

## Fig 455 Full Bore ball sector valve of stainless steel PN 16

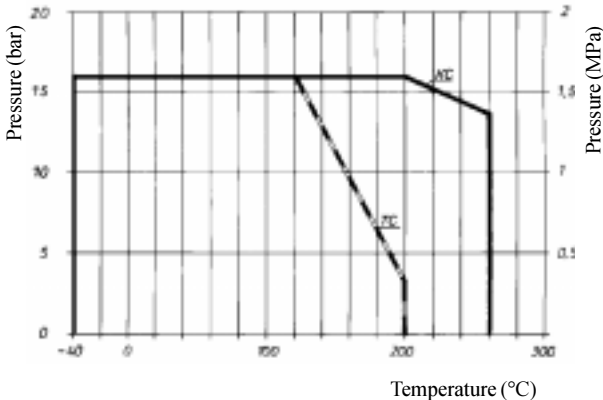


### Application

The Högfors Fig 455 ball sector control valve is specially design for the control applications of different media as liquits, pulps and steam.

**Nominal pressure** PN 16

### Pressure/temperature graph



**Operating temperature:** With stellite K-seat for steam 200°C max.

### Design

The Högfors Fig 455 full bore ball sector valve is manufactured in stainless steel throughout with a hard chromed ball and stellite seat (PTFE is available as an option). The V-port gives an excellent control characteristic intermediate between linear and equal percentage. The full bore design permits high Kv-values. The two piece body is flanged PN 16 as standard, some sizes can accomodate alternative drillings.

### Face to face lenghts

DN 25 ... 100 according to ISO 5752 basic serie 3,  
DN 125 ... 300 according to ISO 5752 basic serie 12

**Flange drilling** according to ISO 2084 PN 16

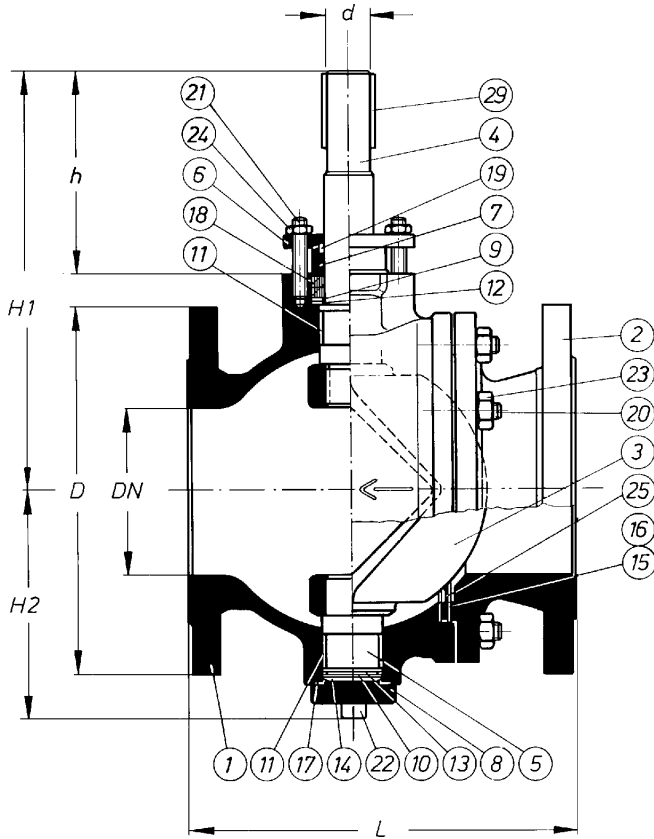
**Nominal sizes** DN 25...300

### Code number

### Seat

<b>455KC</b> _ _ _ _	with manual lever	<b>Stellite</b>
<b>455KC</b> _ _ _ <b>Z</b>	with bare shaft	<b>Stellite</b>
<b>455KC</b> _ _ _ <b>M</b>	with gear	<b>Stellite</b>
<b>455TC</b> _ _ _ _	with manual lever	<b>PTFE</b>
<b>455TC</b> _ _ _ <b>Z</b>	with bare shaft	<b>PTFE</b>
<b>455TC</b> _ _ _ <b>M</b>	with gear	<b>PTFE</b>

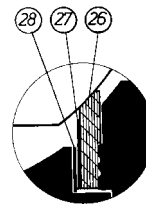
## Ball sector valve



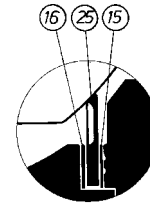
### Parts

- |                          |                      |
|--------------------------|----------------------|
| 1. Body CF-8M            | CF-8M                |
| 2. Body flange           | CF-8M                |
| 3. V-ball                | CF-8M                |
| 4. Upper shaft           | W:no 4401            |
| 5. Lower shaft           | W:no 4401            |
| 6. Gland                 | W:no 4401            |
| 7. Spacer ring           | W:no 4401            |
| 8. Cover                 | W:no 4401            |
| 9. Thrust bearing ring   | W:no 4401            |
| 10. Thrust bearing disc  | W:no 4401            |
| 11. Shaft bearing        | Pampus               |
| 12. Upper thrust bearing | Pampus               |
| 13. Lower thrust bearing | Pampus               |
| 14. Cup spring           | W:no 4401            |
| 15. Shim                 | SFS5811 carbon fibre |
| 16. Shim                 | SFS5811 carbon fibre |
| 17. Cover gasket         | SFS5811 carbon fibre |
| 18. Packing              | Graphite             |
| 19. O-ring               | EPDM                 |
| 20. Stud                 |                      |
| 21. Stud                 |                      |
| 22. Screw                |                      |
| 23. Hexagon nut          |                      |
| 24. Hexagon nut          |                      |
| 25. K-seat               | Stellite             |
| 26. T-seat               | PTFE                 |
| 27. Support ring         | W:no 4401            |
| 28. Shim                 | SFS5811 carbon fibre |
| 29. Key                  | Fe                   |

### Seat alternatives



**PTFE**  
455TC

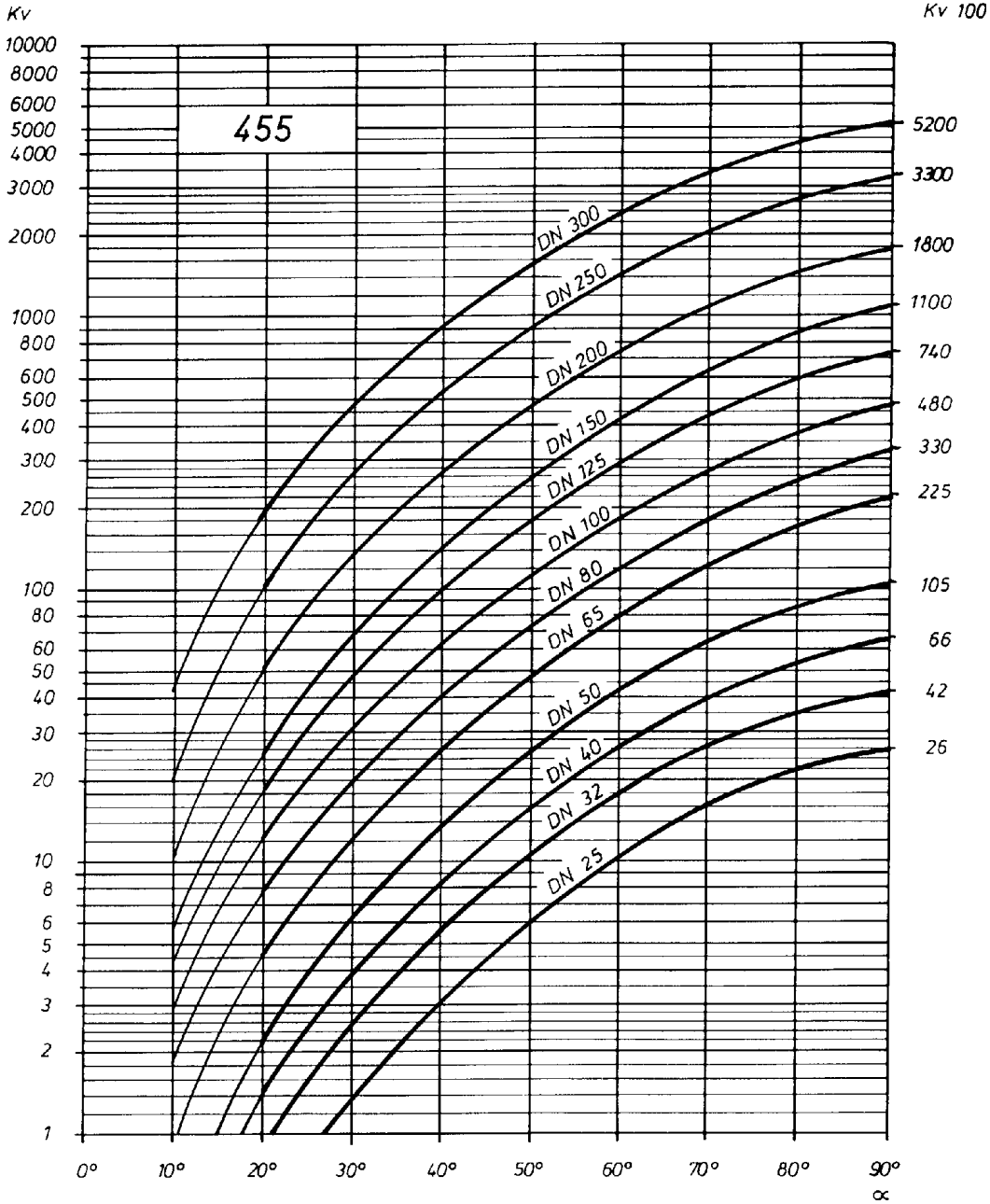


**Stellite**  
455KC

### Dimensions

DN	L	H1	H2	h	d	D	Connection PN 16			Weight kg
							pcd	bolt hole	holes	
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	9,6
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	127
250	533	439	283	170	45	405	355	26	12	230
300	610	495	337	185	60	460	410	26	12	280

## Regulation curves



**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)
- $\alpha$  = disc opening angle
- $Q$  = volume flow  $m^3/h$
- $\Delta p$  = pressure difference bar
- $\rho$  = density of liquid  $kg/dm^3$
- $v$  = flow velocity  $m/s$