465 Ball sector valve of stainless steel DN 25 - 200

11.02.2008

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 PN 40 DN 25 - 40, PN 25 DN 50 - 80, PN 16 DN 100 - 200

Closing pressure depends max 16 bar

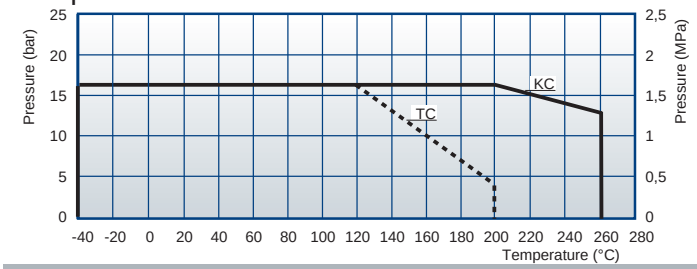
Disc seal alternatives Stellite, PTFE

Temperature and tightness class

Stellite max +260°C/ min -40°C
ISO 5208, EN 12266-1 RATE D

PTFE max +200°C/ min -40°C
ISO 5208, EN 12266-1 RATE A

The max pressure difference depends on the working temperature



Construcion

The Högfors wafer pattern ball sector valve is a reduced bore valve manufactured in stainless steel throughout with a hard chromed v-port ball. This valve is available in stellite or PTFE seat. The v-port gives an excellent control characteristic which is intermediate between linear and equal percentage. The shaft packing box has tightable graphite seals.

Conform with the requirements of the council Directive 97/23/EC on Presssure Equipement, marking:
Class: Gas, group 1 CE 0575

Nominal dimensions: DN 25 - 200

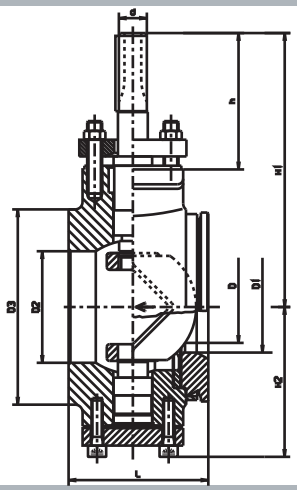
Product codes:

465KC	Stellite
465TC	PTFE
465_ _ _	with handlever
465_ _ _Z	with bare shaft
465_ _ _M	with manual gear

For steam on special order. Code number **46501KC**

Dimensions

DN	L	D	D1	D2	D3	d	h	H1	H2	Weight kg
25	50	20	25	30	65	11	85	143	58	1,6
32	55	27	32	36	75	11	85	143	65	1,9
40	60	35	40	48	90	15	95	165	79	3,2
50	75	45	49	60	105	15	95	169	83	4,5
65	100	53	65	73	123	20	110	195	87	7,5
80	100	72	77	87	140	20	110	213	97	8,4
100	115	89	96	112	160	25	115	233	126	12,6
150	160	112	118	162	216	25	115	263	135	28,0
200	200	167	170	213	273	30	150	342	194	41,0



Materials

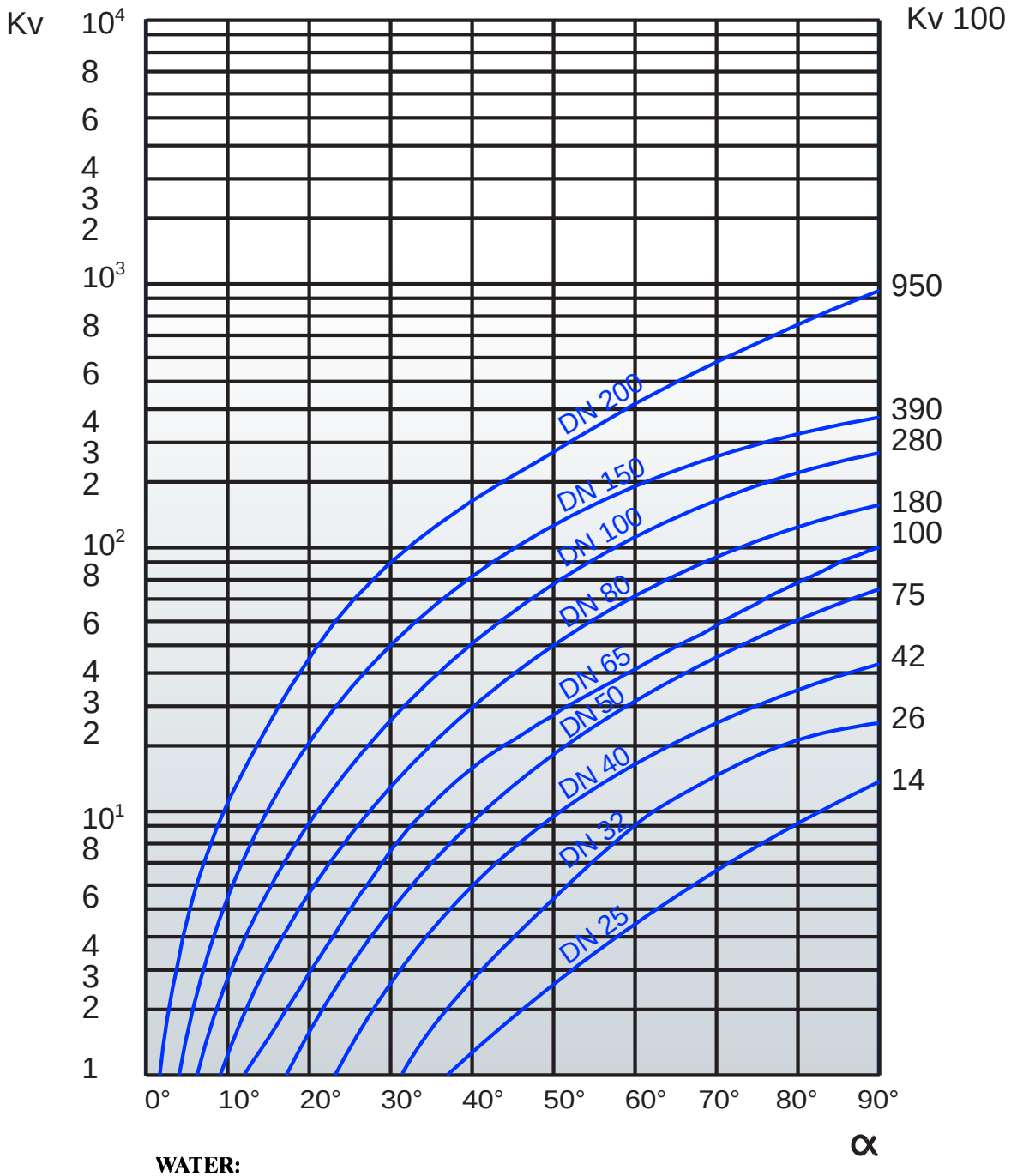
Body:	ASTM A351 CF8M	Seal:	Stellite or PTFE
Ball:	ASTM A351 CF8M	Shaft seal:	Graphite
Shaft:	EN 10088-3 1.4404		

465 Ball sector valve of stainless steel DN 25 - 200

11.02.2008

The control curves

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



WATER:

Volume flow:

$$Q = K_V \sqrt{\frac{\Delta p}{\varrho}}$$

Flow velocity:

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

K_V	=	kv-value — Capacity factors
DN	=	nominal valve size (mm)
α	=	ball opening angle
Q	=	volume flow m^3/h
Δp	=	pressure difference bar
ϱ	=	density of liquid kg/dm^3
v	=	flow velocity m/s