

# Installation Guide

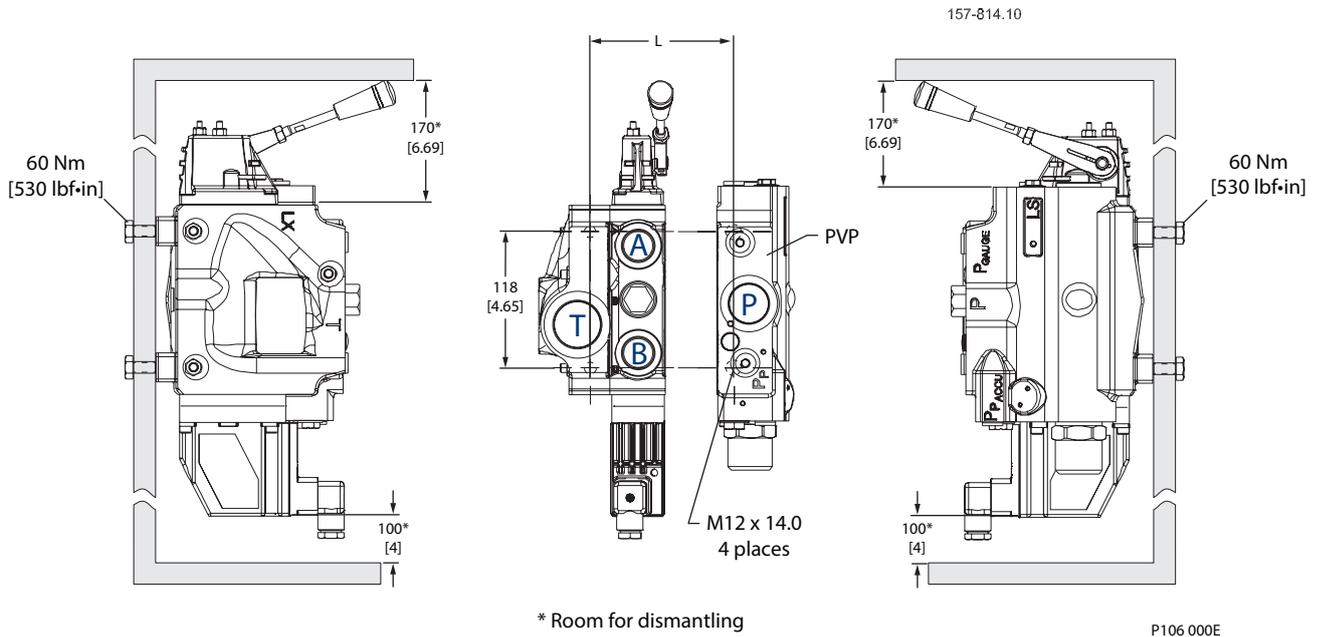
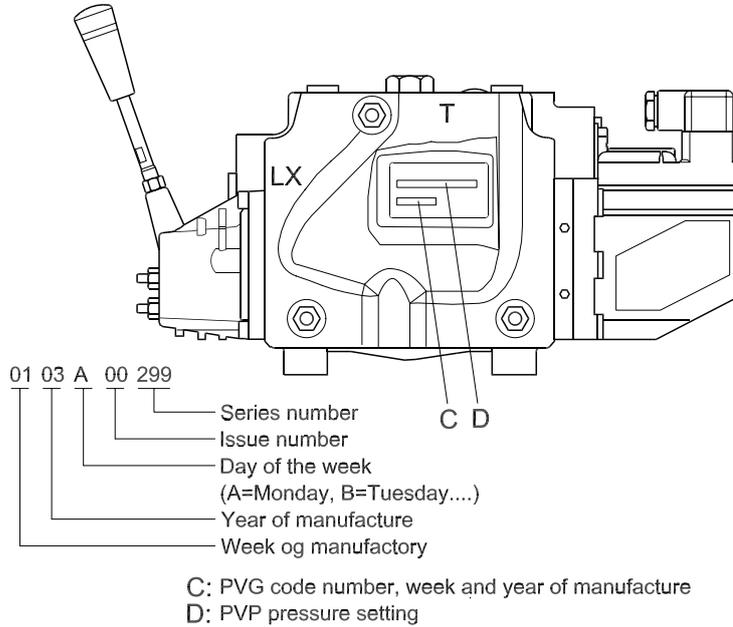
## Proportional valve

### type PVG 100

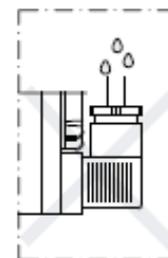
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#### Installation an plug orientation

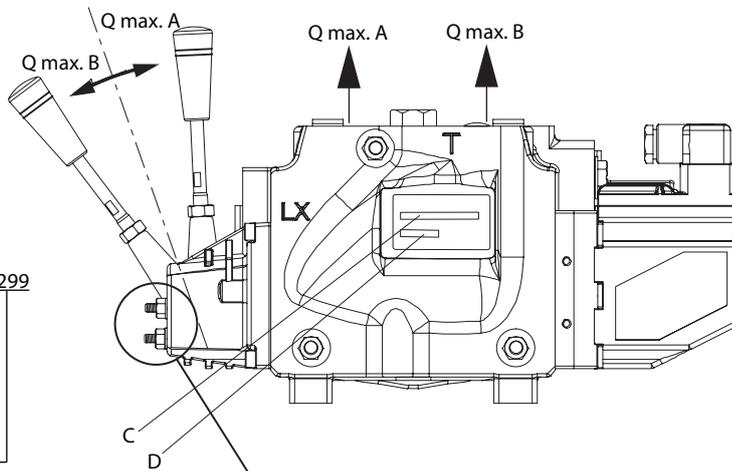
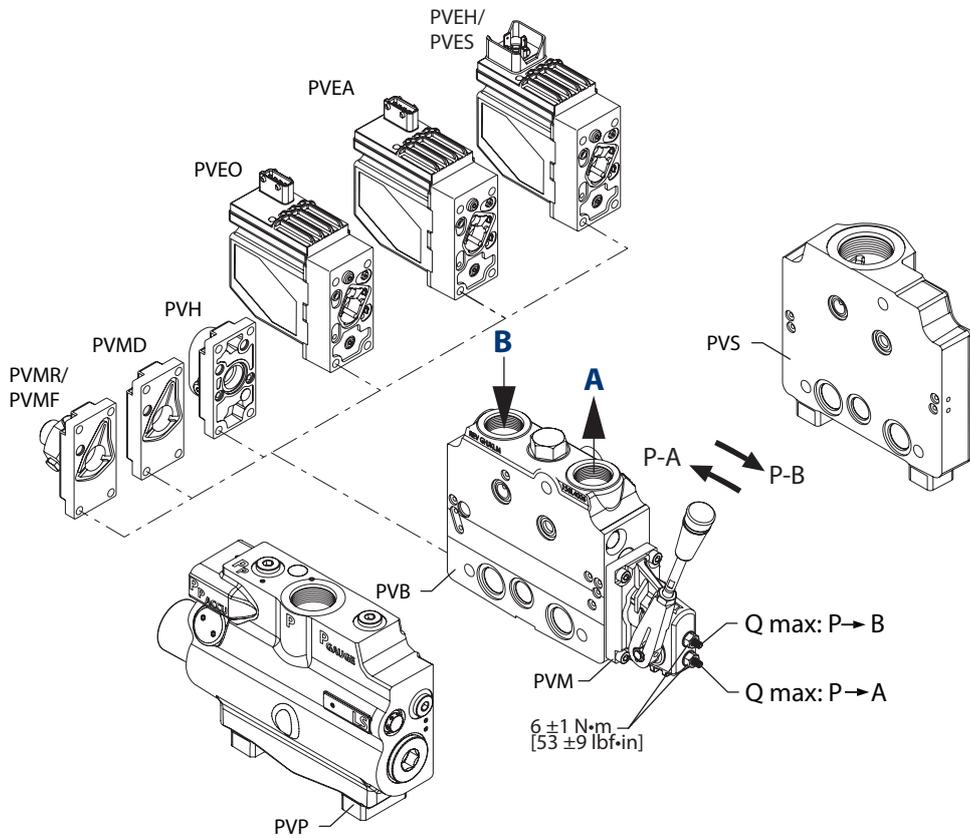


Modul og PVB	1	2	3	4	5	6	7	8
L mm	80.0	128.0	176.0	224.0	272.0	320.0	368.0	416.0
L [in]	[3.15]	[5.04]	[6.93]	[8.82]	[10.71]	[12.60]	[14.49]	[16.38]



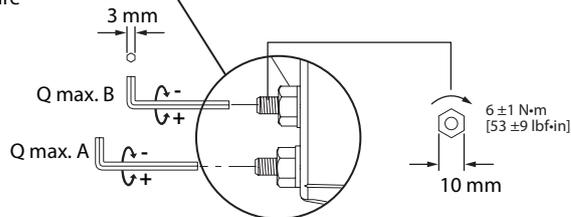
DIN mounting orientation

**Standard, Oil flow direction and setting of max flow PVM on the A-port side**



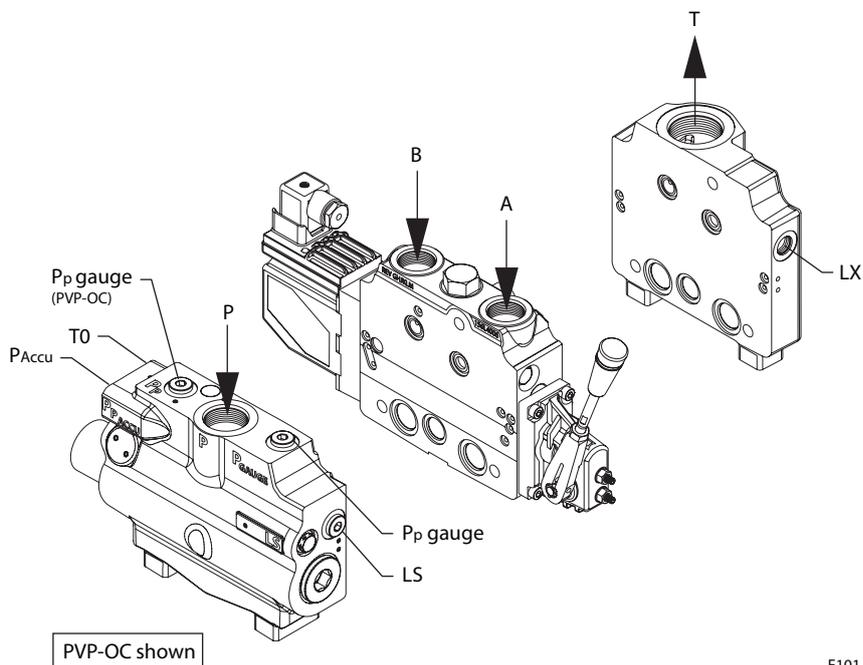
01 03 A 00 0299  
 Week of manufacture — 01  
 Year of manufacture — 03  
 Day of the week — A  
 (A = Monday, B = Tuesday ...)  
 Issue number — 00  
 Series number — 0299

C: PVG code number, week and year of manufacture  
 D: PVP pressure setting



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**Connections, pump side modul, PVP  
basic module PVB end plate, PVS**



**Maximum tightening torque**

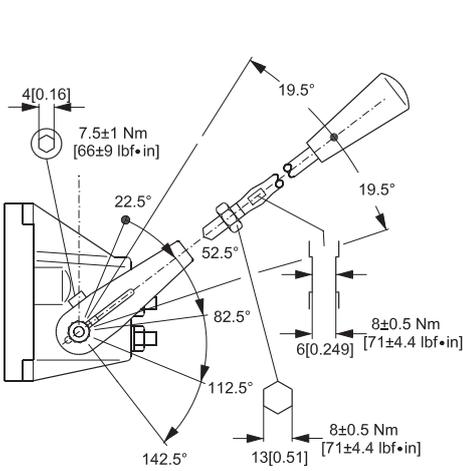
Connection	P		A/B	LS, LX, T0 Gauge: P, Pp, Pp Accum.	T	
	G 3/4	G 1			G 1	G 1 1/4
BSPP port connection	G 3/4	G 1	G 3/4	G 1/4	G 1	G 1 1/4
With steel washer	210 Nm 1850 lbf-in	330 Nm 2920 lbf-in	210 Nm 1850 lbf-in	40 Nm 350 lbf-in	330 Nm 2920 lbf-in	540 Nm 4780 lbf-in
With copper washer	50 Nm 445 lbf-in	70 Nm 620 lbf-in	50 Nm 445 lbf-in	20 Nm 180 lbf-in	70 Nm 620 lbf-in	100 Nm 885 lbf-in
With aluminum washer	110 Nm 970 lbf-in	150 Nm 1330 lbf-in	110 Nm 970 lbf-in	30 Nm 270 lbf-in	150 Nm 1330 lbf-in	240 Nm 2125 lbf-in
With cutting edge	210 Nm 1850 lbf-in	330 Nm 2920 lbf-in	210 Nm 1850 lbf-in	40 Nm 350 lbf-in	330 Nm 2920 lbf-in	540 Nm 4780 lbf-in
UNF port connection	1 1/16 in-12	1 5/16 in-12	1 1/16 in-12	9/16 in-18	1 5/16 in-12	1 5/8 in-12
With O-ring	120 Nm 1040 lbf-in	160 Nm 1420 lbf-in	120 Nm 1040 lbf-in	40 Nm 350 lbf-in	160 Nm 1420 lbf-in	320 Nm 2830 lbf-in

**Rated pressure**

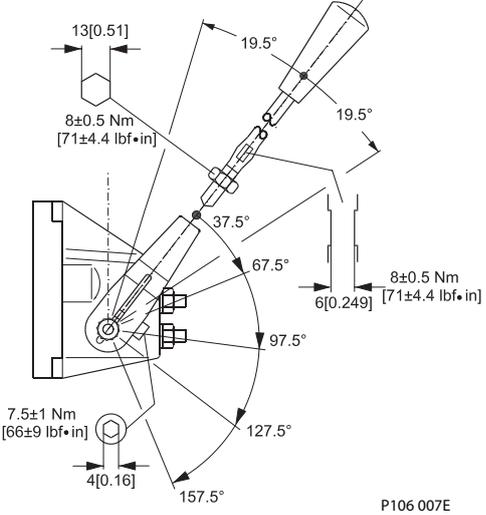
Product	Rated pressure
PVG 100	350 bar [5076 psi]
PVG 100 w. HIC steel	350 bar [5076 psi]
PVG 100 w. HIC aluminium	210 bar [3046 psi]
PVG 100/32 w. PVBZ	210 bar [3046 psi]
PVG 100/32 w. PVS	300 bar [4351 psi]
PVG 100/32 w. PVS1	350 bar [5076 psi]

**Installation of lever**

Base with an angle of 22.5°

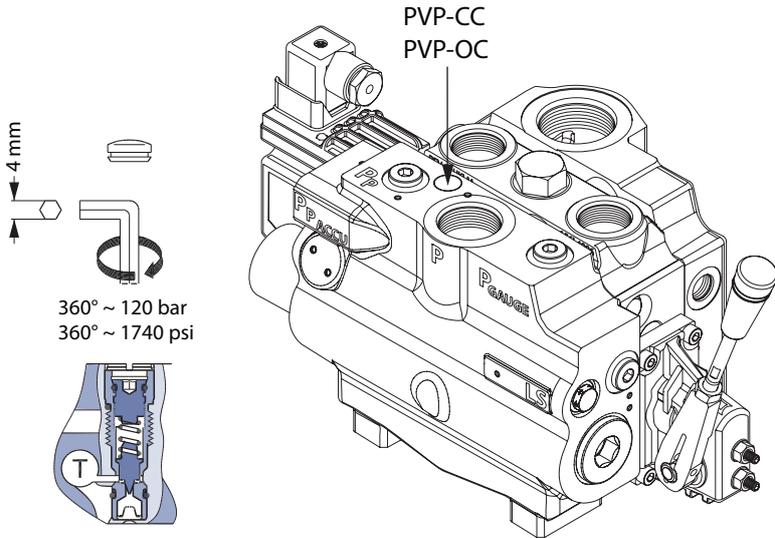


Base with an angle of 37.5°



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**Pressure setting**



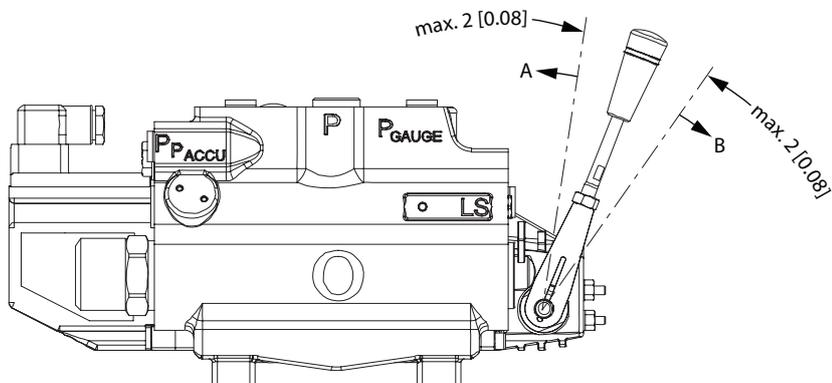
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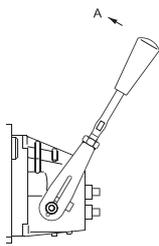
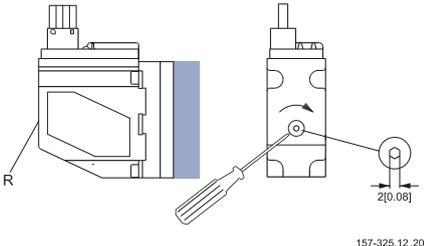
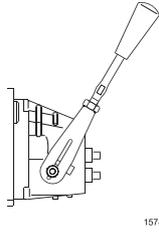
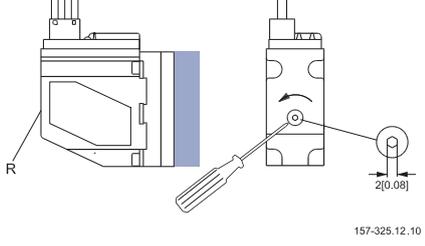
**PVEH/PVEM/PVES**

**Adjustment of PVE when max. lever travel is exceeded (PVE is factory preset)**

Check maximum lever travel in neutral position.

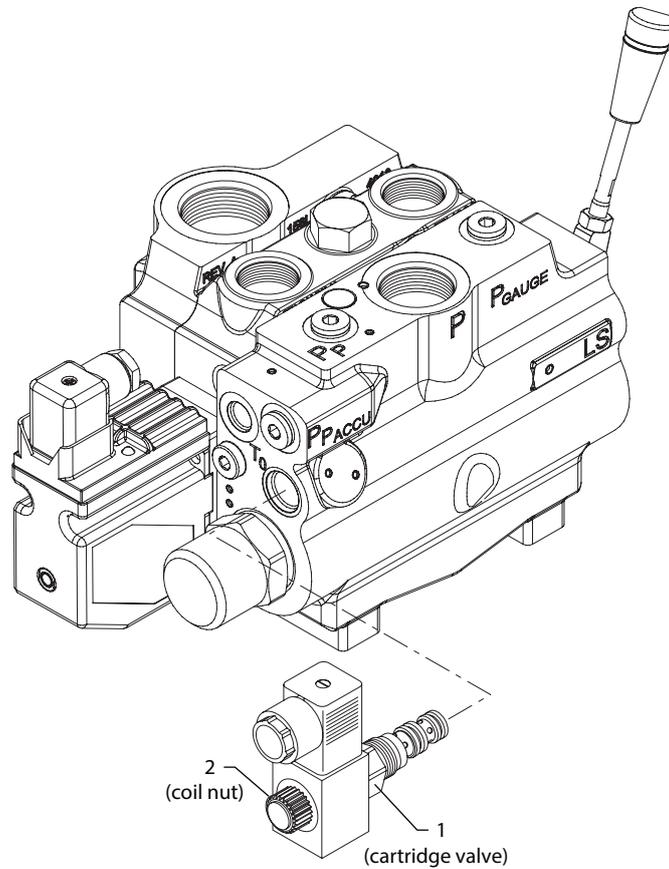
1. Make sure the system is supplied with hydraulic power.
2. Connect supply voltage ( $U_{DC}$ ) (Signal voltage  $0.5 \cdot U_{DC}$ ) or cut off the signal voltage ( $U_s$ ) on pin 2.



Lever travel exceeded in	PVG 100	Direction of rotation for adjustment of position transducer
Direction A	 <p>157-164.11.10</p>	 <p>157-325.12.20</p>
Direction B	 <p>157-164.10.20</p>	 <p>157-325.12.10</p>

Turn of transducer	Movement of lever
1/4	1.5 mm [0.06 in]
1/2	3.0 mm [0.12 in]
3/4	4.5 mm [0.18 in]

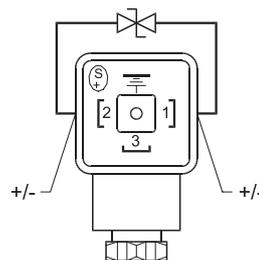
**Installation and technical data for PVPP  
(Solenoid operated pilot drain)**



Position	Across flats	Max. tightening torque
1	24 mm [0.94 in]	45 Nm [400 lbf-in]
2	20 mm [0.79 in]	5 Nm [44 lbf-in]

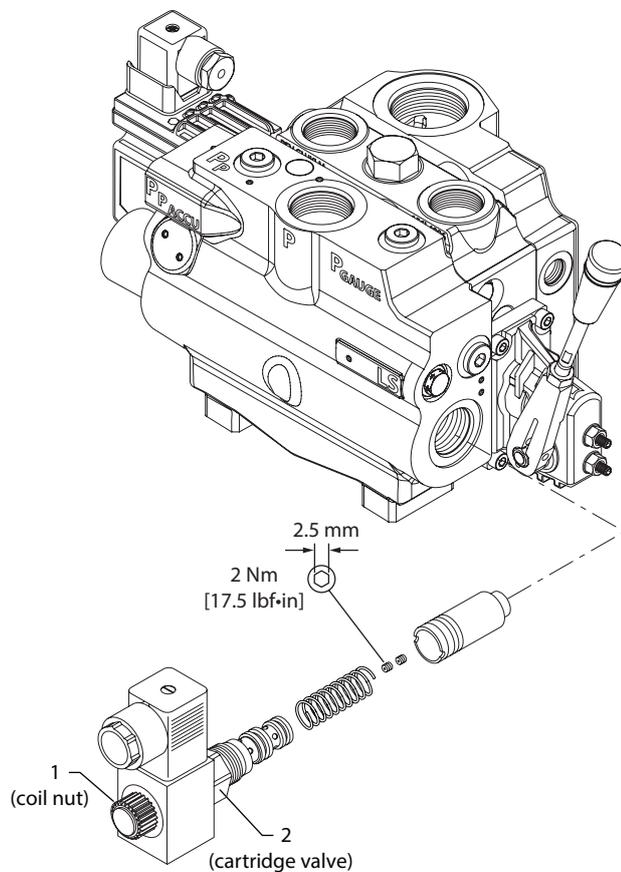
Max. operation pressure	350 bar [5076 bar]		
Max. coil surface temperature	155°C [311°F]		
Rated voltage	12 V $\equiv$	24 V $\equiv$	
Current consumption	22°C (71,6°F) coil temperature	1.55 A	0.78 A
	110°C (230°F) coil temperature	1.00 A	0.50 A
Power consumption	22°C (71,6°F) coil temperature	19 W	19 W
	110°C (230°F) coil temperature	12 W	12 W
Max. permissible deviation from rated supply voltage	±10%		

When installing the wire remember to connect the built-in diode to the plug pins.



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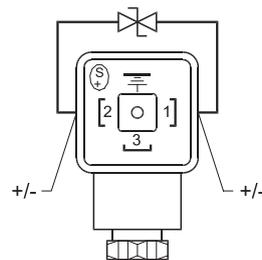
**Installation and technical data for PVPE  
(Solenoid relief valve)**



Position	Across flats	Max. tightening torque
1	22 mm [0.87 in]	5 Nm [45 lbf·in]
2	36 mm [1.42 in]	85 Nm [750 lbf·in]

Max. operation pressure	350 bar [5076 bar]		
Max. coil surface temperature	155°C [311°F]		
Rated voltage	12 V $\equiv$	24 V $\equiv$	
Current consumption	22°C (71,6°F) coil temperature	1.55 A	0.78 A
	110°C (230°F) coil temperature	1.00 A	0.50 A
Power consumption	22°C (71,6°F) coil temperature	19 W	19 W
	110°C (230°F) coil temperature	12 W	12 W
Max. permissible deviation from rated supply voltage	±10%		

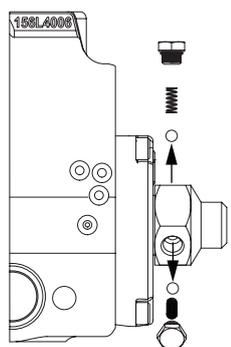
When installing the wire remember to connect the built-in diode to the plug pins.



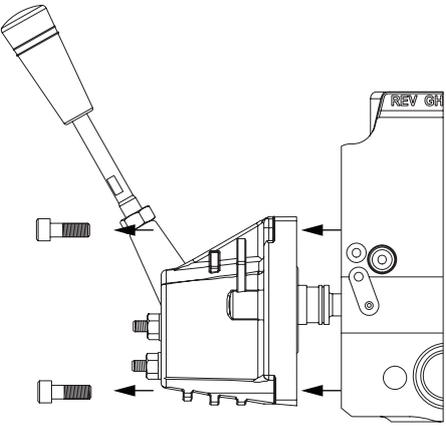
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PVMR Disassembly

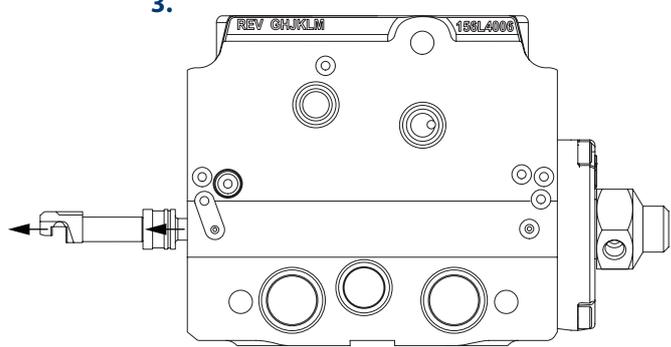
1.



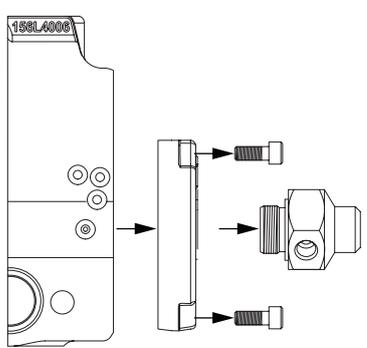
2.



3.

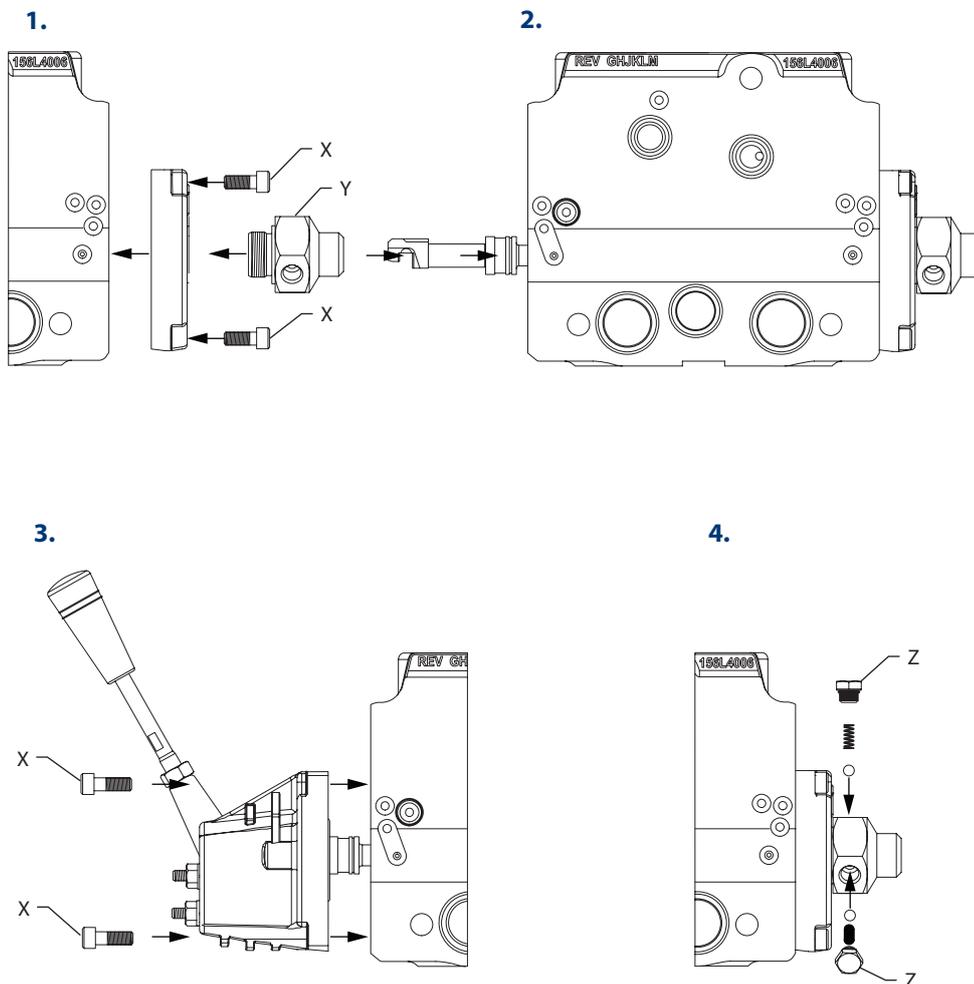


4.



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### PVMR/F Assembly

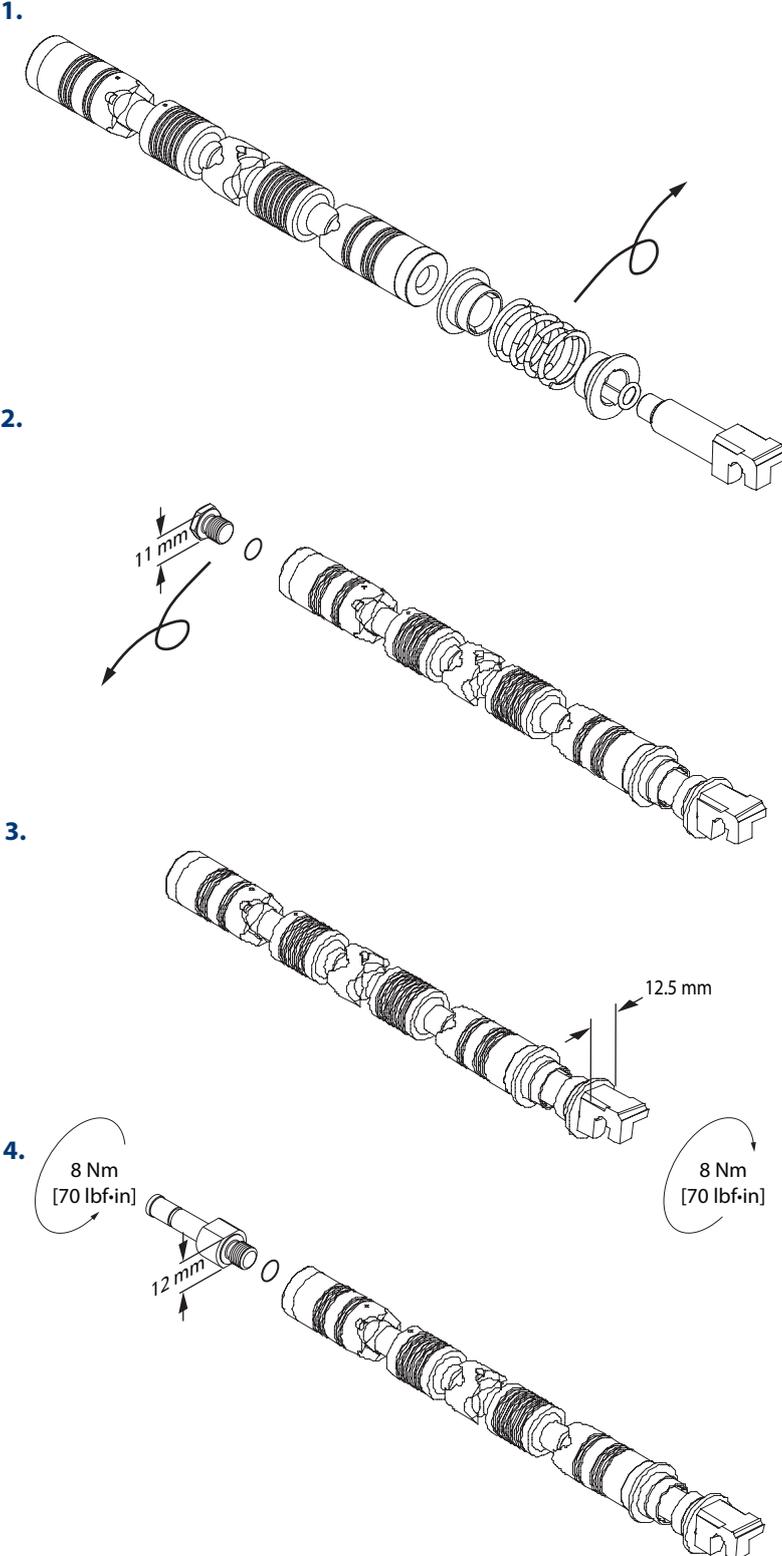


### Tightening torques and widths across flats

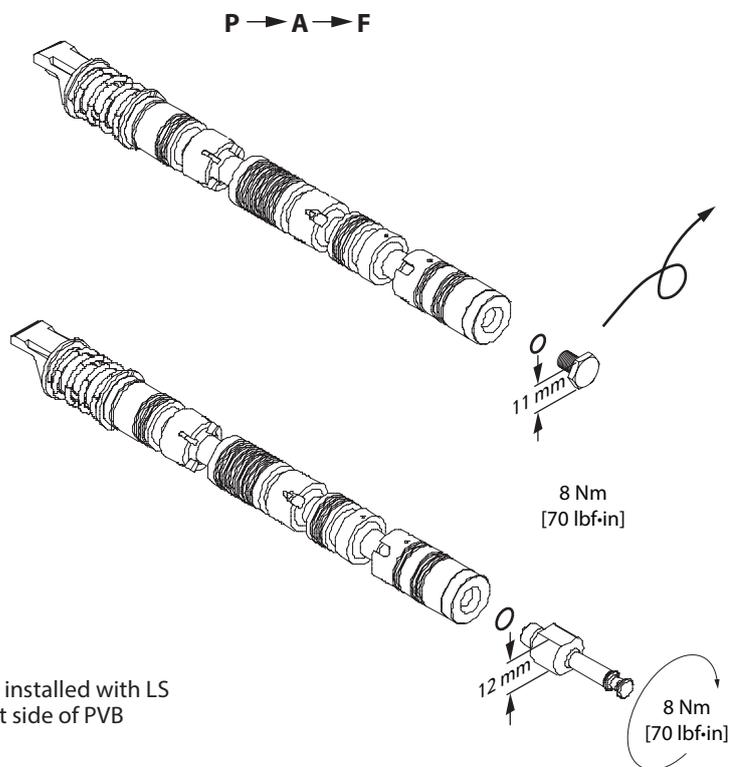
	X	Y	Z
Width across flats			
Tightening torque	8 ± 0.5 Nm [70 ± 4.5 lbf·in]	15 ± 2 Nm [135 ± 20 lbf·in]	4 ± 1 Nm [35 ± 9 lbf·in]

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Standard main spool assembly  
for PVMR



**Standard float spool assembly  
for PVMR**



Not:  
Spools must be installed with LS  
holes on 'B' port side of PVB

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