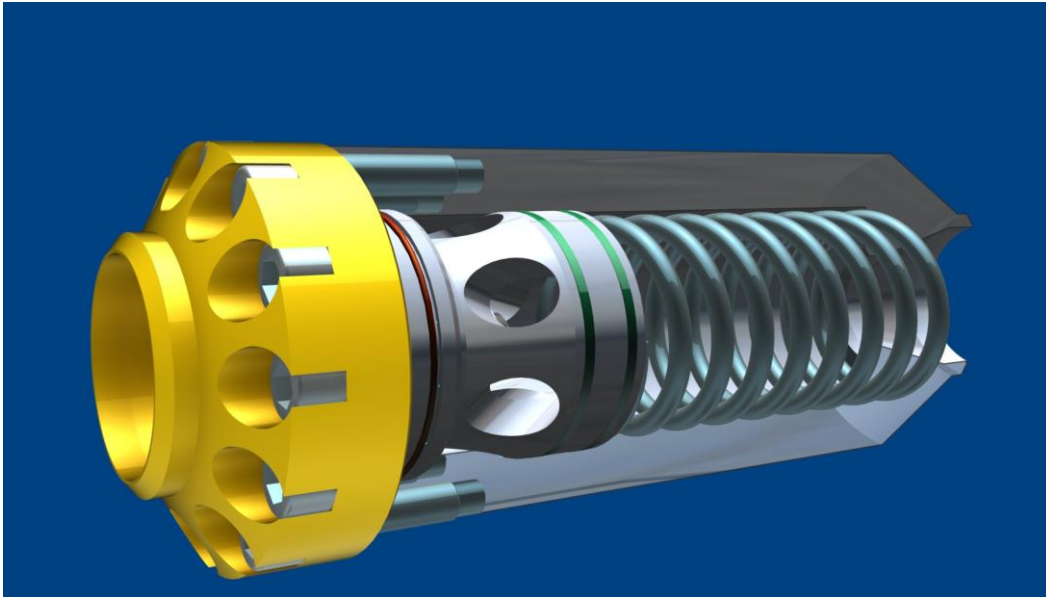


## Moffat Surplussing Valve™



The *Moffat Surplussing Valve™* is a special check valve that allows flow in the forward direction only once a pre-determined cracking pressure has been reached. The surplussing valve is bubble tight in the reverse flow direction. It has many uses but is typically used to prevent hose collapse due to external sea-water pressure for deepwater operations. This allows a hose to be deployed with an internal pressure applied to balance the external hydrostatic pressure. During operation the pressure is raised beyond the cracking pressure and the valve will open and allow flow. If the pressure drops below the cracking pressure the valve closes to protect the hose.

Design Code: API 6A (ISO 10423), API 17D/H, ASME B31.8, ASME VII DIV. 2, PD 5500 and PED  
(Others available upon request)

Sizes: 1", 2", 3", 4", 6" and 8" Nominal Bore

Pressure Range: 6,000 PSI (414 BAR) , 10,000 PSI (690 BAR) and 15,000 PSI (1035 BAR)

Cracking Pressure: 0 to 1,450 PSI (100 BAR)

Max Water Depth: 3,000m

Material Selection: 316 St. Stl, Duplex UNS 31803, Super Duplex UNS 32760, Inconel 625

(Others available upon request)

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Fax: +44 (0)1670 810154  
Email: [moffat.sales@f-e-t.com](mailto:moffat.sales@f-e-t.com)  
Web: [www.f-e-t.com/products/drilling-and-subsea/subsea-technologies/moffat](http://www.f-e-t.com/products/drilling-and-subsea/subsea-technologies/moffat)

## Key Features

**Pre-Determined Cracking Pressure** - Surplussing valves are supplied with a pre-defined customer specified cracking pressure in the flow direction.

**Reliability** - The check valve unit is a rugged compact design with no external moving parts. All units are built to cope with the demands of the subsea environment and for use by ROV.

**End Connections** - Standard hose-end connections include: Hammer-Lug Union (Fig. 1502, 602, 206, etc.), Flanged (API 6A or ANSI), Hub or Threaded (NPT or BSP).

**Hot Stab Integration** - Surplussing Valves are often supplied pre-assembled to *Moffat Subsea Stab Connectors™*. They can be incorporated into either the male or female. A separate datasheet is available upon request.

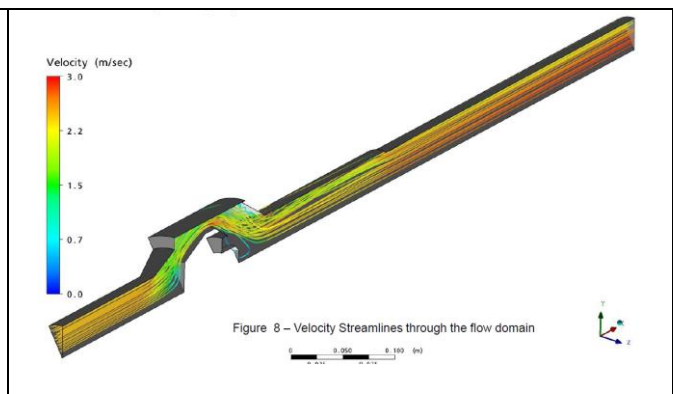
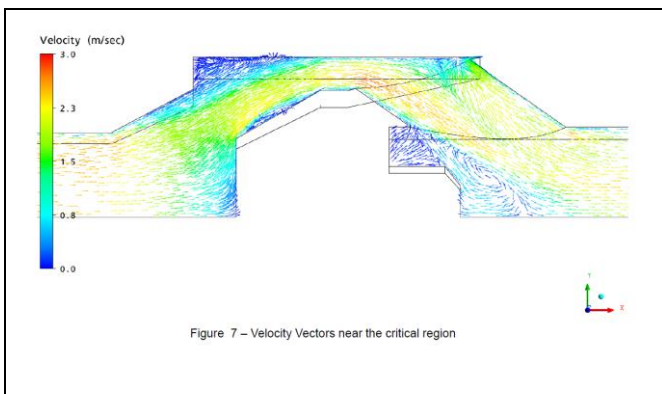


**Refurbishment Service** - The valves are designed provide reliable service over a number of campaigns. Often the required cracking pressure will vary from project to project this can be achieved by returning the valve for refurbishment. It is not recommended that users try to modify the cracking pressure manually.

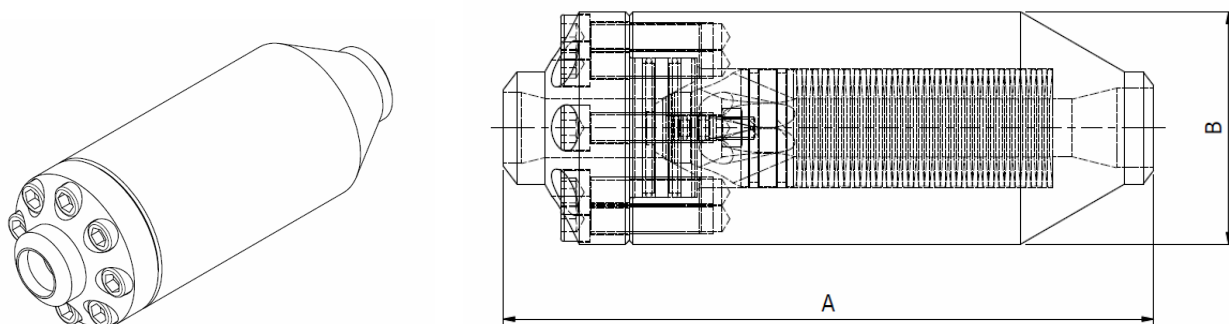
## Flow Data

Flow rate to differential pressure (DP) curves have been characterised for the surplussing valve. These curves have been derived by physical flow testing of the equipment and verified using computational fluid dynamics (CFD).

There are a large number of factors which affect the flow through the surplussing valve (i.e. Cracking / Absolute Pressure, Flow Media, Valve Size, etc.) it is therefore not possible to print all possible flow / DP curves in this document. Our sales department would be happy to provide this data upon enquiry.



## Moffat Surplussing Valve™



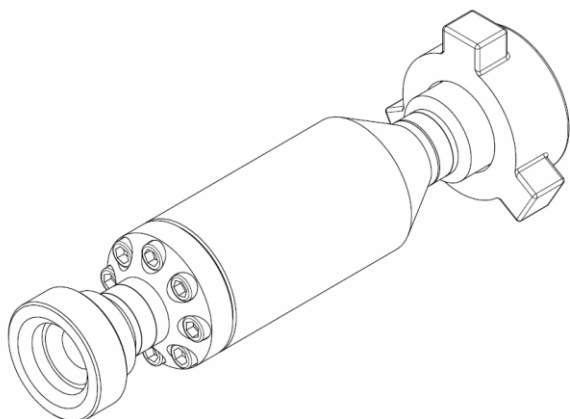
### Approximate Dimensions:

Nominal Bore	A (mm)	B (mm)	W (kg)
1"	350	125	25
2"	350	125	25
3"	575	198	90
4"	575	198	90
6"	1,675	420	1,050
8"	1,880	470	1,120

Note that the dimensions above are based on a standard surplussing valve with butt-weld ends. Drawings and 3D Models to match your precise requirements are available via our sales department.

### Inlet / Outlet Connection

Surplussing valves are stocked with butt-weld ends as standard. This allows the inlet and outlet connections to be configured upon request. We stock and can fit all standard hose-end connections including: Hammer-Lug Union (Fig. 1502, 602, 206, etc.), Flanges (API 6A or ANSI), Hub or Threaded (NPT or BSP).



Surplussing Valve shown complete with Female Fig. 1502 Hammer-Lug Union on the inlet and Male Fig. 1502 + Nut on the outlet. Many configuration options are possible, please contact our sales department for more details.



Moffat, based in the North-East of England, offers design and fabrication services for a significant range of pipeline products aimed at the petrochem, process, offshore and subsea markets both in the United Kingdom and Overseas.

The company has engineering experience and expertise to provide a wide range of bespoke engineered products including: pig launchers & receivers, manifold skids, suction pile hatches (hinged or butterfly), filter separator packages and pull-in heads.

Ancillary subsea equipment associated with the above is also supplied by the company and includes: *Moffat Subsea Stab Connectors™*, *Moffat Surplussing Valves™*, subsea ball / check valves, pig retainer (lock) devices and ROV valve interfaces.

A prime component of the success of the company is the commitment to quality and health and safety. Moffat holds accreditation for quality to ISO 9001 and for Health and Safety to OHSAS 18001.

The customer base covers both end-users and EPC contractors including:

ACERGY	MCDERMOTT
AKER	OCEANEERING
BEL VALVES	ONESUBSEA
BIBBY OFFSHORE	PETROBRAS
BHP	SAIPEM
BJ SERVICES	SAPURA ACERGY
BP	SHELL EXPLORATION & PRODUCTION
CHEVRON	SUBSEA 7
DAEWOO	TECHNIP FMC
EXXON MOBIL	VECTOR INTERNATIONAL
VETCOGRAY (GE OIL AND GAS)	WEATHERFORD
HALLIBURTON	

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WEB: <https://www.f-e-t.com/subsea/hardware-tooling-and-components/tooling/#hot-stabs>

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