

Preload valve for proportional displacement control, code PVAPVV*

An alternative solution is the use of a direct operated preload valve. The preload valve is offered in a manifold for direct mounting to the pressure port of the pump.

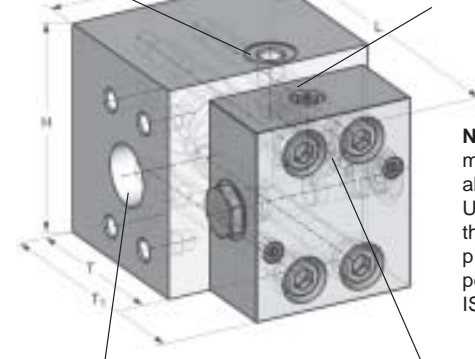
The opening pressure of the valve is set to approx. 20 bar. At 30 bar load pressure the valve is fully open (pressure drop <1 bar).

The ordering code for the preload valve is **PVAPVV***.

Therefore * stands for the frame size of the pump (thread, port and seal material option).

Preload valve PVAPVV*

Drain port L, G1/4"

Gage port p_1 , G1/4"
(preloaded pressure, covered)

Flanged ports ISO 6162: DN, PN; fits to PV frame size BG; threads: M

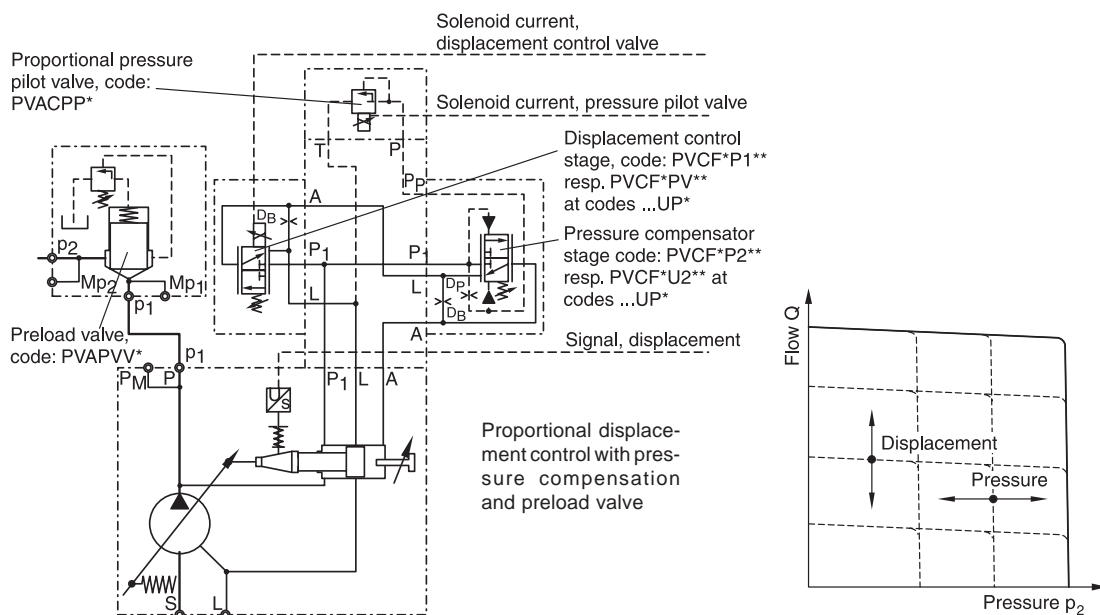
Gage port p_2 , G1/4"
(outlet pressure, covered)

Note: All auxiliary manifolds can also be supplied in US-version (UNC threads and UNF ports) and with ports according to ISO 6149.

Dimensions preload valve PVAPVV*

Dimension		BG1	BG2	BG3	BG4	BG5
H	[mm]	110	110	110	110	130
B	[mm]	92	92	100	100	154
T	[mm]	80	80	92	92	105
L ²⁾	[mm]	120	120	140	140	160
T ₁	[mm]	116	116	137	137	150
for size		PV016 - 023	PV032 - 046	PV063 - 092	PV140 - 180	PV270
DN	[mm]	19 (3/4")	25 (1")	32 (1 1/4")	32 (1 1/4")	38 (1 1/2")
PN	[bar]	400	400	400	400	400
M		M10	M12	M12 (M14*)	M12 (M14*)	M16
valve insert		DIN E16	DIN E16	DIN E25	DIN E25	DIN E32
Q _{nominal}	[l/min]	160	160	300	300	550

* optional for PV063 - PV180, thread option 4; ²⁾ L = clamping length for bolts M

Hydraulic circuit FPR/UPR control and preload manifold

PI PVplus UK.PMD RH

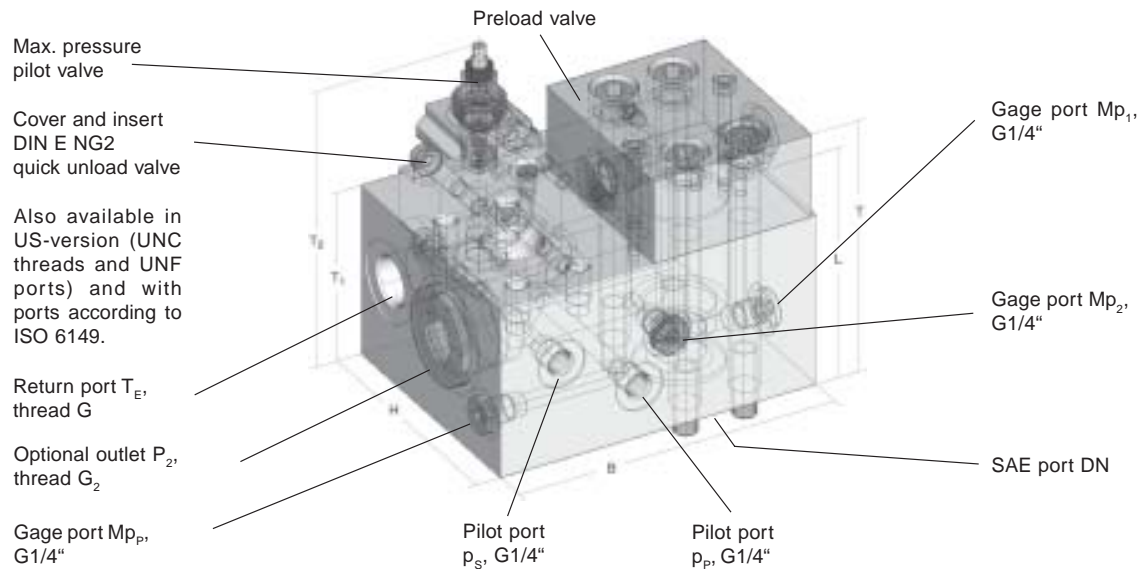
Preload and quick unload manifold, code PVAPVE*

The combination of the preload and the quick unload function into one manifold can be ordered under the code PVAPVE*. This manifold is also designed for direct pump outlet mounting.

To maintain a secure function under all conditions the pressure compensator requires an external sensing line

(P_s) which is connected to the system side of the preload valve.

The ordering code for this proportional displacement control option is **FPP for pressure compensation** and **FPE for closed loop pressure control**.



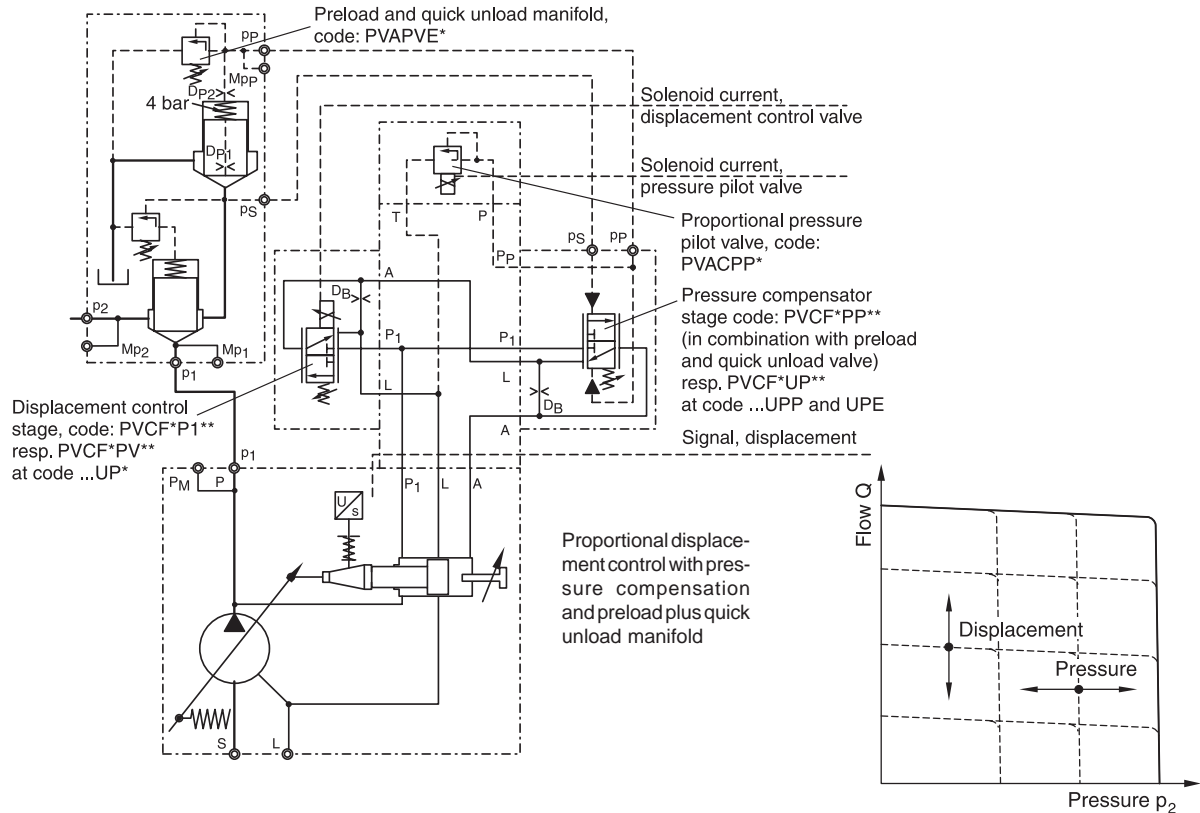
Flange ports ISO 6162; DN, PN; fit to PV, frame size BG; thread M

Dimensions preload and quick unload manifold PVAPVE*

Dimension		BG1	BG2	BG3	BG4	BG5
B	[mm]	145	145	175	175	210
H	[mm]	113	113	135	135	160
T	[mm]	80	80	92	92	105
L	[mm]	120	120	140	140	160
H_1	[mm]	153	153	175	175	205
T_1	[mm]	116	116	137	137	150
for size		PV016 - 023	PV032 - 046	PV063 - 092	PV140 - 180	PV270
DN	[mm]	19 (3/4")	25 (1")	32 (1 1/4")	32 (1 1/4")	38 (1 1/2")
PN	[bar]	400	400	400	400	400
M		M10	M12	M12 (M14*)	M12 (M14*)	M16
valve insert	NG1	DIN E16	DIN E16	DIN E25	DIN E25	DIN E32
$Q_{nominal}$	[l/min]	160	160	300	300	550
valve insert	NG2	DIN E16	DIN E16	DIN E16	DIN E16	DIN E25
$Q_{nominal}$	[l/min]	160	160	160	160	300
G	(port T_E)	1/2"	1/2"	3/4"	3/4"	3/4"
G_2	(opt. outlet)	3/4"	1"	1 1/4"	1 1/4"	1 1/2"

* optional for PV063 - PV180, thread option 4

Hydraulic circuit FPS/UPS control with preload and quick unload manifold



Ordering code pump accessories

