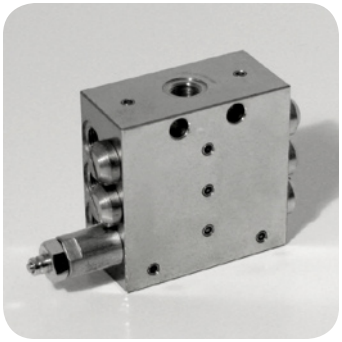
PVB Divider Valve

Mobile, Series Progressive Systems



General

The PVB Divider Valve accurately meters and dispenses lubricant to as many as 20 outlet lines at operating pressures up to 3600 psi. Output volumes are fixed at 0.17cc (0.01 cu. in.) per cycle but can be combined with other outlets by using appropriate fittings for larger outputs. Valves are available with cycle indicator pins to provide visual confirmation of system operation. In addition the cycle pin can be fitted with a switch to provide electrical feedback to a system controller.

Operation

Operational sequence of a PVB Divider Valve is defined as "progressive," meaning that each valve segment completes its piston stroke, discharging a positive volume of lubricant to the point it serves before the following valve segment operates. As long as lubricant is supplied under pressure to the inlet of the divider valve, these segments will continue to operate in a progressive manner. The divider valves will always follow a constant discharge pattern. When lubricant flow ceases, the pistons will stop. Whenever flow resumes, the pistons will start again at the same point in the discharge cycle.

Features

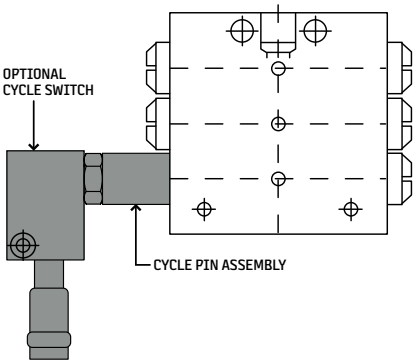
+ Flexible design allows for on-site configurations
+ Valves available in sizes ranging from 6 to 20 outlets
+ Positive displacement discharge
+ One switch monitors complete system
+ Valves are corrosion resistant

Technical Data

Lubricant	Grease	NLGI grade 000-2
	Synthetics	Contact factory prior to use
Discharge/Cycle/Outlet		0.17cc (0.01 cu. in.)
Minimum Pressure		145 psi (10 bar)
Maximum Pressure	Without indicator pin	4350 psi (300 bar)
	With indicator pin	2300 psi (160 bar)
Maximum Differential Pressure (between two opposite outlets)		1015 psi (70 bar)
Operating Temperature Range		-13˚F to 176˚F (-25˚C to 80˚C)
Material		Carbon steel with surface protection
Surface Protection		Proprietary, 1000-hour salt spray

Monitoring

PVB Divider Valves are available with visual cycle pin and optional cycle switch for electrical feedback (sold separately).

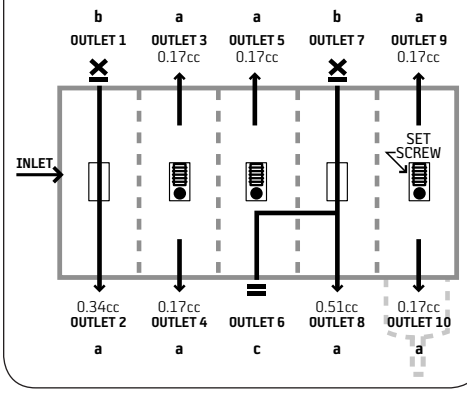


Configuring Outlets

The PVB requires the use of special fittings and/or closure plugs to configure a specific outlet arrangement. All divider valves are supplied with non-configured outlets on each side and can be converted to working outlets by using fittings or plugs, shown on page 3. Using the appropriate fitting or plug allows you to combine multiple outlets to meet higher output requirements. Closure plugs can also be used to reduce the number of working outlets. See chart below for outlet code descriptions.

Code	Outlet Type	Description
a	Working	Outlet is equipped with special tube fitting.
b	Closed	Lubricant ported to opposite outlet, same segment. (Internal set screw and ball[1] removed, unused outlet fitted with special closure plug and clamping ring; see required accessories on page 3.)
c	Closed	Lubricant ported to adjacent segment, away from the inlet segment, same side. (Unused outlet fitted with closure plug and copper seal; see required accessories on page 3.)[2]

Sample Configuration Done On-site



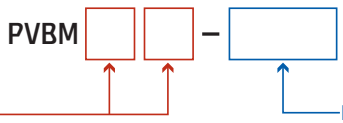
ATTENTION

Standard or conventional tubing adapters are not appropriate.

[1] *Set screw (Part #74107-2644) Ball (Part #71961-4114)*

[2] *Code "c" porting is not possible for the end segment.*

How to Order



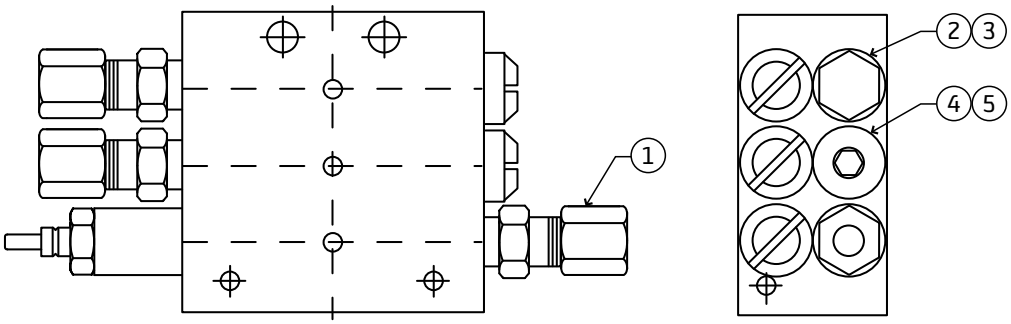
Number of Outlets
06– 6 outlets
08– 8 outlets
10– 10 outlets
12– 12 outlets
14– 14 outlets
16– 16 outlets
18– 18 outlets
20– 20 outlets

End Segment
001– With cycle pin
002– Without cycle pin

The PVB Divider Valve features a smart part number ordering system. Choose the number of outlets and the type of end segment. For example: To order a 6 outlet divider valve with a cycle pin, you would use Part #PVBM06-001.

Outlet Fittings and Accessories

Item	Description			Part #
1	Outlet fittings	Compression	1/4" O.D. TBG outlet fittings with check valve	35166
			1/4" O.D.TBG outlet fittings without check valve	35362
			3/16" O.D. TBG outlet fittings with check valve	35360
			3/16" O.D. TBG outlet fittings without check valve	35361
			6mm O.D. TBG outlet fittings with check valve	23301
		Quick connect	1/4" O.D. TBG outlet fittings with check valve	29080
			1/4" O.D. TBG outlet fittings without check valve	29082
			3/16" O.D. TBG outlet fittings with check valve	29084
			3/16" O.D. TBG outlet fittings without check valve	29086
			4mm O.D. TBG outlet fittings with check valve	23405
			6mm O.D. TBG outlet fittings with check valve	23407
	Outlet adapter		1/8" O.D. NPT(F) outlet fitting with check valve	29076
			1/8" O.D. NPT(F) outlet fitting without check valve	29078
2	Closure plug – "b" porting (singling)			74161-1851
3	Clamping ring – "b" porting (singling)			73511-3223
4	Closure plug – "c" porting			74161-5741
5	Copper seal – "c" porting			72712-1094



Accessories

	Description	Part #
	PVB bracket	35417
	1/4-20 Grade 8 – 2.5" bolt	35538
	1/4-20 Grade 8 – 2.5" Nylon locknut	35539
	Proximity cycle switch with LED (NPN)	66925S003*
	Cable, Straight, 10 meters long	76928-2863
	Cable, 90°, 10 meters long	76928-2833

** Use with cable part #76928-2863 or #76928-2833*

Outlet Fitting

"b" Porting – Closure Plug & Clamping Ring

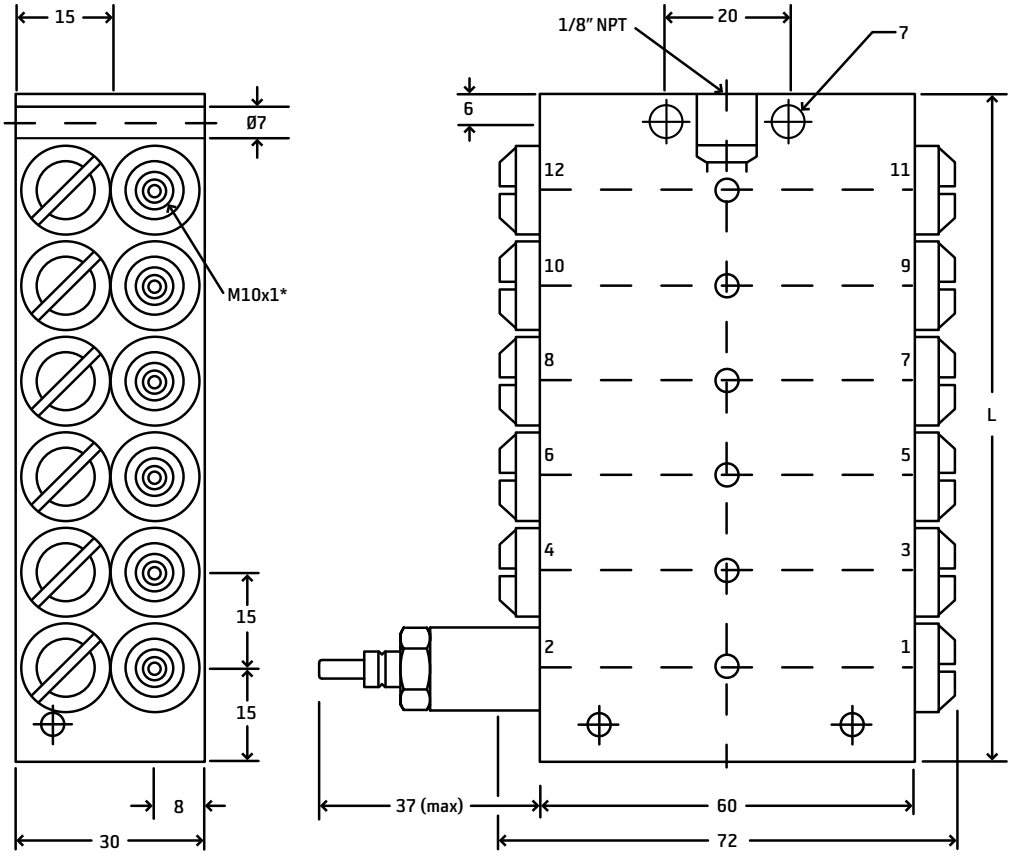
"c" Porting – Closure Plug & Copper Seal

For additional accessories, see *Brochure #35544: Mobile Accessories Catalog.*

Dimensional Schematics

Measurements shown in millimeters unless otherwise noted.

** Refer to page 3 for tubing connections and accessories.*



Outlets (qty)	L
6	60mm
8	75mm
10	90mm
12	105mm
14	120mm
16	135mm
18	150mm
20	165 mm