



PRESSURE REDUCING VALVE PRV25

DESCRIPTION

The ADCA PRV25 is a series of direct acting pressure reducing valves designed for use on steam, compressed air, water and other gases and liquids. These regulators are suitable for reducing steam pressure at the point of use on laundry machines, dyeing, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Bellows specially designed for high durability.

Non-rising adjustment knob.

Lockable knob system.

Built-in strainer.

OPTIONS: Rising adjustment knob with lock nut.

Top cap (adjustment screw with cover).

Spring and dome load version. Gauge connection on body.

USE: Saturated steam, compressed air, water and

other gases and liquids compatible with the

construction.

AVAILABLE

MODELS: PRV25/2S and PRV25/2SG – carbon steel.

PRW25/2S – carbon steel, balanced soft sealing.

PRV25i and PRV25iG – stainless steel.

PRW25i – stainless steel, balanced soft sealing.

Suffix G: soft sealed with PTFE/GR.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

Flanged EN 1092-1 PN 25.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation is recommended.

A "Y" strainer should be installed upstream of

the valve.

See IMI – Installation and maintenance

instructions.





CE MARKING – GROUP 2 (PED – European Directive)					
PN 25	Category				
DN 15 to 25	SEP				
DN 15 to 25	SEP				





LIMITING CONDITIONS						
Valve model	PRV25/2S PRV25i	PRV25/2SG PRV25iG	PRW25/2S PRW25i			
Body design conditions	PN 25	PN 25	PN 25			
Maximum upstream pressure	17 bar	17 bar	14 bar			
Maximum downstream pressure	8,6 bar	8,6 bar	8,6 bar			
Minimum downstream pressure	0,14 bar	0,14 bar	0,35 bar			
Maximum design temperature	210 °C	200 °C	80 °C			
Maximum recommended reducing ratio	10:1	10:1	10:1			
Maximum dome loading pressure	8,6 bar	8,6 bar	8,6 bar			

FLOW RATE COEFFICIENTS (m³/h)						
SIZE	1/2" – DN 15	3/4" – DN 20	1" – DN 25			
Kvs	1,7	2,6	3,1			

REGULATING RANGES							
SPRING COLOUR BLUE * YELLOW ** GREEN RED							
Spring loaded	0,35 to 1,7 bar	0,14 to 1,7 bar	1,4 to 4 bar	3,5 to 8,6 bar			
Spring and dome loaded ***	_	0,14 to 1,2 bar	1 to 3,5 bar	_			

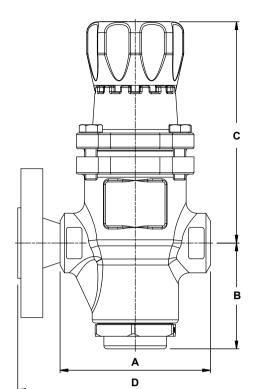
 $^{^{\}star}$ Only applicable to PRW models; ** Only applicable to PRV models.

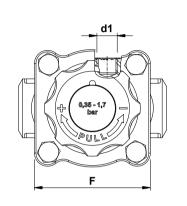
^{***} Ranges shown are related to adjustment spring loading forces. Total downstream pressure will correspond to the sum of the pressure resulting from the adjusted spring force and the loading pressure provided by the dome. Not applicable to PRW models.

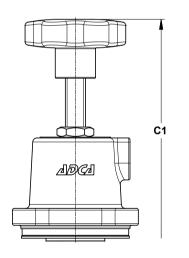
	PRV25 OPTIONAL COVERS							
RISING ADJUSTMENT KNOB WITH LOCK NUT	TOP CAP	SPRING AND DOME LOADED						

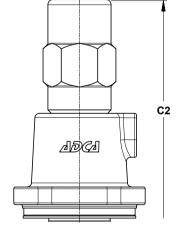


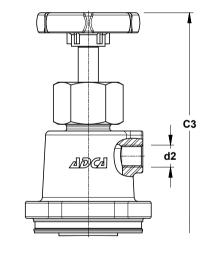












Optional rising adjustment knob

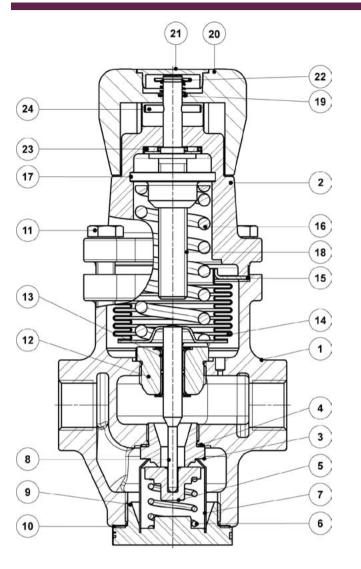
Optional top cap

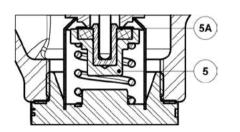
Optional spring and dome loaded version

	DIMENSIONS (mm)															
THREADED					PN	25	CLAS	S 150	CLAS	SS 300						
SIZE	Α	В	С	C1	C2	СЗ	d1 *	d2 **	F	WGT. (kg)	D	WGT. (kg)	D	WGT. (kg)	D	WGT. (kg)
1/2" – DN 15	96	68,5	141	242	237	243	1/4"	1/4"	74	3	150	4,4	150	4	150	4,4
3/4" – DN 20	96	68,5	141	242	237	243	1/4"	1/4"	74	3	150	5	150	4,4	150	5,3
1" – DN 25	96	68,5	141	242	237	243	1/4"	1/4"	74	2,9	160	5,5	160	5,1	160	5,9

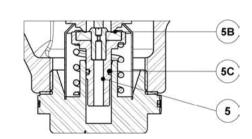




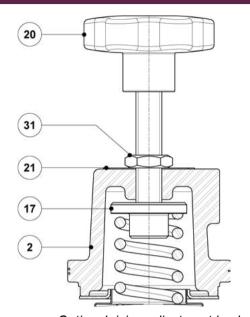




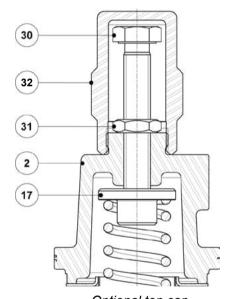




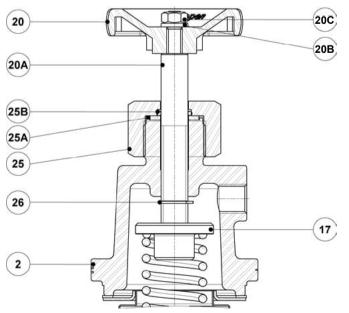
Balanced soft sealing (PRW)



Optional rising adjustment knob



Optional top cap



Optional spring and dome loaded version We reserve the right to change the design and material of this product without notice.

^{*} Optional gauge connection; ** Loading gas dome connection.

Remarks: As standard, in versions manufactured with EN 1092-1 PN 16 flanges or ISO Rp threads, connections d1 and d2 are female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.





	MATERIA	LS		
POS. Nº	DESIGNATION	MATERIAL		
	Body (PRV25/2S and PRW25/2S)	A216 WCB / 1.0619		
1	Body (PRV25i and PRW25i)	A351 CF8M / 1.4408		
	Cover (PRV25/2S and PRW25/2S)	A216 WCB / 1.0619		
2	Cover (PRV25i and PRW25i)	A351 CF8M / 1.4408		
3	* Seat	AISI 316 / 1.4401		
4	* Gasket	Copper		
5	* Valve plug	Hardened stainless steel		
5A	* Valve head	Graphite filled PTFE		
5B	* Valve head	NBR		
5C	* O-ring	NBR		
6	* Valve spring	AISI 302 / 1.4300		
7	* Strainer screen	AISI 304 / 1.4301		
8	Pushrod	AISI 316 / 1.4401		
9	Bottom cover	A351 CF8M / 1.4408		
10	* Gasket	Stainless steel / Graphite		
11	Bolts (PRV25/2S and PRW25/2S)	Steel 8.8		
11	Bolts (PRV25i and PRW25i)	Stainless steel A2-70		
12	* Guide bush	AISI 316 / 1.4401		
13	* Plain bearing	Bronze filled PTFE		
14	* Bellows	AISI 316 Ti / 1.4571		
15	* Bellows gasket	Stainless steel / Graphite		
16	* Adjustment spring	Steel		
17	Top spring plate	Brass		
18	Adjustment screw	AISI 304 / 1.4301		
19	Spring	AISI 302 / 1.4300		
20	Adjustment knob	Nylon		
20A	Adjustment stem	AISI 304 / 1.4301		
20B	Washer	Stainless steel		
20C	Nut	Stainless steel A2-70		
21	Spring identification plate	Plastic; Aluminium		
22	Retaining washer	AISI 302 / 1.4300		
23	Bearing	Steel		
24	Pin	AISI 304 / 1.4301		
25	Cover nut	AISI 303 / 1.4305		
25A	* Gasket	PTFE		
25B	* O-ring	EPDM		
26	Retaining ring	Stainless steel A2-70		
30	Adjustment screw	Stainless steel A2-70		
31	Nut	Stainless steel A2-70		
32	Тор сар	AISI 303 / 1.4305		

^{*} Available spare parts.





CAPACITY TABLE

							CAPACIT	Y
	SATURAT	TED STEA	M (kg/h)			COMPRE	ESSED All	R
INLET	OUTLET		SIZE		Ī	INLET	OUTLET	Ī
(bar)	(bar)	DN 15	DN 20	DN 25		(bar)	(bar)	l
2	0,2 – 1	75	110	132		2	0,2 – 1	
2	1,8	68	102	125		2	1,8	
	0,3 - 1,5	104	148	177			0,3 - 1,5	
3	2	97	141	170		3	2	
	2,6	90	134	162			2,6	
	0,4 – 2	125	180	210			0,4 – 2	
4	2,5	118	171	201		4	2,5	
	3,6	107	158	190			3,6	L
	0,5 - 2,5	137	192	230			0,5 - 2,5	L
5	3	134	189	222		5	3	L
	4,5	128	183	213			4,5	
	0,6 – 3	166	221	266			0,6 - 3	L
6	4	154	212	256		6	4	L
	5,5	138	200	242			5,5	L
	0,7 - 3,5	175	250	300			0,7 - 3,5	L
7	4,5	168	242	290		7	4,5	
•	5,5	157	228	270		•	5,5	L
	6,3	148	216	253			6,3	L
	0,8 – 4	222	300	357			0,8 – 4	L
8	5	208	290	350		8	5	L
•	6	189	271	330			6	
	7,2	170	240	286			7,2	L
	0,9 - 4,5	230	321	382			0,9 - 4,5	L
9	6	209	300	363		9	6	L
-	7	192	271	324		-	7	L
	8	172	241	285			8	L
	1 – 5	238	341	408			1 – 5	L
10	6	230	330	397		10	6	L
	7	215	307	363			7	L
	8,6	177	260	312	L		8,6	L
	1,1 – 5,5	250	358	427			1,1 - 5,5	L
11	6	244	348	415		11	6	ļ
	7	237	337	402			7	ŀ
	8,6	206	296	356	-		8,6	ŀ
	1,2 – 6	265	375	449			1,2 – 6	ŀ
12	7	260	370	444		12	7	ŀ
	8	246	350	421			8	ŀ
	8,6	236	333	400	-		8,6	F
	1,3 - 6,5	281	398	476			1,3 - 6,5	H
13	7	279	391	470		13	7	1
	8	266	381	459			8	1
	8,6	257	367	440	-		8,6	F
15	1,5 – 7,5 8,6	300 285	424 408	508 488		15	1,5 - 7,5 8,6	H
17	1,7 – 8,6	321	453	543	+	17	1,7 – 8,6	+
••	.,. 0,0	V= !	.50	0.0	L	••	.,. 0,0	L

CAPACITY TABLE						
COMPR	ESSED AII	R (Nm³/h -	- 0 °C - 1,	013 bar)		
INLET	OUTLET		SIZE			
(bar)	(bar)	DN 15	DN 20	DN 25		
2	0,2 – 1	120	126	147		
	1,8	109	112	135		
	0,3 - 1,5	157	169	195		
3	2	150	162	187		
	2,6	142	153	178		
	0,4 – 2	196	203	243		
4	2,5	188	196	235		
	3,6	170	181	219		
	0,5 - 2,5	208	222	253		
5	3	202	211	242		
	4,5	197	203	235		
	0,6 - 3	240	251	298		
6	4	232	244	286		
	5,5	225	230	266		
	0,7 - 3,5	269	282	337		
7	4,5	260	270	321		
,	5,5	245	255	300		
	6,3	233	244	284		
	0,8 – 4	323	339	396		
8	5	315	330	383		
0	6	290	306	361		
	7,2	258	270	318		
	0,9 - 4,5	347	363	424		
•	6	322	340	400		
9	7	293	309	364		
	8	264	279	328		
	1 – 5	372	388	453		
40	6	354	375	438		
10	7	328	348	410		
	8,6	280	296	348		
	1,1 - 5,5	387	404	474		
11	6	375	394	463		
11	7	362	383	451		
	8,6	319	338	398		
	1,2 – 6	404	423	500		
12	7	398	418	492		
12	8	375	400	469		
	8,6	358	380	448		
	1,3 - 6,5	428	447	530		
40	7	420	440	522		
13	8	411	431	510		

455

477

463

510

WATER (m³/h)						
D.P	SIZE					
(bar)	DN 15	DN 15 DN 20				
1,5	2,10	3,21	3,83			
2	2,43	3,70	4,42			
3	2,95	4,54	5,41			
4	3,43	5,24	6,25			
5	3,78	5,78	6,90			
6	4,16	6,25	7,45			
7	4,37	6,68	7,96			
8	4,63	7,08	8,45			
9	4,88	7,47	8,90			
10	5,12	7,83	9,34			
12	5,56	8,51	10,15			

VALSTEAM ADCA

VALSTEAM ADCA

We reserve the right to change the design and material of this product without notice.

494

565

546





PISTON SENSING PRESSURE REDUCING VALVES P₂₀P

DESCRIPTION

The ADCA P20P is a series of direct acting, spring loaded, piston sensing pressure reducing valves.

These regulators are designed for use with nitrogen, compressed air, water and other gases and liquids compatible with the materials of construction.

They are suitable for general purpose pressure reducing applications such as instrumentation systems and industrial equipment where small loads and high pressures are involved.

MAIN FEATURES

Compact design.

Machined from bar stock materials.

Non-rising adjustment knob.

Ultrasonically cleaned and degreased.

OPTIONS: Gauge connection on body.

> Different soft valves for liquids and gases. Top cap (adjustment screw with cover). Degreased for oxygen application.

Leakage line connection.

Panel mounting. Bottom mounting. Self relieving.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: P20P – stainless steel, piston sensing, low flow.

SIZES: 1/4".

CONNECTIONS: Female threaded ISO 7 Rp, ISO 228 or NPT.

INSTALLATION: In any position.

See IMI - Installation and maintenance

instructions.





CE MARKING – GROUP 2 (PED – European Directive)				
PN 320	Category			
1/4"	SEP			

FLOW RATE COEFFICIENTS (m³/h)					
SIZE	1/4"				
Kvs	0,043	0,22	0,62		

LIMITING CONDITIONS									
Valve model P20P									
Body design conditions	PN 320								
Maximum upstream pressure	220 bar								
Maximum downstream pressure	200 bar								
Minimum downstream pressure	0,2 bar								
Maximum design temperature	80 °C								
Maximum recommended reducing ratio	40:1								



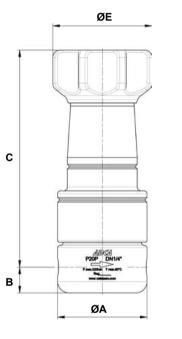
We reserve the right to change the design and material of this product without notice.

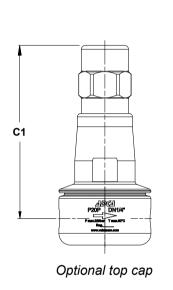
IS P20P.01 E 21.22

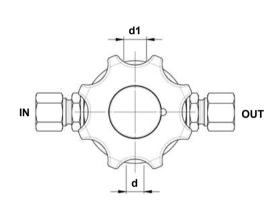
LRQA ISO 9001



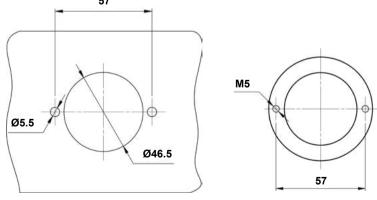
	OPTIONS										
PRESSURE GAUGE CONN.	TOP CAP	LEAKAGE LINE CONNECTION	PANEL MOUNTING								

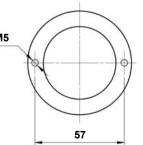


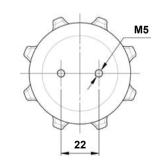




Optional leakage line (d) and pressure gauge (d1) connections







Panel mounting

Optional bottom mounting connection

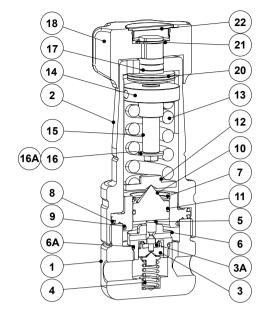
DIMENSIONS (mm)									
SIZE	ØA	В	С	C1	d	d1	ØE	WEIGHT (kg)	
1/4"	59	17	143,5	171	1/8"	1/4"	69	2,5	

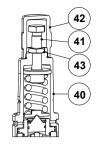
Remarks: As standard, in versions manufactured with ISO threads, connections d1 and d2 are female threaded ISO 228. In versions with NPT threads, these connections are female threaded NPT.

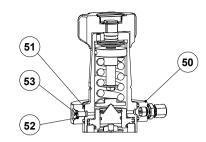






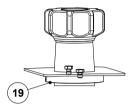






Optional top cap

Optional leakage line connection



Optional panel mounting version

	MATERIALS								
POS. Nº	DESIGNATION	MATERIAL							
1	Valve body	AISI 316L / 1.4404							
2	Cover	AISI 316L / 1.4404							
3	* Plug	AISI 316L / 1.4404							
3A	* Valve head	** NBR; EPDM; PTFE; FPM							
4	* Valve spring	AISI 302 / 1.4300							
5	* Pushrod	AISI 316L / 1.4404							
6	Seat	AISI 316L / 1.4404							
6A	* O-ring	** NBR; EPDM; FPM							
7	Piston sleeve	AISI 316L / 1.4404							
8	* O-ring	** NBR; EPDM; FPM							
9	* O-ring	** NBR; EPDM; FPM							
10	Piston	AISI 316L / 1.4404							
11	* O-ring	** NBR; EPDM; FPM							
12	Plate	AISI 316L / 1.4404							
13	* Adjustment spring	AISI 302 / 1.4300							
14	Spring guide	AISI 316L / 1.4404							
15	Adjustment screw	AISI 316L / 1.4404							
16	Washer	Stainless steel A2							
16A	Bolt	Stainless steel A2-70							
17	* O-ring	NBR							
18	Adjustment knob	Painted aluminium							
19	Panel mounting ring	AISI 316L / 1.4404							
20	Bearing	Corrosion resistant steel							
21	Shaft ring	Stainless steel							
22	Cover nut	Plastic							
40	Cover	AISI 316L / 1.4404							
41	Adjustment screw	Stainless steel A2-70							
42	Тор сар	AISI 316L / 1.4404							
43	Locknut	Stainless steel A2							
50	Leakage line ring	AISI 316L / 1.4404							
51	O-ring	** NBR							
52	O-ring	** FPM							
53	Bolt	AISI 304 / 1.4301							

^{*} Available spare parts. ** Others on request.

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









ORDERING CODE	S P20P											
Valve model	P20P .	1	w	N	F	4	R	Р	Α	1	08	
P20P – piston sensing pressure reducing valve	P20P											
Regulating range												
Nº1 − 0,2 to 1,5 bar		1										
N°2 − 0,3 to 3 bar		2										
N°3 − 0,8 to 8 bar		3										
Nº4 − 1,5 to 15 bar		4										
N°5 − 3 to 30 bar		5										
Nº6 – 5 to 50 bar		6										
N°7 – 20 to 200 bar		7										
Application												
Water			w									
Gases			G									
Oxygen (degreased)			0									
Seal material												
NBR				N								
EPDM				Е								
PTFE a)				Т								
FPM / Viton				٧								
Maximum inlet pressure												
220 bar					F							
Gauge port options												
Without gauge ports						(1)						
Gauge port on the left side (relative to the flow direction)						4						
Gauge port on the right side (relative to the flow direction)						3						
Gauge ports on both sides						2						
Relieving and leakage line connection							(4)					
Non-relieving							(1)					
Relieving (only for non dangerous gases)							R					
Relieving with leakage line connection							L					
Panel mounting Without panel mounting ring								(1)				
Without panel mounting ring With panel mounting ring								(1) P				
								F				
Pipe connection Female threaded ISO 7 Rp (non-standard)									Α			
Female threaded ISO 228									 В			
Female threaded NPT ASME B1.20.1									С			
Flow rate coefficient												
Kvs 0,043										1		
Kvs 0,22										2		
Kvs 0,62									 	3		
Size										_		
1/4"											08	
Special valves / Ext	ras											
Full description or additional codes have to be added in case of non-standard or		n.										E
												1

⁽¹⁾ Omitted if a standard valve is requested.

a) Valve head only, other seals in FPM/Viton or others on request.







DIAPHRAGM SENSING PRESSURE REDUCING VALVES P20D

DESCRIPTION

The ADCA P20D is a series of direct acting, spring-loaded, diaphragm sensing and balanced plug pressure reducing valves.

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

They are suitable for pressure reducing applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Non-rising adjustment knob.

Balanced valve plug.

Completely machined from solid bar stock material.

Ultrasonically cleaned.

OPTIONS: Leakage line connection.

Gauge connection on body.

Different soft valves for liquids and gases.
Top cap (adjustment screw with cover).
Degreased for oxygen application.

Panel mounting. Self relieving.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: P20D – stainless steel, diaphragm sensing.

SIZES: 1/4" to 1/2"; DN 15.

CONNECTIONS: Female threaded ISO 7 Rp, ISO 228 or NPT.

Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal or vertical installation.

See IMI - Installation and maintenance

instructions.







CE MARKING – GROUP 2 (PED – European Directive)							
PN 40	Category						
1/4" to 1/2" – DN 15	SEP						

VALSTEAM ADCA

FLOW RATE COEFFICIENTS (m³/h)								
SIZE	1/4"	3/8"	1/2" – DN 15					
Kvs	1,2	1,8	1,8					

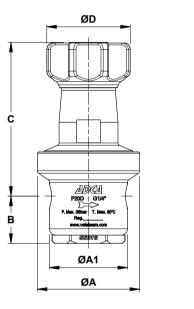
LIMITING CONDITIONS										
Valve model		P2	0D							
Body design conditions	Cl. 150	Cl. 300	PN 40	PN 63 *						
Max. upstream pressure	16 bar	40 bar	40 bar	50 bar						
Max. downstream pressure		15	bar	•						
Min. downstream pressure		0,2	bar							
Max. design temperature	80 °C									
Max. recommended reducing ratio	40:1									

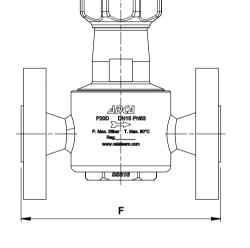
We reserve the right to change the design and material of this product without notice

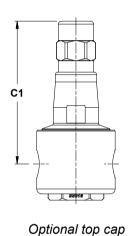


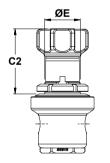


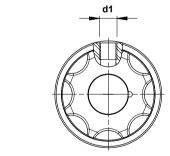
OPTIONS										
PRESSURE GAUGE CONN.	TOP CAP	LEAKAGE LINE CONNECTION	PANEL MOUNTING							
E STATE OF THE STA										

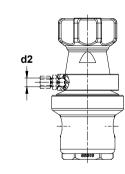












Optional panel mounting version

Optional pressure gauge connection

Optional leakage line connection

	DIMENSIONS (mm)																
	THREADED										PN 40		CLASS 150		CLASS 300		
SIZE	ØA	ØA1	В	С	C1	C2	ØD	ØE	d1	d2	WGT. (kg)	F *	WGT. (kg)	F*	WGT. (kg)	F*	WGT. (kg)
1/4"	80	61	37	120	146	83	69	45	1/4"	1/8"	2,3	_	_	_	_	_	_
3/8"	80	61	37	120	146	83	69	45	1/4"	1/8"	2,3	-	_	_	_	_	_
1/2" – DN 15	80	80	37	120	146	83	69	45	1/4"	1/8"	2,9	150	4,4	160	3,9	170	4,5

^{*} Different face to face dimensions on request.

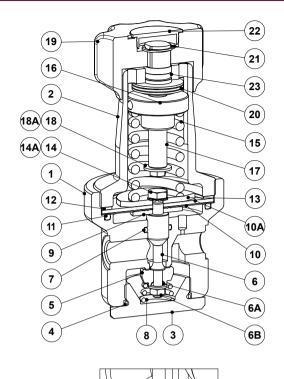
Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO threads, connections d1 and d2 are female threaded ISO 228. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.

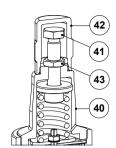


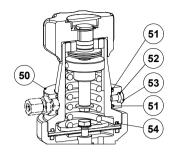
^{*} Rating PN 63 for threaded versions.





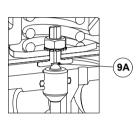


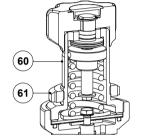




Optional top cap

Optional leakage line connection





Optional relieving version

Optional panel mounting version

	MATERIALS								
POS. Nº	DESIGNATION	MATERIAL							
1	Valve body	AISI 316 / 1.4401							
2	Cover	AISI 316 / 1.4401							
3	Bottom cover	A351 CF8M / 1.4408							
4	* O-ring	** NBR							
5	* Valve head	AISI 316 / 1.4401							
5A	* O-ring	** NBR; EPDM; PTFE; FPM							
6	* Piston	AISI 316 / 1.4401							
6A	* O-ring	** NBR							
6B	Nut	Stainless steel A2							
7	* Piston o-ring	** NBR; EPDM; FPM							
8	Valve spring	AISI 302 / 1.4300							
9	Pusher disc	AISI 316 / 1.4401							
9A	* O-ring	** NBR							
10	* Lower diaphragm	** PTFE							
10A	* Upper diaphragm	** NBR							
11	* O-ring	** NBR							
12	Gasket	Aluminium							
13	Spring plate	AISI 304 / 1.4301							
14	Nut	Stainless steel A2							
14A	* Serrated washer	AISI 304 / 1.4301							





MATERIALS								
POS. Nº	DESIGNATION	MATERIAL						
15	* Adjustment spring	AISI 302 / 1.4300						
16	Spring guide	AISI 316 / 1.4401						
17	Adjustment screw	Brass						
18	Washer	Stainless steel A2						
18A	Bolt	Stainless steel A2-70						
19	Adjustment knob	Painted aluminium						
20	Bearing	Corrosion resistant steel						
21	Shaft ring	Stainless steel						
22	Cover nut	Plastic						
23	* O-ring	NBR						
40	Cover	AISI 316L / 1.4404						
41	Adjustment screw	Stainless steel A2-70						
42	Тор сар	AISI 316L / 1.4404						
43	Locknut	Stainless steel A2						
50	Leakage line ring	AISI 316L / 1.4404						
51	O-ring	** NBR						
52	O-ring	** FPM						
53	Bolt	AISI 304 / 1.4301						
54	O-ring	** NBR						
60	Cover for panel mounting	AISI 316L / 1.4404						
61	Panel mounting ring	A351 CF8 / 1.4308						

^{*} Available spare parts. ** Others on request.

VALSTEAM ADCA

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





We reserve the right to change the design and material of this product without notice.

IS P20D.008 E 14.22

ORDERING (CODES P20)									
Valve model	P20		1	w	N	С	R	4	R	В	08
P20D – diaphragm sensing pressure reducing valve	P20										
Regulating range											
N° 1 – 0,2 to 1,5 bar			1								
N° 2 – 0,3 to 3 bar			2								
N° 3 – 0,8 to 8 bar			3								
N° 4 – 1,5 to 15 bar			4								
Application											
Water				W							
Gases				G							
Oxygen (degreased)				0							
Seal material a)											
NBR					N	1					
EPDM					Е	1					
PTFE		-			Т	1					
FPM / Viton					v						
Maximum inlet pressure											
50 bar						D					
Diaphragm											
NBR / PTFE							R	1			
Gauge port options								1			
Without gauge ports								(1)			
Gauge port on the left side (relative to the flow direction)								4			
Gauge port on the right side (relative to the flow direction)								3			
Gauge ports on both sides								2			
Top cap, relieving, leakage line connection	and panel m	ount	ting								
Non-relieving			_						(1)		
Relieving (only for non-dangerous gases)									R		
Relieving with leakage line connection		-							L		
Non-relieving with top cap (adjustment screw with cover)									T		
Relieving with top cap (adjustment screw with cover, only for non-dangere	ous gases)								٧		
Panel mounting version, non-relieving	J/								P		
Panel mounting version with relieving (only for non-dangerous gases)									Q		
Pipe connection	n										
Female threaded ISO 7 Rp (non-standard)										Α	
Female threaded ISO 228										В	
Female threaded NPT ASME B1.20.1										С	
Flanged EN 1092-1 PN 40										N	
Flanged ASME B16.5 Class 150										U	
Flanged ASME B16.5 Class 300										V	
Size											
1/4"											08
3/8"											10
1/2" or DN 15											15
Special valves	s / Extras										

⁽¹⁾ Omitted if a standard valve is requested.

a) Valve head only. Remaining valve seals on request.







DIAPHRAGM SENSING PRESSURE REDUCING VALVES P20DS

DESCRIPTION

The ADCA P20DS is a series of direct acting, spring loaded, diaphragm sensing balanced plug pressure reducing valves.

These regulators are particularly suitable for general purpose applications where low flow and high temperatures are involved and have been especially designed for use with steam.

MAIN FEATURES

Compact design.

Robust stainless steel diaphragm. Non-rising adjustment knob.

Balanced valve plug.

Completely machined from solid bar stock material.

OPTIONS: Leakage line connection.

Gauge connection on body.

Different soft valves for liquids and gases. Top cap (adjustment screw with cover). Degreased for oxygen application. Connection for external sensing line.

Panel mounting.

USE: Steam, compressed air and other gases

compatible with the construction.

AVAILABLE

MODELS: P20DS – stainless steel, diaphragm sensing.

SIZES: 1/4" to 1/2"; DN 15.

CONNECTIONS: Female threaded ISO 7 Rp, ISO 228 or NPT.

Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal or vertical installation.

See IMI - Installation and maintenance

instructions.







CE MARKING – GROUP 2 (PED – European Directive)									
PN 25 Category									
1/4" to 1/2" – DN 15	SEP								

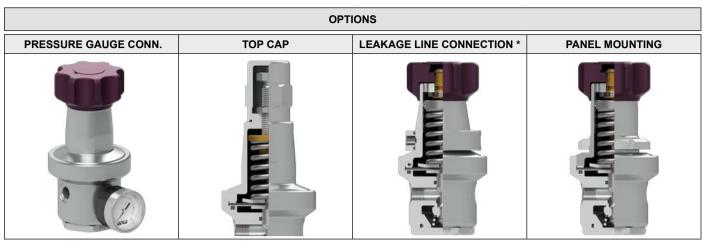
FLOW RATE COEFFICIENTS (m³/h)										
SIZE	1/4"	3/8"	1/2" – DN 15							
Kvs	1,2	1,8	1,8							

LIMITING CONDITIONS									
Valve model									
Body design conditions	Cl. 150	CI. 300	PN 40						
Max. upstream pressure	14 bar	14 bar	14 bar						
Max. downstream pressure		8 bar							
Min. downstream pressure		0,2 bar							
Max. design temperature	200 °C								
Max. recommended reducing ratio	·	10:1							

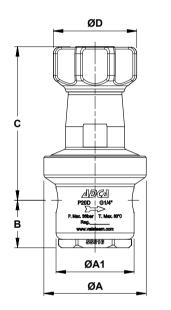
VALSTEAM ADCA

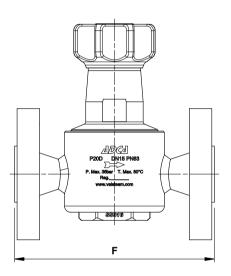


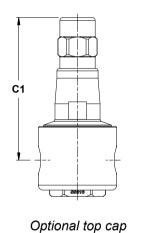




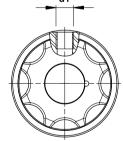
* Not recommended with medium temperatures higher than 80 °C.

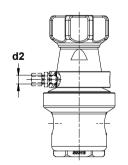






ØE





Optional panel mounting version

Optional pressure gauge connection

Optional leakage line connection

	DIMENSIONS (mm)																
THREADED PN 40 CLASS 150 CLASS												S 300					
SIZE	ØA	ØA1	В	С	C1	C2	ØD	ØE	d1	d2	WGT. (kg)	F *	WGT. (kg)	F*	WGT. (kg)	F*	WGT. (kg)
1/4"	80	61	37	120	146	83	69	45	1/4"	1/8"	2,3	_	_	_	_	_	_
3/8"	80	61	37	120	146	83	69	45	1/4"	1/8"	2,3	_	_	_	_	_	_
1/2" – DN 15	80	80	37	120	146	83	69	45	1/4"	1/8"	2,9	150	4,4	160	3,9	170	4,5

 $^{^{\}star}$ Different face to face dimensions on request.

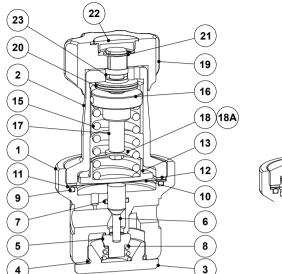
Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO threads, connections d1 and d2 are female threaded ISO 228. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.

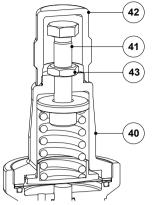


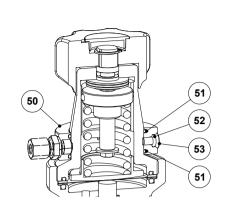
We reserve the right to change the design and material of this product without notice.





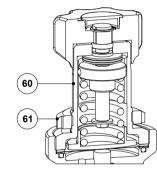






Optional top cap

Optional leakage line connection



Optional panel mounting version

	MATERIALS							
POS. Nº	DESIGNATION	MATERIAL						
1	Valve body	AISI 316 / 1.4401						
2	Cover	AISI 316 / 1.4401						
3	Bottom cover	A351 CF8M / 1.4408						
5	* Valve head	AISI 316 / 1.4401						
5A	* O-ring	** NBR; EPDM; PTFE; FPM						
6	* Piston	AISI 316 / 1.4401						
7	* Piston o-ring	** FPM						
8	Valve spring	AISI 302 / 1.4300						
10	* Diaphragm	AISI 301 / 1.4410						
11	* O-ring	** FPM						
12	Gasket	Aluminium						
13	Spring plate	AISI 304 / 1.4301						
15	* Adjustment spring	AISI 302 / 1.4300						
16	Spring guide	AISI 316 / 1.4401						
17	Adjustment screw	Brass						
18	Washer	Stainless steel A2						
18A	Bolt	Stainless steel A2-70						
19	Adjustment knob	Painted aluminium						
20	Bearing	Corrosion resistant steel						
21	Shaft ring	Stainless steel						

VALSTEAM ADCA





	MATERIALS								
POS. Nº	DESIGNATION	MATERIAL							
22	Cover nut	Plastic							
23	* O-ring	NBR							
40	Cover	AISI 316L / 1.4404							
41	Adjustment screw	Stainless steel A2-70							
42	Тор сар	AISI 316L / 1.4404							
43	Locknut	Stainless steel A2							
50	Leakage line ring	AISI 316L / 1.4404							
51	O-ring	** NBR							
52	O-ring	** FPM							
53	Bolt	AISI 304 / 1.4301							
54	O-ring	** FPM							
60	Cover for panel mounting	AISI 316L / 1.4404							
61	Panel mounting ring	A351 CF8 / 1.4308							

^{*} Available spare parts. ** Others on request.

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





ORDERING CODE	S P20DS									
Valve model	P20DS		1	s	N	S	4	В	08	
P20DS – diaphragm sensing pressure reducing valve	P20DS									
Regulating range]							
Nº1 – 0,2 to 1,5 bar			1							
N°2 – 0,3 to 3 bar			2							
N°3 – 0,8 to 8 bar			3							
Application]						
Steam				S]					
Gases				G						
Oxygen (degreased)	-			0						
Seal material a)]					
NBR					N					
EPDM					E					
PTFE					Т					
FPM / Viton					٧					
Diaphragm					•					
Stainless steel						S				
Gauge port options						•				
Without gauge ports			-				(1)			
Gauge port on the left side (relative to the flow direction)							4			
Gauge port on the right side (relative to the flow direction)							3			
Gauge ports on both sides							2			
Pipe connection										
Female threaded ISO 7 Rp (non-standard)			-					Α		
Female threaded ISO 228								В		
Female threaded NPT ASME B1.20.1	-							С		
Flanged EN 1092-1 PN 40								N		
Flanged ASME B16.5 Class 150								U		
Flanged ASME B16.5 Class 300			-					٧		
Size										
1/4"									08	
3/8"									10	
1/2"									15	
Special valves / Ex	tras									
Full description or additional codes have to be added in case of non-standard	combination	on.							_	Е

⁽¹⁾ Omitted if a standard valve is requested.

We reserve the right to change the design and material of this product without notice.

6

a) Valve head only. Remaining valve seals on request. Valve limited to the materials maximum operating temperature. Contact manufacturer for more details.

Remark: Options not mentioned in the ordering codes table must be requested separately, e.g.: P20DS.1SNS4.B08 with top cap and panel mounting.





DIAPHRAGM SENSING PRESSURE REDUCING VALVE P7

DESCRIPTION

The ADCA P7 series pressure reducing valves are direct acting, spring loaded, diaphragm sensing balanced plug regulators designed for use with steam, nitrogen, compressed air, water and other gases and liquids compatible with the materials of construction.

Particularly suitable for general purpose applications where low flow and high temperatures are involved.

Also specifically recommended to operate as a pilot valve in combination with other pressure regulators.

MAIN FEATURES

Compact design.

Robust stainless steel diaphragm.

Precise milibar control.

OPTIONS: 1/4" gauge connection on body.

Top cap (adjustment screw with cover).

External sensing connection.

Low pressure top.

Dome loaded version.

Bar stock stainless steel construction.

USE: Steam, compressed air and other gases

compatible with the construction.

AVAILABLE

MODELS: P7SS – stainless steel, diaphragm sensing.

SIZES: 1/4" and 3/8".

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

INSTALLATION: Horizontal installation.

See IMI - Installation and maintenance

instructions.



FLOW RATE COEFFICIENTS (m³/h)								
SIZE	SIZE 1/4" 3/8"							
Kvs	1	1,1						

LIMITING CONDITIONS							
Valve model P7SS							
Body design conditions	PN 40						
Maximum upstream pressure (steam)	25 bar						
Maximum upstream pressure (gases)	31 bar						
Maximum downstream pressure	17 bar						
Minimum downstream pressure *	0,35 bar						
Maximum design temperature	300 °C						

^{* 0,07} bar with low pressure top (limited at 7 bar inlet). The low pressure diaphragm should be fitted for outlet pressures from 0,07 up to 0,5 bar.

Pressure and temperature limiting conditions may change if soft sealing is used.

We reserve the right to change the design and material of this product without notice.

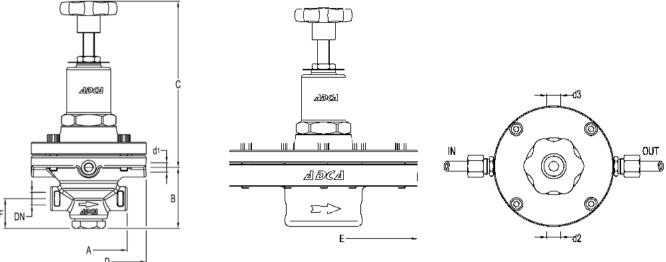
 PN 40
 Category

 1/4" and 3/8"
 SEP

CE MARKING – GROUP 2 (PED – European Directive)







	DIMENSIONS (mm)									
SIZE	Α	В	С	D	E*	F	d1 **	d2 ***	d3 ***	WEIGHT (kg)
1/4"	80	63,5	185	120	195	31	1/8"	1/4"	1/4"	4,8
3/8"	80	63,5	185	120	195	31	1/8"	1/4"	1/4"	4,8

^{*} Low pressure top (bar stock construction); ** Optional external sensing connection; *** Optional pressure gauge connections. Remark: all optional threaded connections are supplied in accordance with the main connections.

MATERIALS								
DESIGNATION	MATERIAL							
Valve body	AISI 316 / 1.4401; A351 CF8M / 1.4408							
Plug	AISI 316 / 1.4401							
* Gasket	Stainless steel / Graphite							
* Strainer screen	AISI 304 / 1.4301							
Gasket	Copper							
* Spring	AISI 302 / 1.4300							
* Valve head	AISI 420; EPDM; PTFE; etc.							
* Pilot valve body	AISI 316 / 1.4401							
* Pushrod	AISI 316 / 1.4401							
* Diaphragm	AISI 301 / 1.4310							
* Gasket	Stainless steel / Graphite							
Top cover	A351 CF8 / 1.4308							
Cover spring	A351 CF8 / 1.4308							
Lower spring carrier	Brass							
Upper spring carrier	Brass							
* Adjustment spring	Spring steel							
Spring id. plate	Aluminium							
Locknut	Stainless steel A2-70							
Handwheel	Plástico							
Bolts	Stainless steel A2-70							
Restrictor	Stainless steel A2-70							
	Valve body Plug * Gasket * Strainer screen Gasket * Spring * Valve head * Pilot valve body * Pushrod * Diaphragm * Gasket Top cover Cover spring Lower spring carrier Upper spring carrier * Adjustment spring Spring id. plate Locknut Handwheel Bolts							

^{*} Available spare parts.

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

REGULATING RANGES										
SPRING COLOUR	GREEN w/ 1 diaphragm	BLUE w/ 1 diaphragm	RED w/ 2 diaphragms	BLACK w/ 2 diaphragms						
Regulating range	0,07 to 0,5 bar * 0,35 to 2 bar	1,5 to 5,5 bar	3,5 to 8,5 bar	7 to 17 bar						

^{*} With special low pressure top assembled.





VALSTEAM ADCA

IS P7.01 E 11.11





Valve model P7SS . P7SS – stainless steel pilot pressure reducing valve P7SS Regulating range Green spring – 0,35 to 2 bar – single diaphragm	1	S	E	S	4	Α	08
Regulating range	1						
	1		i .				
	1						
Green spring – 0,55 to 2 bar – single diapriragin							
Blue spring – 1,5 to 5,5 bar – single diaphragm	2						
Red spring – 1,5 to 8,5 bar – double diaphragm	3						
Black spring – 7 to 17 bar – double diaphragm	4						
Dome loaded – 0,35 to 4 bar – single diaphragm a)	6						
Dome loaded = 0,33 to 4 bar = single diaphragm a) Dome loaded = 2 to 17 bar = double diaphragm a)	7						
Application	,						
Steam		S					
Gases		G]				
Seal material b)							
Metal to metal			(1)				
EPDM			Е				
PTFE			Т				
FPM / Viton			٧				
Diaphragm							
Standard diaphragm				s			
Low pressure diaphragm				L			
Gauge port 1/4"							
Without gauge ports					(1)		
Gauge port on the left side (relative to the flow direction)					4		
Gauge port on the right side (relative to the flow direction)							
Gauge ports on both sides							
Pipe connection							
Female threaded ISO 7 Rp						Α	
Female threaded NPT ASME B1.20.1						С	
Size							
1/4"							08
3/8"							10
Special valves / Extras Full description or additional codes have to be added in case of non-standard combination.							

- (1) Omitted if a standard valve is requested.
- a) The loading control pressure is approximately the same as the required downstream set-point pressure (± 0,2 bar).
- b) Valve limited to the materials' maximum operating temperature. Consult manufacturer for more details.
- Remarks: The external sensing connection must be requested with the order, when required.





DIAPHRAGM SENSING PRESSURE REDUCING VALVE PRV30SS 1/2" to 1" – DN 15 to DN 25

DESCRIPTION

The ADCA PRV30SS is a series of direct acting, spring-loaded, diaphragm sensing and balanced plug pressure reducing valves.

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

They are suitable for pressure reducing applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Built-in strainer.

Balanced valve plug.

Full stainless steel construction.

Various sealing options to meet compatibility requirements.

OPTIONS: Self relieving.

Gauge connection on body.

Different soft valves for liquids and gases.

Dome-loaded version.

Top cap (adjustment screw with cover). Degreased for oxygen application.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PRV30SS – stainless steel, diaphragm sensing.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

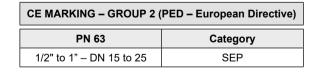
Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation.

See IMI - Installation and maintenance

instructions.



FLOW RATE COEFFICIENTS (m³/h)								
SIZE	1/2" – DN 15	3/4" – DN 20	1" – DN 25					
Kvs	2,1	2,4	6,5					



1/2" to 3/4" - DN 15 to DN 20



1" - DN 25



1/2" to 3/4" - DN 15 to DN 20

1" – DN 25



We reserve the right to change the design and material of this product without notice.

VALSTEAM 4DC4

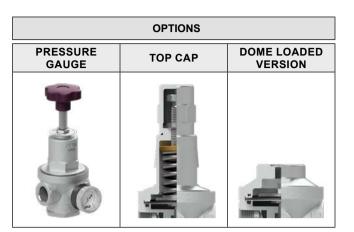
IS P7.01 E 11.11

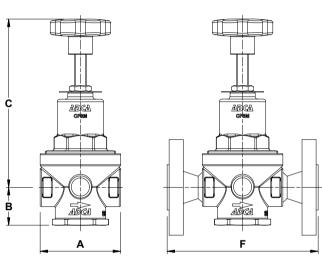


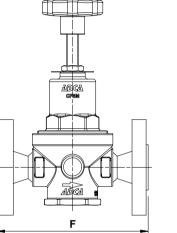


LIMITING CONDITIONS										
Valve model	PRV30SS									
Body design conditions	Cl. 150	Cl. 300	PN 40	PN 63 *						
Max. upstream pressure	x. upstream pressure 16 bar 40 bar 40 bar 50									
Max. downstream pressure	15 bar									
Min. downstream pressure		0,2 l	oar							
Max. design temperature		80 9	C							
Max. recommended reducing ratio	40:1									
Maximum dome-loading pressure		15 b	ar							

^{*} Rating PN 63 for threaded versions.



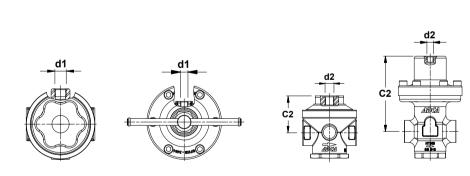




ALDO CAI

1" - DN 25

1/2" to 3/4" - DN 15 to DN 20



	C1
C1	

Optional top cap

Optional pressure gauge connection

(Optional dome-loaded version	7

IS PRV30.015 E 00.21

	DIMENSIONS (mm)													
THREADED						PN	40	CLAS	S 150	CLAS	SS 300			
SIZE	Α	В	С	C1	d1	C2	d2	WGT. (kg)	F*	WGT. (kg)	F*	WGT. (kg)	F*	WGT. (kg)
1/2" – DN 15	80	38	167	145	1/4"	55	1/4"	2,1	150	3,6	150	3	150	3,6
3/4" - DN 20	80	38	167	145	1/4"	55	1/4"	2	150	4,1	150	3,4	150	4,5
1" – DN 25	105	54	292	300	1/4"	153	1/4"	6,6	160	9,3	230	8,5	230	9,7

^{*} Different face to face dimensions on request.

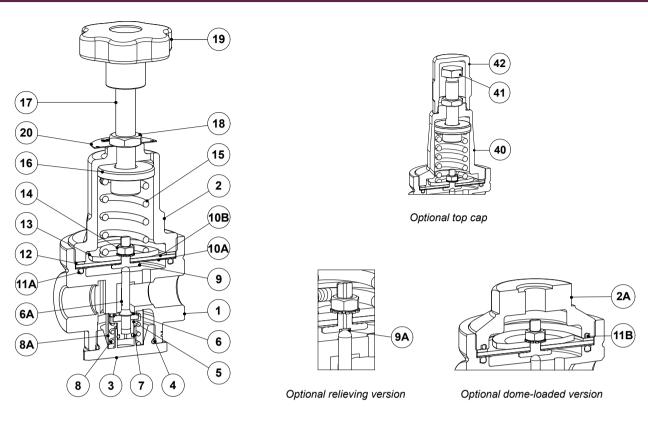
Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO 7 Rp threads, connections d1 and d2 are female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.



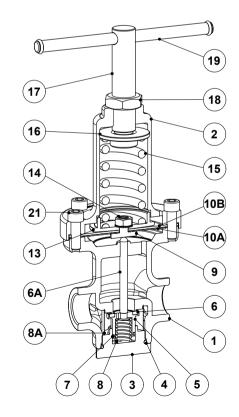
We reserve the right to change the design and material of this product without notice.

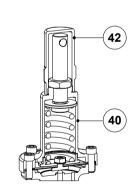




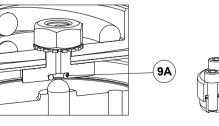


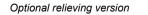
1/2" to 3/4" - DN 15 to DN 20

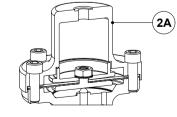




Optional top cap







Optional dome-loaded version

1" - DN 25

VALSTEAM ADCA





MATERIALS								
POS. Nº	DESIGNATION	1/2" to 3/4" – DN 15 to DN 20	1" – DN 25					
1	Valve body	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
2	Spring cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
2A	Cover	AISI 316L / 1.4404	AISI 316L / 1.4404					
3	Bottom cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
4	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
5	* Piston	AISI 316 / 1.4401	AISI 316 / 1.4401					
6	* Valve head	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
6A	* Pushrod	AISI 316 / 1.4401	AISI 316 / 1.4401					
7	* Piston o-ring	NBR; EPDM; FPM	NBR; EPDM; FPM					
8	* Valve spring	AISI 302 / 1.4300	AISI 302 / 1.4300					
8A	* Strainer screen	AISI 304 / 1.4301	AISI 304 / 1.4301					
9	Pusher disc	AISI 304 / 1.4301	AISI 304 / 1.4301					
9A	* O-ring	NBR; EPDM; FPM	NBR; EPDM; FPM					
10A	* Lower diaphragm	PTFE	PTFE					
10B	* Upper diaphragm	NBR	NBR					
11A	* O-ring	NBR; EPDM; PTFE; FPM	-					
11B	* O-ring	NBR; EPDM; PTFE; FPM	-					
12	Gasket	Aluminium	-					
13	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301					
14	Nut	Stainless steel A2-70	Stainless steel A2-70					
15	* Adjustment spring	AISI 302 / 1.4300	AISI 302 / 1.4300					
16	Top spring plate	Brass	AISI 316 / 1.4401					
17	Adjustment stem	AISI 304 / 1.4301	AISI 304 / 1.4301					
18	Locknut	Stainless steel A2-70	Stainless steel A2-70					
19	Handwheel	Plastic	AISI 304 / 1.4301					
20	Spring id. plate	Aluminium	-					
21	Bolts	_	Stainless steel A2-70					
40	Cover	AISI 316L / 1.4404	A351 CF8M / 1.4408					
41	Adjustment screw	Stainless steel A2-70	-					
42	Тор сар	AISI 316L / 1.4404	AISI 316L / 1.4404					

^{*} Available spare parts.

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





	30 .	1	W	N	С	R	4	R	Α	
Regulating range N° 1 – 0,2 to 1,5 bar N° 2 – 0,3 to 3 bar N° 3 – 0,8 to 8 bar N° 4 – 1,5 to 15 bar 0,2 to 15 bar (dome-loaded) a) Application Water Gases Oxygen (degreased) Seal material NBR EPDM	30	1							 ~	15
N° 1 – 0,2 to 1,5 bar N° 2 – 0,3 to 3 bar N° 3 – 0,8 to 8 bar N° 4 – 1,5 to 15 bar 0,2 to 15 bar (dome-loaded) a) Application Water Gases Oxygen (degreased) Seal material NBR EPDM		1		1						
N° 2 – 0,3 to 3 bar N° 3 – 0,8 to 8 bar N° 4 – 1,5 to 15 bar 0,2 to 15 bar (dome-loaded) a) Application Water Gases Oxygen (degreased) Seal material NBR EPDM		1								
N° 3 – 0,8 to 8 bar N° 4 – 1,5 to 15 bar 0,2 to 15 bar (dome-loaded) a) Application Water Gases Oxygen (degreased) Seal material NBR EPDM		_								
N° 4 – 1,5 to 15 bar 0,2 to 15 bar (dome-loaded) a) Application Water Gases Oxygen (degreased) Seal material NBR EPDM		2								
O,2 to 15 bar (dome-loaded) a) Application Water Gases Oxygen (degreased) Seal material NBR EPDM		3								
Application Water Gases Oxygen (degreased) Seal material NBR EPDM		4								
Water Gases Oxygen (degreased) Seal material NBR EPDM		Α								
Gases Oxygen (degreased) Seal material NBR EPDM										
Oxygen (degreased) Seal material NBR EPDM			w							
Seal material NBR EPDM			G							
Seal material NBR EPDM			0	1						
EPDM										
EPDM				N						
				Е						
=/				Т						
FPM / Viton				v						
Maximum inlet pressure										
30 bar					С	-				
50 bar c)					D	-				
Diaphragm										
NBR / PTFE (only NBR in case of dome-loaded version)						R				
Gauge port 1/4"						'\				
Without gauge ports							(1)			
Gauge port on the left side (relative to the flow direction)							4			
Gauge port on the right side (relative to the flow direction)							3			
Gauge ports on both sides							2			
Top cap and relieving										
Non-relieving								(1)		
								(1) R		
Relieving (only for non-dangerous gases)								T		
Non-relieving with top cap (adjustment screw with cover)	`							V		
Relieving with top cap (adjustment screw with cover, only for non-dangerous gases)							X		
Dome-loaded top d)								Α		
Pipe connection										
Female threaded ISO 7 Rp									Α	
Female threaded NPT ASME B1.20.1									С	
Flanged EN 1092-1 PN 40									N	
Flanged ASME B16.5 Class 150									U	
Flanged ASME B16.5 Class 300									٧	
Size										
1/2" or DN 15										15
3/4" or DN 20										20
1" or DN 25										25
Special valves / Extras										
Full description or additional codes have to be added in case of non-standard comb	ination									

⁽¹⁾ Omitted if a standard valve is requested.

VALSTEAM ADCA



a) The loading control pressure can be up to a maximum of 1,2 bar above the required downstream pressure.

<sup>b) All seals except piston o-ring, which is supplied in FPM/Viton or others on request.
c) Only available with spring no 4.</sup>

d) This option must be chosen in case of dome-loaded version.





DIAPHRAGM SENSING PRESSURE REDUCING VALVE PRV30SS 1" to 2" - DN 25 to DN 50

DESCRIPTION

The ADCA PRV30SS is a series of direct acting, spring-loaded, diaphragm sensing and balanced plug pressure reducing valves.

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

They are suitable for pressure reducing applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Built-in strainer.

Balanced valve plug.

Full stainless steel construction.

Various sealing options to meet compatibility requirements.

OPTIONS: Self relieving.

Gauge connection on body.

Different soft valves for liquids and gases.

Dome-loaded version.

Top cap (adjustment screw with cover). Degreased for oxygen application.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PRV30SS - stainless steel, diaphragm sensing.

SIZES: 1" to 2"; DN 25 to DN 50.

CONNECTIONS: Female threaded ISO 7 Rp or NPT (only available

from 11/4" to 2").

Flanged EN 1092-1 PN 40 (only available from

DN 32 to DN 50) or PN 63.

Flanged ASME B16.5 Class 150 or 300 (only

available from 11/4" to 2") or Class 600.

INSTALLATION: Horizontal installation.

VALSTEAM ADCA

See IMI - Installation and maintenance

instructions.

CE MARKING – GROUP 2 (PED – European Directive)							
PN 63	Category						
1" to 2" – DN 25 to 50	SEP						

FLOW RATE COEFFICIENTS (m³/h)								
SIZE	1" – DN 25	2" – DN 50						
Kvs	6,5	7,2	12,7	13,7				



1" to 11/4" - DN 25 to DN 32



11/2" to 2" - DN 40 to DN 50



1" to 11/4" – DN 25 to DN 32 11/2" to 2" – DN 40 to DN 50

We reserve the right to change the design and material of this product without notice.

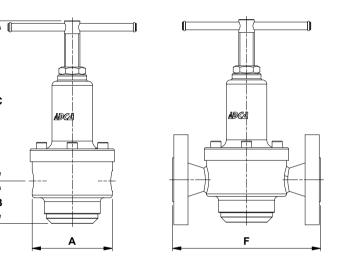


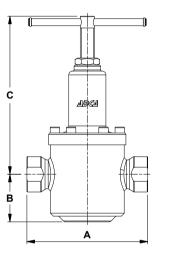


LIMITING CONDITIONS									
Valve model	PRV30SS								
Body design conditions	CI. 150	CI. 300	CI. 600	PN 40	PN 63 *				
Max. upstream pressure	16 bar	40 bar	50 bar	40 bar	50 bar				
Max. downstream pressure	15 bar								
Min. downstream pressure			0,2 bar						
Max. design temperature	80 °C								
Max. recommended reducing ratio	40:1								
Maximum dome-loading pressure			15 bar		·				

* Rating PN 63 for threaded versions

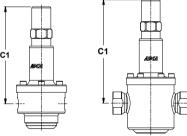
OPTIONS									
PRESSURE GAUGE	TOP CAP	DOME LOADED VERSION							

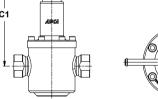


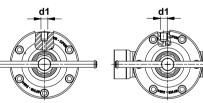


1" to 11/4" - DN 25 to DN 32

11/2" to 2" - DN 40 to DN 50







Optional top cap

Optional pressure gauge connection

Optional dome-loaded version

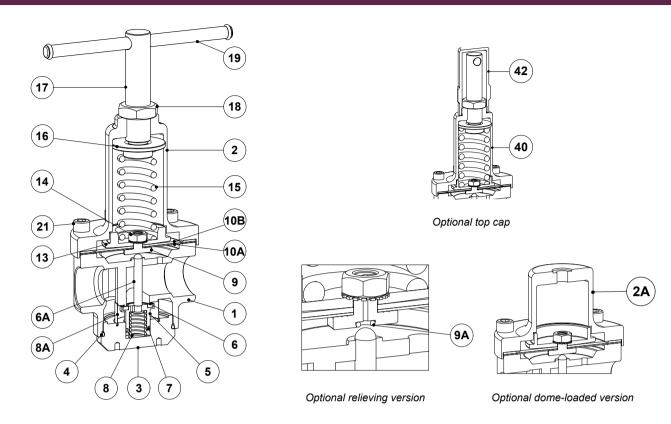
DIMENSIONS (mm)																		
THREADED					PN	PN 40 PN 63		CLASS 150		CLASS 300		CLASS 600						
SIZE	Α	В	С	C1	d1	C2	d2	WGT. (kg)	F*	WGT. (kg)								
1" – DN 25 **	125	66	249	257	1/4"	110	1/4"	_	_	_	230	14,1	_	_	_	_	230	12,5
11/4" – DN 32	125	66	249	257	1/4"	110	1/4"	8,7	260	12,6	260	14,9	260	11,7	260	12,8	260	13,6
11/2" – DN 40	205	81	268	276	1/4"	129	1/4"	12,4	201	16,3	260	20,1	235	15,9	248	18,1	264	19,2
2" – DN 50	205	75	274	270	1/4"	123	1/4"	13,2	230	18,2	300	21,3	254	16,7	267	18,6	300	21

^{*} Different face to face dimensions on request; ** Only available with PN 63 and Class 600 flanged connections. Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO 7 Rp threads, connections d1 and d2 are female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.

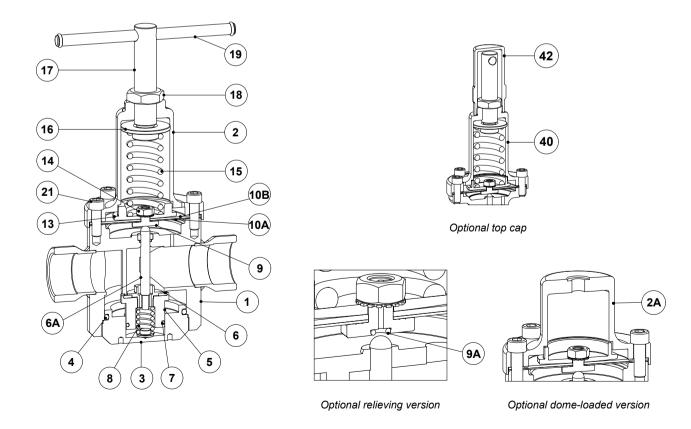
VALSTEAM ADCA







1" to 11/4" – DN 25 to DN 32



11/2" to 2" - DN 40 to DN 50



We reserve the right to change the design and material of this product without notice.

IS PRV30.025 E 00.21





		MATERIALS	
POS. Nº	DESIGNATION	1" to 11/4" – DN 25 to DN 32	11/2" to 2" – DN 40 to DN 50
1	Valve body	AISI 316 / 1.4401	AISI 316 / 1.4401
2	Spring cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408
2A	Cover	AISI 316 / 1.4401	AISI 316 / 1.4401
3	Bottom cover	AISI 316 / 1.4401	AISI 316 / 1.4401
4	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
5	* Piston	AISI 316 / 1.4401	AISI 316 / 1.4401
6	* Valve head	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
6A	* Pushrod	AISI 316 / 1.4401	AISI 316 / 1.4401
7	* Piston o-ring	NBR; EPDM; FPM	NBR; EPDM; FPM
8	* Valve spring	AISI 302 / 1.4300	AISI 302 / 1.4300
8A	* Strainer screen	AISI 304 / 1.4301	-
9	Pusher disc	AISI 304 / 1.4301	AISI 304 / 1.4301
9A	* O-ring	NBR; EPDM; FPM	NBR; EPDM; FPM
10A	* Lower diaphragm	PTFE	PTFE
10B	* Upper diaphragm	NBR	NBR
13	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301
14	Nut	Stainless steel A2-70	Stainless steel A2-70
15	* Adjustment spring	AISI 302 / 1.4300	AISI 302 / 1.4300
16	Top spring plate	Brass	Brass
17	Adjustment stem	AISI 304 / 1.4301	AISI 304 / 1.4301
18	Locknut	Stainless steel A2-70	Stainless steel A2-70
19	Handwheel	AISI 304 / 1.4301	AISI 304 / 1.4301
21	Bolts	Stainless steel A2-70	Stainless steel A2-70
40	Cover	AISI 316L / 1.4404	A351 CF8M / 1.4408
42	Тор сар	AISI 316L / 1.4404	AISI 316L / 1.4404

^{*} Available spare parts.

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





	ES PRV30S										
Valve model	R30	. 1	W	N	С	R	4	R		Α	32
PRV30SS – diaphragm sensing pressure reducing valve	R30										
Regulating range											
N° 1 – 0,2 to 1,5 bar		1									
N° 2 − 0,3 to 3 bar		2									
N° 3 − 0,8 to 8 bar		3									
N° 4 – 1,5 to 15 bar		4	1								
0,2 to 15 bar (dome-loaded) a)		Α	1								
Application											
Water			W								
Gases			G								
Oxygen (degreased)			0	1							
Seal material				1							
NBR				N							
EPDM				Е							
PTFE b)				Т							
FPM / Viton				٧							
Maximum inlet pressure											
30 bar					С	1					
50 bar c)					D						
Diaphragm											
NBR / PTFE (only NBR in case of dome-loaded version)											
Gauge port 1/4"											
Without gauge ports							(1)	1			
Gauge port on the left side (relative to the flow direction)							4	1			
Gauge port on the right side (relative to the flow direction)							3	1			
Gauge ports on both sides							2	1			
Top cap and relieving								l			
Non-relieving								(1)	1		
Relieving (only for non-dangerous gases)								R	1		
Non-relieving with top cap (adjustment screw with cover)								T	1		
Relieving with top cap (adjustment screw with cover, only for non-dangerou	ıs nases)							v	1		
Dome-loaded top d)	io gaddo)							X	1		
Pipe connection										1	
Female threaded ISO 7 Rp										Α	1
Female threaded NPT ASME B1.20.1										c	1
Flanged EN 1092-1 PN 40										N	
Flanged EN 1092-1 PN 63										0	-
Flanged ASME B16.5 Class 150				-				-		U	-
Flanged ASME B16.5 Class 300							-			V	-
Flanged ASME B16.5 Class 600										w	-
Size										- **	
1" or DN 25 (only available with PN 63 and Class 600 flanged connections)											25
11/4" or DN 32											32
11/4" or DN 32 11/2" or DN 40											
											40
2" or DN 50	/ Freduce -										50
Special valves	/ ⊑xtras										

- (1) Omitted if a standard valve is requested.
- a) The loading control pressure can be up to a maximum of 1,2 bar above the required downstream pressure.
- b) All seals except piston o-ring, which is supplied in FPM/Viton or others on request.
- c) Only available with spring no 4.
- d) This option must be chosen in case of dome-loaded version.





PISTON SENSING PRESSURE REDUCING VALVE PRV31SS 1/2" to 1" – DN 15 to DN 25

DESCRIPTION

The ADCA PRV31SS is a series of direct acting, spring-loaded, piston sensing and balanced plug pressure reducing valves.

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

They are suitable for pressure reducing applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Built-in strainer.

Balanced valve plug.

Full stainless steel construction.

Various sealing options to meet compatibility requirements.

OPTIONS: Self relieving.

Gauge connection on body.

Different soft valves for liquids and gases. Top cap (adjustment screw with cover). Degreased for oxygen application.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PRV31SS – stainless steel, piston sensing.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation.

See IMI - Installation and maintenance

instructions.

	CE MARKING – GROUP 2 (PED – European Directive)									
Ī	PN 63	Category								
	1/2" to 1" – DN 15 to 25	SEP								

FLOW RATE COEFFICIENTS (m³/h)										
SIZE	1/2" – DN 15	3/4" – DN 20	1" – DN 25							
Kvs	3	3,5	7,5							



1/2" to 3/4" - DN 15 to DN 20



1" – DN 25



1/2" to 3/4" - DN 15 to DN 20

1" - DN 25



We reserve the right to change the design and material of this product without notice.

IS PRV30.025 E 00.21



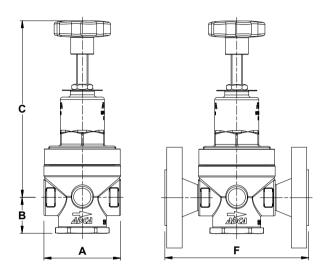




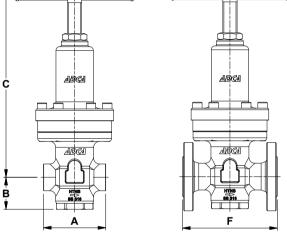
LIMITING CONDITIONS										
Valve model	PRV31SS									
Body design conditions	Cl. 150	CI. 300	PN 40	PN 63 *						
Max. upstream pressure	16 bar	40 bar	40 bar	50 bar						
Max. downstream pressure	50 bar									
Min. downstream pressure		3 b	ar							
Max. design temperature		80 9	°C							
Max. recommended reducing ratio	40:1									

^{*} Rating PN 63 for threaded versions.

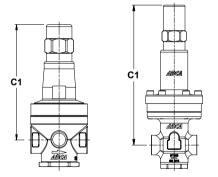
OPT	TIONS
PRESSURE GAUGE	TOP CAP



1/2" to 3/4" - DN 15 to DN 20



1" - DN 25



Optional top cap



Optional pressure gauge connection

	DIMENSIONS (mm)												
THREADED							PN	l 40	CLAS	SS 150	CLASS 300		
SIZE	Α	В	С	C1	d1	WEIGHT (kg)	F*	F * WEIGHT (kg)		WEIGHT (kg)	F *	WEIGHT (kg)	
1/2" – DN 15	80	38	184	162	1/4"	2,8	150	4,9	150	4,2	150	5,2	
3/4" – DN 20	80	38	184	162	1/4"	2,7	150	5,4	150	4,6	150	5,6	
1" – DN 25	105	54	315	322	1/4"	9,2	160	11,8	230	11,1	230	12,2	

 $^{^{\}star}$ Different face to face dimensions on request.

Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO 7 Rp threads, connection d1 is female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, this connection is female threaded NPT.

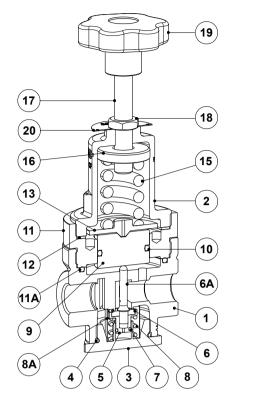


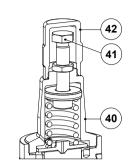
We reserve the right to change the design and material of this product without notice.

IS PRV31.015 E 01.21

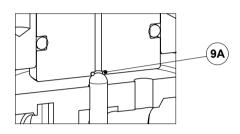






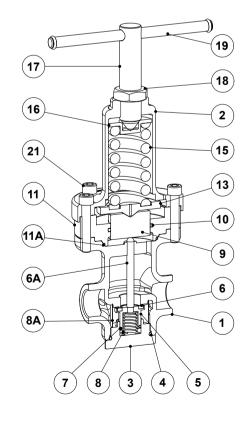


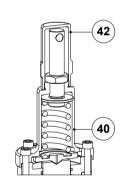
Optional top cap



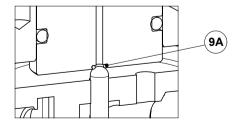
Optional relieving version

1/2" to 3/4" - DN 15 to DN 20





Optional top cap



Optional relieving version

1" - DN 25

VALSTEAM ADCA

We reserve the right to change the design and material of this product without notice.

4

5





		MATERIALS	
POS. Nº	DESIGNATION	1/2" to 3/4" – DN 15 to DN 20	1" – DN 25
1	Valve body	A351 CF8M / 1.4408	A351 CF8M / 1.4408
2	Spring cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408
3	Bottom cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408
4	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
5	* Piston	AISI 316 / 1.4401	AISI 316 / 1.4401
6	* Valve head	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
6A	* Pushrod	AISI 316 / 1.4401	AISI 316 / 1.4401
7	* Piston o-ring	NBR; EPDM; FPM	NBR; EPDM; FPM
8	* Valve spring	AISI 302 / 1.4300	AISI 302 / 1.4300
8A	* Strainer screen	AISI 304 / 1.4301	AISI 304 / 1.4301
9	Piston	AISI 304 / 1.4301	AISI 304 / 1.4301
9A	* O-ring	NBR; EPDM; FPM	NBR; EPDM; FPM
10	* O-ring	NBR; EPDM; FPM	NBR; EPDM; FPM
11	Piston sleeve	AISI 316 / 1.4401	AISI 316 / 1.4401
11A	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
12	Gasket	Aluminium	-
13	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301
15	* Adjustment spring	AISI 302 / 1.4300	AISI 302 / 1.4300
16	Top spring plate	Brass	AISI 316 / 1.4401
17	Adjustment stem	AISI 304 / 1.4301	AISI 304 / 1.4301
18	Locknut	Stainless steel A2-70	Stainless steel A2-70
19	Handwheel	Plastic	AISI 304 / 1.4301
20	Spring id. plate	Aluminium	-
21	Bolts	-	Stainless steel A2-70
40	Cover	AISI 316L / 1.4404	A351 CF8M / 1.4408
41	Adjustment screw	Stainless steel A2-70	-
42	Тор сар	AISI 316L / 1.4404	AISI 316L / 1.4404

^{*} Available spare parts.

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





ORDERING CODES F	PRV31SS									
Valve model	R31	5	W	N	С	4	R	Α	15	
PRV31SS – piston sensing pressure reducing valve	R31									
Regulating range										
Nº 5 - 3 to 30 bar		5								ĺ
Nº 6 - 5 to 50 bar		6								ĺ
Application										
Water			W							ĺ
Gases			G							
Oxygen (degreased)			0							
Seal material										
NBR				N						
EPDM				Е						
PTFE a)				Т]					ĺ
FPM / Viton				٧						
Maximum inlet pressure										
30 bar					С					
50 bar					D					ĺ
Gauge port 1/4"					•					
Without gauge ports						(1)				
Gauge port on the left side (relative to the flow direction)						4				
Gauge port on the right side (relative to the flow direction)						3				
Gauge ports on both sides						2				
Top cap and relieving										
Non-relieving							(1)			
Relieving (only for non-dangerous gases)							R			
Non-relieving with top cap (adjustment screw with cover)							Т			
Relieving with top cap (adjustment screw with cover, only for non-dangerous gar	ses)						٧			
Pipe connection										ĺ
Female threaded ISO 7 Rp								Α		
Female threaded NPT ASME B1.20.1								С		
Flanged EN 1092-1 PN 40								N		
Flanged ASME B16.5 Class 150								U		
Flanged ASME B16.5 Class 300								٧		ĺ
Size										
1/2" or DN 15									15	
3/4" or DN 20									20	
1" or DN 25									25	
Special valves / Ext	ras									
Full description or additional codes have to be added in case of non-standard co	ombination									Е

⁽¹⁾ Omitted if a standard valve is requested.

a) All seals except piston o-rings, which are supplied in FPM/Viton or others on request.





PISTON SENSING PRESSURE REDUCING VALVE PRV31SS 1" to 2" - DN 25 to DN 50

DESCRIPTION

The ADCA PRV31SS is a series of direct acting, spring-loaded, piston sensing and balanced plug pressure reducing valves.

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

They are suitable for pressure reducing applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Built-in strainer.

Balanced valve plug.

Full stainless steel construction.

Various sealing options to meet compatibility requirements.

OPTIONS: Self relieving.

Gauge connection on body.

Different soft valves for liquids and gases. Top cap (adjustment screw with cover). Degreased for oxygen application.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PRV31SS – stainless steel, piston sensing.

SIZES: 1" to 2"; DN 25 to DN 50.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation.

> - Installation and maintenance See IMI

instructions.

CE MARKING – GROUP 2 (PED – European Directive)						
PN 63	Category					
1" to 2" – DN 25 to 50	SEP					

FLOW RATE COEFFICIENTS (m³/h)									
SIZE	1" – DN 25	11/4" – DN 32	11/2" – DN 40	2" – DN 50					
Kvs	7,5	8,2	14,4	15,4					



1" to 11/4" - DN 25 to DN 32



11/2" to 2" - DN 40 to DN 50



1" to 11/4" – DN 25 to DN 32 11/2" to 2" – DN 40 to DN 50



We reserve the right to change the design and material of this product without notice.

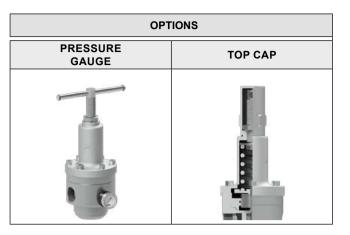
IS PRV31.025 E 02.21

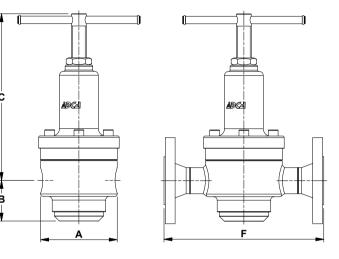
LRQA ISO 9001

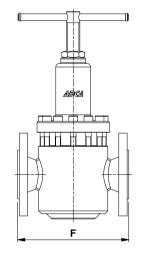


LIMITING CONDITIONS											
Valve model	PRV31SS										
Body design conditions	CI. 150	CI. 300	CI. 600	PN 40	PN 63 *						
Max. upstream pressure	16 bar	40 bar	50 bar	40 bar	50 bar						
Max. downstream pressure	50 bar										
Min. downstream pressure			3 bar								
Max. design temperature	80 °C										
Max. recommended reducing ratio	40:1										

* Rating PN 63 for threaded version	ons.
-------------------------------------	------

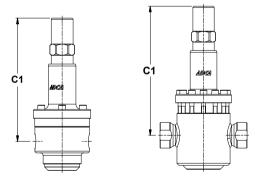






1" to 11/4" - DN 25 to DN 32

11/2" to 2" - DN 40 to DN 50



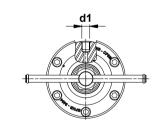
Optional top cap

302

310

1/4"

15,3



Optional pressure gauge

DIMENSIONS (mm) THREADED CLASS 150 CLASS 300 **CLASS 600** PN 40 PN 63 WGT. WGT WGT. WGT. WGT. WGT. F * F * F * F * F * С C1 d1 (kg) (kg) (kg) (kg) (kg) 271 1/4" 230 280 230 16,3 14,7 271 280 1/4" 11 260 14,9 260 260 14 260 15,1 260 15,9 17,2 296 304 1/4" 201 18,3 260 235 264 21,2 14,7 22,3 18 248 20,2

23,5

254

20,3

300

230



Α

125

125

205

205

66

66

81

75

SIZE

1" - DN 25 **

11/4" - DN 32

11/2" - DN 40

2" - DN 50

We reserve the right to change the design and material of this product without notice.

19

267

20,7

connection

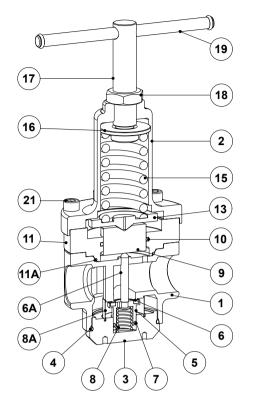
300

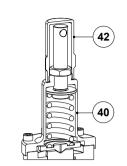
23,2

^{*} Different face to face dimensions on request; ** Only available with PN 63 and Class 600 flanged connections. Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO 7 Rp threads, connection d1 is female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, this connection is female threaded NPT.

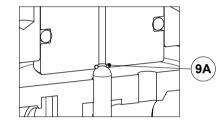






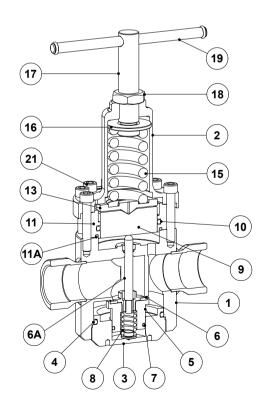


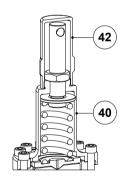
Optional top cap



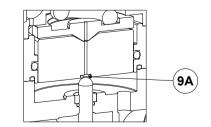
Optional relieving version

1" to 11/4" – DN 25 to DN 32





Optional top cap



Optional relieving version

11/2" to 2" - DN 40 to DN 50





IS PRV31.025 E 02.21

LRQA CERTIFIED ISO 9001



MATERIALS								
POS. Nº	DESIGNATION	11/2" to 2" – DN 40 to DN 50						
1	Valve body	AISI 316 / 1.4401	AISI 316 / 1.4401					
2	Spring cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
3	Bottom cover	AISI 316 / 1.4401	AISI 316 / 1.4401					
4	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
5	* Piston	AISI 316 / 1.4401	AISI 316 / 1.4401					
6	* Valve head	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
6A	* Pushrod	AISI 316 / 1.4401	AISI 316 / 1.4401					
7	* Piston o-ring	NBR; EPDM; FPM	NBR; EPDM; FPM					
8	* Valve spring	AISI 302 / 1.4300	AISI 302 / 1.4300					
8A	* Strainer screen	AISI 304 / 1.4301	-					
9	* Piston	AISI 316 / 1.4401	AISI 316 / 1.4401					
9A	* O-ring	NBR; EPDM; FPM	NBR; EPDM; FPM					
10	* O-ring	NBR; EPDM; FPM	NBR; EPDM; FPM					
11	Piston sleeve	AISI 316 / 1.4401	AISI 316 / 1.4401					
11A	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
13	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301					
15	* Adjustment spring	AISI 302 / 1.4300	AISI 302 / 1.4300					
16	Top spring plate	Brass	Brass					
17	Adjustment stem	AISI 304 / 1.4301	AISI 304 / 1.4301					
18	Locknut	Stainless steel A2-70	Stainless steel A2-70					
19	Handwheel	AISI 304 / 1.4301	AISI 304 / 1.4301					
21	Bolts	Stainless steel A2-70	Stainless steel A2-70					
40	Cover	AISI 316L / 1.4404	A351 CF8M / 1.4408					
42	Top cap	AISI 316L / 1.4404	AISI 316L / 1.4404					

^{*} Available spare parts.

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





ORDERING (CODES PRV31SS										
Valve model	R31		5	w	N	С	4	R	.]	Α	15
PRV31SS – piston sensing pressure reducing valve	R31										
Regulating range	<u> </u>	•									
Nº 5 - 3 to 30 bar			5								
N° 6 - 5 to 50 bar b)			6								
Application											
Water				W	1						
Gases				G	1						
Oxygen (degreased)				0							
Seal material											
NBR	-				N						
EPDM	-				Е]					
PTFE a)	-				Т]					
FPM / Viton					V						
Maximum inlet pressure						1					
30 bar						С					
50 bar b)						D					
Gauge port 1/4"							1				
Without gauge ports							(1)	İ			
Gauge port on the left side (relative to the flow direction)							4				
Gauge port on the right side (relative to the flow direction)							3	1			
Gauge ports on both sides							2	1			
Top cap and relieving	g]			
Non-relieving								(1)			
Relieving (only for non-dangerous gases)								R			
Non-relieving with top cap (adjustment screw with cover)								Т			
Relieving with top cap (adjustment screw with cover, only for non-danger	erous gases)							٧			
Pipe connect	ion										
Female threaded ISO 7 Rp										Α	
Female threaded NPT ASME B1.20.1										С	
Flanged EN 1092-1 PN 40										N	
Flanged EN 1092-1 PN 63										0	
Flanged ASME B16.5 Class 150										U	
Flanged ASME B16.5 Class 300										٧	
Flanged ASME B16.5 Class 600											
Size											
1" or DN 25 (only available with PN 63 and Class 600 flanged connection	ons)										25
11/4" or DN 32											32
11/2" or DN 40											40
2" or DN 50											50
Special valv	es / Extras										
Full description or additional codes have to be added in case of non-sta	andard combination	١.									
				_		_					

- (1) Omitted if a standard valve is requested.
- a) All seals except piston o-rings, which are supplied in FPM/Viton or others on request.
- b) Not applicable to sizes 11/4" and DN32.

VALSTEAM ADCA





PISTON SENSING PRESSURE REDUCING VALVES PRV41SS

DESCRIPTION

The ADCA PRV41SS is a series of direct acting, spring loaded, piston sensing pressure reducing valves.

These regulators are designed for use with nitrogen, compressed air, water and other gases and liquids compatible with the materials of construction.

They are suitable for general purpose pressure reducing applications such as instrumentation systems and industrial equipment where small loads and high pressures are involved.

MAIN FEATURES

Compact design.
Balanced valve plug.

Completely machined from solid bar stock material.

OPTIONS: Gauge connection on body.

Different soft valves for liquids and gases. Top cap (adjustment screw with cover). Degreased for oxygen application.

Self relieving.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PRV41SS – stainless steel, piston sensing.

SIZES: 1/4" to 3/4"; DN 15 and DN 20.

CONNECTIONS: Female threaded ISO 7 Rp, ISO 228 or NPT.

Flanged EN 1092-1 PN 40 to PN 250. Flanged ASME B16.5 Class 150, 300 or 600.

INSTALLATION: Horizontal or vertical installation.

See IMI – Installation and maintenance

instructions.

CE MARKING – GROUP 2 (PED – European Directive)							
PN 320	Category						
1/4" to 3/4" – DN 15 and 20	SEP						

200
alocal.
PHOLOGOPH TO A





LIMITING CONDITIONS												
Valve model			PRV4	41SS								
Body design conditions	Class 150	Class 300 Class 600 PN 40			PN 100	PN 250						
Maximum upstream pressure	16 bar	40 bar	80 bar	40 bar	100 bar	220 bar						
Maximum downstream pressure			200	bar								
Minimum downstream pressure			3 b	par								
Maximum design temperature			80	°C								
Max. recommended reducing ratio			40):1								

^{*} Rating PN 250 for threaded versions.

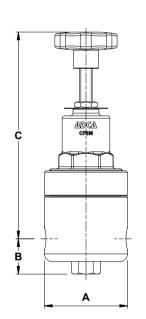


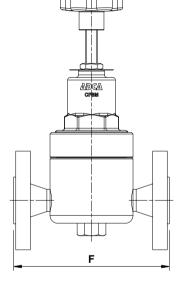


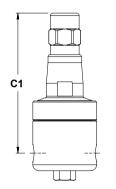


FLOW RATE COEFFICIENTS (m³/h)									
SIZE	1/4"	3/8"	1/2" – DN 15	3/4" – DN 20					
Kvs	0,7	0,8	0,9	0,9					

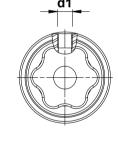
OPT	IONS
PRESSURE GAUGE CONNECTION	TOP CAP







Optional top cap



Optional pressure gauge connection

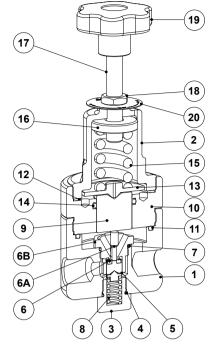
DIMENSIONS (mm)																		
THREADED		PN 40 PN 100		PN 250		CLASS 150		CLASS 300		CLASS 600								
SIZE	ØA	В	С	C1	d1	WGT. (kg)	F*	WGT. (kg)										
1/4"	80	34	200	176	1/4"	3,7	_	_	_	_	_	_	-	_	_	_	_	_
3/8"	80	34	200	176	1/4"	3,7	_	_	_	_	_	_	_	_	_	_	_	_
1/2" – DN 15	80	34	200	176	1/4"	3,7	150	6,8	210	7,8	230	10,3	150	6,5	150	6,8	180	7,2
3/4" – DN 20	80	34	200	176	1/4"	3,7	150	7,4	210	9,4	230	11,9	150	6,7	150	7,8	180	8,2

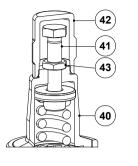
^{*} Different face to face dimensions on request.

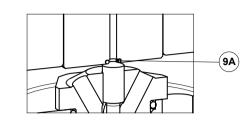
Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO threads, connections d1 is female threaded ISO 228. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.











Optional top cap

Optional relieving version

	MATERIAL	S		
POS. Nº	DESIGNATION	MATERIAL		
1	Valve body	AISI 316 / 1.4401		
2	Cover	A351 CF8M / 1.4408		
3	Bottom cover	AISI 303 / 1.4305		
4	* O-ring	** NBR		
5	* Plug piston	AISI 316 / 1.4401		
6	* Valve head ** NBR; EPDM; PTFE; FI			
6A	Pushrod	AISI 316 / 1.4401		
6B	* Valve seat	AISI 316 / 1.4401		
7	* O-ring	** NBR		
8	Valve spring	AISI 302 / 1.4300		
9	Piston	AISI 316 / 1.4401		
9A	* O-ring	** NBR		
10	Piston sleeve	AISI 316 / 1.4401		
11	* O-ring	** NBR		
12	Gasket	Aluminium		
13	Spring plate	AISI 316 / 1.4401		
15	* Adjustment spring	AISI 302 / 1.4300		
16	Top spring plate	Brass		
17	Adjustment stem	AISI 304 / 1.4301		
18	Locknut	Stainless steel A2		
19	Adjustment knob	Nylon		
20	Spring Identification plate	Aluminium		
40	Cover	AISI 316L / 1.4404		
41	Adjustment screw	Stainless steel A2-70		
42	Тор сар	AISI 316L / 1.4404		
43	Locknut	Stainless steel A2		

^{*} Available spare parts. ** Others on request.

VALSTEAM ADCA



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





ORDERING CODE	S PRV41S	S										
Valve model	R41		5	w	N	С	R	4	R		В	08
PRV41SS – piston sensing pressure reducing valve	R41	П										
Regulating range												
N°5 − 3 to 30 bar			5									
N°6 – 5 to 50 bar			6									
Nº7 – 20 to 200 bar			7									
Application												
Water				W								
Gases				G								
Oxygen (degreased)				0								
Seal material a)												
NBR					N							
EPDM					Е							
PTFE					Т							
FPM / Viton					٧							
Maximum inlet pressure												
220 bar						F						
Gauge port options												
Without gauge ports								(1)				
Gauge port on the left side (relative to the flow direction)								4				
Gauge port on the right side (relative to the flow direction)								3				
Gauge ports on both sides								2				
Top cap, panel mounting and relie	ving											
Non-relieving									(1)			
Relieving (only for non-dangerous gases)									R			
Non-relieving with top cap (adjustment screw with cover)									Т			
Relieving with top cap (adjustment screw with cover, only for non-dangerous gases)												
Pipe connection												
Female threaded ISO 7 Rp (non-standard)											Α	
Female threaded ISO 228											В	
Female threaded NPT ASME B1.20.1											С	
Flanged EN 1092-1 PN 40											N	
Flanged EN 1092-1 PN 100											Р	
Flanged EN 1092-1 PN 250											R	
Flanged ASME B16.5 Class 150											U	
Flanged ASME B16.5 Class 300									٧			
Flanged ASME B16.5 Class 600											W	
Size												
1/4"												80
3/8"												10
1/2" or DN 15												15
3/4" or DN 20												20
Special valves / E	xtras											
Full description or additional codes have to be added in case of non-standard	combinat	ion.										

⁽¹⁾ Omitted if a standard valve is requested.





DIAPHRAGM SENSING PRESSURE SUSTAINING VALVES PS4

DESCRIPTION

The ADCA PS4 is a series of direct acting, spring-loaded diaphragm sensing, pressure sustaining valves designed for use with compressed air, water and other gases or liquids compatible with the construction.

The valve main purpose is to maintain the upstream pressure under control in applications where small loads are involved. These valves are also specifically recommended to operate as pilot valves in combination with other pressure regulators.

MAIN FEATURES

Compact design.

External diaphragm sensing connection.

OPTIONS: Different soft valves for water and gases.

Gauge connection on body.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PS4S – carbon steel.

PS4i – stainless steel.

SIZES: 1/2" to 1".

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

INSTALLATION: Horizontal installation.

A "Y" strainer should be installed upstream of the

valve.

See IMI - Installation and maintenance

instructions.

CE MARKING – GROUP 2 (PED - European Directive)
PN 40	Category
1/2" to 1"	SEP

LIMITING CONDITIONS							
Valve model	PS4						
Body design conditions	PN 40						
Maximum upstream pressure	15 bar						
Minimum upstream pressure	0,35 bar						
Maximum design temperature *	80 °C						

^{*} Others on request.

Warning: A pressure sustaining valve is not a safety relief valve and must not be used for that purpose!

FLOW RATE COEFFICIENTS (m³/h)								
SIZE	1/2"	3/4"	1"					
Kvs	3,6	3,6	3,7					

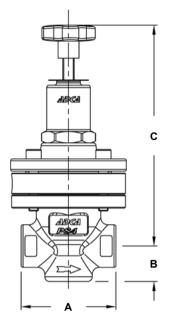


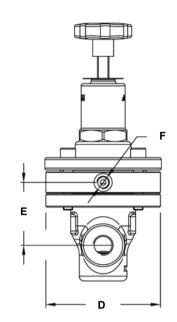


a) Valve head only. Remaining valve seals on request.







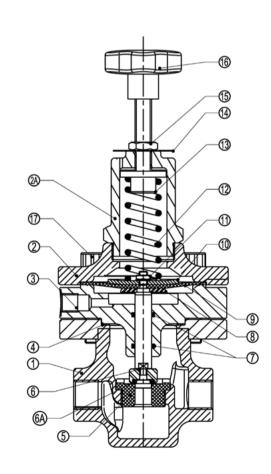


	DIMENSIONS (mm)										
SIZE	SIZE A B C ØD E F										
1/2"	100	37,5	247	120	66	1/4"	8,6				
3/4"	100	37,5	247	120	66	1/4"	8,6				
1"	100	37,5	247	120	66	1/4"	8,6				

MATERIALS									
POS. Nº	DESIGNATION	PS4S	PS4i						
1	Valve body	A216 WCB / 1.0619	A351 CF8M / 1.4408						
2	Top cover	A351 CF8 / 1.4308	A351 CF8 / 1.4308						
2A	Cover spring	A351 CF8 / 1.4308	A351 CF8 / 1.4308						
3	Guide plate	S355JR / 1.0045	AISI 316 / 1.4401						
4	* Gasket	** Stainless steel / Graphite	** Stainless steel / Graphite						
5	* Valve seat	AISI 316 / 1.4401	AISI 316 / 1.4401						
6	* Stem and plug	AISI 316 / 1.4401	AISI 316 / 1.4401						
6A	* Valve sealing	** EPDM; PTFE; NBR	** NBR; EPDM; PTFE						
7	* O-ring	** EPDM	** EPDM						
8	Pusher disc	AISI 316 / 1.4401	AISI 316 / 1.4401						
9	* Diaphragm	** NBR	** NBR						
10	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301						
11	Nut	Stainless steel A2-70	Stainless steel A2-70						
12	* Adjustment spring	Spring steel	Spring steel						
13	Top spring plate	Brass	Brass						
14	Spring ID plate	Aluminium	Aluminium						
15	Locknut	Stainless steel A2-70	Stainless steel A2-70						
16	Handwheel	Plastic	Plastic						
17	Bolts	Steel 8.8	Stainless steel A2-70						

^{*} Available spare parts. ** Others on request.

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







0	RDERING COD	ES PS4							
Valve model	PS4S .	1	w	Е	N		Α	15	
PS4S – carbon steel pressure sustaining valve	PS4S								
PS4i – stainless steel pressure sustaining valve	PS4I								
Regulating range									
Green spring – 0,35 to 2 bar – single diaphragm		1	1						
Blue spring – 1,5 to 5,5 bar – single diaphragm		2							
Red spring – 3,5 to 8,5 bar – double diaphragm		3							
Black spring – 7 to 17 bar – double diaphragm		4]						
Application									
Water			W						
Gases			G						
Seal material a)									
EPDM				E					
PTFE				Т					
FPM / Viton				V					
NBR				N					
Diaphragm									
NBR					N				
Gauge port op	tions				-				
Without gauge ports						(1)			
Gauge port on the left side (relative to the flow direction)						4			
Gauge port on the right side (relative to the flow direction)						3			
Gauge ports on both sides						2			
Pipe con	nection				-				
Female threaded ISO 7 Rp							Α		
Female threaded NPT ASME B1.20.1							С		
	Size								
1/2"								15	
3/4"								20	
1"								25	
Spec	cial valves / Ex	tras							
Full description or additional codes have to be added in case of	of non-standard	combinatio	n.						E

(1) Omitted if a standard valve is requested.

VALSTEAM ADCA

a) Valve limited to the materials maximum operating temperature. Contact manufacturer for more details.

IS PS4.01 E 10.10





DIAPHRAGM SENSING PRESSURE SUSTAINING VALVE PS7

DESCRIPTION

The ADCA PS7 series direct acting, spring-loaded diaphragm sensing pressure sustaining valves are designed for use on steam and compressed air and other gases compatible with the materials of construction

They are suitable for pressure sustaining applications where very small loads are involved. They are also specifically recommended to operate as pilot valves in combination with other pressure regulators.

MAIN FEATURES

Compact design.

Stainless steel diaphragm.

OPTIONS: 1/8" gauge connection on body.

Top cap (adjustment screw with cover).

External sensing connection.

Low pressure top.

Dome loaded version.

USE: Steam, compressed air and other gases

compatible with the construction.

AVAILABLE

MODELS: PS7S – carbon steel.

PS7SS - stainless steel.

SIZES: 1/4" and 3/8".

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

INSTALLATION: Horizontal installation.

A "Y" strainer should be installed upstream of the

valve.

See IMI - Installation and maintenance

instructions.



FLOW RATE COEFFICIENTS (m³/h)							
SIZE	1/4"	3/8"					
Kvs	0,8	0,8					

LIMITING CONDITIONS							
Valve model	PS7						
Body design conditions	PN 40						
Maximum upstream pressure	17 bar						
Minimum upstream pressure	0,35 bar						
Maximum downstream pressure	17 bar						
Maximum design temperature	300 °C						

* 0,07 bar with low pressure top (limited at 7 bar inlet). The low pressure diaphragm should be fitted for outlet pressures from 0,07 up to 0,5 bar.

Pressure and temperature limiting conditions may change if soft seating is used.

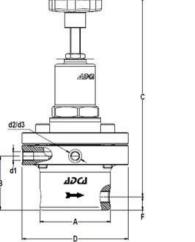
Warning: A pressure sustaining valve is not a safety relief valve and must not be used for that purpose!

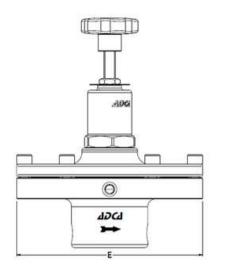
We reserve the right to change the design and material of this product without notice.

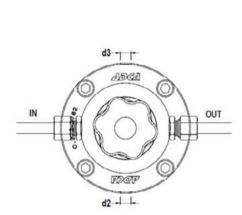
CE MARKING – GROUP 2 (PED – European Directive)					
Category					
SEP					











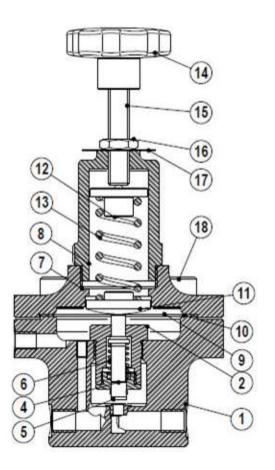
	DIMENSIONS (mm)										
SIZE	Α	В	С	D	E*	F	d1 **	d2 ***	d3 ***	WEIGHT (kg)	
1/4"	80	61	225	120	195	15	1/8	1/8	1/8	4,8	
3/8"	80	61	225	120	195	15	1/8	1/8	1/8	4,8	

^{*} Low pressure diaphragm; ** Optional sensing line connection; *** Optional pressure gauge connections. As standard, in ISO 7 Rp threaded version, these connections are female threaded ISO 7 Rp. In NPT threaded version, these connections are female threaded NPT.

	MATERIA	LS
POS.	DESIGNATION	MATERIAL
1	Valve body	S355JR / 1.0045; AISI 316 / 1.4401
2	* Pilot valve body	A351 CF8 / 1.4308
4	Pushrod	AISI 316 / 1.4401
5	* Valve plug	AISI 420; EPDM; PTFE, etc.
6	* Spring	AISI 302 / 1.4300
7	Top cover	A351 CF8 / 1.4308
8	Spring cover	A351 CF8 / 1.4308
9	* Diaphragm	AISI 301 / 1.4310
10	* Gasket	Stainless steel / Graphite
11	Lower spring carrier	Brass
12	Top spring carrier	Brass
13	* Adjustment spring	Spring steel
14	Handwheel	Plastic
15	Adjustment screw	AISI 304 / 1.4301
16	Locknut	Stainless steel A2-70
17	Spring Id. plate	Aluminium
18	Bolts	Steel 10.9; Stainless steel A2-70

^{*} Available spare parts.

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



REGULATING RANGES

 SPRING COLOUR
 GREEN w/ 1 diaphragm
 BLUE w/ 1 diaphragm
 RED w/ 2 diaphragms
 BLACK w/ 2 diaphragms

 Regulating range
 0,07 to 0,5 bar * 0,35 to 2 bar
 1,5 to 5,5 bar
 3,5 to 8,5 bar
 7 to 17 bar

^{*} With special low pressure top assembly.



VALSTEAM ADCA

IS PS7.01 E 11.10





Ol	RDERING C	ODES PS7							
Valve model	PS7S	. 1	W	E	N		.A	15	
PS7S – Carbon steel pilot pressure sustaining valve	PS7S								
PS7SS – Stainless steel pilot pressure sustaining valve	PS7SS								
Regulating range									
Green spring – 0,35 to 2 bar – single diaphragm		1							
Blue spring – 1,5 to 5,5 bar – single diaphragm		2							
Red spring – 3,5 to 8,5 bar – double diaphragm		3							
Black spring – 7 to 17 bar – double diaphragm		4							
Application		•							
Steam			S						
Gases			G						
Seal material									
Metal to metal				(1)					
EPDM a)				E					
PTFE a)				Т					
FPM / Viton a)				V					
Diaphragm									
Standard diaphragm					s				
Low pressure diaphragm					L				
Gauge port 1/8	" b)								
Without gauge ports						(1)			
Gauge port on the left side (relative to the flow direction)						4			
Gauge port on the right side (relative to the flow direction)						3			
Gauge ports on both sides						2			
Pipe conr	nection								
Female threaded ISO 7 Rp									
Female threaded NPT ASME B1.20.1							С		
	Size								
1/4"								08	
3/8"								10	
Spec	ial valves / l	Extras							
Full description or additional codes have to be added in case of	of non-standa	ird combina	tion.						Е

- (1) Omitted if a standard valve is requested.
- a) Valve limited to the materials' maximum operating temperature. Contact manufacturer for more details.
- b) Gauge port can also be used as external sensing line.





DIAPHRAGM SENSING PRESSURE SUSTAINING VALVE PS30SS

DESCRIPTION

The ADCA PS30SS is a series of direct acting, spring-loaded, diaphragm sensing pressure sustaining valves.

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

They are suitable for pressure sustaining applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Full stainless steel construction.

Various sealing options to meet compatibility requirements.

OPTIONS: Gauge connection on body.

Different soft valves for liquids and gases.

Dome-loaded version.

Top cap (adjustment screw with cover). Degreased for oxygen application.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PS30SS – stainless steel, diaphragm sensing.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation.

See IMI - Installation and maintenance

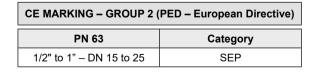
instructions.



1/2" to 3/4" - DN 15 to DN 20



1" - DN 25



	FL	OW RATE COE	EFFICIENTS (m	ո³/h)
	SIZE	1/2" – DN 15	3/4" - DN 20	1" – DN 25
Ī	Kvs	2,1	2,4	6,5

VALSTEAM ADCA



1/2" to 3/4" - DN 15 to DN 20

1" – DN 25



We reserve the right to change the design and material of this product without notice.

IS PS7.01 E 11.10

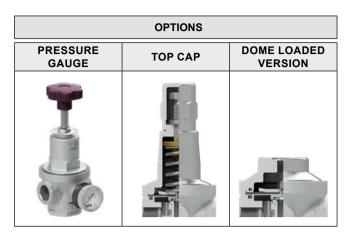


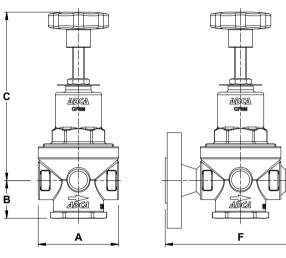


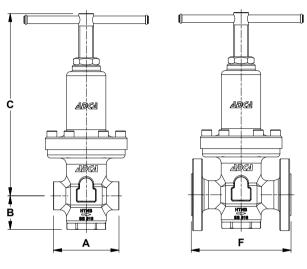
LIMITING CONDITIONS												
Valve model	PS30SS											
Body design conditions	Cl. 150	CI. 300	PN 40	PN 63 *								
Max. upstream pressure	15 bar											
Min. upstream pressure		0,2 l	oar									
Max. design temperature	80 °C											
Maximum dome-loading pressure		15 b	ar									

^{*} Rating PN 63 for threaded versions.

Warning: A pressure sustaining valve is not a safety relief valve and must not be used for that purpose!

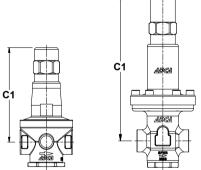




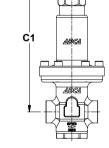


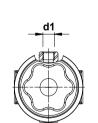
1/2" to 3/4" - DN 15 to DN 20

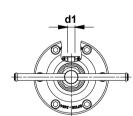
1" – DN 25

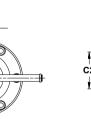


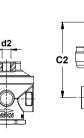
Optional top cap











Optional pressure gauge connection

Optional dome-loaded version

IS PS30.015 E 01.21

	DIMENSIONS (mm)														
THREADED										PN 40		CLASS 150		CLASS 300	
SIZE	Α	В	С	C1	d1	C2	d2	WGT. (kg)	F*	WGT. (kg)	F*	WGT. (kg)	F*	WGT. (kg)	
1/2" – DN 15	80	38	167	145	1/4"	55	1/4"	2,1	150	3,6	150	2,9	150	3,9	
3/4" – DN 20	80	38	167	145	1/4"	55	1/4"	2	150	4,1	150	3,3	150	4,3	
1" – DN 25	105	54	292	300	1/4"	153	1/4"	6,6	160	9,3	230	8,5	230	9,7	

^{*} Different face to face dimensions on request.

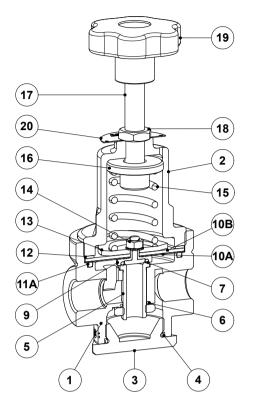
Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO 7 Rp threads, connections d1 and d2 are female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, these connections are female threaded NPT.

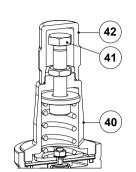


We reserve the right to change the design and material of this product without notice.

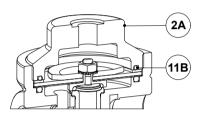






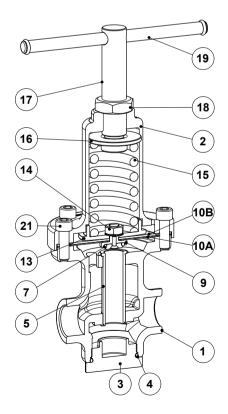


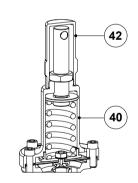
Optional top cap



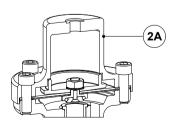
Optional dome-loaded version

1/2" to 3/4" - DN 15 to DN 20





Optional top cap



Optional dome-loaded version

1" - DN 25

VALSTEAM ADCA





		MATERIALS	
POS. Nº	DESIGNATION	1/2" to 3/4" – DN 15 to DN 20	1" – DN 25
1	Valve body	A351 CF8M / 1.4408	A351 CF8M / 1.4408
2	Spring cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408
2A	Cover	AISI 316L / 1.4404	AISI 316L / 1.4404
3	Bottom cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408
4	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
5	Valve seat	AISI 316 / 1.4401	AISI 316 / 1.4401
6	* O-ring	NBR; EPDM; PTFE; FPM	-
7	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM
9	Pusher disc	AISI 316 / 1.4401	AISI 316 / 1.4401
10A	* Lower diaphragm	PTFE	PTFE
10B	* Upper diaphragm	NBR	NBR
11A	* O-ring	NBR; EPDM; PTFE; FPM	-
11B	* O-ring	NBR; EPDM; PTFE; FPM	-
12	Gasket	Aluminium	-
13	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301
14	Nut	Stainless steel A2-70	Stainless steel A2-70
15	* Adjustment spring	AISI 302 / 1.4300	AISI 302 / 1.4300
16	Top spring plate	Brass	AISI 316 / 1.4401
17	Adjustment stem	AISI 304 / 1.4301	AISI 304 / 1.4301
18	Locknut	Stainless steel A2-70	Stainless steel A2-70
19	Handwheel	Plastic	AISI 304 / 1.4301
20	Spring id. plate	Aluminium	-
21	Bolts	-	Stainless steel A2-70
40	Cover	AISI 316L / 1.4404	A351 CF8M / 1.4408
41	Adjustment screw	Stainless steel A2-70	-
42	Тор сар	AISI 316L / 1.4404	AISI 316L / 1.4404

^{*} Available spare parts.

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





ORDERING CO	DES PS30S	S											
Valve model	PS30		1	w	N	С	R	4	R		Α	15	
PS30SS – diaphragm sensing pressure sustaining valve	PS30												
Regulating range													
N° 1 – 0,2 to 1,5 bar			1										
Nº 2 – 0,3 to 3 bar			2										
Nº 3 – 0,8 to 8 bar			3										
N° 4 − 1,5 to 15 bar			4										
0,2 to 15 bar (dome-loaded) a)			Α										
Application													
Water				W	ĺ								
Gases				G	ĺ								
Oxygen (degreased)				0	ĺ								
Seal material					1								
NBR					N	1							
EPDM					Е								
PTFE b)					Т								
FPM / Viton					V								
Maximum inlet pressure						1							
15 bar						С							
Diaphragm													
NBR / PTFE (only NBR in case of dome-loaded version)							R	1					
Gauge port 1/4"								1					
Without gauge ports								(1)	1				
Gauge port on the left side (relative to the flow direction)								4	1				
Gauge port on the right side (relative to the flow direction)								3	1				
Gauge ports on both sides								2	1				
Top cap and relieving									1				
Non-relieving									(1)	1			
Non-relieving with top cap (adjustment screw with cover)									Т	1			
Dome-loaded top c)									Х	1			
Pipe connection	ı												
Female threaded ISO 7 Rp											Α	1	
Female threaded NPT ASME B1.20.1											С	1	
Flanged EN 1092-1 PN 40											N		
Flanged ASME B16.5 Class 150											U		
Flanged ASME B16.5 Class 300											٧		
Size													
1/2" or DN 15												15	
3/4" or DN 20												20	
1" or DN 25												25	
Special valves	/ Extras												
Full description or additional codes have to be added in case of non-stand	ard combinat	ion.											E

- (1) Omitted if a standard valve is requested.
- a) The loading control pressure can be up to a maximum of 1,2 bar above the required downstream pressure.
- b) All seals except piston o-ring, which is supplied in FPM/Viton or others on request.
 c) This option must be chosen in case of dome-loaded version.





PISTON SENSING PRESSURE SUSTAINING VALVE **PS31SS**

DESCRIPTION

The ADCA PS31SS is a series of direct acting, spring-loaded, piston sensing pressure sustaining valves.

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

They are suitable for pressure sustaining applications at the point of use in laundry and dyeing machines, food industries, sterilizers, etc.

MAIN FEATURES

Compact design.

Full stainless steel construction.

Various sealing options to meet compatibility requirements.

OPTIONS: Gauge connection on body.

Different soft valves for liquids and gases. Top cap (adjustment screw with cover). Degreased for oxygen application.

USE: Compressed air, water and other gases and

liquids compatible with the construction.

AVAILABLE

MODELS: PS31SS – stainless steel, piston sensing.

SIZES: 1/2" to 1"; DN 15 to DN 25.

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

Flanged EN 1092-1 PN 40.

Flanged ASME B16.5 Class 150 or 300.

INSTALLATION: Horizontal installation.

See IMI - Installation and maintenance

instructions.



1/2" to 3/4" - DN 15 to DN 20



1" - DN 25

CE MARKING – GROUP 2 (PED – European Directive)									
PN 63 Category										
1/2" to 1" – DN 15 to 25	SEP									

FLOW RATE COEFFICIENTS (m³/h)													
SIZE	SIZE 1/2" – DN 15 3/4" – DN 20 1" – DN 25												
Kvs	3	3,5	7,5										

VALSTEAM ADCA



1/2" to 3/4" - DN 15 to DN 20

1" - DN 25

IS PS31.015 E 00.21





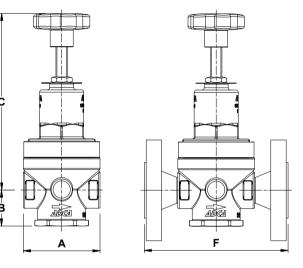


LIMITING	CONDITIO	ONS					
Valve model		PS31	ISS				
Body design conditions	Cl. 150	CI. 300	PN 40	PN 63 *			
Max. upstream pressure		50 b	par				
Min. upstream pressure	3 bar						
Max. design temperature		80 °	C.				

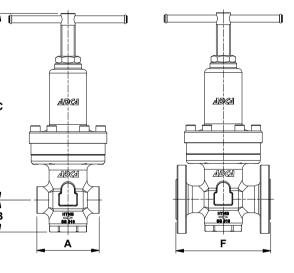
* Rating PN 63 for threaded versions.

Warning: A pressure sustaining valve is not a safety relief valve and must not be used for that purpose!

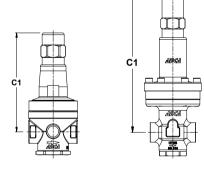
OPTIONS										
PRESSURE GAUGE	TOP CAP									



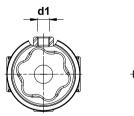
1/2" to 3/4" - DN 15 to DN 20



1" - DN 25



Optional top cap



Optional pressure gauge connection

	DIMENSIONS (mm)											
		TH	IREADED			PN 40		CLAS	SS 150	CLASS 300		
SIZE	Α	В	С	C1	d1	WEIGHT (kg)	F *	WEIGHT (kg)	F*	WEIGHT (kg)	F*	WEIGHT (kg)
1/2" – DN 15	80	38	183	162	1/4"	2,8	150	4,3	150	3,6	150	4,6
3/4" - DN 20	80	38	183	162	1/4"	2,7	150	4,8	150	4	150	5
1" – DN 25	105	54	309	323	1/4"	8,8	160	11,5	230	10,7	230	11,9

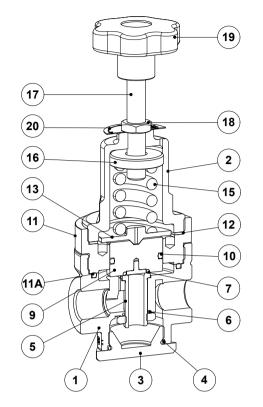
^{*} Different face to face dimensions on request.

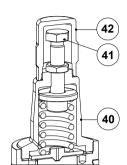
Remarks: As standard, in versions manufactured with EN 1092-1 flanges or ISO 7 Rp threads, connection d1 is female threaded ISO 7 Rp. In versions with ASME B16.5 flanges or NPT threads, this connection is female threaded NPT.





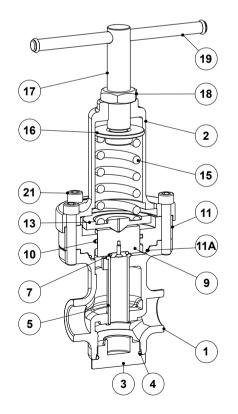


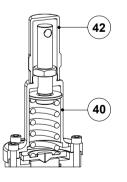




Optional top cap

1/2" to 3/4" – DN 15 to DN 20





Optional top cap

1" – DN 25



We reserve the right to change the design and material of this product without notice.

IS PS31.015 E 00.21





MATERIALS								
POS. Nº	DESIGNATION	1/2" to 3/4" – DN 15 to DN 20	1" – DN 25					
1	Valve body	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
2	Spring cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
3	Bottom cover	A351 CF8M / 1.4408	A351 CF8M / 1.4408					
4	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPN					
5	Valve seat	AISI 316 / 1.4401	AISI 316 / 1.4401					
6	* O-ring	NBR; EPDM; PTFE; FPM	_					
7	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
9	Piston	AISI 316 / 1.4401	AISI 316 / 1.4401					
10	* Piston o-ring	NBR; EPDM; FPM	NBR; EPDM; FPM					
11	Piston sleeve	AISI 316 / 1.4401	AISI 316 / 1.4401					
11A	* O-ring	NBR; EPDM; PTFE; FPM	NBR; EPDM; PTFE; FPM					
12	Gasket	Aluminium	-					
13	Spring plate	AISI 304 / 1.4301	AISI 304 / 1.4301					
15	* Adjustment spring	AISI 302 / 1.4300	AISI 302 / 1.4300					
16	Top spring plate	Brass	AISI 316 / 1.4401					
17	Adjustment stem	AISI 304 / 1.4301	AISI 304 / 1.4301					
18	Locknut	Stainless steel A2-70	Stainless steel A2-70					
19	Handwheel	Plastic	AISI 304 / 1.4301					
20	Spring id. plate	Aluminium	_					
21	Bolts	-	Stainless steel A2-70					
40	Cover	AISI 316L / 1.4404	A351 CF8M / 1.4408					
41	Adjustment screw	Stainless steel A2-70	_					
42	Тор сар	AISI 316L / 1.4404	AISI 316L / 1.4404					

^{*} Available spare parts.

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





ORDERING C	ODES PS31SS										
Valve model	PS31		5	W	N	С	4	R		Α	15
PS31SS – piston sensing pressure sustaining valve	PS31										
Regulating range	•										
Nº 5 - 3 to 30 bar			5]							
N° 6 - 5 to 50 bar			6	1							
Application				Ī							
Water				W							
Gases				G							
Oxygen (degreased)				0							
Seal material											
NBR					N						
EPDM					Е						
PTFE a)					Т						
FPM / Viton					V						
Maximum inlet pressure											
30 bar						С					
50 bar						D					
Gauge port 1/4"											
Without gauge ports							(1)				
Gauge port on the left side (relative to the flow direction)							4				
Gauge port on the right side (relative to the flow direction)							3				
Gauge ports on both sides							2				
Top cap and relieving											
Non-relieving								(1)			
Non-relieving with top cap (adjustment screw with cover)								Т			
Pipe connection	on										
Female threaded ISO 7 Rp										Α	
Female threaded NPT ASME B1.20.1									,	С	
Flanged EN 1092-1 PN 40										N	
Flanged ASME B16.5 Class 150										U	
Flanged ASME B16.5 Class 300										٧	
Size											
1/2" or DN 15											15
3/4" or DN 20											20
1" or DN 25											25
Special valve											
Full description or additional codes have to be added in case of non-stan (1) Omitted if a standard valve is requested	dard combination	١.									



⁽¹⁾ Omitted if a standard valve is requested.

a) All seals except piston o-ring, which is supplied in FPM/Viton or others on request.