# Syphons and connecting pipes For pressure measuring instruments Model 910.15

WIKA data sheet AC 09.06

## Applications

- Cooling element for protection from excessive heating of liquids, gases and vapours
- Protection from pressure spikes and pulsations
- Direct process connection of pressure measuring instruments or in combination with other instrumentation accessories (e.g. valves)

### **Special features**

- Compact version suitable for vibration applications
- Customer-specific combination of valves and measuring instruments (hook-up) on request
- Permissible temperatures to 550 °C
- Nominal pressures to 420 bar



Syphons, model 910.15, stainless steel Fig. left: Compact form Fig. centre: U-form, DIN 16282 form B Fig. right: Trumpet form, DIN 16282 form D

## Description

The geometries of the syphons in accordance with DIN 16282 are divided into U-form and trumpet form. These syphon versions are available with threaded connection (forms A and C) or weld-in connection (forms B and D) to the process side.

In addition to the standardised syphons, connections for NPT threads following DIN 16282 and industrial standard variants are available.

Inside the syphon, condensate is collected, which prevents the ingress of hot media into the pressure measuring instrument. It is recommended to fill the syphon with a cooling separating liquid before commissioning the pressure line. U-form syphons are intended for horizontal pressure tapping; trumpet-form syphons are intended for vertical pressure tapping.

The length-optimised compact form minimises the influence of vibrations and protects the pressure measuring instrument from pressure spikes and pulsations.

For applications that do not require a syphon, WIKA offers connecting pipes in a straight or angular form (pipe elbow 90°).



Page 1 of 7



# Pressure/temperature diagrams

#### Syphon: Trumpet form, U-form **Connecting pipe: Angular form** 500 (7250) Stainless steel 400 Steel Pressure in bar (psi) (5800) 300 (4350) 200 (2900) 100 (1450) 0 (0) 0 100 200 300 400 500 600 (32) (212) (392) (572) (752) (932) (1112) Temperature in °C (°F)

#### Syphon: Compact form





Connecting pipe: Straight form

# Designs per DIN 16282

#### Dimensions in mm [in]





Form B



Version	Inlet <sup>1)</sup>	Outlet <sup>2)</sup>	Max.	Order number		
pressu			operating	Material of wetted parts		
	bar [psi]	Steel 3)	Stainless steel 1.4571			
U-form, form A <sup>4)</sup>	G ½ B	G 1/2 LH-RH union	160 [1,450]	9091181	9091220	
U-form, form B	Weld-in connection	G 1/2 LH-RH union	160 [1,450]	9091190	1323270	
Trumpet form, form C <sup>4</sup>	G ½ B	G 1/2 LH-RH union	160 [1,450]	9091203	9091238	
Trumpet form, form D	Weld-in connection	G 1/2 LH-RH union	160 [1,450]	9091211	1440497	

1) Process side

2) Instrument side 3) Pipe: Steel 1.0345, process connection: 1.1141 4) Definition per DIN 16282 rev. 11/1988

WIKA data sheet AC 09.06 · 07/2020

# **Designs following DIN 16282**

Connection thread deviating from G  $1\!\!\!/_2$  B and M20 x 1.5

Dimensions in mm [in]





Thread machined onto pipe

Thread machined onto pipe

Version Inlet	Inlet 1)		operating pressure in	Order number		
	-			Material of wetted parts		
				Steel 1.0345	Stainless steel 1.4571	
U-form	1⁄2 NPT, male	1/2 NPT, fixed bushing	160 [1,450]	-	0731277	
Trumpet form	1⁄2 NPT, male	$^{1\!\!/_{\!\!2}}$ NPT, fixed bushing	160 [1,450]	1034227	0763349	

1) Process side 2) Instrument side

# Industrial standard designs

Dimensions in mm [in]



**Trumpet form** 20 [0.787] Ø56 -12.2057 230 [9.06] 143244687.01 115 [4.53] 20 [0.787]

Version	Inlet 1)	Outlet <sup>2)</sup>	Max. operating pressure in bar [psi]	Dimensions in mm [in]			Order number	
				l	h <sub>1</sub>	h	Material of wetted parts	
							Steel 1.0345	Stainless steel 1.4571
U-form	Weld-in connection	G ½ LH-RH union	160 [1,450]	218 [8.583]	155 [6.102]	200 [7.784]	9090681	14130264
U-form	G ½ B <sup>3)</sup>	G ½ LH-RH union	160 [1,450]	253 [9.961]	155 [6.102]	200 [7.784]	9090673	-
U-form	G ½ B 4)	G ½ LH-RH union	25 [362]	225 [8.858]	150 [5.905]	205 [8.071]	9090665	-
U-form	G ½ B 4)	G 1⁄2 B 4)	25 [362]	225 [8.858]	150 [5.905]	170 [6.693]	9090657	14090773
Trumpet form	G ½ B <sup>4)</sup>	G ½ LH-RH union	25 [362]	225 [8.858]	-	-	39922306	-

Process side
Instrument side
Threaded fitting welded
Thread machined onto pipe

# **Compact form**

Dimensions in mm [in]

#### **Fixed connection threads**





Version	Inlet <sup>1)</sup>		Max. operating	Order number	
			pressure in bar [psi]	Material of wetted parts	
				Stainless steel 1.4571	
Compact form	1⁄2 NPT, male	1/2 NPT, female	420 [6,091]	11585791	
	G ½ B, male	G 1/2 LH-RH union	420 [6,091]	14114184	

1) Process side 2) Instrument side

# Connecting pipes for pressure measuring instruments

Dimensions in mm [in]



Version	Inlet <sup>1)</sup>	Outlet <sup>2)</sup>	pressure in	Order number		
				Material of wetted parts		
				Steel 1.0345	Stainless steel 1.4571	
Straight form	Weld-in connection	G 1/2 LH-RH union	250 [6,091]	2243679	2112892	
Angular form	Weld-in connection	G 1/2 LH-RH union	250 [6,091]	2243687	2003612	

1) Process side

2) Instrument side

#### **Ordering information**

To order the described product the order number is sufficient. Options require additional specification.

© 05/1994 WIKA Alexander Wiegand SE & Co. KG, all rights reserved. The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

WIKA data sheet AC 09.06 · 07/2020



WIKA Alexander Wiegand SE & Co. KG Alexander-Wiegand-Straße 30 63911 Klingenberg/Germany Tel. +49 9372 132-0 Fax +49 9372 132-406 info@wika.de www.wika.de

Page 7 of 7