

Escapement units PVM

PVM 0A • PVM 1A • PVM 2A • PVM 3 • PVM 4

Application:

The pneumatic escapement units are ideal means to isolate, stop and escape of individual parts from conveyor tracks, magazines, vibratory bowl feeders a.s.o.

Function principle:

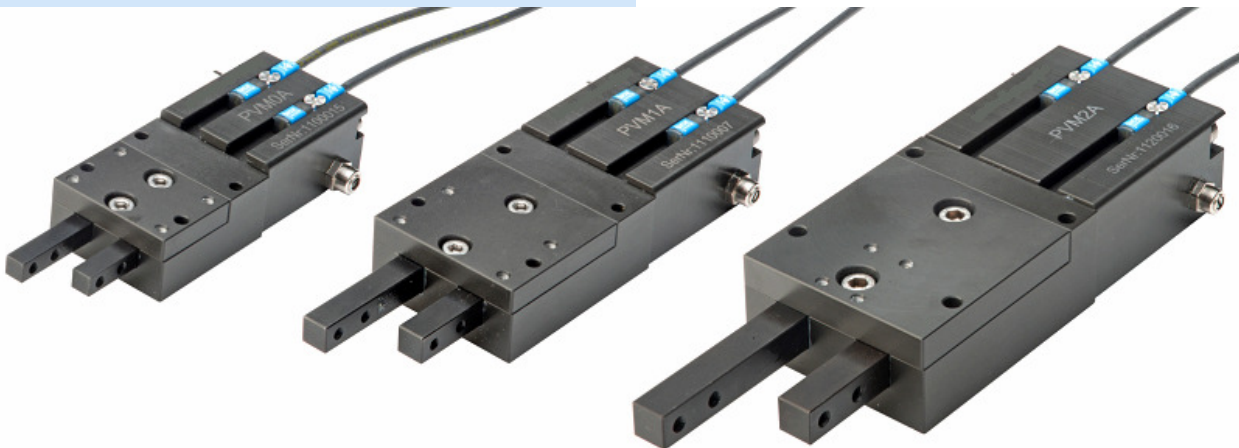
The two square rods are very precise guided and protected against torsion. An internal locking system ensures that both rods are extended before either rod can retract. Therefore only one 5/2 way valve is necessary to command the escapement unit.

Execution:

Body in Alu hard coated, rods in hard steel.

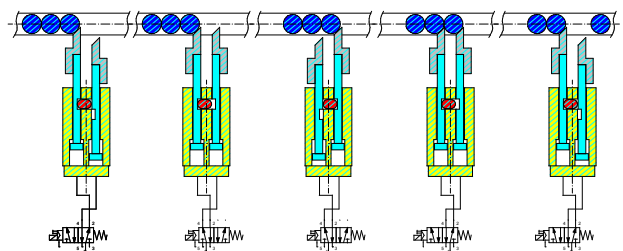
End position detectors:

To detect the end positions of the rods, magnetic cylinder sensor for T-slot is available. (Option see specific data sheet)



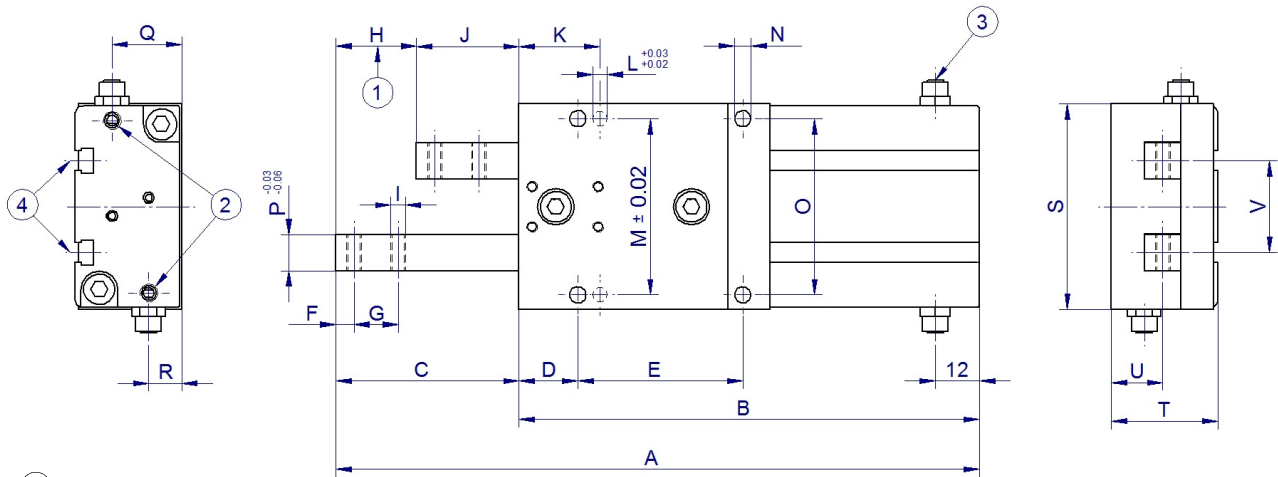
Special Features :

- Various sizes available
- contactless interrogation of the piston rod position
- commercially available sensors for cylinders T-slots can be used
- Orientation of the threaded holes in the piston rod can be selected
- Wear parts kit available
- Special cylinder seals and internal damping give guaranty for high numbers of cycle.



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Dimensions



- ① Stroke
- ② Compressed air connection M5
- ③ One-way flow control valve
- ④ Slot for proximity sensor

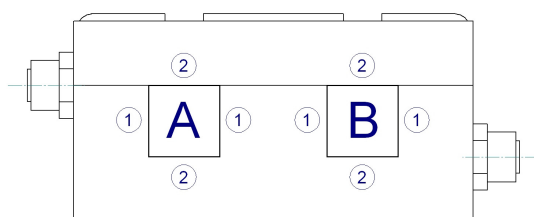
TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M
PVM 0A	109	83	26	10	21	4	8	8	M3	18	16	∅ 3	31
PVM 1A	138.5	103.5	35	12.5	33	4.5	9.5	13	M3	22	20	∅ 4	37
PVM 2A	175.5	125.5	50	16	45	5	12	22	M4	28	22	∅ 4	48

TYPE	N	O	P	Q	R	S	T	U	V				
PVM 0A	∅ 3.5	31	□ 5.9	13.5	5.5	37	22	9.5	15				
PVM 1A	∅ 3.5	37	□ 7.9	14	8	45	24	11	19				
PVM 2A	∅ 4.5	48	□ 9.9	19	9	56	29	14	25				

Piston rod design

Defining the alignment of tapped holes in the piston rods.

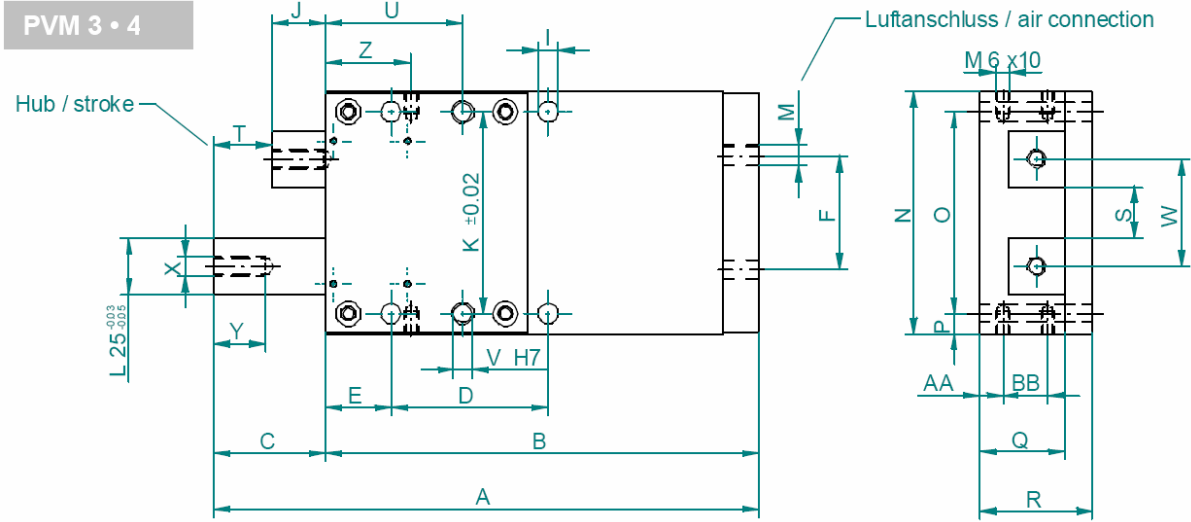
- 1 Tapped hole horizontal
- 2 Tapped hole vertical



	A	B
Standard	1	1
Variante 1	1	2
Variante 2	2	2
Variante 3	2	1

Escapement units PVM PVM 3 • PVM 4

Dimensions



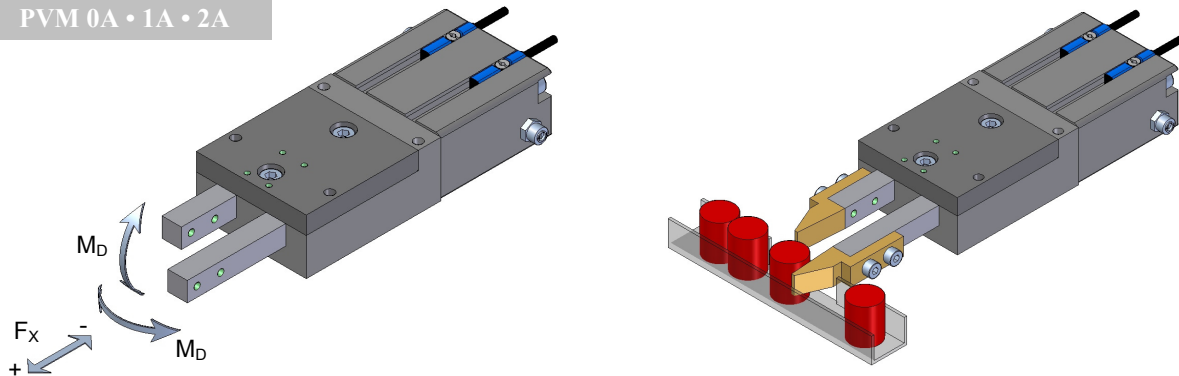
	PVM 3	PVM 4
A	243	331
B	193	240
C	50	91
D	70	100
E	29	32
F	49	85
I	9	13
J	24	50
K	90	147
L	25	40
M	1/8	1/4
N	108	169

	PVM 3	PVM 4
O	90	147
P	9	11
Q	37.5	65
R	50	90
S	23	45
T	26	41
U	61	72
V	6	6
W	48	85
X	M8	M16
Y	16	30
Z	45	50
A	8	15
AA		
BB	20	30

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Technical Specification

PVM 0A • 1A • 2A

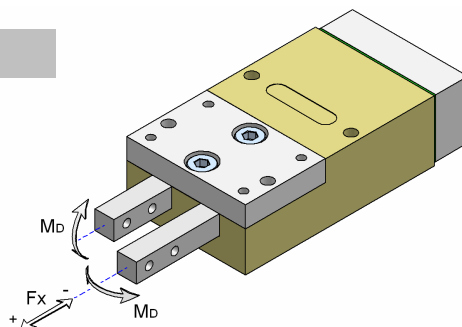


	PVM 0A	PVM 1A	PVM 2A
Extend force $F_x +$ [N]*	61	61	109
Retract force $F_x -$ [N]*	50	46	81
Moment M_D [Ncm]	130	210	700
Cycles per minute**	230	220	200
Stroke [mm]	8	13	22
Weight [kg]	0.195	0.340	0.645
Operating media	Non lubricated, filtered air supply 4 - 6 bar		

* at 6 bar

** at 6 bar, unloaded, unrestricted

PVM 3 • 4



	PVM 3	PVM 4
Extend force $F_x +$ [N]*	410	640
Retract force $F_x -$ [N]*	330	420
Moment M_D [Ncm]	4000	8500
Cycles per minute**	100	50
Stroke [mm]	26	41
Weight [kg]	3.600	12.300
Operating media	Non lubricated, filtered air supply 4 - 6 bar	

* at 6 bar

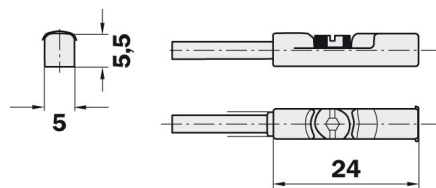
Sensors

PVM 0A • PVM 1A • PVM 2A

For the scanning of one or both rods in the end position "retracted" the installation is provided of magnetic cylinder sensors.

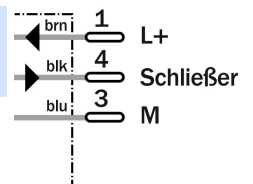


Dimensions



Connection type

Cable with plug M8 3-pin ;
PUR ; Length 0.3 m



Technical specification

Switching output	: PNP
Output function	: Normally open
Supply voltage	: 10-30 VDC
Current consumption	: ≤ 10 mA
Continuous current	: ≤ 200 mA
Enclosure rating	: IP 68

PVM 3 • PVM 4

Dimensions

	PVM 3	PVM 4
D [mm]	20	46
E [mm]	11.5	24
F [mm]	8	8

Technical specifications

PNP	
Operating voltage	10-30 VDC
Supply current	< 18 mA
Current rating	200 mA
Operating distance	2.0 mm
Protection	IP 67
Switching status	Red LED
Cable length	2 m

