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

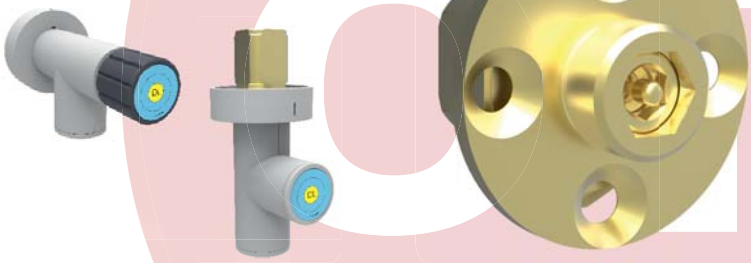
Surface-mounted angle
Laboratory equipment with rear wall inlet and rear outlet

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

spectron
Gas Control Systems

Compact laboratory tapping points EM15 / EE15


with control / shut-off valve


without valve (long)


without valve


blind without regulator

Specifications

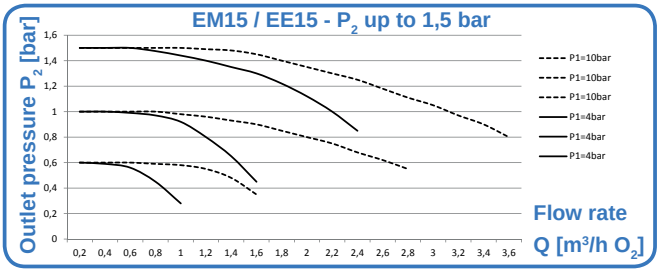
- The special laboratory tapping points incorporate the functions shut-off, pressure regulation and pressure indication in one compact, ergonomic unit.
- EM15: for non-corrosive gases up to quality 6.0
- EE15: for corrosive gases and gas mixtures with corrosive components up to quality 6.0
- The pressure 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.

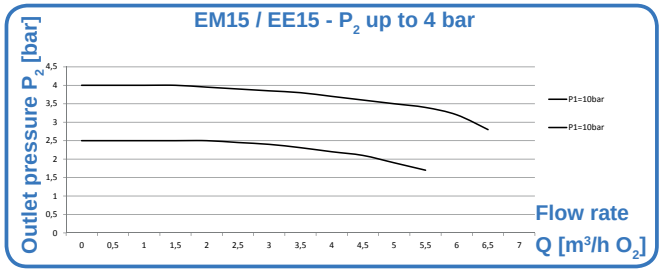
Technical data

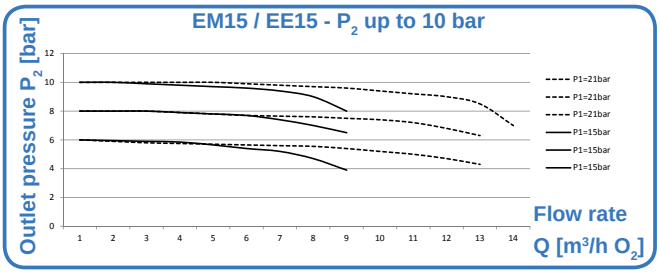
Materials		
Body	M15:	brass
	E15:	SS 1.4404 (316L)
Diaphragms:		Hastelloy C276
other gas wetted surfaces:		brass or SS 1.4404 (316L)
Valve cone:		SS 1.4404 (316L)
Valve seat:		PTFE
Cover:		Polypropylene GB30
Leak rate (to atmosphere):		10^{-8} mbar l/s He
Filter		150 µm
Pressure ranges		
Inlet P_1 (P_2 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

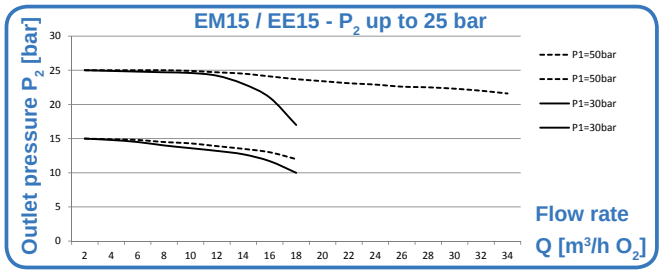
P_2 up to 10 bar: The pressure setting will be done at 10 bar inlet pressure. The limitation of the outlet pressure setting is approx. P_2 + 5%.
P_2 > 10 bar: The inlet pressure for the pressure setting will be done according to the customer´s / user´s specification.

Flow rates with valve in the outlet	see flow curves
Connection to rear-wall connector	G 3/8“ RH



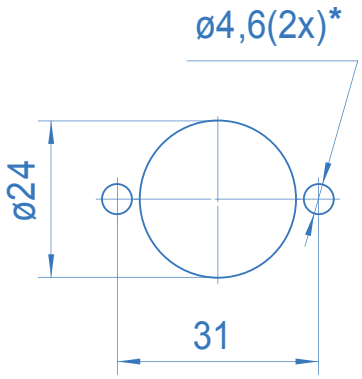






EM15 / EE15
Surface-mounted Type AW

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



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

Bore template for installation

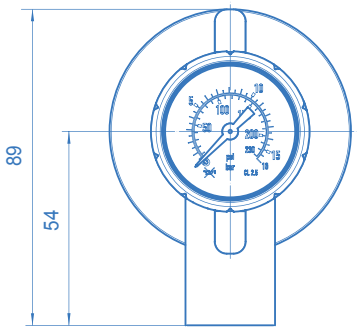
Specifications

- 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.

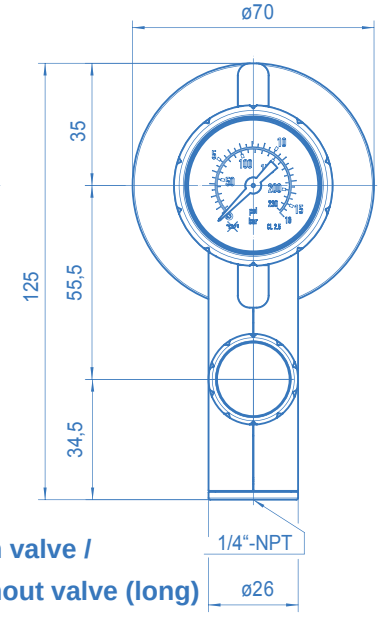
Technical data

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

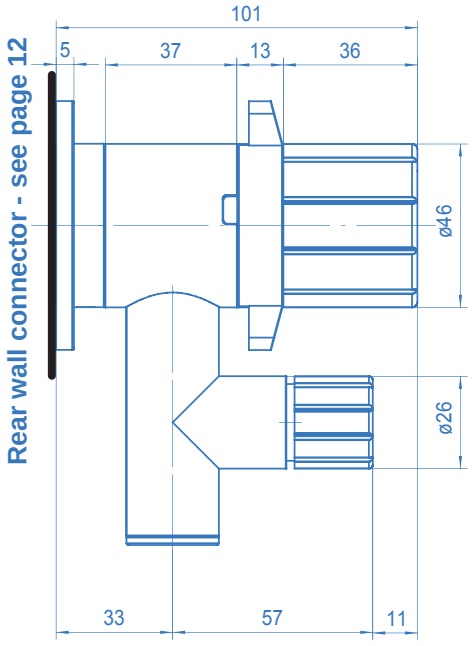
Surface-mounted type with valve in the outlet



without valve

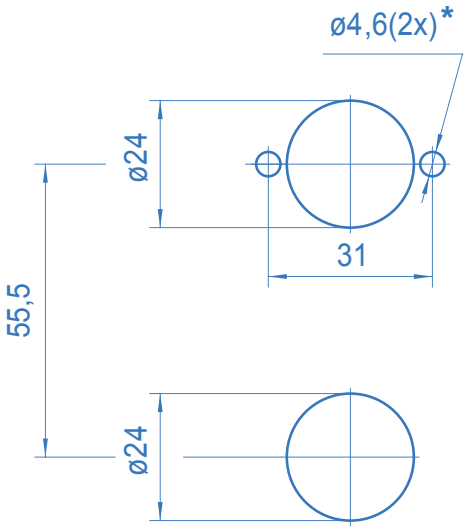


with valve / without valve (long)



EM15 / EE15
Surface-mounted angle Type AE

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



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

Bore template for installation

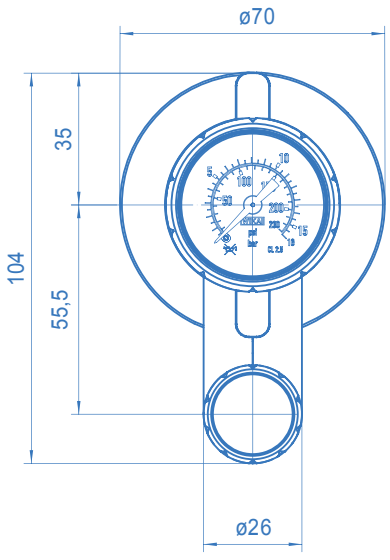
Specifications

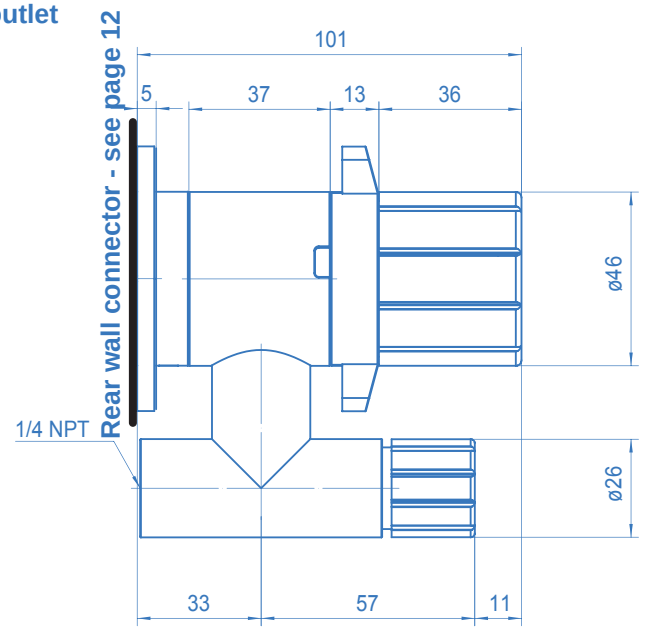
- The surface-mounted tapping point is used for installations into panels independent of the panel thickness.
- The surface-mounted angle version consists of a rear-wall connector made of brass or stainless steel respectively, a round faceplate and assembly accessories.
- The rear outlet leads back into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

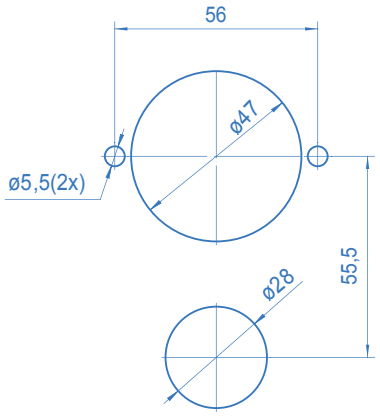
Surface-mounted angle type with valve in the outlet





EM15 / EE15
Panel-mounted Type EP

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



Bore template for installation

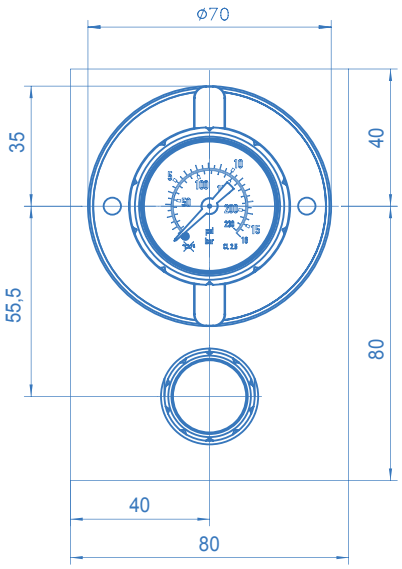
Specifications

- 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.

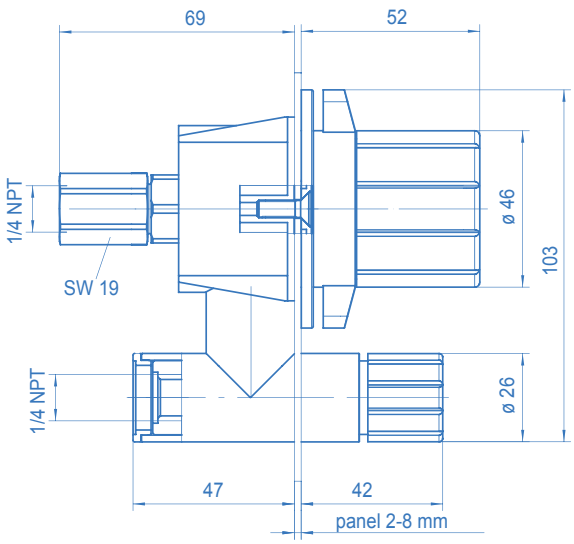
Technical data

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

Panel-mounted type with valve in the outlet



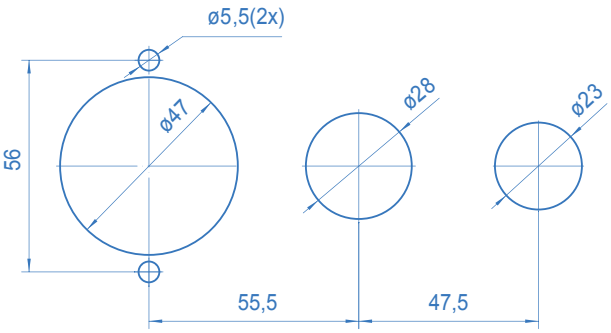
Front view with recommended modular dimensions



Side view with interface dimensions for a panel 2 mm thick

EM15 / EE15
Panel-mounted front Type EF

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



Bore template for installation

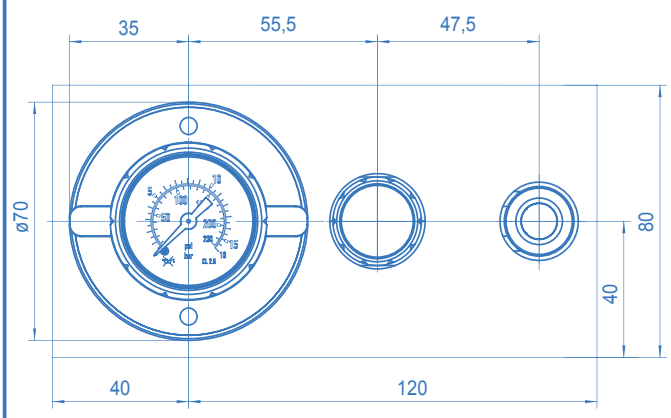
Specifications

- 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.

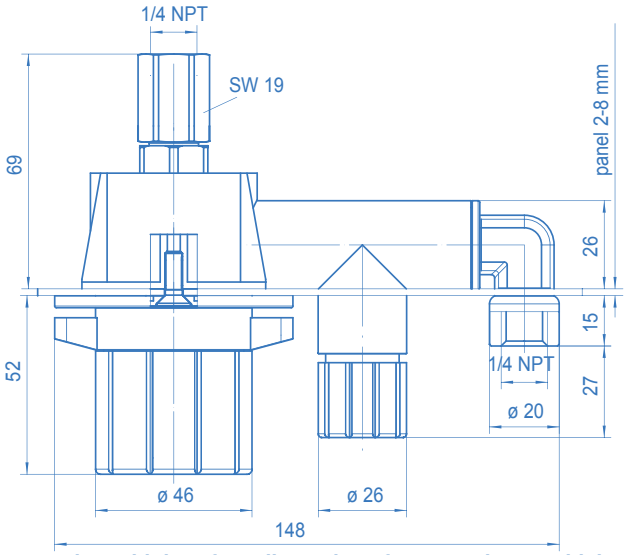
Technical data

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

Panel-mounted front type with valve in the outlet



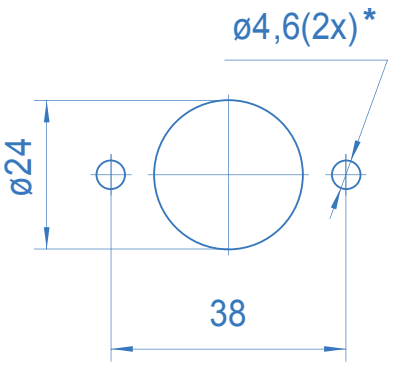
Front view with recommended modular dimensions



Top view with interface dimensions for a panel 2 mm thick

EM15 / EE15
Ceiling-mounted Type DC

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



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

Bore template for installation

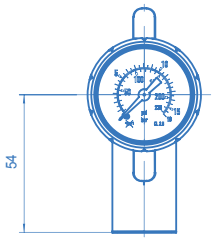
Specifications

- 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.

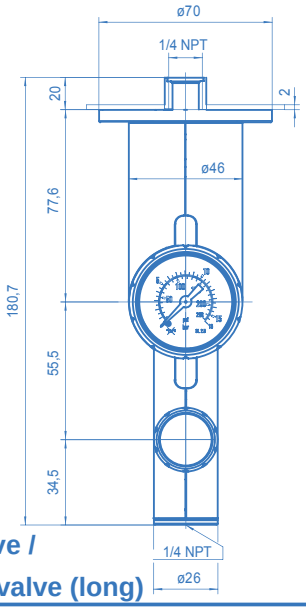
Technical data

Materials		
Rear-wall connector		
P_1 up to 40 bar		Brass
P_1 > 40 bar		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

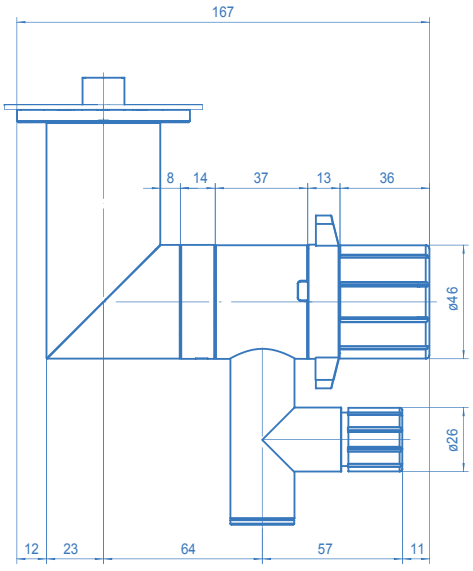
Ceiling type with valve in the outlet



without valve



with valve / without valve (long)



EM15 / EE15
Column-mounted Type SC

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

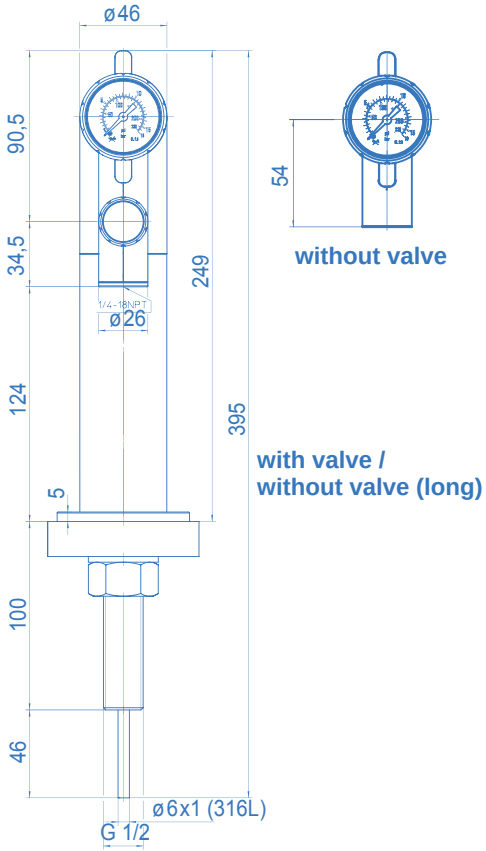
Specifications

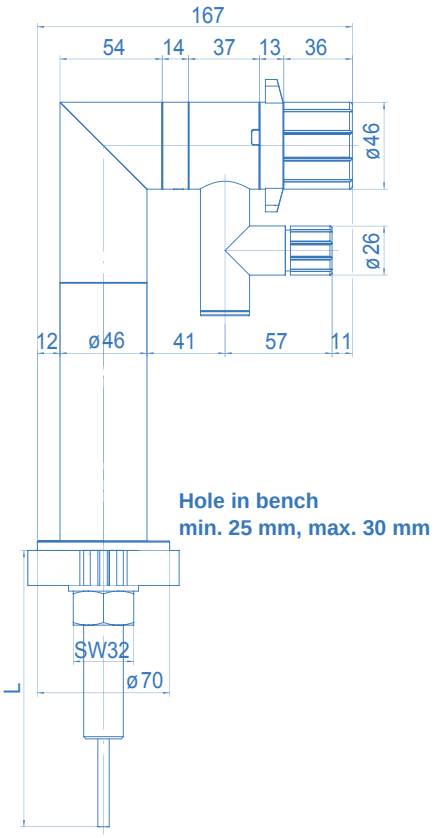
- The column-mounted tapping point is used for installations on laboratory benches up to approx. 90 mm thickness.
- The column-mounted version consists of a metal column body, a metal connector with a tube (6x1 mm), plastic washer, plastic covers, a round faceplate and assembly accessories.
- The plastic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

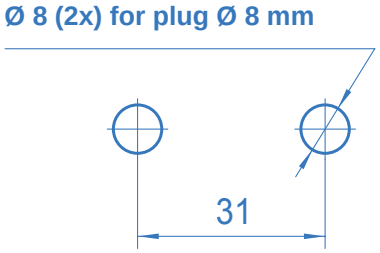
Column-mounted type with valve in the outlet





EM15 / EE15
Wall-mounted Type ES

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



Bore template for installation

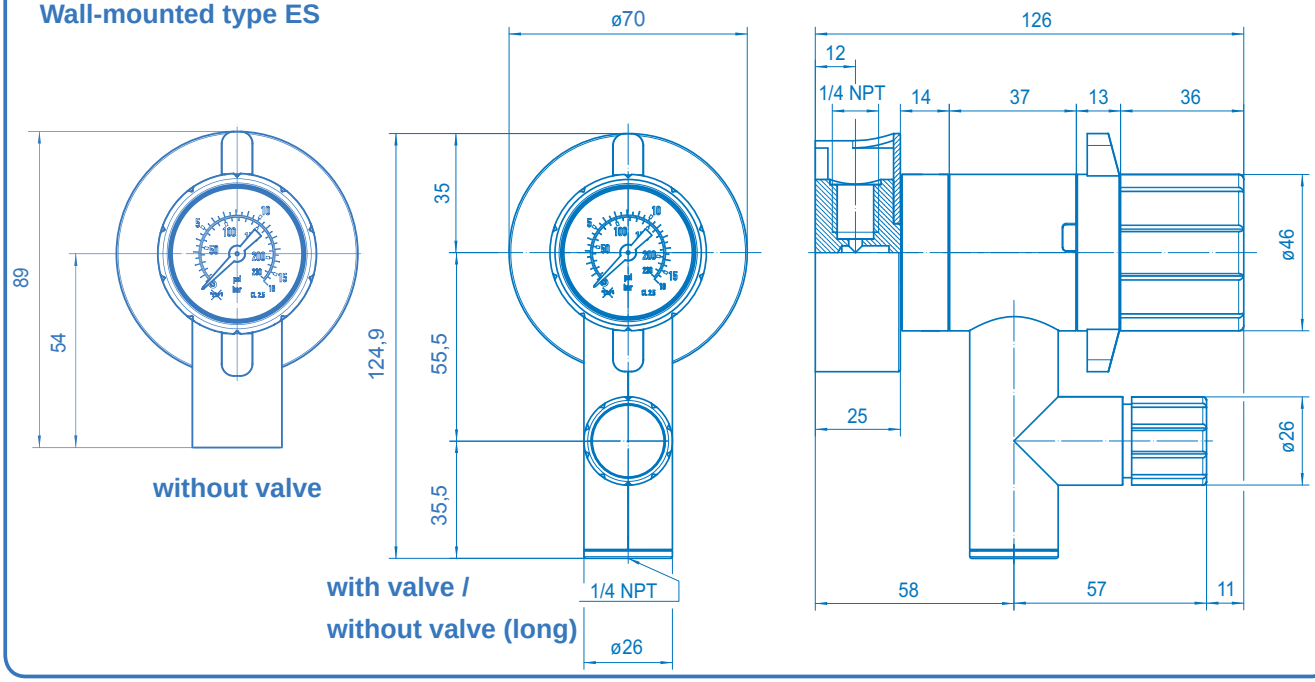
Specifications

- 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

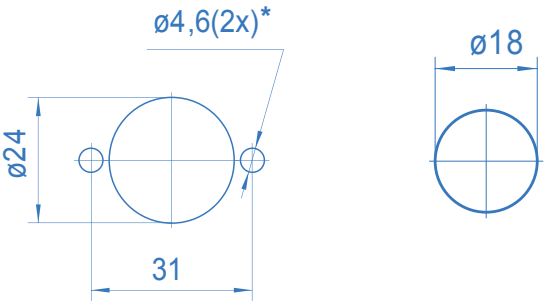
Materials		
Wall connector:		brass or SS 1.4404 (316L)
Covers:		Polypropylene GB30
Connections	inlet:	1/4“-NPT female
	outlet:	1/4“-NPT female
Weight		ca. 1.0 kg

Wall-mounted type ES



VM15 / VE15
Flow control / shut-off valves

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



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

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

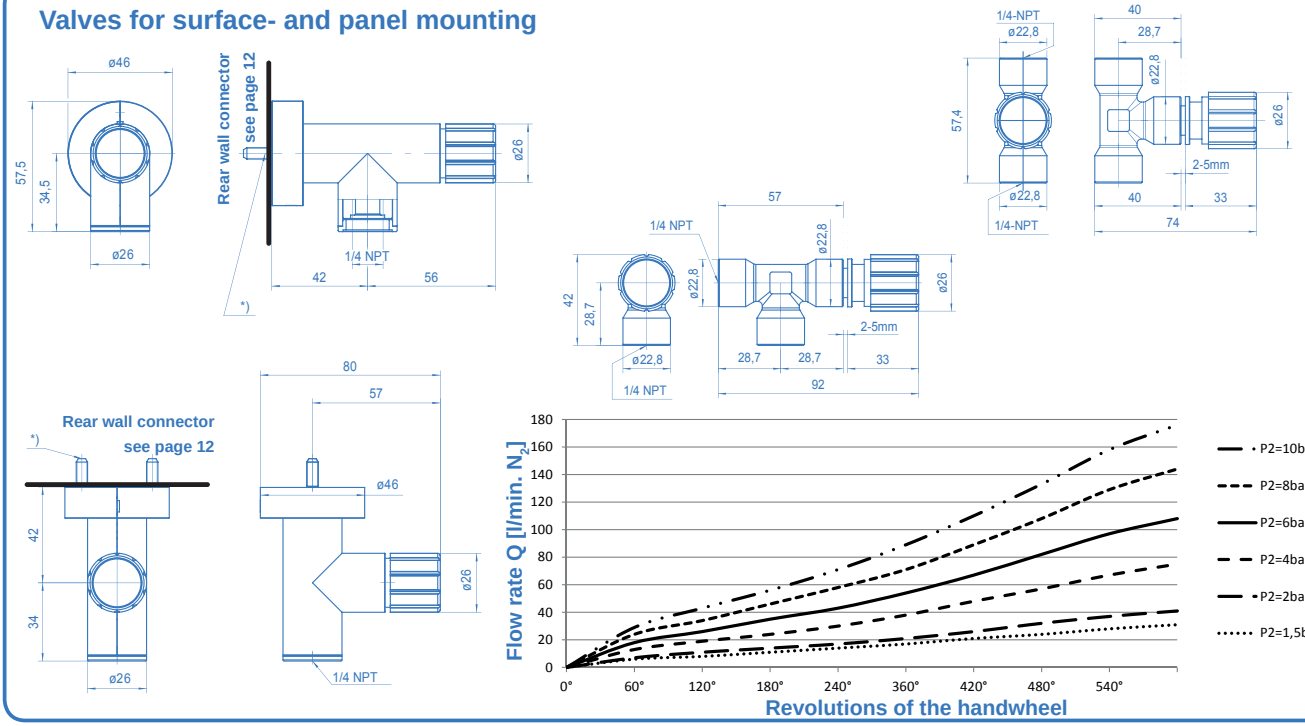
Specifications

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

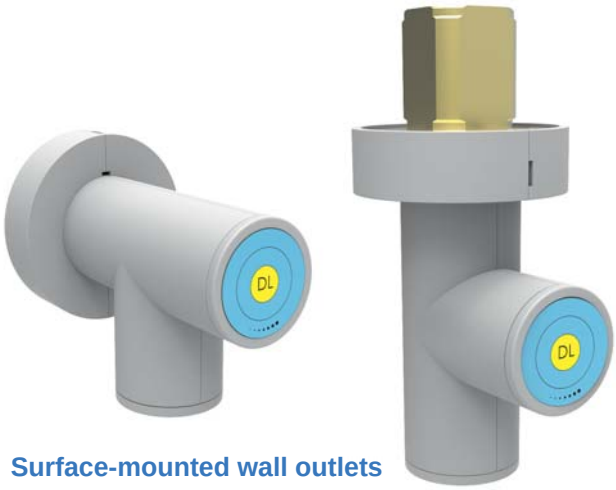
Technical data

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

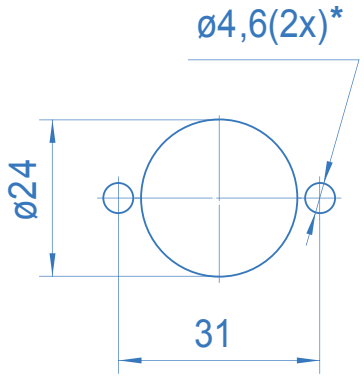
Valves for surface- and panel mounting



AM15 / AE15
Wall outlets



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

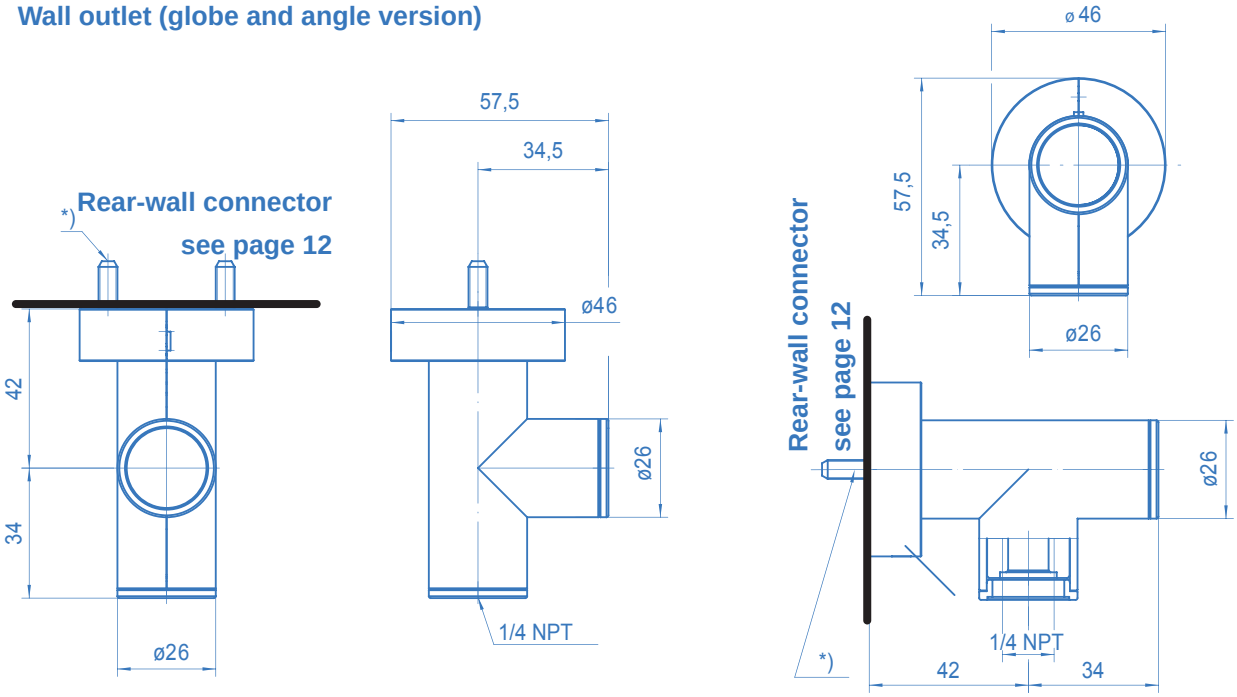
Specifications

- 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

Wall outlet (globe and angle version)

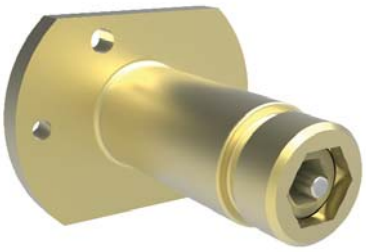


*) for self-cutting screw ME-T-50-16-TX25-A2-DIN7500

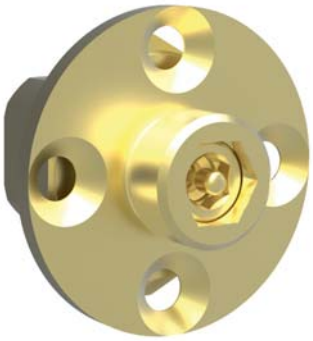
EM15 / EE15
Rear-wall connectors

L7

L30



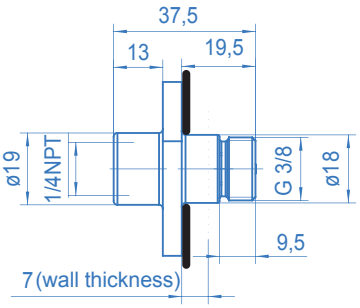
NPT

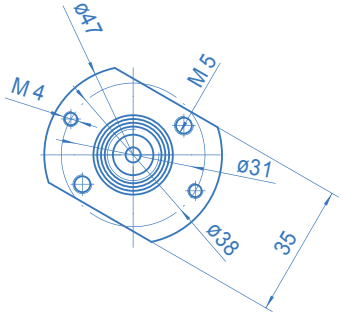


Rear-wall connectors (for surface-mounting AW and AE)
with integrated shut-off valve

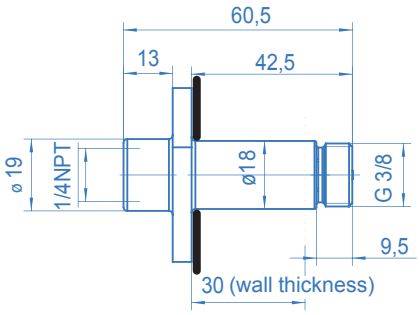
Bore template and dimensions

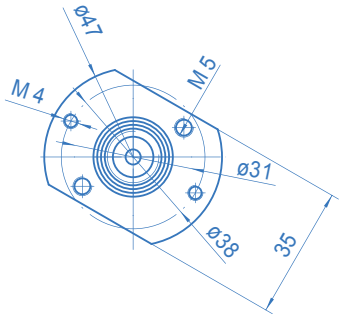
1/4“-NPT female / 7 mm wall thickness (rear installation)



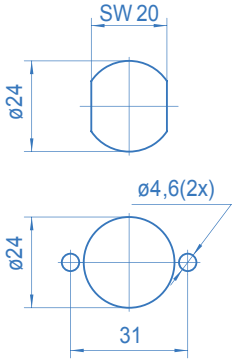


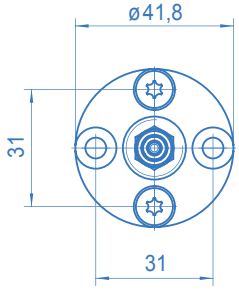
1/4“-NPT female / 30 mm wall thickness (rear installation)

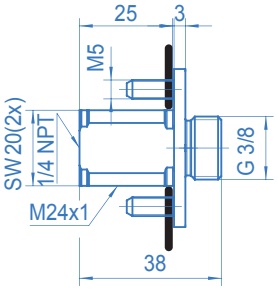




1/4“-NPT female + M24x1 male (front installation)







EM15 / EE15
Ordering information

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

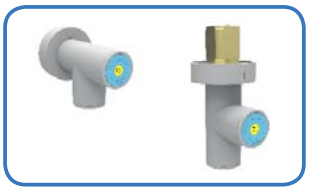
0	1/4“-NPT female
CM3/6/...	Compression ring brass [DN]
CE3/6/...	Compression ring SS [DN]
SM	Hose connector brass
SE	Hose connector SS
CSM(E)	Compr. ring+hose connector
FS	Flashback arrestor
L	1/4"-NPT female **(long)**
LCM3/6/...	Compression ring brass [DN]
LCE3/6/...	Compression ring SS [DN]
LSM	Hose 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	**SC:** SS-tube stub 6x1mm
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)

Gas type (see above)

Outlet (see above)

Version

DV	Globe version
EV	Angle version

Inlet (see above)