



The Series 2100 suction demand valve (SDV) is designed specifically for the dosing industry to hydraulically isolate a metering pump from its bulk supply tank, preventing variations in suction pressure and pump accuracy. The valve will prevent uncontrolled discharge from the storage tank in the event of a pipeline rupture downstream of the valve.

The Series 2100 valves are designed for pulsing flow as is normally associated with metering pumps and can be manufactured from a variety of materials to cope with a wide range of corrosive chemicals of low to medium viscosity.

To choose the valve for your application use the valve specifier overleaf or contact our technical team for assistance.

### SIZES AND CAPACITIES:

| Metric OD | Metric DN | Imperial NB | Capacity Litres/hour |
|-----------|-----------|-------------|----------------------|
| 20        | 15        | 1/2"        | 125                  |
| 25        | 20        | 3/4"        | 300                  |
| 32        | 25        | 1"          | 500                  |
| 40        | 32        | 1 1/4"      | 750                  |
| 50        | 40        | 1 1/2"      | 1000                 |

Note: Due to pressure losses through the SDV's the effective capacity of the dosing pump is reduced by approx. 5%.

### MATERIALS OF CONSTRUCTION:

**BODY** - PVC-U, POLYPROPYLENE, & 316L STAINLESS STEEL.

**DIAPHRAGM** - EPDM, FPM, PFA, & PTFE COATED FPM

**VALVE STEM (The only metallic contact part)** - 316L STAINLESS STEEL, TITANIUM & HASTELLOY C276.

**POPPET VALVE** - PTFE

**O-RINGS** - EPDM & FPM

## CONNECTIONS:

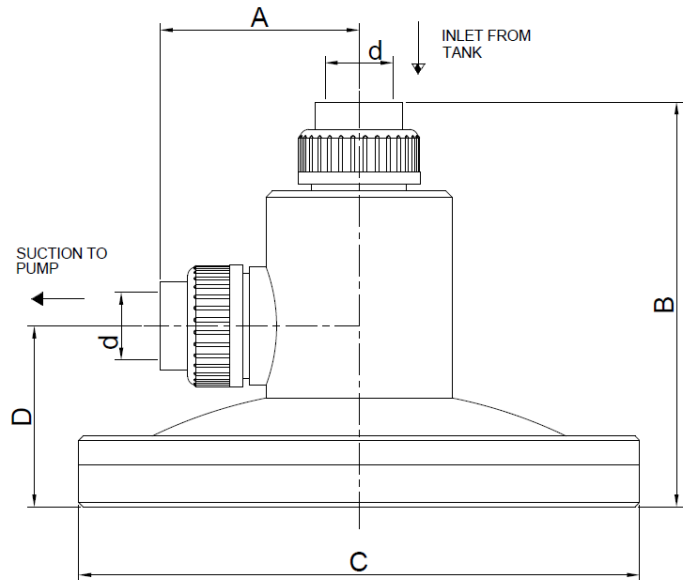
Due to the orientation of the connections screwed or solvent weld connections are not always practical. For this reason the 2100 valves are normally supplied with either fusion or solvent weld UNION connections or flanges when specifically required. Other types of connection can be fitted where practical if requested.

**Valve should be mounted with inlet vertical as shown on the dimensional drawing opposite.**

## OPERATING PRESSURES:

The valves accept inlet pressures up to 15 mtrs. W.C. (1.5 BarG) and will provide a pump suction condition of between 1 and 2 mtrs. W.C. irrespective of inlet pressure. This suction pressure is suitable for the vast majority of dosing pumps currently available. Pulsating flow required to operate effectively.

**THE MAXIMUM OPERATING PRESSURE FOR STANDARD PLASTIC SERIES 2100 VALVES IS 2 BarG. VALVE SHOULD MOUNTED AS CLOSE AS IS PRACTICAL TO THE PUMP SUCTION.**



## DIMENSIONS TABLE:

| d  |    | A      | B   | C   | D   | E   |     |
|----|----|--------|-----|-----|-----|-----|-----|
| DN | OD |        |     |     |     |     |     |
| 15 | 20 | 1/2"   | 80  | 157 | 147 | 65  | 133 |
| 20 | 25 | 3/4"   | 84  | 180 | 208 | 79  | 192 |
| 25 | 32 | 1"     | 99  | 200 | 265 | 87  | 248 |
| 32 | 40 | 1 1/4" | 100 | 230 | 315 | 104 | 297 |
| 40 | 50 | 1 1/2" | 112 | 257 | 345 | 115 | 328 |

## HOW TO SPECIFY YOUR VALVE:

VALVE SIZE INCH NB / MM OD

VALVE TYPE (2100 SERIES)

VALVE STEM MATERIAL  
 3 = 316L STAINLESS STEEL  
 4 = HASTELLOY C276  
 5 = TITANIUM GRADE 2

CONNECTION TYPE  
 0 = SOLVENT/FUSION W UNION  
 1 = FLANGED [PLEASE SPECIFY]  
 2 = OTHER

BODY MATERIAL  
 0 = PVC-U  
 1 = POLYPROPYLENE  
 3 = 316L STAINLESS STEEL

DIAPHRAGM MATERIAL  
 0 = EPDM  
 2 = FPM  
 3 = PTFE

POPPET VALVE  
 If not required leave out

X - 21 X X - X X

## SPARES KITS:

X - 2100 - X - P - SK

## EXAMPLE VALVE:

MODEL 1" - 2150 - 02 = 1" VALVE IN PVC-U HAVING 1" PLAIN SOCKET (SOLVENT WELD) UNION CONNECTIONS AND FPM DIAPHRAGM/O-RINGS WITH TITANIUM VALVE STEM.