

SHUT-OFF AND CHECK VALVE AR-115



TECHNICAL DATA

| | |
|----------------------------|---|
| Nominal diameter: | DN 50 – DN 200 |
| Face-to-face: | EN 558, Series 51 DN 125 and DN 150: EN 558 Series 49 |
| Flange accommodation: | DIN 2501 PN 6/10/16 ANSI B16.5, Class 150 |
| Top flange: | EN ISO 5211 |
| Marking: | DIN EN 19 |
| Tightness check: | DIN 3230 T3 BO, BN (Leakage Rate 1) ISO 5208, Category 3 API 598 Table 5 ANSI B 16-104, Class VI |
| Temperature range: | -10 °C to +130 °C (depending on pressure and material) |
| Operating pressure: | max. 16 bar |
| Static pressure: | max. 10 bar |
| Shut-off: | 6 bar DN 50 – DN 150 4 bar DN 200 |
| Opening as check valve: | <20 mbar |

Multi-functionable shut-off and check valve AR-115.

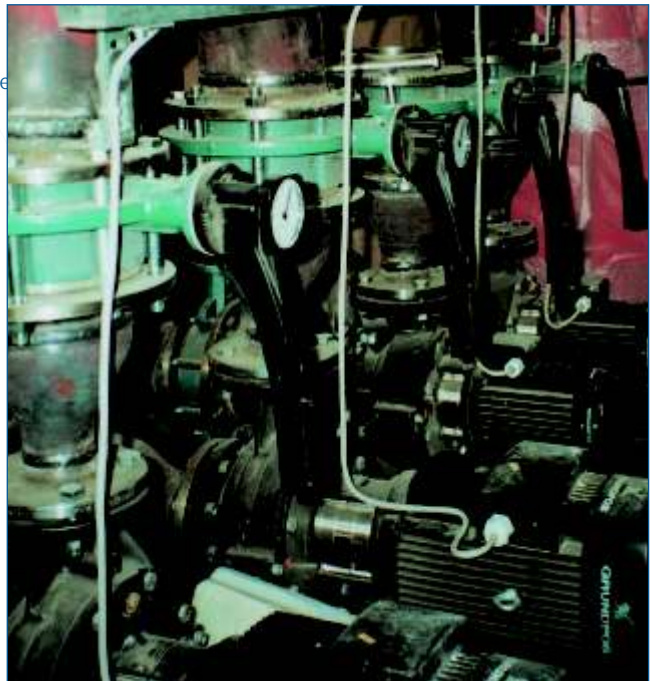
FEATURES

- Defined rate of flow exactly adjustable by disc's stroke
- Terminal services in both flow directions at full working pressure
- Minimal material cost by using only one valve for four functions
- Reduced installation expenses due to
- Small overall length
- Spacer blocks and flange gaskets are not required
- Additional mounting of thermometers being omitted

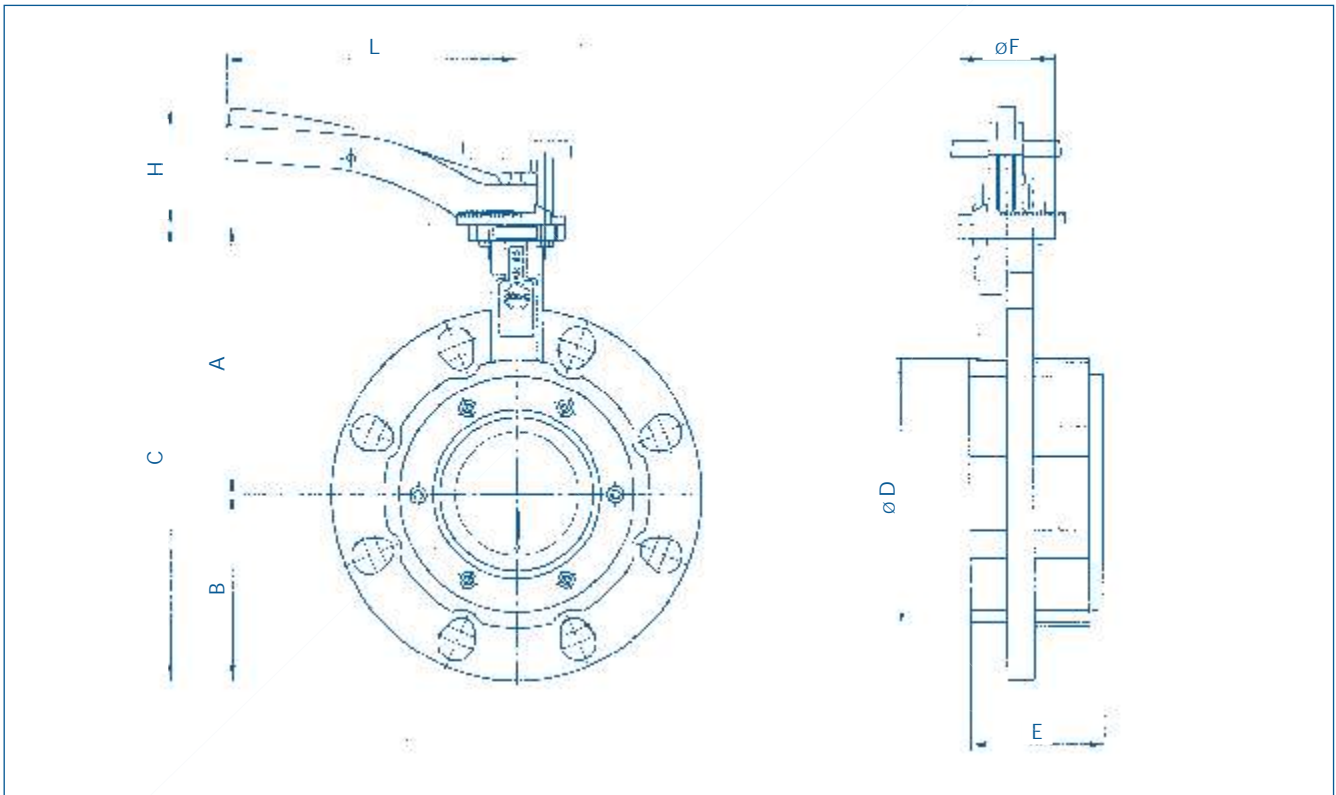
GENERAL APPLICATIONS

- Civil engineering

Gebrauchsmuster DBGM
Nr. 299 04 140.9



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| DN [mm] | Size [in] | Dimensiones [mm] | | | | | | | | Flange | H | L | Weight [kg] |
|------------|--------------|------------------|-----|-----|-----|-----|----|-----|-----|--------|------|---|----------------|
| | | A | B | C | D | E | F | | | | | | |
| 50 | 2 | 126 | 82 | 208 | 96 | 54 | 55 | F04 | 70 | 155 | 3,9 | | |
| 65 | 2 1/2 | 134 | 93 | 227 | 113 | 60 | 55 | F04 | 70 | 155 | 5,0 | | |
| 80 | 3 | 157 | 100 | 257 | 128 | 67 | 65 | F05 | 80 | 195 | 6,0 | | |
| 100 | 4 | 167 | 110 | 277 | 148 | 67 | 65 | F05 | 80 | 195 | 7,5 | | |
| 125 | 5 | 180 | 125 | 305 | 180 | 90 | 65 | F05 | 80 | 195 | 12,0 | | |
| 150 | 6 | 203 | 142 | 345 | 205 | 106 | 90 | F07 | 100 | 276 | 17,3 | | |
| 200 | 8 | 228 | 170 | 398 | 260 | 127 | 90 | F07 | 100 | 276 | 28,3 | | |

Subject to change without notice.

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K_v-VALUES

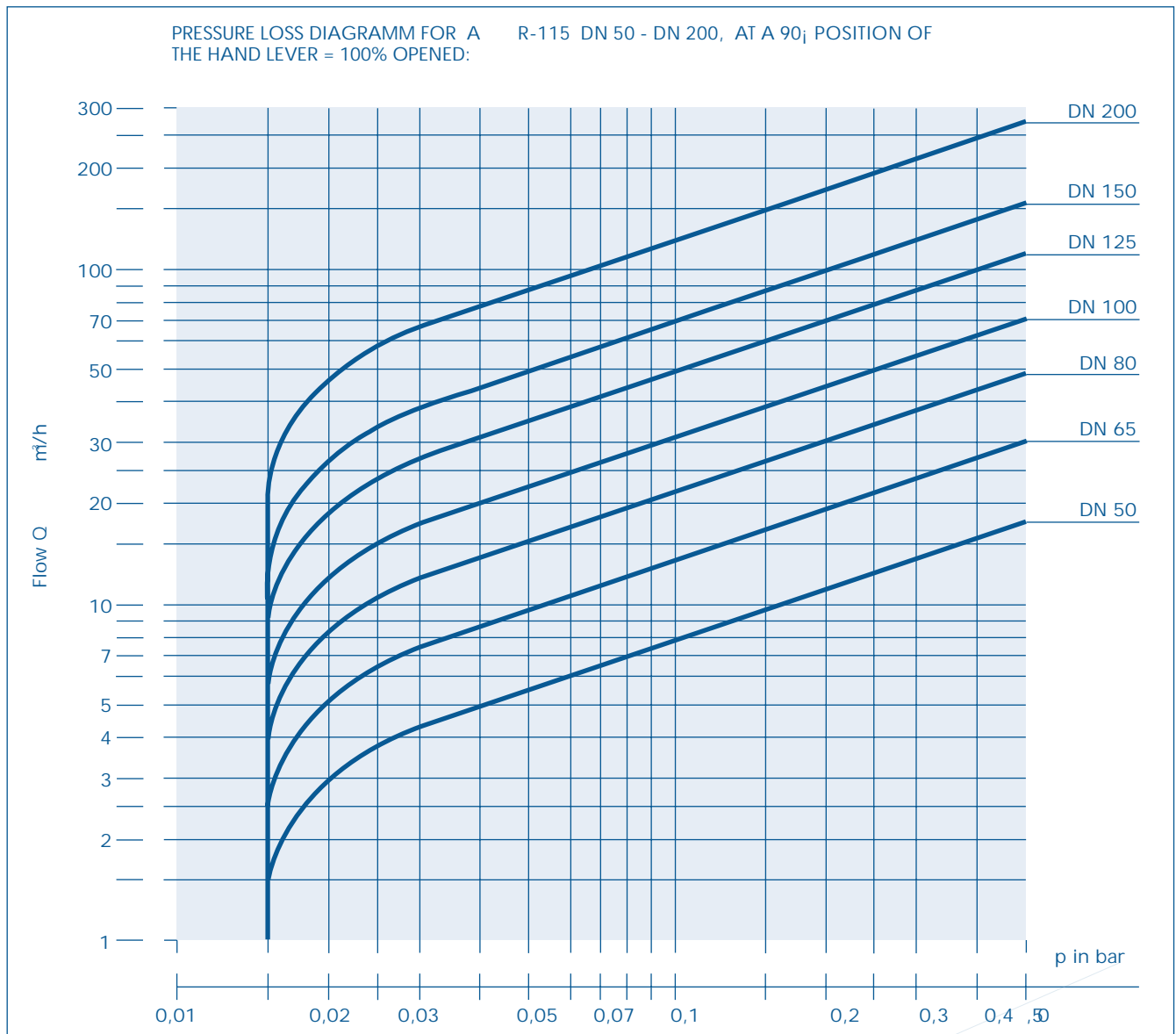
- The K_v-value (m³ per hour) is the flow of water at a temperature of 5 °C to 30 °C at p of 1 bar.

- The K_v-values specified are based on tests carried out by the Delft Hydraulics Laboratories, the Netherlands.

- Permissible velocity of flow
V_{max} 4,5 m/s for liquids

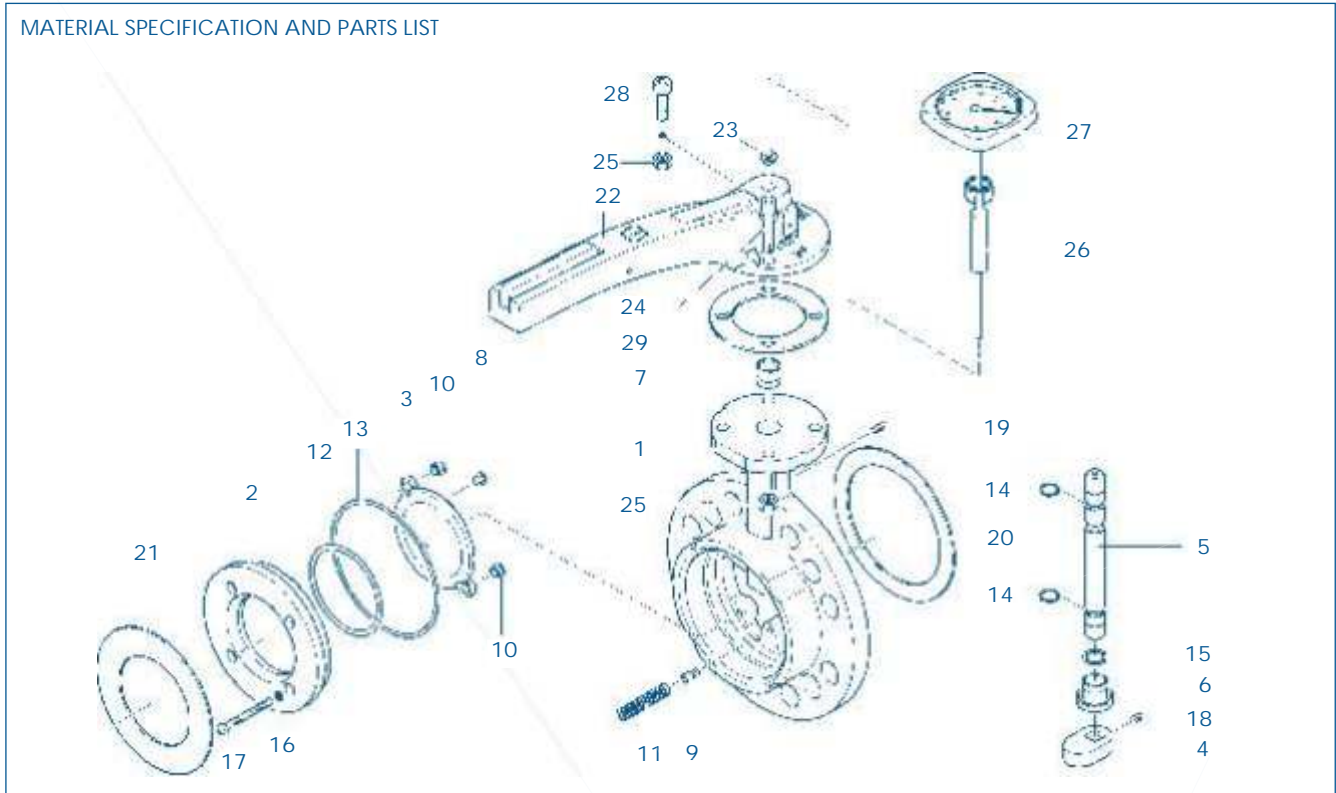
- The throttle function is linear at an angle 30_i to 70_i.

| DN [mm] | Size [in] | Opening angle _i | | | | | | | |
|------------|--------------|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | 20 _i | 30 _i | 40 _i | 50 _i | 60 _i | 70 _i | 80 _i | 90 _i |
| 50 | 2 | 2 | 8 | 16 | 18 | 20 | 22 | 23 | 25 |
| 65 | 2 1/2 | 4 | 16 | 23 | 28 | 37 | 39 | 41 | 43 |
| 80 | 3 | 4 | 21 | 37 | 49 | 56 | 61 | 62 | 64 |
| 100 | 4 | 4,5 | 28 | 53 | 68 | 86 | 92 | 96 | 100 |
| 125 | 5 | 8 | 50 | 92 | 118 | 136 | 149 | 152 | 156 |
| 150 | 6 | 20 | 85 | 148 | 179 | 193 | 211 | 215 | 218 |
| 200 | 8 | 25 | 110 | 212 | 245 | 320 | 347 | 351 | 355 |



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| Pt. | Description | Material | Material-No. | ASTM | Pt. | Description | Material | Material-No. | ASTM |
|-----|----------------|-------------------|---------------|--------|------|-------------|--------------------|-----------------|--|
| 1 | Body | Nodular Cast Iron | GG-25 | 0.6025 | 40B | 16 | Disc | PTFE | Polytetrafluorethylen |
| 2 | Cover | Stainless Steel | G-X5CrNi19-10 | 1.4308 | CF8 | 17 | Socket screw | Stainless Steel | A2-70 B8M |
| 3 | Disc | Stainless Steel | G-X5CrNi19-10 | 1.4308 | CF8 | 18 | Threaded pin | Stainless Steel | A2-70 B8M |
| 4 | Cam | Stainless Steel | G-X5CrNi19-10 | 1.4308 | CF8 | 19 | Threaded pin | Steel | 45H galvanized |
| 5 | Shaft | Stainless Steel | X14CrMoS17 | 1.4104 | 430F | 20 | Seal | EPDM | Ethylene propylene caoutchouc |
| 6 | Bond sleeve | Brass | MS58 | 2.0401 | B45 | 21 | Seal | EPDM | Ethylene propylene caoutchouc |
| 7 | Bearing sleeve | Brass | MS58 | 2.0401 | B45 | 22 | Hand lever | | |
| 8 | Buffer | PTFE | | | | 23 | Reduce sleeve | | |
| 9 | Stub screw | Stainless Steel | X8CrNiS18-9 | 1.4305 | 303 | 24 | Screw | Steel | St galvanized CS |
| 10 | Sleeve | PTFE | | | | 25 | Hex. Nut | Steel | St galvanized CS |
| 11 | Spring | Stainless Steel | X10CrNi18-8 | 1.4310 | 301 | 26 | Thermometer holder | PP | Polypropylen |
| 12 | O-ring | EPDM | | | | 27 | Thermometer | | |
| 13 | O-ring | EPDM | | | | 28 | Socket srew | Steel | St galvanized CS |
| 14 | O-ring | EPDM | | | | 29 | Drew point block | | (DN 150/200) fibre-compound without asbestos |
| 15 | O-ring | EPDM | | | | | | | Ohter materials upon request. |

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