

TWO-WAY HYGIENIC CONTROL VALVES V928

DESCRIPTION

The ADCAPure V928 is a series of two or three-way hygienic control valves with angle or horizontal connections. These valves are designed to regulate and accurately control flow of liquids and gases and are suitable for hygienic applications found in the pharmaceutical, cosmetic, fine chemical and food & beverage industries.

The V928 can be assembled with pneumatic, hydraulic or electric actuators, for modulating and shut-off control tasks.

MAIN FEATURES

- Completely manufactured from bar stock material.
- Body and bonnet are connected by a clamp connection, allowing fast and easy maintenance procedures.
- Cavity-free with no air trap locations.
- Metal to metal or soft sealing.

STANDARD SURFACE FINISH

- Internal wetted parts: $\leq 0,51$ micron Ra – SF1.
- External: $\leq 0,76$ micron Ra – SF3.
- Other surface conditions see IS PV20.00 E - Technical information.
- Ultrasonic cleaning.

- OPTIONS:**
- Soft valve sealing.
 - Reduced bore trims.
 - Steam barrier.
- USE:**
- Saturated steam, hot and superheated water.
 - Process fluids, liquids, air and gases compatible with the construction.
- AVAILABLE MODELS:**
- V928L – two-way angle design.
 - V928H – two-way horizontal design.
- SIZES:**
- DN 15 to DN 100.
- CONNECTIONS:**
- DIN threads, clamp ferrules or tube weld (ETO) ends. Others on request.
- PACKAGING:**
- Assembling and packaging in a clean room certified according to ISO 14644-1.
 - The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.
- INSTALLATION:**
- Horizontal installation. See IMI - Installation and maintenance instructions.



CE MARKING – GROUP 2 (PED – European Directive)	
PN 16	Category
DN 15 to DN 50	SEP
DN 65 to DN 100	1 (CE Marked)

LIMITING CONDITIONS *	
Valve model	V928
Body design conditions	PN 16
Maximum operating pressure	13 bar @ 38°C
Maximum operating steam pressure	6 bar
Max. operating temp. (steam and water)	170 °C
Maximum operating temperature (air)	150 °C
Minimum operating temperature	- 10 °C

* Higher or lower limits on request.

PLUG DESIGN

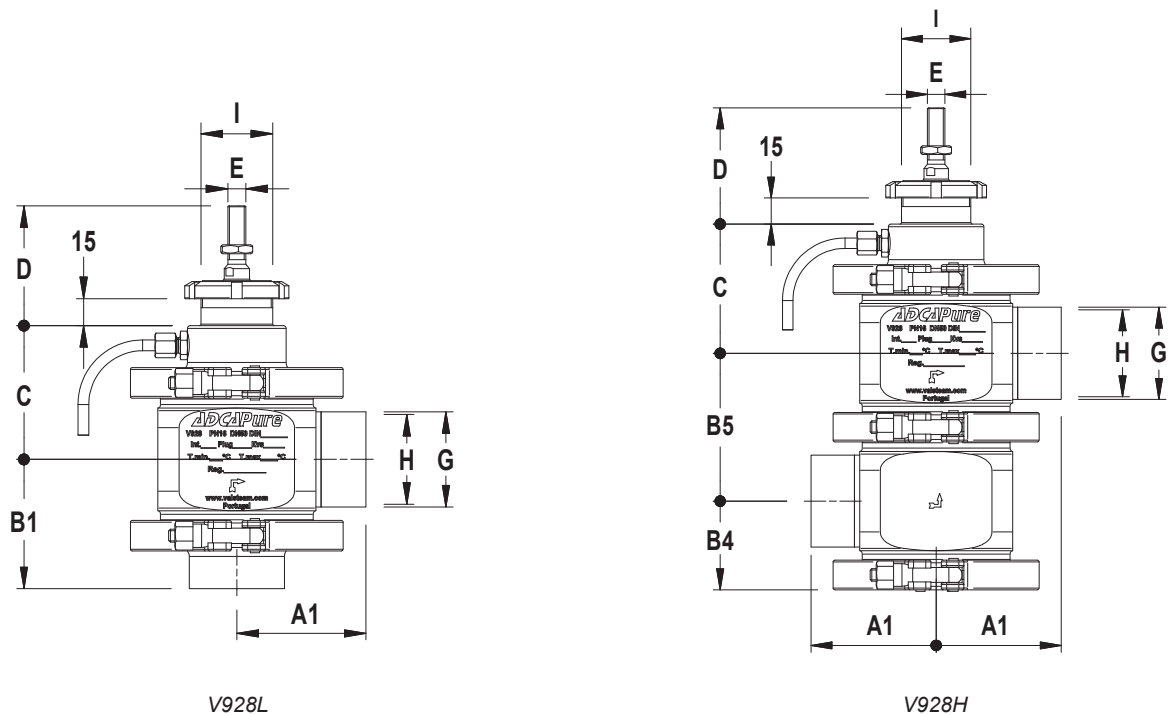
PARABOLIC	PARABOLIC (SOFT SEALING)
Sealing: Metal to metal Characteristic: Equal percentage (EQP) or linear (PL) Flow direction: From below Rangeability: 50:1 (EQP) or 30:1 (PL) Leakage: Class IV, acc. to IEC 60534-4	Sealing: EPDM, PTFE or FPM Characteristic: Equal percentage (EQP) or linear (PL) Flow direction: From below Rangeability: 50:1 (EQP) or 30:1 (PL) Leakage: Class VI, acc. to IEC 60534-4

FLOW RATE COEFFICIENTS – PARABOLIC PL AND EQP PLUGS

SIZE	Kvs (m³/h)																
	0,1 *	0,25 *	0,5 *	1	1,5	2	2,3	2,9	4	6,3	10	16	25	40	63	100	160
DN 15	•	•	•	•	•	•	•	•	•								
DN 20							•	•	•	•							
DN 25							•	•	•	•	•						
DN 32							•	•	•	•	•	•					
DN 40									•	•	•	•	•				
DN 50										•	•	•	•	•			
DN 65											•	•	•	•	•		
DN 80												•	•	•	•	•	•
DN 100													•	•	•	•	•
SEAT Ø (mm)	4		8			12			15	19,2	25	32	38	50	65	76	96
STROKE (mm)															30		

* Microflow only available with linear characteristic.
 For conversion $Kvs = Cv (US) \times 0,865$.

DIMENSIONS



DIMENSIONS (mm)									
DIMENSION	SIZE								
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100
A1	49	49	55	64	64	72	84	92	119
B1	45	45	55	62	64	72	86	109	119
B4	34	36	36	43	45	51	64	71	84
B5	51	55	55	68	73	85	110	125	144
C	57	59	59	66	69	75	91	99	108
D	67						70		
E	M10 x 1,5								
F	34	34	50,5	50,5	50,5	64	91	106	119
G	19	23	29	35	41	53	70	85	104
H	16	20	26	32	38	50	66	81	100
I	M40 x 1,5						M45 x 1,5		
WEIGHT (kg) *	2,4	2,5	2,6	4,3	4,4	4,7	10,8	11,8	17,1

Remarks: Face to face dimensions are not standardized. Other dimensions and standards on request.

Configurations with overlapped connections are only possible for tube weld (ETO) versions.

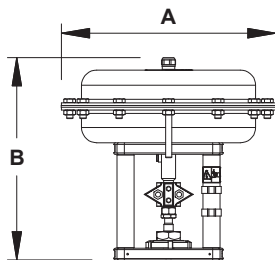
A1 and B1 – Tube weld (ETO) according to DIN 11866-A (DIN 11850-2).

A2, B2 and F – Clamp ferrules DIN (DIN 32676-A).

A3 and B3 – Hygienic male threads DIN (DIN 11851) for pipes according to DIN 11866-A (DIN 11850-2).

Alternative: Aseptic male threads DIN (DIN 11864 -1 Form A) for pipes according to DIN 11866-A (DIN 11850-2).

* Based on the standard valve V928L with tube weld (ETO) connections. For other versions, consult manufacturer.

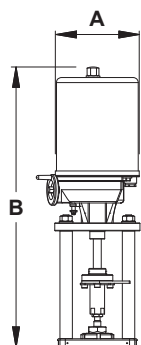


PA SERIES PNEUMATIC ACTUATORS

DIMENSIONS (mm)					
DIMENSION	PA10	PA206	PA281	PA341	PA436
A	170	209	275	336	430
B	251	236	243	323	291 / 311 *
WEIGHT (kg)	6,3	6,2	9,6	14,3	24,4 / 28 *

* For actuators with spring ranges 1 - 2 bar; 1,5 - 3 bar and 2 - 4 bar.

For more information, please consult IS 3.05 – PA Linear pneumatic actuators.



EL SERIES ELECTRIC ACTUATORS

DIMENSIONS (mm)			
DIMENSION	EL12	EL20 – EL45	EL80
A	129	148	188
B	333	485	587
WEIGHT (kg)	2,1	8	13

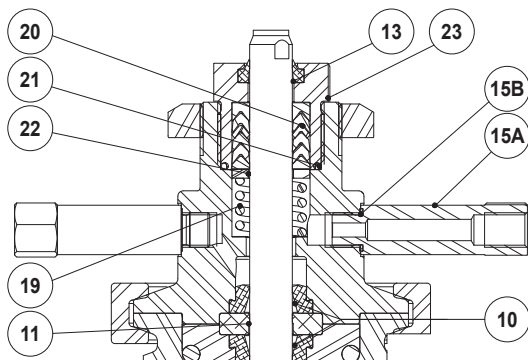
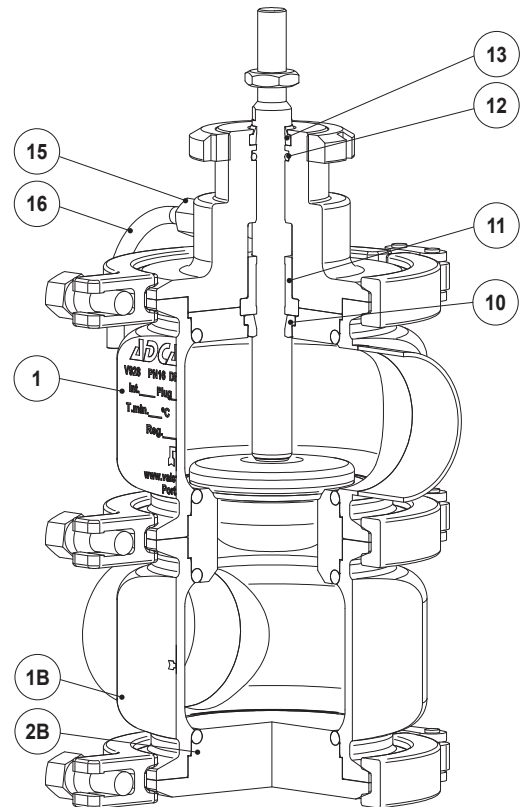
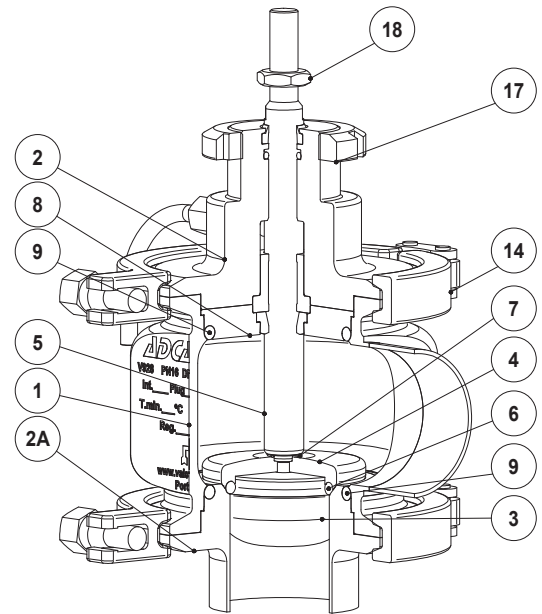
For more information, please consult IS 3.72 – EL Linear electric actuators.

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Upper valve body	AISI 316L / 1.4404
1B	Lower valve body	AISI 316L / 1.4404
2	Bonnet	AISI 316L / 1.4404
2A	Bottom connection	AISI 316L / 1.4404
2B	Bottom cover	AISI 316L / 1.4404
3	* Valve plug	AISI 316L / 1.4404
4	* Plug disc	AISI 316L / 1.4404
5	* Stem	AISI 316L / 1.4404
6	* Valve plug seal	** EPDM; PTFE; FPM
7	* O-ring	EPDM
8	Centering ring	AISI 316L / 1.4404
9	* O-ring	EPDM; PTFE; FPM
10	* Shaft seal	EPDM; PTFE; FPM
11	* Guide bushing	TFM 1600
12	* O-ring	EPDM
13	* Scraper ring	FPM; NBR
14	Clamp	AISI 316 / 1.4401
15	Compression fitting	AISI 304 / 1.4301
15A	Nipple	AISI 316L / 1.4404
15B	* O-ring	FPM
16	Discharge pipe	AISI 316 / 1.4401
17	Lock nut	CF8 / 1.4308
18	Lock nut	AISI 304 / 1.4301
19	* Spring	AISI 302 / 1.4310
20	* Chevron packing set	PTFE
21	* O-ring	EPDM
22	* Washer	AISI 304 / 1.4301
23	Gland nut	AISI 316L / 1.4404

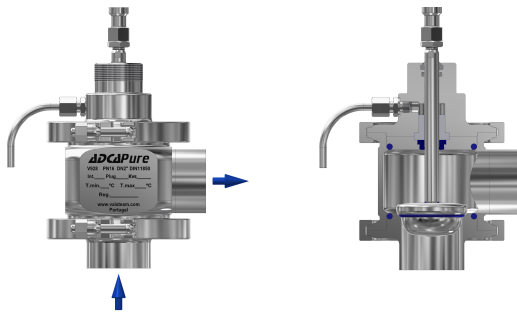
* Available spare parts; ** Others on request.

Remarks: FDA / USP Class VI seals certificate on request.

All valves have a serial number. In case of non-standard valves, this number must be supplied if spare parts are ordered.



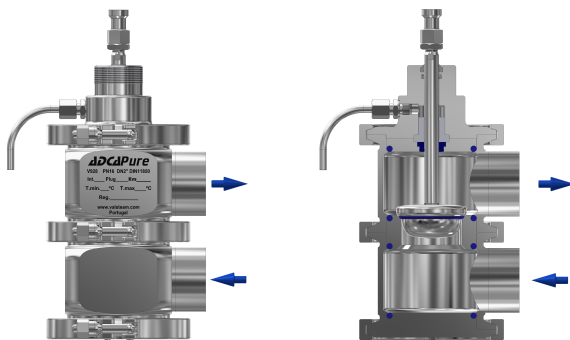
Optional steam barrier



V928L

Two-way angle design with one valve body, a vertical inlet and an horizontal outlet connection.

The vertical inlet connection has an integrated valve seat.



V928H

Two-way horizontal design with two valve bodies (upper and lower) and all the connections in the horizontal plain.

The valve seat is placed between the two main valve bodies.

Remark: Configurations with overlapped connections are only possible for tube weld (ETO) versions.

ORDERING CODES V928 a)												
Valve model	V8L	1	S	U	E	M	E	FD	X	FX	015	
V928L - AISI 316L hygienic control valve, two-way, angle	V8L											
V928H - AISI 316L hygienic control valve, two-way, horizontal	V8H											
Valve series												
Series 1		1										
Bonnet design												
Standard			S									
With steam barrier			B									
Flow direction												
Flow under the plug				U								
Stem and body sealing b)												
EPDM					E							
PTFE					T							
FPM / Viton					V							
Valve sealing												
Metal to metal (class IV)						M						
Soft sealed with EPDM (class VI)						E						
Soft sealed with PTFE (class VI)						T						
Soft sealed with FPM/Viton (class VI)						V						
Characteristic												
Equal percentage (EQP)							E					
Linear (PL)							L					
Flow rate coefficient												
Kvs 4								FD				
See table below for other Kvs value codes												
Surface finish c)												
Standard surface finish									X			
Mirror mechanical polished external surfaces (SF1)									P			
Electropolished internal wetted parts (SF5)									E			
Pipe connection												
Clamp ferrule DIN (DIN 32676-A)										FX		
Hygienic male threads DIN (DIN 11851)										G1		
Aseptic male threads DIN (DIN 11864-1 Form A)										G2		
Tube weld (ETO) according to DIN 11866-A (DIN 11850-2)										FI		
Size												
DN 15												015
DN 20												020
...												
Special valves / Extras												
Full description or additional codes have to be added in case of a non-standard combination												E

a) Codification for valve only. For actuator codes, refer to the appropriate information sheet.

b) When the bonnet with heating chamber is selected the stem sealing is achieved through a PTFE V-Rings/chevron packing set. In which case this field only specifies the body sealing material.

c) Consult IS PV20.00 for further details and other surface finish options.

FLOW RATE COEFFICIENT CODES										
Kvs	0,1	0,25	0,5	1	1,5	2	2,3	2,9	4	
Code	M4	M2	M1	R4	R3	R2	R1	R0	FD	
Kvs	6,3	10	16	25	40	63	100	160	-	
Code	FE	FF	FG	FH	FI	FJ	FL	FM	-	