

Type KVII/F- KVII/F

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

Edition: 05.18

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 fuels
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



safe and reliable

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Double Block and Bleed for Gaseous Media Electro-Pneumatic Operated



DN 2½"-12" ANSI 150 lbs

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 ANSI 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

- Media:**
- > Gaseous fuels
acc. to PED 2014/68/EU
 - > Fuels acc. to G260;
gas group 1., 2. and 3
 - > Other gaseous media
Max. 12 bar g
- Operating pressure:** Max. 12 bar g
- 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

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)

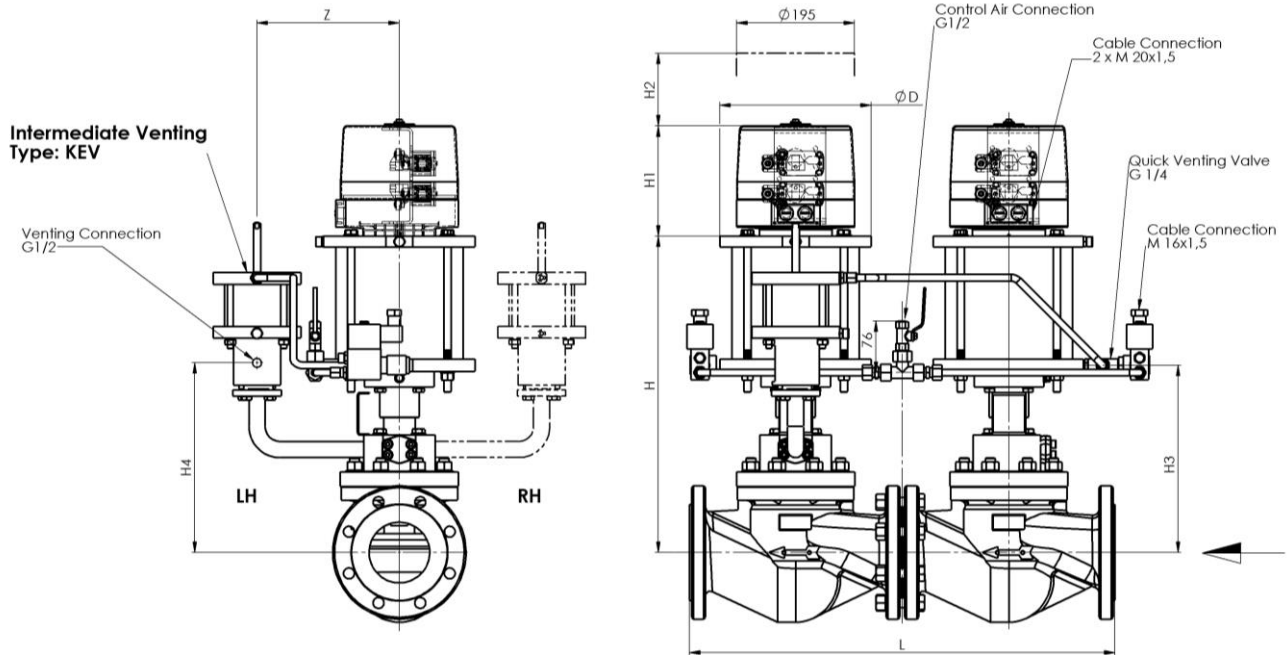
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MATERIALS*

| | |
|-----------------------|---------------------|
| Body: | A 216 WCB |
| Valve seat: | cladded with 1.4551 |
| Plug gasket: | Elastomer |
| Bellow: | 1.4541 |
| Stem: | 1.4021 |
| Actuator: | Steel/Aluminium |
| Sealing parts: | Elastomer |

* Other materials and accessories are available on request.

PARAMETER

| Nominal diameter DN | 2½ | 3 | 4 | 6 | 8 | 10 | 12 |
|---|------------|-----|-----|-----|-----|------|------|
| Max. Service pressure (PS) in bar g | 12 | 12 | 12 | 6 | 6 | 3 | 2 |
| Rating ANSI Class | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| K_{vs} - value m ³ /h (max.) | 72 | 108 | 170 | 376 | 655 | 1030 | 1460 |
| Closing time | < 1 Second | | | | | | |

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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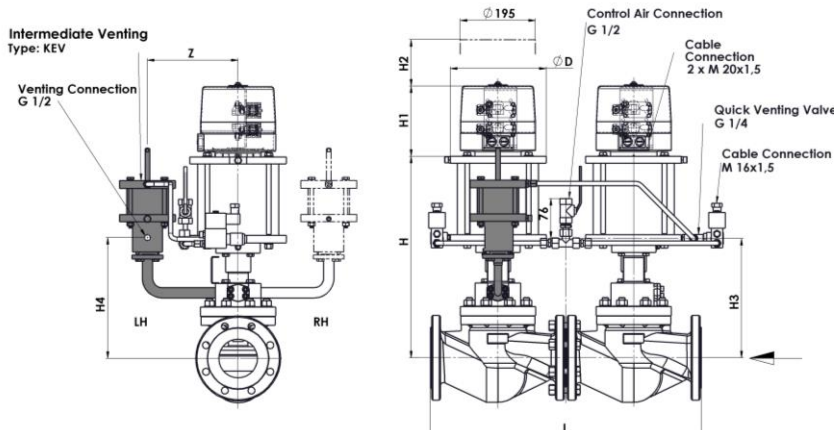
DIMENSIONS

| ANSI | bar g | | mm | | | | | | | | Arrangement | kg Weight |
|------|--------------------------|----------|------|-----|-----|----------------|----------------|----------------|----------------|-----|-------------|--------------|
| | max. Operating pressure* | Actuator | L | D | H | H ₁ | H ₂ | H ₃ | H ₄ | Z | | |
| 2½ | 8 | 150 | 432 | 200 | 520 | 180 | 120 | 307 | 255 | 240 | A | 97 |
| 2½ | 12 | 200 | 432 | 250 | 520 | 180 | 120 | 307 | 255 | 240 | A | 97 |
| 3 | 5 | 150 | 482 | 200 | 525 | 180 | 120 | 310 | 265 | 250 | A | 113 |
| 3 | 12 | 200 | 482 | 250 | 525 | 180 | 120 | 310 | 265 | 250 | A | 113 |
| 4 | 3 | 150 | 584 | 200 | 525 | 180 | 120 | 315 | 315 | 235 | A | 140 |
| 4 | 12 | 200 | 584 | 250 | 525 | 180 | 120 | 315 | 315 | 235 | A | 140 |
| 6 | 1 | 150 | 812 | 200 | 660 | 250 | 180 | 400 | 367 | 235 | A | 194 |
| 6 | 3,5 | 200 | 812 | 250 | 660 | 250 | 180 | 400 | 367 | 235 | A | 194 |
| 6 | 6 | 250 | 812 | 315 | 660 | 250 | 180 | 400 | 367 | 300 | A | 194 |
| 8 | 1,5 | 200 | 990 | 250 | 745 | 250 | 180 | 420 | 425 | 235 | B | 320 |
| 8 | 3,5 | 250 | 990 | 315 | 745 | 250 | 180 | 420 | 425 | 300 | A | 320 |
| 8 | 6 | 300 | 990 | 370 | 745 | 250 | 180 | 420 | 425 | 300 | A | 320 |
| 10 | 2 | 250 | 1244 | 315 | 870 | 250 | 180 | 535 | 490 | 315 | B | 536 |
| 10 | 3 | 300 | 1244 | 370 | 870 | 250 | 180 | 535 | 490 | 315 | B | 536 |
| 12 | 1,25 | 250 | 1396 | 315 | 890 | 250 | 180 | 555 | 525 | 315 | B | 745 |
| 12 | 2 | 300 | 1396 | 370 | 890 | 250 | 180 | 555 | 525 | 315 | B | 745 |

*Max. Functional pressure with compressed air 4 bar; Flange dimensions acc. to ANSI B 16.5

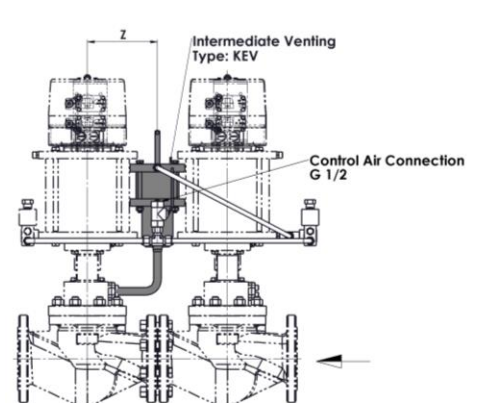
TYPE A

Intermediate Venting Left Hand / Right Hand arrangement



TYPE B

Intermediate Venting compact arrangement



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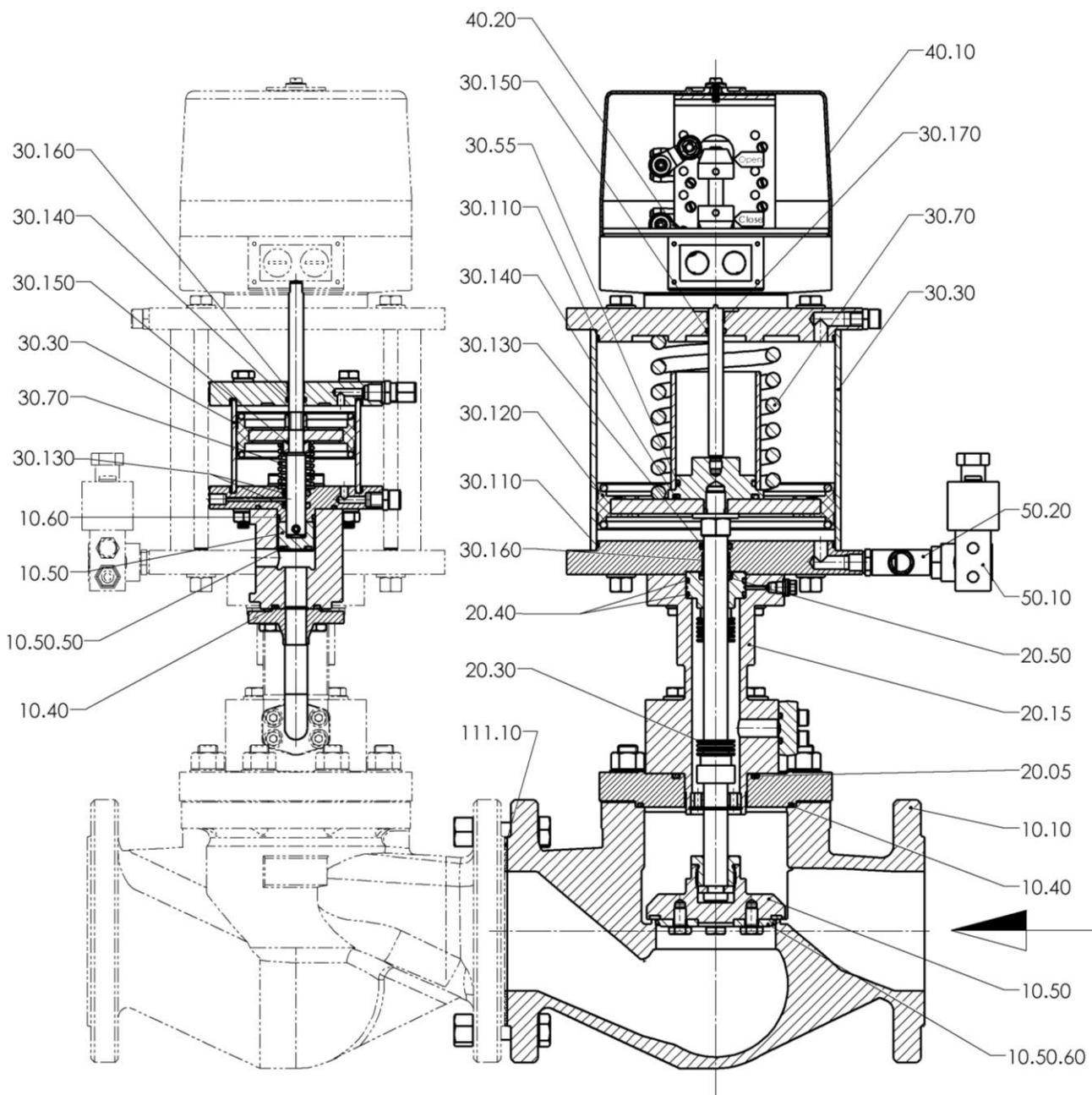
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**Intermediate Venting Valve
Type: KEV**

**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 |
| * | Spares | | |