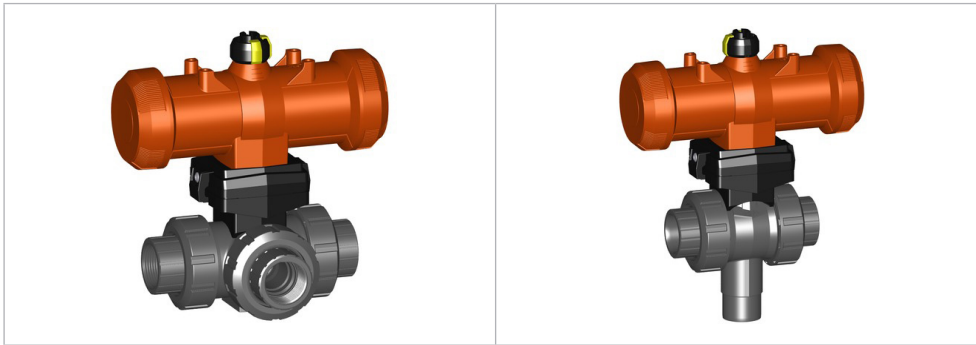


Ball Valve Type 285–288



Type 285 – 288, horizontal
With pneumatic actuators PA11 and PA21

Type 285 – 288, vertical
With pneumatic actuators PA11 and PA21

Product description

Ball valves of types 258 – 288 are based on Ball Valve Type 543 and pneumatic actuators PA11 and PA21. The 285 to 288 series is designed as a modular upgradeable 3-way ball valve for mixing and diverting applications which demand special process requirements.

Applications

- Chemical process industry
- Seawater desalinization systems
- Life science industry industry
- Microelectronics
- Measurement and control
- Water treatment
- Diverting function in shipbuilding

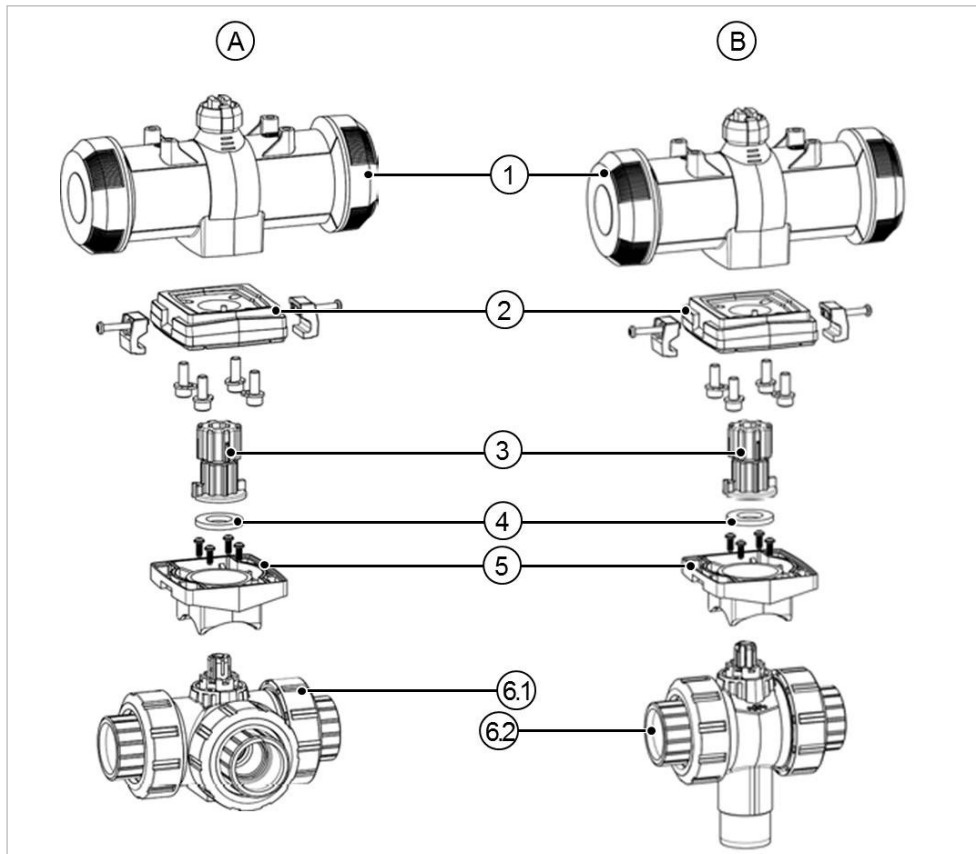
Benefits/features

- Compact design and modular construction of the valves
- Preloaded spring packages, standard version FC, DA; (FO on request)
- Short switching time
- For FC/FO stroke limitation possible
- Control air connection according to NAMUR

Flow media

Neutral and aggressive media with a small amount of particles/solids. The chemical resistance is dependent on the selected valve material ([see online tool ChemRes PLUS](#)).

Technical data



- A Type 285 – 287
- B Type 288
- ① Pneumatic actuators PA11 and PA21
- ② Adapter plate
- ③ Coupling
- ④ Spacer
- ⑤ MF housing
- 6.1 3-way Ball Valve Type 543, horizontal
- 6.2 3-way Ball Valve Type 543, vertical

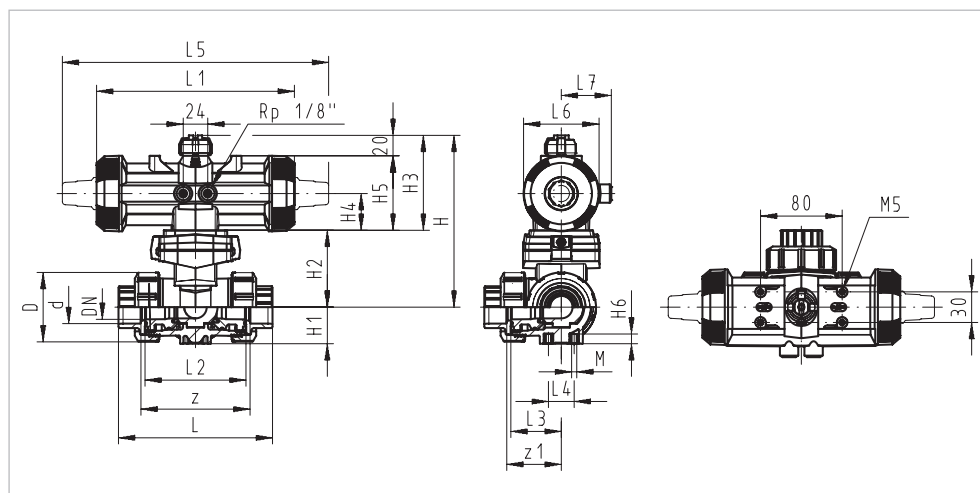
| Specification | | | |
|------------------|---------------------------------|------------------------|-------------|
| Dimensions | Type 285 – 288 | PA11 | DN10 – DN25 |
| | | PA21 | DN32 – DN50 |
| Base type | Type 285 – 287 | Type 543 –, horizontal | |
| | Type 288 | Type 543, vertical | |
| Materials | PVC-U, ABS, PP-H, PVDF | | |
| Gasket materials | O-ring gasket | EPDM, FKM, PTFE, PVDF | |
| Pressure rating | PN10 | | |
| Connections | Socket, spigot, threaded socket | | |
| Standards | ISO, BS, ASTM, JIS | | |

i The following technical data can be found in the Planning Fundamentals under "Ball Valve Type 546 Pro, hand-operated":

- Pressure-temperature diagram
- Pressure loss
- Flow characteristics
- Kv values
- Reference values for fastening screws

Dimensions

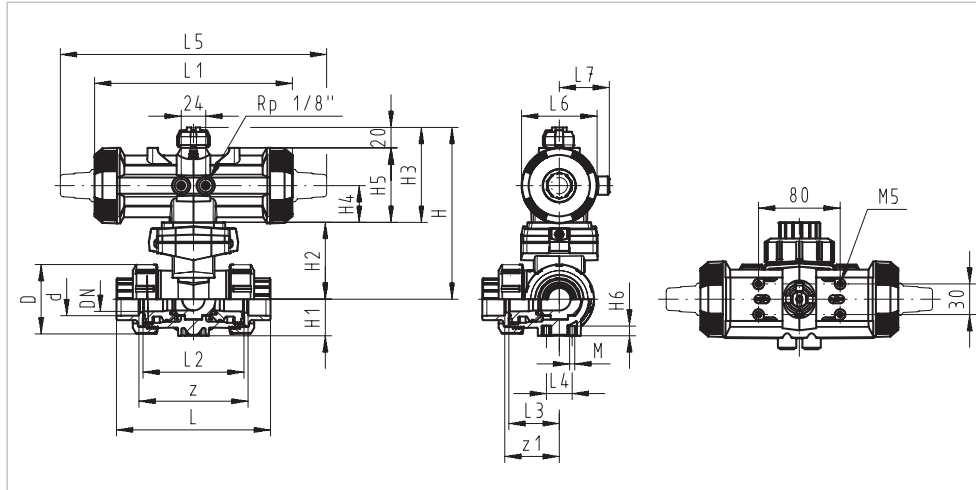
Type 285 PVC-U, PVC-C, ABS with solvent cement sockets



| d (mm) | DN (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) |
|--------|---------|--------|--------|---------|---------|---------|---------|---------|---------|
| 16 | 10 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 |
| 20 | 15 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 |
| 25 | 20 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 |
| 32 | 25 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 |
| 40 | 32 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 |
| 50 | 40 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 |
| 63 | 50 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 |

| d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | M | z (mm) | z1 (mm) |
|--------|--------|---------|---------|---------|---------|---------|---------|---------|---|--------|---------|
| 16 | 109 | 194 | 73 | 36 | 25 | 261 | 76 | 48 | 6 | 81 | 40 |
| 20 | 112 | 194 | 73 | 36 | 25 | 261 | 76 | 48 | 6 | 81 | 40 |
| 25 | 131 | 194 | 86 | 43 | 25 | 261 | 76 | 48 | 6 | 94 | 47 |
| 32 | 151 | 194 | 99 | 50 | 25 | 261 | 76 | 48 | 6 | 107 | 54 |
| 40 | 181 | 224 | 120 | 60 | 45 | 305 | 95 | 59 | 8 | 130 | 65 |
| 50 | 205 | 224 | 137 | 69 | 45 | 305 | 95 | 59 | 8 | 143 | 72 |
| 63 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 | 8 | 185 | 92 |

Type 285 – 287: PROGEF, SYGEF with fusion sockets



| d (mm) | DN (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) |
|--------|---------|--------|--------|---------|---------|---------|---------|---------|---------|
| 16 | 10 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 |
| 20 | 15 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 |
| 25 | 20 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 |
| 32 | 25 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 |
| 40 | 32 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 |
| 50 | 40 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 |
| 63 | 50 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 |

| d (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | M | z (mm) | z1 (mm) |
|--------|--------|---------|---------|---------|---------|---------|---------|---------|---|--------|---------|
| 16 | 110 | 194 | 72 | 36 | 25 | 261 | 76 | 48 | 6 | 82 | 41 |
| 20 | 112 | 194 | 72 | 36 | 25 | 261 | 76 | 48 | 6 | 82 | 41 |
| 25 | 129 | 194 | 85 | 43 | 25 | 261 | 76 | 48 | 6 | 97 | 49 |
| 32 | 146 | 194 | 98 | 50 | 25 | 261 | 76 | 48 | 6 | 110 | 55 |
| 40 | 170 | 224 | 118 | 60 | 45 | 305 | 95 | 59 | 8 | 132 | 66 |
| 50 | 193 | 224 | 135 | 69 | 45 | 305 | 95 | 59 | 8 | 151 | 76 |
| 63 | 244 | 224 | 176 | 89 | 45 | 305 | 95 | 59 | 8 | 188 | 94 |

Accessories

- Emergency manual override -10 – +50 °C
- Limit switch box for electrical position feedback
- 3/2-way pilot solenoid valve MNL532
- NAMUR connection plate
- Pilot valve cluster PV2000
- Digital positioner DRS500
- AS interface

i For further information on accessories, refer to the online product catalog at www.gfps.com

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09/2020-A
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