# Free Fall Fire Valves (Screwed)

- Suitable for installation in either horizontal or vertical pipe work.
- Designed to provide a 100% shut off when used as a fuel isolating valve.
- May also be used as a fuel 'dump' valve, whereby the valve will open on actuation.
- Standard Free Fall Valve assembly comprises of a valve, lever, and weight, together with a fitting kit.
- Standard valves are manufactured in cast iron to ASTM A126 Gr B.
- Suitable for use with fuel oils at pressures up to 14 bar.
- Valves with screwed connections have BSP parallel threads.
- Standard Fire Valves are supplied with a 'Lubricating Compound', which is a general-purpose sealant, suitable for hydrocarbons.
- May be actuated mechanically or electrically.
- Supplied with a Fire Valve Kit, available in sizes, Small (15 to 50mm NB valves), Medium (65 to 100mm NB valves) and Large (125 to 200mm NB valves).
- Kits contain Pulley Wheels, Stainless Steel Cable, Fusible Links (Standard 72 Degrees), Warning Signs, Cable Connectors and Tension Springs, any of which may be purchased as individual products.
- Electrically actuated Fire Valve systems utilise a standard valve, lever and weight and use an E-MAG Electro-Magnetic Release System, allowing actuation by making or breaking an electrical circuit, usually 24V DC or 230V AC.
- The installation of a valve mounted Mercury Switch, Electro Mechanical Release or Wall Mounted Changeover Switch may provide remote signalling of the Fire Valve status or allow direct switching of electrical equipment where applicable.
- Competitively priced with a full range of ancillaries.

Available Sizers are below -

Free Fall Fire Valves (Screwed)		
20-001	1/2"	
20-003	3/4"	
20-005	1"	
20-007	1 ¼"	
20-009	1 ½"	
20-011	2"	

## Maintenance - Free Fall Fire Valves (Screwed)

- Frequent maintenance of your Free Fall Fire Valve is strongly advised. We recommend that the valve is inspected every 3 months. The Fire Valve will need to be 're-charged with lubricating grease' throughout its life. Frequency of re-charging depends on several aspects: flow rate, valve usage, pressure and temperature. FEL Lubricating Grease is supplied in 'Stick Form' and can be inserted into the valve spindle without a grease gun.
- During inspection, attention should be paid to the 'Combination Screw' and how far it is screwed into the valve spindle. The Combination Screw is fitted into the valve spindle and is used to insert lubricating grease into the aperture between the valve body and plug valve by turning until resistance is felt.
- If the Combination Screw is fully screwed into the valve spindle, this indicates that the valve needs to be re-charged with lubricating grease.
- Lack of lubricating grease may be the cause of fuel leakage, or, if the valve is fitted to the suction side of a fuel pump, it may allow air to enter your fuel system.
- Each FEL Free Fall Fire Valve is supplied complete with a *Maintenance Record Card* at the time of purchase.

The Maintenance Card will provide a record of the installation date and ongoing routine maintenance as well the original FEL Order Reference. This is an important record for the end customer and will help to keep the valve in a serviceable condition throughout its life.

#### Achieving an Even Operating Torque

Should a valve become jammed or unusually stiff to operate, this can usually be cured by the injection of lubricant. If this is ineffective it will be necessary to dismantle the valve, clean the components and recharge with lubricant. Please contact us for more information.

#### Maintenance Steps

- 1. Visually inspect the valve for damage and leakage.
- 2. Release the stainless-steel cable and work the valve lever for several strokes, the valve plug should rotate evenly backward and forward.
- 3. The combination screw is used to force lubricating grease into the valve body.
  Before it has reached its limit (Fully Screwed Down), the Combination Screw should be removed, a grease stick should then be inserted into the aperture in the valve spindle.
  Replace the combination screw, remember to re-

attach the Maintenance Record Card.

FEL Valves www.felvalves.com Tel: 0044(1)565733137  VALVES FOR POWER GENERATION APPLICATION, BSP FITTINGS.  MAINTENANCE RECORD  REF:				
PLEASE DO NOT REMOVE FROM VALVE BODY				
DATE OF INSTALLATION:				
DATE	INSPECTED BY?	LUBRICATED?	SIGNATURE	
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<sup>\*</sup>Maintenance Card (Always leave attached to the valve Body)

- 4. Tighten the Combination Screw until some resistance is felt. Give several steady strokes of the lever to distribute the lubricant. Ensure the lever moves evenly. This may need repeating.
- 5. The first indication of the valve becoming fully charged is an increase in rotate the combination screw and/or an increase in effort required to rotate the lever.
- 6. Should grease appear between the valve body and plug, this indicates the valve is overcharged.
- 7. When the correct even operation of the valve is achieved, re-attached the stainless-steel cable.
- 8. Inspection and re-charging should be carried out every 3 months to ensure correct operation of the valve.

### Re-Order Codes for FEL Free Fall Valve Lubricating Grease

To re-order the lubricant, you can use code number – **20-050** followed by the quantity of grease sticks you require -

Lubricant for Free Fall Fire Valves		
20-050/4	Lubricant, Diesel fuel x 4 Sticks	
20-050/8	Lubricant, Diesel fuel x 8 Sticks	
20-050/12	Lubricant, Diesel fuel x 12 Sticks	
20-050/16	Lubricant, Diesel fuel x 16 Sticks	
20-050/24	Lubricant, Diesel fuel x 24 Sticks	
20-050/32	Lubricant, Diesel fuel x 32 Sticks	