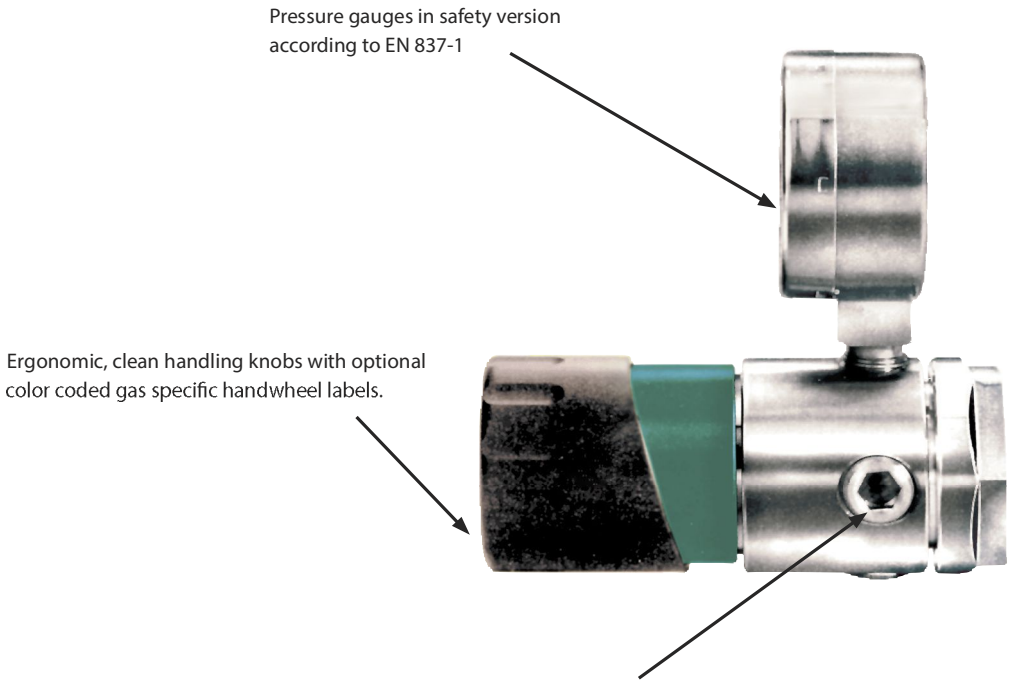
POINT-OF-USE REGULATORS EMD 400



Single stage regulators at high performance.
Inlet pressure 40 bar.
Outlet pressure range 0,1 – 10,5 bar / 7 – 150 psi, analytical version 0,1 – 2,2 bar / 1,5 – 33 psi.

Available in different versions and combined with angle and straight version regulating and shut-off valves, this results in a unique adaption and makes these modules suitable for the most common laboratory applications and for lab furnitures of all manufacturers: suspended versions, bench mounting, surface and inset wall assembly or mounted on plates.

BASIC DESIGN ASPECTS*

MATERIAL
stainless steel 316L (1.4404) specially cleaned and electro-polished or brass 2.0401.26.

SEALING MATERIAL
Seats: FKM and FFKM with stainless steel, FKM and EPDM with brass.
Seals: PCTFE with stainless steel and PVDF with brass. This depends on gas specification and purity requirements. Material is specified in "Technical data".

INNER PARTS
Low maintenance, service friendly regulator unit, particle filter 10 µm SS-filament at the inlet.

DIAPHRAGM
Good protection against burst and corrosion due to diaphragm material Hastelloy.

PERFORMANCE DATA
See flow charts, for different pressures please contact GCE.

GUARANTEED LEAKAGE RATE
$\leq 1\times10^{-9}$ mbar l/s Helium.

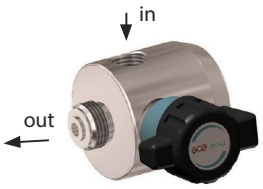
PURITY
Cleanness and leak tightness according to the demand of high purity ≤6.0 applications.

WORKING TEMPERATURE
-20 °C to +70 °C / -4 to 160 °F.

INLET / OUTLET CONNECTIONS
Inlet G 3/8", others with adapters. Outlet tube fitting for 6 mm tube, others on demand.

*Different data to series specification are listed in the product specific "Technical Data".

SHUT-OFF VALVES MVA 400 G/W



MVA 400 W

MVA 400 G

For inert, reactive, flammable and oxidizing gases and gas mixtures, purity max. 6.0, inlet pressure 40 bar / 600 psi

HIGHLIGHTS

- Very fine flow rate adjustment
- Hardened stainless steel cone for a longer life span
- Gas type specificidentification according to EN 13792
- Very easily purged

APPLICATION

These valves can be combined in many ways with the numerous components of the lab system in particular with the pressure regulator EMD 400.

DESCRIPTION

These regulating valves are characterized by their outstanding operational reliability and extreme leak-tightness. They have very good regulating characteristics and allow for exact delivery for both very small as very large amounts of gas.

TECHNICAL DATA

Body:	Stainless steel 1.4301 specially cleaned and electro-polished or
	brass 2.0401.26 specially cleaned, nickel-plated and chrome-plated
Diaphragm:	Hastelloy
Body seals:	hardened stainless steel cone
Seat seals:	PCTFE
Leakage rate:	< 1×10^{-6} mbar l/s Helium (seat)
	< 1×10^{-9} mbar l/s Helium (outboard)
Vacuum capable:	yes
Nominal width:	DN 5
Kv-value:	< 0.2
Working temperature:	-25 °C to 70 °C / -13 °F to 158 °F
Weight:	approx. 500 g
Inlet - Outlet:	MVA 400W: G1/4"f - G3/8"m
	MVA 400G: G3/8"f - G3/8"m

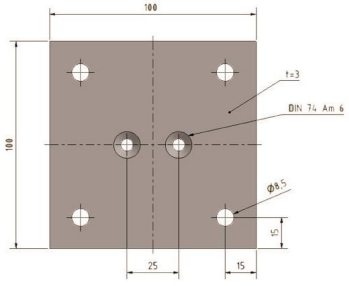
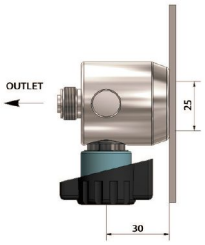
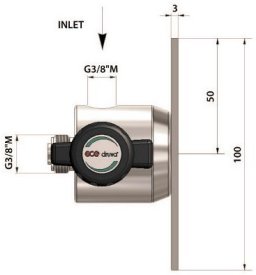
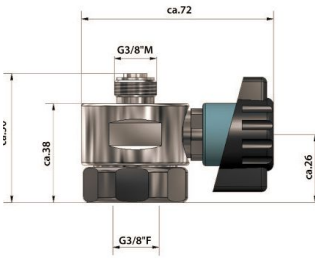


PLATE - MVA 400 W



MVA 400 W





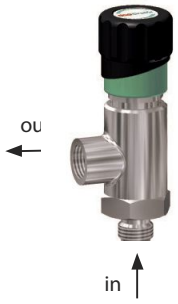
MVA 400 G

ORDER CODE

Type	Material	Inlet pressure	Inlet*	Outlet	Gas type
MVA 400 W	**BC**	**E**	**G14F**	**G38M**	**N2**
MVA 400 W **MVA 400 G**	BC = brass chrome-plated SS = stainless steel	E = 40 bar / 600 psi	MVA 400W: G14F = G1/4"f MVA 400G: G38F = G3/8"f CL6 CL8 BC = brass chrome-plated SS = stainless steel	MVA 400W: G38M = G3/8"m MVA 400G: G38M = G3/8"m	Please specify

* Outlet: CL... = compressed fitting for ... mm outside diameter, NO... = hose connector for ... mm hose inside diameter.

REGULATING VALVES WITH SHUT OFF FUNCTION TYPE MVR-A 400 G/W



MVR-A 400 W

MVR-A 400 G

For inert, reactive, flammable and oxidizing gases and gas mixtures
Purity max. 6.0
Inlet pressure 40 bar / 600 psi or 50 bar / 725 psi

SPECIAL FEATURES

- Very fine flow rate adjustment
- Regulating function with with special seat for shut off function
- Diaphragm shut-off valve
- Hardened stainless steel cone for a longer life span
- Very easily purged

APPLICATION

These valves can be combined in many ways with the numerous components of the lab system in particular with the pressure regulator EMD 400 and EMD 3100.

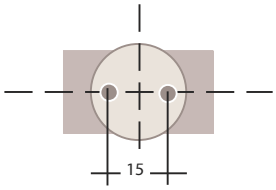
DESCRIPTION

These regulating valves are characterized by their outstanding operational reliability and extreme leak-tightness. They have very good regulating characteristics and allow for exact delivery for both, very small and very large amounts of gas.

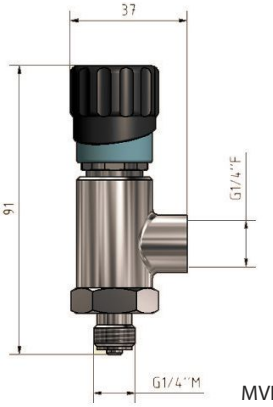
TECHNICAL DATA

Body:	Stainless steel 1.4301 specially cleaned and electro-polished or brass 2.0401.26 specially cleaned, nickel-plated and chrome-plated
Diaphragm:	Hastelloy
Body seals:	Hardened stainless steel cone/brass cone for SS/BC version
Seat seals:	PCTFE
Leakage rate:	< 1×10^{-4} mbar l/s Helium (seat)
	< 1×10^{-7} mbar l/s Helium (outboard)
Vacuum capable:	Yes
Fine metering:	Adjustment knob approx. 10 turns
Nominal width:	DN 2
Kv-value:	< 0.02
Working temperature:	-25 °C to 70 °C / -13 °F to 158 °F
Weight:	Approx. 280 g
Inlet - Outlet:	MVR-A 400 W: G1/4"m - G1/4"f
	MVR-A 400 G: G1/4"f - G1/4"f

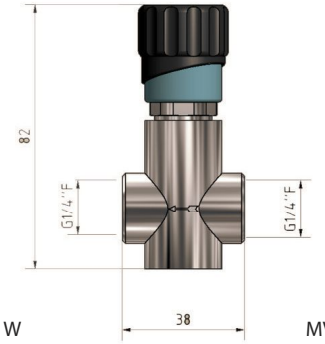
MOUNTING



2 bore holes M6 are provided on the MVR-A 400 G for mounting.



MVR-A 400 W



MVR-A 400 G

ORDER CODE

Type	Material	Inlet pressure	Inlet*	Outlet*	Gas type
MVR-A 400 W	**BC**	**E**	**G14M**	**G14F**	**N2**
MVR-A 400 W **MVR-A 400 G**	BC = brass chrome-plated SS = stainless steel	E = 40 bar / 600 psi	MVA-R 400W: G14M = G1/4"m MVA-R 400G: G14F = G1/4"f CL6 CL8,CL10 BC = brass chrome-plated SS = stainless steel	MVA-R 400W: G14F = G1/4"f MVA-R 400G: G14F = G1/4"f CL6 CL8 BC = brass chrome-plated SS = stainless steel N04 N06	Please specify

*Outlet: CL... = compressed fitting for ... mm outside diameter, NO... = hose connector for ... mm hose inside diameter.