

## DIAPHRAGM SENSING PRESSURE REDUCING VALVE PRV30 (1/2" – 3/4"; DN 15 – DN 20)

### DESCRIPTION

The ADCA PRV30 series direct acting, spring-loaded diaphragm sensing, balanced plug pressure reducing valves, are designed for use with compressed air, water and other gases and liquids compatible with the materials of construction.

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

### MAIN FEATURES

Compact design.  
Balanced valve plug.  
Machined from bar stock materials or investment casting.

**OPTIONS:** Different soft valves for water and gases.  
Relieving – Internal relief valve to allow reduced outlet pressure in a no-flow condition.  
Built-in strainer.  
1/4" outlet gauge connection on body.  
Top cap (adjustment screw with cover).

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

**AVAILABLE MODELS:** PRV30SS – stainless steel, diaphragm sensing.

**SIZES:** 1/2" and 3/4"; DN 15 and DN 20.

**CONNECTIONS:** Female threaded ISO 7 Rp or NPT.  
Flanged EN 1092-1 PN 40 or PN 63.  
Flanged ASME B16.5 Class 150 or 300.

**INSTALLATION:** Horizontal installation.  
See IMI – Installation and maintenance instructions.  
A "Y" strainer should be installed upstream of the valve.



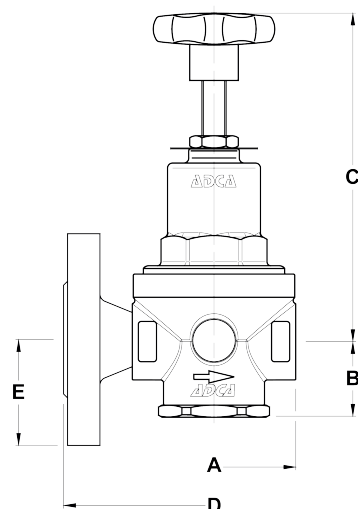
FLOW RATE COEFFICIENTS (m³/h)		
SIZE	1/2" – DN 15	3/4" – DN 20
Kvs	2,1	2,4

LIMITING CONDITIONS	
Valve model	PRV30SS
Body design conditions	PN 63
Maximum upstream pressure	50 bar
Maximum downstream pressure	15 bar
Minimum downstream pressure	0,2 bar
Maximum design temperature *	80 °C
Maximum recommended reducing ratio	40:1

\* Others on request.

#### CE MARKING – GROUP 2 (PED – European Directive)

PN 63	Category
1/2" to 3/4" – DN 15 to 20	SEP



**DIMENSIONS (mm)**

THREADED					PN 40			PN 63		
SIZE	A	B	C	WEIGHT (kg)	D *	E	WEIGHT (kg)	D *	E	WEIGHT (kg)
1/2" – DN 15	80	38	175	1,8	150	47,5	3,2	210	52,5	4
3/4" – DN 20	80	38	175	1,8	150	52,5	3,8	230	70	6

\* Different lenghts on request.

Remarks: DN 15 PN 40 face to face dimensions were adopted as per DN 20; 1" or DN 25 available on special execution and same performance;  
For flanged ASME versions dimensions, consult manufacturer.

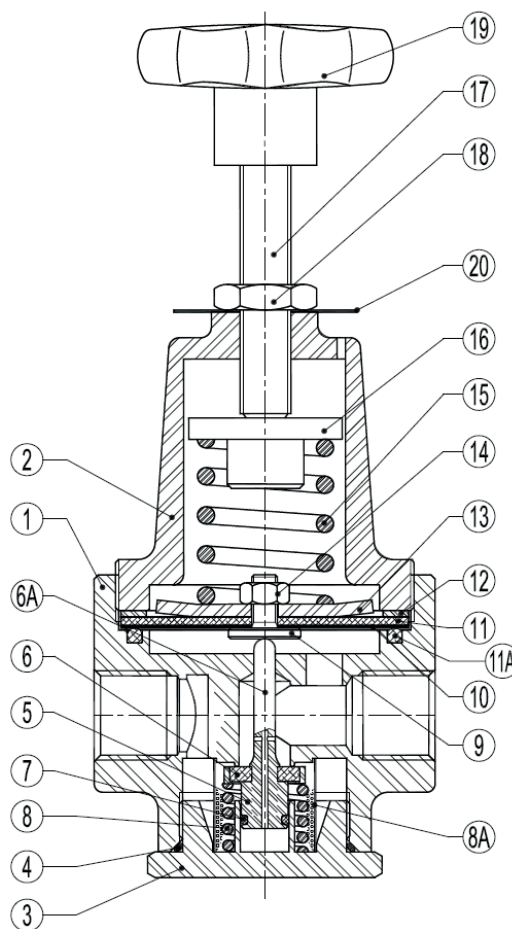
**MATERIALS**

POS. N°	DESIGNATION	MATERIAL
1	Valve body a)	A351 CF8M / 1.4408 (AISI 316 / 1.4401)
2	Cover a)	A351 CF8M / 1.4408 (AISI 316 / 1.4401)
3	Seat cover a)	A351 CF8M / 1.4408 (AISI 316 / 1.4401)
4	* O-ring	NBR
5	* Piston valve	AISI 316 / 1.4401
6	* Valve head	NBR ; EPDM ; PTFE; etc.
6A	* Pushrod	AISI 316 / 1.4401
7	* O-ring	NBR ; EPDM ; PTFE; etc.
8	* Valve spring	AISI 302 / 1.4300
8A	* Strainer screen	AISI 304 / 1.4301
9	Pusher disc	AISI 304 / 1.4301
10	* Diaphragm	PTFE
11	* Diaphragm	NBR **
11A	* O-ring	NBR ; EPDM ; PTFE; etc.
12	Gasket	Aluminium **
13	Spring plate	AISI 304 / 1.4301
14	Nut	Stainless steel A2-70
15	* Adjustment spring	Spring steel
16	Top spring plate	Brass
17	Adjustment screw	AISI 304 / 1.4301
18	Locknut	Stainless steel A2-70
19	Handwheel	Plastic
20	Spring id. plate	Aluminium

\* Available spare parts; \*\* Stainless steel 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.

a) Bar stock execution on request.



ORDERING CODES PRV30														
Valve model	R30	.	1	W	N	C	S	4	R	.	A	25E		
PRV30SS – diaphragm sensing pressure reducing valve	R30													
Regulating range														
Nº1 – 0,2 to 1,5 bar			1											
Nº2 – 0,3 to 3 bar			2											
Nº3 – 0,8 to 8 bar			3											
Nº4 – 1,5 to 15 bar			4											
Application														
Water				W										
Gases				G										
Oxygen (degreased)				O										
Seal material a)														
NBR					N									
EPDM					E									
PTFE					T									
FPM / Viton					V									
Maximum inlet pressure														
30 bar					C									
50 bar b)					D									
Diaphragm														
Stainless steel (non relieving)							S							
Rubber / PTFE (relieving or non-relieving)							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						
Relieving														
Non-relieving									(1)					
Relieving (for non-dangerous gases only)									R					
Pipe connection														
Female threaded ISO 7 Rp											A			
Female threaded NPT ASME B1.20.1											C			
Socket weld (SW) ASME B16.11											H			
Butt weld (BW) ASME B16.25											I			
Flanged EN 1092-1 PN 40											N			
Flanged EN 1092-1 PN 63											O			
Flanged ASME B16.5 Class 150											U			
Flanged ASME B16.5 Class 300											V			
Flanged ASME B16.5 Class 600											W			
Size														
1/2" or DN 15												15		
3/4" or DN 20												20		
1" or DN 25 (same performance, with larger connection – special execution)												25E		
Special valves / Extras														
Full description or additional codes have to be added in case of non-standard combination.													E	

(1) Omitted if a standard valve is requested.

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

b) The 50 bar inlet is available only with spring nº 4.

## DIAPHRAGM SENSING PRESSURE REDUCING VALVE PRV30 (1" – 1 1/4"; DN 25 – DN 32)

### DESCRIPTION

The ADCA PRV30 series direct acting, spring-loaded diaphragm sensing, balanced plug pressure reducing valves, are designed for use with compressed air, water and other gases and liquids compatible with the materials of construction.

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

### MAIN FEATURES

Compact design.  
Balanced valve plug.

**OPTIONS:** Different soft valves for water and gases.  
Relieving – Internal relief valve to allow reduced outlet pressure in a no-flow condition.  
1/4" outlet gauge connection on body.  
Top cap (adjustment screw with cover).

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

**AVAILABLE MODELS:** PRV30SS – stainless steel, diaphragm sensing.

**SIZES:** 1" and 1 1/4"; DN 25 and DN 32.

**CONNECTIONS:** Female threaded ISO 7 Rp or NPT.  
Flanged EN 1092-1 PN 40 or PN 63.  
Flanged ASME B16.5 Class 150 or 300.

**INSTALLATION:** Horizontal installation.  
See IMI – Installation and maintenance instructions.  
A "Y" strainer should be installed upstream of the valve.



PN 40

PN 63

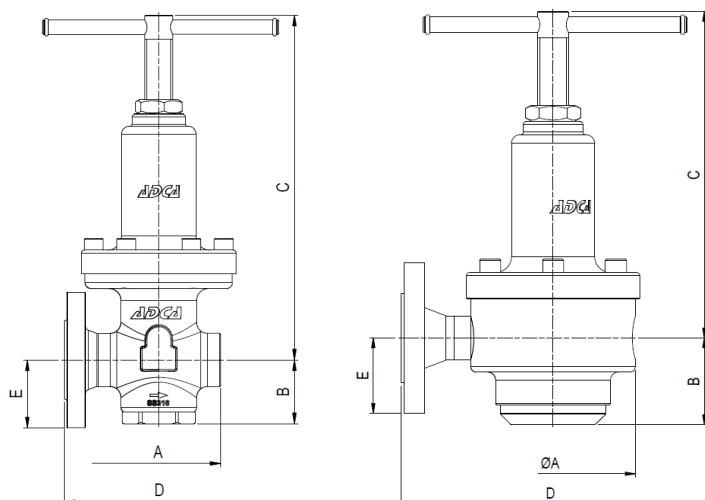
FLOW RATE COEFFICIENTS (m³/h)		
SIZE	1" – DN 25	1 1/4" – DN 32
Kvs	6,5	7,2

LIMITING CONDITIONS	
Valve model	PRV30SS
Body design conditions	PN 63
Maximum upstream pressure	50 bar
Maximum downstream pressure	15 bar
Minimum downstream pressure	0,2 bar
Maximum design temperature *	80 °C
Maximum recommended reducing ratio	40:1

\* Others on request.

#### CE MARKING – GROUP 2 (PED – European Directive)

PN 63	Category
1" to 1 1/4" – DN 25 to 32	SEP



**DIMENSIONS (mm) – CASTED VERSION**

THREADED					PN 40		
SIZE	A	B	C	WGT. (kg)	D *	E	WGT. (kg)
1" – DN 25	105	60	295	6,3	160	57,5	8,5

\* Different lengths and connections on request.

**DIMENSIONS (mm) – BAR STOCK VERSION**

THREADED					PN 40			PN 63			CLASS 150			CLASS 300		
SIZE	A	B	C	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)
1" – DN 25	125	66	250	7,5	230	58	11	230	70	13	230	54	10,5	230	62	11,5
1 1/4" – DN 32	125	66	250	7,5	260	70	11	260	78	14	260	59	11	260	67	12

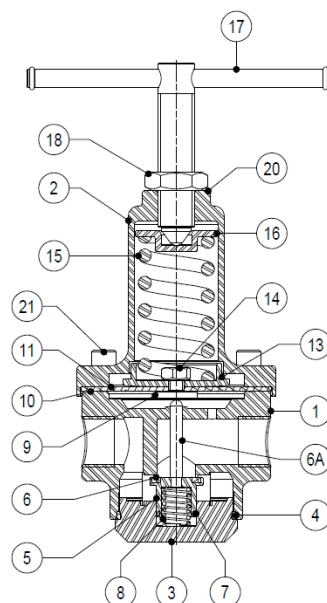
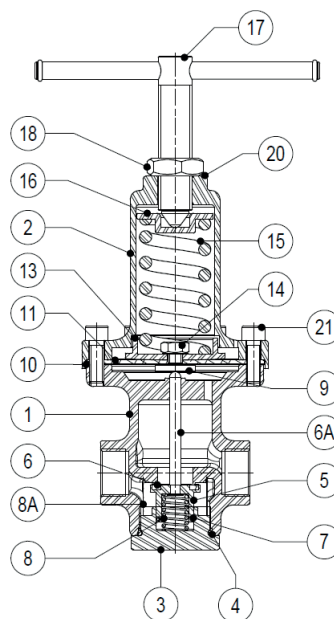
\* Different lengths on request.

**MATERIALS**

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316 / 1.4401; A351 CF8M / 1.4408
2	Top cover	CF8M / 1.4408
3	Seat cover	AISI 316 / 1.4401
4	* O-ring	NBR
5	* Piston valve	AISI 316 / 1.4401
6	* Valve head	NBR; EPDM; PTFE; etc.
6A	* Pushrod	AISI 316 / 1.4401
7	* O-ring	NBR; EPDM; PTFE; etc.
8	* Valve spring	AISI 302 / 1.4300
8A	* Strainer screen	AISI 304 / 1.4301
9	Pusher disc	AISI 304 / 1.4301
10	* Diaphragm	PTFE
11	* Diaphragm	NBR **
13	Spring plate	AISI 304 / 1.4301
14	Nut	Stainless steel A2-70
15	* Adjustment spring	Spring steel
16	Top spring plate	Brass
17	Adjustment screw	AISI 304 / 1.4301
18	Locknut	Stainless steel A2-70
20	Spring id. plate	Aluminium
21	Bolts	Stainless steel A2-70

\* Available spare parts; \*\* Stainless steel 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 CODES PRV30														
Valve model	R30	.	1	W	N	C	S	4	R	.	A	25		
PRV30SS – diaphragm sensing pressure reducing valve	R30													
<b>Regulating range</b>														
Nº1 – 0,2 to 1,5 bar			1											
Nº2 – 0,3 to 3 bar			2											
Nº3 – 0,8 to 8 bar			3											
Nº4 – 1,5 to 15 bar			4											
<b>Application</b>														
Water				W										
Gases				G										
Oxygen (degreased)				O										
<b>Seal material a)</b>														
NBR					N									
EPDM					E									
PTFE					T									
FPM / Viton					V									
<b>Maximum inlet pressure</b>														
30 bar						C								
50 bar b)						D								
<b>Diaphragm</b>														
Stainless steel (non relieving)							S							
Rubber / PTFE (relieving or non-relieving)							R							
<b>Gauge port 1/4"</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						
<b>Relieving</b>														
Non-relieving									(1)					
Relieving (for non-dangerous gases only)									R					
<b>Pipe connection</b>														
Female threaded ISO 7 Rp											A			
Female threaded NPT ASME B1.20.1											C			
Socket weld (SW) ASME B16.11											H			
Butt weld (BW) ASME B16.25											I			
Flanged EN 1092-1 PN 40											N			
Flanged EN 1092-1 PN 63											O			
Flanged ASME B16.5 Class 150											U			
Flanged ASME B16.5 Class 300											V			
Flanged ASME B16.5 Class 600											W			
<b>Size</b>														
1" or DN 25												25		
1 1/4" or DN 32												32		
<b>Special valves / Extras</b>														
Full description or additional codes have to be added in case of non-standard combination.												E		

(1) Omitted if a standard valve is requested.

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

b) The 50 bar inlet is available only with spring nº 4.

## DIAPHRAGM SENSING PRESSURE REDUCING VALVE PRV30 (1 1/2" – 2"; DN 40 – DN 50)

### DESCRIPTION

The ADCA PRV30 series direct acting, spring-loaded diaphragm sensing, balanced plug pressure reducing valves, are designed for use with compressed air, water and other gases and liquids compatible with the materials of construction.

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

### MAIN FEATURES

Compact design.  
Balanced valve plug.  
Machined from bar stock materials.

**OPTIONS:** Different soft valves for water and gases.  
Relieving – Internal relief valve to allow reduced outlet pressure in a no-flow condition.  
Built-in strainer.  
1/4" outlet gauge connection on body.  
Top cap (adjustment screw with cover).

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

**AVAILABLE MODELS:** PRV30SS – stainless steel, diaphragm sensing.

**SIZES:** 1 1/2" and 2"; DN 40 and DN 50.

**CONNECTIONS:** Female threaded ISO 7 Rp or NPT.  
DN 40: Flanged EN 1092-1 Type 11 B PN 40 or PN 63.  
DN 50: Flanged EN 1092-1 Type 01 A PN 40 \*.  
DN 50: Flanged EN 1092-1 Type 11 B PN 63.  
\* Type 11 B PN 40 welding neck available, with different face to face dimensions.

**INSTALLATION:** Horizontal installation.  
A "Y" strainer should be installed upstream of the valve.  
See IMI – Installation and maintenance instructions.



Type 11 B flanges



Type 01 A flanges

FLOW RATE COEFFICIENTS (m³/h)		
SIZE	1 1/2" – DN 40	2" – DN 50
Kvs	12,7	13,7

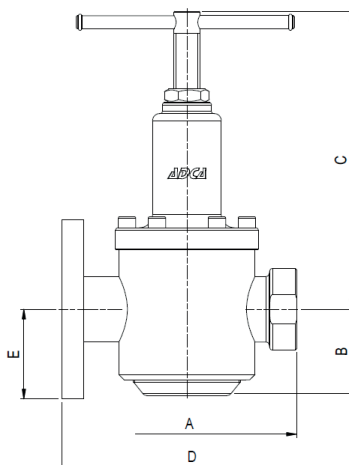
LIMITING CONDITIONS	
Valve model	PRV30SS
Body design conditions	PN 63
Maximum upstream pressure	50 bar
Maximum downstream pressure	15 bar
Minimum downstream pressure	0,2 bar
Maximum design temperature *	80 °C
Maximum recommended reducing ratio	40:1

\* Others on request.

### CE MARKING – GROUP 2 (PED – European Directive)

PN 63	Category
1 1/2" to 2" – DN 40 to 50	SEP





**DIMENSIONS (mm)**

THREADED					PN 40			PN 63/100				CLASS 150			CLASS 300		
SIZE	A	B	C	WGT. (kg)	D *	E	WGT. (kg)	D *	E PN 63	E PN 100	WGT. (kg)	D *	E	WGT. (kg)	D *	E	WGT. (kg)
11/2" – DN 40	205	86	268	13	201	75	16,3	260	85	85	20,3	235	63,5	15,5	248	78	18
2" – DN 50	205	80	274	13,3	230 **	82,5	18,5	300	90	97,5	22,8	254	76	18	267	82,5	20

\* Different lenghts on request.

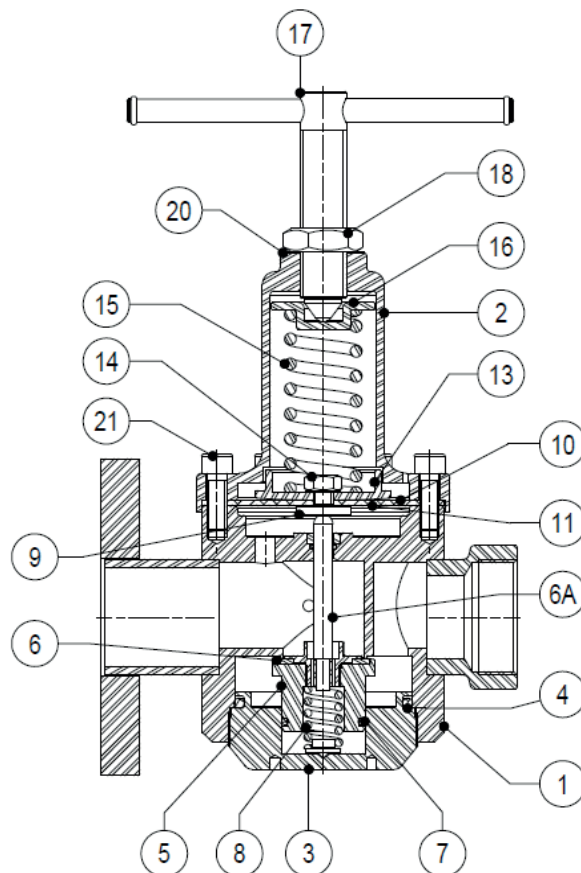
\*\* Only available with flat flanges EN 1092-1 type 01 A. Welding neck type 11 B flanges as option with 300 mm minimum face to face dimensions.

**MATERIALS**

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316 / 1.4401
2	Top cover	A351 CF8M / 1.4408
3	Seat cover	AISI 316 / 1.4401
4	* O-ring	NBR
5	* Piston valve	AISI 316 / 1.4401
6	* Valve head	NBR; EPDM; PTFE; etc.
6A	* Pushrod	AISI 316 / 1.4401
7	* O-ring	NBR; EPDM; PTFE; etc.
8	* Valve spring	AISI 302 / 1.4300
9	Pusher disc	AISI 304 / 1.4301
10	* Diaphragm	PTFE
11	* Diaphragm	NBR **
13	Spring plate	AISI 304 / 1.4301
14	Nut	Stainless steel A2-70
15	* Adjustment spring	Spring steel
16	Top spring plate	Brass
17	Adjustment screw	AISI 304 / 1.4301
18	Locknut	Stainless steel A2-70
20	Spring id. plate	Aluminium
21	Bolts	Stainless steel A2-70

\* Available spare parts; \*\* Stainless steel 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 CODES PRV30														
Valve model	R30	.	1	W	N	C	S	4	R	.	A	40		
PRV30SS – diaphragm sensing pressure reducing valve	R30													
Regulating range														
Nº1 – 0,2 to 1,5 bar			1											
Nº2 – 0,3 to 3 bar			2											
Nº3 – 0,8 to 8 bar			3											
Nº4 – 1,5 to 15 bar			4											
Application														
Water				W										
Gases				G										
Oxygen (degreased)				O										
Seal material a)														
NBR					N									
EPDM					E									
PTFE					T									
FPM / Viton					V									
Maximum inlet pressure														
30 bar						C								
50 bar b)						D								
Diaphragm														
Stainless steel (non relieving)							S							
Rubber / PTFE (relieving or non-relieving)							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						
Relieving														
Non-relieving									(1)					
Relieving (for non-dangerous gases only)									R					
Pipe connection														
Female threaded ISO 7 Rp											A			
Female threaded NPT ASME B1.20.1											C			
Socket weld (SW) ASME B16.11											H			
Butt weld (BW) ASME B16.25											I			
Flanged EN 1092-1 PN 40											N			
Flanged EN 1092-1 PN 63											O			
Flanged ASME B16.5 Class 150											U			
Flanged ASME B16.5 Class 300											V			
Flanged ASME B16.5 Class 600											W			
Size														
11/2" or DN 40												40		
2" or DN 50												50		
Special valves / Extras														
Full description or additional codes have to be added in case of non-standard combination.													E	

(1) Omitted if a standard valve is requested.

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

b) The 50 bar inlet is available only with spring nº 4.