

ARI-ZETRIX®-DBB - Fig.016-DBB - Double flanged process valve with metallic sealing - Triple offset as double block and bleed
 ARI-ZETRIX®-DBB - Fig.018-DBB - Threaded flange process valve with metallic sealing - Triple offset as double block and bleed
 ARI-ZETRIX®-DBB - Fig.019-DBB - Butt weld ends process valve with metallic sealing - Triple offset as double block and bleed

ARI-ZETRIX®-DBB

with screwed connection

- DBB: Double Block&Bleed
- With ARI-ZETRIX® double flange
- Tube materials:

P235GH/
 P265GH
 1.4571 / 1.4541

- Valve materials:

1.0619+N
 1.4408

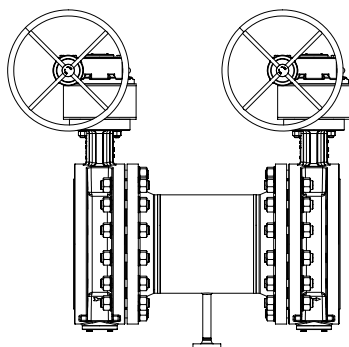


Fig. 016-DBB

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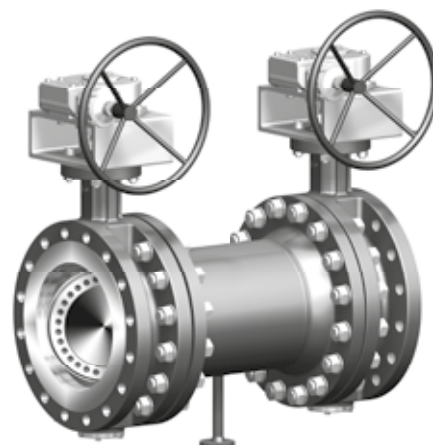


Fig. 016-DBB

ARI-ZETRIX®-DBB

 with screwed connection for
 short face-to-face lengths

- DBB: Double Block&Bleed
- With ARI-ZETRIX® threaded flanged
- Tube materials:

P235GH/
 P265GH
 1.4571 / 1.4541

- Valve materials:

1.0619+N
 1.4408

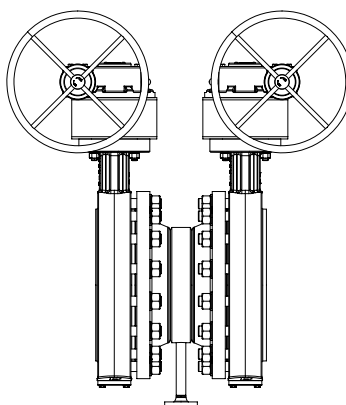


Fig. 018-DBB

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ARI-ZETRIX®-DBB

with butt weld connection

- DBB: Double Block&Bleed
- Mit ARI-ZETRIX® in Schweißenden-Ausführung
- Tube materials:

P235GH/
 P265GH

- Valve materials:

1.0619+N

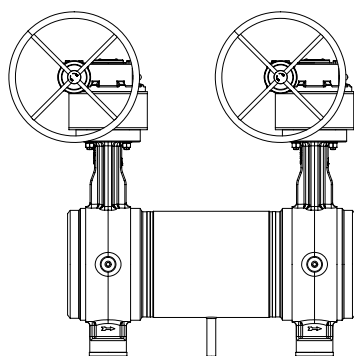
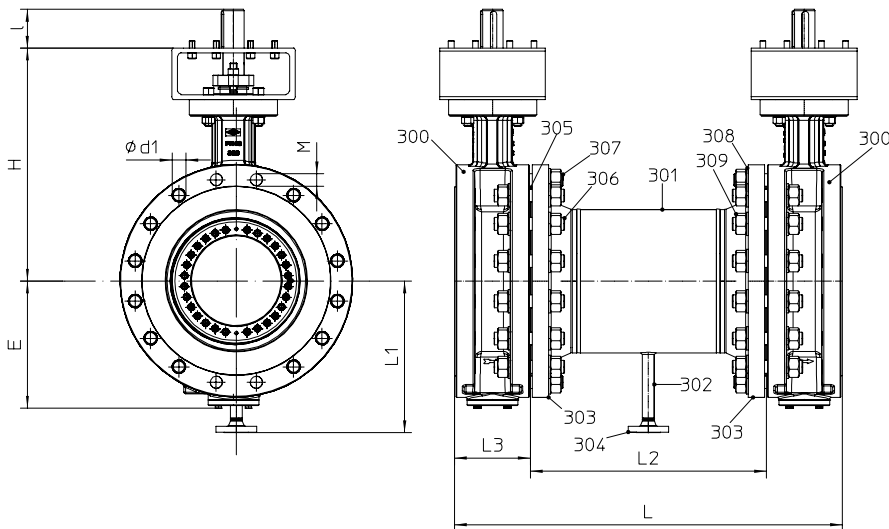


Fig. 019-DBB

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Features:

- DBB: Double Block&Bleed
- Double flange, threaded flange and butt weld ends design
- Cast steel / stainless steel body
- Triple offset construction:
 Rotary movement (90°) without wear or friction
- Metallic sealing
- Stellite seat (Stellite® 21)
- Continuous stem, hardened bearings
 with graphite protector ring
- Blow-out protected stem (optional: acc. to API 609)
- Vacuum-tight
- Firesafe acc. to ISO 10479 / API 607
- ATEX
- SIL
- NACE (optional)
- Packing acc. to EN ISO 15848-1/ TA-Luft (optional)

Screwed, double flanged process valve - Triple offset (Cast steel, Stainless steel)


| Figure | Nominal pressure | Material | Nominal diameter |
|------------|------------------|----------|------------------|
| 30.016-DBB | PN 6 | 1.0619+N | DN 150-400 |
| 31.016-DBB | PN10 | 1.0619+N | DN 150-400 |
| 32.016-DBB | PN16 | 1.0619+N | DN 150-400 |
| 34.016-DBB | PN25 | 1.0619+N | DN 150-400 |
| 35.016-DBB | PN40 | 1.0619+N | DN 150-400 |

| | | | |
|------------|------|--------|------------|
| 50.016-DBB | PN 6 | 1.4408 | DN 150-400 |
| 51.016-DBB | PN10 | 1.4408 | DN 150-400 |
| 52.016-DBB | PN16 | 1.4408 | DN 150-400 |
| 54.016-DBB | PN25 | 1.4408 | DN 150-400 |
| 55.016-DBB | PN40 | 1.4408 | DN 150-400 |

Face-to-face dimension series 1 acc. to DIN EN 558 / ISO 5752

Further nominal diameter on request

| Sealing element: | |
|--------------------------------------|----------------|
| • Graphite / X2CrNiMoN22-5-3, 1.4462 | -60°C to 400°C |
| Max. differential pressure: | |
| • = Nominal pressure | |

| Actuation arrangement: | |
|------------------------|---------------------------------|
| • Worm gear | • Pneumatic actuator |
| • Electric actuator | • Hydraulic actuator |
| Test: | |
| Sealing leakage test: | • DIN EN 12266-1 Leakage rate A |

Options refer datasheet ZETRIX®

| Parts | | | | |
|-------------------|-------|--------------------|------------------------------------|--|
| Pos. | Sp.p. | Description | Fig. 30./31./32./34./35.016-DBB | Fig. 50./51./52./54./55.016-DBB |
| 300 | | ZETRIX® Fig. 016 | GP240GH+N, 1.0619+N / Stellite 21 | GX5CrNiMo19-11-2, 1.4408 / Stellite 21 |
| 301 | | Tube without seams | P235GH, 1.0345 | X6CrNiMoTi17-12-2, 1.4571 |
| 302 ¹⁾ | | Tube without seams | P235GH, 1.0345 | X6CrNiMoTi17-12-2, 1.4571 |
| 303 | | Flange | P250GH, 1.0460 | X6CrNiMoTi17-12-2, 1.4571 |
| 304 ¹⁾ | | Flange | P250GH, 1.0460 | X6CrNiMoTi17-12-2, 1.4571 |
| 305 | | Gasket | Graphite / X2CrNiMo17-12-2, 1.4404 | |
| 306 | | Thread bolt | 25CrMo4, 1.7218 | A2-70 |
| 307 | | Thread bolt, short | 25CrMo4, 1.7218 | A2-70 |
| 308 | | Disc | A2 | |
| 309 | | Hexagon nut | 25CrMo4, 1.7218 | A2-70 |
| | | L Spare parts | | |

¹⁾ Bleed connection design subject to agreement

Further informations see datasheet ZETRIX®.

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|

Face-to-face dimension series 1 acc. to DIN EN 558 / ISO 5752

| | | | | | | | | | | | | | | | | | |
|-----------------|------|------------|-----|-----|-----|-----|-----|------|------------|--|--|--|--|--|--|--|--|
| L ¹⁾ | (mm) | on request | 480 | 600 | 730 | 850 | 980 | 1100 | on request | | | | | | | | |
|-----------------|------|------------|-----|-----|-----|-----|-----|------|------------|--|--|--|--|--|--|--|--|

Further face-to-face dimension on request. Max. face-to-face dimension L = 1800 mm

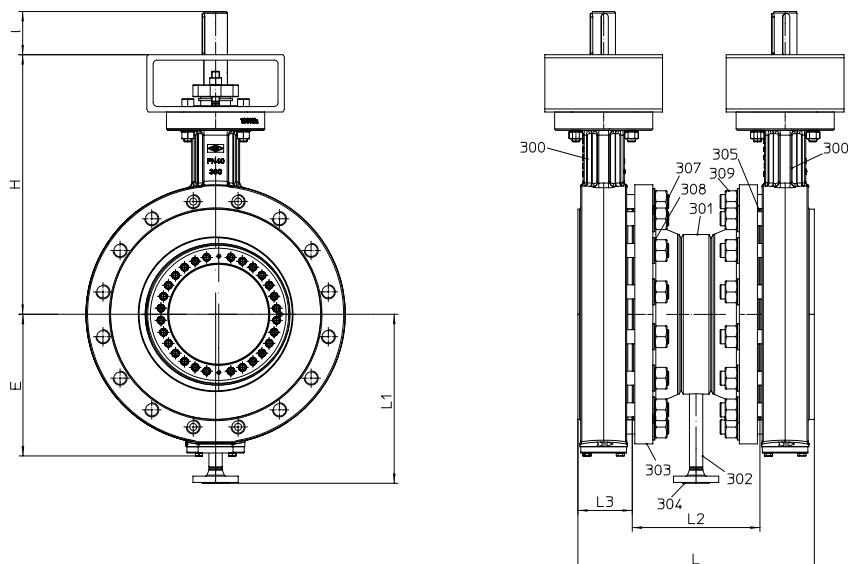
Weights

| | | | | | | | | | | | |
|----------|------|-----------------|------|------------|-----|-----|-----|-----|-----|-----|------------|
| 1.0619+N | PN6 | Fig. 30.016-DBB | (kg) | on request | 313 | 420 | 556 | 143 | 183 | 231 | on request |
| | PN10 | Fig. 31.016-DBB | (kg) | | 318 | 429 | 570 | 147 | 189 | 239 | |
| | PN16 | Fig. 32.016-DBB | (kg) | | 325 | 446 | 593 | 147 | 189 | 240 | |
| | PN25 | Fig. 34.016-DBB | (kg) | | 345 | 475 | 637 | 154 | 199 | 255 | |
| | PN40 | Fig. 35.016-DBB | (kg) | | 477 | 688 | 929 | 155 | 226 | 288 | |
| 1.4408 | PN6 | Fig. 50.016-DBB | (kg) | on request | 324 | 431 | 569 | 149 | 192 | 242 | on request |
| | PN10 | Fig. 51.016-DBB | (kg) | | 330 | 440 | 584 | 154 | 197 | 249 | |
| | PN16 | Fig. 52.016-DBB | (kg) | | 336 | 457 | 608 | 154 | 197 | 251 | |
| | PN25 | Fig. 54.016-DBB | (kg) | | 357 | 487 | 652 | 161 | 207 | 266 | |
| | PN40 | Fig. 55.016-DBB | (kg) | | 489 | 702 | 947 | 161 | 239 | 300 | |

Pressure-temperature-ratings

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

| acc. to DIN EN 1092-1 | PN | | -60°C to <-10°C | -10°C to 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 400°C |
|----------------------------|----|-------|-----------------|---------------|-------|-------|-------|-------|-------|-------|-------|
| 1.0619+N / P235GH / P250GH | 6 | (bar) | 4,5 | 6 | 5,5 | 5,2 | 5 | 4,5 | 4,1 | 3,8 | 3,5 |
| | 10 | (bar) | 7,5 | 10 | 9,2 | 8,8 | 8,3 | 7,6 | 6,9 | 6,4 | 5,9 |
| | 16 | (bar) | 12 | 16 | 14,8 | 14 | 13,3 | 12,1 | 11 | 10,2 | 9,5 |
| | 25 | (bar) | 18,7 | 25 | 23,2 | 22 | 20,8 | 19 | 17,2 | 16 | 14,8 |
| | 40 | (bar) | 30 | 40 | 37,1 | 35,2 | 33,3 | 30,4 | 27,6 | 25,7 | 23,8 |
| 1.4408 / 1.4571 / 1.4541 | 6 | (bar) | on request | 6 | 5,9 | 5,4 | 5 | 4,7 | 4,4 | 4,2 | 4,1 |
| | 10 | (bar) | | 10 | 9,9 | 9 | 8,4 | 7,9 | 7,4 | 7,1 | 6,8 |
| | 16 | (bar) | 16 | 16 | 15,8 | 14,5 | 13,4 | 12,7 | 11,8 | 11,4 | 10,9 |
| | 25 | (bar) | 25 | 25 | 24,7 | 22,7 | 21 | 19,8 | 18,5 | 17,8 | 17,1 |
| | 40 | (bar) | 40 | 40 | 39,6 | 36,3 | 33,7 | 31,8 | 29,7 | 28,5 | 27,4 |

Screwed, fully lugged process valve - Triple offset (Cast steel, Stainless steel)


| Figure | Nominal pressure | Material | Nominal diameter |
|------------|------------------|------------|------------------|
| 30.018-DBB | PN 6 | on request | |
| 31.018-DBB | PN10 | 1.0619+N | DN 150-400 |
| 32.018-DBB | PN16 | 1.0619+N | DN 150-400 |
| 34.018-DBB | PN25 | 1.0619+N | DN 150-400 |
| 35.018-DBB | PN40 | 1.0619+N | DN 150-400 |
| 36.018-DBB | PN63 | on request | |
| 37.018-DBB | PN100 | | |
| 50.018-DBB | PN 6 | on request | |
| 51.018-DBB | PN10 | 1.4408 | DN 150-400 |
| 52.018-DBB | PN16 | 1.4408 | DN 150-400 |
| 54.018-DBB | PN25 | 1.4408 | DN 150-400 |
| 55.018-DBB | PN40 | 1.4408 | DN 150-400 |
| 56.018-DBB | PN63 | on request | |
| 57.018-DBB | PN100 | | |

Length as specified by customer (short face-to-face lengths)
Further nominal diameter on request

| Sealing element: | |
|-------------------------------------|----------------|
| • Graphit / X2CrNiMoN22-5-3, 1.4462 | -60°C to 400°C |
| Max. differential pressure: | |
| • = Nominal pressure | |

| Actuation arrangement: | |
|------------------------|---------------------------------|
| • Worm gear | • Pneumatic actuator |
| • Electric actuator | • Hydraulic actuator |
| Test: | |
| Sealing leakage test: | • DIN EN 12266-1 Leakage rate A |

Options refer datasheet ZETRIX®

| Parts | | | | | |
|-------------------|-------|--------------------|------------------------------------|--|--|
| Pos. | Sp.p. | Description | Fig. 30/31/32/34/35/36/37.018-DBB | Fig. 50/51/52/54/55/56/57.018-DBB | |
| 300 | | ZETRIX® Fig. 018 | GP240GH+N, 1.0619+N / Stellite 21 | GX5CrNiMo19-11-2, 1.4408 / Stellite 21 | |
| 301 | | Tube without seams | P235GH, 1.0345 | X6CrNiMoTi17-12-2, 1.4571 | |
| 302 ¹⁾ | | Tube without seams | P235GH, 1.0345 | X6CrNiMoTi17-12-2, 1.4571 | |
| 303 | | Flange | P250GH, 1.0460 | X6CrNiMoTi17-12-2, 1.4571 | |
| 304 ¹⁾ | | Flange | P250GH, 1.0460 | X6CrNiMoTi17-12-2, 1.4571 | |
| 305 | | Gasket | Graphite / X2CrNiMo17-12-2, 1.4404 | | |
| 307 | | Thread bolt, short | 25CrMo4, 1.7218 | A2-70 | |
| 308 | | Disc | A2 | | |
| 309 | | Hexagon nut | 25CrMo4, 1.7218 | A2-70 | |
| L Spare parts | | | | | |

¹⁾ Bleed connection design subject to agreement

| Weights | |
|---|--|
| The weights of the fully lugged version depend on the length specified by the customer. | |

| Pressure-temperature-ratings | | Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart. | | | | | | | | | |
|------------------------------|----------|---|---------------|-------|-------|-------|-------|-------|-------|-------|------------|
| acc. to DIN EN 1092-1 | PN | -60°C to <-10°C | -10°C to 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 400°C | |
| 1.0619+N / P235GH / P250GH | 6 (bar) | 4,5 | 6 | 5,5 | 5,2 | 5 | 4,5 | 4,1 | 3,8 | 3,5 | |
| | 10 (bar) | 7,5 | 10 | 9,2 | 8,8 | 8,3 | 7,6 | 6,9 | 6,4 | 5,9 | |
| | 16 (bar) | 12 | 16 | 14,8 | 14 | 13,3 | 12,1 | 11 | 10,2 | 9,5 | |
| | 25 (bar) | 18,7 | 25 | 23,2 | 22 | 20,8 | 19 | 17,2 | 16 | 14,8 | |
| | 40 (bar) | 30 | 40 | 37,1 | 35,2 | 33,3 | 30,4 | 27,6 | 25,7 | 23,8 | |
| | 63 (bar) | | | | | | | | | | |
| 1.4408 / 1.4571 / 1.4541 | 6 (bar) | on request | 6 | 5,9 | 5,4 | 5 | 4,7 | 4,4 | 4,2 | 4,1 | |
| | 10 (bar) | on request | 10 | 9,9 | 9 | 8,4 | 7,9 | 7,4 | 7,1 | 6,8 | |
| | 16 (bar) | 16 | 16 | 15,8 | 14,5 | 13,4 | 12,7 | 11,8 | 11,4 | 10,9 | |
| | 25 (bar) | 25 | 25 | 24,7 | 22,7 | 21 | 19,8 | 18,5 | 17,8 | 17,1 | |
| | 40 (bar) | 40 | 40 | 39,6 | 36,3 | 33,7 | 31,8 | 29,7 | 28,5 | 27,4 | |
| | 63 (bar) | | | | | | | | | | |
| 100 (bar) | | | | | | | | | | | on request |

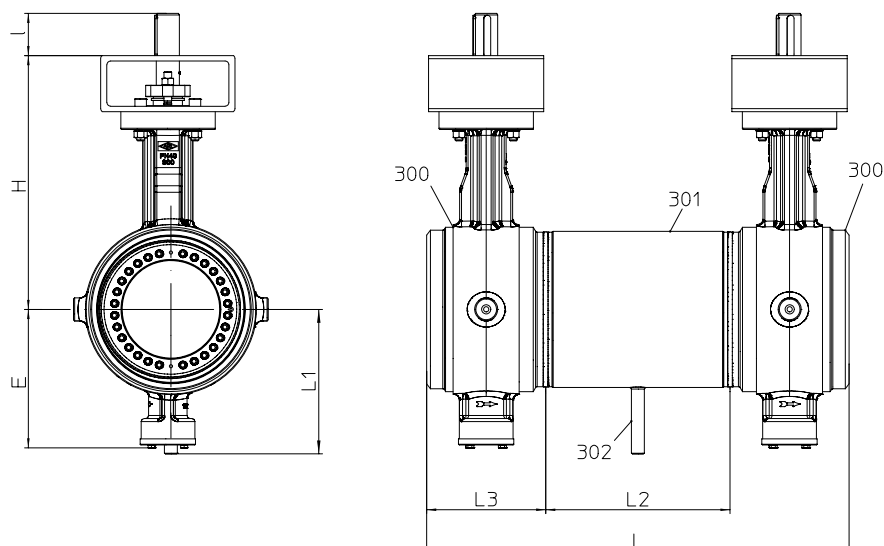
Further informations see datasheet ZETRIX®.

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

Welded process valve - Triple offset (Cast steel, Stainless steel)



| Figure | Nominal pressure | Material | Nominal diameter |
|------------|------------------|----------|------------------|
| 30.019-DBB | PN6 | 1.0619+N | DN 150-400 |
| 31.019-DBB | PN10 | 1.0619+N | DN 150-400 |
| 32.019-DBB | PN16 | 1.0619+N | DN 150-400 |
| 34.019-DBB | PN25 | 1.0619+N | DN 150-400 |
| 35.019-DBB | PN40 | 1.0619+N | DN 150-400 |

Baulänge Grundreihe 1 nach DIN EN 12982

Further nominal diameter on request

| Sealing element: | |
|-------------------------------------|----------------|
| • Graphit / X2CrNiMoN22-5-3, 1.4462 | -60°C to 400°C |
| Max. differential pressure: | |
| • = Nominal pressure | |

| Actuation arrangement: | |
|------------------------|---------------------------------|
| • Worm gear | • Pneumatic actuator |
| • Electric actuator | • Hydraulic actuator |
| Test: | |
| Sealing leakage test: | • DIN EN 12266-1 Leakage rate A |

Options refer datasheet ZETRIX®

| Parts | | | |
|-------------------|-------|--------------------|-----------------------------------|
| Pos. | Sp.p. | Description | Fig. 30./31./32./34./35.019-DBB |
| 300 | | ZETRIX® Fig. 019 | GP240GH+N, 1.0619+N / Stellite 21 |
| 301 | | Tube without seams | P235GH, 1.0345 |
| 302 ¹⁾ | | Tube without seams | P235GH, 1.0345 |
| L Spare parts | | | |

¹⁾ Bleed connection design subject to agreement

| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

| Face-to-face dimension series 1 acc. to DIN EN 12982 | | | | | | | | | | | | |
|--|------|------------|--|--|-----|-----|-----|-----|-----|------|------------|--|
| L ¹⁾ | (mm) | on request | | | 480 | 600 | 730 | 850 | 980 | 1100 | on request | |
| Further face-to-face dimension on request. Max. face-to-face dimension L = 1800 mm | | | | | | | | | | | | |

| Weights | | | | | | | | | | | | | | | |
|----------|------|-----------------|------|----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|
| 1.0619+N | PN6 | Fig. 30.019-DBB | (kg) | 77 | 109 | 144 | 201 | 244 | 356 | 77 | 109 | 144 | 201 | 244 | 356 |
| | PN10 | Fig. 31.019-DBB | (kg) | 77 | 109 | 144 | 201 | 244 | 356 | 77 | 109 | 144 | 201 | 244 | 356 |
| | PN16 | Fig. 32.019-DBB | (kg) | 77 | 109 | 144 | 201 | 247 | 360 | 77 | 109 | 144 | 201 | 247 | 360 |
| | PN25 | Fig. 34.019-DBB | (kg) | 77 | 109 | 145 | 203 | 247 | 363 | 77 | 109 | 145 | 203 | 247 | 363 |
| | PN40 | Fig. 35.019-DBB | (kg) | 77 | 123 | 168 | 247 | 364 | 467 | 77 | 123 | 168 | 247 | 364 | 467 |

| Pressure-temperature-ratings | | Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart. | | | | | | | | | |
|------------------------------|----|---|---------------|-------|-------|-------|-------|-------|-------|-------|------|
| acc. to DIN EN 1092-1 | PN | -60°C to <-10°C | -10°C to 50°C | 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 400°C | |
| 1.0619+N / P235GH | 6 | (bar) | 4,5 | 6 | 5,5 | 5,2 | 5 | 4,5 | 4,1 | 3,8 | 3,5 |
| | 10 | (bar) | 7,5 | 10 | 9,2 | 8,8 | 8,3 | 7,6 | 6,9 | 6,4 | 5,9 |
| | 16 | (bar) | 12 | 16 | 14,8 | 14 | 13,3 | 12,1 | 11 | 10,2 | 9,5 |
| | 25 | (bar) | 18,7 | 25 | 23,2 | 22 | 20,8 | 19 | 17,2 | 16 | 14,8 |
| | 40 | (bar) | 30 | 40 | 37,1 | 35,2 | 33,3 | 30,4 | 27,6 | 25,7 | 23,8 |

Further informations see datasheet ZETRIX®.

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

| Kvs-value / Zeta-value (Fig. 016, 018, 019) | | | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|---|------------|---------------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| PN6/10 | Kvs-value | (m ³ /h) | on request | | | | | | | | | | | | | | | | |
| | Zeta-value | -- | | | | | | | | | | | | | | | | | |
| PN16/25 | Kvs-value | (m ³ /h) | | | | | | | | | | | | | | | | | |
| | Zeta-value | -- | | | | | | | | | | | | | | | | | |
| PN40 | Kvs-value | (m ³ /h) | | | | | | | | | | | | | | | | | |
| | Zeta-value | -- | | | | | | | | | | | | | | | | | |

For more information on actuators, connections and optional components, see the ZETRIX® data sheet.

myValve® - Your Valve Sizing-Program.

myValve® is a powerful software tool that not only helps you size your system components; it also gives you instant access to all other data about the selected product, such as order information, spare parts drawings, operating instructions, data sheets, etc., whenever you need it.



Contents:

Module ARI-process valve ZETRIX-calculation

- Sizing of flow quantity Kv, volume flow Q, pressure drop p, sound level; Selecting the valve size with given capacity; Selection of the actuator.
- Calculation of torque for actuators in flow from shaft side and flow from disc side, as well as dynamic torque curves to show the maximum value and the opening angle at which it is reached.

Media:

Integrated media-data bank (more than 160 media) with conditions:

- Vapours / gases
- Steam (saturated and superheated)
- Liquids

Special features:

- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number.
- Direct output of calculation and product data in PDF format.
- Product data could be taken for a direct order.
- SI- and ANSI-units with direct conversion to another data bank.
- Settings with over pressure or absolute pressure.
- All ARI valves are integrated in a data bank.
- Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram and spare part drawings
- Operation in company networks possible (no complex installations on individually PC's necessary).
- Extensive catalogue extending over several product groups.

System Requirements:

Windows operating systems, Linux, etc.