

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

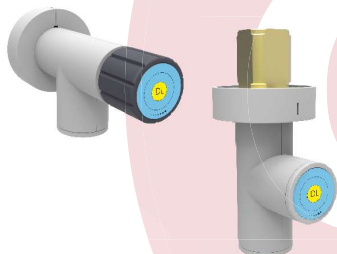
Laboratory equipment with rear wall inlet and rear outlet



Type EP

Valves / wall outlets

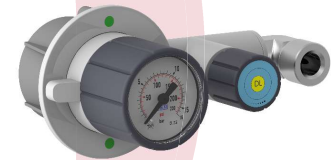
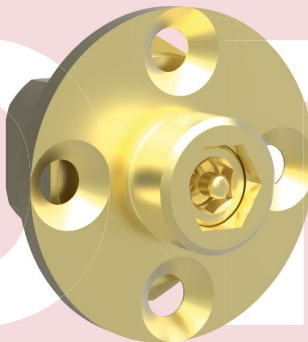
Laboratory equipment with rear wall inlet and front outlet



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

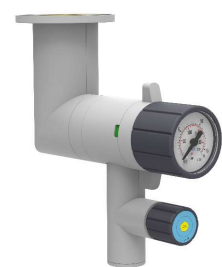
Column-mounted laboratory equipment and front outlet



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 hand wheel 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 SPECTROCLEAN® 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.
- Acetylene version optional with flashback arrester.

Technical data

Materials

Body	M15:	brass
	E15:	SS 1.4404 (316L)
Diaphragms:		Hastelloy C276
other gas wetted surfaces:		brass or SS 1.4404 (316L)
Valve cone:		SS 1.4404 (316L)
Valve seat:		PTFE
Cover:		Polypropylene GB30

Leak rate

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

Filter

150 μ m

Pressure ranges

Inlet 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 / 5 / 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. $P_2 + 5\%$.

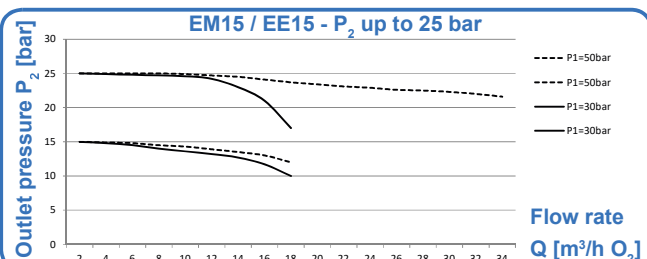
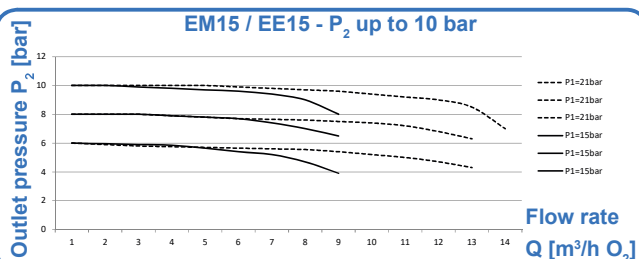
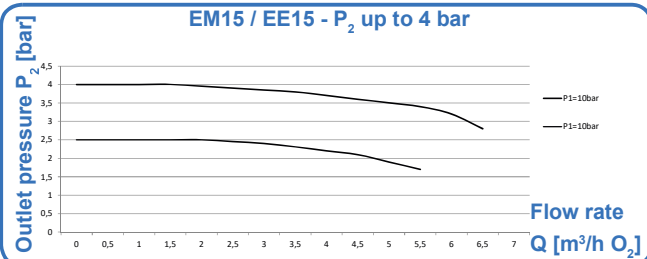
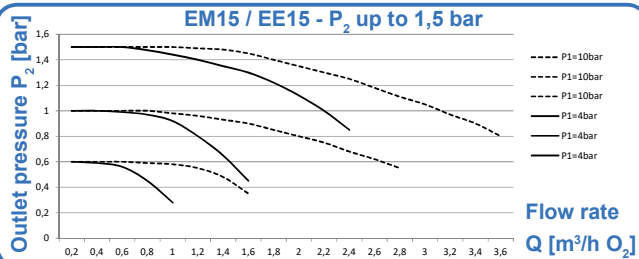
$P_2 > 10$ bar: The inlet pressure for the pressure setting will be done according to the customer's / user's specification.

Flow rates

see flow curves

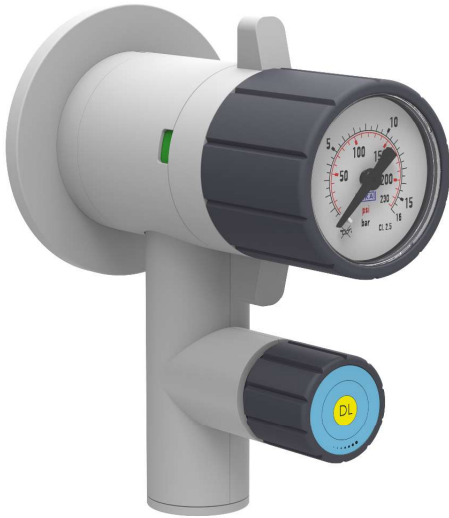
with valve in the outlet

Connection to rear-wall connector G 3/8" RH

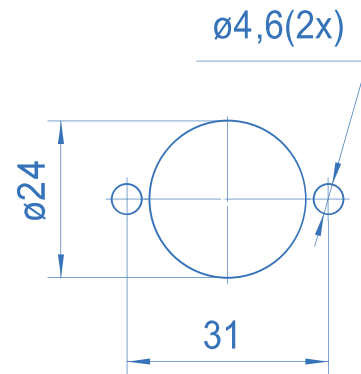


EM15 / EE15 Surface-mounted Type AW

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



Bore template for installation

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.

Technical data

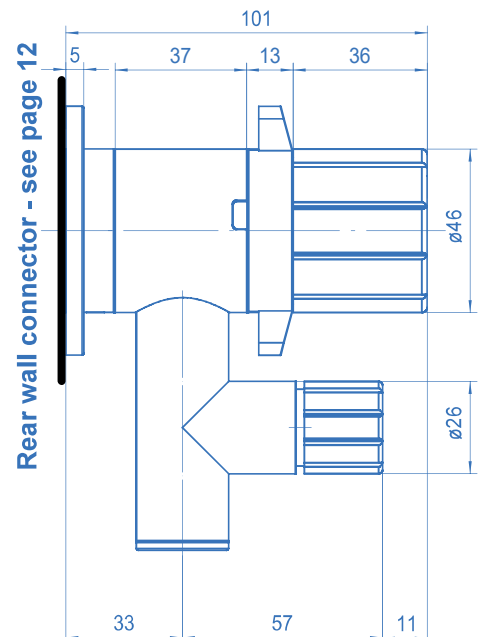
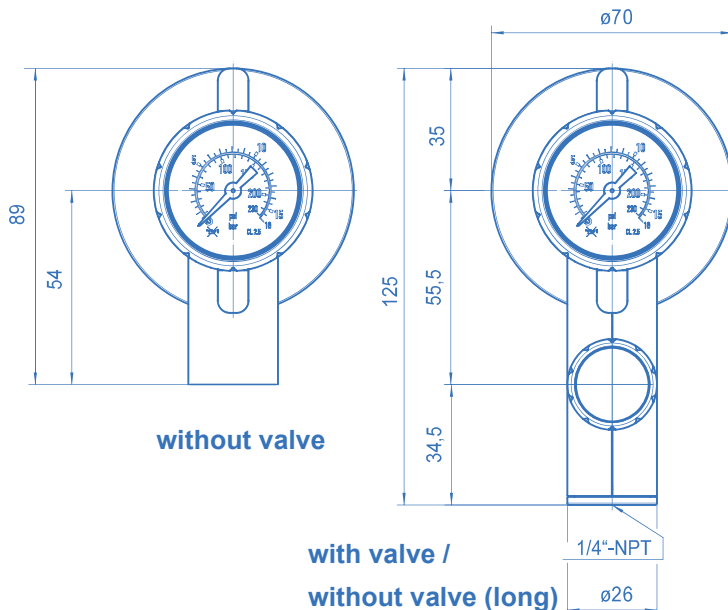
Materials

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

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

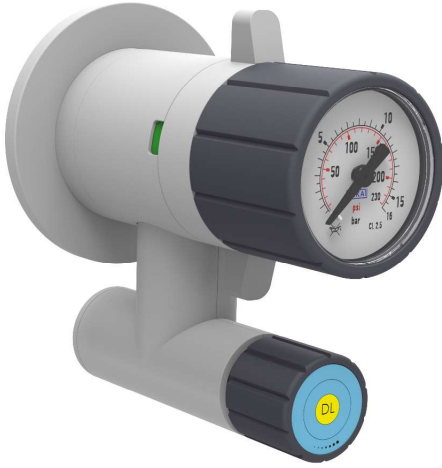
Weight ca. 0.8 kg

Surface-mounted type with valve in the outlet

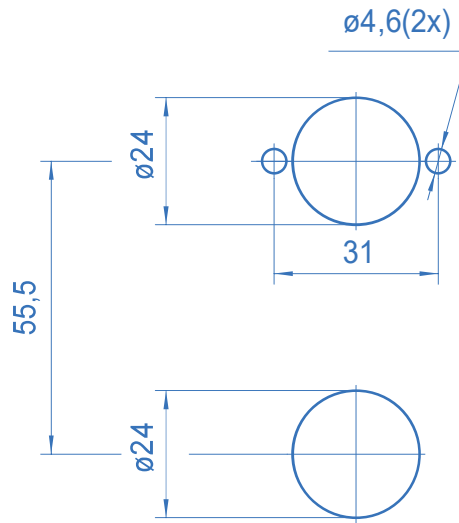


EM15 / EE15 Surface-mounted angle Type AE

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



Bore template for installation

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.
- The rear outlet leads back into the panel.

Technical data

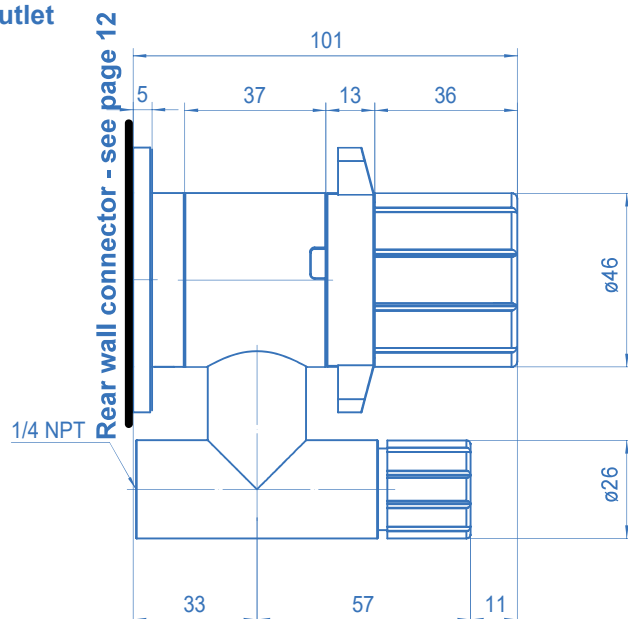
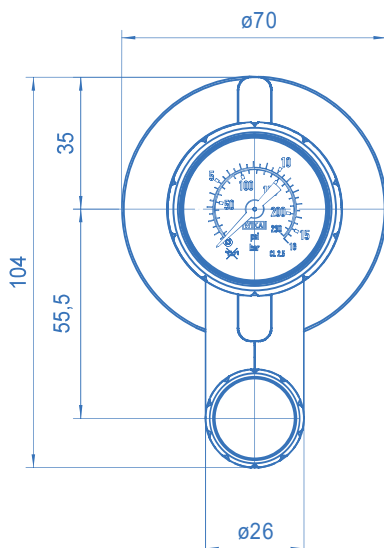
Materials

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

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

Weight ca. 0.8 kg

Surface-mounted angle type with valve in the outlet

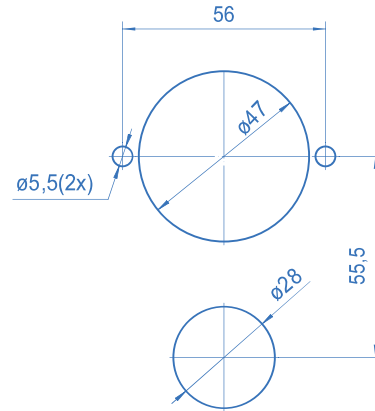


EM15 / EE15 Panel-mounted Type EP

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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 female thread, a plastic holder, a round faceplate (2-5 mm panel) and assembly accessories.

Technical data

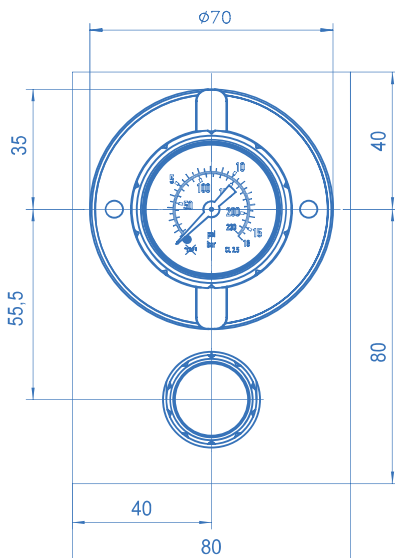
Materials

Inlet adaptor:	brass or SS 1.4404 (316L)
Holder:	Polypropylene GB30
Covers:	Polypropylene GB30

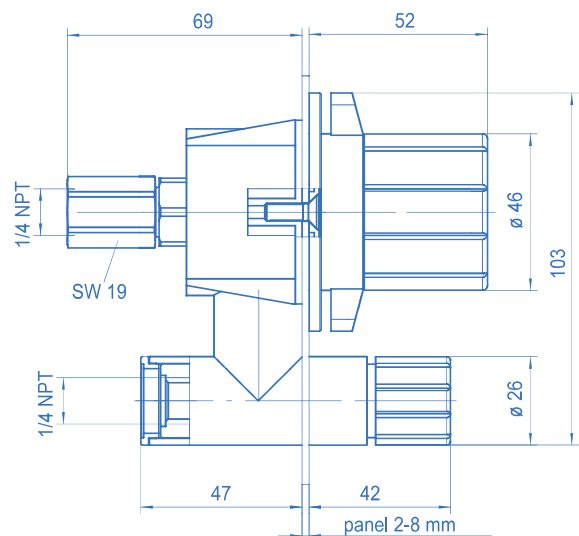
Connections	inlet:	1/4"-NPT female
	outlet:	1/4"-NPT female

Weight	ca. 0.8 kg
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Panel-mounted type with valve in the outlet



Front view with recommended modular dimensions



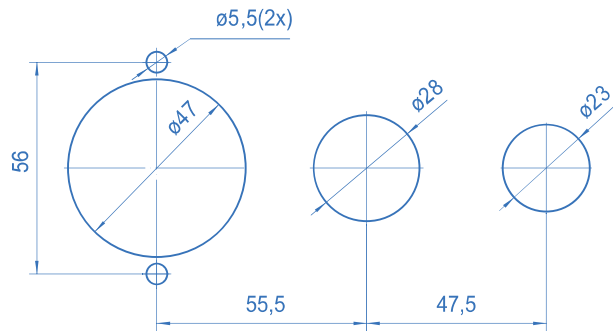
Side view with interface dimensions for a panel 2 mm thick

EM15 / EE15 Panel-mounted front Type EF

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Panel-mounted front 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 front version consists of an inlet adaptor made of brass or stainless steel respectively with 1/4"-NPT female thread, a plastic holder, a round faceplate (2-5 mm panel) and assembly accessories.
- The outlet is to the front.

Technical data

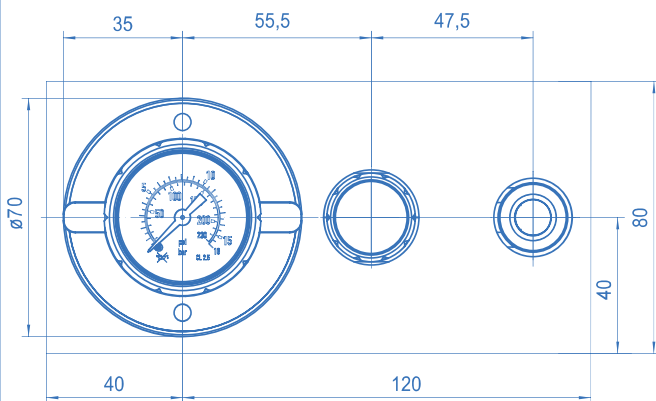
Materials

Inlet adaptor:	brass or SS 1.4404 (316L)
Holder:	Polypropylene GB30
Covers:	Polypropylene GB30

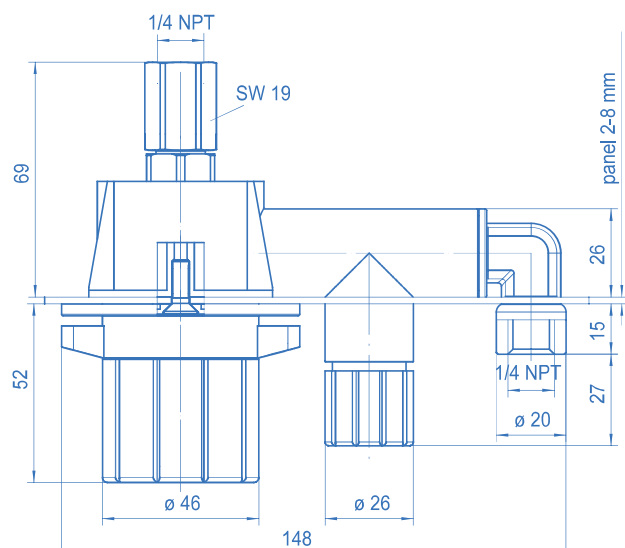
Connections	inlet:	1/4"-NPT female
	outlet:	1/4"-NPT female

Weight	ca. 0.8 kg
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Panel-mounted front type with valve in the outlet



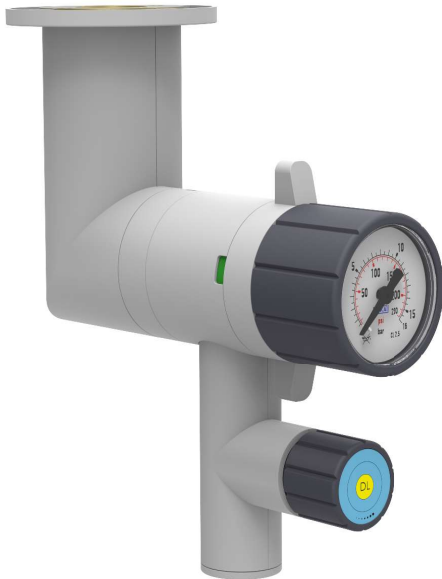
Front view with recommended modular dimensions



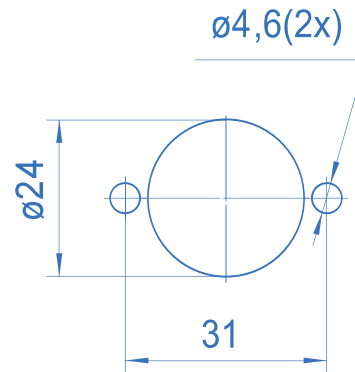
Top view with interface dimensions for a panel 2 mm thick

EM15 / EE15 Ceiling-mounted Type DC

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



Bore template for installation

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.

Technical data

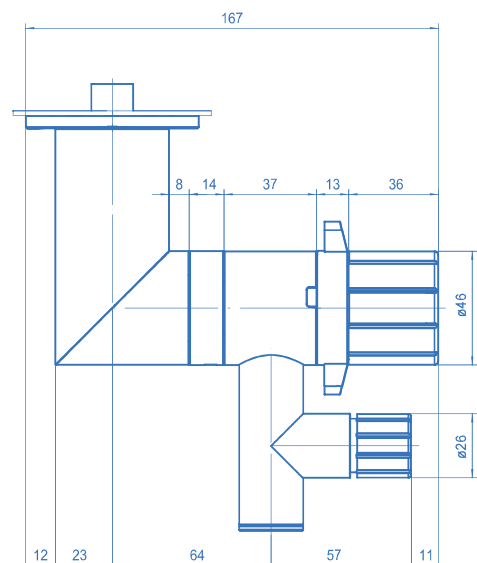
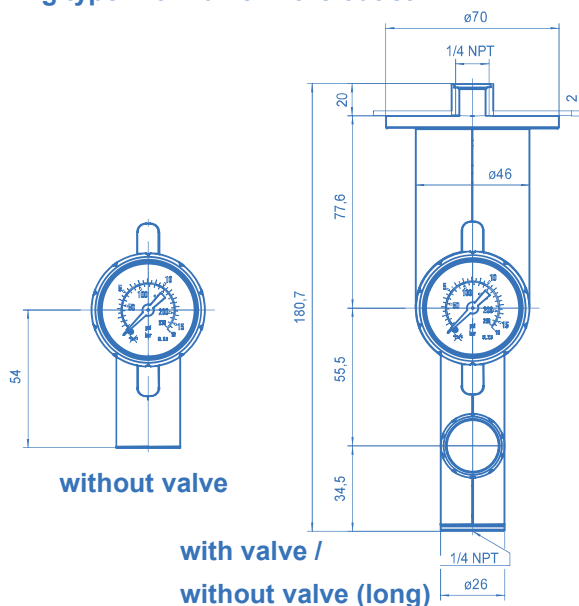
Materials

Rear-wall connector	Brass
P ₁ up to 40 bar	SS 1.4404 (316L)
P ₁ > 40 bar	Polypropylene GB30
Covers:	Polypropylene GB30
Washer:	Polypropylene GB30

Connections	inlet:	1/4"-NPT female
	outlet:	1/4"-NPT female

Weight	ca. 1.2 kg
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Ceiling type 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

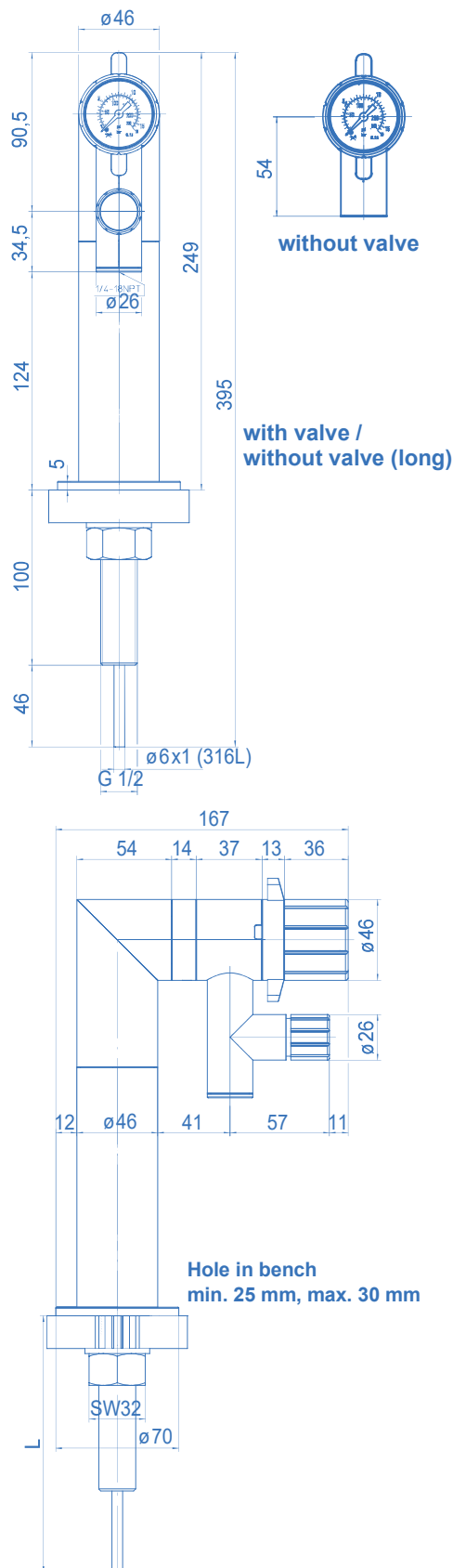
Materials

Connector:	SS 1.4404 (316L)
Tube:	SS 1.4404 (316L)
Column body:	Aluminium
Washer:	Polypropylene GB30
Covers:	Polypropylene GB30

Connections	inlet:	tube 6x1 mm
	outlet:	1/4"-NPT female

Weight	ca. 1.8 kg
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Column-mounted type with valve in the outlet



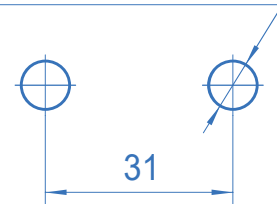
EM15 / EE15 Wall-mounted Type ES

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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

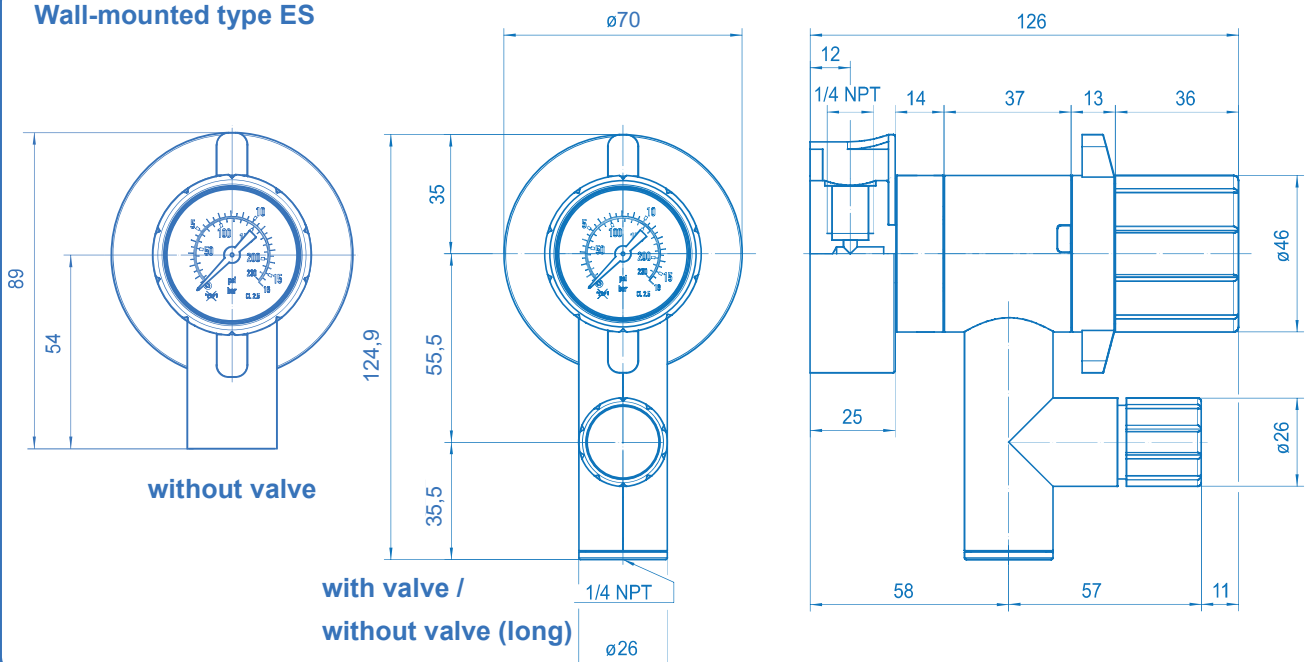
Materials

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

Wall-mounted type ES

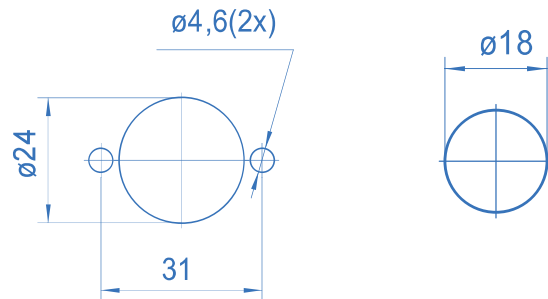


VM15 / VE15 Flow control / shut-off valves

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Flow control / shut-off valve for surface mounting (angle) 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

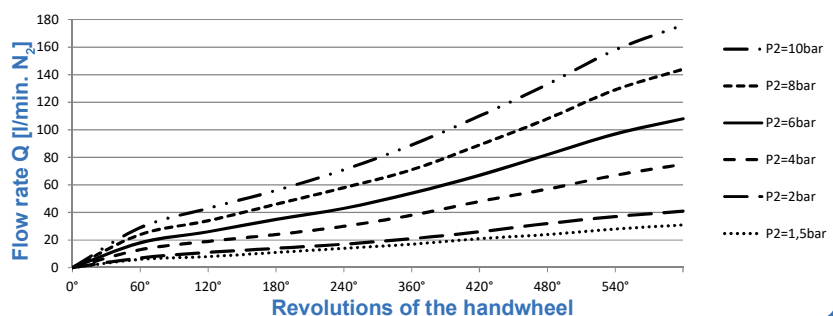
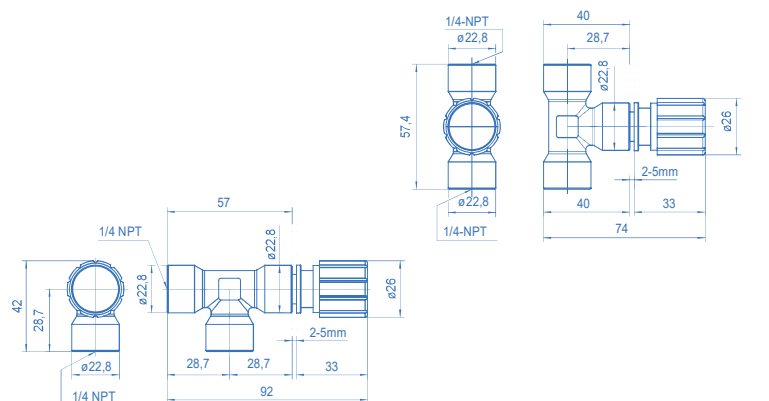
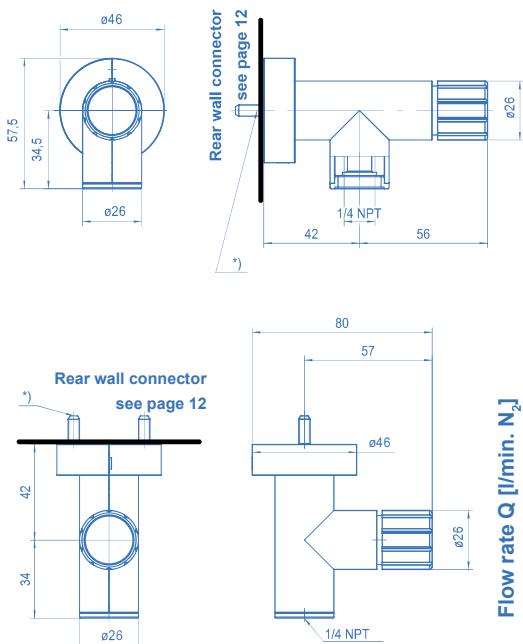
Materials

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

Connections inlet: see drawings below
 outlet: 1/4"-NPT female

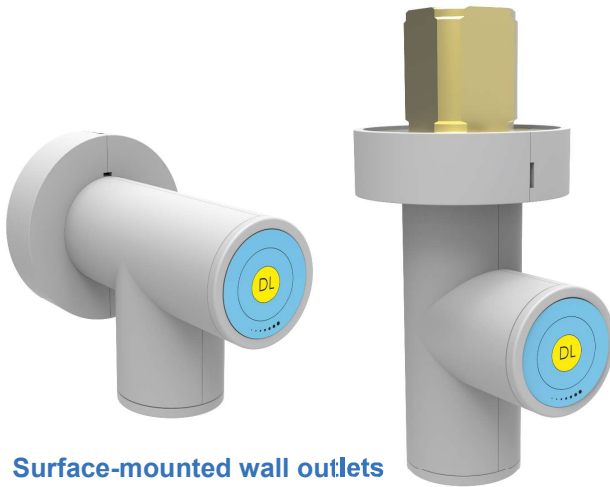
Leak rate (to atmosphere) 10^{-8} mbar l/s He

Valves for surface- and panel mounting

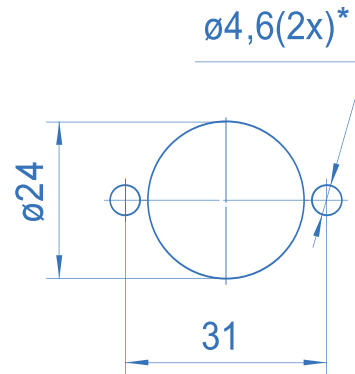


AM15 / AE15 Wall outlets

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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

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

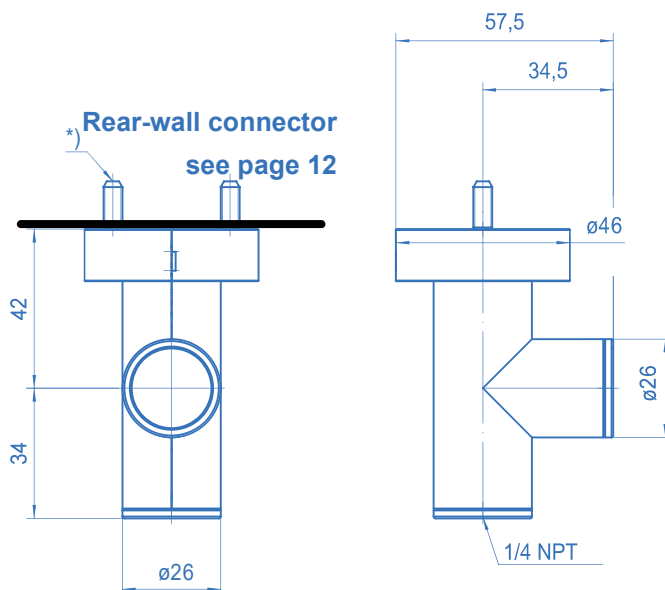
Materials

Body:	brass or SS 1.4404 (316L)
Valve seat:	PTFE
Covers:	Polypropylene GB30
Spring:	SS 1.4310

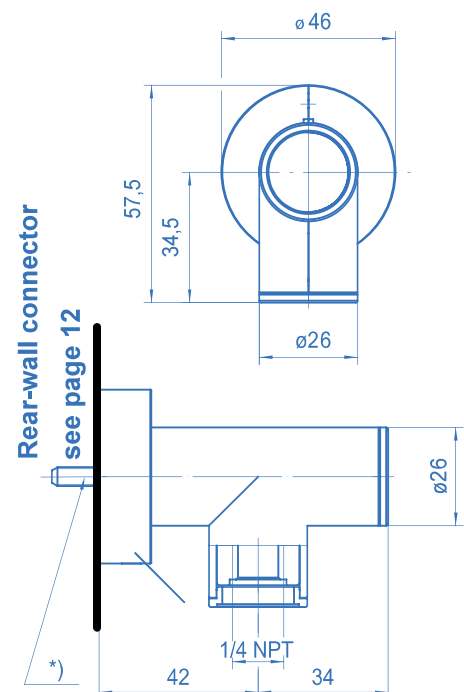
Connections	inlet:	see drawings below
	outlet:	1/4"-NPT female

Leak rate (to atmosphere)	10^{-8} mbar l/s He
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Wall outlet (globe and angle version)



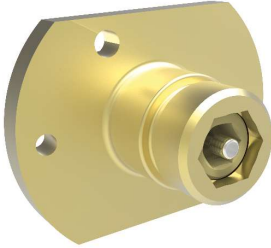
*) for self-cutting screw ME-T-50-16-TX25-A2-DIN7500



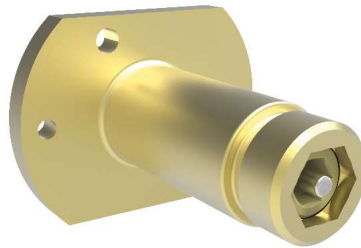
EM15 / EE15 Rear-wall connectors

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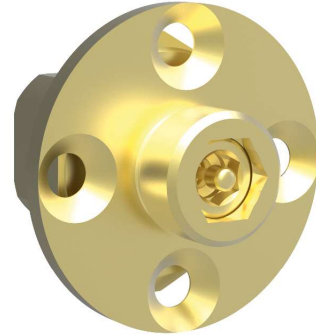
L7



L30



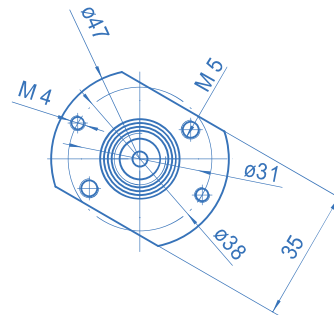
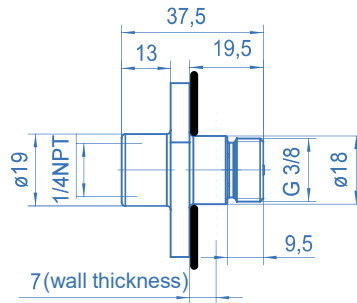
NPT



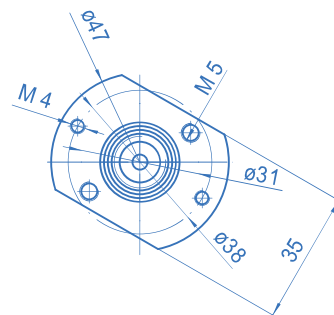
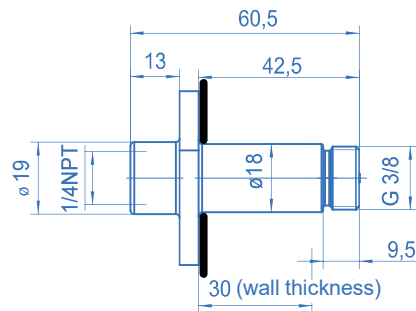
Rear-wall connectors (for surface-mounting AW and AE)
with integrated shut-off valve

Bore template and dimensions

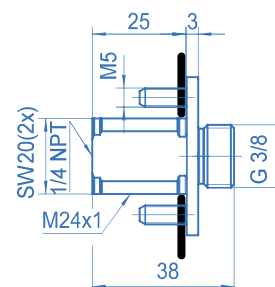
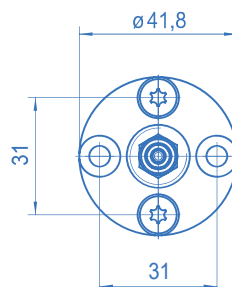
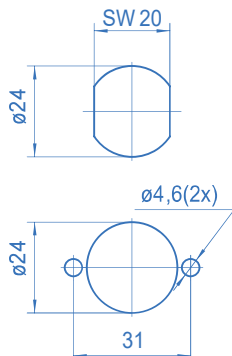
1/4"-NPT female / 7 mm wall thickness (rear installation)



1/4"-NPT female / 30 mm wall thickness (rear installation)



1/4"-NPT female + M24x1 male (front installation)



EM15 / EE15 Ordering information

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Ordering information: Tapping points EM15 / EE15 series

EM 15 - AW - 10 - 0 - V - Ar/H2

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 $P_{1,max.} = 100$ bar)
25	max. outlet pressure 25 bar (piston version up to $P_{1,max.} = 100$ bar)
65	max. outlet pressure 65 bar (piston version up to $P_{1,max.} = 100$ bar)
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 [DN]
CE3/6/...	Compression ring SS [DN]
SM	Hose connector brass
SE	Hose connector SS
CSM(E)	Compr. ring+hose connector
FS	Flashback arrester

L

L	1/4"-NPT female (long)
LCM3/6/...	Compression ring brass [DN]
LCE3/6/...	Compression ring SS [DN]
LSM	Hose connector brass
LSE	Hose connector SS
LCSM(E)	Compr. ring+hose connector

V	Valve (1/4"-NPT female)
VCM(E)6	Valve with compression ring
VSM(E)	Valve with hose connector
VCSM(E)	Valve + compression ring and hose connector
B	Blind w/o pressure regulator

Inlet

0	EP/EF: 1/4"-NPT female
0	DC/ES: 1/4"-NPT female
L7	AW/AE: 1/4"-NPT f / 7 mm
L30	AW/AE: 1/4"-NPT f / 30 mm
NPT	AW/AE: 1/4"-NPT female + M24x1 male
CM6/8/...	Compression ring brass [DN]
CE6/8/...	Compression ring SS [DN]
CM(E)6w	angle compression ring [DN]
RS	SS-tube stub 6x1 mm
X	without rear-wall connection



Ordering information: Valve / Wall outlet

VM 15 - AW - 0 - EV - 0 - Ar/H2

Model

V	Valve
A	Wall outlet

Material

M	brass
E	Stainless steel

Type

see above

GG	Basic unit w/o rear-wall conn. (G 3/8" RH)
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Gas type (see above)

Outlet (see above)

Version

DV	Globe version
EV	Angle version

Inlet (see above)

