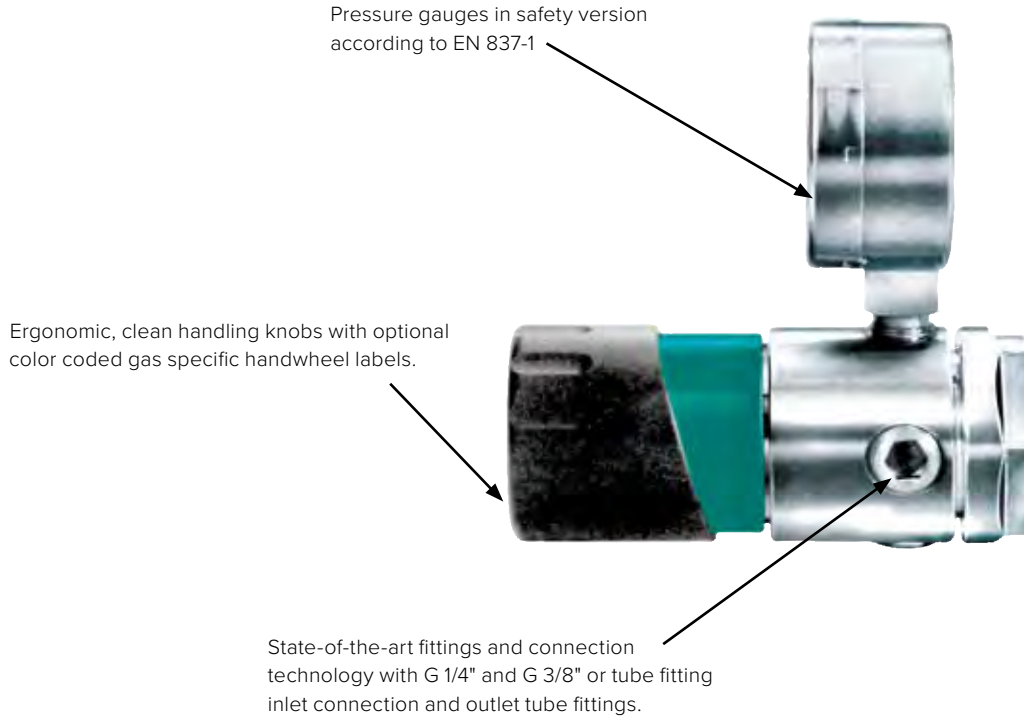


POINT-OF-USE REGULATORS EMD 400



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 50 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

$\leq 1 \times 10^{-9}$ 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".

POINT-OF-USE REGULATOR LAB 400



EMD 400-01



MVA 400 W



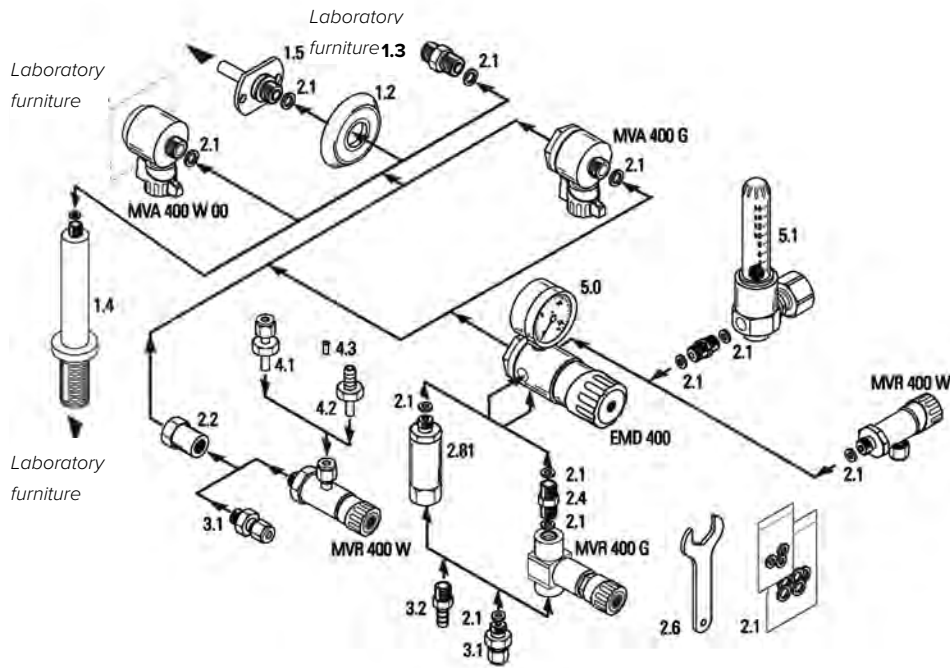
MVA 400 G



MVR 400 W



MVR 400 G



NO.	TYPE	FUNCTION	MATERIAL	ART.-NO.
1.2	Closing cap	Cap to cover the wall connector (1.5).		H19006625
1.3	Adapter fitting G 3/8" m NPT1/4"	Threaded adapter fitting to connect shut-off valve resp. pressure regulator and other male threaded outlets NPT1/4"	stainless steel	H233038150
1.4	Upright pipe conn. G 1/4" f > G 1/4"m	Connector for table mounting		H28591603
1.5	Wall connector 8 mm > G 3/8"m	Mounting LabSystem components at laboratory furniture walls	brass	H23303403
1.51	Wall connector NPT1/4" f > G 3/8"m	Mounting LabSystem components to laboratory furniture walls	brass stainless steel	H23303203 H23303201
2.1	Sealing			
	14.0 × 9.0 × 2.0 mm (G 3/8") 11.2 × 5.5 × 1.5 mm (G 1/4")	for brass version	PVDF	H09015916 H09008916
	14.0 × 9.0 × 2.0 mm (G 3/8") 11.2 × 5.5 × 1.2 mm (G 1/4") 11.2 × 5.5 × 1.5 mm (G 1/4") 11.2 × 5.5 × 2.1 mm (G 1/4")	for stainless steel version	PCTFE PCTFE PCTFE PCTFE	H09010309 H09011809 H09008909 H09009009
2.2	Adapter fitting G 3/8" f > G 1/4" f	Reducing adapter to connect the control valve with the wall connector (1.1)	brass	H23302253

NO.	TYPE	FUNCTION	MATERIAL	ART.-NO.
2.4	Male connector G 1/4"m > G 1/4"m	To connect the control valve MVR 400 G or the flow meter SVM 400 with the pressure regulator EMD 400	brass stainless steel	A000105 H233026151
2.6	Spanner, wrench size 36	Special LabSystem Spanner for EMD 400, ZB 400, MVE 400E and MVE 400G.	steel plated	H11006401
2.81	Flame arrestor FS 400 G 1/4"f > G 1/4" m	For the use of acetylene	stainless steel	L000110
3.1	Tube fitting for EMD 400 G 1/4" > tube	Outlet screwed connection for EMD 400.	brass 1/8" brass 6 mm brass 10 mm stainless steel 1/8" stainless steel 6 mm stainless steel 10 mm	A000121U A000123U A000125U A000120U A000122U A000124U
3.2	Hose nozzle fitting for EMD 400 G 1/4" > hose nozzle	Outlet screwed connection for EMD 400, outer diameters of hose nozzles = inner diameters of hose.	brass 4 mm brass 6 mm brass 8 mm	H03825573 H03825673 H03825773
4.2	Hose nozzle fitting for SVR 400 W G 1/4" > hose nozzle	Outer diameters of hose nozzles = inner diameters of hose.	brass 4 mm brass 6 mm brass 8 mm stainless steel 4 mm stainless steel 6 mm	H03825203 H03825303 H03825403 H03825201 03825301
4.3	Supporting tube 6 x 4 mm		stainless steel	H03804401U
5.0	Pressure gauge RM 50 inlet: G 1/4"m	Enables the use of PE- resp. PTFE-hoses in tube fittings Spring-tube gauge, rating diameter 50 mm, metallic housing, precision class 2.5.	stainless steel brass	see accessory
5.1	Flow meter SVM 400, without adapter G 1/4" f > G 1/4" f	Flow indication with fine adjustment valve 0 – 60 l/h air 0 – 120 l/h air 0 – 960 l/h air 0 – 1500 l/h air		on demand

Legend:

f = female thread, **m** = male thread

G 1/4" f > G 1/4" m means: **inlet** G 1/4" female thread and **outlet** G 1/4" male thread.

AVAILABLE ACCESSORY

Large range of mounting and assembling accessory (see Accessory), especially tube fittings and hose adaptors.

POINT-OF-USE REGULATORS EMD 400/404



EMD 400-01



EMD 400-06
wall mounted,
inlet from top



EMD 400-42
plate assembly,
inlet from rear



EMD 400-41
Bench version

Single-stage, for inert, reactive, flammable and oxidizing gases and gas mixtures, purity max. 6.0,
Inlet pressure 40 bar / 600 psi,
Outlet pressure range 0.1 – 10.5 bar / 1 – 150 psi

HIGHLIGHTS

- > ECD-suitable
- > Great variety of assembly possibilities in laboratory furniture due to the modular design of the LabSystem
- > Gas type specific colour indication labels according to EN 13792
- > Analysis version available

FEATURES

Standard version regulator with gauge, inlet at rear, outlet downwards. May be combined with inlet shut-off valve MVA 400, wall connector, metering valve MVR 400G and MVR 400W, flashback arrestor (FBA), different gauges and diverse accessory (see previous pages).

APPLICATION

For wall, plate, suspended and bench mounting, with great variety of combinations, covering any laboratory gas supply demand.

TECHNICAL DATA	
Body material:	stainless steel 316L (1.4404) specially cleaned and electro polished or brass CW614 (CuZn39Pb3) specially cleaned, chrome-plated
Pressure gauge range:	Type 400: 0 – 2.5/6/16 bar (0 – 35/85/235 psi) Type 404: 0 – 3 / 6 bar (0 – 45/85 psi)
Weight:	0,8 kg
Inlet - outlet:	G 3/8" f - G 1/4" f

POINT OF USE REGULATOR EMD 400-06 WALL MOUNTED WITH CHECK VALVE

Item No.	Type	Material	Design	Inlet (bar)	Outlet
S93001180	emd40006 sse10 g14g14 cv	SS	outlet point - with check valve	40	0-10
S93001106	emd40006 sse6 g14g14 cv	SS	outlet point - with check valve	40	0-6
S93001179	emd40006 sse1,5 g14g14 cv	SS	outlet point - with check valve	40	0-1,5
S93001178	emd40006 bce10 g14g14 cv	BC	outlet point - with check valve	40	0-10
S93001177	emd40006 bce4 g14g14 cv	BC	outlet point - with check valve	40	0-6
S93001176	emd40006 bce1,5 g14g14 cv	BC	outlet point - with check valve	40	0-1,5

ORDER CODE

Type	Variation	Material	Inlet pressure	Outlet pressure	Inlet	Outlet*	Gas type
EMD 400	-01	BC	E	1	CL6 BC	CL6 BC	GAS
EMD 400 = standard	-01 = standard -06 = plate mounted	BC = brass chrome-plated	EMD 400: E = 40 bar / 600 psi	EMD 400: 1 = 0.1 – 1 bar / 1 – 15 psi 4 = 0.2 – 4 bar / 3 – 60 psi	G3/8 = C3/8"f G1/4 = G1/4"f NPT1/4 = NPT1/4"f	G1/4 = G1/4"f CL4, CL6, CL8 CL 1/4, CL 1/8"	Please specify
EMD 404 = analysis version	-41 = bench version -42 = wall assembly -07 = 06 + FBA -10 = 06 + MVR -43 = 41 + MVR -44 = 42 + MVR	SS = stainless steel	EMD 404: E = 12 bar / 175 psi	EMD 404: 10 = 0.5 – 10.5 bar / 7 – 150 psi EMD 404: 2,2 = 0.1 – 2.2 bar/ 1.5 – 32 psi 4 = 0.5 – 4 bar / 7 – 60 psi	CL4, CL6, CL8 CL 1/4, CL 1/8" NO 1/4", NO 1/8" BC = brass chrome-plated SS = stainless steel steel steelUNI		

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