

## Differential Pressure Gauges

With Bourdon Tube • Model 716.01.2121

### Pressure Gauges

- Time-tested measuring system technology (bourdon tube).
- Screw ring (instead of conventional bezel ring) permits
  - removal of dirt deposits inside the case
  - cleaning inside of window on site
  - dismantling for repair and servicing.
- Restrictor screw in pressure input channel of measuring system for suppressing and smoothing pressure peaks and thus reducing inadmissible overpressure loading on plus side.
- Radial pressure connection for automatic condensation draining through pressure input channel at lowest point on case.
- Good price/performance ratio, preferential use by OEM customers.



#### Service intended

Monitoring the degree of pollution in medium-sized compressed air filters.

#### Nominal size

70, 80 mm

#### Accuracy class

1,6

#### Scale ranges

0 ... 0.6 to 0 ... 16 bar  
or equivalent other units of pressure or vacuum.  
Standard ranges per EN 837

#### Working pressure

Steady: full scale value  
Fluctuating: 0,9 x full scale value

#### Static pressure rating

16 bar

#### Operating temperature

Ambient: -20 ... +60 °C  
Medium: +60 °C maximum

#### Temperature error

Additional error when temperature of the pressure element deviates from +20 °C  
Rising temperature: +0,3 %/10 K of true scale value  
Falling temperature: -0,3 %/10 K of true scale value

#### Degree of protection

IP 66 per EN 60 529 / IEC 529

#### Standard features

##### Pressure connection (exposed to pressure medium)

Connecting-flange geometry according to drawings overleaf

##### Case and screw ring (exposed to pressure medium)

Black aluminium Pressure element (exposed to pressure medium)  
Bourdon tube, Cu alloy

##### Sealing rings (exposed to pressure medium)

NBR (Buna rubber)

##### Restrictor screw (exposed to pressure medium)

Bore 0.2 mm, Cu alloy in pressure connection channel of bourdon tube system

##### Movement (exposed to pressure medium)

Cu alloy

##### Dial (exposed to pressure medium)

aluminium, multicoloured scales (customized)

##### Pointer (exposed to pressure medium)

White aluminium

##### Stop pin (exposed to pressure medium)

Brass, nickel-plated at 6 o'clock

##### Window (exposed to pressure medium)

80 mm: pressed hard glass per DIN 8902  
70 mm: acrylic plastic

##### Suspended particle filter (exposed to pressure medium)

White felt: 8,5 mm dia. x 8 mm thick

#### Optional extras

- Static pressure rating > 16 bar
- Customized connection geometry

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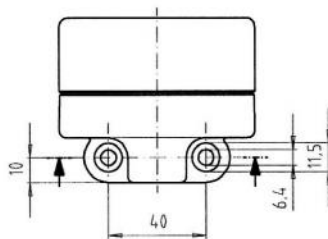
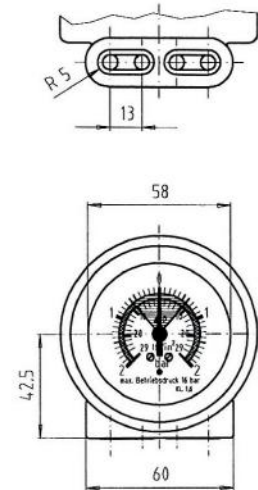
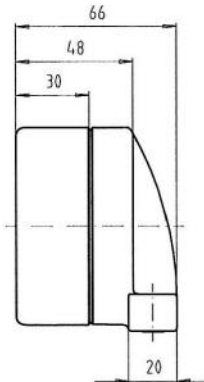
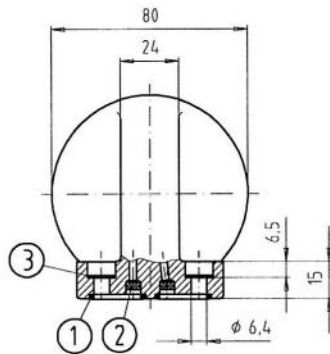
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**Operating principle**

- Case machined of solid aluminium bar retains bourdon tube pressure element.
- High pressure ⊕ retained in bourdon tube
- High pressure ⊖ retained in case
- Any pressure differential across high pressure and low pressure side will deflect the bourdon tube pressure element.
- The deflection will be indicated on a graduated dial scale.

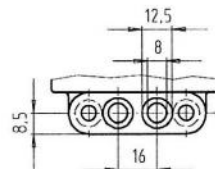
**Dimensions**

Nominal size 80 mm

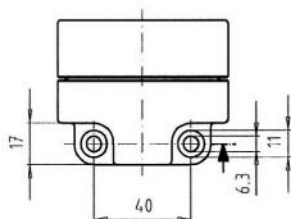
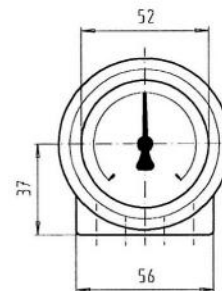
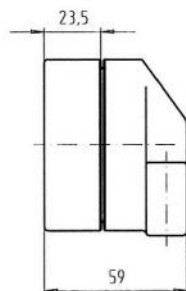
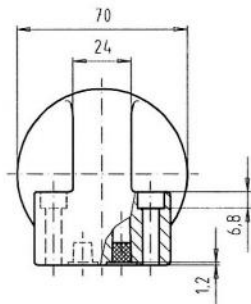


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- ① O-ring 15 x 2 mm dia. NBR
- ② Filter (felt) 6,5 x 3 mm dia.
- ③ USIT seal 6,7 x 11 mm dia. x 1 mm, NBR



Nominal size 70 mm



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**Ordering information**

State:

Model / Nominal size / Scale range / Maximum operating pressure (static pressure) / Connection size / Connection position / Optional extras required

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.