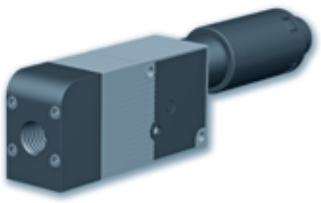
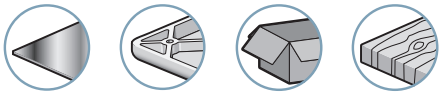
GEMP
Simple Vacuum Pump with ASR



AIR Saving Regulator

The GEMP series vacuum pumps are the simplest in the energy-saving range.
They automatically regulate the supply pressure to an optimal 4 bar thanks to an integrated pressure regulator (ASR). Energy savings are achieved regardless of the pressure in the compressed air network and without penalizing other applications which require more than 4 bar.
GEMP pumps therefore reduce both energy consumption and the noise level.

Industry-specific applications



Characteristics

Models	Ø Nozzle (mm)	Air consumed (Nl/min)	Maximum vacuum (%)	Air drawn in (Nl/min)	At air pressure (bar)
GEMP60x12	1.2	65	60	72	4
GEMP60x15	1.5	97	60	110	4
GEMP60x20	2.0	179	60	189	4
GEMP60x25	2.5	260	60	275	4
GEMP60x30	3.0	385	60	385	4
GEMP90x12	1.2	65	85	50	4
GEMP90x15	1.5	97	85	75	4
GEMP90x20	2.0	179	85	125	4
GEMP90x25	2.5	260	85	200	4
GEMP90x30	3.0	385	85	245	4

Advantages

- Modular design with interchangeable options
- Compact and light
- Exceptional energy savings
- Optimized performance for all types of applications
- Silent operation
- No clogging

Evacuation Time in Seconds per Liter

% vacuum	10	20	30	40	50	60	70	80	85
GEMP60x12	0.09	0.2	0.35	0.55	0.9	-	-	-	-
GEMP60x15	0.06	0.14	0.23	0.36	0.59	-	-	-	-
GEMP60x20	0.04	0.08	0.13	0.21	0.34	-	-	-	-
GEMP60x25	0.03	0.05	0.09	0.14	0.24	-	-	-	-
GEMP60x30	0.01	0.04	0.07	0.10	0.17	-	-	-	-
GEMP90x12	0.13	0.27	0.44	0.64	0.88	1.19	1.62	2.37	3.12
GEMP90x15	0.09	0.18	0.29	0.42	0.58	0.79	1.08	1.59	2.08
GEMP90x20	0.05	0.11	0.18	0.25	0.35	0.46	0.65	0.95	1.25
GEMP90x25	0.03	0.07	0.11	0.16	0.22	0.3	0.41	0.59	0.78
GEMP90x30	0.03	0.06	0.09	0.13	0.18	0.24	0.33	0.48	0.64

Specifications

Supply	Non-lubricated filtered air, 2 to 8 bar
Optimum pressure	4 bar
Weight	100 to 265g
Material	POM - 2017A – Cu Zn – PA6 15 % FV
Operating temperature	0 to 80 °C

Vacuum Switch Characteristics

See pages 7/9.

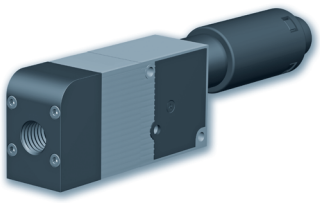
For all orders, please specify:
Model + % vacuum + X + Ø Nozzle + Vacuum switch.
e.g.: GEMP90X12VA

1: Model	2: % vacuum		X	4: Nozzle diameter		5: Vacuum switch	
GEMP	**60**	max. 60% vacuum. (porous objects)	**X**	**12**	1.2 mm	**VA**	electronic display
				15	1.5 mm	**VB**	electronic
	90	max. 85% vacuum (air-tight objects)		**20**	2 mm	**VC**	with electrical contact
				25	2.5 mm	**VO**	without vacuum switch
				30	3 mm		

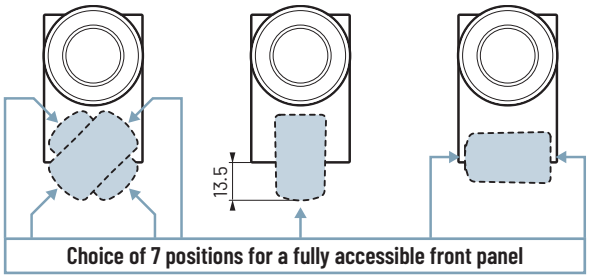
GEMP

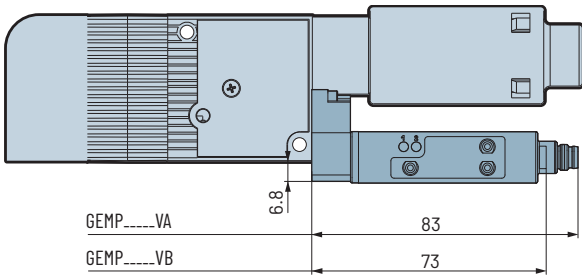
Simple Vacuum Pump with ASR

Vacuum Switch Functions and Connections



1 - Modules with Electronic Indexable Vacuum Switch GEMP-----VA or GEMP-----VB



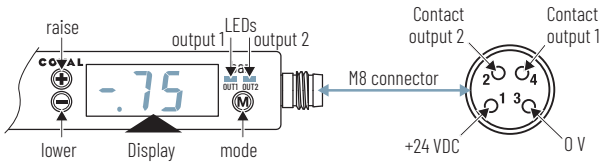


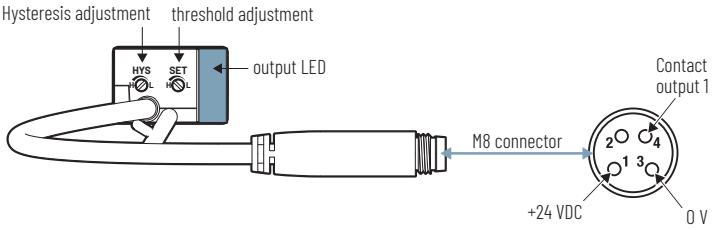
Vacuum switch with display, 2 outputs, GEMP-----VA

- compatible fluids: non-corrosive gas, dry, non-lubricated air.
- measuring range: -1 ... 0 bar
- hysteresis: configurable.
- maximum excess pressure: 3 bar.
- repetitivity: +/- 1% of the range.
- output thresholds: 2 x NO / NC.
- switching power: 125 mA transistor PNP
- threshold status display: 2 x LEDs.
- display unit: bar.
- Electrical connection: M8 (4 pins).
- supply voltage: 12 - 24 VDC ± 10%.
- current draw: < 60 mA.
- protection level: IP40.
- working temperature: 0 to 50 °C

Electronic vacuum switch, 1 output, GEMP-----VB

- compatible fluids: non-corrosive gas, dry, non-lubricated air.
- measuring range: -1 ... 0 bar
- hysteresis: configurable from 0 to 10%.
- maximum exsess pressure: 3 bar.
- repetitivity: +/- 1% of the range.
- output thresholds: 1 x NO.
- switching power: 125 mA transistor PNP
- threshold status display: 1 x LED.
- electrical connection: M8 (4 poles).
- supply voltage: 18 - 30 VDC (regulated).
- current draw: < 20 mA.
- protection level: IP50.
- working temperature: 0 to 50 °C

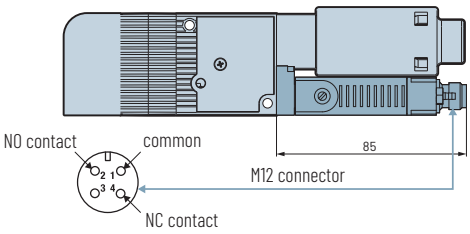




2 - Modules with Electrical Contact Vacuum Switch GEMP-----VC

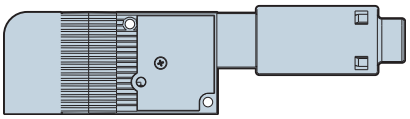
Contact vacuum switch, GEMP-----VC

- compatible fluids: non-corrosive gas, dry, non-lubricated air.
- measuring range: -350 to -850 mb.
- hysteresis: 125 mb.
- maximum overpressure: 2 bar.
- repetitivity: 3% of the range.
- breaking capacity: 1 x NO, 1 x NC.
- switching power: 3 A (breaker)
- electrical connection: M12 (4 poles).
- supply voltage: up to 125 V.
- protection level: IP40.
- working temperature: -10 to 50° C.
- number of operations: 5 million cycles.
- maximum throughput: 30 cycles perminute.



3 - Modules without Vacuum Switch GEMP-----VO

This model without vacuum switch must be accompanied by an independent vacuum switch on the vacuum circuit or a vacuum gauge for manually-controlled vacuum capacity.

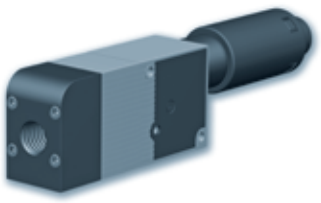


Note:
Screw-on electrical connectors, straight and angled M8 and M12 shown p. 11/12.

GEMP

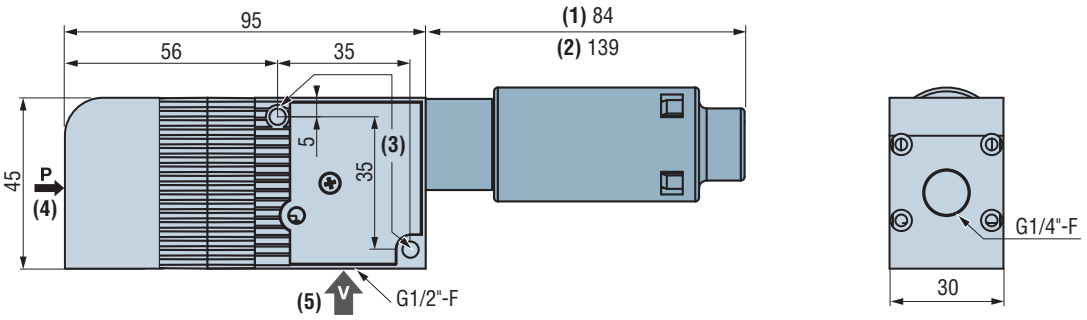
Simple Vacuum Pump with ASR

Dimensions and Performance Curves



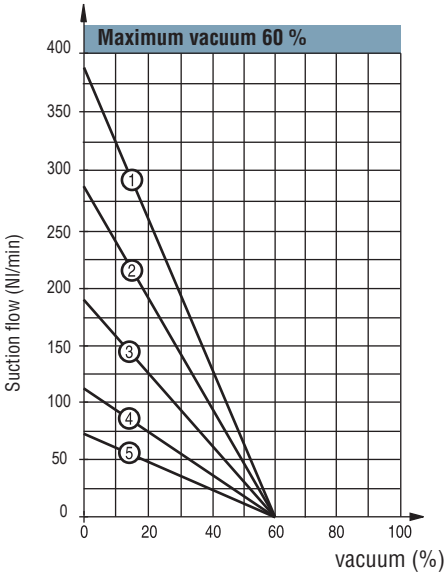
AIR Saving Regulator

Dimensions

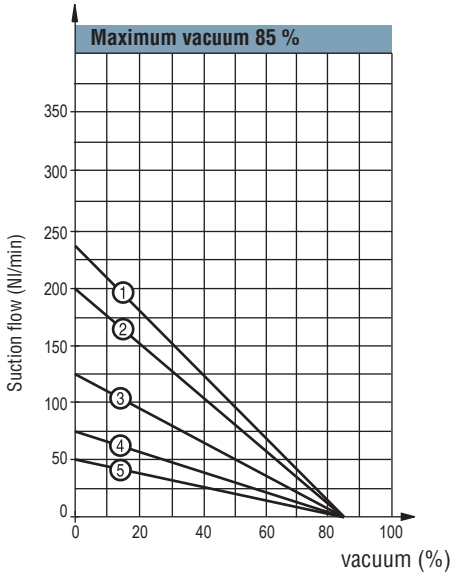


(**1**) silencer for nozzles Ø 1.2 or 1.5 mm (GEMP--X12--, GEMP--X15--)
(**2**) silencer for nozzles Ø 2 - 2.5 or 3 mm (GEMP--X20--, GEMP--X25--, GEMP--X30--)
(**3**) fittings Ø 4.2 mm
(**4**) G1/4"-F pressure fitting: pressure at 4 bar
(**5**) G1/2"-F vacuum fitting

Performance Curves



1 - GEMP60X30
2 - GEMP60X25
3 - GEMP60X20
4 - GEMP60X15
5 - GEMP60X12



1 - GEMP90X30
2 - GEMP90X25
3 - GEMP90X20
4 - GEMP90X15
5 - GEMP90X12

Note: all dimensions are in mm