

Diaphragm Pressure Regulators MR 16/MR 50



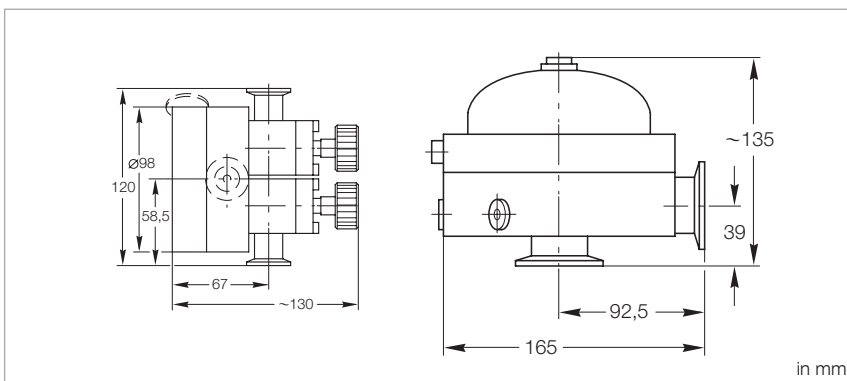
The MR 16/50 diaphragm regulators are absolute pressure regulators which automatically adapt the pumping speed of a vacuum pump depending on the amount of gas, without the need for an external power supply.

Advantages to the User

- Non-incremental, automatic pressure control
- Simple setting of the control pressures
- High control accuracy
- Corrosion protected stainless steel design
- Easy to disassemble for cleaning and maintenance
- Trouble-free operation in ex. areas
- Built-in isolation valves for the process connection and the vacuum pump (MR 16)

Typical Applications

- Distillation processes of all kinds
- Solvent recovery
- Drying processes
- Temperature control on bath cryostats
- Degassing of liquids and plastics



Dimensional drawing for the diaphragm regulator MR 16 (left) and MR 50 (right)

Technical Data

Diaphragm Pressure Regulator

MR 16

MR 50

		MR 16	MR 50
Control range	mbar (Torr)	10 to 1000 (7.5 to 750)	10 to 1000 (7.5 to 750)
Control inaccuracy		± 2% of the pressure control (10 – 90% of flow)	± 2% of the pressure control (10 – 90% of flow)
Throughput	m ³ /h	16	50
Nominal temperature range	°C	+5 to +100	+5 to +100
Storage temperature range	°C	-25 to +60	-25 to +60
Temperature coefficient	% / K	0.3	0.3
Setting time	ms	5	5
Permissible overload for brief periods	bar	3	3
Diaphragm material		FPM (FKM)/EPDM	FPM (FKM)/EPDM
Housing material		stainless steel 1.4571	stainless steel 1.4571
Installation orientation		Any	Any
Dimensions		see dimensional drawing	see dimensional drawing
Vacuum connection	2x DN	16 ISO-KF	40 ISO-KF
Measurement connection	3x thread R	1/8"	1/8"
Weight, approx.	kg (lbs)	2.7 (6.0)	8.0 (17.6)

Ordering Information

Diaphragm Pressure Regulator

MR 16

MR 50

	MR 16	MR 50
	Part No.	Part No.
Diaphragm pressure regulator		
MR 16, DN 16 ISO-KF	160 25	-
MR 50, DN 40 ISO-KF	-	160 27
Options		
Stainless steel measurement flange, DN 16 ISO-KF, for connection to a reference and/or process chamber or pumping stud KALREZ diaphragm	160 26 -	160 26 200 28 597
Spare Parts		
EPDM diaphragm and seal kit	EK 160 29	-
Viton diaphragm and seal kit	EK 160 31	-
Seal kit MR 50, incl. EPDM and Viton diaphragms	-	EK 160 32
Adjustment screw for the adjustable valve, complete with seal	240 001	240 001