

DIFFERENTIAL PRESSURE GAUGE WITH MEASURING MEMBRANE

with or without contact(s)

Nominal size 100 and 160

Accuracy class 1,6

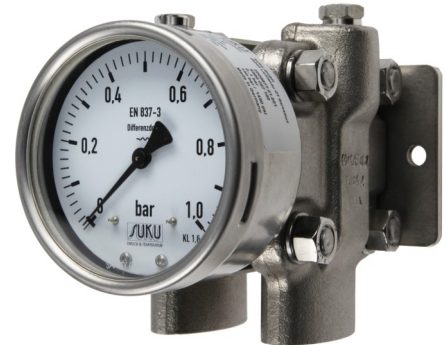
PN40, PN100, PN160



DRUCK & TEMPERATUR

The measuring system consists of two pressure chambers with measuring membranes, which are rigidly connected by a connecting rod. If there is a pressure difference in the pressure chambers, a force comes up on the membranes, which moves the pointer mechanism of the display via a transmission mechanism.

Areas of application: Mechanical and plant engineering, chemistry and petrochemistry, power plant, marine and offshore technology, process engineering



Type	5593		5594		Optionen
Nominal size	100		160		
Ø Measuring cell	75	130	75	130	
Accuracy	± 1,6 % of measuring range (temperature error 0,3%/ 10K)				
Differential pressure measuring ranges	M.-cell Ø75: 0...250 mbar - 0...25 bar / -100...150 mbar - -1...5 bar M.-cell Ø130: 0...40 mbar - 0...600 mbar / -40...+60 mbar - -100...+250 mbar				
Nominal pressure of the measuring system	PN 40				PN100, PN160 (depending on the measuring cell size and measuring range)
Overload capability	unilateral overpressure protected up to nominal pressure of the measuring system (+) and (-) side underpressure protected				
Bayonet ring case	1.4301				
Case filling	without				Glycerine, Silicone oil, Paraffin oil
Connection	Flange connection based on DIN EN 61518 with female thread G1 / 2				Female thread G1/2 Male thread G1/2 Cutting ring connection 12 mm tube, others o. r.
Material connections	1.4404				Cutting ring connection 1.4571
Push caps	1.4404				Hastelloy C4
Measuring membrane	Measuring range ≤400 mbar CrNi-steel 1.4404 Measuring range ≥0,6 bar DURATHERM®				Others on request
Intermediate plate	HART-COAT®				
Sealings	FKM				
Window	Laminated safety glass				
Pointer mechanism	CrNi-steel				
Dial and pointer	Aluminium white, scale and lettering black				Red pointer, drag pointer
Protection class	IP 65 EN 60529				
Temperatures	Ambient: -20...+60°C, storage: -40...+80°C, medium: ≤ 100°C				
Mounting optional	Mounting plate for wall mounting or mounting plate and mounting bracket for tube mounting, Panel mounting set for NS 100 measuring cell Ø75 or front ring with supporting structure				
Contact devices optional	Slow break or magnetic snap-action contact (silicone oil filling possible), inductive contacts (paraffin oil filling possible) Current output 0...20 mA or 4...20 mA				
Electric connection optional	Cable box (rated voltage 250V, cable gland M20x1,5)				Type 5593, 5594

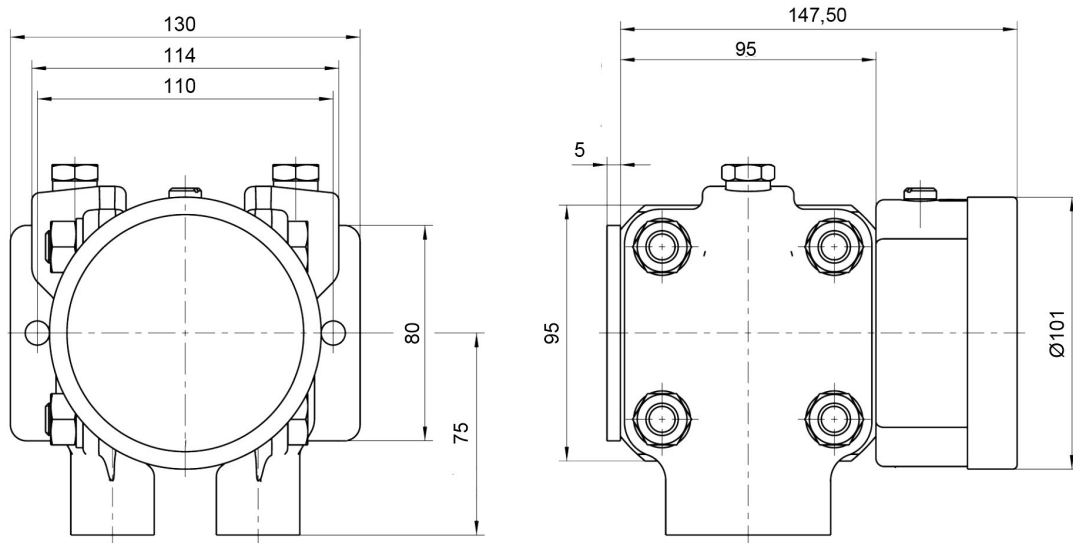
Dimensional drawing

Dimensions in mm

Small measuring system - Ø75 dimensions for pressure stages PN40 and PN 100

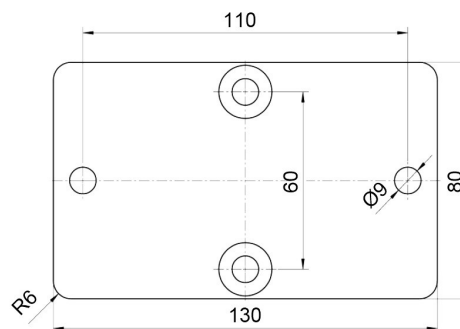
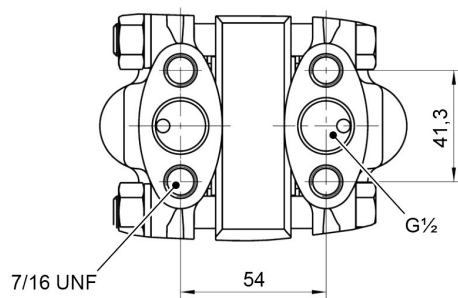


DRUCK & TEMPERATUR

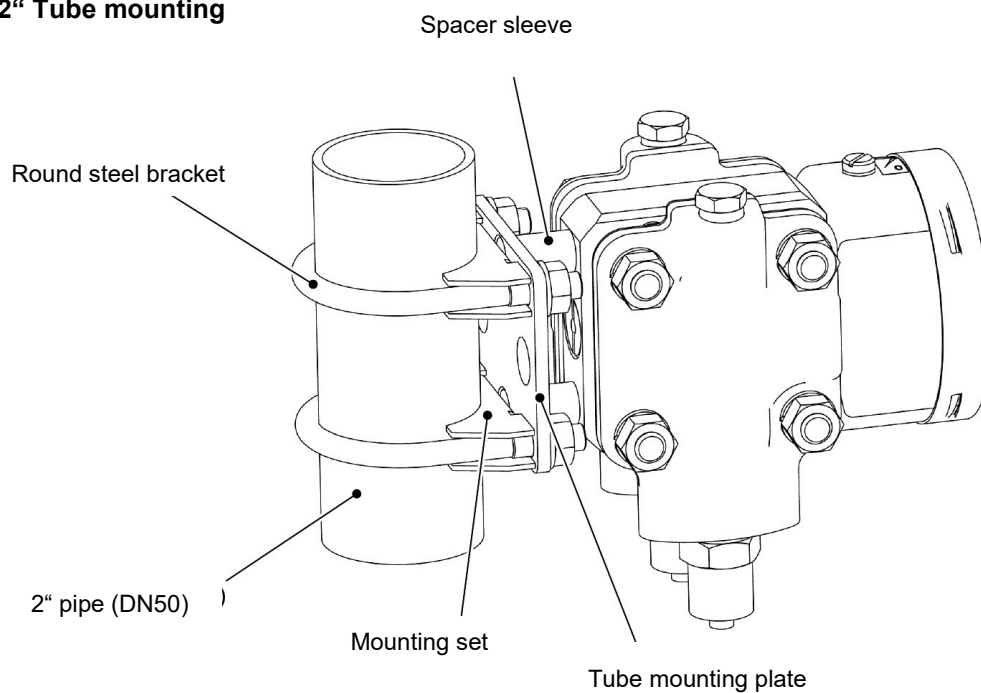


Flange according to DIN EN 61518

Wall mounting plate



2" Tube mounting



Type 5593, 5594

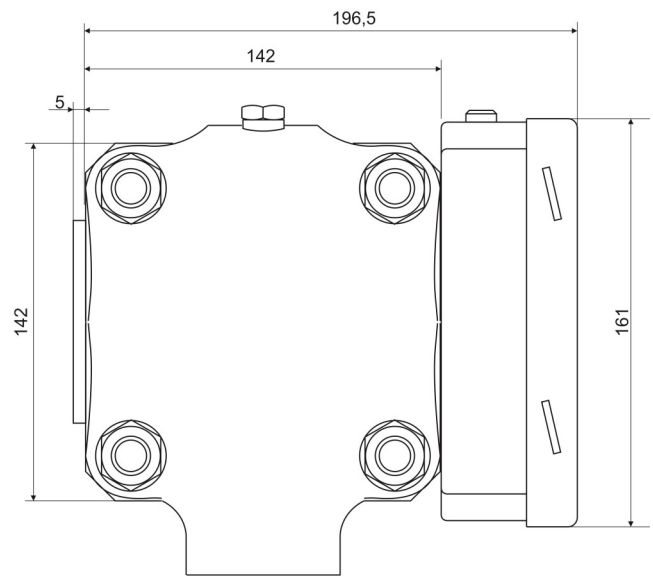
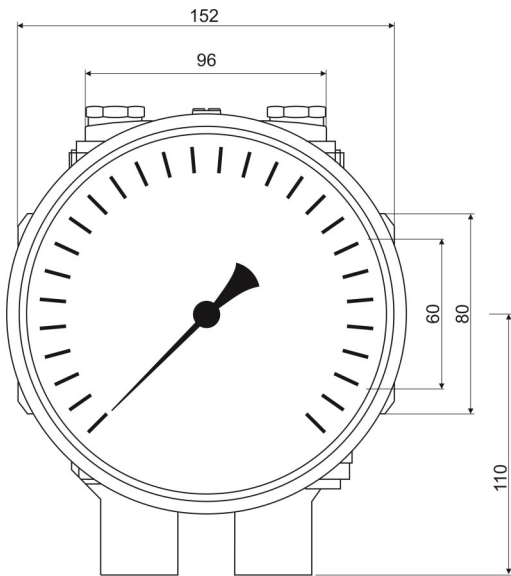
Dimensional drawing

Dimensions in mm

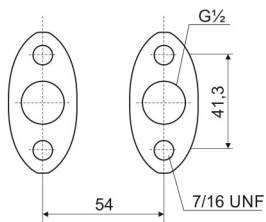


DRUCK & TEMPERATUR

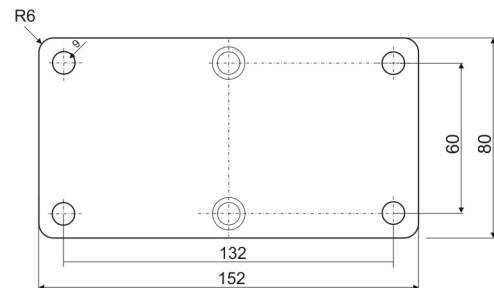
Big measuring system - Ø130



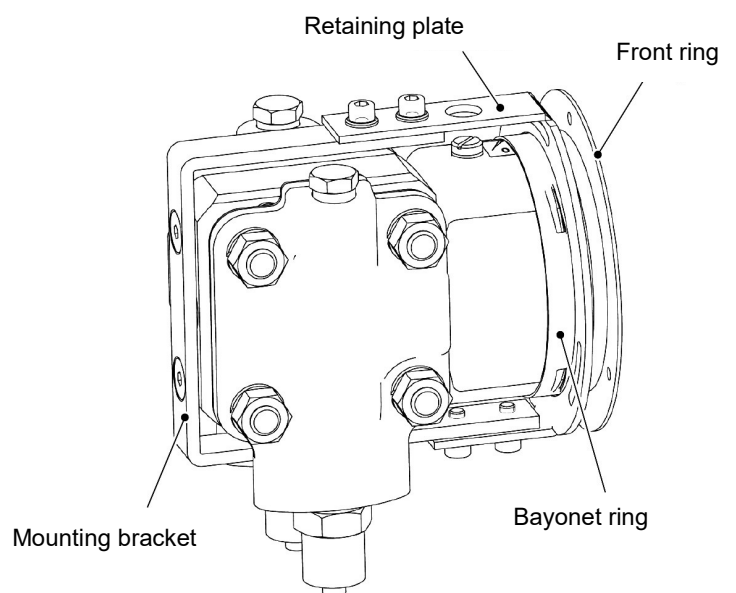
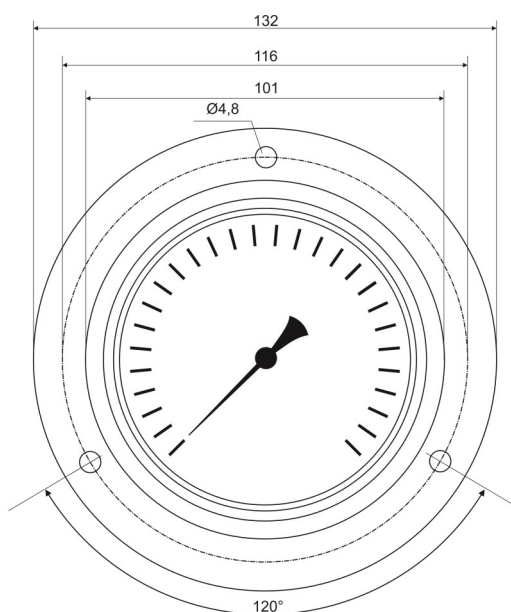
Flange according to DIN EN 61518



Wall mounting plate



Front panel mounting



Type 5593, 5594

Measuring cell Ø75 (small measuring cell)

Measuring range	Measurement display		Slow break contacts			Magnetic snap-action contacts			Inductive contacts		Angular position encoder	Drag pointer	Red pointer	Diaphragm seal	Pressure stage
	Ø100	Ø160	1	2	3	1	2	3	1	2					
0...250 mbar	■	■										■	■		PN 160
0...400 mbar	■	■				■	■		■	■	■	■	■		
-100...150 mbar	■	■										■	■		
-150...250 mbar	■	■	■	■	■	■	■		■	■	■	■	■		
0...0,6 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	PN 40
0...1,6 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
0...2,5 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
0...4 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
0...6 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	PN 100
0...10 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
0...16 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	PN 160
0...25 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
-1...0,6 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
-1...1,5 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
-1...3 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	
-1...5 bar	■	■	■	■	■	■	■		■	■	■	■	■	■	

Measuring cell Ø130 (big measuring cell)

Measuring range	Measurement display		Slow break contacts			Magnetic snap-action contacts			Inductive contacts		Angular position encoder	Drag pointer	Red pointer	Diaphragm seal	Pressure stage
	Ø100	Ø160	1	2	3	1	2	3	1	2					
0...40 mbar	■	■	○	○		○	○		○	○	■		■		PN 40
0...60 mbar	■	■	■	■		■	■		■	■	■	■	■		
0...100 mbar	■	■	■	■		■	■		■	■	■	■	■	■	PN 100
0...160 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	
0...250 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	PN 40
0...400 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	
-40...+60 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	PN 100
-60...+100 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	
-100...+150 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	PN 160
-100...+250 mbar	■	■	■	■	■	■	■		■	■	■	■	■	■	

■ available ○ on request