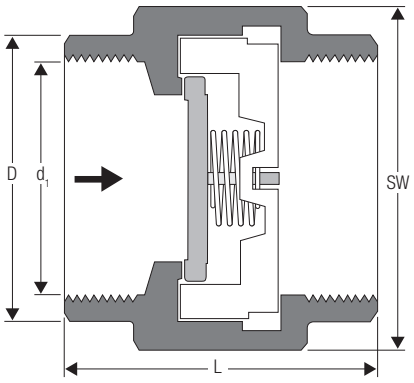


MB 14

Non-Return Valves

MB 14 PN 16
DN ½" – 2"

Description

Non-return valve with screwed end connection; valve design with spring for installation in any position. Metal-to-metal seat. Application for liquids, gases and vapours (observe PED classification).

Pressure/Temperature Rating

Nominal sizes	DN	½" – 2"		
Nominal pressure	PN	16		
Max. service pressure	[bar g]	16	14	13
	[psi g]	230	200	185
Related temperature	[°C]	120	200	250
	[°F]	248	392	482
Min. temperature*)		–10 °C (14 °F)		

*) Minimum temperature for nominal pressure rating

Connections

screwed BSP ½" – 2" (to DIN/ISO 228)

Dimensions

Nominal sizes	DN		½"	¾"	1"	1¼"	1½"	2"
Dimensions	L	[mm]	49	49	61	61	72	72
	D	[mm]	42	42	62	62	83	83
	d_1		½"	¾"	1"	1¼"	1½"	2"
	AF	[mm]	30	30	46	46	65	65
Weight		[kg]	0.230	0.181	0.648	0.490	1.244	0.94

Materials

DN ½" – 2"	DIN		ASTM equivalent
Body	Cu Zn 39 Pb 2	CW 614 N	B 455
Valve disc	X6CrNiMoTi17-12-2	1.4571	A 182 F 316
Spring			A 313 type 316
Retainer	X5CrNi18-10	1.4301	A 182 F 304

Non-Return Valves

MB 14 PN 16
DN ½" – 2"

Opening Pressures

Differential pressures at zero volume flow approx. 15 – 20 mbar.

Order Specifications

Type MB 14, DN . . .

Material, fluid, flowrate, pressure and temperature.

Note:

The valves should not be used on compressors or where pulsating flow exists.

For these applications please consult us.

Application of European Directives

Pressure Equipment Directive (PED)

The equipment conforms to this directive and can be used for the following media:

■ Fluids of group 2

ATEX Directive

The equipment does not have its own potential ignition source and is not subject to this directive.

Static electricity: When installed, static electricity may arise between the equipment and the connected system.

When used in potentially explosive atmospheres, the plant manufacturer or plant operator is responsible for discharging or preventing possible static charge.

If it is possible for medium to escape, e.g. through actuating mechanisms or leaks in threaded joints,the plant manufacturer or plant operator must take this into consideration when dividing the area into zones.

Supply in accordance with our general terms of business.

Pressure Drop Chart

The curves given in the chart are valid for water at 20 °C. To read the pressure drop for other fluids the equivalent water volume flowrate $\dot{V}_w$ must be calculated and used in the graph.

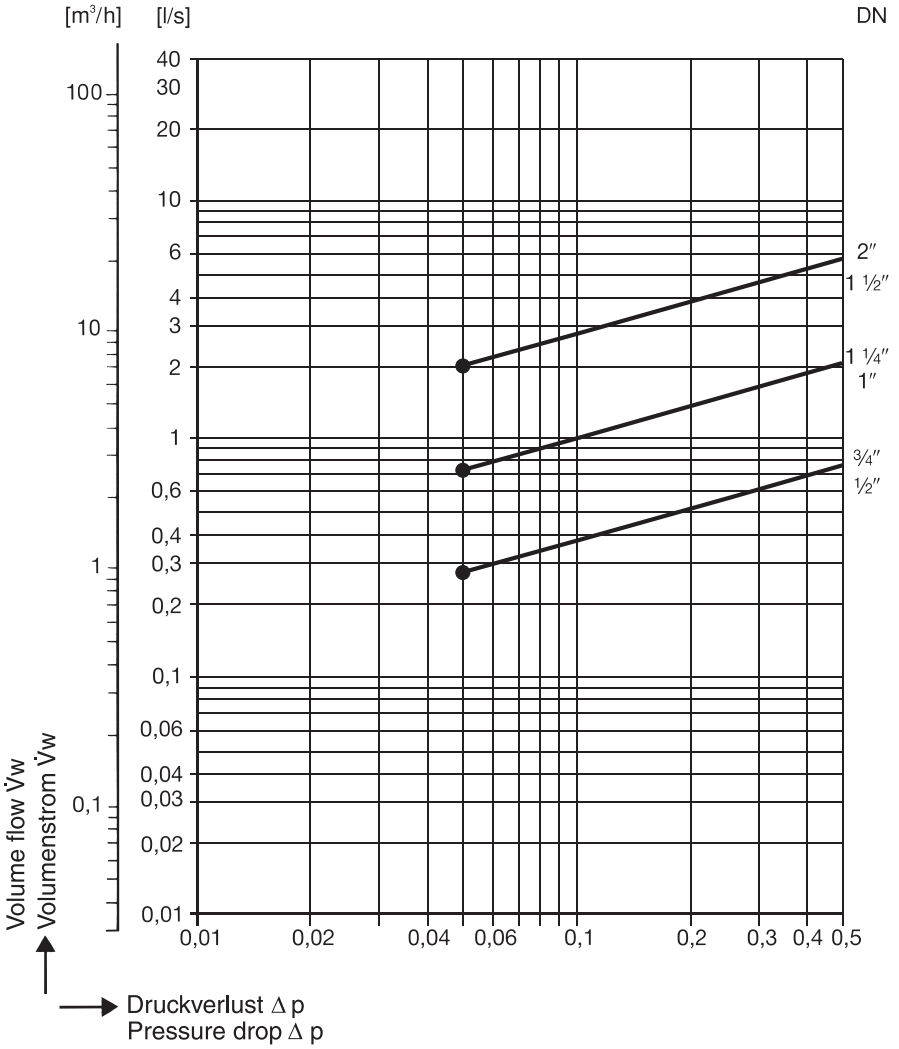
The values indicated in the chart are applicable for spring-assisted valves with horizontal flow.

$$\dot{V}_w = \dot{V} \cdot \sqrt{\frac{\rho}{1000}}$$

$\dot{V}_w$ = Equivalent water volume flow in l/s or m³/h

ρ = Density of fluid (operating condition) in kg/m³

$\dot{V}$ = Volume of fluid operating condition) in [l/s] or [m³/h]



● Required minimum volume flow $\dot{V}_w$ for equipment with standard spring and horizontal flow.

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810176-03/08-2017cmp (803811-06) · GESTRA AG · Bremen · Printed in Germany