

PRESSURE REDUCING VALVE

RP13/E

04 2023

CE
PED 2014/68/UEUK
CA

TYPE RP13 DN 15-50

Cast Iron EN-GJL-250 PN16
Carbon Steel GP240GH+N PN40

Face to face EN 558-1

DESCRIPTION

Series RP13 pressure reducing valve is a self-actuated proportional action type.

Composed by a direct action single seat special body valve, flow tries to close, with diaphragm and feedback spring, controlled by downstream pressure.

The Internal balance without bellow guarantees a long life to the valve. The series RP13 pressure reducing valve can be simply and easily installed and it is suitable for industrial plants where compressed air is not available for a "pneumatic reducing system" or where the user requires a stable reduced pressure not subjected to frequent variations.

SIZES :

from DN 15 to DN 50

MAX WORKING CONDITIONS :

Maximum inlet pressure with steam or air	23 bar
Maximum inlet pressure with water	8 bar
Maximum design temperature	0/+220 °C
Maximum downstream reduced pressure (1)	8 bar
Minimum downstream reduced pressure	0,2 bar

ON REQUEST :

- PTFE/GR Soft seal $\leq 190^{\circ}\text{C}$ for class VI°
- PTFE Soft seal $\leq 150^{\circ}\text{C}$ for class VI°
- Stellite seat - plug degree 6 (recommended with $\Delta p \geq 12$ bar)
- Reduced bore (see table)

CONNECTIONS :

BODY : flanged EN1092-1 - PN16 and PN40 form B
ACTUATOR : female screwed Rp ISO 7 (BSP) 3/8"
CONDENSATION POT : female n°3 connections Rp ISO 7 3/8"

REDUCED PRESSURE RANGES :

TYPE	ACTUATOR	RANGE bar
C1	T.60	3 - 8
C2	T.80	1 - 5
C3	T.100	0.5 - 3
C5	T.150	0.2 - 1.5
(1) C1 special	T50	8 - 12 bar

Where control spring ranges overlap, always use the lower range to give better control and precision

ACCESSORIES :

- KIT for STEAM code RPKITV in carton box (weight 2,2 Kg)
pot (2,3 lt.), cap, fittings and spring adj. tool
- KIT for WATER and GASES code RPKITA in plastic bag
(weight 0,2 Kg) fitting and spring adjusting tool

CV = american unit (flowrate in USGPM
with 1 psi of differential pressure)

Kv = metric unit (flowrate in m3/h with
1 bar of differential pressure)

PLUGS PT cl. IV° Full bore	NOMINAL DIAMETER					
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
	Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1.1/4"	Ø 1.1/2"	Ø 2"
CV	2,42	6,12	9,79	17,45	23,89	26,99
KV	2,06	5,22	8,35	14,88	20,38	23,02
Rangeability	6:1	8:1	11:1	14:1	16:1	16:1
Red. bore	Ø 1/4"	Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1.1/4"	Ø 1.1/2"
CV	1,13	2,42	6,12	9,79	17,45	23,89
KV	0,96	2,06	5,22	8,35	14,88	20,38
Rangeability	5:1	6:1	8:1	11:1	14:1	16:1

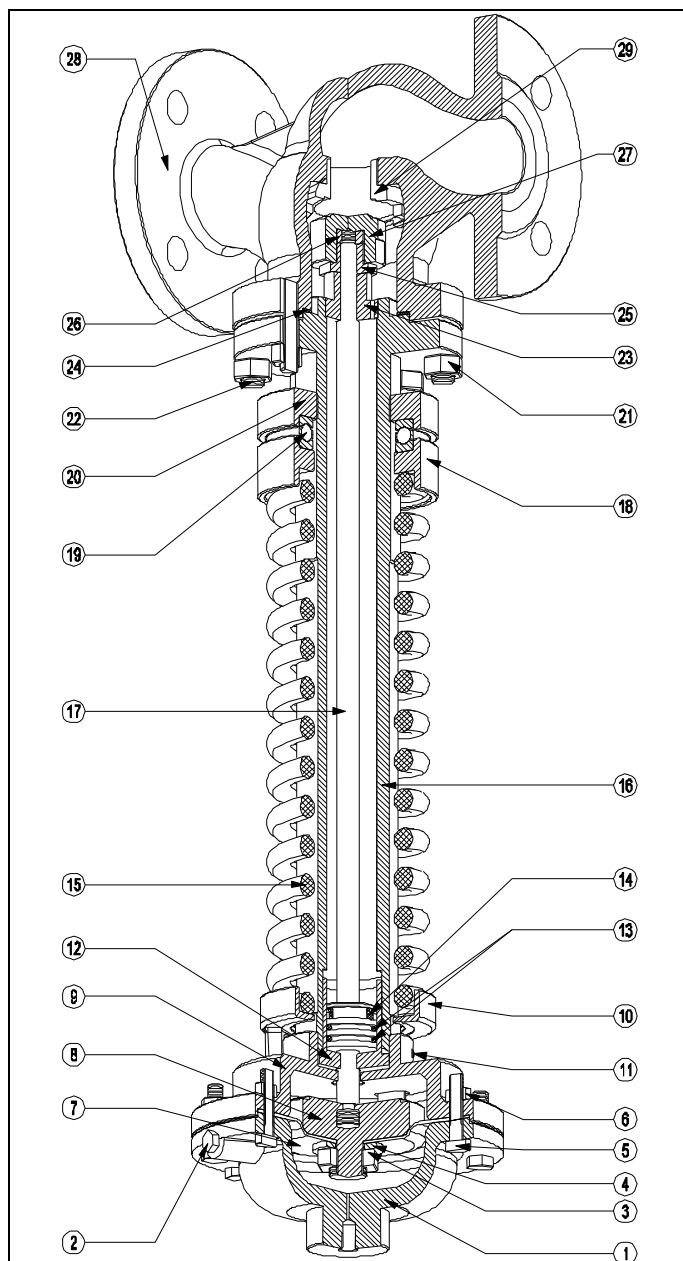
NOTE : The downstream pipe diameter must be sized according to the specific volume of steam reduced pressure, to obtain a steam velocity not exceeding 30-35 m/s (maximum limit value = 40 m/s).

CONFLOW s.p.a.

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

Via Lecco, 69/71
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COMPONENTS LIST and MATERIALS

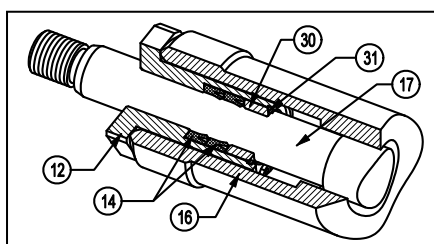


COMPONENTS LIST

1. Upper diaphragm casing
2. Airvent screw
3. Hexagonal locknut
4. Washer
5. Diaphragm casing bolts
6. Diaphragm casing locknuts
7. Diaphragm
8. Diaphragm plate
9. Lower diaphragm casing
10. Lower spring plate
11. Grub screw
12. Airtight guide
13. O-Rings (DN25-DN50)
14. Airtight
15. Spring
16. Yoke
17. Stem
18. Upper spring plate
19. Ball bearing (DN40-50)
20. Spring adjusting plate
21. Body locknuts
22. Stud-bolts
23. Guide bushing
24. Body gasket
25. Plug locknut
26. Entering catch
27. Plug
28. Body
29. Seat
30. Washer (DN15-20)
31. Seeger (DN15-20)

MATERIALS

1. EN-GJL-250 cast iron
2. 4.8 DIN 933 galvanized steel
3. AISI 304 st. steel
4. DIN 125 galvanized steel
5. 8.8 DIN 933 galvanized steel
6. ISO 4033 galvanized steel
7. RubbertexT60-80
NBR T100-T150
On request for Mineral Oil
8. EN-GJL-250 cast iron
9. Carbon steel ASTM A105
10. AVP galvanized
11. 14.9 DIN 914 steel
12. AVP galvanized
13. NBR
14. NBR DIN 3760
15. C85 8 steel (DN15-50)
16. ASTM A105 nickel plated
17. AISI 304 st. steel
18. AVP galvanized
19. Ref. 51112 steel (DN40-50)
20. Free-cutting leaded steel
galvanized
21. ISO 4033 galvanized steel
22. Galvanized steel
23. S.S. AISI 303
24. WS3640 or similar
PTFE on request
25. AISI 303 st. steel
26. AISI 303 st. steel
27. AISI 304 st. steel
28. EN-GJL-250 cast iron or
GP240GH+N carbon steel
29. AISI 304 st. steel
30. OT58 brass
31. DIN 471 steel



**STEM PACKING
DN 15 - 20**

SPARE PARTS KIT

Diaphragm (part. 7)

T.50 cod. JMRP13T050RSTD
T.60 cod. JMRP13T060RSTD
T.80 cod. JMRP13T080RSTD
T.100 cod. JMRP13T100RSTD
T.150 cod. JMRP13T150RSTD

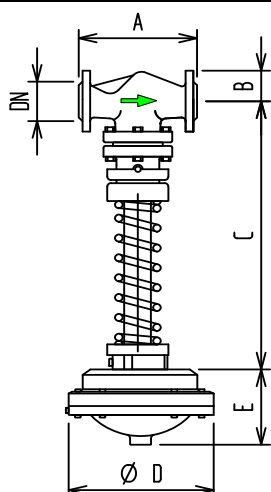
Gaskets kit [parts. 12 - 14 (n°2) - 24 - 30 - 31]

DN 15/20 cod. JRP13TG015020FB-0

Gaskets kit [parts. 13 (n° 2) - 14 - 24]

DN 25-32 cod. JRP13TG025032FB-0
DN 40-50 cod. JRP13TG040050FB-0

DIMENSIONS (mm) and WEIGHT (Kg)



BODY GROUP

DN	Ø	A	B	C	WEIGHT
15	1/2"	130	47,5	340	5,5
20	3/4"	150	52,5	333	6,5
25	1"	160	57,5	424	10,5
32	1.1/4"	180	70	427	11,5
40	1.1/2"	200	75	476	17,5
50	2"	230	82,5	482	20,0

ACTUATOR

ACTUATOR	Ø D	E	WEIGHT
T.60	149	94	3,5
T.80	162	93	5,0
T.100	188	96	6,5
T.150	226	93	10,0

For valve sizing, see leaflet n° 100/VP part I°

Specifications given are only indicative and not binding for the manufacturer who reserve the right to carry-out any modifications deemed necessary without prior notice. All data sheets by CONFLOW SpA, are available last update on our internet web site www.conflo.it.