

PVEM

Technical Information PVG 32 Proportional Valve Group

PVG 32 technical data

Technical data for PVEO and PVEM (continued)

Signal voltage (PVEM)	neutral	$0.5 \times U_{DC}$	$1.25 \rightarrow 6V$	3.75
	A-port ↔ B-port	$0.25 \cdot U_{DC}$ to $0.75 \cdot U_{DC}$	$3V \rightarrow 8V$	$12V$
Signal current at rated voltage (PVEM)		0.25 mA	DAC	0.50 mA
Input impedance in relation to $0.5 \cdot U_{DC}$		12 KΩ		
Power consumption		8 W		

Fig 3
 $.25 \times 12 = 3$
 $.75 \times 12 = 9$

Reaction time for PVEO and PVEM

Supply voltage	Function		PVEO, On/Off	PVEO-R, On/Off	PVEM, Prop. med.
Disconnected by means of neutral switch	Reaction time from neutral position to max. spool travel	max.	0.235 s	0.41 s	0.700 s
		rated	0.180 s	0.35 s	0.450 s
		min.	0.120 s	0.25 s	0.230 s
Disconnected by means of neutral switch	Reaction time from max. spool travel to neutral position	max.	0.175 s	0.33 s	0.175 s
		rated	0.090 s	0.27 s	0.090 s
		min.	0.065 s	0.25 s	0.065 s
Constant voltage	Reaction time from neutral position to max. spool position	max.	-	-	0.700 s
		rated	-	-	0.450 s
		min.	-	-	0.230 s
Constant voltage	Reaction time from max. spool travel to neutral position	max.	-	-	0.700 s
		rated	-	-	0.450 s
		min.	-	-	0.230 s
Hysteresis *		rated	-	-	20%

* Hysteresis (control signal/spool travel) is indicated at rated voltage and $f = 0.02$ Hz for one cycle. (one cycle = neutral → full A → full B → neutral)

Technical data for PVEA, PVEH and PVES

PVEA, PVEH and PVES					
Supply voltage U_{DC}	rated		11 V to 32 V		$12V$ from tractor
	range		11 V to 32 V		
	max. ripple		5%		
Current consumption at rated voltage	PVEH/PVES (PVEA)		0.57 (33) A @ 12 V		0.3 (17) A @ 24 V
Signal voltage	neutral		$0.5 \times U_{DC}$	$5 \times 12 = 6V$	
	A-port ↔ B-port		$0.25 \cdot U_{DC}$ to $0.75 \cdot U_{DC}$	$.25 \rightarrow$	
Signal current at rated voltage			0.25 mA to 0.70 mA		
Input impedance in relation to $0.5 \cdot U_{DC}$			12 KΩ		
Input capacitor			100 nF		
Power consumption	PVEH/PVES (PVEA)		7 (3.5) W		
(PVEH/PVES)		Max. load	100 mA		60 mA
	Active	Reaction time at fault	500 ms (PVEA: 750 ms)		
	Passive	Reaction time at fault	250 ms (PVEA: 750 ms)		