

PRESSURE GAUGE SYPHONS

DIN 16 282 or industrial standard

APPLICATION

Pressure gauge syphons protect pressure gauges from excessive heating by hot media. The condensate that forms in the water trap tube prevents the hot medium from directly entering the gauge. Before commissioning, the water trap tube should be pre-filled with cold fluid. Water trap tubes can be mounted on the shut-off valve before the pressure gauge or directly on the gauge itself. They also serve to reduce pulsation of the medium.

EXECUTION

- Design according to DIN 16282 in circular shape (for vertical pressure sampling)
- Design according to DIN 16282 in U-shape (for horizontal pressure extraction), angled at 90°
- Standard circular design
- Standard U-shaped design (not angled)



Water trap pipes U-shape / circular shape

TYPE OVERVIEW

PRESSURE GAUGE SYPHONS according to DIN 16282 U-shape
made of seamless steel tubing

Form	Connections	Exit	Materials*	
A	Connection pin Form 4 DIN 16282 Thread G ½ A	Connection pin DIN 16282 - Form 6, clamping sleeve DIN 16283 G1/2 right-left	P235GH-TC1 / St35.8 16Mo3 13CrMo4-5 10 CrMo9-10 1.4571	
B	Welding connection	Connection pin DIN 16282 - Form 6, clamping sleeve DIN 16283 G1/2 right-left	P235GH-TC1 / St35.8 16Mo3 13CrMo4-5 10 CrMo9-10 1.4571	

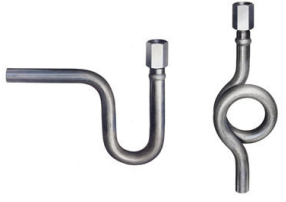
*Other materials available on request

PRESSURE GAUGE SYPHONS according to DIN 16282, circular shape
made of seamless steel tubing

Form	Connection	Exit	Materials*	
C	Connection pin Form 4 DIN 16282 Thread G ½ A	Connection pin DIN 16282 - Form 6 clamping sleeve DIN 16283 G1/2 right-left	P235GH-TC1 / St35.8 16Mo3 13CrMo4-5 10 CrMo9-10 1.4571	
D	Welding connection	Connection pin DIN 16282 - Form 6 clamping sleeve DIN 16283 G1/2 right-left	P235GH-TC1 / St35.8 16Mo3 13CrMo4-5 10 CrMo9-10 1.4571	

*Other materials available on request

PRESSURE GAUGE SYPHONS (U-shape / circular shape)

Form	Connection	Exit	Operating pressure PM	Materials	
U-shape	G 1/4 A G 1/2 A G 1/4 A Welding connection Welding connection	G 1/4 A G 1/2 A Clamping sleeve G 1/4 Clamping sleeve G 1/4 Clamping sleeve G 1/2	25 bar Operating pressure limited to max. Operating temperature 200°C	Steel P235GH-TC1 stainless steel 1.4571	
circular shape	G 1/4 A G 1/2 A weld connection G 1/4 A	G 1/4 A G 1/2 A Clamping sleeve G 1/4 Clamping sleeve G 1/4			

*Other versions/connection types available on request

PRESSURE/TEMPERATURE TABLE FOR PIPES

The table values apply to seamless, smooth pipes in new condition. Material cross-sectional reductions resulting from cut threads and bends are not taken into account. Welding factors are also not considered.

Rohrabmessung		höchste Betriebstemperatur in Grad Celsius																				
in mm	Werkstoff	200	250	300	350	400	425	450	470	490	500	510	520	530	540	550	560	570				
nahtl. Stahlrohre:																						
20,0 x 2,60	St 35.8-l / P235GH TC1	183	157	133	113	100				höchstzulässiger Druck in bar												
21,3 x 3,20	St 35.8-l / P235GH TC1	196	173	140	117	106																
21,3 x 3,20	15 Mo 3 / 16 Mo 3					183	178	172	163	131	108											
21,3 x 3,20	13 CrMo 44 / 13 CrMo 4-5					218	212	206	198	189	179	153	118	88	62	40						
21,3 x 3,20	10CrMo910 / 10CrMo9-10					218	212	206	201	185	162	138	121	102	86	72	59	50				
austenitische Edelstähle:																						
13,5 x 2,30	1.4541	223	215	205	198	189		180														
13,5 x 2,30	1.4571	272	264	254	247	240		230														
20,0 x 2,50	1.4571	242	235	227	220	214		205														
21,3 x 2,60	1.4541	202	196	186	180	173		164														
21,3 x 2,60	1.4571	248	240	232	225	218		209														

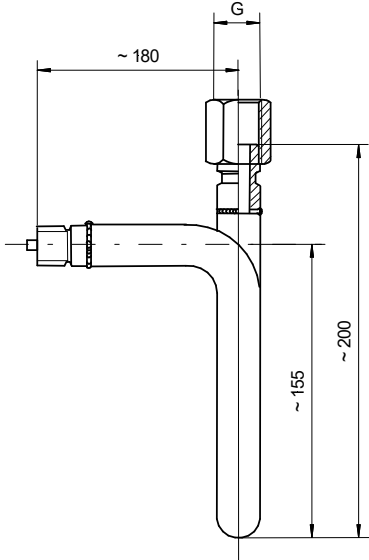
For every operational scenario, the permissible pressure after the calculation rules DIN 2413, under consideration of the long-term rupture strength, to determine.

Regarding the above values only as approximate guidelines.

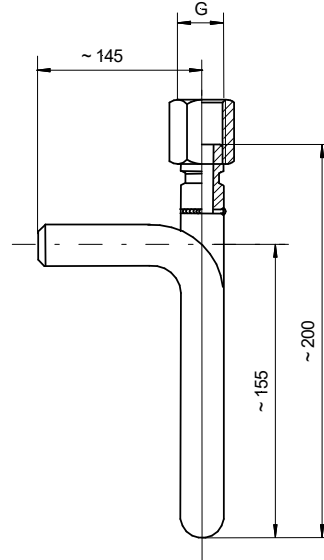
DIMENSIONS

Water trap pipes according to DIN 16282 U-shape

- Form A: Threaded connection G1/2" – Clamping sleeve G1/2"

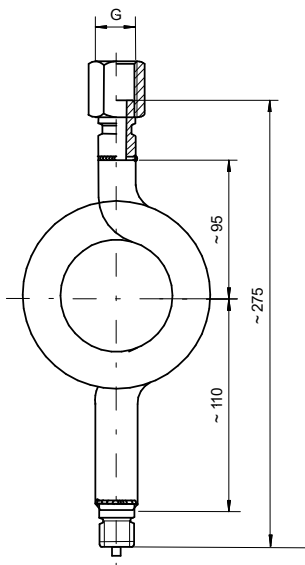


- Form B: Weld-on end – clamping sleeve G1/2"

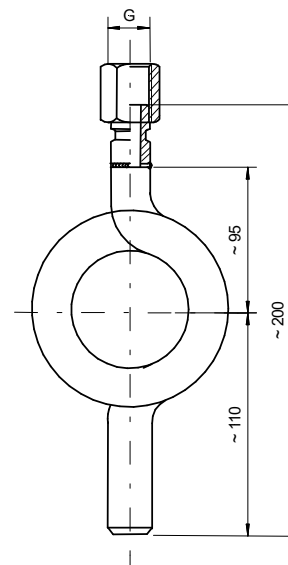


Water trap pipes according to DIN 16282, circular shape

- Form C: Threaded connection G1/2" – Clamping sleeve G1/2"



- Form D: Weld-on end – clamping sleeve G1/2"



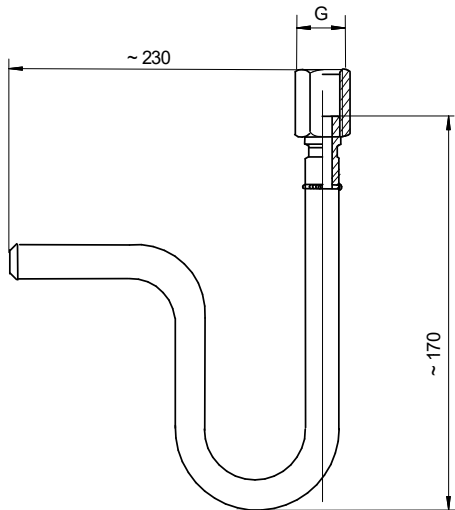
Further details:

- other materials 16Mo3 / 13CrMo4-5 / 10CrMo 9-10
- DIN 16282 Form F: U-shape Weld end – Weld end
- DIN 16282 Form G: Circular shape Weld end – Weld end
- Design according to customer specifications

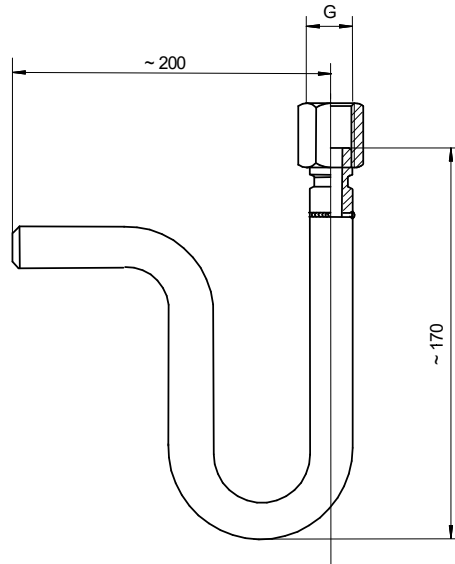
DIMENSIONS

Water trap pipes, commercially available in U-shape

- Weld-on end – clamping sleeve G1/4"

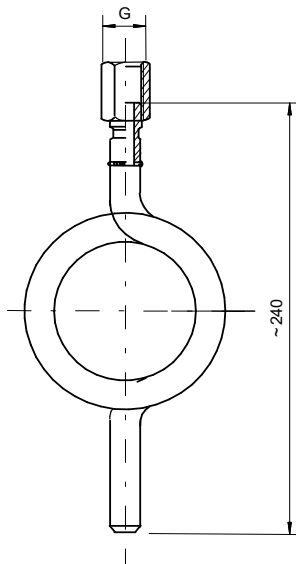


- Weld-on end – clamping sleeve G1/2"

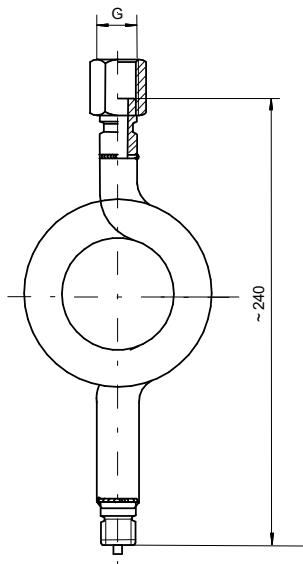


Water trap pipes, commercially available in a circular shape

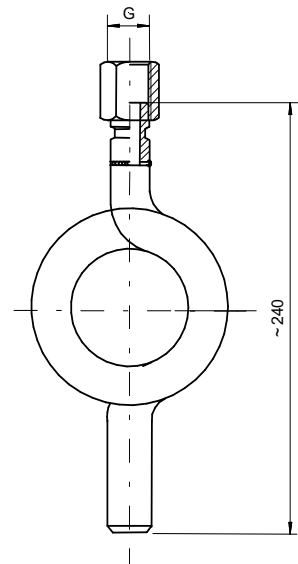
- Weld-on end – clamping sleeve G1/4"



- G1/2" – Clamping sleeve G1/2"

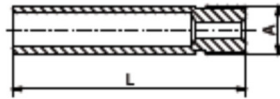


- Weld-on end – clamping sleeve G1/2"



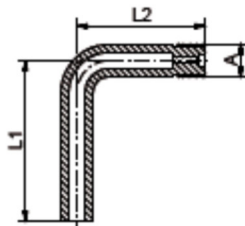
OVERVIEW OF CONNECTION PIPES

Straight connecting pipes WSR 50



Form	Connection A	Length L	Material
Weld-on/clamping sleeve	G1/2"	100mm	Steel
Pin/Clamping sleeve	G1/2"	100mm	Steel
Weld-on/clamping sleeve	G1/2"	100mm	Stainless steel 1.4571
Pin/Clamping sleeve	G1/2"	100mm	Stainless steel 1.4571

Connecting pipes, angled shape WSR 51



Form	Connection A	Length L1	Length L2	Material
Weld-on/clamping sleeve	G1/2"	100mm	80mm	Steel
Pin/Clamping sleeve	G1/2"	100mm	80mm	Steel
Weld-on/clamping sleeve	G1/2"	100mm	80mm	Stainless steel 1.4571
Pin/Clamping sleeve	G1/2"	100mm	80mm	Stainless steel 1.4571