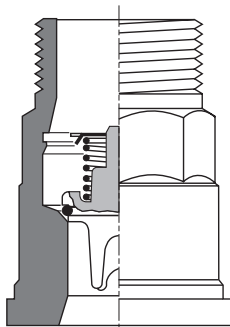
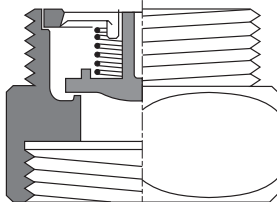


SBO 11



SBO 21



SBO 31

Gravity Circulation Checks
SBO 11, SBO 21, SBO 31
PN 6
DN ¾", 1", 1¼"

Description

Check valve for installation downstream of circulating pumps in heating and hot water installations to prevent gravity circulation.

Pressure & temperature ratings		
Service pressure	bar	6
Operating temperature	°C	130 ¹⁾

¹⁾ Valve cone not under pressure

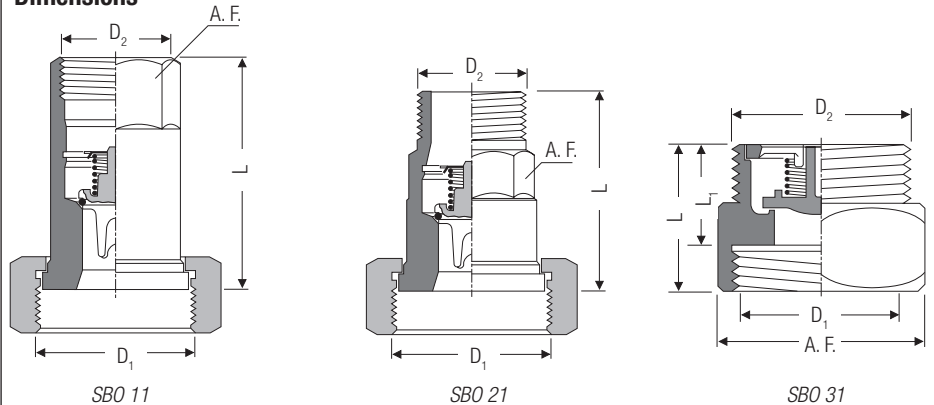
End connection

SBO 11: Vale inlet provided with a collar for fitting the union nut of the circulating pump. Valve outlet screwed female for direct connection to the feed line.

SBO 21: Vale inlet provided with a collar for fitting the union nut of the circulating pump. Valve outlet screwed male for connecting an additional stop valve.

SBO 31 Valve inlet screwed female for direct connection to the circulating pump. Valve outlet screwed male for fitting the nipple with gasket and union nut of the circulating pump.

Dimensions



Type		SBO 11		SBO 21		SBO 31		
Nominal size	DN	1"	1¼"	1"	1¼"	¾"	1"	1¼"
Dimensions	L	66	82	57	70	39	40	45
	L ₁					25.5	26.5	31.5
	D ₁	G 1½	G 2	G 1½	G 2	G 1¼	G 1½	G 2
	D ₂	G 1	G 1¼	R 1	R 1¼			
	A. F.	36	46	36	46	50	55	65
Weight	[kg]	0.4	0.6	0.32	0.6	0.3	0.34	0.5

Materials

Type	SBO 11	SBO 21	SBO 31
Body	Hot-pressed brass (CW614N)		
Valve cone	Plastics PPO*)		
Spring to close	1.4310		
Seat gasket	EPDM		
Guide	1.4310		Hot-pressed brass (CW614N)

*) Note that PPO is not resistant to glycol!

Gravity Circulation Checks
SBO 11, SBO 21, SBO 31
PN 6
DN ¾", 1", 1¼"

Pressure Drop Chart

The curves given in the chart are valid for water at 20 °C.
 The values indicated in the charts are based on readings taken at spring-loaded valves that are installed horizontally. With vertical flow insignificant deviations occur only within the range of partial opening.

Opening Pressures

Differential pressures at zero volume flow.

Valve type	DN	Opening pressures [mbar]			
		Direction of flow			
		without spring	with spring		
		↑	↑	→	↓
SBO 11	1" 1¼"	1	7	6	6
SBO 21	1" 1¼"	1	7	6	5
SBO 31	¾" 1" 1¼"	2	9	7	5

Specification Text

GESTRA gravity circulation checks, hot-pressed brass / plastics, spring-loaded.
 Type SBO..., DN..., end connection G...

Order Specifications

Type SBO..., DN... / G...

PED (Pressure Equipment Directive)

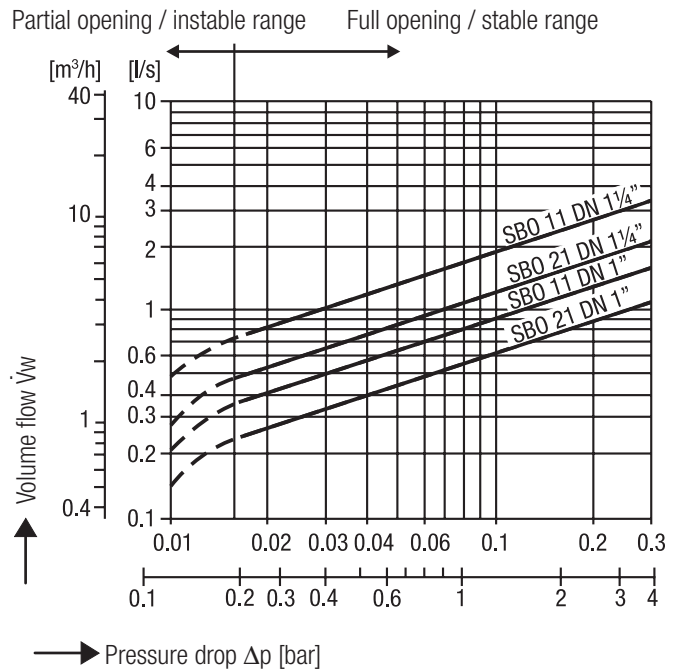
The equipment fulfills the requirements of the Pressure Equipment Directive PED 97/23/EC. For use with fluids of group 2. The equipment is excluded from the scope of the PED according to section 3.3 and must not bear a CE marking. For more information please refer to our PED Declaration of Conformity.

ATEX (Atmosphère Explosible)

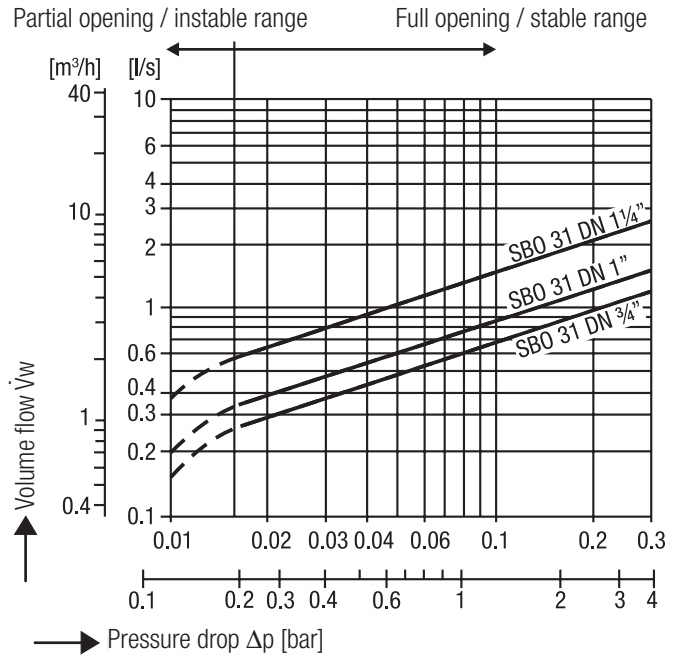
The equipment does not have its own potential source of ignition and is therefore not subject to the ATEX Directive 94/9/EC. Applicable in Ex zones (surrounding atmosphere) 0, 1, 2, 20, 21, 22 (1999/92/EC). The equipment is not Ex marked. For more information refer to our ATEX Declaration of Manufacturer.

Supply in accordance with our general terms of business.

SBO 11 and SBO 21



SBO 31



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