

PVE Series 4 for PVG 32, PVG 100 and PVG 120 Technical Information Electrical Actuation

ON/Off Actuation

With electrical ON/OFF actuation the main spool is moved from neutral to maximum stroke when power is connected.

PVEO, ON/OFF

Main features of PVEO:

- Compact
- Robust operation
- With Hirschmann, Deutsch or AMP connector
- Low electrical power
- As option with directional indicator (DI)

PVEO-R, ON/OFF with hydraulic ramp

Like PVEO, but for applications where longer reaction time is needed.

With electrical proportional actuation the main spool position is adjusted so that it corresponds to an electrical signal – e.g. from a remote control unit.



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Proportional Actuation

PVEA, proportional fine

PVEA versions are recommended where among the requirements are fault monitoring, low hysteresis, high resolution but where the reaction time is not critical. Main features of PVEA:

- Inductive transducer
- Integrated pulse width modulation
- Low hysteresis
- AMP or Deutsch connector
- As option with directional indicator (DI)
- Fault monitoring with transistor output for signal source.
- Low electrical power
- No set-up procedure

PVEH, proportional high

Performance like PVEA but with fast reaction time. Main features of PVEH:

- Inductive transducer
- Integrated pulse width modulation
- Low hysteresis
- Fast reaction time
- Hirschmann, Deutsch or AMP connector
 - As option with directional indicator (DI)
- Fault monitoring with transistor output for signal source
- Low electrical power
- No set-up procedure

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SAUER DANFOSS PVE Series 4 for PVG 32 Technical Information PVE Series 4 for PVG 32, PVG 100 and PVG 120 **Technical Data**

Technical Data

The following technical data are from typical test results. For the hydraulic system a mineral based hydraulic oil with a viscosity of 21 mm2/s [102 SUS] and a temperature of 50° C [122° F] were used.

PVEO

		PV	EO
	rated	12 V DC	24 V DC
Supply voltage UDC	range	11 V to 15 V	22 V to 30 V
	max. ripple	5%	

Reaction time PVEO (minus PVG 120)

Supply voltage	Function		PVEO ON/OFF s	PVEO-R ON/OFF s
Disconnected by		max.	0.235	0.410
means of neutral switch	Reaction time from neutral position to max. spool travel min.	rated	0.180	0.350
		min.	0.120	0.250
Disconnected by means of neutral switch		max.	0.175	0.330
	Reaction time from max. spool	rated	0.090	0.270
	mi		0.065	0.250

PVEA, PVEH and PVES

		PVEA, PVE	H and PVES	
	rated	11 V to 32 V		
Supply voltage U _{DC}	range	11 V to 32 V		
	max. ripple	5%		
Current consumption at rated voltage	PVEH/PVES (PVEA)	0.57 (0.33) A @ 12 V	0.3 (0.17) A @ 24 V	
Circulturate an	neutral	0.5 x U _{DC}		
Signal voltage	$\text{A-port} \leftrightarrow \text{B-port}$	0.25 • U_{DC} to 0.75 • U_{DC}		
Signal current at rated voltage		0.25 mA to 0.70 mA		
Input impedance in relation to 0.5 • U _{DC}		12 ΚΩ		
Power consumption	ion PVEH/PVES (PVEA) 7 (3.5) W		5) W	



PVE Series 4 for PVG 32, PVG 100 and PVG 120 **Technical Information** Dimensions

General Dimensions

PVE with Hirschmann connector





PVE with AMP connector





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SAUER PVE Series 4 for PVG 32 Technical Information PVE Series 4 for PVG 32, PVG 100 and PVG 120 Code Numbers

Code Numbers for Use on PVG 32 157B....

PVE for PVG 32 and PVG 100

PVEO, ON/OFF actua Code no. 157B	ation	Hirschman 12 V	n connector 24 V	АМР со 12 V	nnector 24 V	Deutsch o 12 V	connector 24 V
PVEO	ON/OFF	4216, 4266*	4228, 4268*	4901	4902, 4272*	4291	4292
	ON/OFF with ramp	4217	4229	4903	4904	Not available	Not available
	PVEO-DI	Not available	Not available	4905	4906	Not available	Not available

PVEA/PVE Code no. 1	H/PVES, proportional actuation 157B	Hirschmann connector 11 - 32 V	AMP connector 11 - 32 V	Deutsch connector 11 - 32 V
	Standard, active fault monitoring	Not available	4734	4792
PVEA	Standard, passive fault monitoring	Not available	4735, 4775*	Not available
	Standard, active fault monitoring	Not available	4736	4796
PVEA-DI	Standard, passive fault monitoring	Not available	4737	Not available
	Standard, active fault monitoring	4032	4034, 4074*	4092
PVEH	Standard, passive fault monitoring	4033, 4073*	4035, 4075*	4093
	Float -> B, active fault monitoring	4332	Not available	4392
	Standard, active fault monitoring	Not available	4036	4096
PVEH-DI	Standard, passive fault monitoring	Not available	4037	Not available
D\/ES	0% hysteresis, active fault monitoring	4832	4834	4892
r v LJ	0% hysteresis, passive fault monitoring	4833	4835, 4865*	Not available

* Anodized versions

PVED-CC, proportio	anl actuation	AMP connector	Deutsch connector	
157B		11 V 32 V	11 V 32 V	
PVED-CC	ISOBUS	4943	4944	

PVEH-F, proportioa	nl actuation	AMP connector	Deutsch connector	
157B		11 V 32 V	11 V 32 V	
PVEH-F	Float -> A Active fault monitoring	4338	Not available	

PVEP, proportioanl	actuation	Deutsch connector 11 V 32 V
PVEP	Active fault monitoring	11034832
PVEP-F	Float -> A Active fault monitoring	157B4753