

EPSY Plus

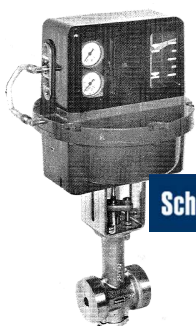
EPSY *Plus*

MICRO FLOW CONTROL VALVE

Certified according
PED 97/23/EC



Certified according
ATEX 94/9/EC



Schlumberger

Sereg Vannes

VALTEK

FLowsERVE

GRA Supervision

1978



2012

● General description

The EPSY^{Plus} valve is specifically designed for low flow applications, and operated between 10...110 bar (class 150, 300 and 600). It offers very high precision and excellent regulation qualities in many different fields of application. It is also recommended for use with extreme temperatures (-196 °C...+430 °C).

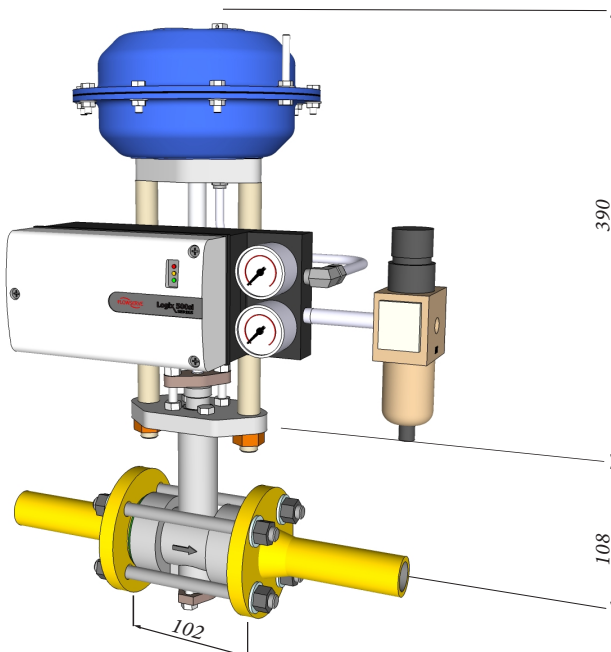
EPSY^{Plus} valves are widely used in gas and petro-chemical industries, for many industrial equipments, food industries, and also in cryogenic processes such as liquid air separation plants as well as cryogenic and high-pressure gas purification facilities.

- Simple and robust design is achieved through countless experiments over many years.
- The longer stroke in comparison to the old EPSY and the optional use of modern intelligent positioners allow this valve to have an outstanding control performance.
- Replacement of the seat can be effected from the bottom without dismantling the actuator.
- The compact design (102 mm) allows easy replacement of a ball valve in case of change of «service condition» or the need of additional control function.
- Easy change of Cv and programming of control curve.

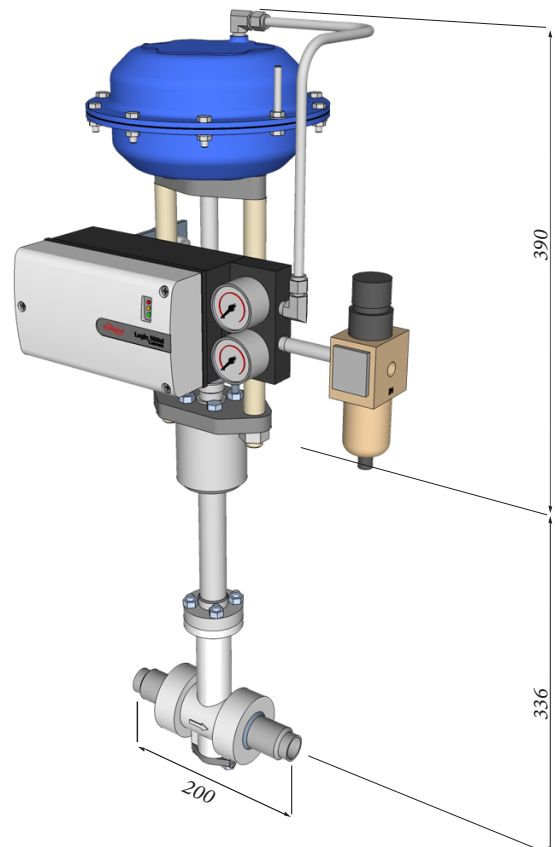
Flow coefficient Cv for all sizes
(½", ¾" and 1")

Flow characteristics		Ø Seat (mm)
%	Linear	
3	3.5	12
2	2	
1	1	7
NA	0.5	
NA	0.25	4
NA	0.1	
NA	0.03	
NA	0.01	

● Dimensions

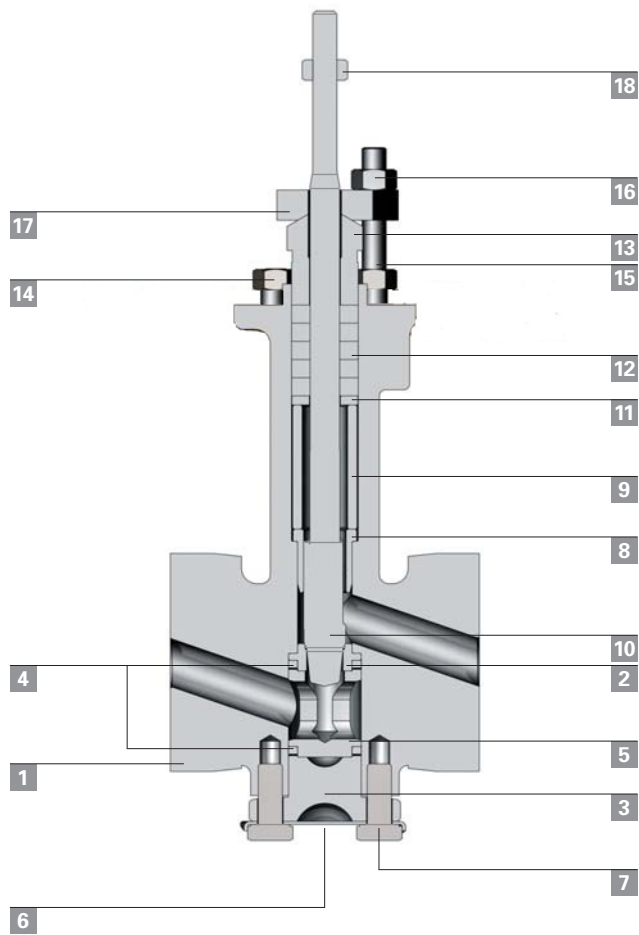


Valve EPSYPlus
(shown with pneumatic actuator
and standard positioner)

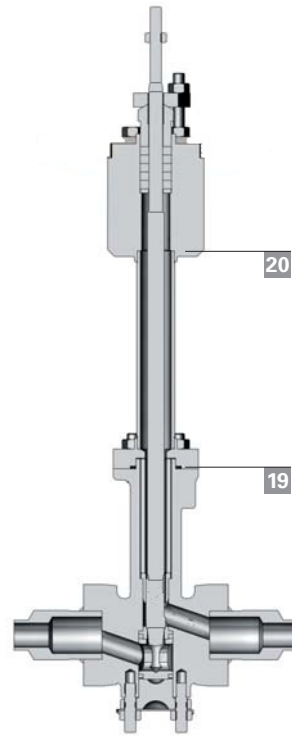


Cryogenic valve EPSYPlus
(shown with pneumatic actuator
and standard positioner)

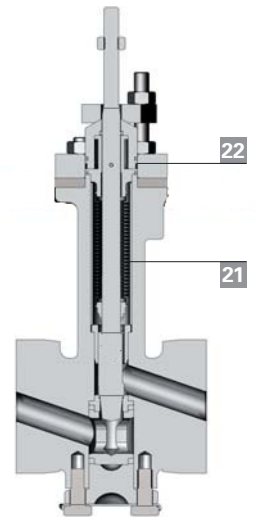
Valve EPSY^{Plus}



Cryogenic valve EPSY^{Plus}




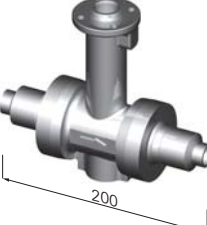




Bellows sealed valve EPSY^{Plus}



Note: Cryogenic execution with bellows seal is also available. Refer to our datasheets to overview all different executions.

● Standard Materials (special materials available on demand)	Service temperature	
	Carbon steel execution	Stainless steel execution
	-30°C < T < +430 °C	-196°C < T < +430 °C
1 Body	WCC, A105	CF3M, F316L
2 Seat	A453 Gr.660, Hastelloy C276, PTFE (150°C), PEEK (250°C),	
3 Bottom Flange	A105	A182 F316L
4 Body Gasket	Graphite	
5 Seat spacer	F316L	
6 Locking plate	F304L	
7 Bolts or screws of bottom flange	Stainless Steel	
8 Guiding sleeve	A453 Gr660	
9 Spacer	F316L	
10 Plug	A453 Gr.660, Hastelloy C276	
11 Packing retainer	F316L	
12 Packing	see separate table	
13 Packing follower	F316L	
14 2 Short bolts	Stainless Steel	
15 2 Long bolts	Stainless Steel	
16 Nuts	Stainless Steel	
17 Gland flange	F316L	
18 Locking nut	Stainless Steel	
19 Cryogenic gasket	Not Applicable	C-Ring (Helicoflex)
20 Cryogenic extension	Not Applicable	F316L
21 Bellows seal	F316L	
22 Bellows seal back up packing	O-Ring NBR (optional FPM)	

● Connections types				Flangeless*			Screwed flanges			Integral flanges**					
															
ASME/ANSI B16.5	ISO 7005-1	DIN EN 1092-1	1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"				
FF	Flat Face	Type A	Type A	NA	x	x	x	x	x	NA	x	x			
RF	Raised Face	Type B1	Type B1/B2	NA	x	x	x	x	x	NA	x	x			
LF	Large Femal face	Type F/F1	Type F	NA	x	x	x	x	x	NA	x	x			
LM	Large Mal face	Type E/E1	Type E	NA	x	x	x	x	x	NA	x	x			
LG	Large Grove face	Type D/D1	Type D	NA	x	x	x	x	x	NA	x	x			
LT	Large Tongue face	Type C/C1	Type C	NA	x	x	x	x	x	NA	x	x			
RTJ	Ring Joint face	NA	NA	NA	x	x	NA	NA	NA	NA	NA	NA			
				Butt welded			NPT			NPT with adaptor					
															
				1/2"			NA			x					
				3/4"			NA			x					
				1"			x			NA					
				* Bolts and nuts can be delivered upon request						** Only cast body, class 300					

● Packings	Temperature (°C)	Applications	Options		
			Firesafe	Live loaded	Vacuum Design
Braided PTFE / Kevlar	-100 ≤ T ≤ +150	Standard applications for liquids and gases	x	x	NA
Expanded Graphite E	-200 ≤ T ≤ +430	High temperature, nuclear industry and all industrial applications in general (non-PTFE applications, naturally fire-safe)	STD	x	NA
Expanded Graphite E1		Same with corrosion inhibitor Refinery environment	STD	x	NA
Expanded Graphite E1 BS		Same with corrosion inhibitor and low sulfur Refinery environment	STD	x	NA
Pure Braided PTFE	-200 ≤ T ≤ +300	Oxygen and food industry	x	x	NA
Pure PTFE V-Ring	-200 ≤ T ≤ +100	Higher tightness, live loaded	x	STD	x

STD = standard, X = optional, NA = not applicable/available



Your contact for MicroFlow Valves:

GR Supervision

4, rue Torpilleur Sirocco

63300 Thiers - FR

Tel : +33 (0)4 73 94 46 92

E-mail : contact@gr-supervision.com

Web : www.gr-supervision.com