

Syphons for pressure measuring instruments

Applications

- Syphons protect pressure measuring instruments from pulsations in the medium and from excessive heating
- Cooling element for fluids, gases and vapours in pressure measurement
- For direct mounting to the pressure connection of the pressure measuring instrument or to the shut-off device (stopcock or valve) mounted underneath

Special features

- Designs per DIN 16282 or to industrial standards
- Permissible temperatures to 400 °C
- Nominal pressures to 160 bar
- Materials: Steel (1.0039, 1.0345) and stainless steel (1.4571)

Description

Syphons per DIN 16282 U-form, form B, and trumpet form, form D, have a welding connection for the pressure tapping on the process side and a threaded connection on the instrument side.

In the industrial standard versions, threaded connections are also available for the pressure tapping on the process side.

U-form syphons are intended for horizontal pressure tapping; trumpet-form syphons are intended for vertical pressure tapping.

Inside the syphon, condensate is collected, which prevents the ingress of hot media into the measuring instrument. We recommend filling the syphon with a cooling separating liquid before commissioning the pressure line.



Syphons, DIN 16282, stainless steel

Fig. left: U-form, form B

Fig. right: Trumpet form, form D

Material of wetted parts	Permissible operating temperature up to °C	Max. working pressure ¹⁾ in bar
Steel 1.0039, 1.0345	120	160
	300	120
	400	104
Stainless steel 1.4571	120	160
	300	140
	400	131

1) With some industrial standard syphons the maximum working pressure is limited to 25 bar, see table on page 3

Options

- Other connection threads
- Special pipe for high temperatures and working pressures
- Material: Monel
- 1.4571 stainless steel, oil and grease-free for oxygen service
- 3.1 / 3.2 material test certificate
- Pipe connectors for pressure measuring instruments, see page 3



1. Versions per DIN 16282

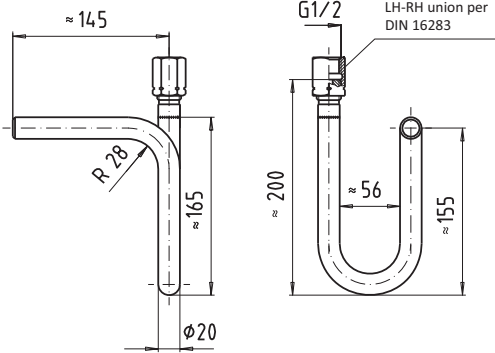
With welding connection on the pressure tapping side

Design	Material of wetted parts
U-form, form B Outlet ²⁾ : LH/RH union G ½	1.0345
	1.0345 with 3.1
	1.4571
	1.4571 with 3.1
Trumpet form, form D Outlet ²⁾ : LH/RH union G ½	1.0345
	1.0345 with 3.1
	1.4571
	1.4571 with 3.1

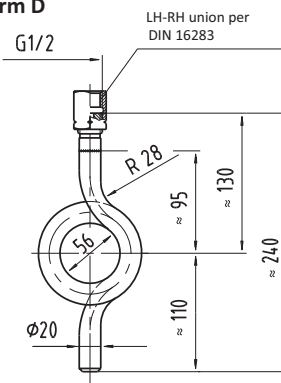
2) Instrument side

Dimensions in mm

U-form, form B



Trumpet form, form D



2. Industrial standard designs (similar to DIN 16282)

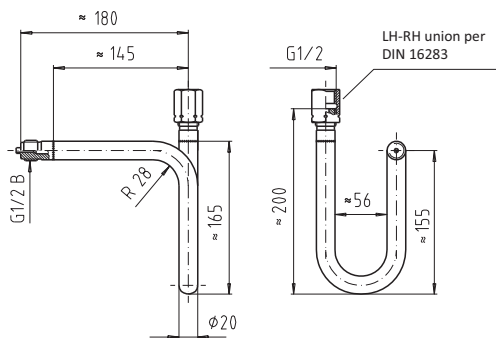
With G ½ B threaded connection on the pressure tapping side

Design	Material of wetted parts
U-form Outlet ²⁾ : LH/RH union G ½	1.0345
	1.0345 with 3.1
	1.4571
	1.4571 with 3.1
Trumpet form Outlet ²⁾ : LH/RH union G ½	1.0345
	1.0345 with 3.1
	1.4571
	1.4571 with 3.1 NACE

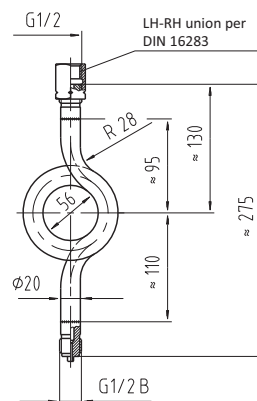
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Dimensions in mm



U-form



Trumpet form



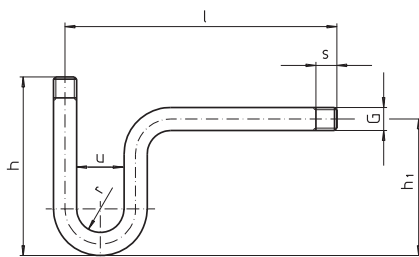
3. Industrial standard designs

Design	Con- nection thread G	Max. working pressure	Material of wet- ted parts	Dimensions in mm					
				D	h	h ₁	l	u	s
U-form  Inlet ¹⁾ and Outlet ²⁾ : Male thread	G ½ B ⁴⁾	25 bar	1.0039	-	170	130	225	60	13
	G ½ B ⁴⁾	25 bar	1.0345	-	170	130	225	56	20
U-form Inlet ¹⁾ : G ½ B Outlet ²⁾ : LH/RH union G ½	G ½ B ⁴⁾	25 bar	1.0345	-	205	130	225	56	20
	G ½ B ⁵⁾	s. Tabelle S.1	1.0345	-	200	130	225	56	20
U-form Inlet ¹⁾ : without thread ³⁾ Outlet ²⁾ : LH/RH union G ½	G ½ B	s. Tabelle S.1	1.0345	-	200	130	-	56	-
Trumpet form  Inlet ¹⁾ and Outlet ²⁾ : Male thread	G ½ B ⁴⁾	25 bar	1.0039	60	240	120	-	-	13
	G ½ B ⁴⁾	25 bar	1.0345	56	230	115	-	-	20

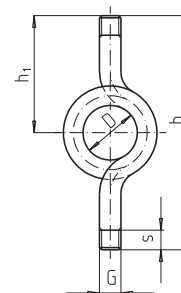
- 1) Process side
- 2) Instrument side
- 3) Prepared for welding
- 4) Thread machined directly onto pipe
- 5) Welded pressure connection

Dimensions in mm

U-form



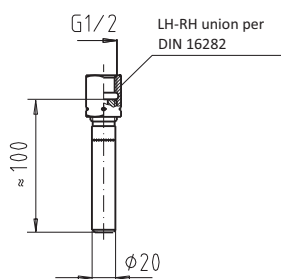
Trumpet form



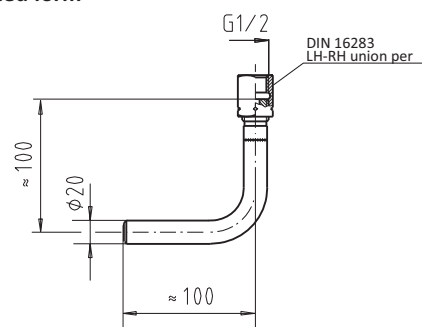
4. Pipe connectors for pressure measuring instruments

Welding connection on the pressure tapping side (outlet ²⁾: LH/RH union G ½)

Straight form



Angled form



Design	Material of wetted parts	Order number
Straight Form	1.0345	2243679
	1.4571	2112892

Design	Material of wetted parts
Angled form	1.0345
	1.4571