

COMMISSIONING

In the Figure 1732 and Figure DP1732 ranges, the flow rate is established by measuring the differential pressure using the Figure 631 test points - red is high pressure and blue is low pressure. Valves are fitted with a handwheel, which indicates the valve set position, open to shut is 4 complete turns. The inner digit indicates 1/10th of turns and the outer digit indicates complete turns open, ie. a reading of 1 in the inner window and 3 on the outer ring indicates 3.1 open; 4 being fully open.

Set flow rate as follows;

- connect measuring device to test points following the connection procedure specified by the manufacturer of the device
- either by calculation or use of graphs, equate differential pressure to flow rate. Graphs are available on our website or from our technical department
- flow regulation is achieved by adjusting the handwheel position
- once design flow rate is achieved, note handwheel position. The handwheel contains a setting facility which should be used to maintain the set position, this can be set as follows;
 - remove cap in centre of handwheel
 - using a 3mm Allen key tighten the centre screw until it stops, care should be taken not to over tighten
 - replace centre cap
 - the valve can now be closed to isolate but will only open to the set position



Double Regulating and Commissioning Valves

Figure 1432, Figure 1732 and DP1732

Hattersley Double Regulation Valve (DRV) and Fixed Orifice Double Regulation Valve (FODRV);

- are Y-pattern globe valves having characterised disks tending towards equal percentage performance
- the double regulating feature allows valve opening to be set with an 3mm Allen key
- operation of the valve is by means of the hand wheel
- the Figure 1432 DRV and Figure 1732 FODRV valves are WRAS approved
- the Figure DP1732 FODRV is designed as a 'Companion Valves' for the Differential Pressure Control Valve

LIMITS OF USE

These installation, operation and maintenance instructions have been categorised in accordance with the Pressure Equipment Directive – PED.

The fluid to be transported is limited to Group 2 liquids i.e. non-hazardous.

On no account must these valves be used on any Group 1 liquids, Group 1 gases or Group 2 gases.



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FM311
ISO 9001

- Designed and manufactured under quality management systems in accordance with BS EN ISO 9001-2008

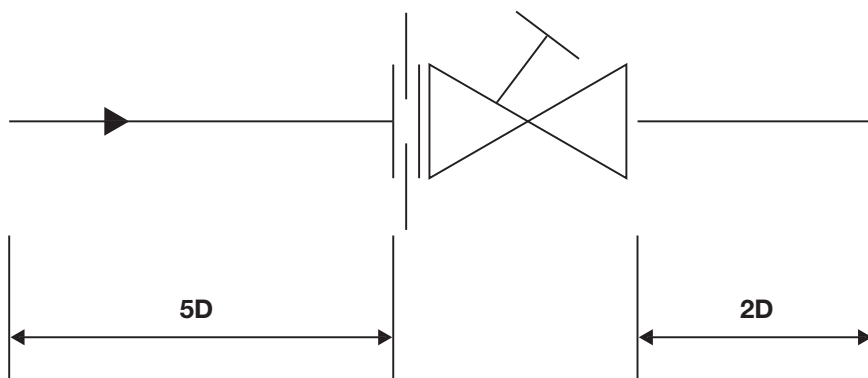
The Company reserve the right to amend any product without notice.

H_DRV_1109
IOM_004BR1432D799_Rev 5

INSTALLATION

These instructions are issued as guidelines only and do not cover all installed conditions – if unsure please contact our Technical Helpline before installation.

- Hattersley products are designed for installation and use within suitably designed systems reflecting CIBSE, BSRIA and HVAC guidelines. Particular care should be taking with regards to;
 - accessibility to valve for setting/adjustment
 - tube cutting
 - jointing
 - bracketing/supports
- where possible the Figure 1432 should be installed in a run of pipework of the same nominal diameter and with the flow in the correct direction. There is no requirement for straight lengths of pipework for DRVs
- the Figure 1732 and the Figure DP1732 **must** be installed in a run of pipework of the same nominal diameter and with the flow direction as indicated on the body.
 - to ensure flow measurement accuracy, it is essential that the pipework on the inlet and outlet is straight, is of the same diameter as the valve and has a minimum length equivalent to 5 diameters on the inlet and 2 diameters on the outlet
 - Note: the requirement for 5 and 2 clear diameters are minimum requirements. Where possible longer lengths should be achieved
 - if installed near to pump outlet, it is essential that the straight lengths of pipework between pump and valve inlet is a minimum of 10 diameters, greater if possible



- the Figure DP1732 Companion Valves should be installed in the opposite pipework to the DPCV, ie. DPCV installed in return pipework – Companion Valve installed in flow pipework. The Companion Valve should be connected to the DPCV via the impulse tube (supplied with the DPCV). If required an isolation valve can be installed in the impulse tube
- for the Figure DP1732, because the impulse tube is connected with a compression fitting, the temperature and pressure ratings are limited to PN16. If the valve is used separately, ie impulse tube connection blanked off, the full pressure rating applies, ie PN25.
- end connections are as follows;
 - for sizes ½” to 2”, Figure 1432 and Figure 1732 have female ISO228-1 parallel threads suitable for connection to threaded steel pipework, ½” & ¾” when used with the compression adaptor, are suitable for connection to BSEN1057 – half hard copper.
 - Figure DP1732 has male threaded ends to ISO228-1 parallel; therefore require a flat face sealing gasket suitable for the service.

TEMPERATURE RATING

Figure DP1732 - when used with compression fitting

TEMPERATURE °C	-10 to 30	65	120
PRESSURE (BAR)	16	10	5

Figure DP1732 – when not using compression fitting

TEMPERATURE °C	-10 to 100	110	120
PRESSURE (BAR)	25	23.4	21.8

Figure 1432 and Figure 1732

TEMPERATURE °C	-10 to 100	120
PRESSURE (BAR)	20	17.2

Figure 1432C and Figure 1732C

TEMPERATURE °C	-10 to 30	65	120
PRESSURE (BAR)	16	10	5