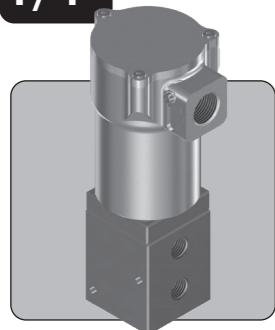


-2/3DS01- DIRECT SOLENOID VALVE

1/4" UP TO 690 BAR 10,000 PSI



The 2/3DS01 is a 2 position 3 way direct acting stainless steel high pressure solenoid valve. The valve is configured normally closed and is an ideal choice for low flow, high pressure switching applications.

A wide variety of low wattage solenoid thrusters are available, including ATEX and IECEx approved coils for use in

hazardous areas and numerous electrical connections. Override and reset options provide additional functionality for systems where the ability for manual intervention is required.

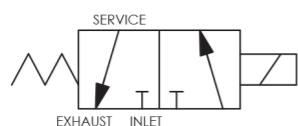
- 2 position 3 way direct acting solenoid valve
- Stainless steel construction
- Contamination tolerant with 40 micron filtration included as standard
- Efficient 3 watt coil design provides high force from low power
- Independently certified SIL 3 capability
- Coil may be rotated 360 to suit cable layout
- Wide variety of mounting, connection, voltage, override and reset options available
- Subsea versions available – contact us for advice

Specifications

BASIC MODEL NUMBER

2/3DS01

SYMBOL



MAX WORKING PRESSURE LIQUID

690 bar
(10,000 psi)

CV (FLOW CAPACITY)

0.01
See performance graph

FLUID

Liquids only
See materials section

TEMPERATURE RANGE

See Product Selector opposite and Technical Data section

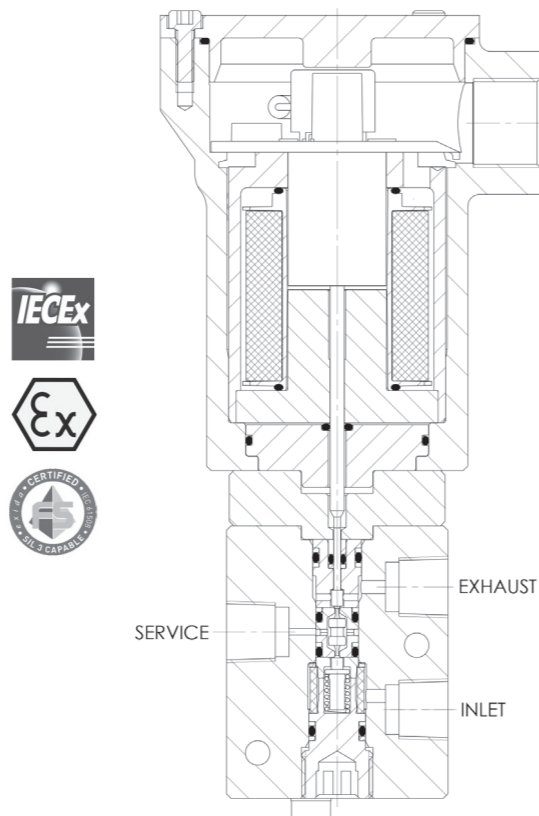
PORT SIZE

1/4"

WEIGHT

3.2 kg
(7.1 lb)

Specifications may change without notice



Materials

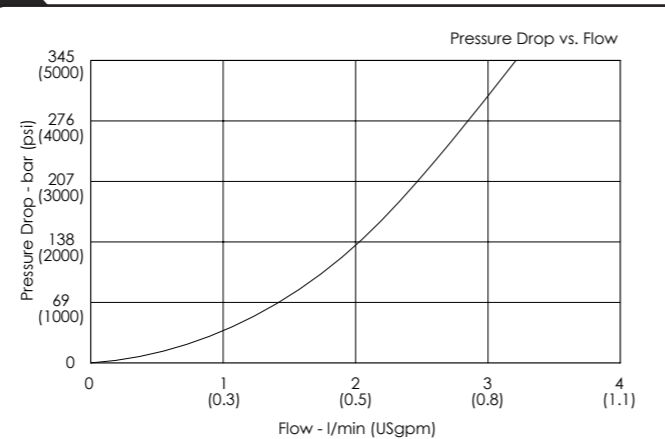
Externally Exposed Parts: 316, 17/4 PH and 300 series Stainless Steels. Acetal push button for manual override and reset options.

Internally Wetted Parts: 316, 302 and 17/4 PH Stainless Steel and Silicon Nitride.

The standard valve is designed for use with mineral oils, water glycols, plain water and may also be used with a wide variety of media compatible with the materials of construction.

⚠ The standard valve has Viton® seals. Further seal options are available via the Product Selector. Compatibility with the working fluid at the operating temperature must be considered.

Typical Performance



Typical performance based on water

Valve & Thruster Options

Valve Options

As standard the valve will move to the energised position when a suitable electrical supply is applied and is returned by a spring (auto-reset) when the electrical supply is removed.

Alternative options include –

MO : Manual Override – With the electrical supply de-energised the valve may be temporarily switched via a push button. Releasing the push button will allow the valve to return. Contact us if a detented manual override feature is required.

MR : Manual Reset – Electrically energising the solenoid will not cause the valve to switch until the push button is pressed. Once the valve is switched the push button may be released and the valve will remain switched. Removing the electrical supply will cause the valve to return to the de-energised position. The valve will not switch if the push button is pressed with the coil de-energised.

MOMR : Manual Override and Manual Reset - Electrically energising the solenoid will not cause the valve to switch until the push button is pressed. Once the valve is switched the push button may be released and the valve will remain switched. Removing the electrical supply will cause the valve to return to the de-energised position. The valve will switch if the push button is pressed with the coil de-energised.

Please contact us for further override, reset and latching options.

Thruster & Seal Options

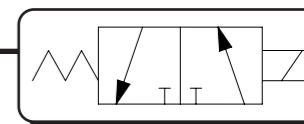
For use in zone 1 and 2 explosive atmospheres as defined by 1999/92/EC either the STExd or STExm thruster must be selected. It is the customer's responsibility to assess the application and to determine the zone and temperature class for their particular atmosphere. Please contact us if use in zone 0 is required.

The temperatures stated for seal options relate to the temperature of the fluid inside the valve. Maximum fluid temperature should be limited to the allowable ATEX surface temperature. The minimum allowable ambient temperature is equal to the minimum allowable seal temperature. The table below details the maximum allowable ambient temperature limits. All coils use class H insulation.

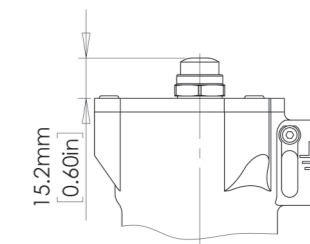
The thruster options included on this data sheet represent only a few common configurations. Please contact us where alternative options are required, such as dual coil windings, alternative electrical supplies, connections and conduits or when subsea use is required.

Thruster Type	Maximum Ambient Temperature for non-hazardous area	Maximum Ambient Temperature for T4 temperature rating	Maximum Ambient Temperature for T6 temperature rating	IP Rating
STHC	90°C	Not allowed	Not allowed	65
STKC	90°C	Not allowed	Not allowed	68
STExd	90°C	90°C*	65°C	68
STExm	90°C	80°C*	Not allowed	68

Voltage Option	Voltage Range
12VDC	10.8 – 13.2V
24VDC	21.6 – 26.4V
48VDC	43.2 – 52.8V
115VAC	100.0 – 127.0V 50/60Hz
230VAC	215.0 – 253.0V 50/60Hz



ADDITIONAL HEIGHT FOR MO, MR AND MOMR VARIANTS



Product Selector

2/3DS01 /25P - MO - STHC - 12VDC - NBR - 10K

VALVE TYPE	PORTING OPTIONS	VALVE OPTIONS	THRUSTER OPTIONS	VOLTAGE OPTIONS	SEAL OPTIONS	MAX WORKING PRESSURE
2/3DS01	/25P 1/4" BSPP female /25N 1/4" NPT female -44AE 1/4" OD medium pressure tube port M Manifold mount	Leave blank if none required MO Manual override MR Manual reset MOMR Manual override and manual reset	STHC Din connector STKC M20 conduit STExd Ex db approved STExm Ex emb approved	12VDC 12 volt DC 24VDC 24 volt DC 48VDC 48 volt DC 115VAC 110/120 volt AC 230VAC 230/240 volt AC	Leave blank for Viton® seals -10°C to +120°C NBR Nitrile seals -25°C to +105°C EP EPDM seals -45°C to +120°C HNBR Hydrogenated Nitrile seals -20°C to +120°C	10K 690 bar (10,000 psi) Liquid

Repair and seal kits are available on request

For a seal kit add SK at the end of the model code and for a repair kit add RK

See valve and thruster options above for further details

Further thruster options are available on request

STExm thruster is not available with AC coils

Further voltage options are available on request

Further seal options are available on request. Temperature ratings relate to fluid temperature. See above for ambient temperatures



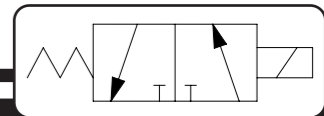
CATALOGUE ALSO AVAILABLE ON CD
VISIT OUR WEBSITE FOR A FULL ONLINE SEARCH FACILITY
www.bisvalves.co.uk

BIS VALVES
The Specifier's Catalogue

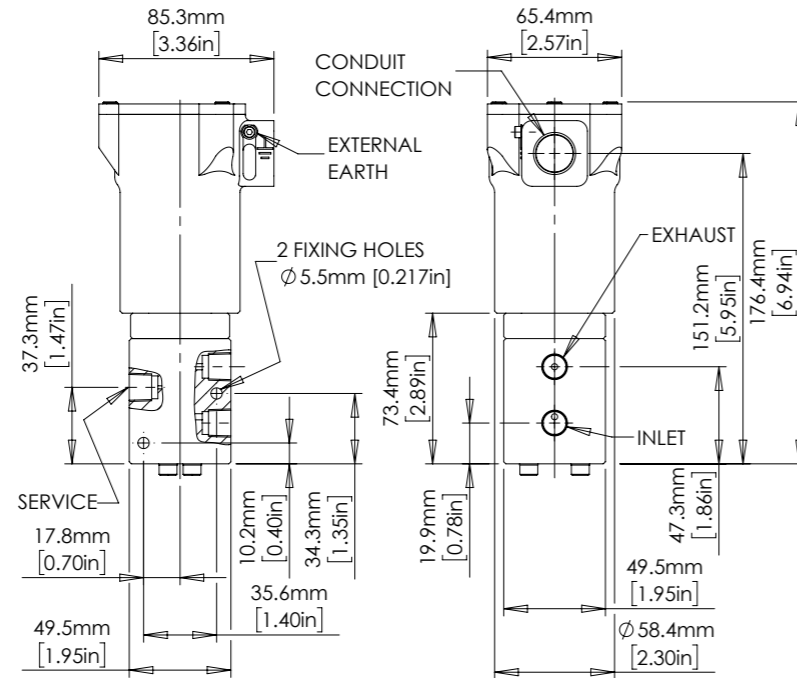
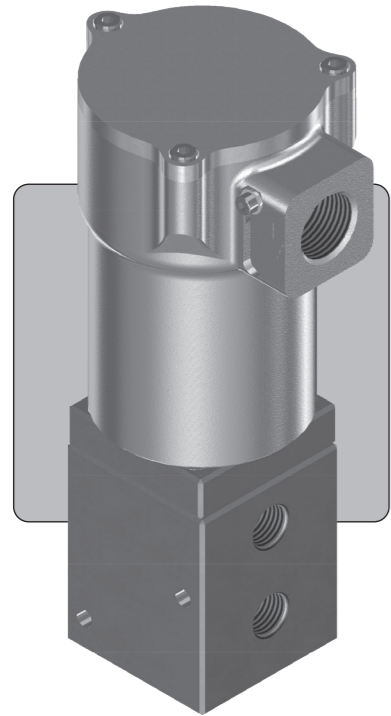
SOLENOID
STOP AND METERING
3 PORT DIRECTIONAL CONTROL
4 PORT DIRECTIONAL CONTROL
CHECK AND SHUTTLE
PILOT OPERATED CHECK
RELIEF
EXCESS FLOW
FILTERS
PRESSURE SENSING
PUMPS
ACTUATORS
TECHNICAL DATA

2/3DS01

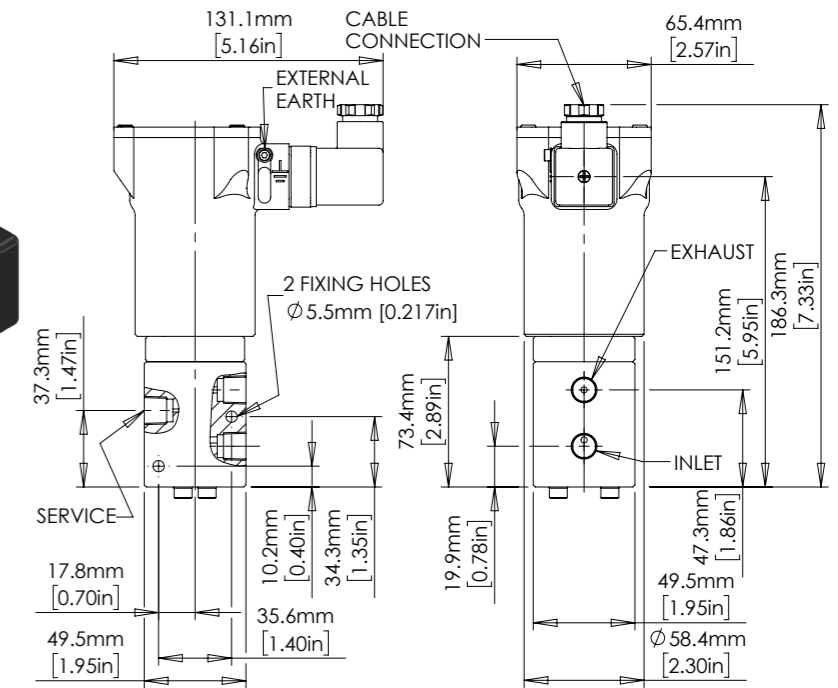
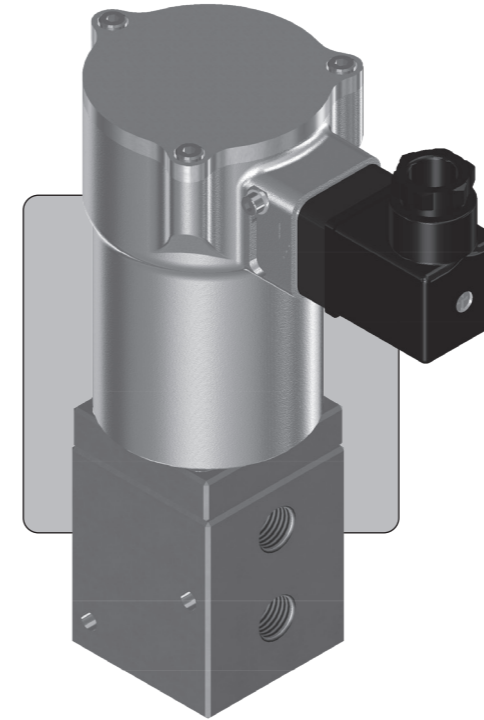
DIRECT SOLENOID VALVE



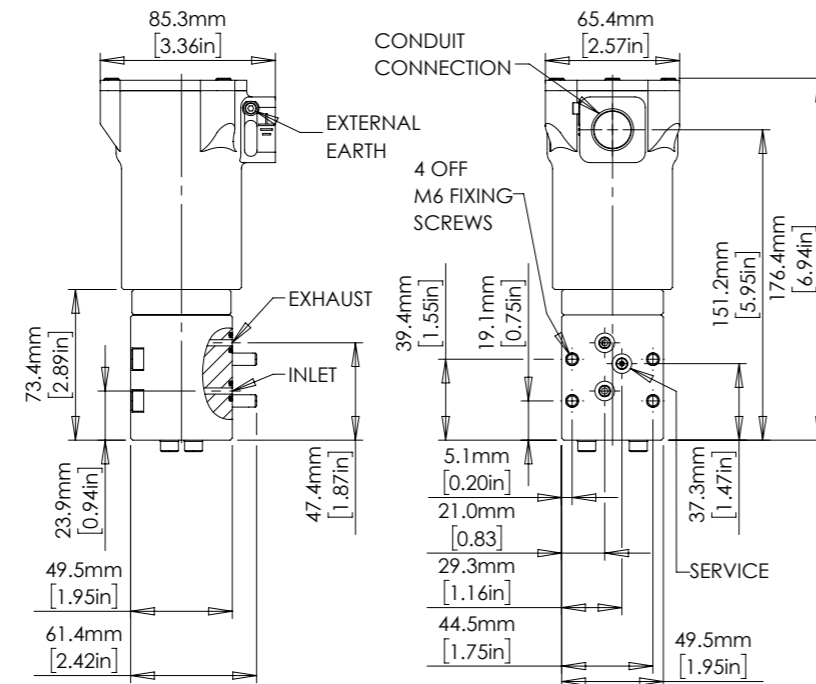
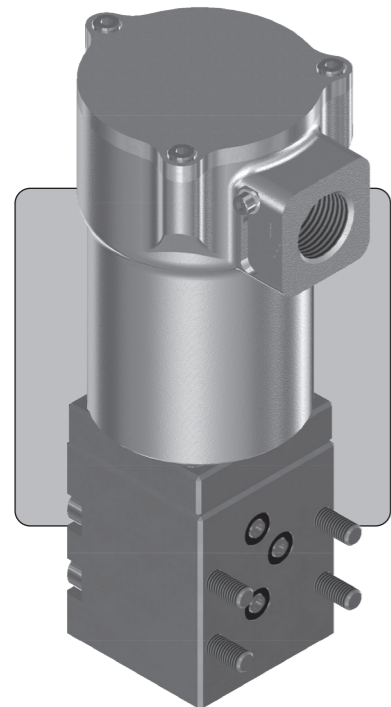
2/3DS01/25P or /25N-STEXd or STEXm



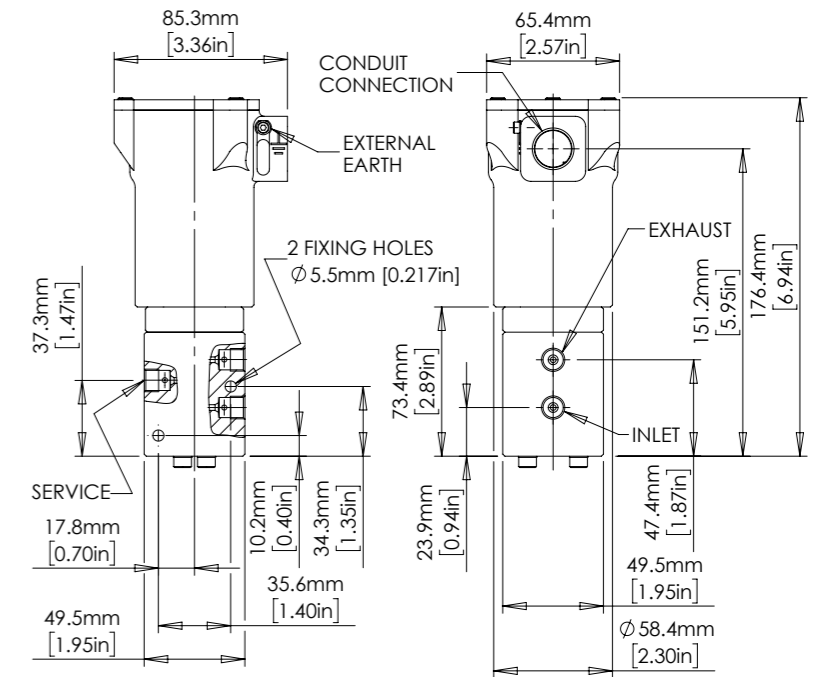
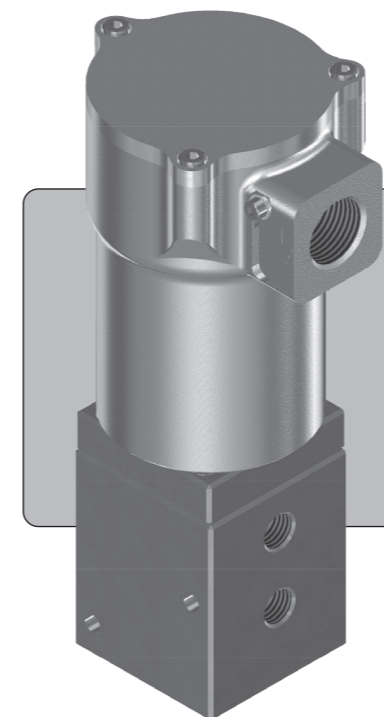
2/3DS01/25P or /25N-STHC



2/3DS01M-STEXd or STEXm



2/3DS01-44AE-STEXd or STEXm



SOLENOID
STOP AND METERING
3 PORT DIRECTIONAL CONTROL
4 PORT DIRECTIONAL CONTROL
CHECK AND SHUTTLE
PILOT OPERATED CHECK
RELIEF
EXCESS FLOW
FILTERS
PRESSURE SENSING
PUMPS
ACTUATORS
TECHNICAL DATA