50'000	15'000	30	0,09	0,03	10,8
250	14	0,18	6	5'000	50'000	15'000	30	0,09	0,05	17



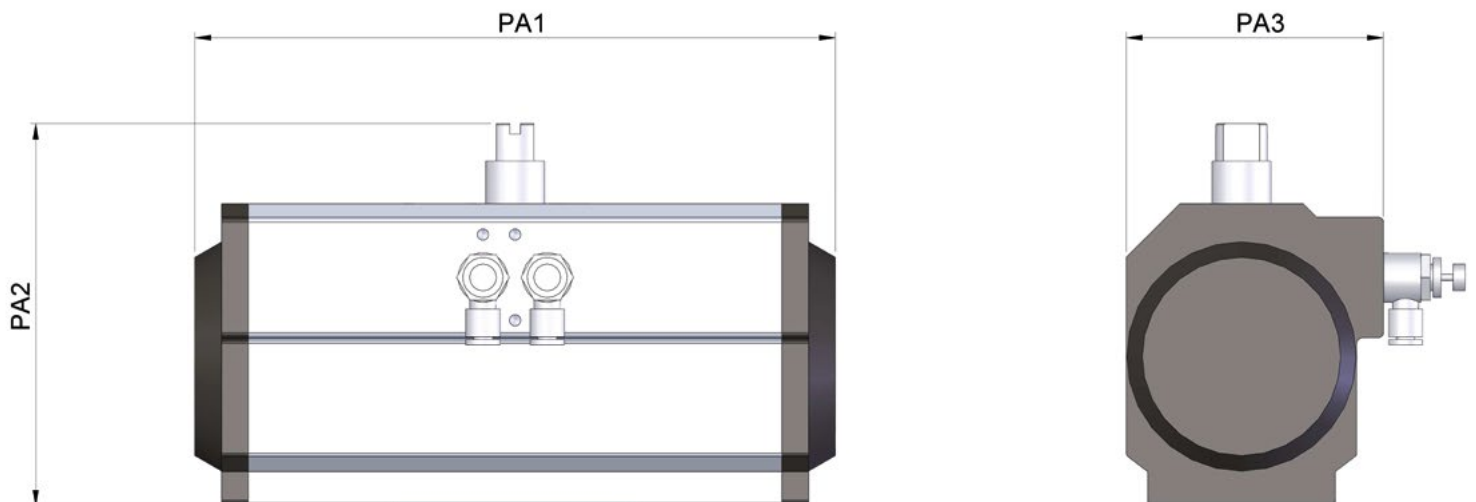
An example of pneumatic motor with case configuration : weight 10 kg, consumption 8,1 l/s

DOUBLE ACTING PNEUMATIC ACTUATOR

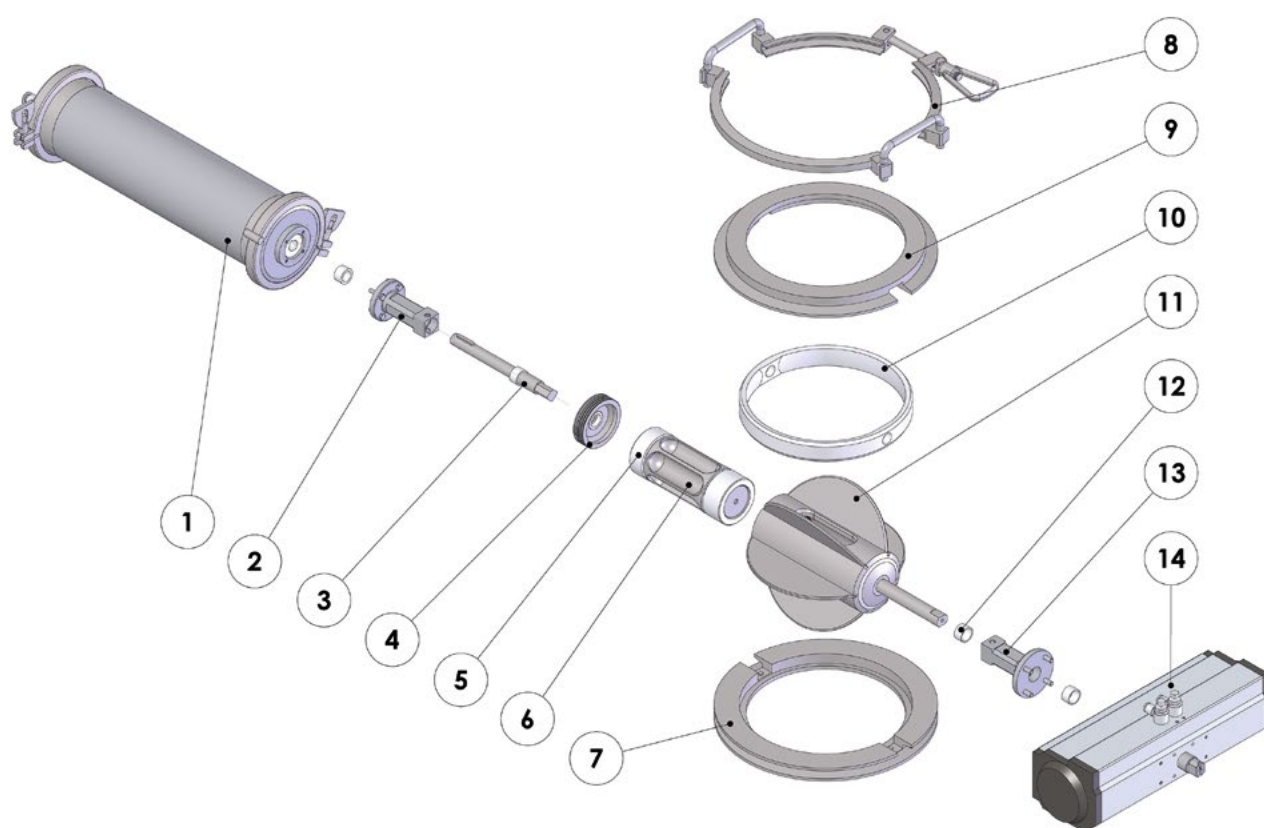
Silicone Gasket							EPDM/PTFE/FKM Gasket					
Actuator Flange	PA1 [mm]	PA2 [mm]	PA3 [mm]	Weight [kg]	Air cons. (°)	DN [mm]	Actuator Flange	PA1 [mm]	PA2 [mm]	PA3 [mm]	Weight [kg]	Air cons. (°)
F04	234	120	85	2,7	0,7 NI	100	F04	234	120	85	2,7	0,7 NI
F05/ F07	252	143	96	4,0	1,2 NI	150	F05/ F07	252	143	86	4,0	1,2 NI
F05/ F07	330	143	96	5,7	1,9 NI	200	F05/ F07	330	143	86	5,7	1,9 NI
F05/ F07	331	162	113	6,8	2,4 NI	250	F07/ F10	331	162	104	6,8	2,4 NI

POSSIBILITY TO DETERMINE PRODUCT FLOW AND DOSING

TWO COAXIAL ROTORS OF DIFFERENT VOLUME INDIVIDUALLY ACTUATED



(°) Full cycle air consumption (two strokes) @ 6 barg. Compressed air connections for Ø 6 mm pipe.



SINGLE COMPONENTS

- | | | |
|----------------------|----------------------------|-------------------------|
| 1. Gearmotor | 6. Secondary rotor (doser) | 11. Main rotor (feeder) |
| 2. Gaermotor support | 7. Half body | 12. Bushing |
| 3. Shaft | 8. Clamp | 13. Actuator support |
| 4. Plug | 9. Halfbody | 14. Actuator |
| 5. Bushing | 10. Gasket material | |

This product has been manufactured in compliance with the rules established by the Quality Management System ISO 9001 : 2015 rated by Bureau Veritas Italy S.p.A. and covered by certificate No. IT268312. Each valve is designed, manufactured, tested and individually packed in our facilities in Lucca (Italy). The serial number and the SteriValves logo is then etched on the valve to guarantee the manufacturing quality and the traceability.

