

### Application and Features

Type	PN	Application	Features
SBO	PN 6	Installed downstream of circulating pumps in heating and hot water installations in order to avoid gravity circulation	Plastic valve cone with advanced flow characteristic

### Pressure/Temperature Ratings / Material

Max. service pressure [bar]	Max. service temperature [°C]	Materials	
		Body	Valve cone
6	130 <sup>1)</sup>	Brass	PPO

<sup>1)</sup> Max. service temperature at atmospheric pressure

### Dimensions

Type		SBO 11		SBO 21		SBO 31		
Size	DN	1"	1 1/4"	1"	1 1/4"	3/4"	1"	1 1/4"
	L [mm]	66	82	57	70	39	40	45
Connections (BSP thread)	Inlet <sup>2)</sup>	G 1 1/2	G 2	G 1 1/2	G 2	G 1 1/4	G 1 1/2	G 2
	Outlet	G 1	G 1 1/4	R 1	R 1 1/4			

<sup>2)</sup> SBO 11 and SBO 21: Thread of union nut

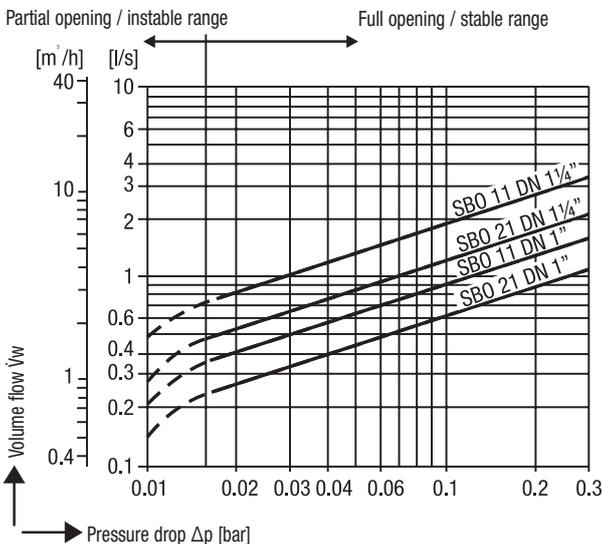
### Opening Pressures

Differential pressures at zero volume flow.

Type	DN	Opening pressure [mbar]			
		Direction of flow			
		with-out spring	with spring		
SBO 11	1"	1	7	6	6
	1 1/4"	1	7	6	6
SBO 21	1"	1	7	6	5
	1 1/4"	1	7	6	5
SBO 31	3/4"	2	9	7	5
	1"	2	9	7	5
	1 1/4"	2	9	7	5

### Pressure Drop Charts

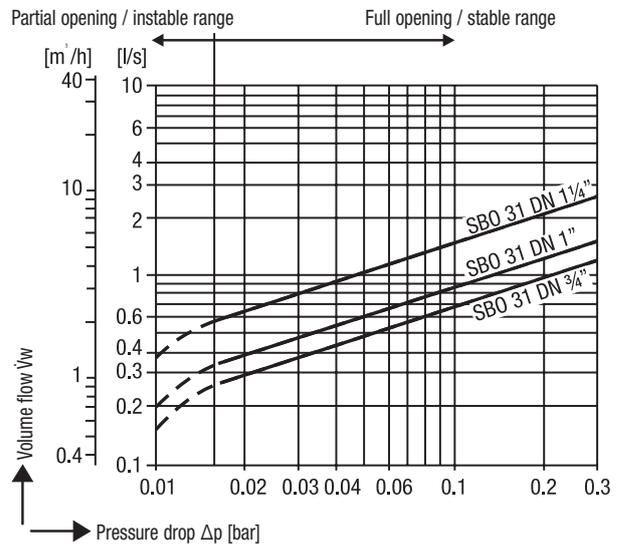
SBO 11, SBO 21



Curve 1: SBO 21 DN 1"  
Curve 2: SBO 11 DN 1"

Curve 3: SBO 21 DN 1 1/4"  
Curve 4: SBO 11 DN 1 1/4"

SBO 31



Curve 1: SBO 31 DN 3/4"  
Curve 2: SBO 31 DN 1"

Curve 3: SBO 31 DN 1 1/4"