









- 1 Prior to dismantling the valve, unscrew the handwheel by one turn, then loosen and remove the body bolts - the bonnet can now be separated from the body. Holding the diaphragm outer, unscrew the diaphragm anticlockwise to remove. Discard the EPDM compressor.
- 2 Place the new EPDM compressor over the tube nut.
- 3 Invert the TFM diaphragm by pressing the center of the diaphragm face with your thumbs while holding the outer edge of the diaphragm with your fingers.
- 4 Engage the thread of the diaphragm with the tube nut by rotating clockwise.
- 5 Holding the EPDM compressor, rotate the diaphragm until the thread engagement tightens against the end stop. Reinvert the diaphragm by pushing down. Unscrew the diaphragm by no more than half a turn to align the holes in the diaphragm with those in the bonnet casting.
- 6 Gently rotate the handwheel in a clockwise direction until the diaphragm and compressor sit flat against the bonnet flange.
- 7 Place the bonnet assembly against the body flange, making sure that the diaphragm centre bead and identification ears align with the weir of the body. Replace the body bolts and finger tighten only. Check that the nuts run freely along the bolt thread before assembly, replacing both should any thread interference be evident. It is recommended to lightly lubricate the screw thread with water or food grade grease prior to assembly. Using a torque wrench, tighten the nuts in **small increments** repeatedly in a **criss-cross pattern** as illustrated until the desired torque level stated overleaf is achieved. This will ensure uniform compression of the diaphragm.
- 8 Remove the screw in the centre of the handwheel. Screw down the handwheel until initial compression of the diaphragm against the seat can be felt. At this point, turn the handwheel a further 5/8 of a turn. Reinsert the travel stop screw and hand tighten. Run the valve between fully closed and fully open to ensure smooth travel. Diaphragm replacement is now complete.

Valve size	Diaphragm (TME) 	Tools required		Bolt torque Nm
				
1/2"	48071	5mm	10mm	9.1
3/4"	48072	5mm	10mm	9.1
1"	48073	6mm	13mm	13.6
1-1/2"	48074	8mm	17mm	25
2"	48075	8mm	17mm	34
2-1/2"	48077	14mm	24mm	94
3"	48077	14mm	24mm	94
4"	48078	10mm	19mm	61

Valve size 	Bonnet complete 	Compressor 	Tube nut 	Bolt set 
1/2"	0.5-N-PN-970-MET	46096	27543	050-BLKIT-M
3/4"	0.75-N-PN-970-MET	46098	27544	075-BLKIT-M
1"	1-N-PN-970-MET	46100	27545	100-BLKIT-M
1-1/2"	1.5-N-PN-970-MET	46102	27547	150-BLKIT-M
2"	2-N-PN-970-MET	46104	27548	200-BLKIT-M
2-1/2"	2.5-N-PN-963-MET	27540	27550	250-BLKIT-M
3"	3-N-PN-963-MET	27540	27550	300-BLKIT-M
4"	4-N-PN-963-MET	28630	27550	400-BLKIT-M