

## Pressure Measurement

Fittings

Shut-off valves for differential pressure transmitters

1

### Valve manifold combination DN 8

#### Overview



The valve manifold combination DN 8 (7MF9416-4..) is for pressure transmitters for differential pressure.

It is used to shut off and blow out the differential pressure lines and to check the pressure transmitter zero.

In the designs with a test connection, a test device can be connected to check the pressure transmitter characteristic.

#### Benefits

- Max. working pressure 420 bar (6092 psi)

#### Application

The valve manifold combination DN 8 is designed for vapors.

#### Design

The valve manifold combination DN 8 has a process connection with welding pins.

The connection for the pressure transmitter is designed as a flange connection, while the blow-out connection is designed as a pipe union with ferrule.

The manifold valves have an internal spindle thread, while the blow-out valves have an external spindle thread.

The optional test connection is M20x1.5.

The valve manifold combination DN 8 is supplied with a mounting plate.

#### Materials used

Component	Valve manifold		Blow-out valves	
	Material	Mat. No.	Material	Mat. No.
Housing	P250GH	1.0460	16 Mo 3	1.5415
Head parts	C 35	1.0501	21 CrMo V57	1.7709
Spindles	X 12 CrMoS 17	1.4104	X 20 Cr 13	1.4021
Cones	X 35 CrMo 17	1.4122	X 35 CrMo 17 hardened and tem- pered	1.4122
Valve seats	X 6 CrNiMoTi	1.4571/316Ti	X 20 Cr 13	1.4021
Packings	PTFE	-	Pure graphite	-
Welding pins	-	-	16 Mo 3	1.5415

#### Function

- Shutting off the differential pressure lines
- Blowing out the differential pressure lines
- Checking the pressure transmitter zero

As an option it is possible to order a version with a test connection, to which a test device for checking the pressure transmitter characteristic can be connected.

#### Selection and Ordering data

**Valve manifold combination DN 8 for vapors**

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

for flanging to pressure transmitters for differential pressure, with mounting plate, max. working pressure 420 bar (6092 psi), also available in stainless steel on request (order accessory set with Order code), without certificate

- without test connection
- with test connection M20 x 1.5

#### Accessories

Factory test certificate EN 10204-2.2

Material acceptance test certificate EN 10204-3.1

Article No.

**7MF9416-4..A**

4 C

4 D

#### Selection and Ordering data

Order code

Article No.

#### Further designs<sup>1)</sup>

Please add **"-Z"** to Article No. and specify Order code.

#### Accessory set to EN

(required for flanging, weight 0.2 kg)

4x screws  $\frac{7}{16}$ -20 UNF x  $2\frac{1}{8}$  inch to ASME B18.2; chromized steel  
2x O-rings to DIN 3771, 20 x 2.65 - S - FPM90, max. permissible 420 bar (6092 psi), 120 °C (248 °F)

**B34**

**7MF9410-5CA**

#### Accessory set to DIN<sup>2)</sup>

(required for flanging, weight 0.2 kg)

4x screws M10x55 to DIN EN 24014; chromized steel  
4x washers Ø 10.5 mm to DIN 125;  
2x O-rings to DIN 3771, 20 x 2.65 - S - FPM90, max. permissible 420 bar (6092 psi), 120 °C (248 °F)  
Flange connection to DIN 19 213 only permissible up to PN 160!

**B16**

**7MF9010-6CC**

- 1) When ordering accessory set together with the valve manifold combination, please use Order code; otherwise use Article No.
- 2) Flange connections to DIN 19213 only permissible up to PN 160 (2321 psi)

#### Accessories

#### Accessory set for valve manifold combination DN 8 for flanging

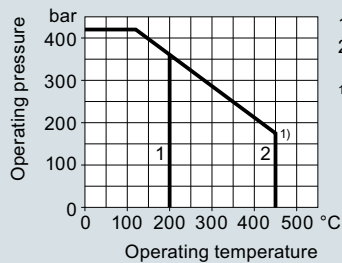
- B34: 4 screws  $\frac{7}{16}$ -20 UNF x  $2\frac{1}{8}$  inch to ASME B 18.2.1, 2 O-rings (FPM 90)
- B16: 4 screws M10x55 to DIN EN 24014, 4 washers, 2 O-rings (FPM 90)

Washers Ø 10.5 to DIN 125

O-ring to DIN 3771, 20 x 2.65 – S – FPM90, max. 420 bar (6092 psi), 120 °C (248 °F)

**Note:** M10 screws only permissible up to PN 160 (2321 psi)!

## Characteristic curves

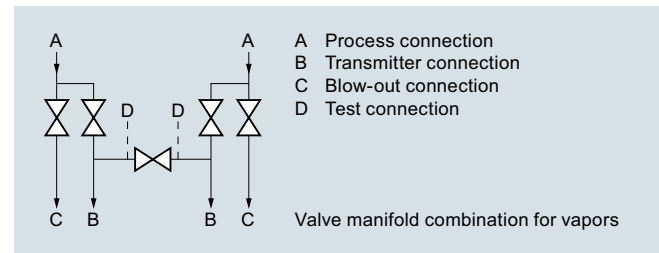


- 1 Valve manifold  
2 Blow-out connection

<sup>1)</sup> According to DIN 19210 the design can be such that the temperatures for the differential pressure line can be set approx. 100 °C (212 °F) lower than the media temperature.

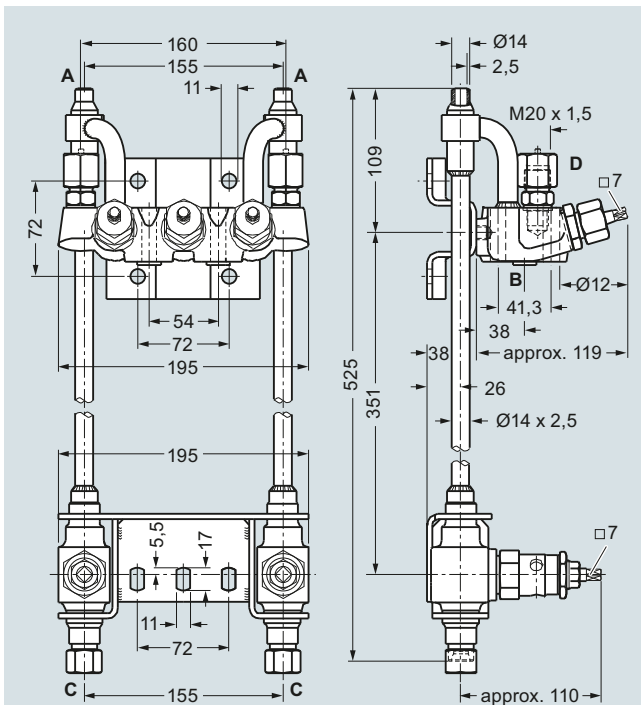
Permissible operating pressure as a function of the permissible operating temperature

## Schematics



Valve manifold combination DN 8, connections

## Dimensional drawings



- A Process connection (e.g. on primary device): Welding pin  
B Transmitter connection: Flange connection to EN 61518, form A  
C Blow-out connection: Pipe union with ferrule, diameter 14 mm, S series to DIN 2353  
D Test connection (only with Article No. 7MF9416-4D.): M20 x 1,5
- Valve design:  
- Manifold valves: internal spindle thread  
- Blow-out valves: external spindle thread

Valve manifold combination DN 8 (7MF9416-4..), dimensions in mm