

SANITARY PRESSURE REDUCING VALVES P160G

DESCRIPTION

The ADCAPure P160G is a series of angle design direct acting diaphragm sensing pressure reducing valves.

These regulators are designed for use with clean steam, compressed air, water and other gases or liquids compatible with the construction materials and valve design.

MAIN FEATURES

High capacities.

Top cap (adjustment screw with cover).

FDA / USP Class VI compliant seals.

Completely machined from bar stock material, no castings or forgings are used.

STANDARD SURFACE FINISH

Internal wetted parts: $\leq 0,51 \mu\text{m Ra} - \text{SF1}$.

External: $\leq 0,76 \mu\text{m Ra} - \text{SF3}$.

Other surface conditions see TIS.GIA – General information

ADCAPure.

Ultrasonic cleaning.

OPTIONS:

Leakage line connection.

Gauge connection on body.

Lock system, allows inline clean-in-place (CIP) and sterilization-in-place (SIP) operations.

Lifting lugs to ease installation.

Different soft sealings for liquids and gases.

USE:

Clean steam, compressed air, water and other gases and liquids compatible with the construction.

AVAILABLE

MODELS:

P160G.

SIZES:

2 1/2" and 3".

REGULATING

RANGES:

1 to 1,7 bar; 1,5 to 4 bar.

CONNECTIONS:

ASME BPE clamp ferrules.

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. Vertical inlet and horizontal outlet. See IMI – Installation and maintenance instructions.



CE MARKING – GROUP 2 (PED – European Directive)	
PN 10	Category
2 1/2" and 3"	1 (CE Marked)

LIMITING CONDITIONS *	
Maximum allowable pressure	10 bar
Maximum upstream pressure	8 bar
Maximum downstream pressure	4 bar
Minimum downstream pressure **	1 bar
Maximum operating temperature ***	180 °C

* Other limits on request. Maximum operating conditions may be limited by the valve end connections due to normative restrictions.

** For tight shut off, with adjustment spring relaxed, ensure a minimum downstream pressure of 0,2 bar.

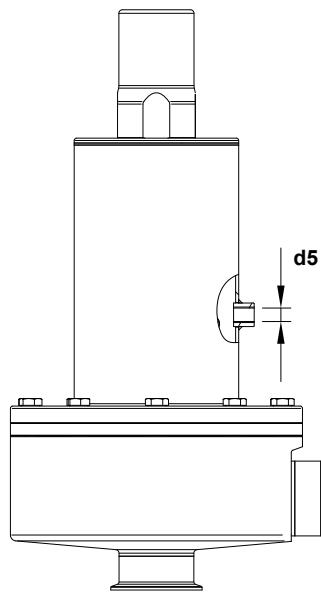
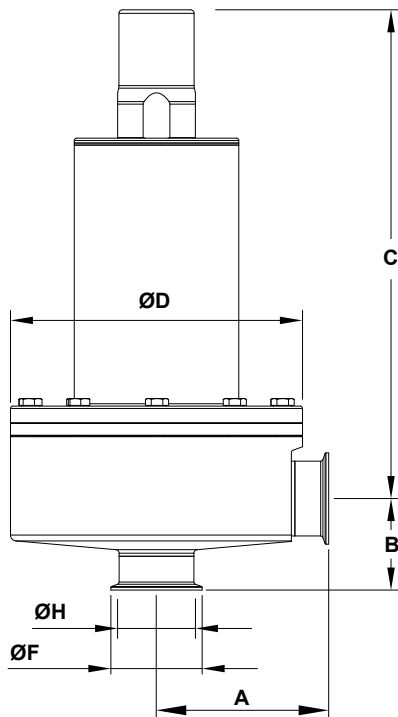
*** See "Ordering Codes" table for restrictions.

FLOW RATE COEFFICIENTS (m³/h)

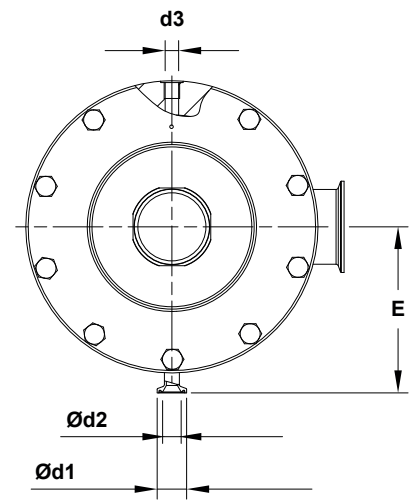
SIZE	2 1/2"	3"
Kvs	19,8	

OPTIONS

LEAKAGE LINE CONNECTION	GAUGE CONNECTION	LOCK SYSTEM	LIFTING LUGS



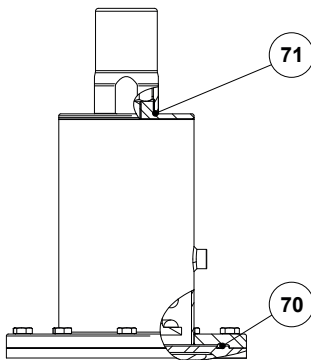
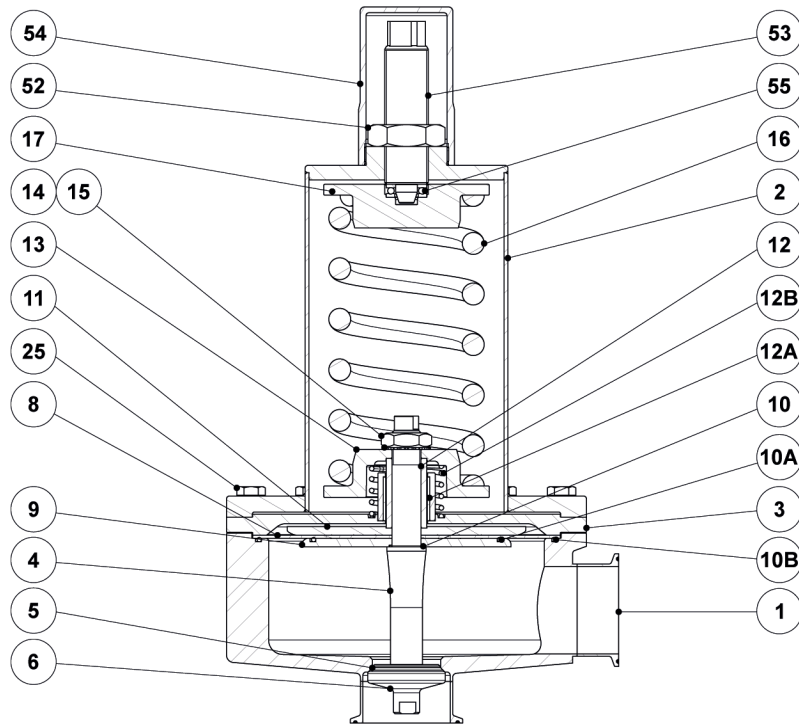
Optional leakage line connection



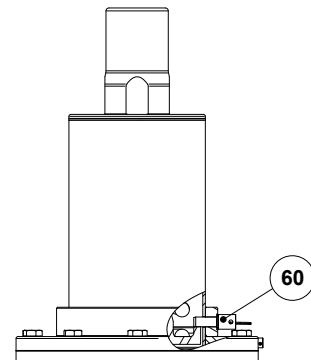
Optional gauge connection

DIMENSIONS (mm)

SIZE	A	B	C	ØD	Ød1	Ød2	d3	d5	E	ØF	ØH	WEIGHT (kg)
2 1/2"	144	78	410	245	25	15,75	1/4"	1/4"	141	77,4	60,2	34,6
3"	144	84	417	245	25	15,75	1/4"	1/4"	141	90.9	72,9	36,2



Optional leakage line connection



Optional top cap

MATERIALS

POS. N°	DESIGNATION	MATERIAL	POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404	12B	Spring	AISI 302 / 1.4300
2	Cover	AISI 316L / 1.4404	13	Spring plate	AISI 316 / 1.4401
3	Intermediate flange	AISI 316L / 1.4404	14	Nut	Stainless steel A2-70
4	* Valve stem	AISI 316L / 1.4404	15	Washer	Stainless steel A2
5	* Valve seal	** EPDM; PTFE; FPM	16	* Adjustment spring	Zinc plated spring steel
6	* Valve plug	AISI 316L / 1.4404	17	Top spring plate	AISI 316 / 1.4401
8	* Diaphragm	PTFE (Gyton)	52	Lock nut	Stainless steel A2-70
9	Lower diaphragm plate	AISI 316L / 1.4404	53	Adjustment screw	Stainless steel A2-70
10	* O-ring	** EPDM	54	Top cap	AISI 316L / 1.4404
10A	* O-ring	** EPDM	55	Bearing	Corrosion resistant steel
10B	* O-ring	** EPDM	60	Locking pin	AISI 316L / 1.4404
11	Upper diaphragm plate	AISI 316L / 1.4404	70	O-ring	EPDM
12	Stem guide	AISI 316 / 1.4401	71	O-ring	EPDM
12A	Plain bearing	Bronze			

* 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.

ORDERING CODES P160G													
Valve model	P16G	8	9	T	M	T	X	X	X	DI	65	E	
P160G – AISI 316L / 1.4404 diaphragm sensing pressure reducing valve	P16G												
Regulating range													
1 to 1,7 bar		8											
1,5 to 4 bar		9											
Flow rate coefficient													
Kvs 19,8			9										
Diaphragm													
PTFE (Gylon)				T									
Valve sealing													
Metal to metal (non-standard)					M								
EPDM – Tmax 150 °C (180 °C with steam and hot water)					E								
PTFE					T								
FPM / Viton (FDA approval only)					V								
Top cap and leakage line connection													
Top cap (adjustment screw with cover)						T							
Top cap (adjustment screw with cover) w/ ISO 228 G 1/4" leakage line connection						U							
Top cap (adjustment screw with cover) w/ 1/4" NPT leakage line connection						V							
Gauge connections													
Without gauge connections							X						
Tri-clamp gauge connection on the left side (relative to flow direction) – downstream pressure							7						
Tri-clamp gauge connection on the right side (relative to flow direction) – downstream pressure							6						
Tri-clamp gauge connections on both sides – downstream pressure							5						
Threaded gauge connection on the left side (relative to flow direction) – downstream pressure – ISO 228 G 1/4"							4						
Threaded gauge connection on the right side (relative to flow direction) – downstream pressure – ISO 228 G 1/4"							3						
Threaded gauge connections on both sides – downstream pressure – ISO 228 G 1/4"							2						
Threaded gauge connection on the left side (relative to flow direction) – downstream pressure – 1/4" NPT							W						
Threaded gauge connection on the right side (relative to flow direction) – downstream pressure – 1/4" NPT							Y						
Threaded gauge connections on both sides – downstream pressure – 1/4" NPT							Z						
Surface finish a)													
Standard surface finish								X					
Mirror mechanical polished external surfaces (SF1)								P					
Electropolished internal wetted parts (SF5)								E					
Special features													
None										X			
Degreased for oxygen										O			
CIP / SIP lock system										C			
Lifting lugs										L			
Degreased for oxygen and lifting lugs										M			
CIP / SIP lock system and lifting lugs										N			
Pipe connections													
Clamp ferrule ASME BPE											D		
Tube weld (ETO) according to ASME BPE											DI		
Size													
2 1/2"												65	
3"												80	
Special construction / Additional options													
Full description or additional codes have to be added in case of a non-standard combination													E

a) Consult TIS.GIA – General information ADCAPure – for further details and other surface finish options.