

INSTRUCTIONS TO CHANGE THE SET PRESSURE AND DISASSEMBLY

SAFETY VALVES

Issue: 30 Enero 2009

INSTRUCTIONS TO CHANGE THE SET PRESSURE

Series 1400 – Series 1415

Check the pipes are clean to avoid damages in the valve with particles or rust.

Once the valve was installed, check the requested set pressure is correct, then you can adjust like this:

- 1) Unlock the cap (piece nº 4), unscrew to the left.
 - 2) Unscrew the lock nut (piece nº10) from the adjusting screw (piece nº 9) to the left.
 - 3) Change the set pressure by the adjusting screw (piece nº 9) threading clockwise slowly to increase the set pressure or unscrew to reduce set pressure.
- When you have the requested set pressure, lock the lock nut (piece nº 10) and check again the set pressure.

IMPORTANT: This action will do ever with pressure in the line, if not the seats can be damage.

SAFETY VALVE DISASSEMBLY

Once the cap (piece nº 4) is removed, according point 1, and the lock nut (piece nº 10) and adjusting screw (piece nº 9) are unscrewed

Unscrew the nozzle (piece nº1) and take out all the internal pieces.

RECOMMENDED SPARE PARTS

Disc (piece nº 5)

Spring (piece nº 11).

Cap gasket (piece nº 20).

Nozzle gasket (piece nº 21).

Soft seat (piece nº 28).

Model 1400

Description

Type	Safety and Relief valve
Connections / Rating	Flanged EN 1092 PN-16 / 25 / 40 / 63 / 100
Material	Nodular Iron, Carbon steel, Stainless steel, LCC and SuperDuplex
Temperature range	-196°C to +425°C

Technical information

Applications	Steam, gases, vapours and liquids
Min. Set pressure	0,2 barg; With bellows 2 barg
Seat	metal-metal, PTFE, Viton and Stellite
Overpressure	10% for steam, gas and vapour 21% fire exposure, 25% for liquids
Blowdown	10%
Tolerance Set pressure	± 3%

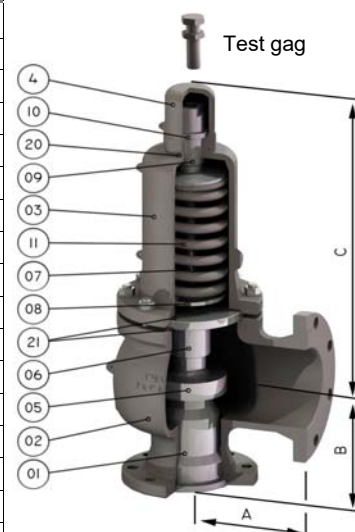
Requirements

Calculation	EN-4126-1 / 7
Design / Size	EN-12516-1, EN-4126-1 / 7
Materials	EN / ASTM
Inspection	EN-4126-1 / 7, MSS-SP-55
Tolerances	EN-4126-1 and ASME UG-126

Construction and materials

Item	Description	15 x 25 to 25 x 40 PN 16/25 Carbon steel	32 x 50 to 400 x 500 PN 16/25 Nodular iron	15 x 25 to 400 x 500 PN 40/63/100 Carbon steel	15 x 25 to 400 x 500 PN 16 to 100 Stainless steel
1	Nozzle	AISI-316L	A351 CF-8	A351 CF-8	A351 CF-8
2	Body	C.S. 1.0619	EN-JS1030	C.S. 1.0619	1.4409
3	Bonnet	C.S. 1.0619	EN-JS1030	C.S. 1.0619	1.4409
4	Cap	A351 CF-8	A351 CF-8	A351 CF-8	A351 CF-8
5	Disc	AISI-316L	AISI-316L	AISI-316L	AISI-316L
6	Guide	AISI-304	AISI-304	AISI-304	AISI-304
7	Push Rod	AISI-316L	AISI-316L	AISI-316L	AISI-316L
8	Spring Button	Carbon steel	Carbon steel	Carbon steel	AISI-303
9	Ajusting Screw	AISI-303	AISI-303	AISI-303	AISI-303
10	Lock Nut	AISI-303	AISI-303	AISI-303	AISI-303
11	Spring	1.8159 C. steel	1.8159 C. steel	1.8159 C. steel	AISI-302
12	Lever	A 351 CF 8	A 351 CF 8	A 351 CF 8	A351 CF-8
17	Release nut	AISI-304	AISI-304	AISI-304	AISI-304
18	Lever axis	AISI-303	AISI-303	AISI-303	AISI-303
19	Packing lever axis	AISI-303	AISI-303	AISI-303	AISI-303
20	Gasket cap	PTFE	PTFE	PTFE	PTFE
21	Gasket bonnet	GRAPHITE +S.S	GRAPHITE +S.S	GRAPHITE+SS	GRAPHITE+SS
22	Gasket pack. lever	Viton	Viton	Viton	Viton
27	Bellows	AISI-316 Ti	AISI-316 Ti	AISI-316 Ti	AISI-316 Ti
28	Soft seat	Viton / PTFE	Viton / PTFE	Viton / PTFE	Viton / PTFE

 Recommended spare parts



Options

Lifting device



Sealed packing lever



Open bonnet



Soft seat



Bellows



Model 1415

Description

Type	Safety relief valves	
Connections	ASME/ANSI B16.5	ANSI150 / 300 / 600 / 900 / 1500 / 2500
Material	Carbon steel A 216 WCB, A 217 WC6, S.S. A 351 CF3M, LCC, Duplex and SuperDuplex	
Temperature range	-196°C to +540°C	

Technical information

Applications	Steam, gases, vapours and liquids
Min. Set pressure	0,2 barg; With bellows 2 barg
Seat	metal-metal, PTFE, Viton and Stellite
Overpressure	10% for steam, gas and vapour 21% for fire exposure, 25% for liquids
Blowdown	10%
Tolerance Set pressure	± 3%

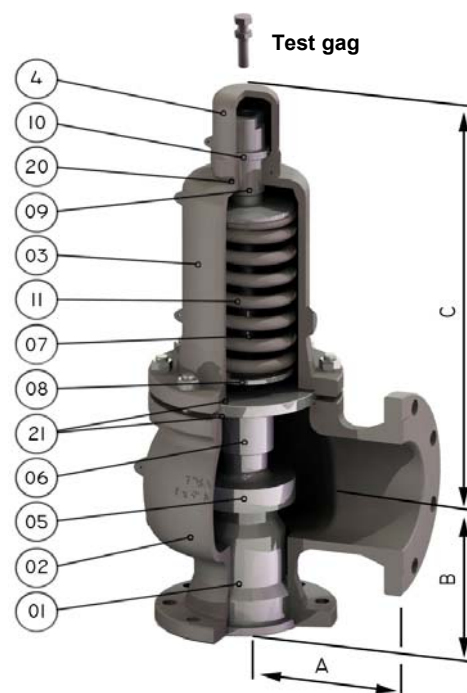
Requirements

Calculation	API RP 520
Design / Size	API STD 526, ASME Section VIII
Materials	EN / ASTM / ASME
Inspection	EN-4126-1/7 API 527 MSS-SP55
Tolerances	EN-4126-1 and ASME UG-126

Construction and materials

Item	Description	Material		
		Carbon steel	Stainless steel	DUPLEX
1	Nozzle	AISI-316L	AISI-316L	EN 1.4462
2	Body	A216 WCB	A351 CF3M	EN 1.4462
3	Bonnet	A216 WCB	A351 CF3M	EN 1.4462
4	Cap	A351 CF8	A351 CF8	EN 1.4462
5	Disc	AISI-316L	AISI-316L	EN 1.4462
6	Guide	AISI-316L	AISI-316L	EN 1.4462
7	Push Rod	AISI-316L	AISI-316L	EN 1.4462
8	Spring Button	AISI-303	AISI-303	EN 1.4462
9	Ajusting Screw	AISI-420	AISI-303	EN 1.4462
10	Lock Nut	AISI-303	AISI-303	EN 1.4462
11	Spring	1.8159 C. S.	AISI-302	Inconel X 750
12	Lever	A351 CF8	A351 CF8	A351 CF8
17	Release nut	AISI-304	AISI-304	AISI-304
18	Lever axis	AISI-303	AISI-303	AISI-303
19	Packing lever axis	AISI-303	AISI-303	AISI-303
20	Gasket cap	PTFE	PTFE	PTFE
21	Gasket bonnet	Graphite + S.S.	Graphite + S.S.	Graphite + S.S.
22	Gasket pack. lever	Viton	Viton	Viton
27	Bellows	AISI-316 TI	AISI-316 TI	AISI-316 TI
28	Soft seat	Viton / PTFE	Viton / PTFE	Viton / PTFE

Recommended spare parts



Options

Lifting device



Sealed packing lever



Open bonnet



Soft seat



Bellows

