

# Compact laboratory tapping points

## EM15: for non-corrosive gases

## EE15: for corrosive gases

### Surface-mounted

Laboratory equipment with rear wall inlet and front outlet



**Type AW**

### Surface-mounted angle

Laboratory equipment with rear wall inlet and rear outlet



**Type AE**

### Panel-mounted

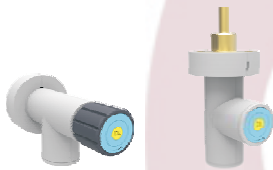
Laboratory equipment with rear wall inlet and rear outlet



**Type EP**

### Valves / wall outlets

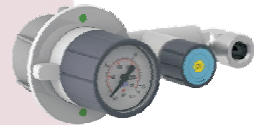
Laboratory equipment with rear wall inlet and front outlet



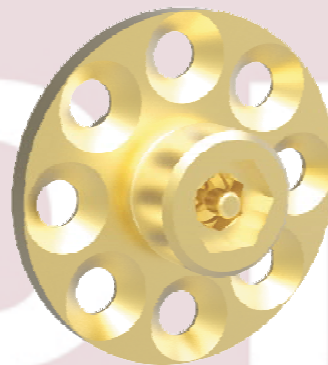
**Type AW / EP**

### Panel-mounted front

Laboratory equipment with rear wall inlet and front outlet



**Type EF**



### Wall-mounted

Laboratory equipment for wall mounting (surface-mounted pipework)



**Type ES**

### Column-mounted

Column-mounted laboratory equipment and front outlet



**Type SC**

### Ceiling-mounted

Laboratory equipment with top inlet and front outlet



**Type DC**

# Compact laboratory tapping points EM15 / EE15

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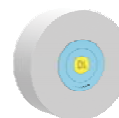
with control / shut-off valve



without valve (long)



without valve



blind without regulator

## Specifications

- The special laboratory tapping points incorporate the functions shut-off, pressure regulation and pressure indication in one compact, ergonomic unit.
- EM15: for non-corrosive gases up to quality 6.0  
EE15: for corrosive gases and gas mixtures with corrosive components up to quality 6.0
- The pressure regulator is diaphragm sensed for outlet pressures up to 10 bar and piston sensed for higher outlet pressure values.
- The acetone resistant pressure gauge is safely integrated into the adjusting handwheel to create an extremely compact device.
- Integrated shut-off valve in the rear-wall connector allows the preparation of the tapping point without pressure regulator.
- Quick and easy mounting or disassembly of the regulating unit with filled gas piping.
- Diaphragm shut-off valve with position indicator
- Optional flow control / shut-off valve in the outlet
- All gas-wetted components have undergone the special SPECTROCLEAR® cleaning process and have been thoroughly baked out.
- For ECD-applications the devices can be treated in an extended cleaning process.
- All equipment has been 100%-helium-leak-tested using a mass-spectrometer.
- All components are plastic-covered resistant to acid and alkaline solutions.

## Technical data

### Materials

|                            |                                        |
|----------------------------|----------------------------------------|
| Body:                      | M15: Brass or<br>E15: SS 1.4404 (316L) |
| Diaphragms:                | Hastelloy C276                         |
| other gas-wetted surfaces: | Brass or<br>SS 1.4404 (316L)           |
| Valve cone:                | SS 1.4404 (316L)                       |
| Valve seat:                | PTFE / PVDF                            |
| Cover:                     | Polypropylene GB30                     |

### Leak rate

(to atmosphere):  $10^{-8}$  mbar l/s He

|        |       |                      |
|--------|-------|----------------------|
| Filter | brass | 100 $\mu$ m (bronze) |
|        | SS    | 150 $\mu$ m          |

### Pressure ranges

Inlet pres.  $P_1$  ( $P_2$  up to 10 bar): max. 40 bar

( $P_2 > 10$  bar): max. 100 bar

max. outlet pressure  $P_2$ : 1,0 / 1,5 / 2,5 / 4 / 10  
16 / 25 / 65 bar

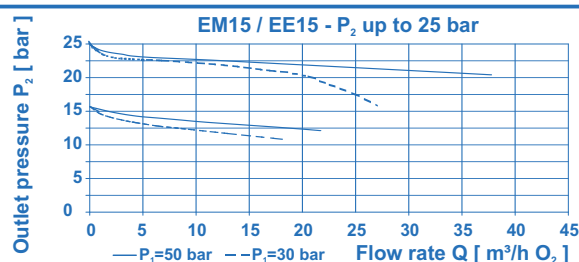
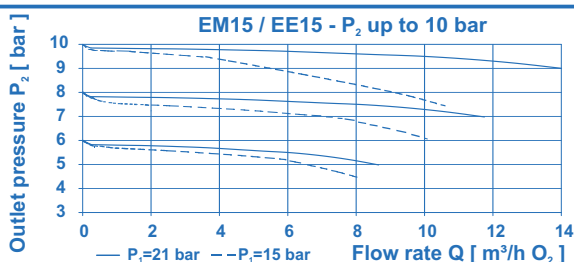
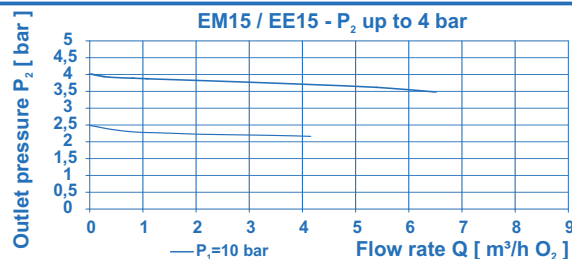
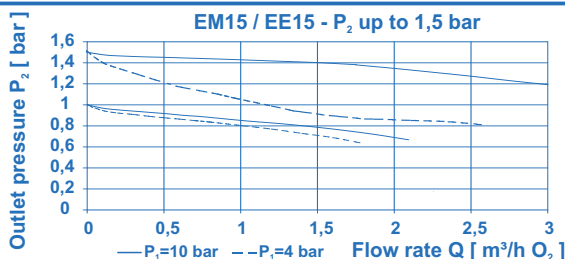
$P_2$  up to 10 bar: The pressure setting will be done at 10 bar inlet pressure. The limitation of the outlet pressure setting is approx.  $P_2 + 5\%$ .

$P_2 > 10$  bar: The inlet pressure for the pressure setting will be done according to the customer's / user's specification.

**Flow rates** see flow curves  
**with valve in the outlet**

### Connection to

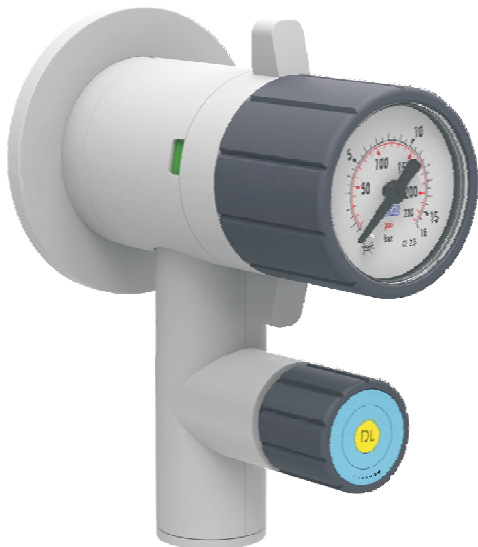
rear-wall connector: G 3/8" RH



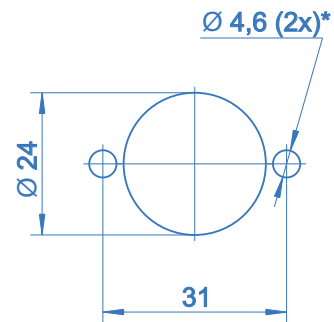
# EM15 / EE15

## Surface-mounted Type AW

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Surface-mounted tapping point  
with flow control / shut-off valve



Bore template for installation

\*) for self-cutting screw  
ME-T-50-16-TX25-A2-DIN7500  
(included)

### Specifications

- The surface-mounted tapping point is used for installations into panels independent of the panel thickness.
- The surface-mounted version consists of a rear-wall connector made of brass or stainless steel respectively, a round faceplate and assembly accessories (screws).

### Technical data

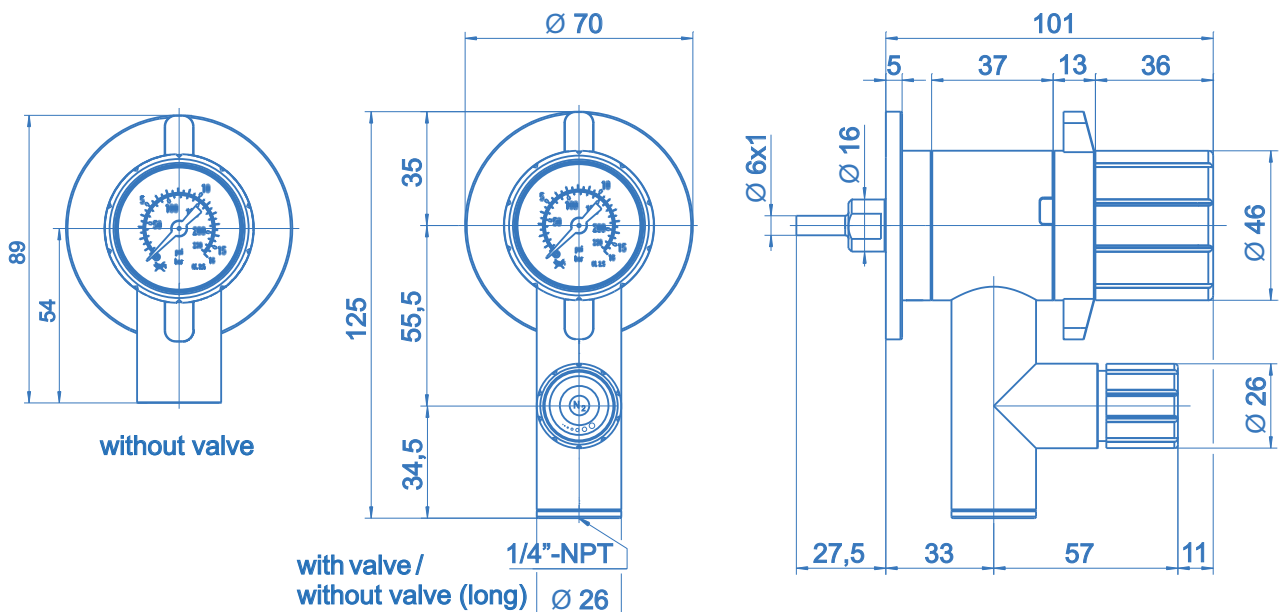
#### Materials

Rear-wall connector: Brass or  
SS 1.4404 (316L)  
Covers: Polypropylene GB30

**Connections** inlet: see ordering information  
outlet: 1/4"-NPT female

**Weight** ca. 0,8 kg

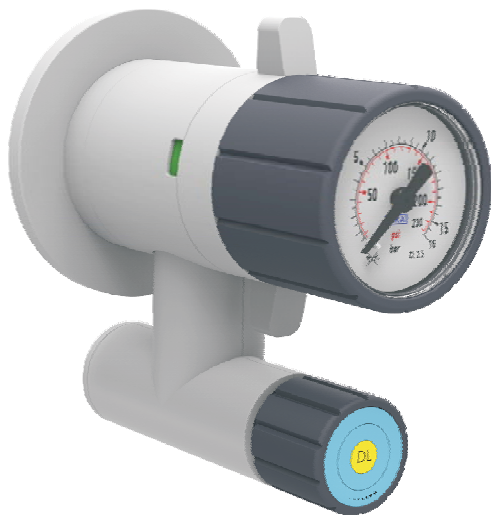
### Installation example surface-mounted tapping point with valve in the outlet



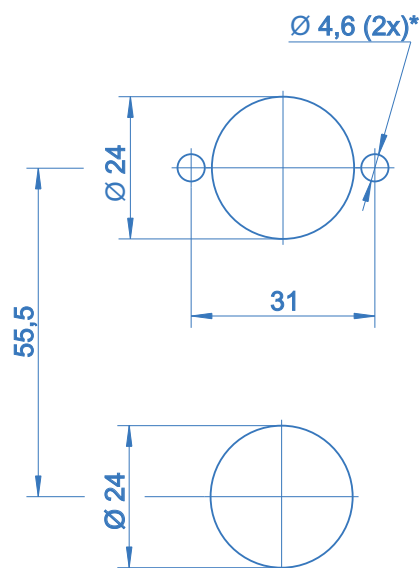
# EM15 / EE15

## Surface-mounted angle Type AE

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Surface-mounted angle tapping point with flow control / shut-off valve



Bore template for installation

\*) for self cutting screw  
ME-T-50-16-TX25-A2-DIN7500  
(included)

### Specifications

- The surface-mounted tapping point is used for installations into panels independent of the panel thickness.
- The surface-mounted angle version consists of a rear-wall connector made of brass or stainless steel respectively, a round faceplate and assembly accessories (screws).
- The rear outlet leads back into the panel.

### Technical data

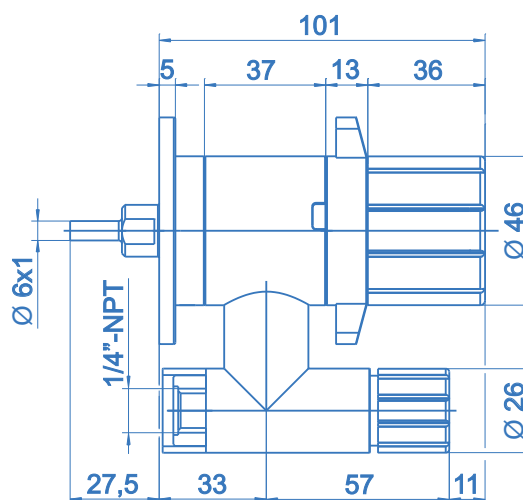
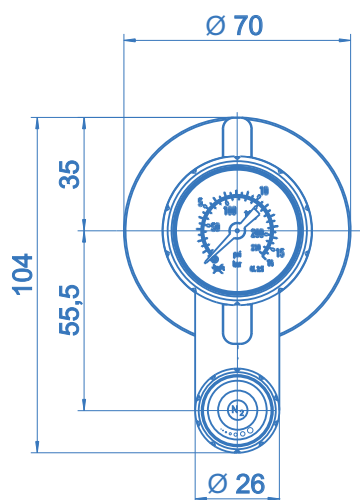
#### Materials

Rear-wall connector: Brass or SS 1.4404 (316L)  
Covers: Polypropylene GB30

**Connections** inlet: see ordering information  
outlet: 1/4"-NPT female

**Weight** ca. 0,8 kg

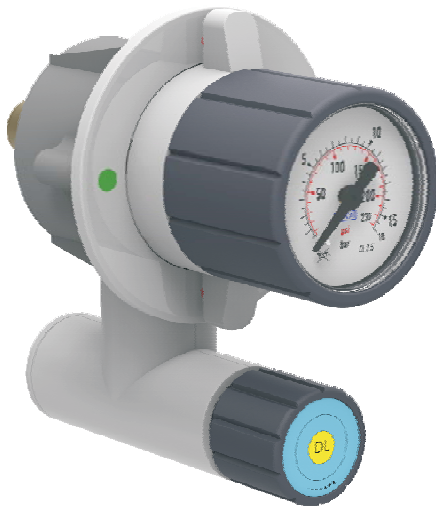
### Installation example surface-mounted angle version with valve in the outlet



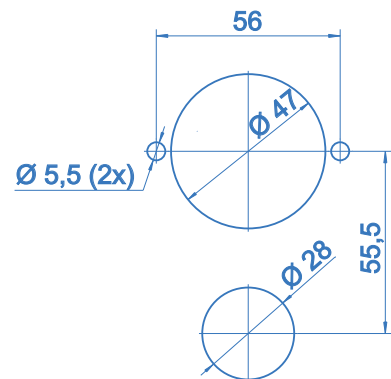
# EM15 / EE15

## Panel-mounted Type EP

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Panel-mounted tapping point  
with flow control / shut-off valve



Bore template for installation

### Specifications

- The panel-mounted tapping point is used for installations into panels between 2 and 8 mm thick.
- The panel-mounted version consists of an inlet adaptor made of brass or stainless steel respectively with 1/4"-NPT male thread, a plastic holder, a round faceplate and assembly accessories (screws).

### Technical data

#### Materials

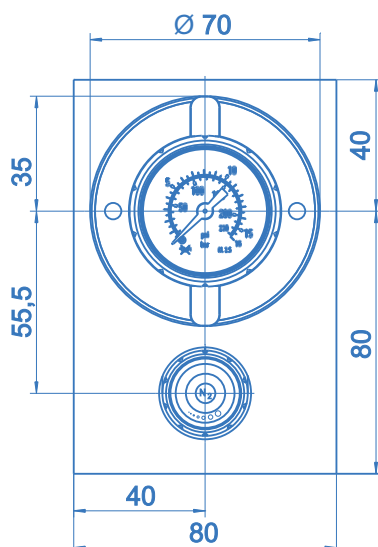
|                |                              |
|----------------|------------------------------|
| Inlet adaptor: | Brass or<br>SS 1.4404 (316L) |
| Holder:        | Polypropylene GB30           |
| Covers:        | Polypropylene GB30           |

#### Connections

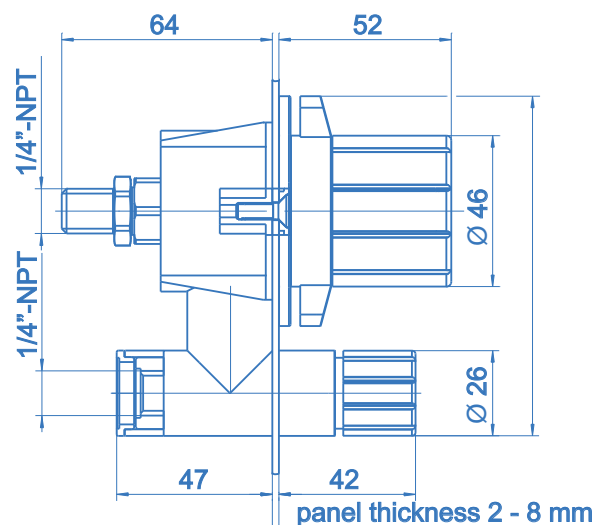
|         |                 |
|---------|-----------------|
| inlet:  | 1/4"-NPT male   |
| outlet: | 1/4"-NPT female |

|               |            |
|---------------|------------|
| <b>Weight</b> | ca. 0,8 kg |
|---------------|------------|

### Installation example panel-mounted tapping point with valve in the outlet



Front view with recommended dimension for multiple installations



Side view with interface dimensions for a panel 2 mm thick

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- The panel-mounted tapping point is used for installations into panels between 2 and 8 mm thick.
- The front version consists of an inlet adaptor made of brass or stainless steel respectively with 1/4"-NPT male thread, a plastic holder, a round faceplate and assembly accessories (screws, sticker).
- The outlet is to the front.

## Materials

|                |                              |
|----------------|------------------------------|
| Inlet adaptor: | Brass or<br>SS 1.4404 (316L) |
| Holder:        | Polypropylene GB30           |
| Covers:        | Polypropylene GB30           |

Inlet: 1/4"-NPT male  
Outlet: 1/4"-NPT female

ca. 0,8 kg

### Front view with recommended dimension for multiple installations

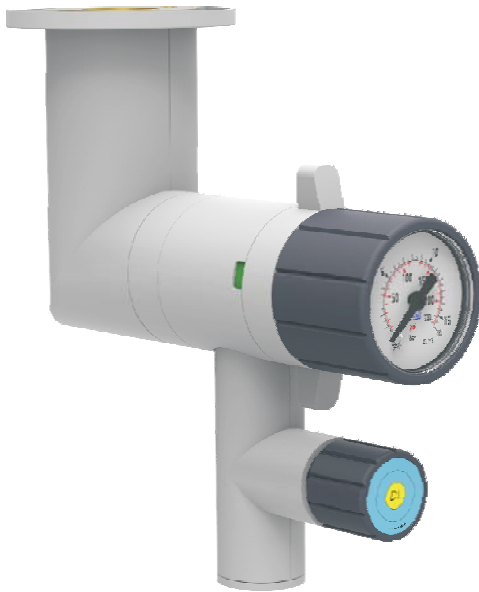




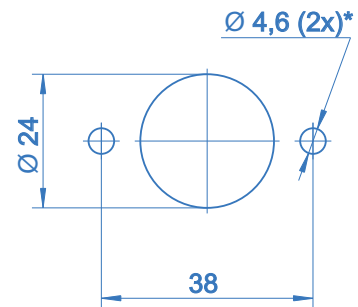
# EM15 / EE15

## Ceiling-mounted Type DC

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Ceiling-mounted tapping point  
with flow control / shut-off valve



Bore template for installation

\*) for self cutting screw  
ME-T-50-16-TX25-A2-DIN7500  
(included)

### Specifications

- The ceiling-mounted tapping point is used for installations at the ceiling.
- The ceiling-mounted version consists of a rear-wall connector made of brass or stainless steel respectively with an 1/4"-NPT female inlet, plastic covers, washer, a round faceplate and assembly accessories (screws, nuts).

### Technical data

#### Materials

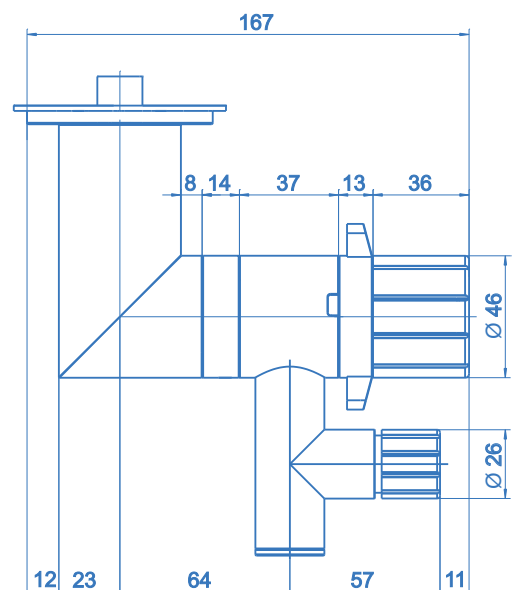
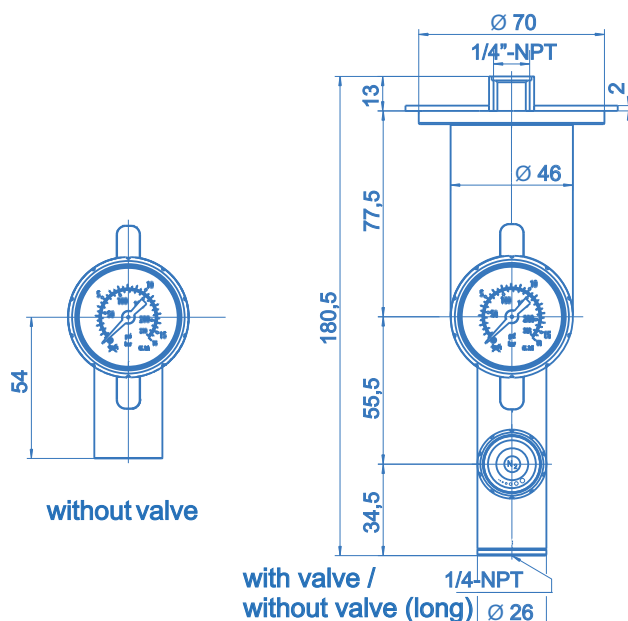
|                      |                    |
|----------------------|--------------------|
| Rear-wall connector: | SS 1.4404 (316L)   |
| Covers:              | Polypropylene GB30 |
| Washer:              | Polypropylene GB30 |

#### Connections

|         |                 |
|---------|-----------------|
| Inlet:  | 1/4"-NPT female |
| Outlet: | 1/4"-NPT female |

**Weight** ca. 1,2 kg

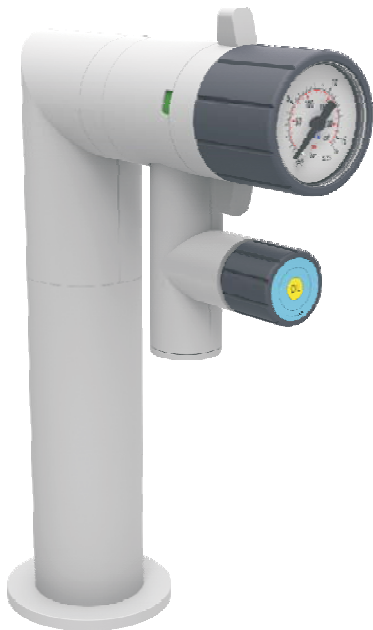
### Installation example ceiling-mounted tapping point with valve in the outlet



# EM15 / EE15

## Column-mounted Type SC

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Column-mounted tapping point with flow control / shut-off valve

### Specifications

- The column-mounted tapping point is used for installations on laboratory benches up to approx. 90 mm thickness.
- The column-mounted version consists of a metal column body, a metal connector with a tube (6x1 mm), plastic washer, plastic covers, a round faceplate and assembly accessories.
- The plastic covers of the metal column are acid and alkaline solutions resistant.

### Technical data

#### Materials

|                 |                    |
|-----------------|--------------------|
| Connector:      | SS 1.4404 (316L)   |
| Tube:           | SS 1.4404 (316L)   |
| Column body:    | Aluminium          |
| Washer, covers: | Polypropylene GB30 |

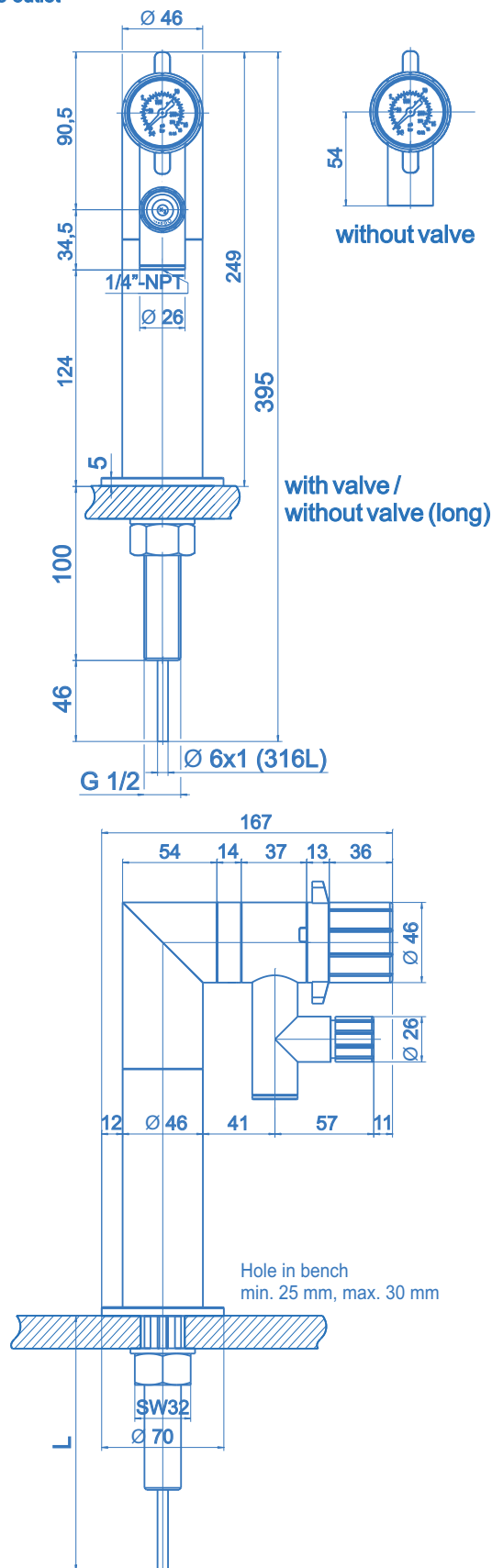
#### Connections

|         |                 |
|---------|-----------------|
| Inlet:  | Tube 6 x 1 mm   |
| Outlet: | 1/4"-NPT female |

**Installation length L** ca. 146 mm

**Weight** ca. 1,8 kg

Installation example column-mounted tapping point with valve in the outlet

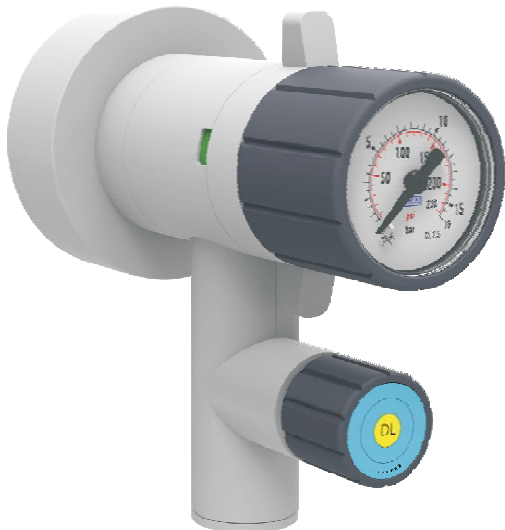




# EM15 / EE15

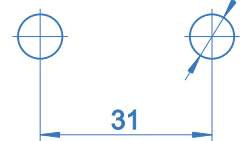
## Wall-mounted Type ES

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Wall-mounted tapping point with flow control / shut-off valve

Ø 8 (2x) for plug Ø 8 mm



Bore template for installation

### Specifications

- The wall-mounted tapping point is used for installations with surface-mounted pipe work.
- The wall-mounted version consists of a metal wall connector to connect both the gas line and the tapping point, a round faceplate and plastic covers.

### Technical data

#### Materials

Wall connector:

Brass or  
SS 1.4404 (316L)

Covers:

Polypropylene GB30

#### Connections

inlet:

1/4"-NPT female

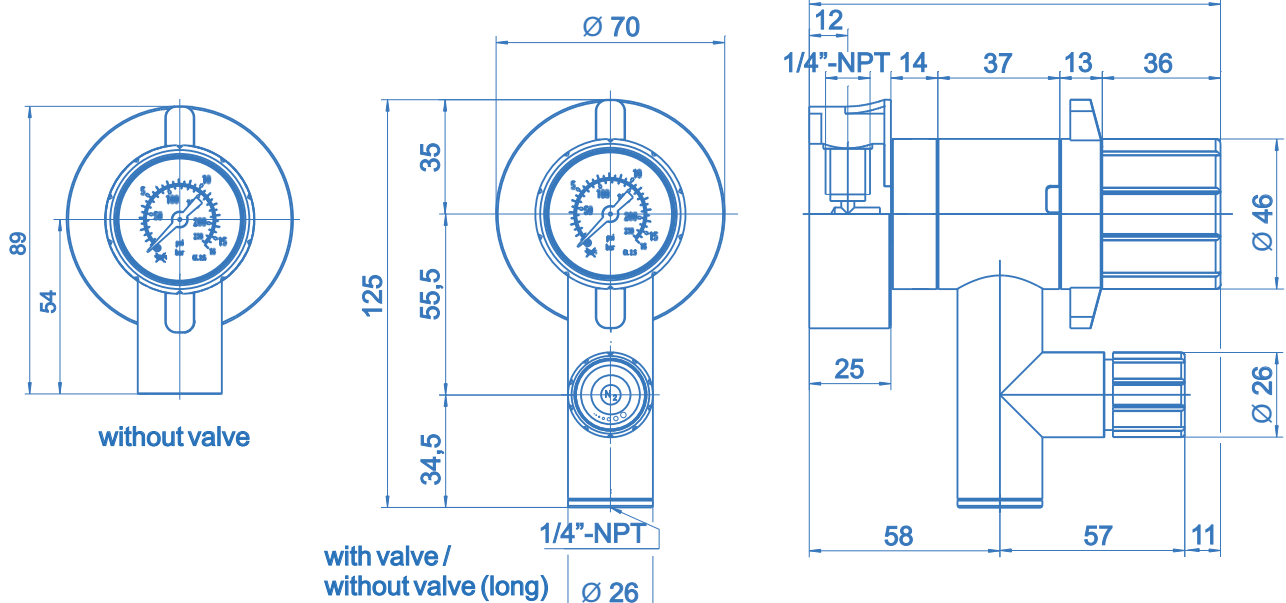
outlet:

1/4"-NPT female

#### Weight

ca. 1,0 kg

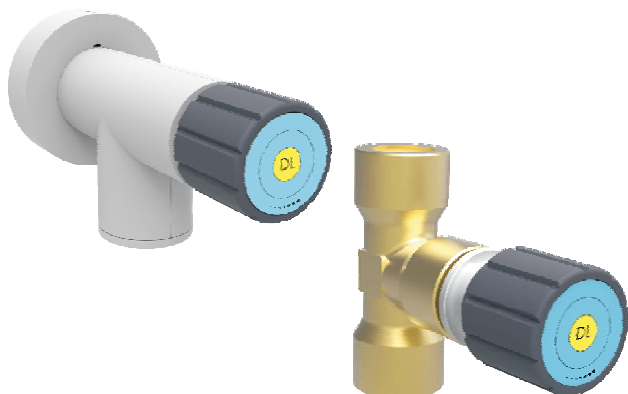
### Installation example wall-mounted tapping point with valve in the outlet



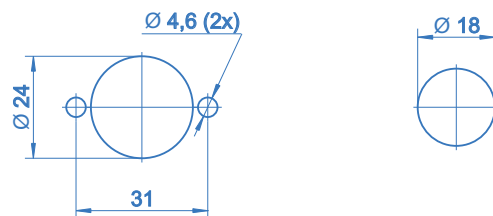
# VM15 / VE15

## Flow control / shut-off valves

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Flow control / shut-off valve for surface-mounting (angle version) and panel-mounting (globe version)



Bore template for surface-mounting (left) and panel-mounting (right)

### Specifications

- The flow control and shut-off valves are also available in addition to the laboratory tapping points.
- The valves come as surface- or panel-mounted type.
- There is a globe and an angle version in brass or stainless steel available.
- The valves are suitable for pressure ranges up to 100 bar

### Technical data

#### Materials

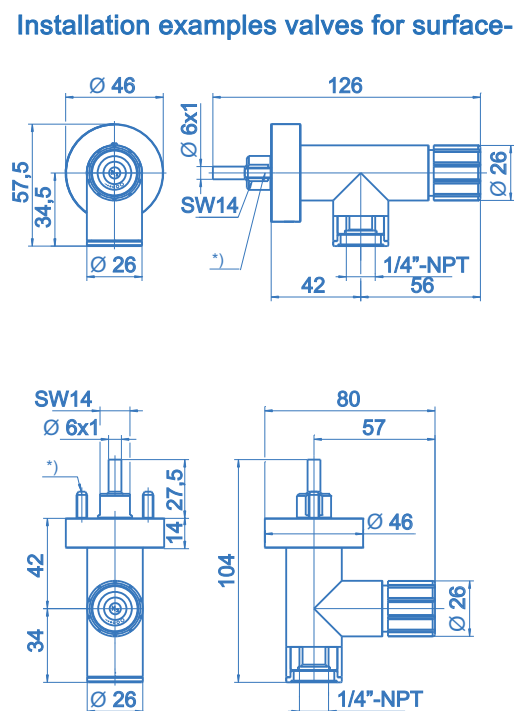
|                             |                           |
|-----------------------------|---------------------------|
| Body, flow control spindle: | Brass or SS 1.4404 (316L) |
| Valve seat:                 | PVDF                      |
| Diaphragm:                  | Hastelloy C276            |
| Covers:                     | Polypropylene GB30        |
| Spring:                     | Stainless steel 1.4310    |

#### Connections

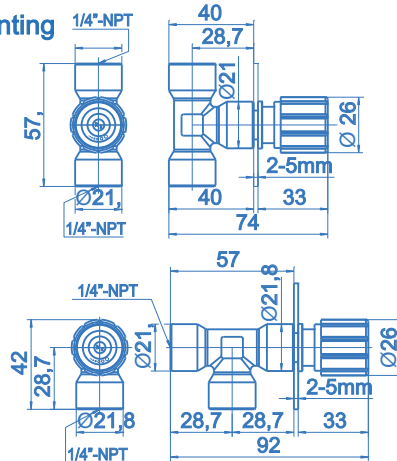
|         |                    |
|---------|--------------------|
| Inlet:  | see drawings below |
| Outlet: | 1/4"-NPT female    |

**Leak rate (to atmosphere)**  $10^{-8}$  bar cm<sup>3</sup>/s He

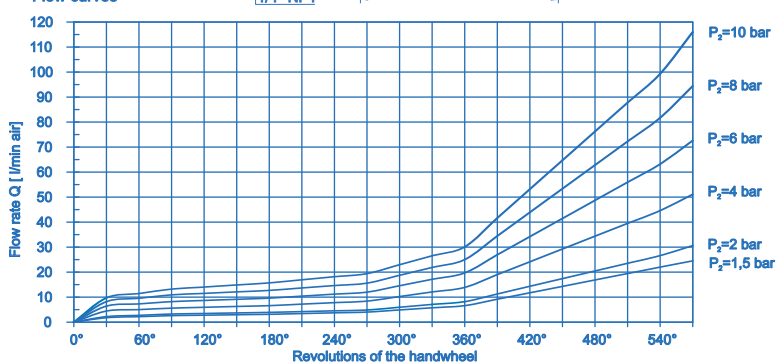
### Installation examples valves for surface- and panel-mounting



\*) Self cutting screw  
ME-T-50-16-TX25-A2-DIN7500 (included)



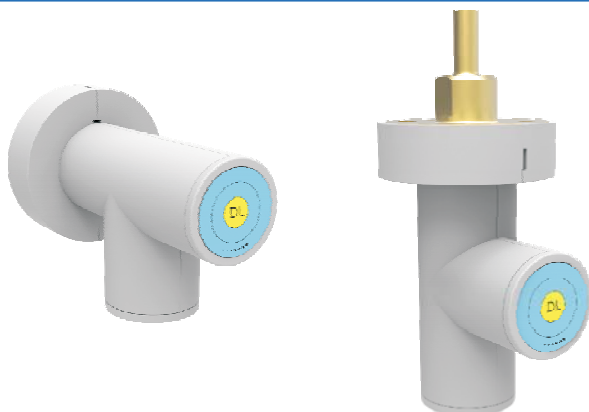
Flow curves



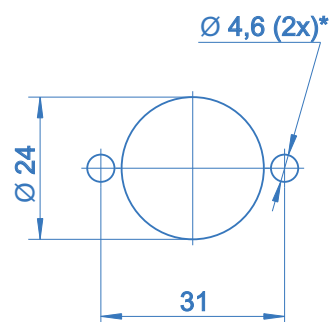
# VM15 / VE15

## Wall outlets

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Surface-mounted wall outlets  
(angle and globe version)



Bore template for wall outlet (surface-mounted)

\*) for self cutting screw ME-T-50-16-TX25-A2-DIN7500 (included)

### Specifications

- The wall outlets are also available in addition to the laboratory tapping points.
- The outlets come as surface-mounted type.
- There is a globe and an angle version in brass or stainless steel available.

### Technical data

#### Materials

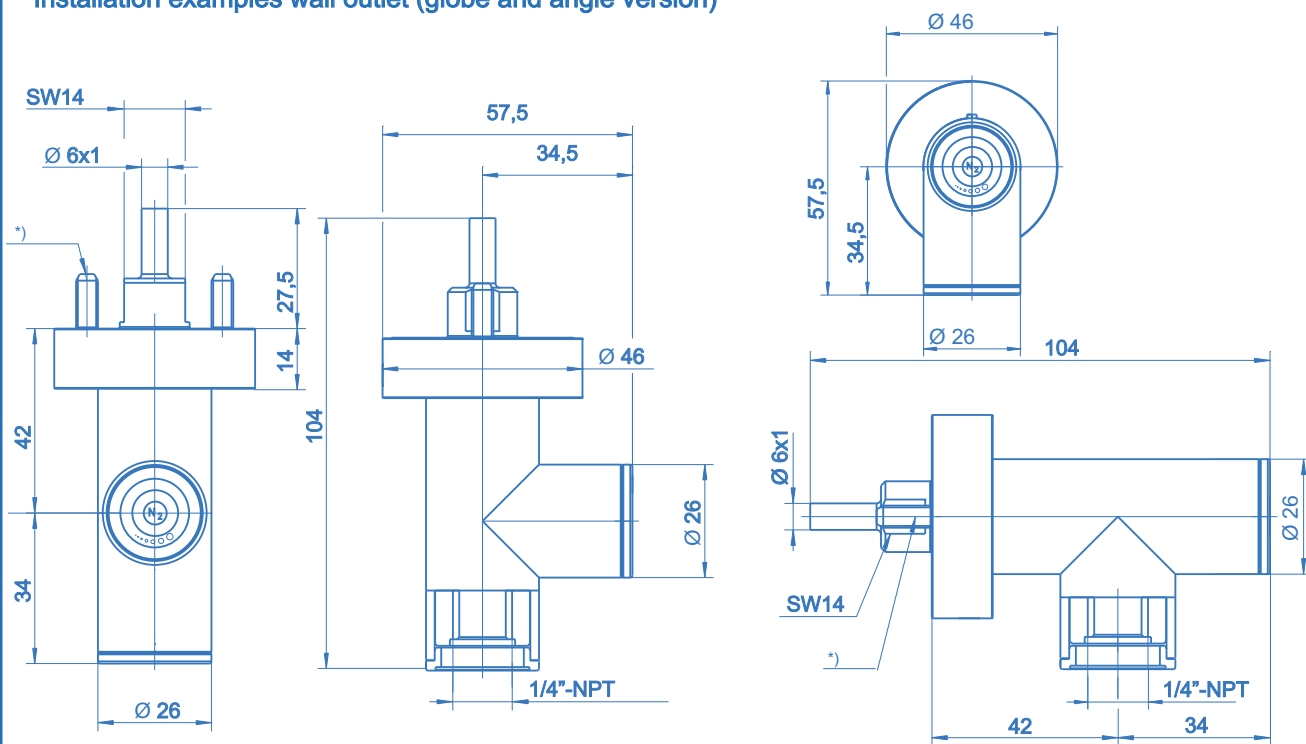
|             |                              |
|-------------|------------------------------|
| Body:       | Brass or<br>SS 1.4404 (316L) |
| Valve seat: | PTFE                         |
| Covers:     | Polypropylene GB30           |
| Spring:     | Stainless steel 1.4310       |

#### Connections

|         |                    |
|---------|--------------------|
| Inlet:  | see drawings below |
| Outlet: | 1/4"-NPT female    |

Leak rate (to atmosphere)  $10^{-8}$  bar  $\text{cm}^3/\text{s}$  He

### Installation examples wall outlet (globe and angle version)



\*) Self cutting screw  
ME-T-50-16-TX25-A2-DIN7500 (included)

# EM15 / EE15

## Rear-wall connectors

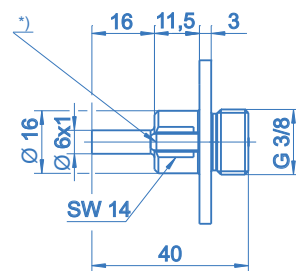
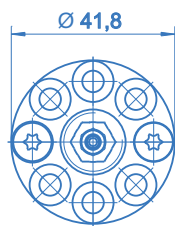
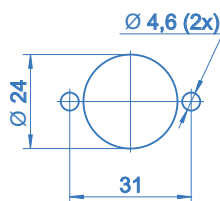
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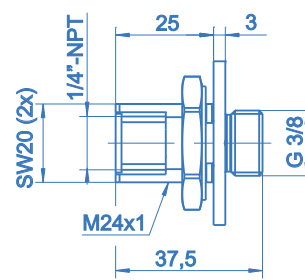
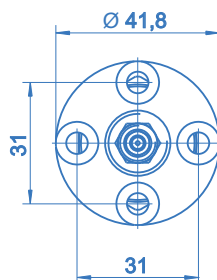
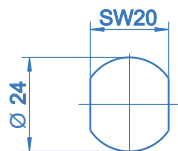
Rear-wall connectors (for surface-mounting AW and AE)  
with integrated shut-off valve

### Bore templates and dimensions

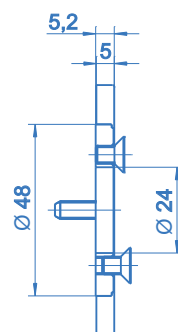
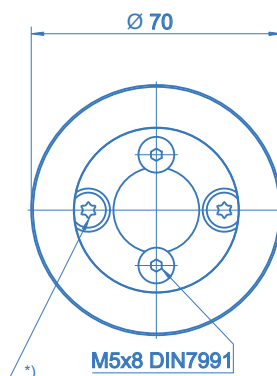
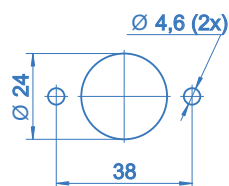
#### 6 mm tube stub



#### 1/4"-NPT female + M24x1 male



#### Adaptor for old bore template



\*) Self cutting screw  
ME-T-50-16-TX25-A2-DIN7500 (included)

# EM15 / EE15

## Ordering information

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Ordering information: Tapping points EM15 / EE15 series

**E M 15 - AW - 10 - 0 - V - Ar/H<sub>2</sub>**

### Material

- M** - Brass
- E** - Stainless steel

### Type

- AW** - Surface-mounted
- AE** - Surface-mounted angle version
- EP** - Panel-mounted
- EF** - Panel-mounted front
- DC** - Ceiling-mounted
- SC** - Column-mounted
- ES** - Wall-mounted
- GG** - Basic regulator w/o rear-wall conn. (G 3/8" RH)

### Pressure range

- 1,0** - max. outlet pressure 1,0 bar
- 1,5** - max. outlet pressure 1,5 bar
- 2,5** - max. outlet pressure 2,5 bar
- 5** - max. outlet pressure 5 bar
- 10** - max. outlet pressure 10 bar
- 16** - max. outlet pressure 16 bar  
(piston version up to 100 bar inlet pressure)
- 25** - max. outlet pressure 25 bar  
(piston version up to 100 bar inlet pressure)
- 65** - max. outlet pressure 65 bar  
(piston version up to 100 bar inlet pressure)
- 0** - Rear-wall connector incl. shut-off valve without pressure regulator

### Gas type

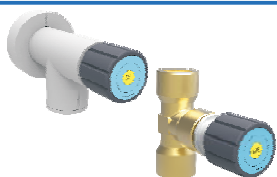
Please specify with order

### Outlet

- 0** 1/4"-NPT-female
- CM3,6...** Compression ring Brass [D<sub>n</sub>]
- CE3,6...** Compression ring SS [D<sub>n</sub>]
- SM** Hose connector brass
- SE** Hose connector stainless steel
- CSM(E)** Compr. ring + hose connector
- L** 1/4"-NPT-female (long)
- LCM3,6...** Compression ring brass [D<sub>n</sub>]
- LCE3,6...** Compression ring SS [D<sub>n</sub>]
- LSM** Hose connector brass
- LSE** Hose connector stainless steel
- LCSM(E)** Compr. ring + hose connector
- V** Valve (1/4"-NPT-female)
- VNPTw** Valve + angle 1/4"-NPT-f
- VCM(E)6** Valve with compression ring
- VSM(E)** Valve with hose connector
- VCSM(E)** Valve + compression ring and hose connector
- B** Blind without pressure regulator

### Inlet

- 0** **AW/AE:** 6 mm tube stub  
**EP/EF:** 1/4"-NPT male  
**DC/ES:** 1/4"-NPT female
- NPT** 1/4"-NPT female +  
M24x1 male (AW/AE)
- CM6,8...** Compression ring brass [D<sub>n</sub>]
- CE6,8...** Compression ring SS [D<sub>n</sub>]
- CM(E)6w** Angle compression ring [D<sub>n</sub>]
- RS** **SC:** SS-tube stub 6 x 1 mm
- X** without rear-wall connection



Ordering information: Valve / Wall outlet

**V M 15 - AW - 0 - EV - 0 - Ar/H<sub>2</sub>**

### Model

- V** - Valve
- A** - Wall outlet

### Material

- M** - Brass
- E** - Stainless steel

### Type

- AW** - Surface-mounted
- EP** - Panel-mounted (for valves only)

### Gas type (see above)

### Outlet (see above)

### Version

- DV** - Globe version
- EV** - Angle version

### Inlet (see above)

