

## DM900 Stainless Steel Flow Measurement Device

- DM900 Flow Measurement Devices are suitable for use with PN10, PN 16, PN25 and PN40 flanges or flanged valves having ratings detailed in the appropriate flange or valve product standards.
- Service temperature and pressures indicated on the identification tag or body marking shall not be exceeded.
- DM900 Flow Measurement Devices must be installed into a well-designed system and it is recommended that the system be inspected in accordance with the appropriate member state legislation. In the UK – The Pressure Systems Safety Regulations 2000.

### INSTALLATION

The DM900 must be fitted between mating flanges, with gaskets. It is essential that care be taken to ensure that the DM900 is centralised within the flanges before tightening the bolts. Inside diameter of gaskets must not encroach into pipe bore. The DM900 must be fitted with at least ten clear diameters upstream and five clear diameters downstream of any disturbing influence, such as elbows, tees, valves etc and should be in a straight run of pipe.

- Ensure DM900 is suitable for service conditions eg. pressure, temperature, service media.
- The Installation shall be designed to provide adequate means of draining and venting to avoid harmful effects such as water hammer, vacuum collapse, corrosion and uncontrolled chemical reactions and to permit cleaning, inspection and maintenance in the correct manner.
- The product has not been designed to include corrosion, erosion or abrasion allowances. Any queries regarding service applications should be addressed to the Crane Fluid Systems Technical Sales Department.
- The valves have been designed for loadings appropriate to its intended use and other reasonably foreseeable operating conditions. Loadings caused by traffic, wind and earthquake have not been taken into account.
- It is the responsibility of the installer to ensure that the valves do not exceed the allowable limits of pressure. However the equipment is designed to withstand a momentary pressure surge of up to 10% above the maximum working pressure.
- The piping system shall be so designed to reduce the risk of fatigue due to vibration of pipes.

## Maximum Pressure Temperature Rating

TEMP °C	-10 to 100	110	120
PRESSURE (BAR)	25	25	25

### End

Fits in between flanges to BSEN 1092.2  
PN10 to PN40

### Pressure test valves

For PN40/180°C service requirements fit  
P82 double seal pressure test valve.

### Flow direction

The DM900 must be fitted in accordance  
with the direction of flow arrow.

## PIPE CUTTING

When cutting pipe, the end *must* be  
deburred before fitting the mating flanges  
otherwise disturbance could be caused  
across the orifice. This is particularly so on  
heavy grade BS1387 pipe.

## OPERATION

- When using test insertion points it is  
advisable to use a silicone based  
lubricant to prolong effective life of the  
seal. A petroleum based lubricant  
should not be used.
- When not in use the screw caps on the  
P84 valves should be fitted.

## MAINTENANCE

- Due to the nature of the DM900, once in  
service the device requires no regular  
maintenance.

## GENERAL CONSIDERAIONS

- Maximum operating pressure reduces as  
service temperature increases. Pressure  
and temperature limitations are shown by  
the valve body marking or on the  
identification tag.
- Flow measurement devices are not  
designed to operate under high shock  
loadings. Where pressure increases occur  
due to shock loading (water hammer),  
they should be added to the working  
pressure to obtain the total pressure  
acting on the valve. The total must not  
exceed the pressure rating of the valve. A  
pressure surge or shock, is usually  
caused by the rapid closure of a check  
valve or quarter turn valve resulting in a  
sudden reduction in flow rate. The  
surfaces of DM900 Flow Measurement  
Devices in service may be subject to  
extreme temperatures – care should be  
taken when handling.

## SERVICE APPLICATIONS

For use on hazardous  
liquids only – Group 2 – as defined by the  
Pressure Equipment Directive 97/23/EC.



FLUID SYSTEMS

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