

455

# Ball sector valve of stainless steel DN 25 - 300

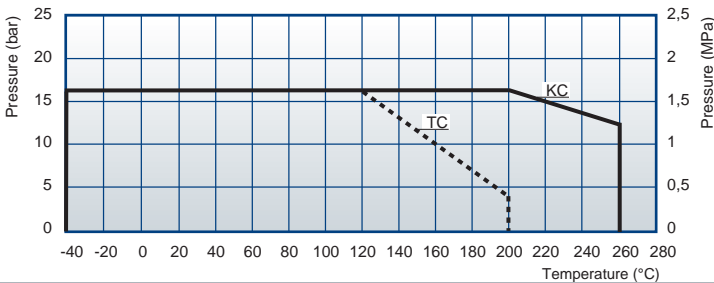
17.04.2007

## Operation

Högfors ball sector valve is specially designed for control applications of various media like liquids, pulps and steam. This valve is tight to one direction which is shown by an arrow.

Nominal pressure	PN16
Closing pressure difference	16 bar
Disc seal alternatives	Stellite, PTFE
Temperature and tightness class	
Stellite	+260°C/ -40°C
	ISO 5208, EN 12266-1 RATE D
PTFE	+200°C/ -40°C
	ISO 5208, EN 12266-1 RATE A

The max pressure difference depends on the working temperature



## Construction

The sector ball valve with flanges has a full bore design. The two piece body, v-port ball and stems are of stainless steel. The shaft packing box has tightable graphite seals.

Conform with the requirements of the Council Directive 97/23/EC on Pressure Equipment, marking:

Class: Gas, group 1

Nominal dimensions: DN25 - 300

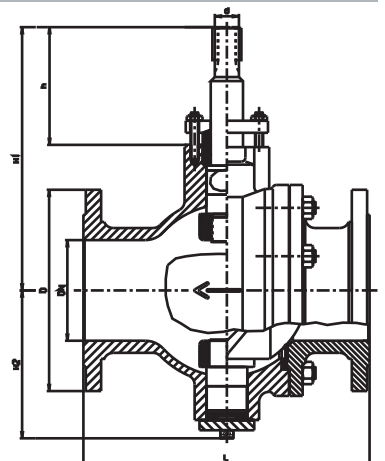


Product codes:	455KC_ _ _	Stellite
	455TC_ _ _	PTFE
	455_ _ _	with handlever
	455_ _ _ Z	with bare shaft
	455_ _ _ M	with manual gear

For steam on special order 45501KC

## Dimensions

DN	L	H1	H2	h	d	D	Connection PN 16			Weight kg
							Dr	hole Ø	kpl	
25	127	143	68	85	11	115	85	14	4	5,0
32	140	166	79	95	15	140	100	18	4	7,7
40	165	170	83	95	15	150	110	18	4	9,5
50	178	196	91	110	20	165	125	18	4	12
65	190	204	99	110	20	185	145	18	4	17
80	203	235	126	115	25	200	160	18	8	23
100	229	245	136	115	25	220	180	18	8	27
125	356	329	185	150	30	250	210	18	8	55
150	394	343	199	150	30	285	240	22	8	67
200	457	404	248	170	45	340	295	22	12	122
250	533	439	283	170	45	405	355	26	12	230
300	610	510	337	185	60	460	410	26	12	280

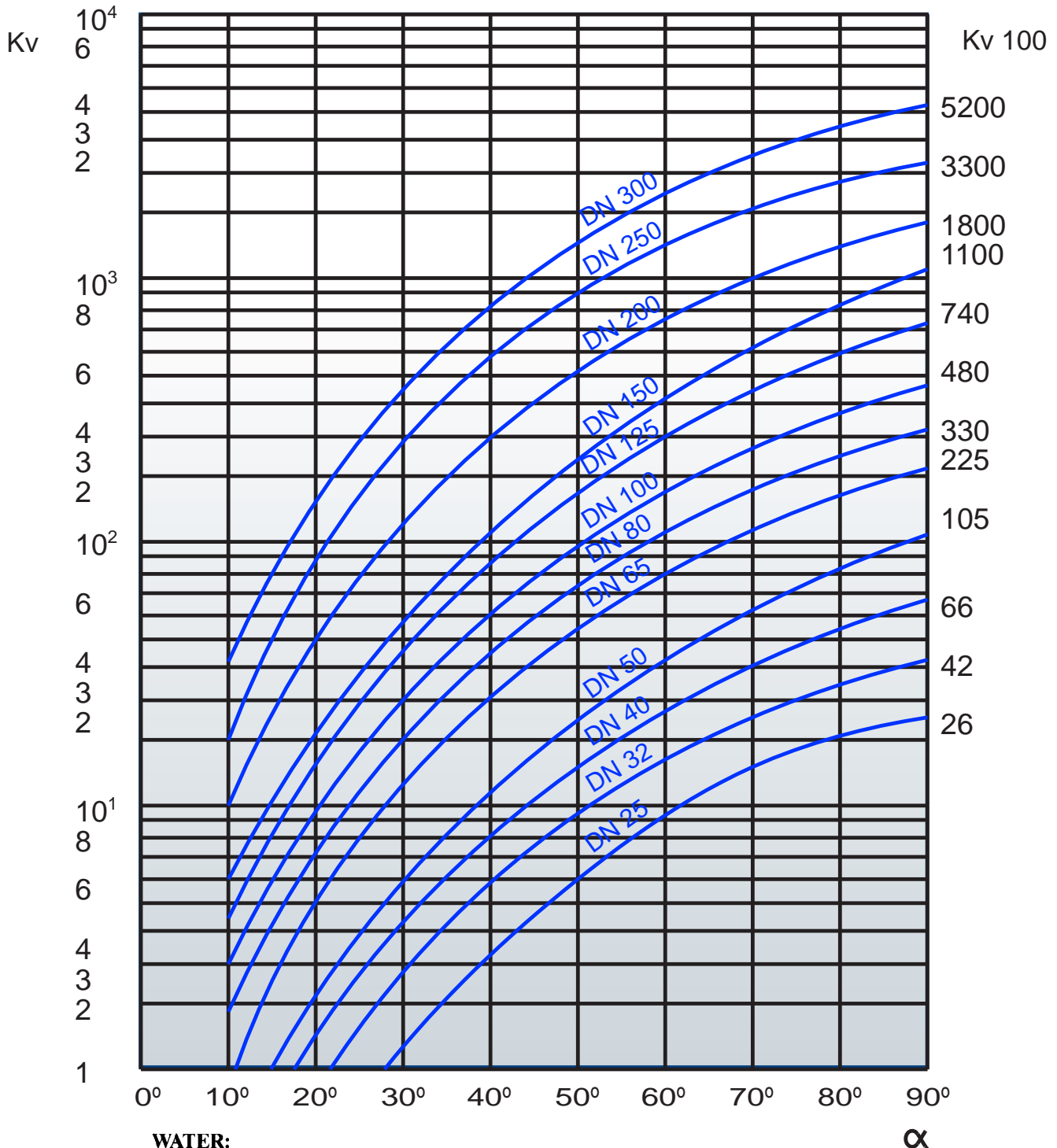


## Materials

Body and flange:	ASTM A351 CF8M	Seal:	Stellite or PTFE
Ball:	ASTM A351 CF8M	Shaft seal:	Graphite
Shaft:	EN 10088-3 1.4404		

The control curves

The curves indicate the regulating values of the valve at different opening angles.



**WATER:**

**Volume flow:**

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

**Flow velocity:**

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

- $K_v$  = kv-value — Capacity factors
- DN = nominal valve size (mm)
- $\alpha$  = ball opening angle
- Q = volume flow m<sup>3</sup>/h
- $\Delta p$  = pressure difference bar
- $\rho$  = density of liquid kg/dm<sup>3</sup>
- v = flow velocity m/s