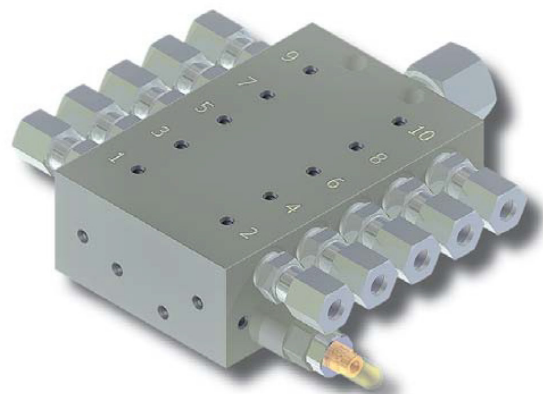




Product description

## Progressive Block Distributor PVB

P\_2017\_1\_GB\_PVB



### Product characteristics

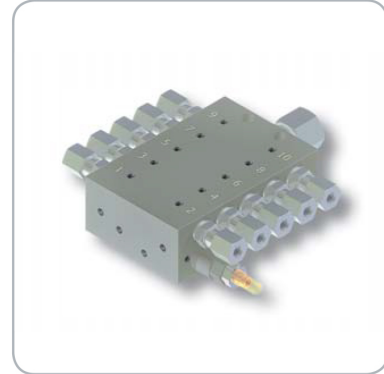
- + Progressive distributor / modular design
- + Grease and oil
- + up to 20 outlets for 6 mm pipe
- + Metered volume 0.20 cm<sup>3</sup>
- + Material steel and/or stainless

## Application

The PVB - distributors are mainly used in progressive systems using standardised metered quantities and offer a cost-effective and rational solution for the central supply of lubrication points. In addition, the high operating pressure up to 350 bar provides the function of sub-distributors in large two-line systems.

### Advantages:

- + easy system layout
- + problem-free installation
- + unsophisticated control and monitoring features
- + precisely-measured lubricant discharge per outlet



## Use

Machine-tools and processing machinery, mechanical engineering in general, presses of every type, plastic and paper processing machines, textile machines, printing and packaging machinery, etc.

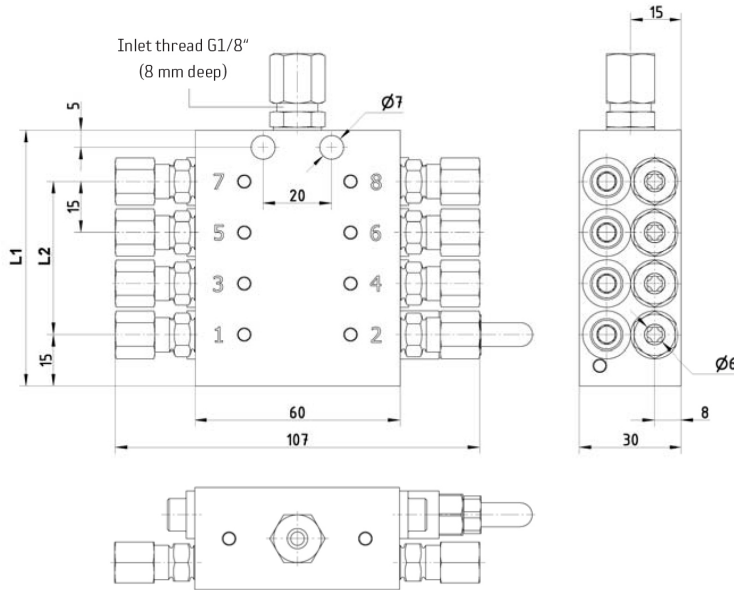
## Design and function

PVB distributors are piston distributors which evenly distribute the supplied lubricant. This is achieved by means of metal sealing pistons which dispense the lubricant to the connected lubrication points progressively (one after another). Due to the way the pistons work under pressure in the PVB distributor, it is possible to monitor the functioning of the system (either visually or electronically) with little effort. The distributor dispenses for as long as it is supplied with lubricant at a sufficient pressure. Once an individual metered volume (0.20 cm<sup>3</sup>) of lubricant is dispensed from each outlet in turn this is called a distributor cycle. The lubricant required is controlled via the number of cycles / time units.

The PVB distributor is available in 8 different sizes (or 6 for the stainless steel version), depending of the number of outlets required. The minimum configuration contains 3 pistons providing up to 6 outlets. Each additional size has an additional metering piston and an additional pair of outlets.



**Dimensions (mm)**



<b>Number of outlets</b>	up to 6	up to 8	up to 10	up to 12	up to 14	up to 16	up to 18	up to 20
<b>L1 (mm)</b>	60	75	90	105	120	135	150	165
<b>L2 (mm)</b>	30	45	60	75	90	105	120	135
<b>Weight (kg)</b>	0.9	1.1	1.3	1.5	1.7	1.9	2.1	2.3

Note: Stainless steel version has max. 16 outlets

**Technical Data**

Operation pressure max. :  
 in versions with motion indicator ..... 160 bar  
 in pressure resistant versions (without motion indicator) ..... 300 bar

Metered volume per piston stroke per outlet: ..... 0.20 cm<sup>3</sup>

Opening pressure: ..... > 10 bar

Temperature range (without electrical monitoring): ..... - 20°C to + 120°C

Permitted volume flow (for oil): ..... 0.5 to 1000 cm<sup>3</sup>/min

Permitted differential pressure between the outlets: ..... max. 100 bar

maximum permitted operating pressure when using non-return valves

Suitable lubricants based on mineral oil:  
 Grease ..... NLGI class 000 to 2 DIN 51818  
 Oil ..... ISO VG 68 to 1500 operating viscosity DIN 51519  
 Synthetic lubricants ..... on request

The NLGI-class as per DIN 51818 indicates the consistency of the lubricant, and gives information on the stiffness of the grease. It does not give any indication of the general ability to supply in lubrication systems, since lubricating greases with the same NLGI class can have different flow characteristics.

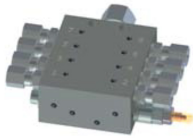
On an individual basis we will be happy to test your lubricant in our facilities for ability to supply.

Connectable pipelines:  
 Inlet (Port thread: G 1/8) ..... Ø 6/8/10 mm  
 Outlet (M 10x1, Special fitting) ..... Ø 6 mm

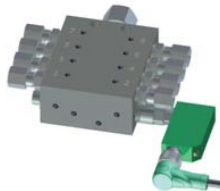
### Monitoring

The PVB distributor can be fitted with a motion indicator on the last outlet pair for visually monitoring the piston movement. During one distributor cycle the motion indicator moves out and in once or the reverse, depending on the piston position. In addition the motion indicator can be read electrically using a proximity switch. In this case it must be ensured that the same side is always evaluated using the control mechanism.

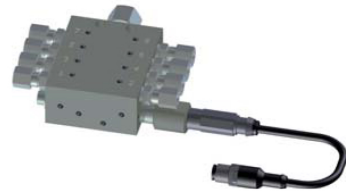
Visual monitoring (160 bar)



Electrical monitoring (160 bar)



Pressure resistant electrical monitoring (350 bar)

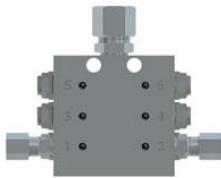


Note: Operating pressure 350 bar in versions without monitoring

### Examples of order

By combining two outlets the metered quantity is doubled. If an outlet is closed, in order to obtain an odd number of outlets, this leads to a metered quantity ratio of 2:1 at one outlet. If equal metered quantities are required, all the outlets must be coded as combined outlet pairs. The following examples show frequently used configurations for 2 - 6 outlets:

2 x 0.6 cm<sup>3</sup>



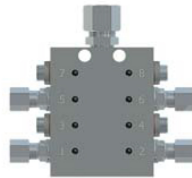
PVB06A \_\_ FFA\_\_

3 x 0.4 cm<sup>3</sup>



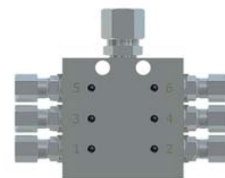
PVB06A \_\_ BCB\_\_

4 x 0.4 cm<sup>3</sup>



PVB08A \_\_ FAFA\_\_

6 x 0.2 cm<sup>3</sup>



PVB06A \_\_ AAA\_\_



Verteilerkonfiguration und Codierung

Code example: PVB

08	A	02	A	A	F	B										02
----	---	----	---	---	---	---	--	--	--	--	--	--	--	--	--	----

Number of outlets (steel):

- up to 6 outlets - 06
- up to 8 outlets - 08
- up to 10 outlets - 10
- up to 12 outlets - 12
- up to 14 outlets - 14
- up to 16 outlets - 16
- up to 18 outlets - 18
- up to 20 outlets - 20

Number of outlets (stainless steel):

1.4305	1.4404
up to 6 outlets - E6	- F6
up to 8 outlets - E8	- F8
up to 10 outlets - EA	- FA
up to 12 outlets - EC	- FC
up to 14 outlets - EE	- FE
up to 16 outlets - EF	- FF

Monitoring:

- without motion indicator (350 bar) - 01
- with motion indicator (160 bar) - 02
- with motion indicator and monitoring switch (160 bar) - 03
- with motion indicator and pressure-resistant monitoring switch (350 bar) - 08

Revision A (no alternative)

Outlet pairs: 7+8, 5+6, 3+4, 1+2

Optional for further outlet pairs

Outlet codes:

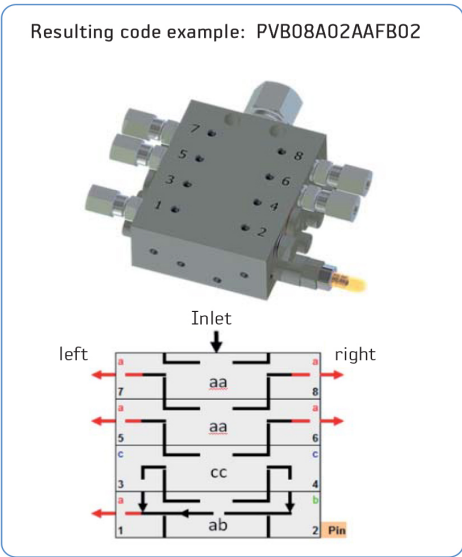
- A - both outlets open (AA)
- B - left outlet open, right closed (AB) b-connection open
- C - right outlet open, left closed (BA) b-connection open
- D\* - left outlet open, right closed (AC) c-right connection open
- E\* - right outlet open, left closed (CA) c-left connection open
- F\* - both outlets closed (CC) c-connections open on both sides
- G\* - both outlets closed (BC) b-connection and c-right connection open
- H\* - both outlets closed (CB) b-connection and c-left connection open

Note:

Each letter describes a pair of outlets. It starts with the outlet pair at the inlet with the highest number.

The number of letters used for the outlet codes depends on the size of the distributor. The minimum configuration with 6 outlets requires at least 3 letters. In this example there are 4 pairs of outlets, so 4 letters must be defined - according to the above table.

\* The codes D, E, F, G, H (c-connection) are not permitted in the last outlet pair (1+2) for functional-technical reasons.



Accessories (for pre-assembled delivery):

Without inlet fitting, only outlet fittings .....	00
Inlet fitting for Ø.6 mm pipe and outlet fittings .....	01
Inlet fitting for Ø 10 mm pipe and outlet fittings .....	02