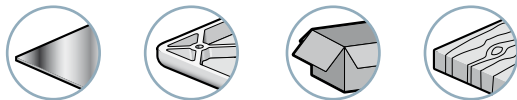


Branch-specific applications



Advantages

- Integrated electric vacuum control
- Can be adapted to all branches
- Optimized performance for handling all types of objects
- Reduced wiring and easy-to-use
- Modular design thanks to the different options
- Light and compact
- No clogging thanks to the through type silencer
- Silent operation

Description

GVPS series vacuum pumps control vacuum generation using an integrated valve. This installation simplifies wiring and reduces vacuum pump response times. The valve is electrically controlled (24 V DC).

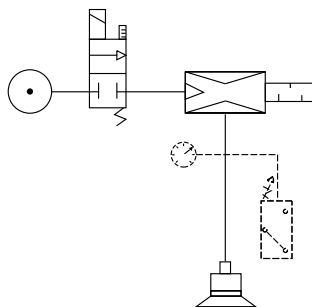
Characteristics

model	Ø nozzle (mm)	air consumed (NI/min)	max. vacuum (%)			air drawn in (NI/min)		
			X	T	N	X	T	N
GVPS 12	1.2	67	40	75	90	150	63	45
GVPS 15	1.5	100	50	75	90	180	95	70
GVPS 20	2	180	50	75	90	250	160	125
GVPS 25	2.5	270	50	75	90	360	240	200
GVPS 30	3	400	50	75	90	450	330	265

As standard, versions N and T are delivered with silencer S and version X with silencer K. Only exception, the GVPS 30 is fitted with silencer K.

Evacuation time in seconds per liter

% vacuum	10			20			30			40			50			60			70			80			85		
	X	T	N	X	T	N	X	T	N	X	T	N	X	T	N	X	T	N	X	T	N	X	T	N	X	T	N
GVPS 12	0.05	0.10	0.14	0.11	0.22	0.30	0.22	0.37	0.49	0.62	0.55	0.71	-	0.78	0.97	-	1.16	1.33	-	1.92	1.81	-	-	2.66	-	-	3.42
GVPS 15	0.04	0.07	0.09	0.09	0.15	0.20	0.15	0.24	0.32	0.27	0.36	0.46	-	0.52	0.63	-	0.77	0.85	-	1.27	1.16	-	-	1.71	-	-	2.20
GVPS 20	0.03	0.04	0.06	0.06	0.09	0.12	0.11	0.14	0.19	0.19	0.22	0.28	-	0.31	0.38	-	0.46	0.52	-	0.76	0.71	-	-	1.04	-	-	2.13
GVPS 25	0.02	0.03	0.03	0.04	0.06	0.07	0.08	0.10	0.11	0.14	0.14	0.16	-	0.21	0.22	-	0.30	0.30	-	0.50	0.41	-	-	0.60	-	-	0.77
GVPS 30	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.11	0.10	0.12	-	0.15	0.17	-	0.22	0.23	-	0.37	0.31	-	-	0.45	-	-	0.58



Specifications

Supply	Non-lubricated filtered air, 2 to 6 bar
Optimum pressure	4 bar
Voltage	24V DC
Power	0.7 W
Materials	POM - 2017A – Cu Zn – PA6 15% FG
Temperature	0 to 60°C / 32 to 140°F
Number of valve operations	10 million
Operating frequency	Maximum 2 Hz
Function	N.C. (N.O. on request)

For all orders, please specify:

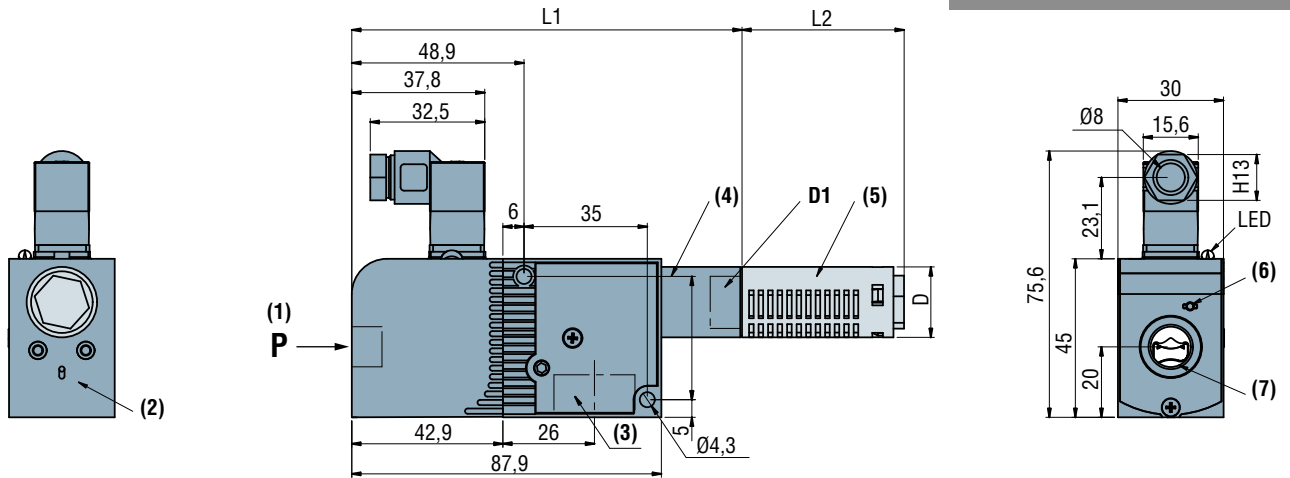
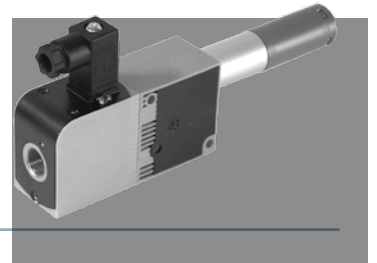
Model + Nozzle diameter + Characteristic + Silencer + Fitting + Control

1: Model	2: Nozzle diameter	3: Characteristic	4: Silencer	5: C.A. fitting	6: Controls
GVPS	12 1.2 mm 15 1.5 mm 20 2 mm 25 2.5 mm 30 3 mm	X 50 % vacuum T 75 % vacuum N 90 % vacuum	- Without silencer S ⁽¹⁾ Diffuser K Through-type	14 1/4 G BSPP	E1 24 V DC N.F. E Other voltages on request

(1) no silencer (S) for nozzle Ø 30.

E.g. **GVPS 30 N K 14 E1**

(GVPS series electrically-controlled vacuum pump, nozzle diameter 3mm, 90% vacuum with through type silencer, 1/4 G pressure fitting and 24V DC N.C. control)



- (1) 4 bar compressed air tank
- (2) Vacuum switch option mounting zone
- (3) Vacuum 1/2 Gas
- (4) Exhaust
- (5) Silencer model S or K
- (6) Manual controls
- (7) 1/4 Gas

models	L1 (mm)		L2 (mm)			D (mm)		D1 (gas)	
	X	N/T	S(N/T)	K(N/T)	K(X)	X	N/T	X	N/T
GVPS12	106	111	46	68	121	30	20	1/2	1/4
GVPS15	106	121	46	68	121	30	20	1/2	1/4
GVPS20	106	106	62	121	121	30	30	1/2	1/2
GVPS25	106	106	62	121	121	30	30	1/2	1/2
GVPS30	178	178	-	121	121	30	30	1/2	1/2

Additional information

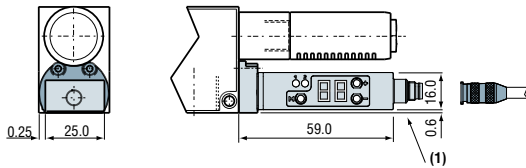
Options

- Vacuum switches see page 8/10.
- Other options see pages 8/11 and 8/12.
- Silencer see page 11/2.

Curves

See page 8/13.

customer-mounted **Modular vacuum pump options**



Delivered with M8 cable (2 meters)
(1) M8 connector

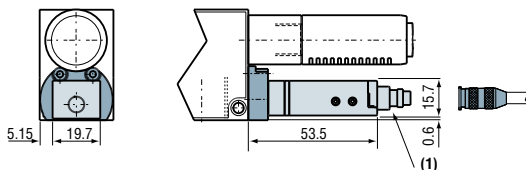
Electronic vacuum switch with display

GVO PSA 100 C option

(See exact characteristics page 12/1)

Our top-of-the-range electronic vacuum switch, the PSA 100, has an LED display showing the vacuum value in different units. It also has two separate outputs with independently regulated hysteresis, N.O. or N.C.

- PNP as standard
- M8 connector.
- Connection cable, see page 8/14.



Delivered with M8 cable (2 meters)
(1) M8 4 pole connector

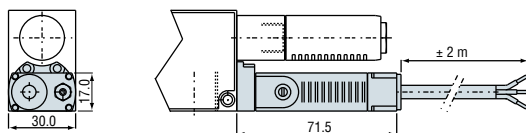
Electronic vacuum switch

GVO PSP 100 C (M5), PSP 100 L (M5) option

(See characteristics page 12/2)

The vacuum data collected is always very reliable even with a large number of suction pads, thanks to the precision of the PSP 100. It has one output with hysteresis adjustment.

- PNP as standard
- M8 connector
- Connection cable, see page 8/14.



GVO PSE 100 E with cable (length 2 metres)

Vacuum switch with electrical signal

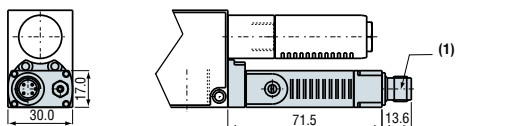
GVO PSE 100 E or EC option

(See characteristics page 12/5)

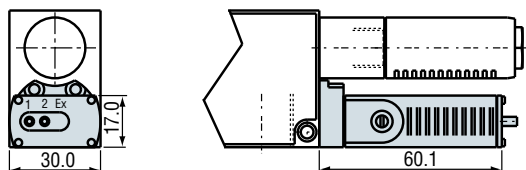
The PSE 100 E or EC vacuum switch indicates the level of vacuum in the suction pad circuit. For a small number of suction pads (5 to 10 maximum). This indication is enough to prove an object is gripped. Hysteresis (125mbar) must also be taken into account according to the use of the vacuum switch data.

Check that the vacuum pump supply pressure generates a level of pressure equal to the threshold setting.

For connection cable, see page 8/14.



GVO PSE 100 EC with M12 connector (delivered without connection cable)
(1) M12 male connector



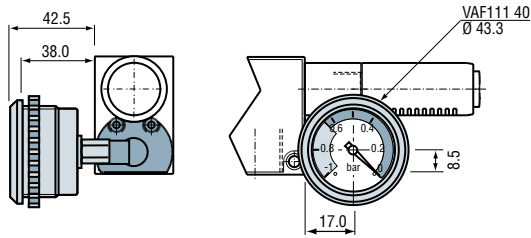
Vacuum switch with pneumatic signal

GVO PSE 100 P N.O. or N.C. option

(see characteristics page 12/6)

For use in fully pneumatic applications or explosive environments. The vacuum switch enables a pressure data message to be given when a vacuum threshold is reached.

customer-mounted **Modular vacuum pump options**

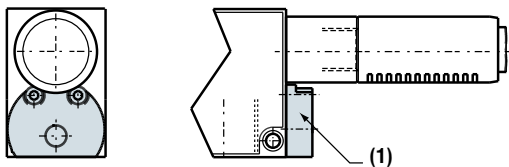


Vacuum gauge

GVO VAF 111 40 option

(See characteristics page 12/8)

The vacuum gauge displays the level of vacuum in the suction pad circuit. This option makes it simple to keep the status of the vacuum circuit under constant surveillance.

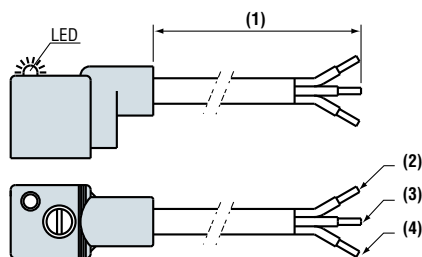


(1) Plug

Plug to shut off vacuum data

GVOB option

This plug option makes it possible to shut off the vacuum signal to avoid affecting operation of the vacuum pump if a GVO option is removed.



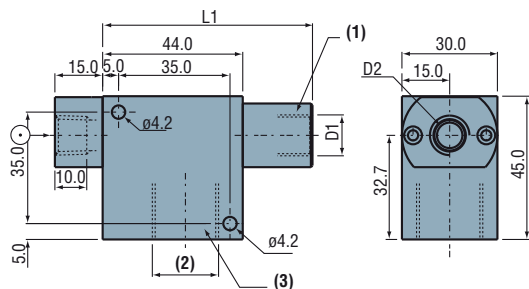
- (1) L(2 meters)
- (2) Brown
- (3) Blue
- (4) Yellow-Green (Earth)

GVO CA 24 V option, (110 V or 220 V on request)

with anti-interference on electric valve control: factory-mounted.

Use of an anti-interference is recommended on the valve control when using electrically-controlled pumps. This anti-interference protects the equipment and ensures the valve control is reliable in electrically polluted environments.

- As standard for 24V DC and CA control
- On request for other models

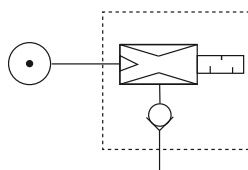


GVO AL and GVO AL NPT option (for GVP vacuum pump)

Body and flange 1/4 Gas in aluminum.

■ Note: It is no longer possible to mount vacuum gauge options.

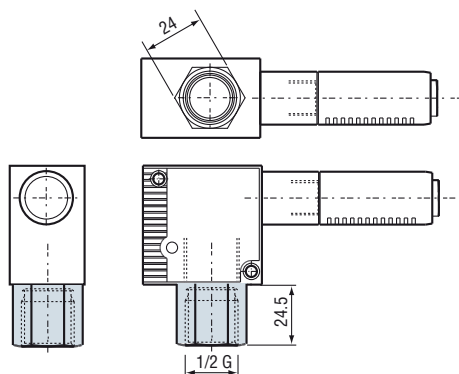
- | | |
|-----------------------------|-------------|
| L1 = L1 GVP (plastic) - 1mm | (1) Exhaust |
| D1 = D1 (GVP N, T and X) | (2) 1/2 Gas |
| D2 = 1/4 Gas for GVO AL | (3) Vacuum |
| 1/4 NPT for GVO AL NPT | |



Check valve option - Ref. 02090101 (for GVPD vacuum pump)

Check valve option.

Requires blow-off downstream from the valve for release.



GVO P option

with 1/2 protective extension

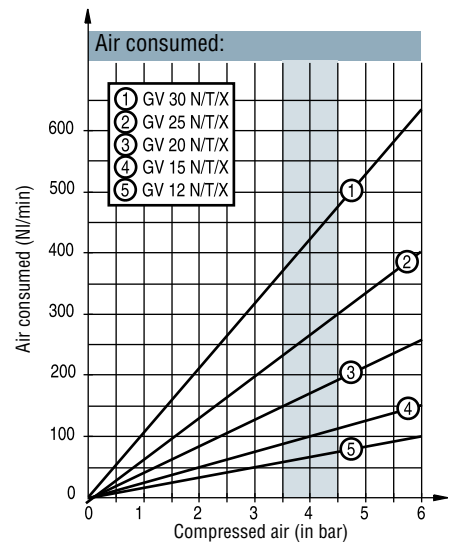
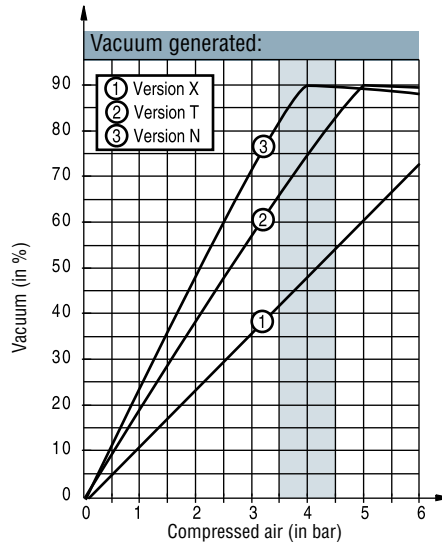
The 1/2 extension is recommended for double valve models or with pneumatic vacuum switch to protect components during mounting or installation.

The extension is fitted with a 400 micron stainless steel filtration grid as standard.

Performance curves for modular vacuum pumps

GVP, GVPS, GVPD

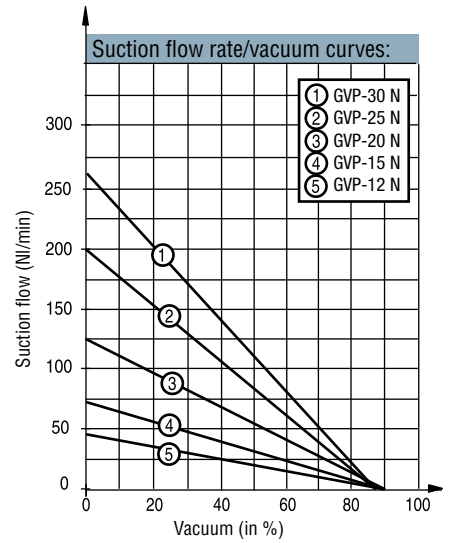
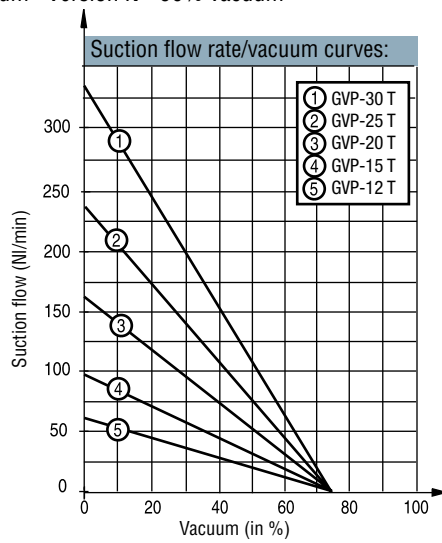
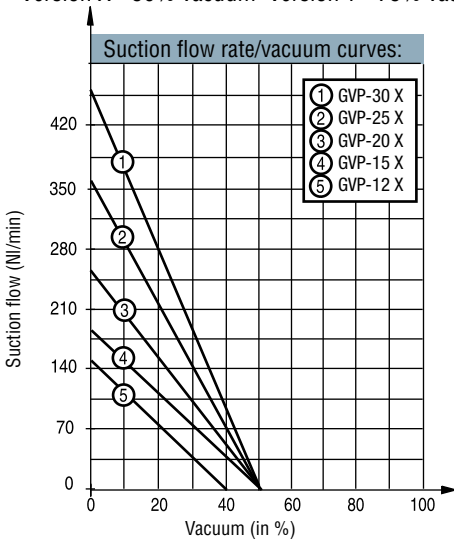
■ Pressure 4 bar



■ Supply pressure 4 bar

Version X - 50% vacuum Version T - 75% vacuum

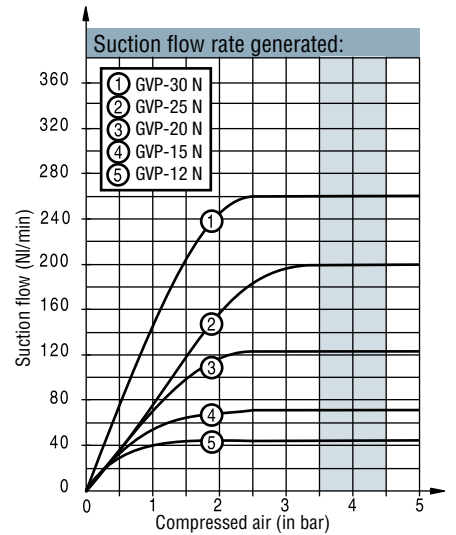
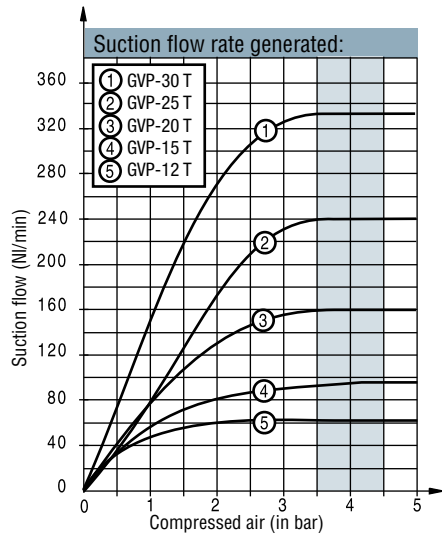
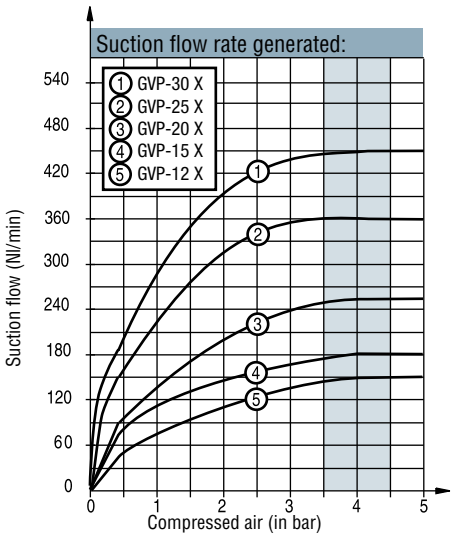
Version N - 90% vacuum



■ Supply pressure 4 bar

Version X - 50% vacuum Version T - 75% vacuum

Version N - 90% vacuum



The range of modular and intelligent vacuum pumps

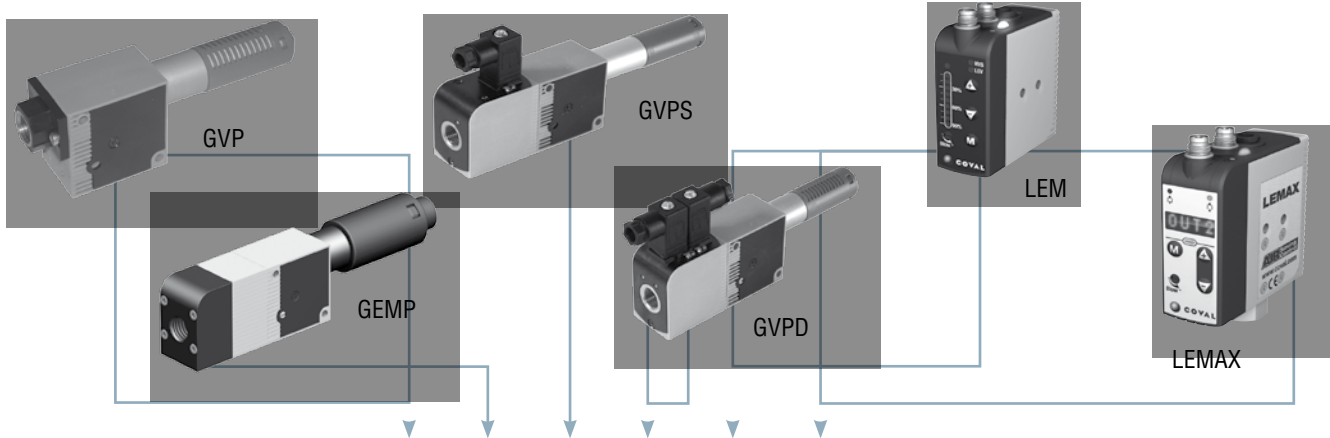
Advantages

- Reduced energy consumption
- Reduced noise levels
- Increased life expectancy
- Can be adapted to all branches
- Technical development of the Coval valve resulting from technological advances in aerospace and automotive applications.

New optimized fluidics

The COVAL range of modular vacuum pumps operates with a pressure supply of 4 bar.

Developed by COVAL over the years, this range is the result of research and optimized technical solutions. Thanks to the new fluidics, this range of vacuum pumps offer an optimized performance.



Model	MODULAR VACUUM PUMPS				INTELLIGENT VACUUM PUMPS					
	GVP	GEMP	GVPS	GVPD	LEM	LEMAX	GEM	GVMAX--V3	GVMAX--V2	GVMAX
Compressed air control (Suction)			■	■	■	■	■	■	■	■
Blow-off control				■	■	■	■	■	■	■
Integrated pressure regulator		■			■	■	■	■		
Powerful blow-off						■		■		
Electronic vacuum switch with display	□	□	□	□	■	■	■	■	■	■
Electronic vacuum switch	□	□	□	□	■	■	■			
Vacuum switch with electrical contact	□	□	□	□			■			
Vacuum check-valve	□		□	□	□	■	□	■	■	■
Electric control			■	■	■	■	■	■	■	■
Pneumatic control										■
Twin Tech (Integration & Intelligence)					■	■	■	■		
ASC (Air saving Control)						■				
Automatic vacuum regulation						■		■	■	■
M8 connections					■	■				
M12 connections							■	■	■	

■ : Standard or integrated □ : Option

