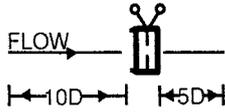


Installation

The MDF0 must be installed in a length of pipe of the same nominal size as the device, with the arrow pointing in the direction of flow.

Installation layout

N.B. To ensure flow measurement accuracy it is essential that the piping in the inlet and outlet sides is straight and has a *minimum* length equivalent to 10 diameters at inlet and 5 diameters at outlet as shown:



Joining

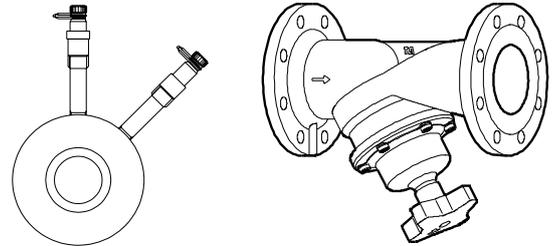
No jointing material must be allowed to protrude inside the bore.

Tube cutting

After cutting tube, the end *must* be deburred or reamed before fitting to the flow measurement device. Failure to carry out this procedure may lead to serious errors in flow measurement.

IMI TA

MDF0, MDF2, MDF3, MDF4



MDF2 Double Regulating Valve

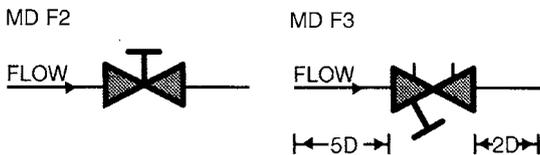
MDF3 Variable Orifice Double Regulating Valve

Installation

The valve must be installed in a straight run of pipe of the same nominal size, with the arrows pointing in the direction of flow. The minimum requirements of the 'Installation Layout' must also be observed (see below).

Installation layout

N.B. To ensure flow measurement accuracy it is essential that the piping in the inlet and outlet sides is straight and has a minimum length equivalent to 5 diameters at inlet and 5 diameters at outlet as shown:



Joining

No jointing material must be allowed to protrude inside the bore.

Tube cutting

After cutting tube, the end *must* be deburred or reamed before fitting to the valve. Failure to carry out this procedure may lead to errors in flow measurement accuracy.

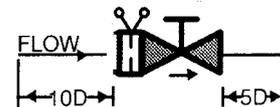
MDF4 Fixed Orifice coupled to a regulating valve

Installation

The valve must be installed in a straight run of pipe of the same nominal size, with the arrows pointing in the direction of flow. The minimum requirements of the 'Installation Layout' must also be observed (see below).

Installation layout

N.B. To ensure flow measurement accuracy it is essential that the piping in the inlet and outlet sides is straight and has a minimum length equivalent to 10 diameters at inlet and 5 diameters at outlet as shown:



The *outlet* length may be reduced to 2 1/2D without significant reduction in flow measurement accuracy.

Joining

No jointing material must be allowed to protrude inside the bore.

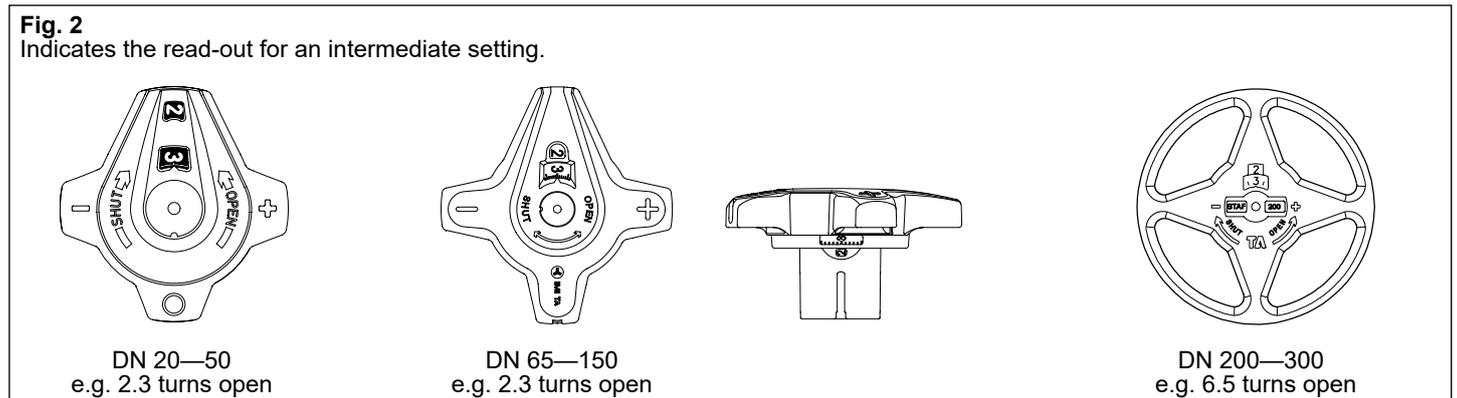
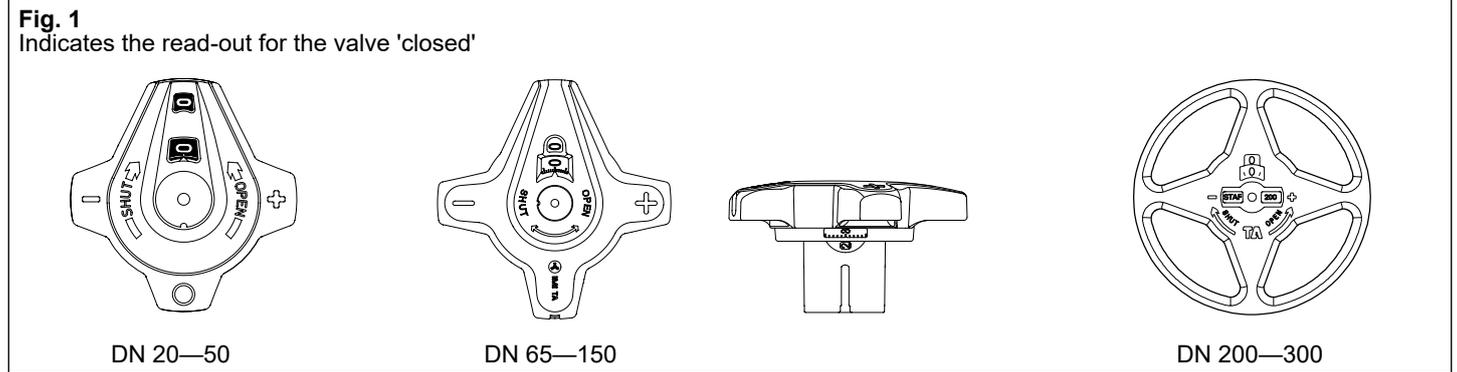
Tube cutting

After cutting tube, the end *must* be deburred or reamed before fitting to the valve. Failure to carry out this procedure may lead to errors in flow measurement accuracy.

Valve setting indicator

The MDF2, MDF3 and MDF4 valves operate from closed to fully open with 4 complete turns, size 20-50, of the handwheel. (8 turns size 65-150, 12 turns size 200 and 250, 16 turns size 300).

The handwheel indicates the valve setting by means of digits appearing in outer (black) and inner (red) windows. The digit in the outer window indicates the number of full turns of the handwheel. The digit in the inner window indicates tenths of a turn.



Regulating and flow measurement

Flow regulation is achieved by adjusting the valve setting until the required flowrate, as derived from the associated flow measurement device, is obtained. The handwheel will indicate the final valve setting.

Flow charts are available on request for all sizes.

Presetting

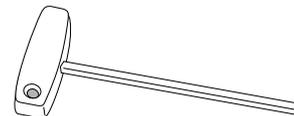
It is possible to read the preset value on the handwheel. The number of turns between the fully open and closed positions is 4 turns for DN 20-50, 8 turns for DN 65-150, 12 turns for DN 200-250 and 16 turns for DN 300.

Initial setting of a valve for a particular pressure drop, e.g. corresponding to 2.3 turns on the graph, is carried out as follows:

1. Close the valve fully (Fig 1).
2. Open the valve to the preset value 2.3 turns (Fig 2).
3. Do not remove the handwheel screw, but insert the Allen key (long end) through the hole in it. (See table, fig 3).

The valve is now preset and may be closed and re-opened to the preset point.

Fig. 3



DN	Allen key	TA No
20—50	3 mm	52 187-103
65—150	5 mm	52 187-105
200—300	8 mm	—

Pressure/temperature rating

16 bar at -10°C to
110°C (MDF0, MDF4)
120°C (MDF2, MDF3)

End connections

To be installed between flanges PN 16 BS4504.

Flow direction

A flow direction arrow is engraved on the body.

Flow charts are available on request.