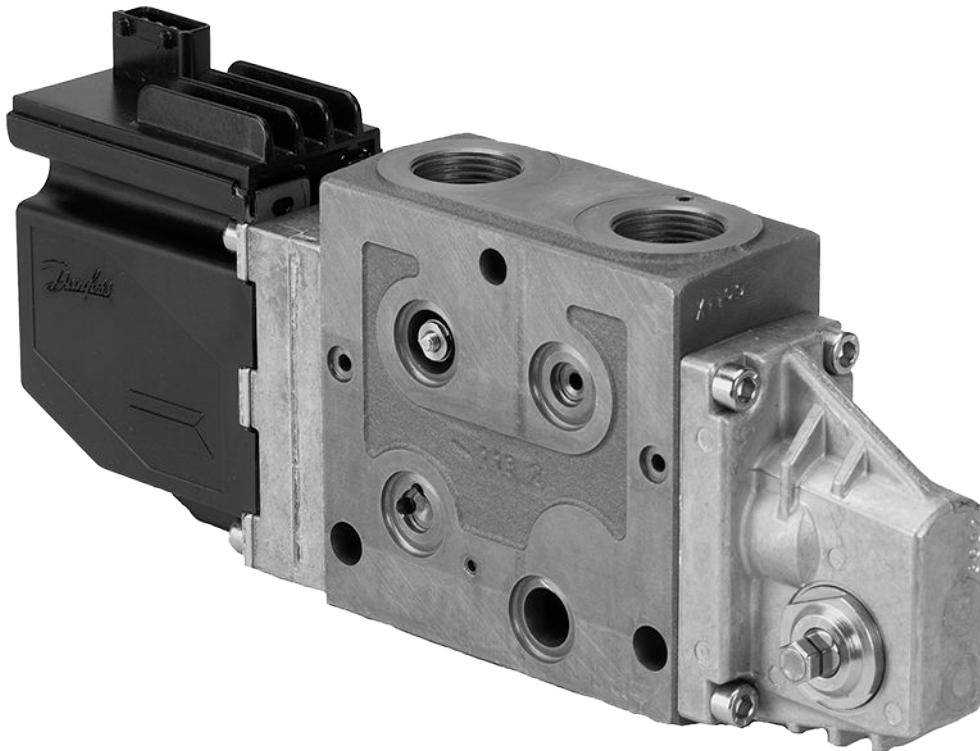


Technical Information

Proportional Valve Group Modules

PVSK



Revision history*Table of revisions*

Date	Changed	Rev
March 2017	Minor edits	0204
May 2014	Converted to Danfoss layout – DITA CMS	BC
December 2010	New back cover	BB
January 2010	Drawings changed	BA
January 2010	Japan location	AB
June 2004	First edition	AA

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Specifications

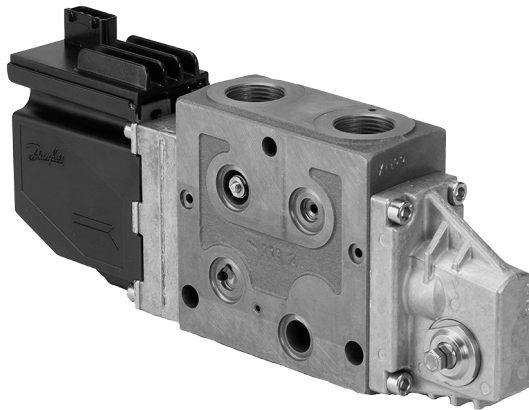
Introduction

Danfoss introduces PVSK-modules with integrated diverter valve and P-disconnect function.

The module is intended for cranes, telescope lifts and other applications that have special demands on functionality and safety.

The PVSK-module can be integrated in PVG 32 valve groups for open- as well as closed-center systems.

PVSK



PVSK spool



Functions of the PVSK-module:

- When the diverter valve is in neutral position, there is no pressure (only tank pressure) in the P-channel of the valve group.
- When the diverter valve spool is actuated in A-direction, it enables the basic modules in the PVG-group to receive pump flow supply.
- When the diverter valve spool is actuated in B-direction, it enables the (High Pressure Carry Over) HPCO-port in the PVSK module and the P-channel in the valve group to receive pump flow supply.

Specification and code number for PVSK modules

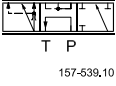
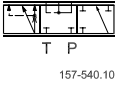
Specification and code number for PVSK modules

Symbol	Description	Code no.
157-418,10	Open and closed center inlet with pilot supply for electrical actuation Max. pump pressure 350 bar [5076 psi] Max. pump flow 120 l/min [31.7 US gal/min] P = 3/4"; HPCO = 3/4"	157B6961

Introduction

Specification and code numbers for PVSK spools

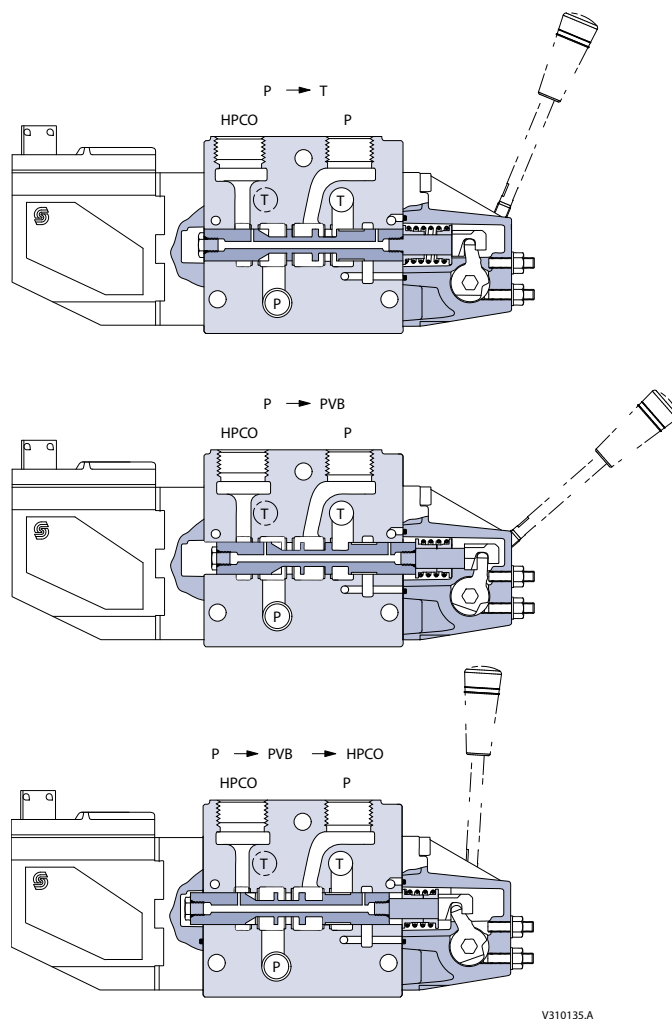
Specification and code number for PVSK spools

Symbol	Description	Code no.
	4 way - 3 position spool for fixed displacement pump HPCO flow 40 l/min [10.57 US gal/min] Open neutral position P → T	157B9657*
	4 way - 3 position spool for variable displacement pump HPCO flow 40 l/min [10.57 US gal/min] Closed neutral position P → T	157B9658*

* PVSK spool must be option mounted.

PVSK function

PVSK sectional view

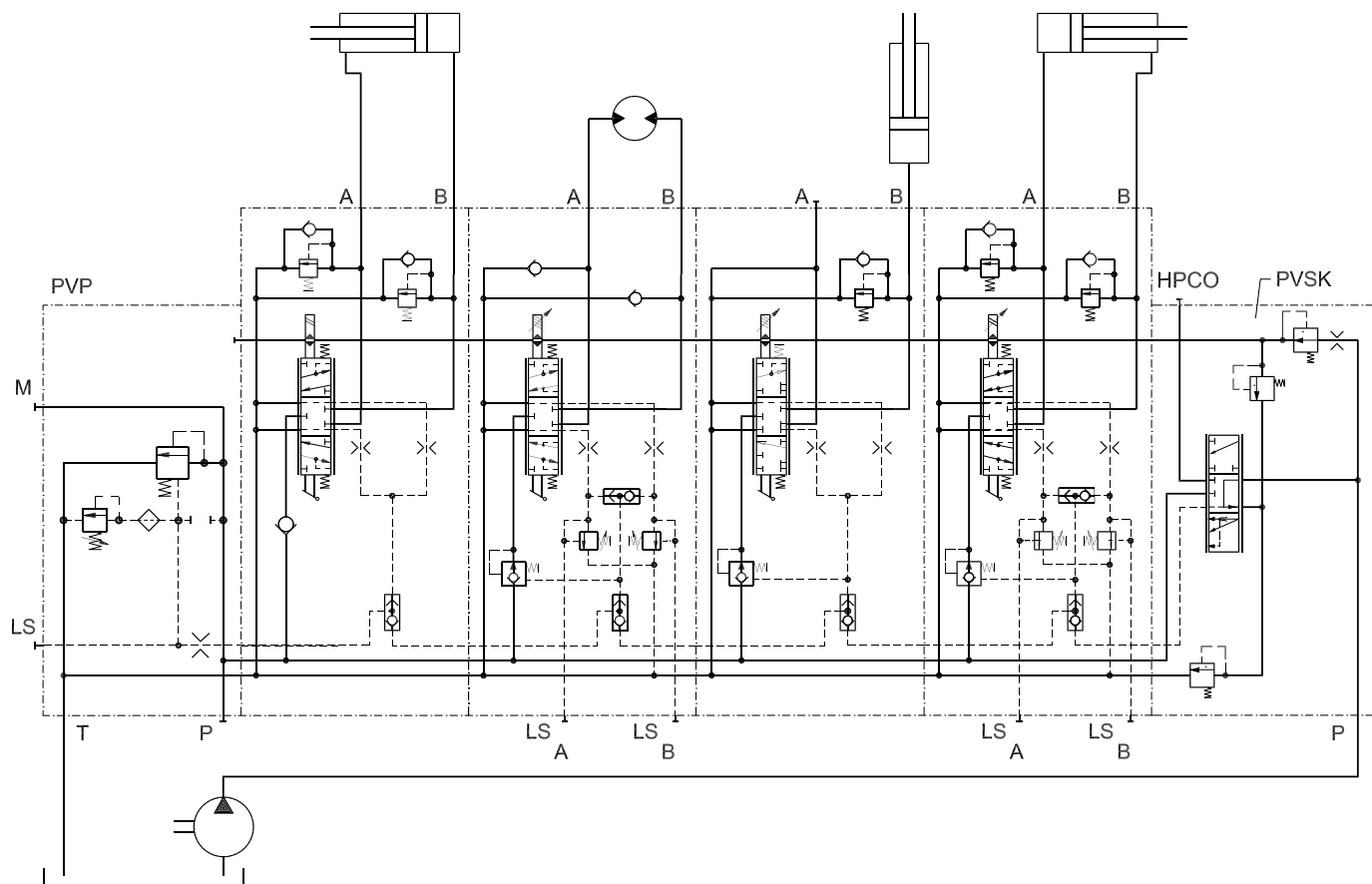


As the PVSK-module is provided with pump (P) and HPCO (High Pressure Carry Over) connections, the standard pump connection in PVP, PVPV or PVPM must be sealed with a steel plug (see example on page 6). Note that the steel plug is not included upon delivery. In neutral position, the spool in the PVSK-module interrupts the connection from the pump to the P-channel in the valve group. This not only ensures a low pressure (tank pressure) in the P-channel, but also a low pressure-drop in flow circulating between pump and tank (see [PVSK characteristics](#) on page 7).

As the PVSK-module replaces endplate PVS/PVSI, the code number field (field 11) in the specification sheet must be left open. In general, the diverter function must be specified as a working function PVB, which means that PVE, PVSK spool and PVM must be specified separately (see PVG 32 specification sheet [Specifications](#) on page 10).

To ensure an adequate supply to the PVE pilot reduction valve, the tank channel of PVSK includes a backpressure valve. In open-centre systems, the pump flow must be min. 40 l/min (10.57 US gal/min) to maintain a sufficient pressure-drop across the backpressure valve.

PVSK function

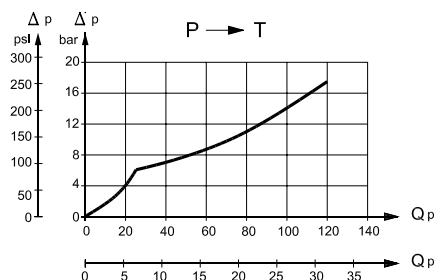


157-420.12

As the PVSK-module has an integrated pilot oil supply, always use standard PVP 32 **without pilot oil supply** in PVG 32 valve groups.

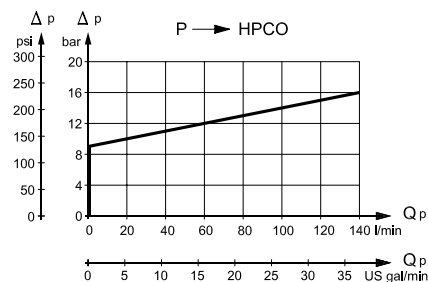
PVSK characteristics

Pressure drop $P \rightarrow T$; PVSK spool in neutral position



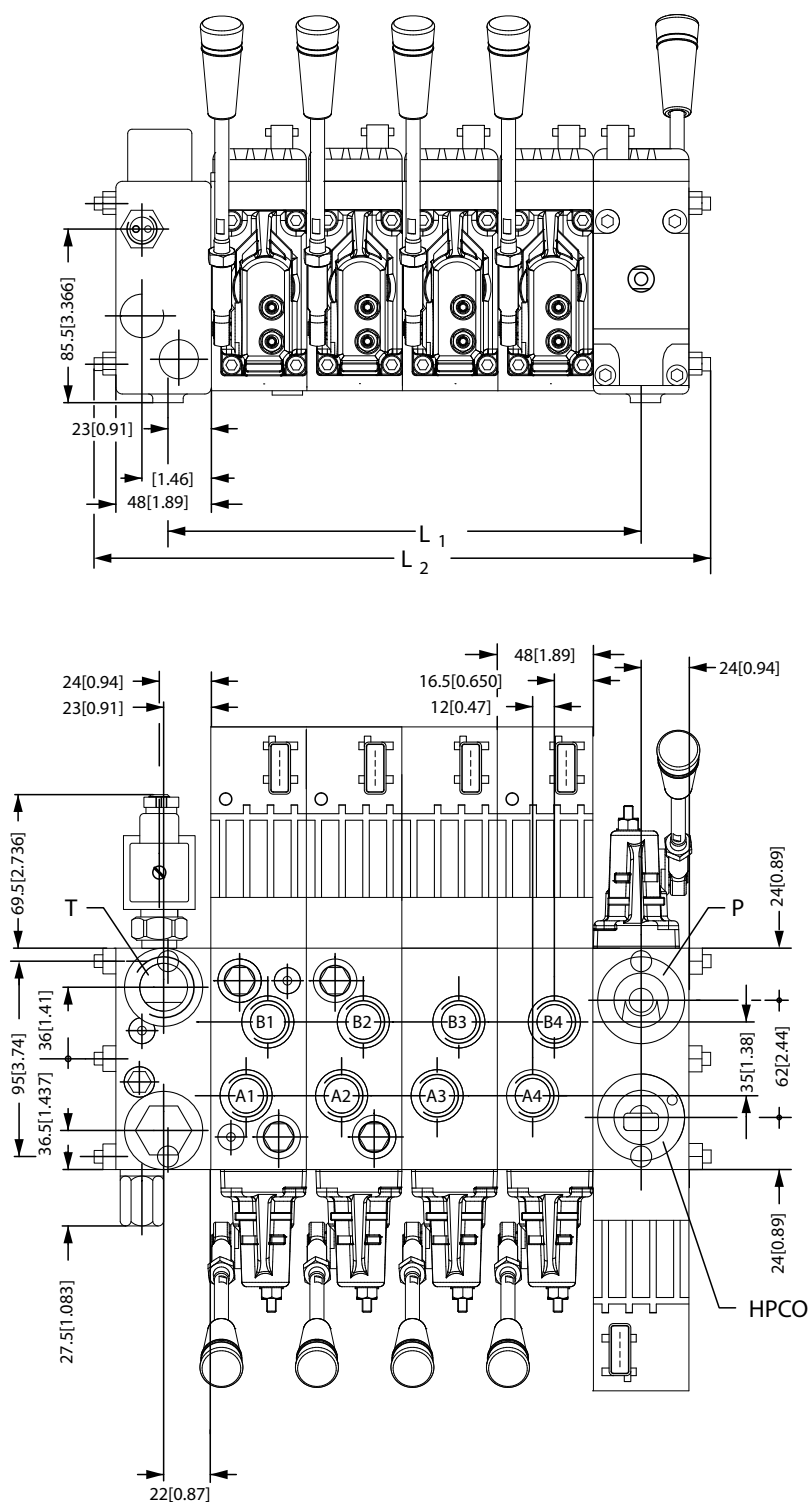
157-521.11

Pressure drop $P \rightarrow T$ in PVP



157-522.10

Dimensions



V310126.A

Because of limited space conditions, PVE and PVM on the work sections have to be mounted as shown on the above drawing.

Dimensions**Stay bolt set, PVAS for PVSK**

Qty, Basic modules	L1	L2	Code no.	Weight	
				kg	[lb]
1	95	165	157B8021	0.25	[0.55]
2	143	213	157B8022	0.30	[0.66]
3	191	262	157B8023	0.35	[0.77]
4	239	311	157B8024	0.45	[0.99]
5	287	360	157B8025	0.50	[1.10]
6	335	409	157B8026	0.55	[1.21]
7	383	458	157B8027	0.65	[1.43]
8	431	507	157B8028	0.70	[1.54]
9	479	551	157B8029	0.75	[1.65]
10	528	600	157B8030	0.85	[1.87]

Specifications

PVG 32 specification sheet


PVG 32
Specification Sheet

Subsidiary / Dealer	PVG No.
Customer	Customer No.
Application	Revision No.

Function	A-port	B-port
0 Inlet	P = bar	
1	a f b LS _A = bar LS _B = bar	c e b bar
2	a f b LS _A = bar LS _B = bar	c e b bar
3	a f b LS _A = bar LS _B = bar	c e b bar
4	a f b LS _A = bar LS _B = bar	c e b bar
5	a f b LS _A = bar LS _B = bar	c e b bar
6	a f b LS _A = bar LS _B = bar	c e b bar
7	a f b LS _A = bar LS _B = bar	c e b bar
8	a f b LS _A = bar LS _B = bar	c e b bar
9	a f b LS _A = bar LS _B = bar	c e b bar
10	a f b LS _A = bar LS _B = bar	c e b bar
11	a f b LS _A = bar LS _B = bar	c e b bar
12	a f b LS _A = bar LS _B = bar	c e b bar
13	a f b LS _A = bar LS _B = bar	c e b bar
14	a f b LS _A = bar LS _B = bar	c e b bar
15 End section		
16 PVAS section		
17 Reserved for painting		

Comments
Filled in by _____ Date _____

Comatrol

www.comatrol.com

Turolla

www.turollaocg.com

Hydro-Gear

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