

## HIGH ACCURACY PRESSURE REDUCING VALVE

### PRV 300

DN 11/2" – 2"; DN40 – DN50

#### DESCRIPTION

The ADCA PRV300 series **direct acting, spring-loaded diaphragm sensing, balanced plug** pressure reducing valves, are designed for use on compressed air, water and other gases or liquids compatible with the materials of construction.

They are suitable for high accuracy pressure reducing stations at the point of use on laundry machines, dyeing, food industries, sterilizers, etc.

Connections are female screwed or flanged.

#### MAIN FEATURES

Compact design.

Large high accuracy diaphragm.

Balanced valve plug

Machined from barstock materials and investment casting



#### OPTIONS:

Different soft valves for water and gases.  
Relieving-Internal relief valve to allow reduce outlet pressure in a no-flow condition.  
Built-in strainer.  
Outlet 1/4" gauge connection on body.  
Regulating screw with top cap.

#### USE:

Compressed air, water and other gases and liquids compatible with the construction.

#### AVAILABLE MODELS:

PRV300/SS – Stainless steel

#### SIZES:

DN 11/2" and 2"  
DN 40 and DN50

#### CONNECTIONS:

Female screwed ISO7/1Rp(BS 21) .  
Flanged EN 1092-1 PN40 or ANSI.

#### INSTALLATION:

Horizontal installation.  
An "Y" strainer should be provided upstream the valve.  
See IMI, installation and maintenance instructions.

#### ORDER REQUIREMENTS :

Type of fluid  
Maximum operating temperature  
Inlet pressure and required outlet pressure  
Capacity (maximum and minimum).

#### CAPACITIES

Valve Size	40	50
KVs (m3/h)	12,7	13,7

#### LIMITING CONDITIONS

Valve model	PRV300SS
Body design conditions	PN 16
Max.upstream pressure	16 bar
Max.downstream pressure	1,7 bar
Min.downstream pressure	0,05 bar
Max.design temperature *	80 °C
Max.recommended reducing ratio	40:1

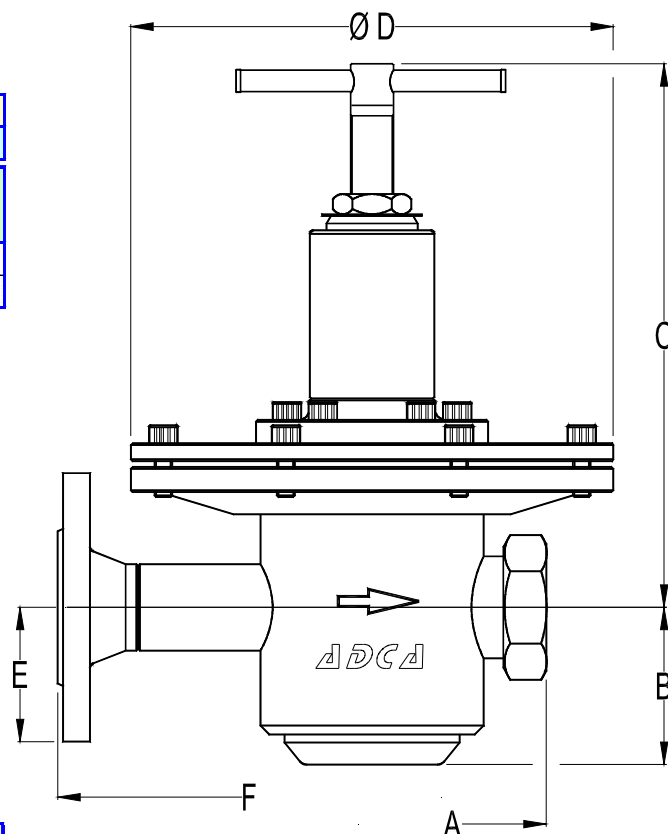
\*Other on request.

#### CE MARKING (PED - European Directive 97/23/EC)

PN 16	Category
DN 40 to 50	SEP - art. 3, paragraph3

DIMENSIONS (mm)								
Screwed					EN 1092-1 Flanges			
SIZE DN	A	B	C	D	WGT. Kgs	E	F *	WGT. Kgs
1 1/2"-40	195	90	305	270	23,2	75	320	28
2"-50	205	90	305	270	23,6	82,5	320	28,7

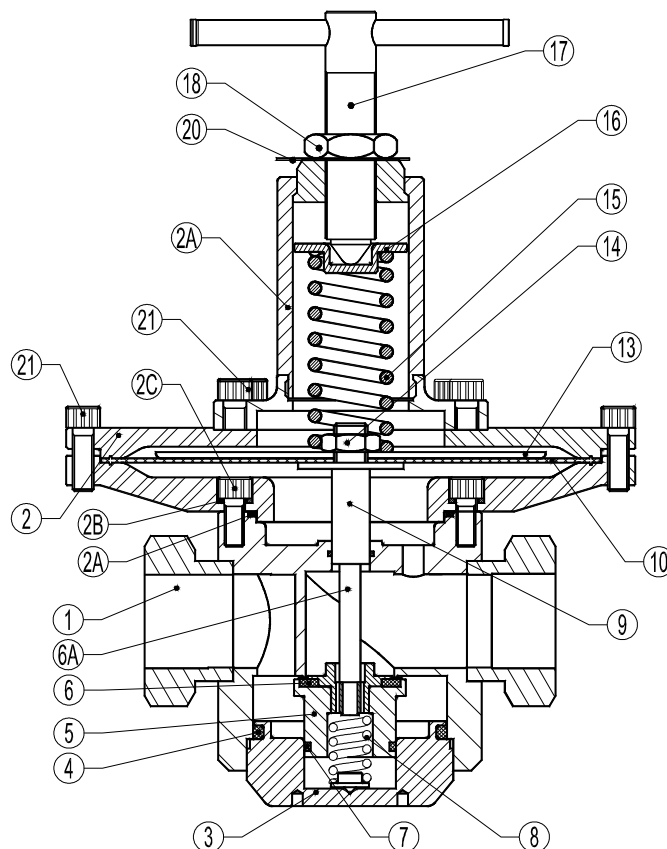
\* Different lenghts on request.



MATERIALS		
POS.	DESIGNATION	MATERIAL
1	VALVE BODY	AISI316 / 1.4401 ; CF8M / 1.4408
2	COVER	AISI316 / 1.4401
2A	SPRING COVER	AISI316 / 1.4401 ; CF8M / 1.4408
2B	BOLTS	ST.STEEL A2-70
3	SEAT COVER	AISI316 / 1.4401
4	*O-RING	NBR
5	*PISTON VALVE	AISI316 / 1.4401
6	*VALVE HEAD	NBR
6A	*PUSHROD	AISI316 / 1.4401
7	*O-RING	NBR
8	*VALVE SPRING	SPRING STEEL
8A	*STRAINER SCREEN	AISI304 / 1.4301
9	PUSHER DISC	AISI304 / 1.4301
10	*DIAPHRAGM	RUBBER
13	SPRING PLATE	AISI304 / 1.4301
14	NUT	ST.STEEL A2-70
15	*ADJUSTMENT SPRING	STEEL
16	TOP SPRING PLATE	BRASS
17	ADJUSTMENT SCREW	AISI304 / 1.4301
18	LOCKNUT	ST.STEEL A2-70
20	SPRING IDENT. PLATE	ALUMINIUM

\* Available spare parts.

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



# ORDERING CODES PRV300SS

Valve Model	R300	.	1	W	N	B	R	.	15
PRV300SS - Diaphragm sensing	R300								
Outlet spring range									
Nº1 - 0,05 to 0,3 bar			1						
Nº2 - 0,2 to 1,7 bar			2						
Aplication									
Water				W					
Gases				G					
Oxygen (Degreased)				O					
Seal material									
NBR					N				
EPDM					E				
PTFE					T				
FPM/VITON					V				
Maximum inlet pressure									
16 bar						B			
Diaphragm material									
Rubber/PTFE (Relieving or non-relieving)							R		
Gauge port 1/4"									
Without gauge ports								(1)	
Gauge port on the left side (Related to the flow direction)								4	
Gauge port on the right side (Related to the flow direction)								3	
Gauge ports on both sides								2	
Relieving									
Non-relieving								(1)	
Relieving (Only for non-dangerous gases)								R	
Pipe connection									
Threaded BSP ISO 7/1 Rp									A
Threaded NPT ANSI B1.20.1									C
Socket weld SW ANSI B16.11									H
Butt weld BW ANSI B16.25									I
Flanged EN1092-1 PN40									N
Flanged EN1092-1 PN63									O
Flanged ANSI B16.5 150#									U
Flanged ANSI B16.5 300#									V
Flanged ANSI B16.5 600#									W
Size									
DN 1/2" or DN 15									15
DN 3/4" or DN 20									20
....									25
									32
									40
									50
Special valves / Extras b)									
									E

(1) Omitted if a standard valve is requested

b)Full description or adicional codes has to be added in case of non-standard combination.