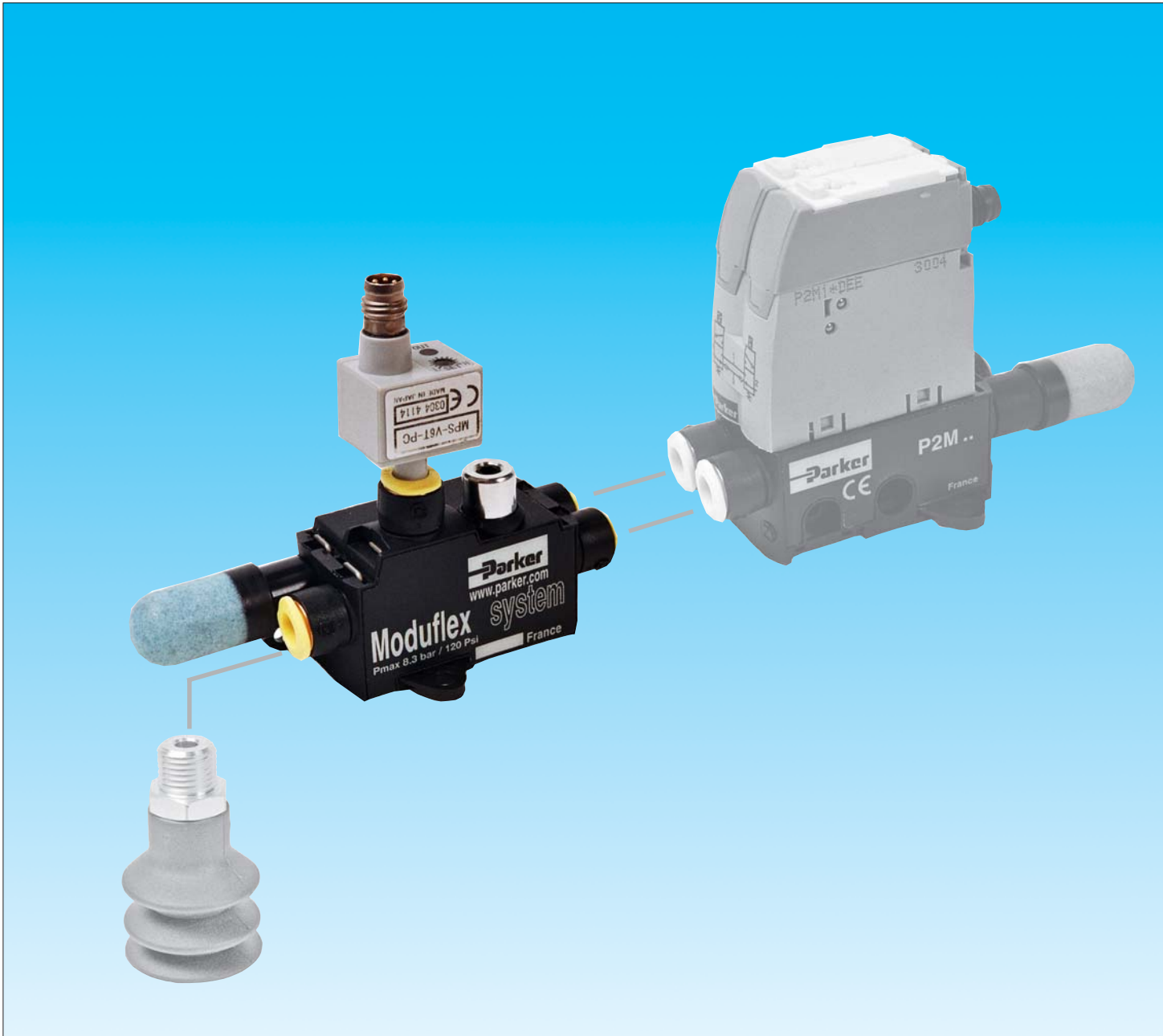




Vacuum technology

*Moduflex vacuum generator
Peripheral module*

Catalogue PDE2548SLUK-ev



Moduflex vacuum generator

Summary

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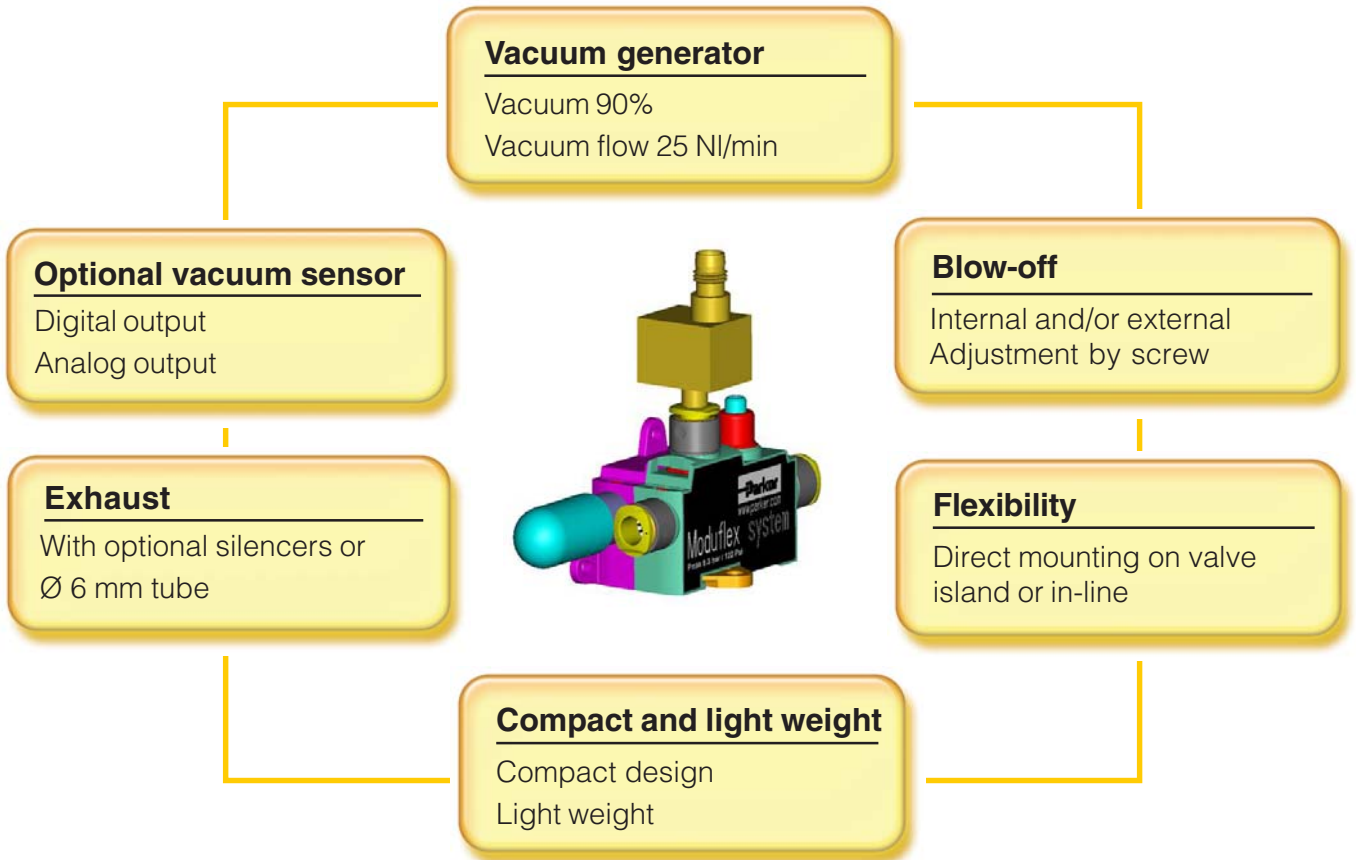
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Generic Industries



The modular Vacuum Generator from the MODUFLEX family can be used in many different industrial applications for picking up all kinds of products for transportation quickly and precisely.

Automation



With its integrated blow-off function, the Moduflex Vacuum Generator provides the necessary vacuum and breaks it automatically at the end of the Pick and Place automated process.

Printing and replication



In picking up paper or foils, transporting CD's and DVD's, the new Moduflex Vacuum Generator shows its flexibility and performance mounted on the island or in-line with the suction cups.

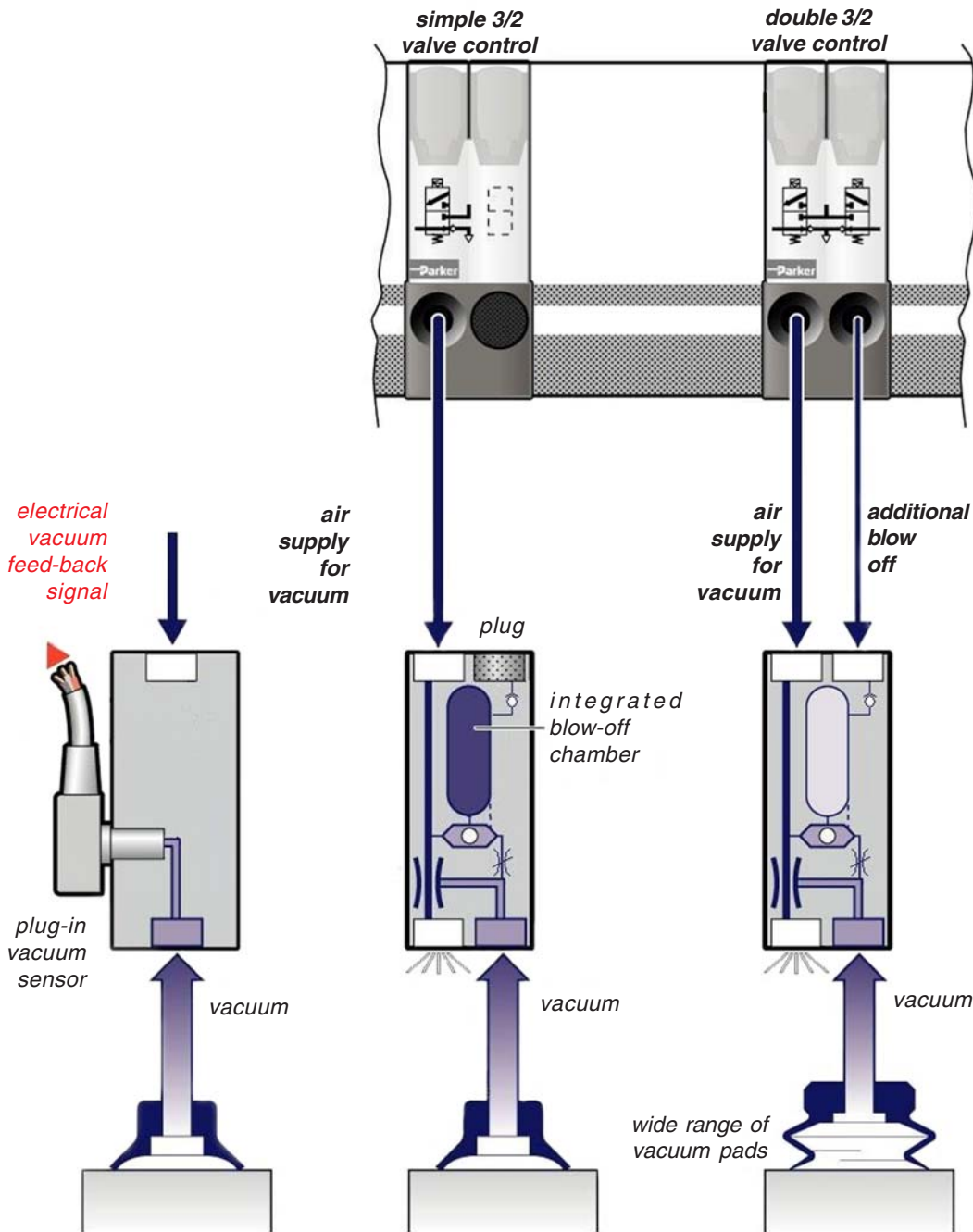
Packaging



For opening boxes, inserting products in the boxes and transporting the boxes, the new Moduflex Vacuum Generator is an ideal unit to mount close to the suction cups on the robot system.

Moduflex vacuum generator

Vacuum technology



A multi-mounting module

As with all other Moduflex peripheral modules, this vacuum generator may be either positioned remotely from the control valve or directly onto the valve island.

A) **Remote positioning** with cup directly mounted on the generator for high response.

B) **Centralised control** with the generator on the island for space minimising at point of suction for aggressive environments.

C) **In-line mounting** with cup position remote in accordance with machine structure for easy access.

A multi-purpose module

Depending on the application requirements, this vacuum generator module may be controlled by a single or by a double 3/2 Moduflex valve module.

A Ø6 mm port is available for an optional plug-in vacuum sensor for delivering an electrical vacuum feed-back signal.

Single 3/2 valve control

The 3/2 valve delivers the air supply to generate vacuum through the venturi. It also pressurizes the integrated blow-off chamber.

When the 3/2 valve cuts-off the air supply, this chamber is automatically exhausted in order to speed-up the part release.

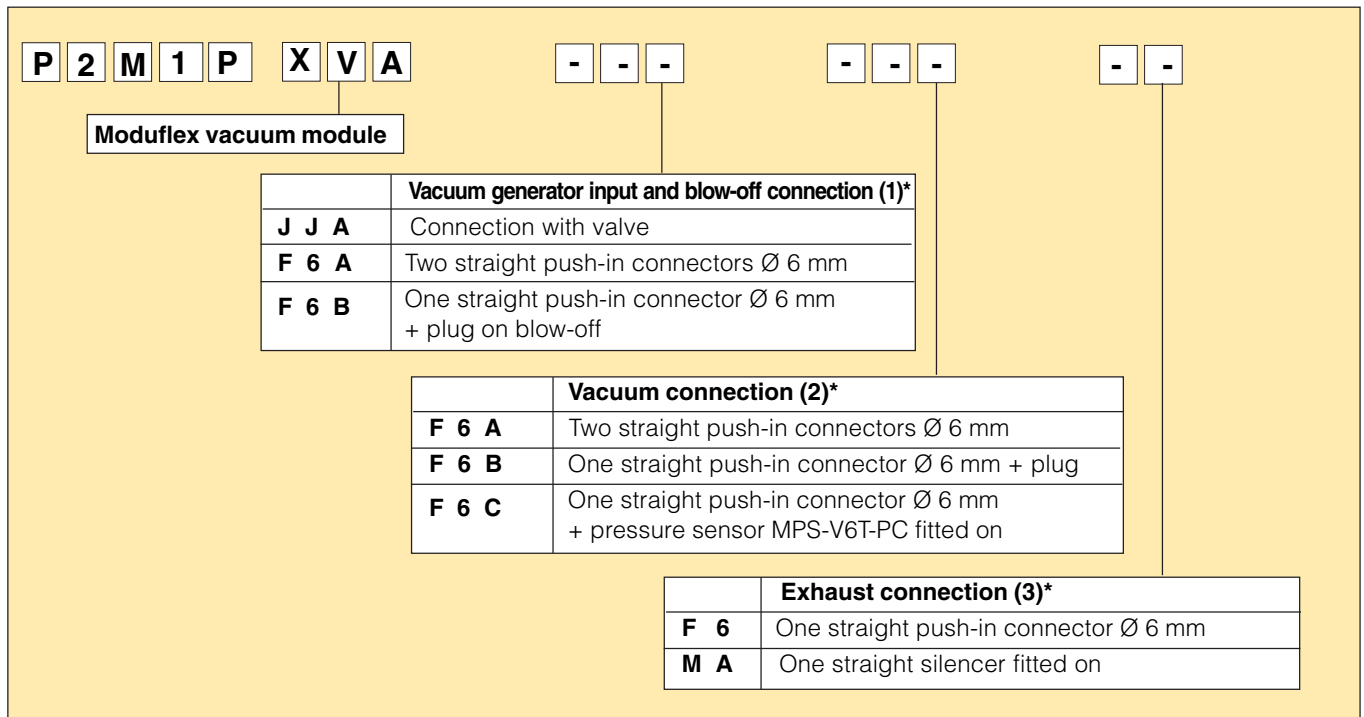
Double 3/2 valve control

One 3/2 valve controls air supply for vacuum. The other 3/2 valve will generate an additional blow-off that may prove necessary to obtain quick part release from large vacuum pads.

The effect of the blow-off can be controlled with an adjustable screw.

This Moduflex valve can be electrically or pneumatically actuated.

Order codes



* See vacuum generator connection drawing page 6.

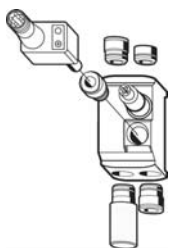
Complete vacuum modules and stand-alone valves combination

Mounting	Blow-off	Vacuum connect.	Vacuum module with silencer	3/2 valve electrically actuated	3/2 valve pneu. actuated
On valve	external	2	P2M1PXVAJJAF6AMA	P2M1SDEE2CV2C	P2M1SDPPC
On valve	internal	2	P2M1PXVAJJAF6AMA	P2M1S3ES2CV2C	P2M1S3PSC
On valve	external	1	P2M1PXVAJJAF6BMA	P2M1SDEE2CV2C	P2M1SDPPC
On valve	internal	1	P2M1PXVAJJAF6BMA	P2M1S3ES2CV2C	P2M1S3PSC
In-line	external	2	P2M1PXVAF6AF6AMA	P2M1SDEE2CV2CF6	P2M1SDPPCF6
In-line	external	1	P2M1PXVAF6AF6BMA	P2M1SDEE2CV2CF6	P2M1SDPPCF6
In-line	internal	2	P2M1PXVAF6BF6AMA	P2M1S3ES2CV2CF6	P2M1S3PSCF6
In-line	internal	1	P2M1PXVAF6BF6BMA	P2M1S3ES2CV2CF6	P2M1S3PSCF6

Note : Complete modules are delivered with straight plug-in connectors Ø 6 mm and one silencer fitted on.

Standard modules and accessories

Description	Weight g	Indiv. quant.	Order codes
Standard module vacuum generator	30	1	P2M1PXVA
Push-in straight pneumatic connector - ext. Ø 6 mm tube	3	10	FMD06-1
G1/8 straight pneumatic connector	3	1	FMDG1-1
Push-in elbow pneumatic connector - ext. Ø 6 mm tube	5	10	CMD06-1
G1/8 elbow pneumatic connector	3	1	CMDG1-1
Plug	5	1	PMDXX1
Double male union connector	8	1	HMDXX1
G1/8 exhaust silencer	5	1	P6M-PAB1
Adjustable PNP pressure sensor, M8 connector	10	1	MPS-V6T-PC
Adjustable PNP pressure sensor, 2 m wire	70	1	MPS-V6T-PG



Moduflex vacuum generator

Technical characteristics

Vacuum module

Fluid

Compressed air or inert gas, filtered 40µ mini., not lubricated

Working pressure

1 to 8 bar

Working temperature

-15°C to +60°C

Materials

Body : Polyamide 6,6 reinforced fibreglass

Poppet : Nitrile

Nozzle : Brass

Clip connector : Treated steel

Pressure sensor

Fluid

Air or inert gas, filtered 40µ mini., not lubricated

Working temperature

0°C to +50°C

Supply

10,8 to 30 V DC

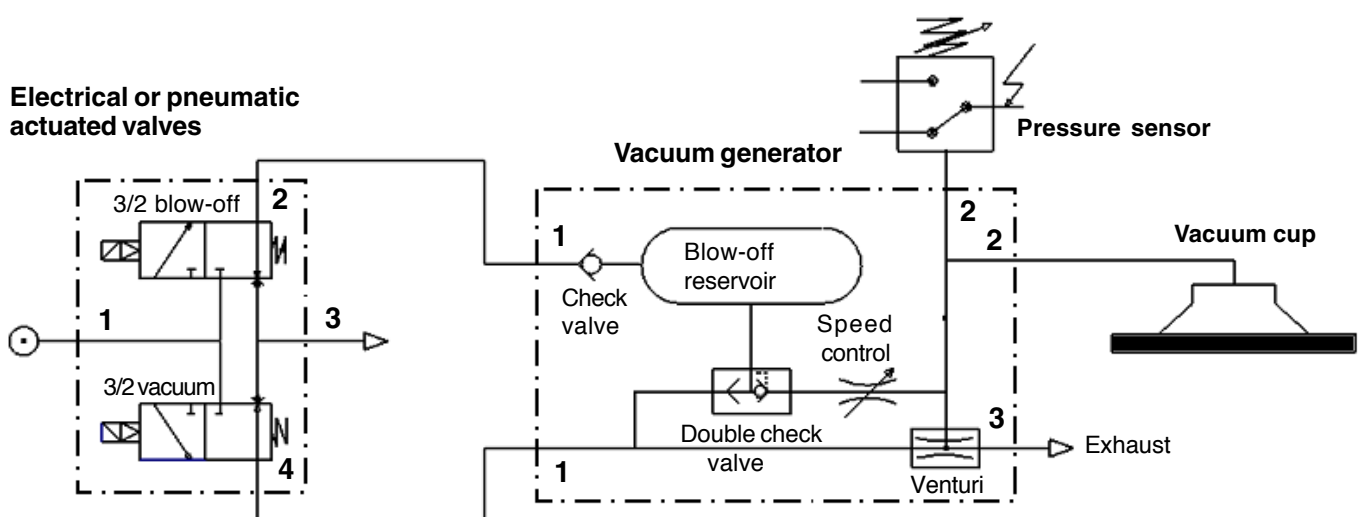
Digital output

PNP 125 mA

Materials

Body : Polycarbonate

Connection drawing



Moduflex vacuum generator

Specific characteristics

Maximum vacuum

Vacuum level : 90% at 6,5 bar

Air consumption

Air consumption : 46 NI/min at 5 bar

Vacuum flow

Flow : 25NI/min at 0 % vacuum and 6,5 bar

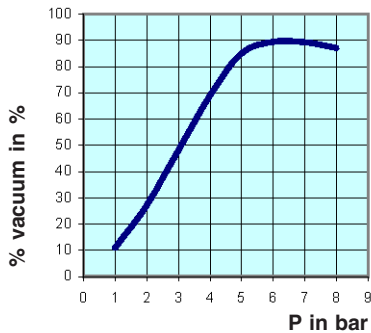
Evacuation time in s/l to reach different vacuum levels % (at P = 6,5 bar)

Vacuum %	0	10	20	30	40	50	60	70	80	90
Time in s	0,0 / 0,0	0,3 / 0,3	0,4 / 0,5	0,8 / 0,9	1,4 / 1,5	2,0 / 2,2	2,7 / 3,2	3,7 / 4,9	5,9 / 9,8	10,7 / -
Flow in NI/min	24,9 / 23,2	22,1 / 20,3	19,3 / 17,3	16,6 / 14,4	13,8 / 11,5	11,0 / 8,5	8,2 / 5,6	5,5 / 2,7	2,7 / 0,0	0,0 / -

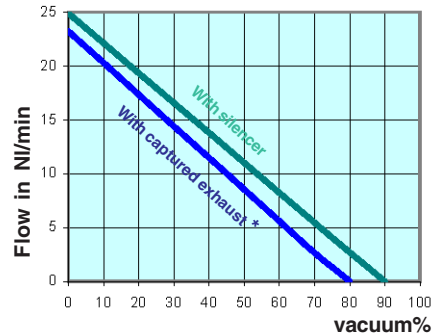
With silencer / With captured exhaust *

Performances

Vacuum level

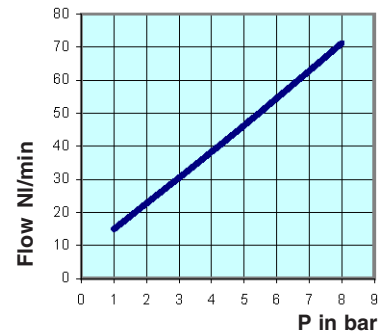


Vacuum flow



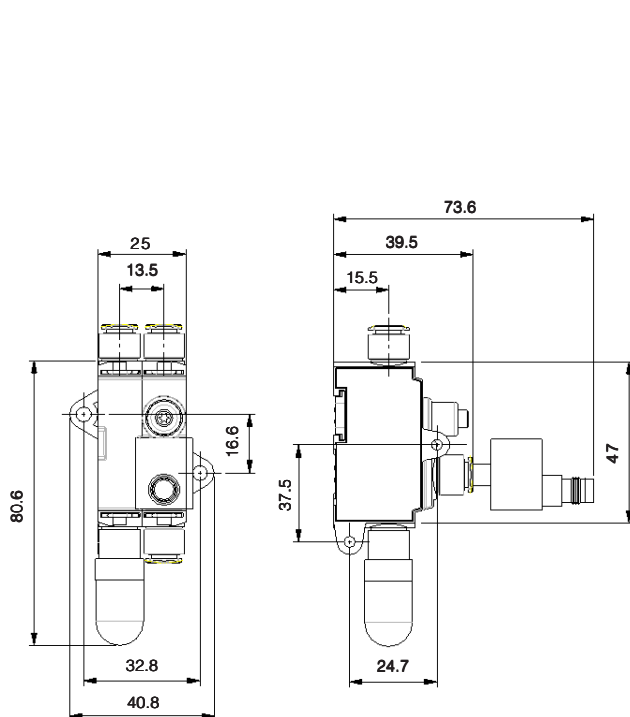
* 1 m exhaust - tube Ø6 mm
3 m exhaust - tube Ø8 mm

Air consumption

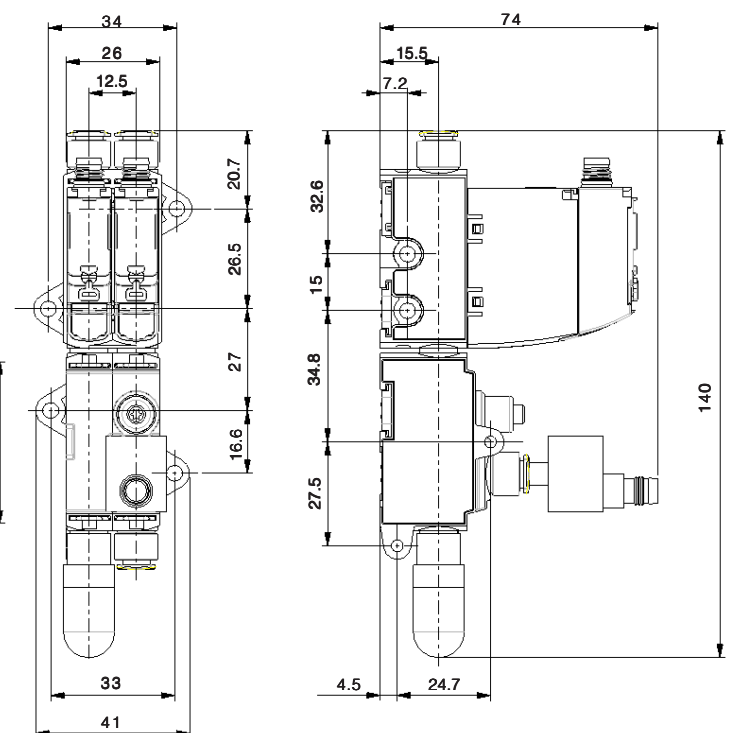


Dimensions

In-line



With Moduflex valve



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