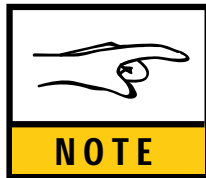




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## Installation, Operation and Maintenance Instructions for Flowrox PVEG valve



These instructions must be read carefully and understood prior to the installation, use, and servicing of this product.

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# 1 FLOWROX PVEG INSTRUCTIONS

## 1.1 INSTALLATION INTO PIPELINE

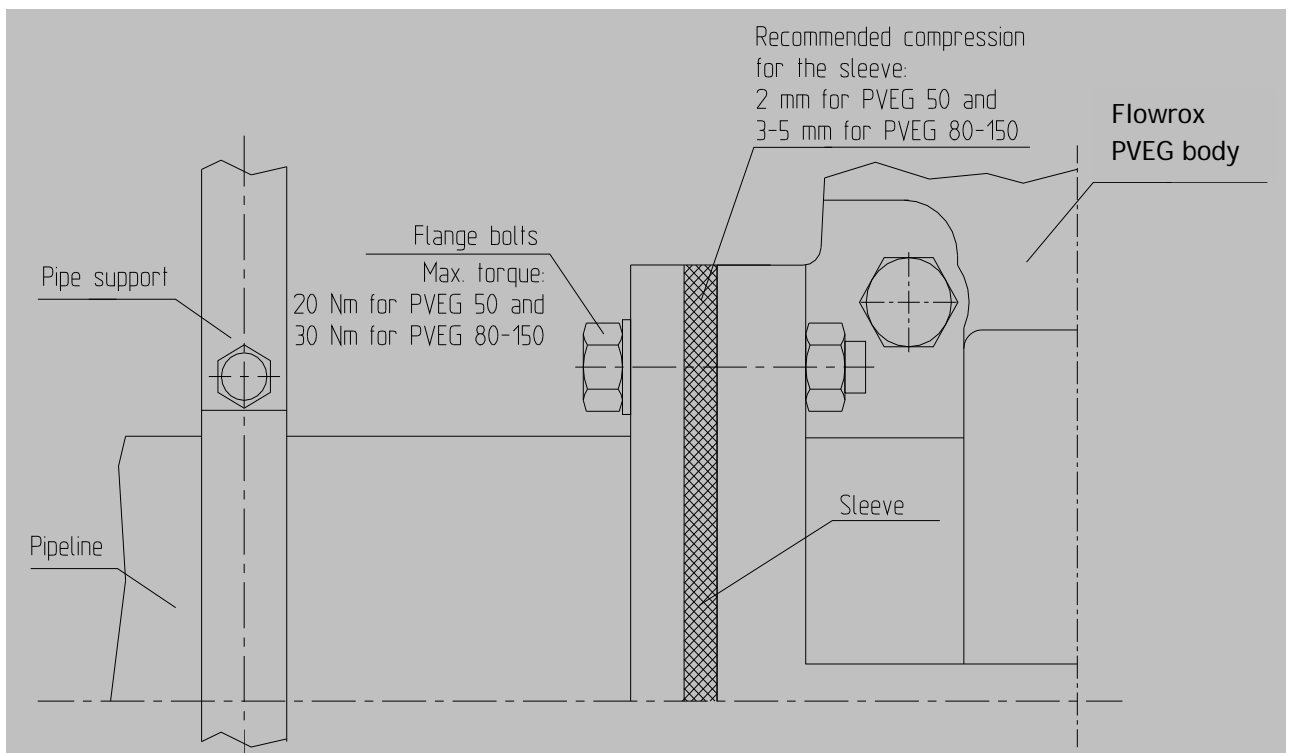
Before starting the installation of Flowrox PVEG, loose pipe supports from both sides of the valve.

Adjust the distance between the pipe flanges to be similar to the face-to-face dimension of the Flowrox valve.

Install the valve. Notice! Assemble all flange bolts through flanges before starting to tight any hex nuts.

Use torque wrench to tight the hex nuts, **maximum allowed torque is 30 Nm (ca. 20 lbf-ft) for sizes PVEG80 - PVEG150 (PVEG3" - PVEG6") and 20 Nm (ca. 15 lbf-ft) for PVEG50 (PVEG2").**

Check during the tightening that the compression of the rubber flange of the sleeve is max. 3-5 mm (0,12" - 0,2") for sizes 80 mm - 150 mm (3" - 6"). Maximum compression for PVEG50 (PVEG2") is 2 mm (0,08").



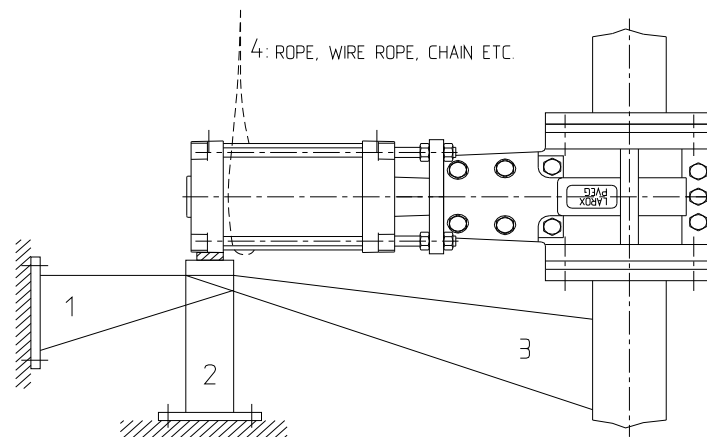
Drawing 1.

### IMPORTANT !

Bolt/hex nut torques over 30 Nm may cause damages to the Flowrox PVEG body. Never "pull" the whole pipeline with flange bolts to get the flanges tight.

If you have to install the PVEG valve with pneumatic (A) actuator horizontally, it has to be supported to ensure the operation. The support can be fixed on the wall (1), on the floor (2) or the pipeline (3). Also a simple rope, wire rope, chain etc. (4) can be used to support the actuator (see drawing 2.).

The valve can be installed in either way with respect to the flow direction.



Drawing 2.

## 1.2 PVEG DISASSEMBLE AND SLEEVE EXCHANGE

Open the valve and detach it from the pipeline.

*The body bolts of the PVEG valve are stainless steel and can be removed by a 10 mm hexagon key and 19mm socket wrench for 2" and 3" valves and a 14 mm hexagon key and 24mm socket wrench for 4" and 6" valves.*

If other body half cannot be removed from PVEG A valve, remove lower nuts (part 8.) and close the valve carefully by pneumatic cylinder so that cylinder (part 3.) raises up from the attachment frame (part 5.). Do not change the position of upper nuts (part 8.).

- Remove the body bolts (part 11/12 or 9/10) and other body half.
- Remove the broken sleeve (part 7.) and put in the new sleeve.
- Install body half and body bolts.

If lower nuts (part 8.) had to be removed from PVEG A valve, open the valve by pneumatic cylinder so that cylinder (part 3.) lands down and it is possible to install removed lower nuts (part 8.). Check that the valve will close totally.

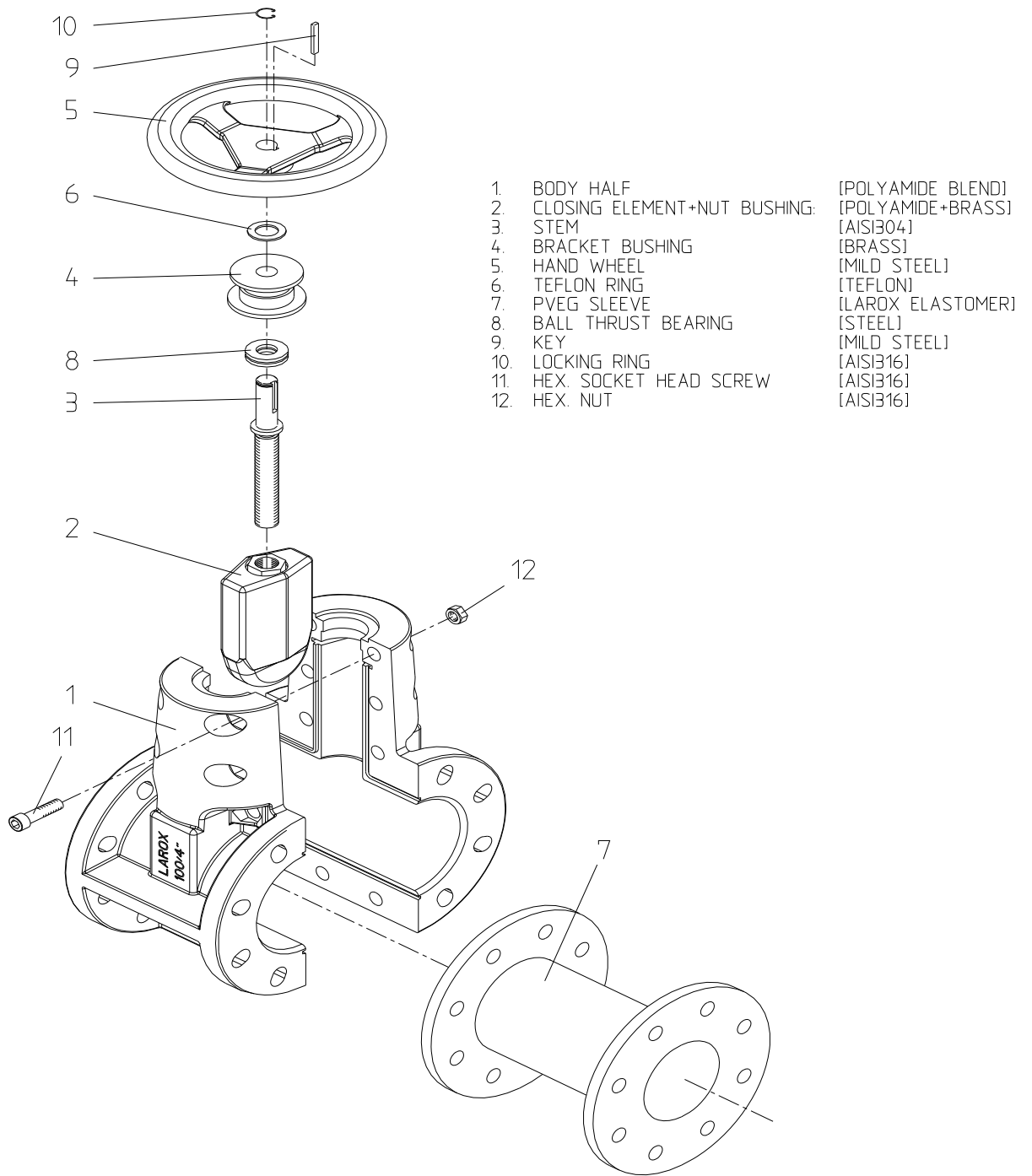
Install the valve into the pipeline.

## Recommended Screw Torques for Flowrox Valve Flanges

Note 1: This table is for lubricated screws, if screws unlubricated these figures have to be multiplied by 1.5.

NOTE 2: These figures are theoretical. Measurements done with loose flanges and flexible hoses, in practice most of the screw torques can go to pipeline deformations.

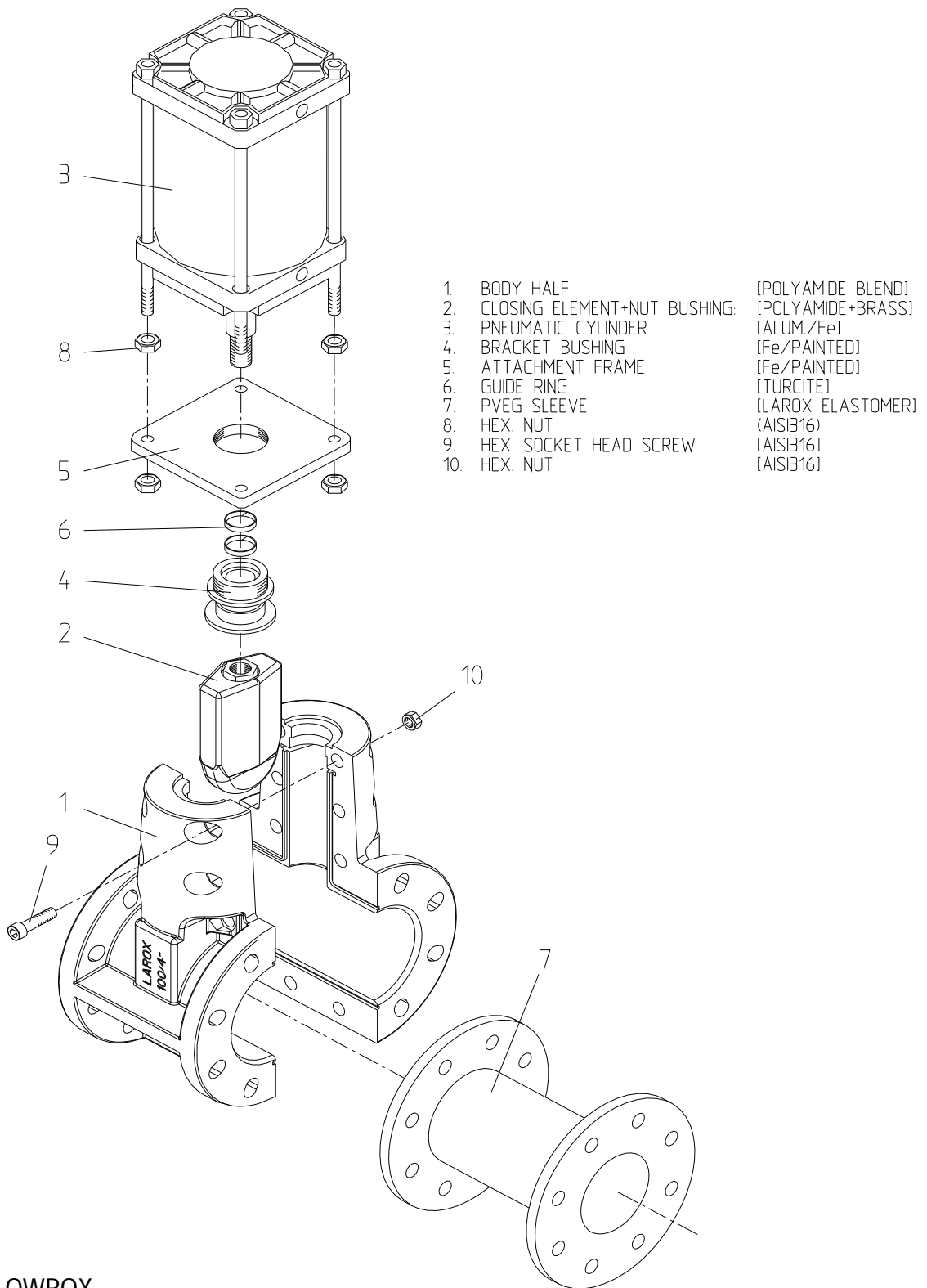
SCREW SIZE	TORQUE IN Nm	TORQUE IN Ft-lb
M12	15	10
M16	30	20
M20	60	50
M24	125	100
M27	160	120
M30	275	205
M33	470	350
M36	645	480
M39	935	690
UNC 3/8	5	5
UNC 1/2	15	10
UNC 5/8	35	25
UNC 3/4	60	45
UNC 1	100	75
UNC 1 1/4	505	375
UNC 1 1/2	935	690



**FLOWROX**  
**FLOWROX PVEG M Valve - Manual Actuator**

Dwg. no. 450584

05.07.02



**FLOWROX**  
**FLOWROX PVEG A Valve - Pneumatic Actuator**

Dwg. no. 451795

02.09.05