GESTRA Steam Systems

Product Range Group A2

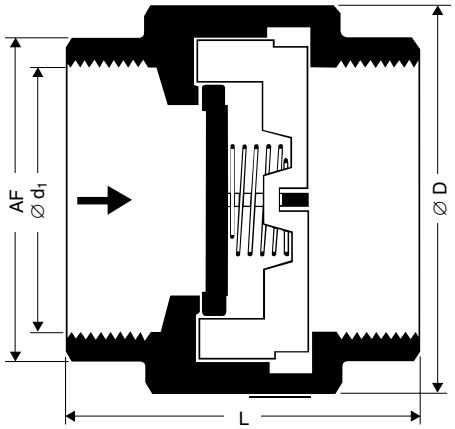
Non-Return Valves
MB 14
PN 16, DN ½" – 2"

MB 14

CE

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] [psi g]	16 230	14 200	13 185
Related temperature	[°C] [°F]	120 248	200 392	250 482
Min. temperature*)		–60 °C (–76 °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 38 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.

CE

These products comply with the requirements of the EC Pressure Equipment Directive (PED) 97/23/EC. DN ½" – 2" are excluded from the scope of this Directive and **not entitled** to bear the CE marking.

Classification: fluid group 2 (non-hazardous substance).

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 or other fluids the equivalent water volume flowrate must be calculated and used in the graph.

The values indicated in the chart are applicable to spring-loaded valves with horizontal flow. With vertical flow insignificant deviations occur only within the range of partial opening.

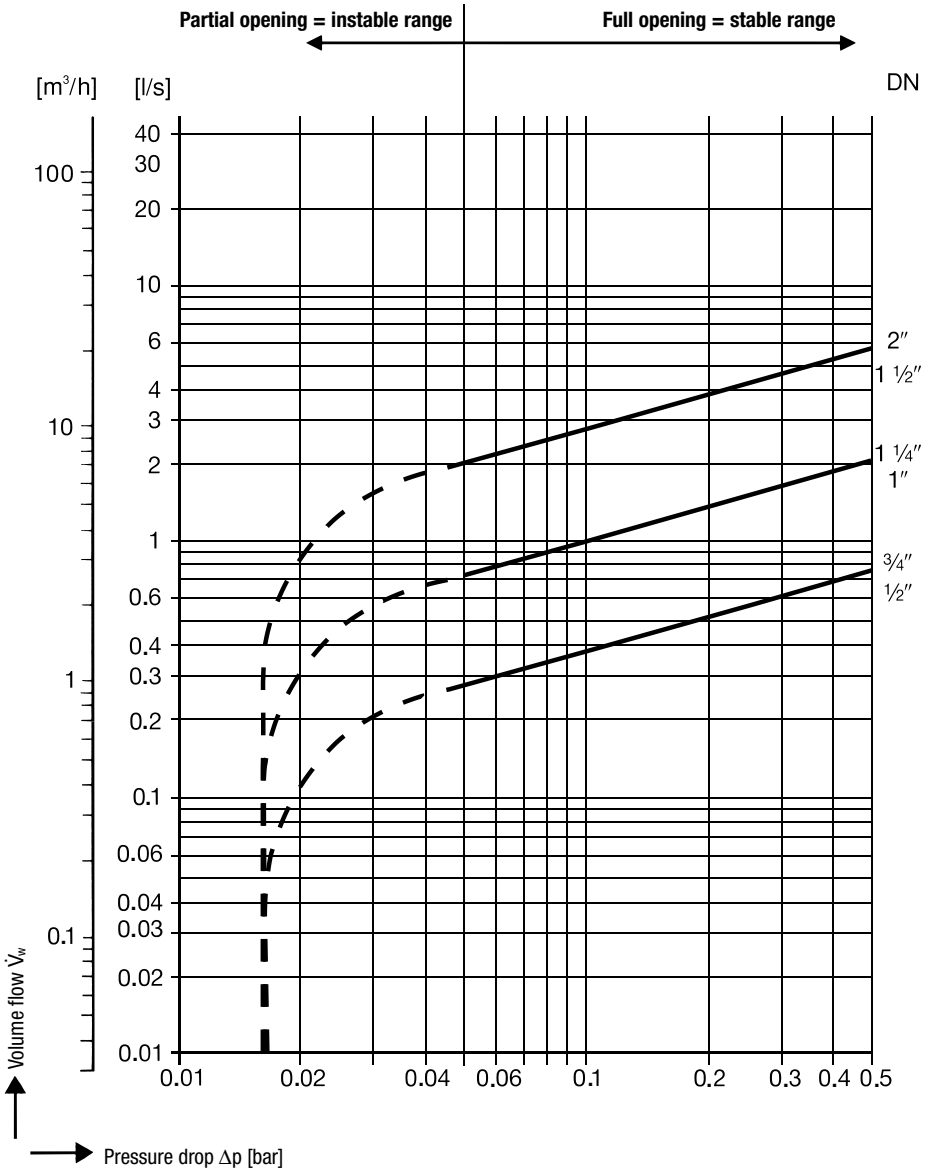
$$\dot{V}_w = \dot{V} \cdot \sqrt{\frac{\rho}{1000}}$$

$\dot{V}_w$ = 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]

When selecting valve please consider:



GESTRA AG

P. O. Box 10 54 60, D-28054 Bremen
Münchener Str. 77, D-28215 Bremen

Telephone +49 (0) 421 35 03 - 0, Fax +49 (0) 421 35 03 - 393

E-Mail gestra.ag@flowserve.com, Internet www.gestra.de

FLOWSERVE® GESTRA

810176-01/1104cm · © 1987 GESTRA AG · BREMEN · Printed in Germany