

D116-8-E-2021

# **U-Tube Manometer Typ D116/8**

### **Application**

For all measurements of pressure or differential pressure with ranges from 20 mbar to 200 mbar

### Measurement Range

The U-pipe manometer D116/8 is manufactured in the ranges from 20mbar to 200mbar and from 200mmWS to 2000mmWS. Nominal lengths and item numbers see table below.

### Design

this type is almost unbreakable and robust, which is also suitable for warm and humid use sites.

The design is carried out on a 2 mm thick aluminum base plate, 64 mm wide, with lateral side edges raised to the side for protection of the measuring tube and to increase the stability of the base plate.

The U-shaped measuring tube made of unbreakable acrylic glass has a ameter of 10 mm and the measuring tube ends are slightly prebent for pushing on of the hose and provided with screwed hose clips.

The measuring tube is mounted elastically with plastic clips and produced from one piece.

The base plate is provided with 2 mounting holes (Ø 6 mm).

The sliding scale is 40mm wide, with black lettering and graduation. and divided on both sides. The zero point is in the middle.

The measuring accuracy is better than a partial stroke.

The devices are individually packaged in a slide-in sleeve.



#### Scales of the U-tube manometer

up to NL (nominal length) = 1200mm, the scales are made of matted aluminum with anodised pitch. Longer scales are made of white PVC. All scales are resistant to weather, acid, alkali and oil.

They are impact resistant up to -40 ° C and flame retardant.

Division in mbar: From 0.1: 0.1 divided for measuring liquid of density 1000 kg / m<sup>3</sup>

Division in mm: of 1: 1 divided for measuring liquid of density 1000 kg / m<sup>3</sup>

Division in Pa (Pascal): from 10:10 for measuring liquid of density 1000 kg / m³ as special version

Scales for other measuring liquids e.g. Teflon oil is available at extra cost

## Nominal Length and Article-No.

Scale	NL200	NL300	NL400	NL500	NL600	NL800	NL1000	NL1200	NL1500	NL2000
mbar	10-0-10	15-0-15	20-0-20	25-0-25	30-0-30	40-0-40	50-0-10	60-0-60	75-0-75	100-0-100
Article No:	11,111	11,112	11,113	11,114	11,115	11,116	11,117	11,118	11,119	11,120
mmWS	100-0-100	150-0-150	200-0-200	250-0-250	300-0-300	400-0-400	500-0-500	600-0-600	750-0-750	1000-0-1000
Article No:	11,096	11,097	11,098	11,099	11,100	11,101	11,102	11,103	11,104	11,105





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### Measuring accuracy

This is dependent on the reading error; For 2 readings each with a  $\frac{1}{2}$  pitch deviation, the measuring error is the same for all unit lengths = 1 partial line

Or

NL = 1000, an error of +/- 0.1% of the final value is obtained

NL = 500, an error of +/- 0.2% of the final value is obtained

NL = 200, an error of +/- 0.5% of the final value is obtained

### Special designs / accessories for U-tube manometer D 116/8

Article no.: 11,174 Brass three-way cock mounted on the right leg

Article no.: 11,175 both sides with brass three-way cock mounted

Article no.: 11,176 both sides with PVC cock mounted

Article no.: 11,181 Automatic overfill protection made of acrylic glass

Extension piece mounted on right leg

Article no.: 11,185 meters of PVC hose, clear transparent for grommets 9/10 mm

## Measuring liquid for U-tube manometer

Article number 11,336 50 ml frost-proof measuring liquid "D" blue; Density 1.0 kg / dm³ 100 ml frost-proof measuring liquid "D" blue; Density 1.0 kg / dm³

Article number 11,352 50 ml Measuring liquid Teflon oil, green, density 1,92 kg / dm³
Article number 11,353 100 ml Measuring liquid Teflon oil, green, density 1,92 kg / dm³
(When using Teflon oil it is recommended to use a special scale on the U-tube manometer)

#### Needed liquid for U-Tube Manometer 116/8 (app.) in ml

Length	NL200	NL300	NL400	NL500	NL600	NL800	NL1000	NL1200	NL1500	NL2000
Volume	20 ml	30 ml	40 ml	50 ml	60 ml	80 ml	100 ml	120 ml	150 ml	200 ml

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