

Accessories – Syphon range BDT42, BDT43, BDT44

Description

Syphons are used to protect pressure gauges to the effect of hot process media under pressure such as steam. The syphon allows the media to condensate in the syphon. This prevents hot media to enter the pressure gauge. This increases the life time of a pressure gauge with hot media. There are several designs for different installation situation. The BDT42 coil syphon is used for vertical installation, the BDT43 for horizontal installation. The BDT44 is a more compact design of the BDT42 coiled syphon.

Material of construction

All Badotherm Syphons are manufactured from AISI 316Ti as a standard material for all components such as the pipe, connector and adjusting nut. Optionally, the syphon could be manufactured from AISI 316L, Alloy C276 or Alloy 400 materials.

Pressure vs temperature

The syphon has a pressure rating based on the process temperature. Below tables show the pressure against the maximum allowed operating temperature (MOAT) at that pressure.

BDT42

Pressure	Max. Operating Temperature up to
160 bar	120°C
140 bar	300°C
130 bar	400°C

BDT43

Pressure	Max. Operating Temperature up to
160 bar	120°C
140 bar	300°C
130 bar	400°C

BDT44

Pressure	Max. Operating Temperature up to
380 bar	100°C
310 bar	200°C
280 bar	300°C
260 bar	400°C



Design information

Syphons are made in accordance with the DIN 16282 or industrial standards.

DIN 16282

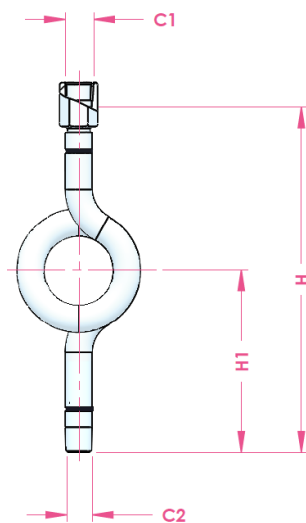
The DIN 16282 form B, and G are with a butt weld connection on the process side. The form C is mentioned up to rev 11/1988 of the DIN standard and has a G ½ male connection welded to the inlet. Nowadays there are more variants called industry standards or commercial style.

Industry standards

The industry standards are syphons with ANSI 1.20.1 ½" NPT threaded connections or M20x 1.5 threaded connections. The straight threaded versions are executed with a rotating nut as female thread.

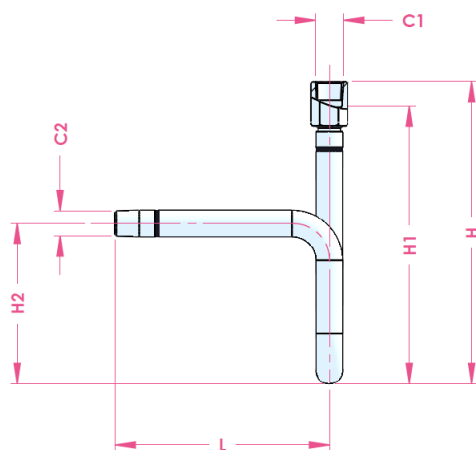
Dimensions tables:

Coiled Syphon BDT42



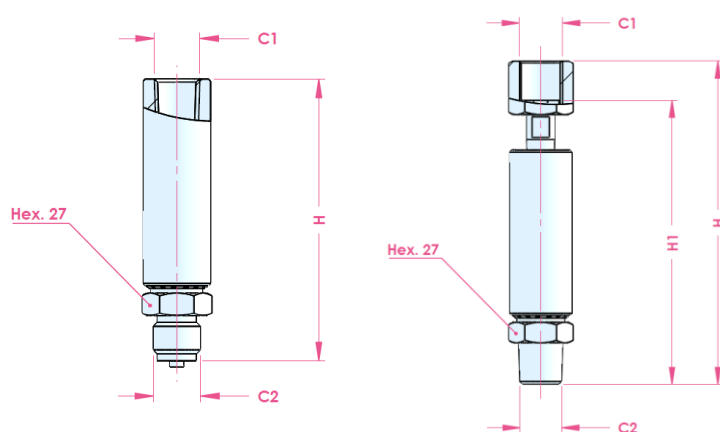
C2 (Inlet)	C1 (Outlet)	H1	H	Standard
G 1/2 B	G ½ (LH x RH)	145	275	DIN 16282 form C
1/2" NPT - m	1/2" NPT - f			Industry standard
M20 x 1.5 - m	M20 x 1.5 - f	110	240	DIN 16282 form G
20mm BW end	20mm BW end			

U-Shape syphon BDT43



C2 (Inlet)	C1 (Outlet)	L	H	H1	H2	Standard
G 1/2 B	G ½ (LH x RH)	145.0	219.0	200.0	155.0	DIN 16282 form B
M20 x 1.5 - m	M20 x 1.5 - f	145.0				Industry standard
1/2" NPT - m	1/2" NPT - f	180.0	200.0	na		

Straight Syphon BDT44



C2 (Inlet)	C1 (Outlet)	H	H1
G 1/2 B	G ½ - f	160.0	141.0
M20 x 1.5 - m	M20 x 1.5 - f		
1/2" NPT - m	1/2" NPT - f	125.5	na

Change log

Date	Change
1-7-2022	Clarified material designation AISI 316 to AISI 316Ti

Holland – Romania – India – Thailand – Dubai – USA

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