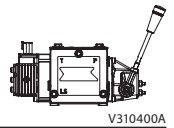


# Installation Guide

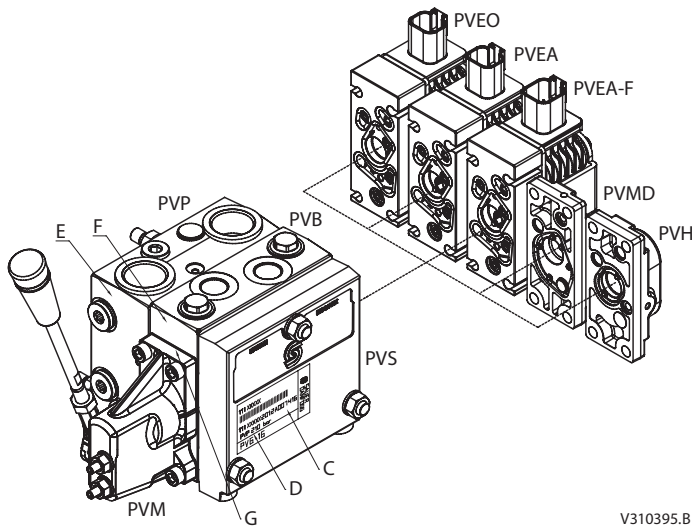
## Proportional Valve Group PVG 16



V310400A

### Identifikation, Identification

**Standardmontage:** PVP til venstre for PVM  
**Standard installation:** PVP to the left of PVM  
**Normale Montage:** PVP links von PVM  
**Montage standard:** PVP à gauche de PVM



V310395.B

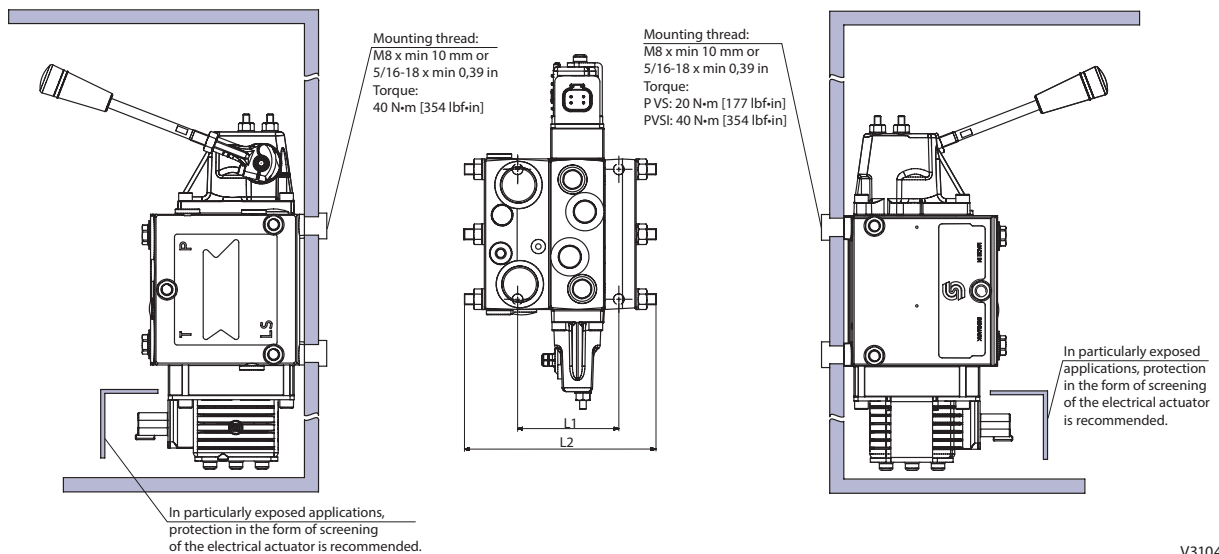
C: PVG-nummer, uge og år for montage og serienummer  
 D: PVP-trykjusting  
 E: PVP-nummer, uge og år for fremstilling og serienummer  
 F: PVB - A-port, nummer, uge og år for fremstilling og serienummer  
 G: PVM, uge og år for fremstilling

C: PVG-number, week and year of installation and series number  
 D: PVP - pressure setting  
 E: PVP-number, week and year of manufacturing and series number  
 F: PVB - A-port, number, week and year of manufacturing and series number  
 G: PVM, week and year for manufacturing

C: PVG-Nummer, Woche und Jahr der Montage und Seriennummer  
 D: PVP - Druckeinstellung  
 E: PVP-Nummer, Woche und Jahr der Herstellung und Seriennummer  
 F: PVB - A-Anschluß, Nummer, Woche und Jahr der Herstellung und Seriennummer  
 G: PVM, Woche und Jahr der Herstellung

C: PVG-numéro, semaine et année de montage et numéro sériel  
 D: PVP - réglage de pression  
 E: PVP-numéro, semaine et année de fabrication et numéro sériel  
 F: PVB - orifice-A, numéro, semaine et année de fabrication et numéro sériel  
 G: Semaine et année de fabrication

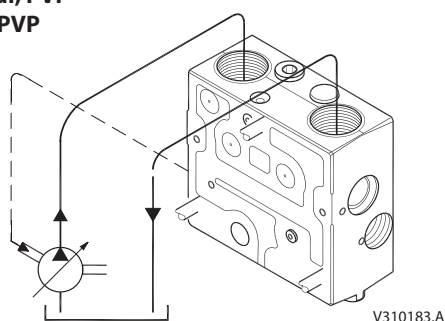
### Montering og orientering af stik Installation and plug orientation Montage und Ausrichtung des Steckers Montage et orientation de la prise



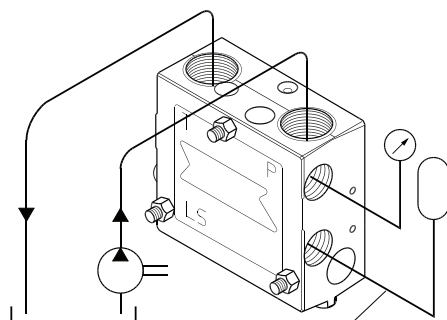
V310401.B

No. of PVB 16		1	2	3	4	5	6	7	8	9	10	11	12
L1	mm	74	114	154	194	234	274	314	354	394	434	474	514
	[in]	[2.91]	[4.49]	[6.06]	[7.64]	[9.21]	[10.79]	[12.36]	[13.94]	[15.51]	[17.09]	[18.66]	[20.24]
L2	mm	140	189	213	262	311	336	385	434	458	507	551	576
	[in]	[5.51]	[7.44]	[8.39]	[10.31]	[12.24]	[13.23]	[15.16]	[17.09]	[18.03]	[19.96]	[21.69]	j

**Tilslutning, pumpe­side­modul, PVP**  
**Connection, pump side module, PVP**  
**Anschluß, pumpe­sei­ti­ges Modul, PVP**  
**Raccordement, plaque d'entrée PVP**



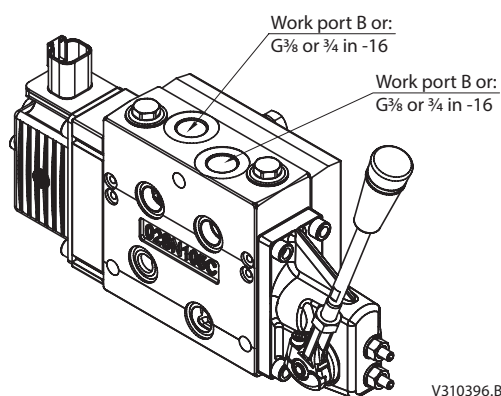
V310183.A



Accumulator port  
157-81.13

**Tilslutning, grund­modul, PVB**  
**Connection, basic module, PVB**  
**Anschluß, Grund­modul, PVB**  
**Raccordement, module de distribution, PVB**

**Nominal tryk**  
**Rated pressure**  
**Nomineller Druck**  
**Pression nominale**

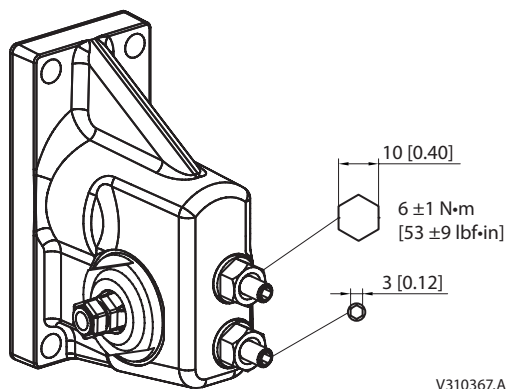


V310396.B

Product	Rated pressure
with PVS	300 bar [4351 psi]
with PVS1	350 bar [5076 psi]

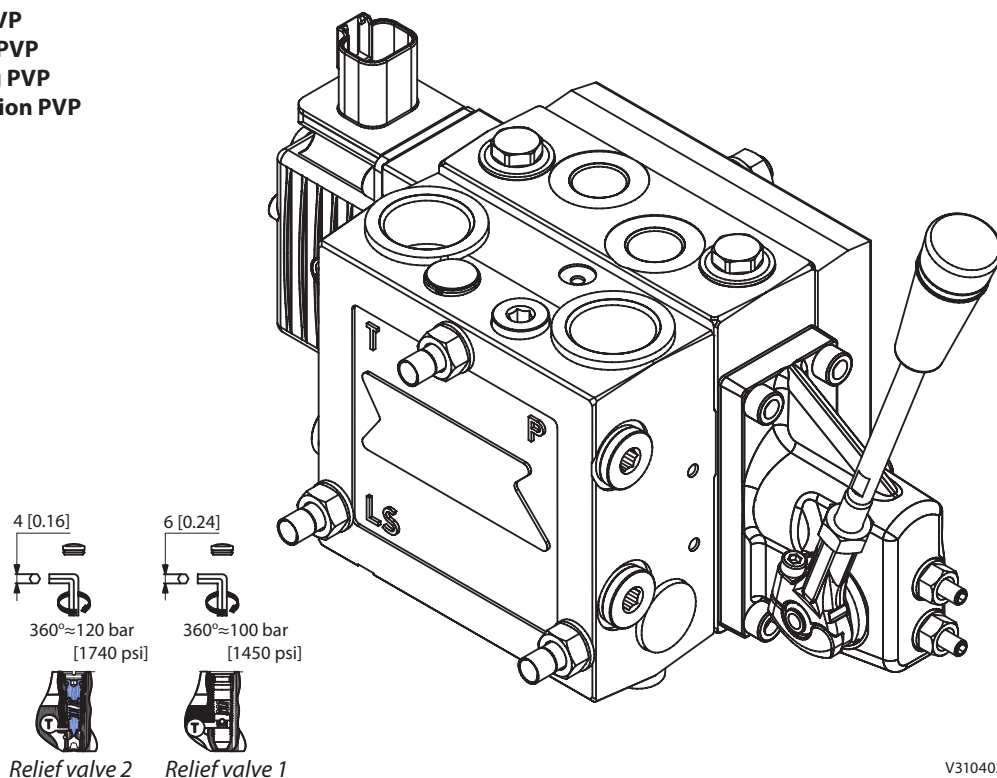
Max. tilspændingsmoment Max. tightening torque Max. Anzugsmoment Couple de serrage maxi	Tilslutning • Connection • Anschluss • Raccordement							
	P		A/B	T	LS, M, LSA, LSB PVH, Accu.	LX		
						PVS	PVS1	
Forskruing Screwed connection Verschraubung Raccord	RG BSP. F R G	1/2 in	3/4 in	3/8 in	3/4 in	1/4 in	1/8 in	1/4 in
Med stålskive With steel washer Stahldichtring Avec rondelle en acier		130 N•m [1150 lbf•in]	210 N•m [1850 lbf•in]	130 N•m [1150 lbf•in]	210 N•m [1850 lbf•in]	40 N•m [350 lbf•in]	17 N•m [150 lbf•in]	40 N•m [350 lbf•in]
Med kobberskive With copper washer Kupfer Dichtring Avec rondelle en cuivre		30 N•m [270 lbf•in]	50 N•m [445 lbf•in]	30 N•m [270 lbf•in]	50 N•m [445 lbf•in]	20 N•m [180 lbf•in]	15 N•m [135 lbf•in]	20 N•m [180 lbf•in]
Med aluminiumsskive With aluminium washer Aluminium Dichtring Avec rondelle en all		70 N•m [620 lbf•in]	110 N•m [970 lbf•in]	70 N•m [620 lbf•in]	110 N•m [970 lbf•in]	30 N•m [270 lbf•in]	15 N•m [135 lbf•in]	30 N•m [270 lbf•in]
Med skærekant With cutting edge Mit Dichtkante Tranchant		130 N•m [1150 lbf•in]	210 N•m [1850 lbf•in]	130 N•m [1150 lbf•in]	210 N•m [1850 lbf•in]	40 N•m [350 lbf•in]	17 N•m [150 lbf•in]	40 N•m [350 lbf•in]
Forskruing Screwed connection Verschraubung Raccord	UNF	7/8 in - 14	1 1/16 in - 12	3/4 in - 16	1 1/16 in - 12	1/2 in - 20	3/8 in - 24	1/2 in - 20
O-ring		90 N•m [800 lbf•in]	120 N•m [1060 lbf•in]	90 N•m [800 lbf•in]	120 N•m [1060 lbf•in]	30 N•m [270 lbf•in]	10 N•m [90 lbf•in]	30 N•m [270 lbf•in]

**Mekanisk justering af max flow**  
**Mechanical adjustment of max flow**  
**Mechanische Einstellung des maximalen Volumenstroms**  
**Ajustement mécanique du débit maximum**



V310367.A

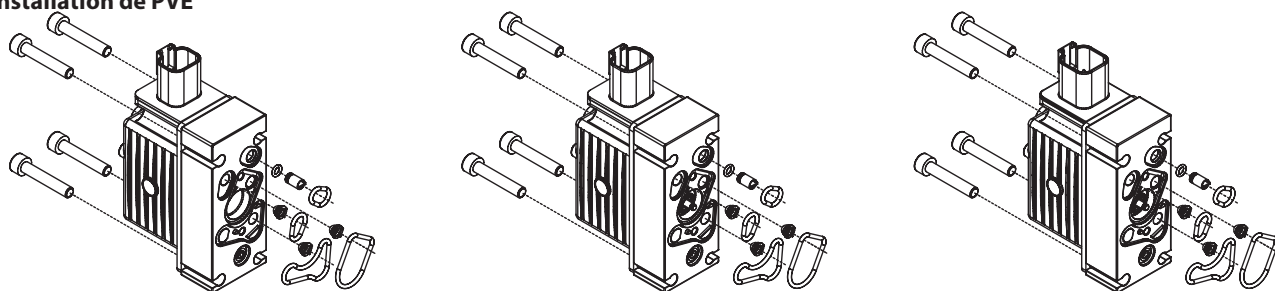
**Trykindstilling PVP**  
**Pressure setting PVP**  
**Druckeinstellung PVP**  
**Réglage de pression PVP**



V310402.B

	Before week 40/2003	Week 40/2003 - week 2/2012	After week 2/2012
Relief valve 1	x	x	
Relief valve 2		x	x

**Montage af PVE**  
**Installation of PVE**  
**Montage von PVE**  
**Installation de PVE**



V310 397.B

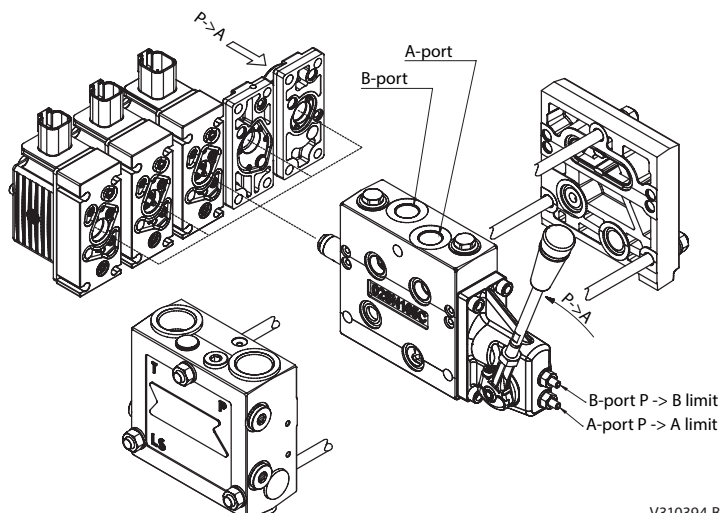
### Standard mounting

Oliestrømmens retning og indstilling af max. oliestrøm. PVP til venstre for PVM.

Oil flow direction and setting of max. flow. PVP to the left of PVM.

Richtung des Ölstroms und Einstellung des max. Ölstroms. PVP links von PVM.

Sens du débit et réglage de débit maxi. PVP à gauche de PVM.

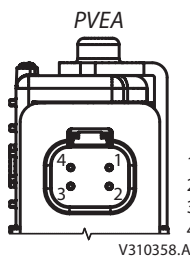


V310394.B

### Connections

#### Pin layout: PVEO

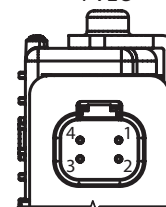
The PVEO is available for simple ON/OFF actuation of the main spool. It has a 4 pin Deutsch connector.



1. Vi (signal pin)
2. Sp (spool position)
3. Vneg (±)
4. Vbat (+)

V310358.A

#### Pin layout: PVEO



1. NC 2 (A-direction)
2. Vneg (±)
3. Vneg (±)
4. NC 4 (B-direction)

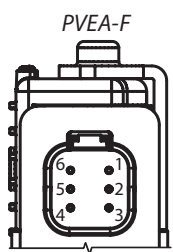
V310358.A

#### Pin layout: PVEA

The PVEA is available as the PVE for proportional control of the spool. It has a 4 pin Deutsch connector.

#### Pin layout: PVEA-F

The PVEA-F is available for float options. It has a 6 pin Deutsch connector where the float command has a dedicated pin. All features in the PVEA is also in the PVEA-F.



1. Vi (signal pin)
2. NC (not connected)
3. Vf (float)
4. Sp (spool position)
5. Vneg (±)
6. Vbat (+)

V310359.A

Function	Signal voltage	
	A (pin 1)	B (pin 2)
Neutral	0	0
Q: P → A	$U_{DC}$	0
Q: P → B	0	$U_{DC}$

Function	Signal voltage ( $U_s$ )
	Neutral
Q: P → A	$U_s$ (pin 1) = $(0.5 \rightarrow 0.25) \cdot U_{DC}$
Q: P → B	$U_s$ (pin 1) = $(0.5 \rightarrow 0.75) \cdot U_{DC}$

#### Warning

When PVEA-F is given float command it will actuate the spool into float state no matter what position in spool has or set point given to PVEA-F.

### Udluftning

Hvis gruppen er monteret vertikalt, anbefales det at udlufte ved justerskruer (Pos. A). Bemærk: Ved PVEA kan det, pga.dens hydrauliske opbygning, være påkrævet at foretage udluftning.

### Bleeding

If the group is installed vertically, it is recommended to bleed it at the adjusting screws (Pos. A).

Note: Because of the hydraulic build-up of PVEA, it may be necessary to bleed the PVEK.

### Entlüftung

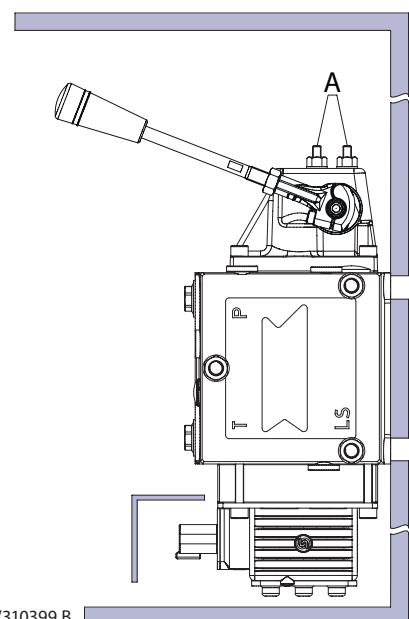
Wenn die Gruppe vertikal montiert ist, empfehlen wir an den Justierschrauben zu entlüften (Pos. A).

Beachte: Wegen des hydraulischen Aufbaus von PVEA kann eine Entlüftung erforderlich sein.

### Purge

Si l'ensemble est monté verticalement, il est recommandé de le purger au moyen des vis d'ajustage (Pos. A).

Nb! En raison du système hydraulique des PVEAs il peut s'avérer nécessaire de purger.



V310399.B