

safe and reliable



Type KVII/F- KVII/F

## Double Block and Bleed Unit for Gaseous Media Electro-Pneumatic Operated

Edition: 06.21

Subject to change without notice

### APPLICATION AREA

- > Gas firing systems on steam boilers  
acc. to DIN EN12952/12953
- > Industrial thermoprocessing equipment  
acc. to DIN EN 746
- > Pipe systems for gaseous media  
for all industrial sectors

### ADVANTAGE

- > Closing time < 1 sec
- > High safety level through zero leakage
- > Heavy duty design for high operating cycles
- > High performance valve design for long service life
- > Package unit with integrated intermediate venting



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# Double Block and Bleed for Gaseous Media Electro-Pneumatic Operated



DN 65-300 PN 16-40

## APPLICATION

- > Automatic operated emergency shutdown device
- > In gas pipes in front of burner  
acc. to DIN EN12952/12953
- > Safety and control device for gas burner
- > Automatic shut-off valve in piping systems

## TECHNICAL DATA

- > Single-seated straight-through globe valve  
acc. to DIN/EN standard
- > Stem sealing acc. to TA-Luft,  
stainless steel bellow with additional lip seal and  
connection for tightness test
- > Exchangeable plug gasket
- > Maintenance-free guide bushing
- > Additional sealing force generated through primary  
pressure loaded onto the valve plug
- > Piston actuator with integrated closing spring
- > Integrated connection for intermediate venting

## CERTIFICATES

### EC-Type examination (Modul B)

acc. to directive 2014/68/EU

### EC- Type examination certificate

with product-identnumber

acc. to gas appliance regulation EU/2016/426

based on:

DIN EN 13611 / DIN EN 161 / DIN EN 16678 / DIN EN 16304

**Certificate:**

- > TA-Luft  
DIN EN ISO 15848-1  
VDI 2440
- > SIL2 / EN 61508
- > Fire-safe  
DIN EN ISO 10497 / API 607

## OPERATING DATA (GENERAL)

- Media:**
- > Gaseous fuels  
acc. to PED 2014/68/EU
  - > Fuels acc. to G260;  
gas group 1., 2. and 3
  - > Other gaseous media
- Operating pressure:** Max. 16 bar g (siehe Tabelle auf S.4)
- Operating temperature:** -29 to 180 °C
- Ambient temperature:** -29 to 80 °C
- Control medium:** Compressed air at 4-8 bar g
- Air quality:** acc. to DIN ISO 8573-1
- Control voltage:** 230 V, 50 Hz, 24 V DC
- Power:** 10.6 VA / 6.8 W
- IP Protection Class:** IP 65
- Mounting position:** no restriction
- Mounting location:** Indoor/Outdoor

*The determined individual operating and design data based is displayed in the valve specification sheet submitted along with the quotation!*

## OPTION

- > Quick-closing valve with integrated control characteristic for soft opening
- > Combination with electro-pneumatic positioner for selective flow control

## REMARKS

Acc. to DIN EN12952/12953 it is advised to install strainer in front of shut off combination. (Kühme SF / SFY)

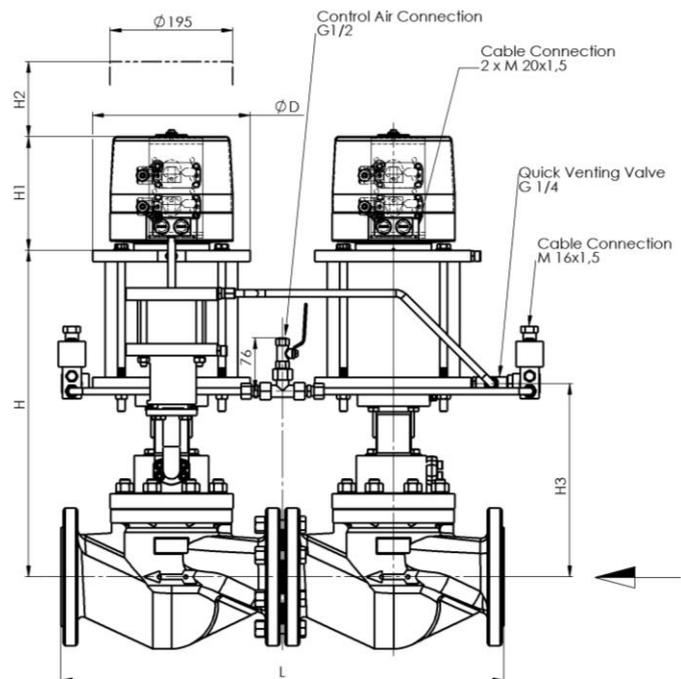
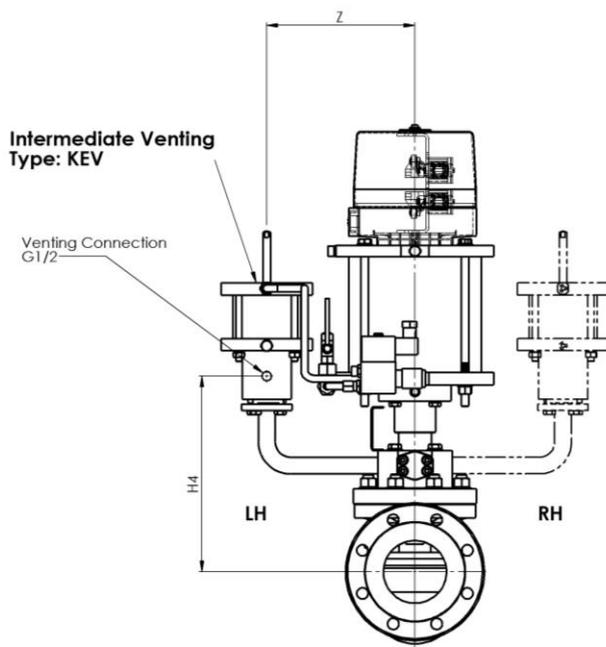
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## MATERIALS\*

|                       |                     |
|-----------------------|---------------------|
| <b>Body:</b>          | GP240GH             |
| <b>Valve seat:</b>    | cladded with 1.4551 |
| <b>Plug gasket:</b>   | Elastomer           |
| <b>Bellow:</b>        | 1.4541              |
| <b>Stem:</b>          | 1.4021              |
| <b>Actuator:</b>      | Steel/Aluminium     |
| <b>Sealing parts:</b> | Elastomer           |

\* Other materials and accessories are available on request.

## REMARKS

The actuator size is selected according to the operating pressure! The max. Service pressure (PS) remains unaffected!

## PARAMETER

| Nominal diameter DN   | 65         | 80  | 100 | 125 | 150 | 200 | 250  | 300  |
|---|------------|-----|-----|-----|-----|-----|------|------|
| Max. Service pressure (PS) in bar g                             | 12         | 12  | 12  | 6   | 6   | 6   | 3    | 2    |
| Rating PN*  | 16         | 16  | 16  | 16  | 16  | 16  | 16   | 16   |
| $k_{vs}$ - value m <sup>3</sup> /h (max.)                       | 75         | 105 | 170 | 270 | 405 | 675 | 1090 | 1460 |
| Closing time  | < 1 Second |     |     |     |     |     |      |      |
| *Also available with flange connection acc. to PN 25-40 rating. |            |     |     |     |     |     |      |      |

## ACCESSORIES\*

| QTY | Accessories   |
|-----|---|
| 2   | Quick venting valve   |
| 2   | 3/2-way solenoid valve, directly actuated, pressure 0 to 8 bar                  |
| 4   | Limit switch as mechanical cam switch or proximity switch                       |
| 2   | Protection cover, transparent, for limit switch and optical position indication |

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DN 65-300 PN 16-40

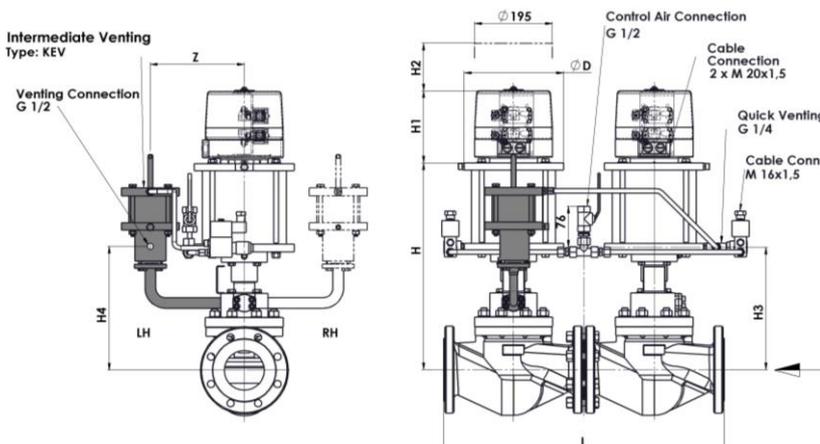
## DIMENSIONS

| DN  | bar g                    |          | mm   |     |     |                |                |                |                |     | Arrangement | kg  |
|-----|--------------------------|----------|------|-----|-----|----------------|----------------|----------------|----------------|-----|-------------|-----|
|     | max. Operating pressure* | Actuator | L    | D   | H   | H <sub>1</sub> | H <sub>2</sub> | H <sub>3</sub> | H <sub>4</sub> | Z   |             |     |
| 65  | 8,0                      | 150      | 580  | 200 | 520 | 180            | 120            | 307            | 255            | 240 | A           | 107 |
| 65  | 12,0                     | 200      | 580  | 250 | 520 | 180            | 120            | 307            | 255            | 240 | A           | 107 |
| 80  | 5,0                      | 150      | 620  | 200 | 525 | 180            | 120            | 310            | 265            | 250 | A           | 125 |
| 80  | 12,0                     | 200      | 620  | 250 | 525 | 180            | 120            | 310            | 265            | 250 | A           | 125 |
| 80  | 16,0                     | 250      | 620  | 315 | 525 | 180            | 120            | 310            | 265            | 250 | A           | 125 |
| 100 | 3,0                      | 150      | 700  | 200 | 525 | 180            | 120            | 315            | 315            | 235 | A           | 155 |
| 100 | 12,0                     | 200      | 700  | 250 | 525 | 180            | 120            | 315            | 315            | 235 | A           | 155 |
| 100 | 16,0                     | 250      | 700  | 315 | 525 | 180            | 120            | 315            | 315            | 235 | A           | 155 |
| 125 | 1,5                      | 150      | 800  | 200 | 660 | 250            | 180            | 400            | 335            | 235 | A           | 185 |
| 125 | 5,0                      | 200      | 800  | 250 | 660 | 250            | 180            | 400            | 335            | 235 | A           | 185 |
| 125 | 6,0                      | 250      | 800  | 315 | 660 | 250            | 180            | 400            | 335            | 235 | A           | 185 |
| 150 | 1,0                      | 150      | 960  | 200 | 660 | 250            | 180            | 400            | 367            | 235 | B           | 215 |
| 150 | 3,5                      | 200      | 960  | 250 | 660 | 250            | 180            | 400            | 367            | 235 | B           | 215 |
| 150 | 6,0                      | 250      | 960  | 315 | 660 | 250            | 180            | 400            | 367            | 300 | A           | 215 |
| 200 | 1,5                      | 200      | 1200 | 250 | 745 | 250            | 180            | 420            | 425            | 235 | B           | 355 |
| 200 | 3,5                      | 250      | 1200 | 315 | 745 | 250            | 180            | 420            | 425            | 300 | B           | 355 |
| 200 | 6,0                      | 300      | 1200 | 370 | 745 | 250            | 180            | 420            | 425            | 300 | B           | 355 |
| 250 | 2,0                      | 250      | 1460 | 315 | 870 | 250            | 180            | 535            | 490            | 315 | B           | 595 |
| 250 | 3,0                      | 300      | 1460 | 370 | 870 | 250            | 180            | 535            | 490            | 315 | B           | 595 |
| 300 | 1,25                     | 250      | 1700 | 315 | 890 | 250            | 180            | 555            | 525            | 315 | B           | 925 |
| 300 | 2,0                      | 300      | 1700 | 370 | 890 | 250            | 180            | 555            | 525            | 315 | B           | 925 |

\*Max. Functional pressure (max. switchable differential pressure) with compressed air 4 bar g; Flange dimensions acc. to EN 1092-1/B1

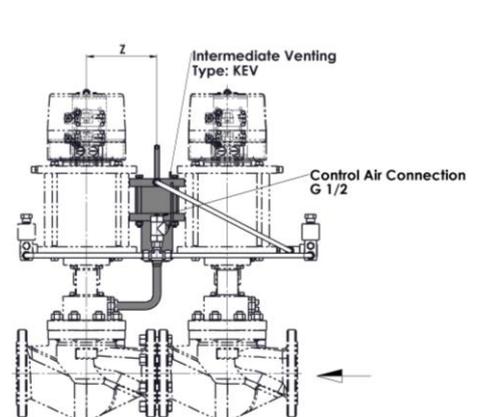
### TYPE A

Intermediate Venting Left Hand / Right Hand arrangement



### TYPE B

Intermediate Venting compact arrangement



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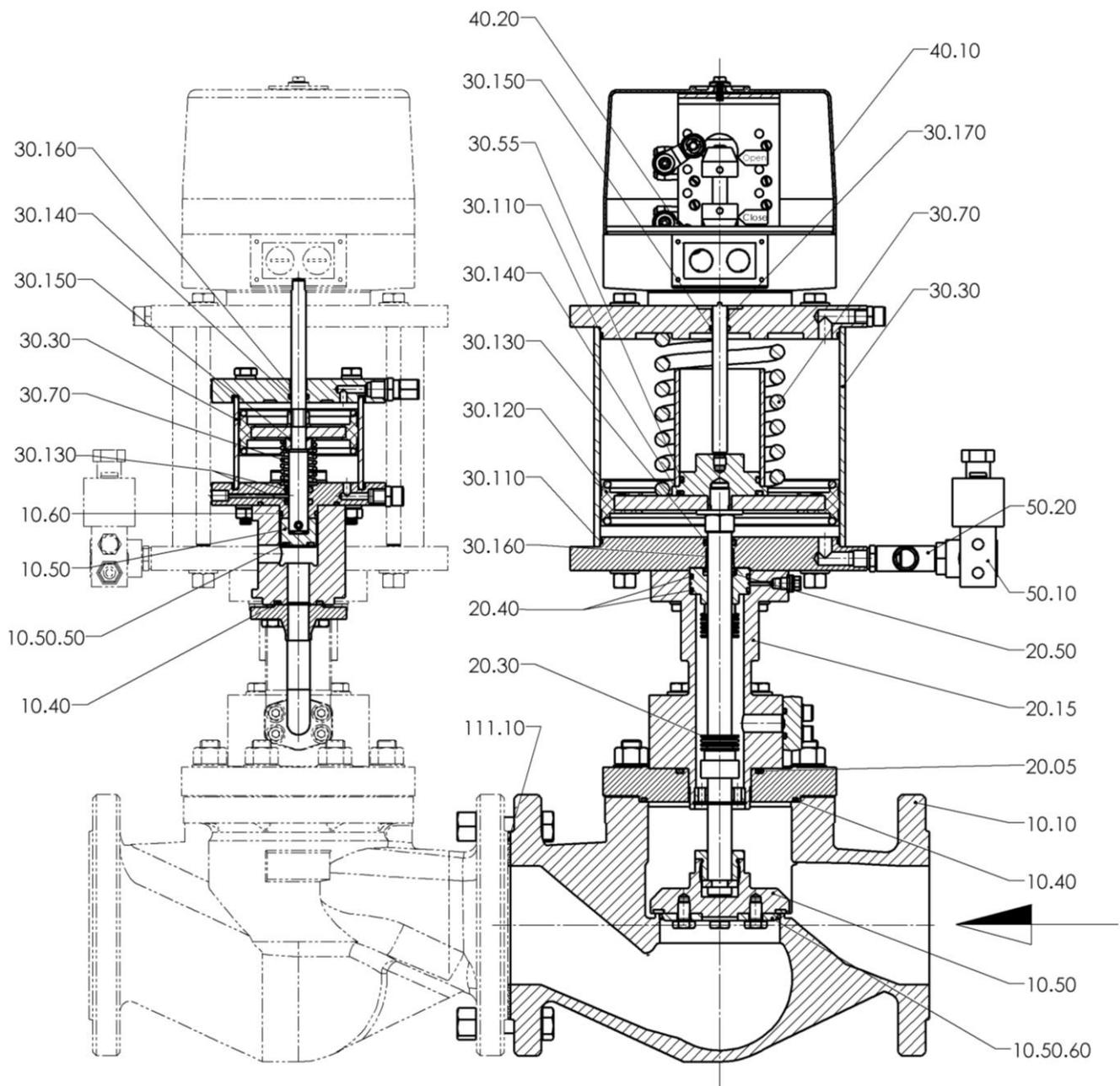
# Double Block and Bleed for Gaseous Media Electro-Pneumatic Operated



DN 65-300 PN 16-40

**Intermediate Venting Valve  
Type: KEV**

**Main Valve  
Type: KVII/F**



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## MAIN VALVE TYPE: KVII/F

|            |                 |          |                        |
|------------|-----------------|----------|------------------------|
| 10.10      | Body            | * 30.55  | O-Ring                 |
| * 10.40    | O-Ring          | * 30.70  | Compression spring     |
| 10.50      | Plug            | * 30.110 | O-Ring                 |
| * 10.50.60 | Plug gasket     | * 30.120 | T-DUO Sleeve           |
| * 15.30    | O-Ring          | * 30.130 | O-Ring                 |
| * 20.05    | O-Ring          | * 30.140 | O-Ring                 |
| 20.15      | Bonnet          | * 30.150 | O-Ring                 |
| * 20.30    | Stem with below | 30.160   | DU-Bushing             |
| * 20.40    | O-Ring          | 30.170   | DU-Bushing             |
| * 20.50    | Lip seal        | * 40.10  | Protection cover       |
| 20.60      | Guide bushing   | * 40.20  | Limit switch           |
| 30.30      | Piston tube     | * 50.10  | 3/2-Way solenoid valve |
|            |                 | * 50.20  | Quick venting valve    |

## INTERMEDIATE VENTING TYPE: KEV

|            |               |          |                    |
|------------|---------------|----------|--------------------|
| * 10.40    | O-Ring        | * 30.70  | Compression spring |
| 10.50      | Plug          | * 30.130 | O-Ring             |
| * 10.50.50 | Plug gasket   | * 30.140 | O-Ring             |
| * 10.60    | O-Ring        | * 30.150 | O-Ring             |
| 30.30      | Piston tube   | 30.160   | DU-Bushing         |
|            |               | * 111.10 | Flange gasket      |
| *          | <b>Spares</b> |          |                    |