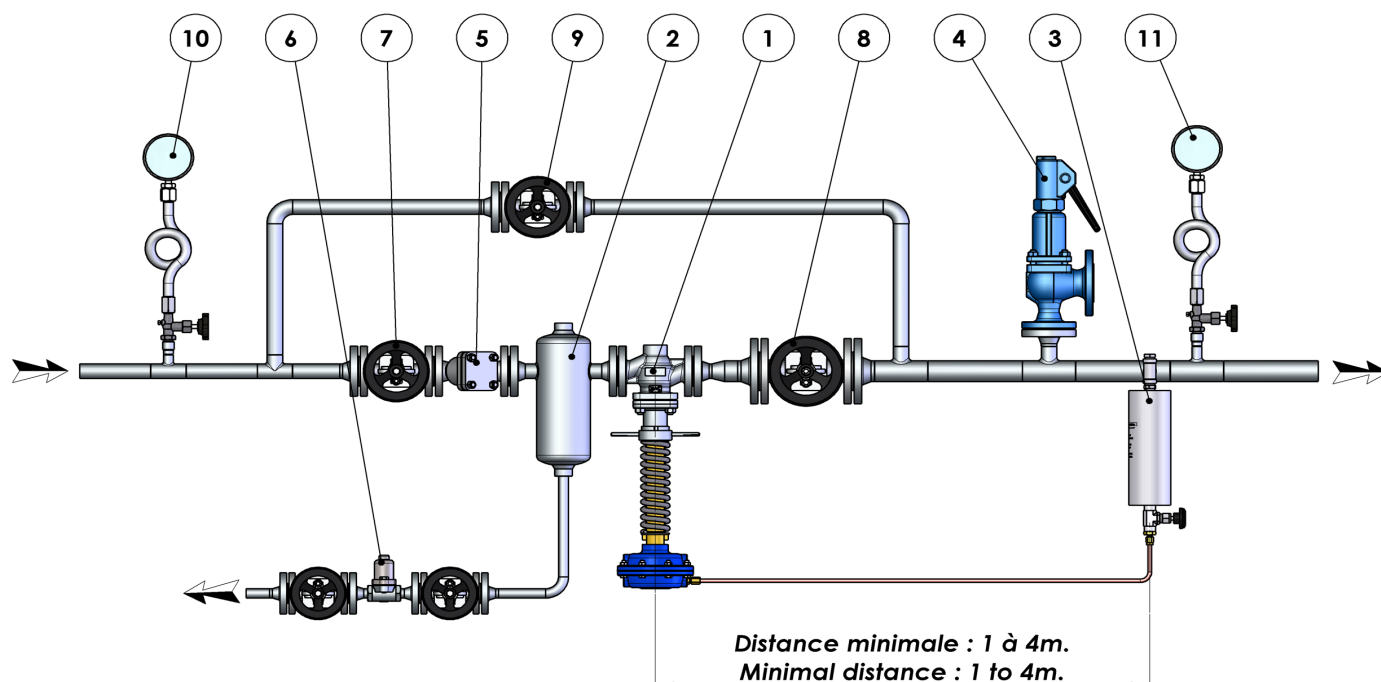


Certifications

DESP; ATEX II 2 G/D; ISO9001 / PED; ATEX II 2 G/D; ISO9001

Operation

The pressure reducing valves type PR516 are self-actuated (without auxiliary energy) controlling the pressure downstream compared to a set point. The pressure reducing valve closes by increase in the pressure downstream in a proportional way. During the assembly, the actuator will be directly connected to piping by impulse pipe including or not a condensation bottle. The choice of the adjustment range will be carried out according to the pressure downstream to control and of adjustment range table.



Example of installation

Mounting

It is imperative to assemble the pressure reducing valve, on horizontal piping, the actuator downwards. For use on steam, the condensation bottle must be filled with water before the startup in order to protect the diaphragm from the actuator against too high temperatures.

Item	Description
1	Pressure reducing valve
2	Separator
3	Condensation bottle
4	Safety valve
5	Y strainer
6	Steamtrap
7	Inlet isolating valve
8	Outlet isolating valve
9	Bypass valve
10	Upstream gauge
11	Downstream gauge

Operational limits

Pressure reducing valve	Nominal Diameter	Leakage rate	Max. temperature in valve	Max. temperature in actuator	
				Without bottle	With bottle
PR516 Mono Siège Single seat Stem sealing by 2 FKM O-ring	DN 15 ... DN 80	Metallic sealing < 0,01% Kvs Classe IV ANSI B16 104	Max. 200°C	130°C EPDM diaphragm	230°C EPDM diaphragm
				150°C FKM diaphragm	250°C FKM diaphragm
Stem sealing by stainless steel bellows			Max. 350°C		

Kvs values (m³/h)

Sleeves	½"	¾"	1"	1¼"	1½"	2"	-	-
Flanges	15	20	25	32	40	50	65	80
Ø Seat	Kvs							
2	0.1	0.1						
4	0.5	0.5	0.5					
6	1.1	1.1	1.1					
8	1.7	1.7	1.7					
10	2.3	2.5	3	3.1				
12	2.7	3.7	4	4.1	4.1			
15	3.3	4.9	5.2	5.7	5.8			
20		6	7.5	8.3	8.5	12		
25			9.2	12	15	17	17	
32				15	20	24	25	
40					24	30	33	34
50						37	42	44

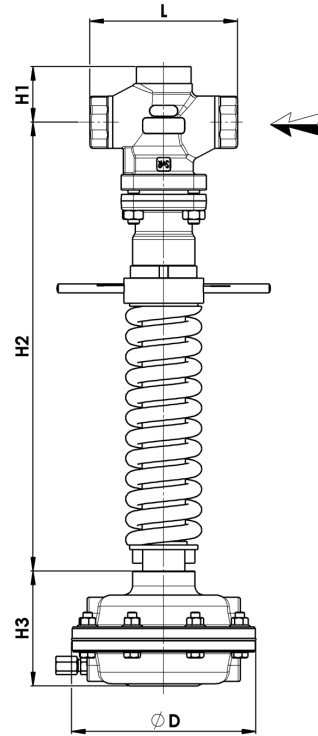
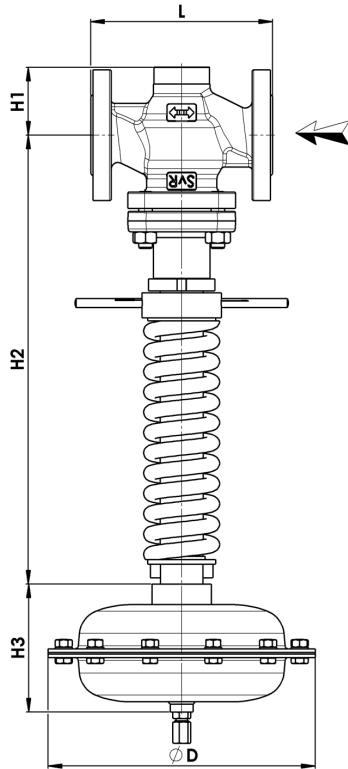
Adjustment range (bar eff)

Type	Surface	N° Plage Range	R Ressort Spring	Range according to Ø seat	
				Ø2 à/to Ø20 Stroke 5mm	Ø25 à/to Ø50 Stroke 10mm
B	175 cm²	24	8-41	0.1 ... 0.4	0.1 ... 0.3
		23	8-40	0.1 ... 0.7	0.2 ... 0.6
		22	8-39	0.2 ... 1.2	0.4 ... 1.1
		21	8-38	0.3 ... 2.1	0.7 ... 1.9
		20	8-37	0.6 ... 3.7	1.2 ... 3.4
C	70 cm²	31	8-41	0.1 ... 0.9	0.3 ... 0.9
		30	8-40	0.3 ... 1.7	0.5 ... 1.5
		29	8-39	0.5 ... 3.0	0.9 ... 2.7
		28	8-38	0.8 ... 5.1	1.7 ... 4.7
		27	8-37	1.5 ... 9.3	3.0 ... 8.6
		104	8-98	2.9 ... 15.0	5.7 ... 13.6

Dimensions

PR516 DN15 – DN80 (Flanges) Actuator B-
244 175cm²

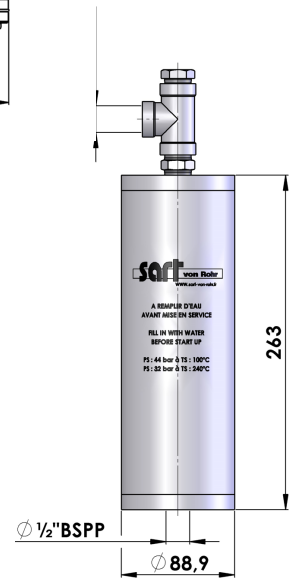
PR516 DN½" – DN2" (Sleeve) Actuator C-
243 70cm²



All dimensions in mm

Threaded and welded version						
DN	½"	¾"	1"	1¼"	1½"	2"
L	130	130	130	200	200	200
H1	60	60	60	90	90	90
H2	395	395	395	425	425	425
Masse / Mass (kg)	8.5	8.5	8.5	14	14	14

Flanges version								
DN	15	20	25	32	40	50	65	80
L (ISO PN16/25/40)	130	150	160	180	200	230	290	310
L (ANSI Class 150 RF)	184	184	184	/	222	254	/	298
L (ANSI Class 300 RF)	190	194	197	/	235	267	/	317
L (ANSI Class 150 RTJ)	/	/	197	/	235	267	/	311
L (ANSI Class 300 RTJ)	201	207	210	/	248	283	/	333
H1	45	50	60	70	85	90	100	120
H2	395	395	395	400	430	425	425	420
Masse / Mass (kg)	9	10	12	14	16	19	25	32



Actionneur / Actuator	B 244	C 243
ØD	235	161
H3	113	101
Surface / Section	175 cm ²	70 cm ²
Raccordement Connexion	¼" NPT	
Masse / Mass (kg)	6	5.5

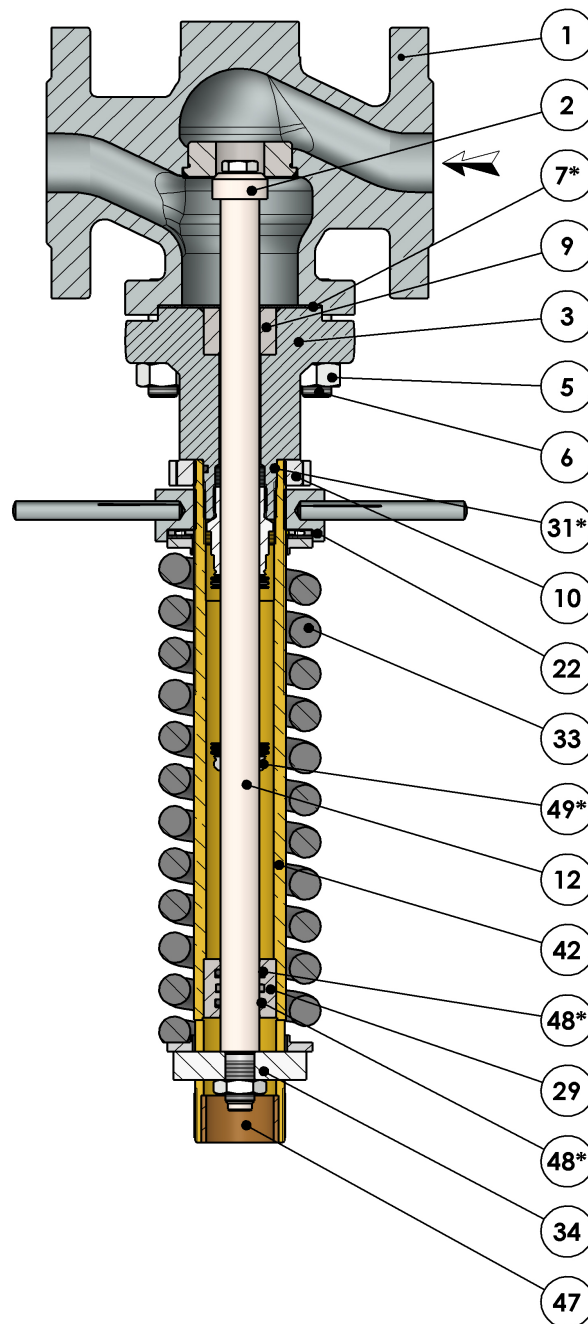
Condensation bottle			
Version Limite/Limit	Standard	High Temperature	
PS (bar)	44	32	50
TS (°C)	100	240	550
Conduite d'impulsion Impulsion pipe	2m tube de cuivre 6/8 2m copper tube 6/8		
Raccordement Connexion	½" BSPP		
Masse / Mass (kg)	2		

Part list - DN15 – DN100 / DN1½” - DN2”

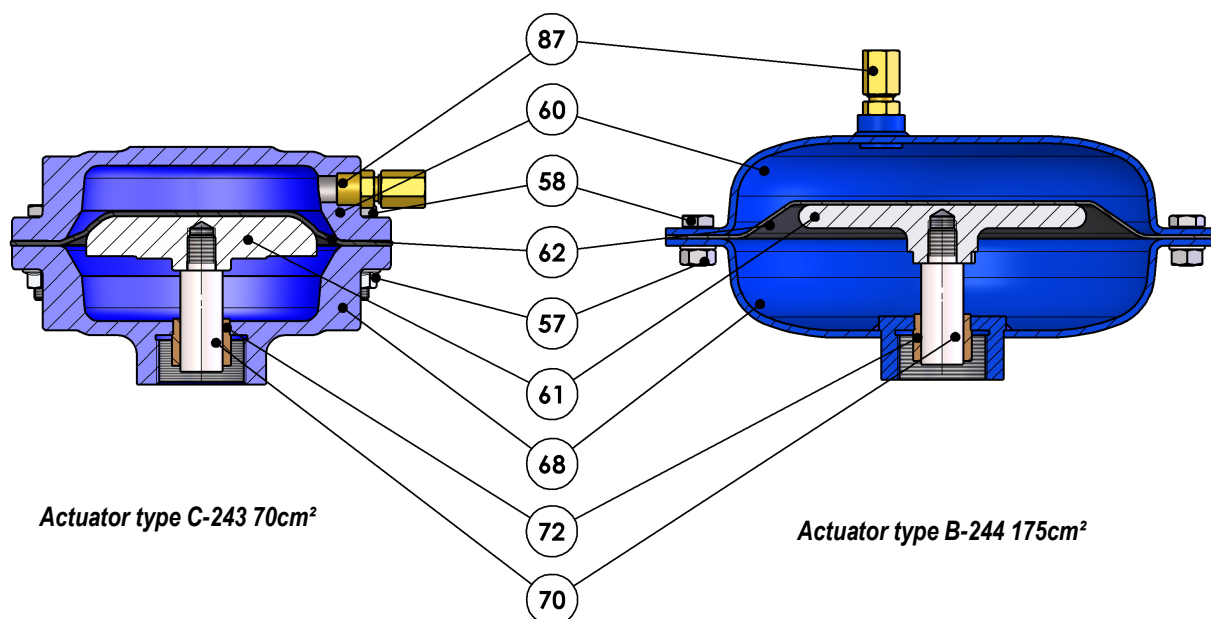
Rep./Item	Description	Material
1	Body	1.0619 / 1.4408
2	Cone	Inox / Stainless steel
3	Cover	1.0565 / 1.4408
5	Stud	8.8 / A2-70
6	Nut	8.8 / A2-70
7*	Gasket	Graphite
9	Bush	Inox / Stainless steel
10	Slotted round nut	Acier / inox -- Steel / Stainless steel
12	Stem	Inox / Stainless steel
22	Adjusting nut	Acier / Steel
29	Bush	Inox / Stainless steel
31*	O-ring	FKM
33	Spring	Acier / Steel
34	Stop	Inox / Stainless steel
42	Tube	Laiton / Brass -- Inox / Stainless steel
47	Bush	Cuivre / Copper
48*	O-ring	FKM
49**	Safety bellows	Inox / Stainless steel

* Spare parts

**Optionnal



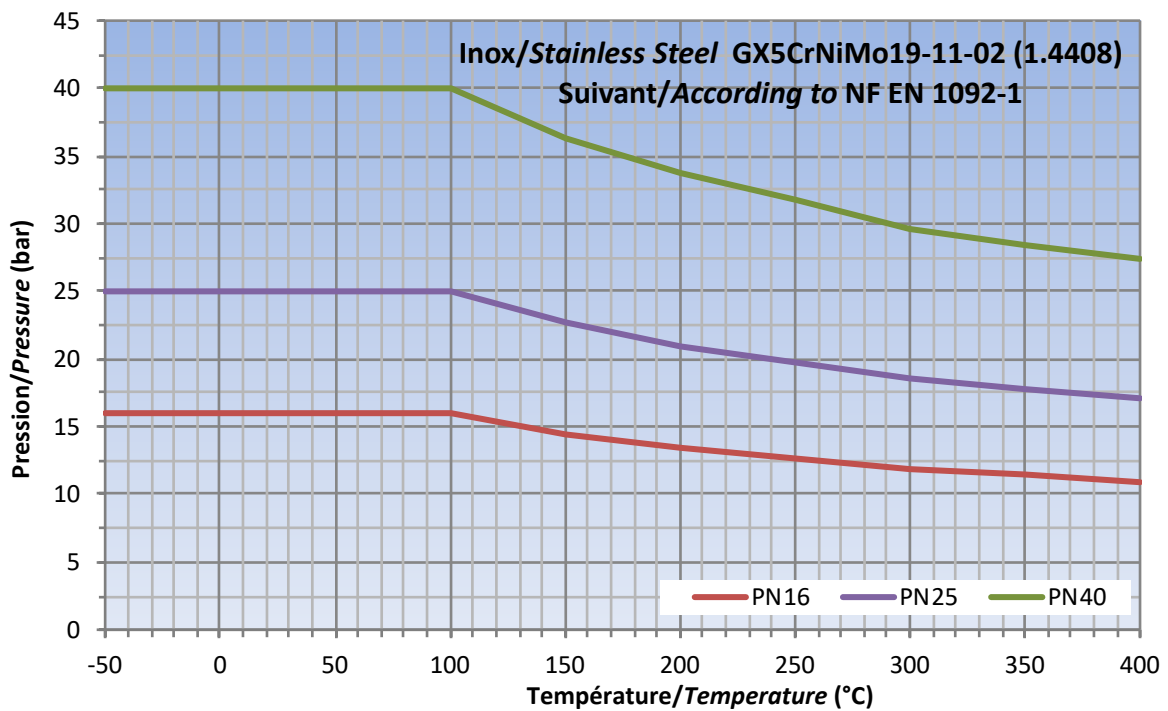
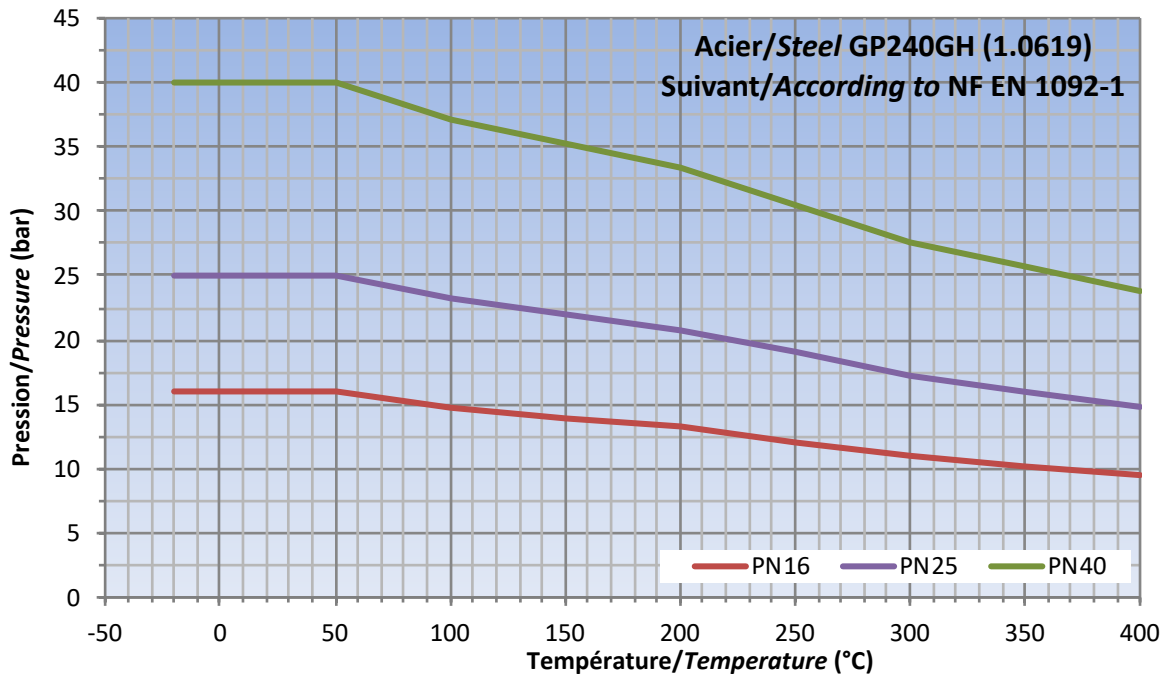
Actuator Part List



Rep./Item	Description	Material
57	Nut	8.8 / A2-70
58	Screw	8.8 / A2-70
60	Upper casing	Steel / Stainless steel
61	Diaphragm plate	Steel / Stainless steel
62*	Diaphragm	FKM - NBR
68	Lower casing	Steel / Stainless steel
70	Stem	Stainless steel
72	Bush	Copper tin alloy
87	Male fitting	Brass -Stainless steel

* Spare parts

Pressure -Temperature Charts



Pressure -Temperature Charts

