

BALL VALVE of stainless steel

450 series



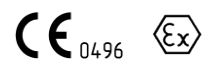
Description

Edition 31-03-2016

Ball valve 450 is an on-off valve which is tight in both directions of flow. It is used for example in industrial and ship's pipe work as well as in oil pipelines.

Valve 450 is a full bore valve with flanges. The two piece body, floating ball and blow out proof stem are made of stainless steel. The PTFE seals in stem are self adjusting.

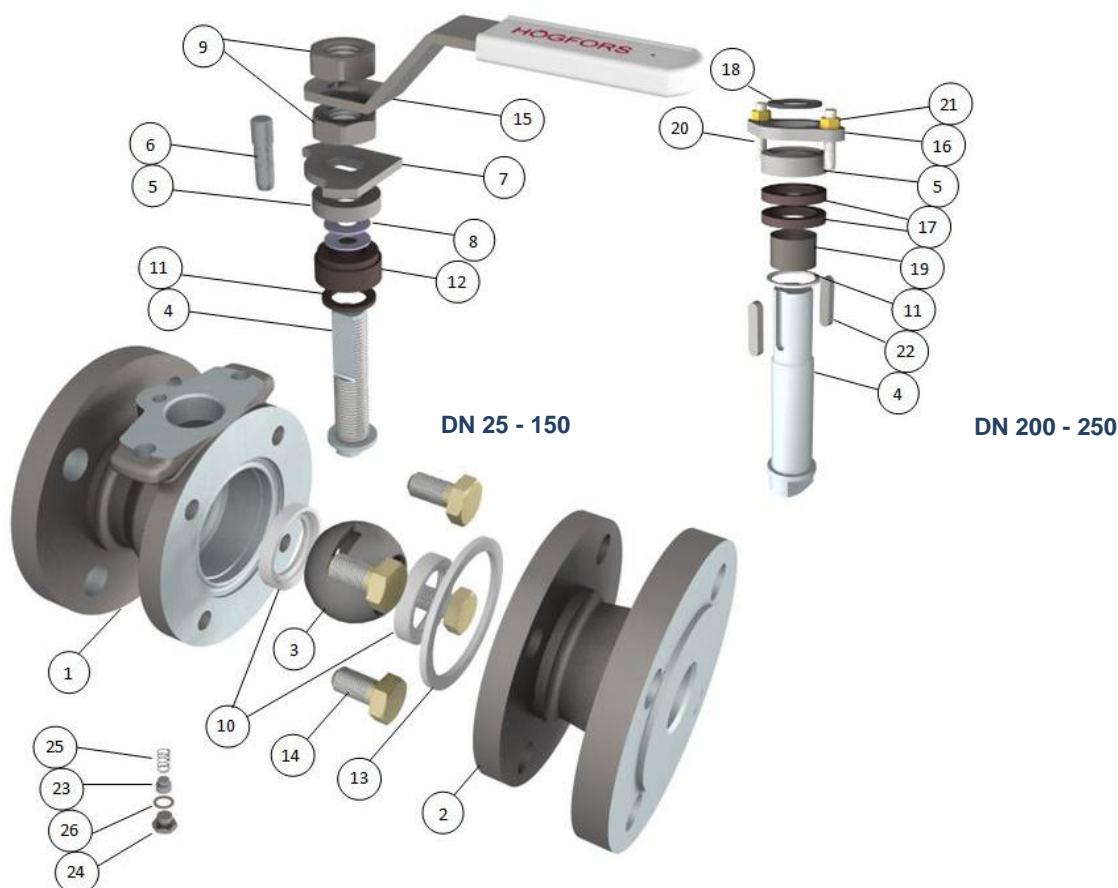
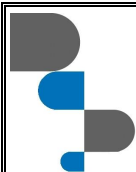
Nominal dimensions	DN 25 - 250
Nominal pressure	PN 100 DN 25 – 80 PN 63 DN 100 - 250
Ball seal	PTFE (TS)
Pressure difference (ΔP)	100 / 63 / 40 / 25 / 16 bar
Tightness class ISO 5208, EN 12266-1	RATE A
* Working temperature of liquid media	+200°C -40°C
** Connection flanges	EN1092-1 Type B PN 100/63/40/25/16, ANSI Class 600/400/300/150
Safety	<p>Conform to the requirements of the Council Directive 97/23/EC on Pressure Equipment, marking: Class: gas, group 1</p> <p>Explosion-proof design is available as per special order. Marking in accordance to ATEX Directive 94/9/EC: group II 2 GD, protection concept of non-electrical components: c T6.</p>



*) The max pressure difference depends on the working temperature.

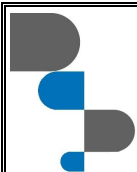
**) Flange drilling for others standards and pressures are also available as per special order.

Consult factory for details.



Parts list and standart materials

Parts	Material
1 Body	Stainless steel CF8M / 1.4462
2 Body flange	Stainless steel CF8M / 1.4462
3 Ball	Stainless steel 1.4401, AISI 316
4 Stem	Stainless steel 1.4418
5 Spacer ring	Stainless steel 1.4401, AISI 316
6 Retaining pin	Stainless steel 1.4401, AISI 316
7 Retaining disc	Stainless steel 1.4401, AISI 316
8 Cup spring	Stainless steel 1.4401, AISI 316
9 Hexagonal nut	Stainless steel 1.4401, AISI 316
10 Ball seat	PTFE
11 Counterplate	PTFE
12 Packing	PTFE
13 Body gasket	PTFE
14 Bolt	Stainless steel 1.4401, AISI 316
15 Hand lever	Stainless steel 1.4401, AISI 316
16 Gland	Stainless steel 1.4401, AISI 316
17 Packing	Graphite
18 O-ring	EPDM or FPM
19 Bearing	Pampus
20 Stud bolt	Stainless steel 1.4401, AISI 316
21 Hexagonal nut	Stainless steel 1.4401, AISI 316
22 Key	Carbon steel
23 Support screw	Stainless steel 1.4404
24 Bottom plug	Stainless steel 1.4401, AISI 316
25 Earthing spring	Stainless steel
26 Counterplate	PTFE



SILVER LINE

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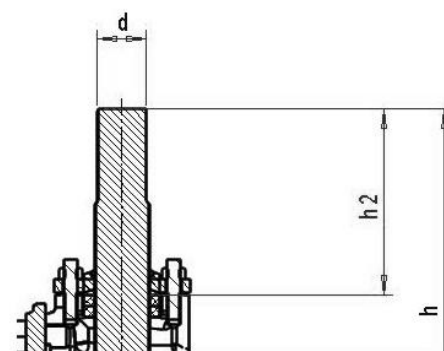
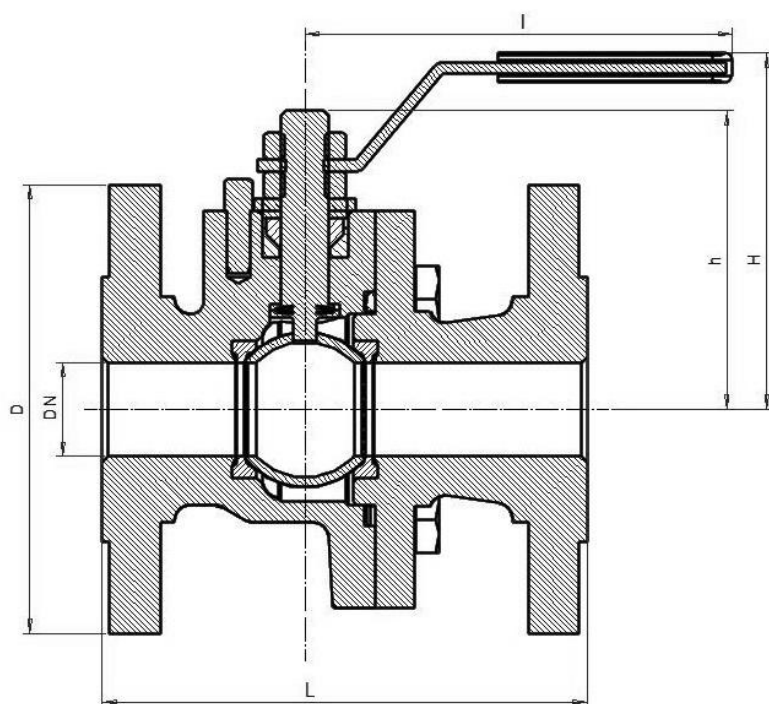
HÖGFORS

Valves

450 series

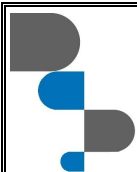
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Dimensions



DN 200 - 250

DN	L	h	h2	H	l	d	D
25	125	78	-	90	140	2K-8	115
32	130	93	-	115	180	2K-10	140
40	140	99	-	122	180	2K-10	150
50	150	122	-	157	250	2K-12	165
65	170	133	-	168	250	2K-12	185
80	180	171	-	215	400	2K-19	200
100	190	184	-	228	400	2K-19	220
125	325	236	-	269	600	2K-24	250
150	350	254	-	287	600	2K-24	285
200	400	400	172	370	-	45	340
250	450	436	172	405	-	45	405



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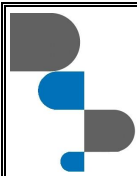
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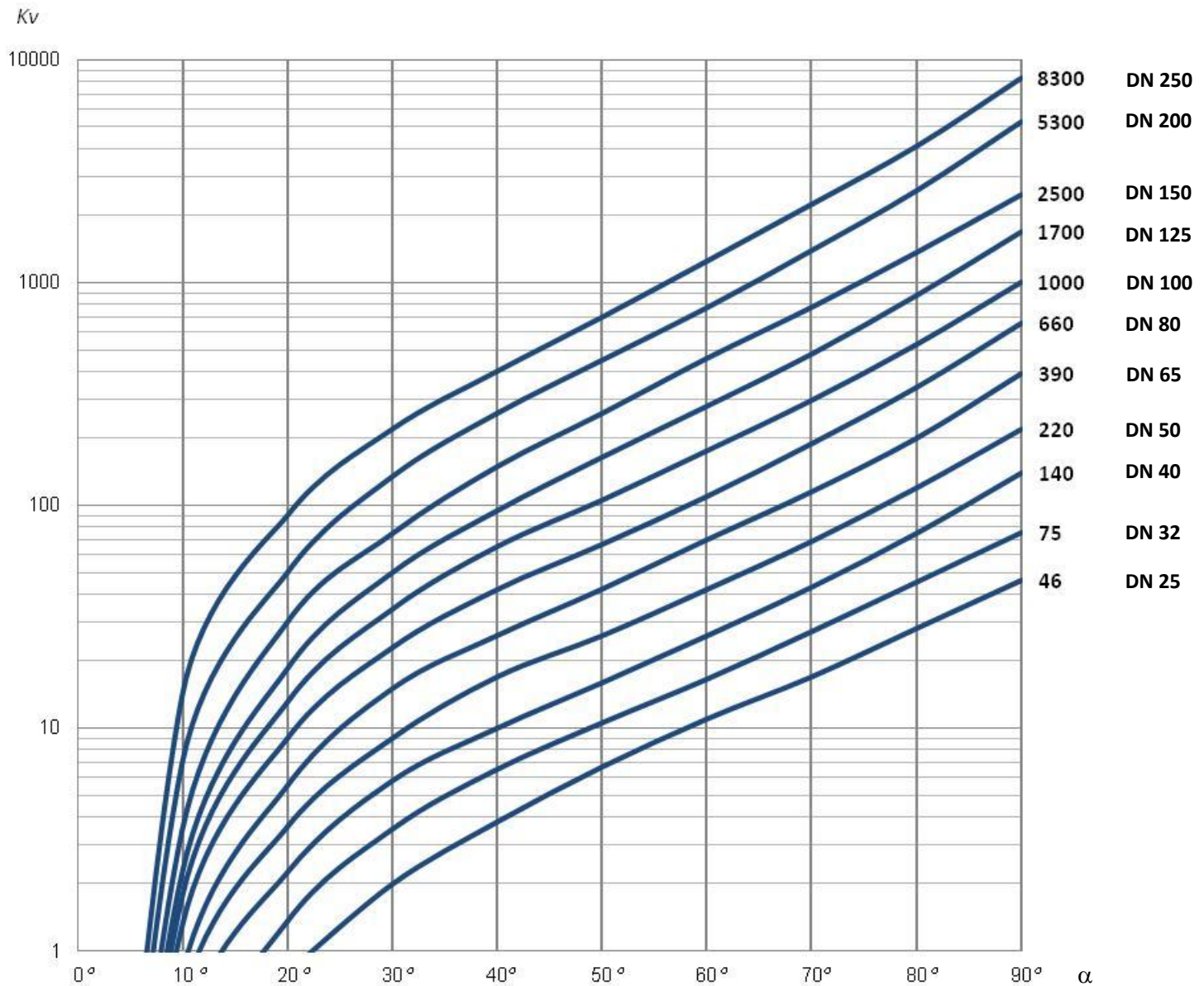
How to order

		4	50		T	S	250	M
Body material:	4 – stainless steel							
Valve type:	50 – ball valve							
Version:								
Seat:	(T) - PTFE							
Ball surface treatment:	S – hard chrome							
Size DN:								
Operation:	(_) - handlever (Z) – bare shaft (M) - gear							



Flow curves

Indicating typical Kv value.



WATER:

Volume flow:

$$Q = K_v \sqrt{\frac{\Delta p}{\rho}}$$

Flow velocity:

$$V = 354 \frac{Q}{DN^2}$$

K_v = KV value – Capacity factor

DN = nominal valve size, mm

α = disc opening angle

Δp = pressure difference, bar

ρ = density of liquid, kg/dm³

V = flow velocity, m/s

Q = volume flow, m³/h