

## General Information - Standard Products.

### General Design Criteria.

Irrespective of valve type, size or mode of operation, SFC interlocks are supplied to fit to the specified host valve. For each size and type of valve, the interlock is supplied with a mounting coupler that locates onto the host valve.

In fitting SFC interlocks to valves, the certified pressure envelope of the host valve is never broken; accordingly, valve vendor warranties are never jeopardized or invalidated by the attachment of SFC interlock products.

Other significant design features of SFC interlocks include:-

#### **WEATHERPROOF:**

SFC interlocks have TOTALLY SEALED lock bodies. Key entry apertures are fitted with internal self-sealing stainless steel Weather strips.

#### **MAINTENANCE FREE:**

SFC interlocks are supplied fully lubricated ready for installation. For handwheel operated gate valves, the locks are adjustable in situ to compensate for valve wear without any necessity for removal.

#### **'CODED CARD KEYS'**

The coded card key design is original to SFC. To unlock an SFC interlock simply involves the "sheathing" of the key blade; to lock the lock assembly conversely requires the "unsheathing" of the key blade. There is no requirement for the operator to have to manipulate / rotate the key – based on a simple rack and pinion principle; this is the most 'user friendly', reliable and ergonomic design currently available.

### Materials

SFC interlocks are supplied as precision investment castings in Stainless steel manufacture through the Lost Wax Process.



### **Interlock Lubrication**

Internal lock components are lubricated with Bostik Never-seez compound. (Nickel / Graphite grease). Lock bodies are sealed for life and under normal circumstances the lubricant would not come into contact with operators. If for any reason locks are dismantled resulting in contact. The safety data sheet should be observed, please refer to COSHH statement located in section 3.5, additional copies are available on request.

### **Environmental Testing**

As part of our continuing program of product improvement to ensure total customer satisfaction, we undertook tests to simulate extreme operating conditions. These are described briefly as follows with relevant testing certificates attached.

#### **Salt Mist Test.**

This test was an atmospheric test conducted over a 28 day cycle using highly corrosive salts at Temperatures of 40° with a relative humidity of 93 (+ 2/3-3%). Conducted by an independent laboratory (GEC Avionics) and witnessed by Lloyds.

#### **Fire Test.**

This test was conducted to establish the operability of SFC interlocks after a major fire. The locks were heated to cherry red condition (700°C) and operated and were then tested again after cooling to ambient temperature. This test was conducted by Essex heat Treatment Ltd.

#### **Low Temperature Test & Ultra Low Temperature Test.**

At the time of testing in 1989 our principle market was the North Sea. We accordingly undertook a low temperature test to -25° C with satisfactory results.

Prompted by our dialogue with the Russian Pipeline Authority, we undertook an Ultra Low Temperature Test to - 57°C and the locks were found to operate satisfactorily while covered with 2mm of frost. This test was again witnessed by Lloyds.

All Certification is available upon request.





## COSHH

We confirm that the interlocks and ancillary equipment supplied under the above purchase order are non-hazardous to health and require no special handling or preservation procedures.

The interlocks supplied are sealed for life and under normal circumstances the lubricant, Bostik Never-Seez Pure Nickel Special Nuclear Grade Anti-Seize & Lubricating Compound would not come into human contact. If for any reason the locks are stripped down resulting in contact, please refer to the Manufacturers material safety data sheets.

