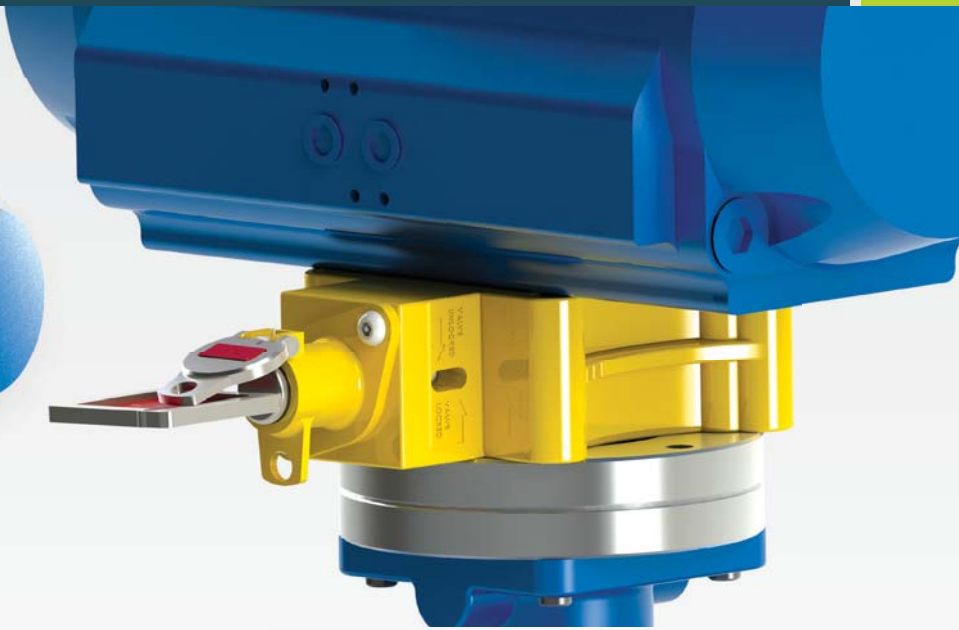# IML – INTERMEDIATE LOCK

The ISO pattern 'IML' intermediate lock that enables full mechanical control of any ISO pattern actuator.

Actuated valves in process operations are normally maintained in an energised state and may otherwise be part of a DCS managed system. During normal operations these valves will respond to process commands in a pre-determined manner.

However, during periods of planned maintenance the command architecture managing these valves may need to be suspended to facilitate prescribed work tasks. In these circumstances it may be essential to ensure that such valves are set to their failsafe position and are disabled both remotely and locally so that work may proceed safely.

The SFC 'IML' lock is a mechanical device that interfaces between the actuator and its host valve. It uses an operating key facility to lock the actuator in the desired open or closed position so that the valve is prevented from turning under any circumstances.

This key may be a part of an additional designed-in feature whereby the power source that energises the valve can be interlocked with the IML unit itself to provide a total failsafe solution by ensuring the power source and the actuator are mechanically interlocked and all functions are disabled.

With all ISO 5211 patterns covered from F05 to F16, the six models of the IML will interface immediately to any ISO pattern actuator and replaces the requirement for a valve mounting kit.

The maximum flange torque for each hole pattern in line with ISO 5211 is :

F05	125Nm
F07	250Nm
F10	500Nm
F12	1000Nm
F14	2000Nm
F16	4000Nm

The 'IML' is available in two compact mechanical configurations :

- A key-operated system managed from the Control Room as part of a structured 'Permit to Work' ('PtW') management system.
- A simple stand alone lock-out system which satisfies OSHA Standard 1910.47 – 'Control of Hazardous Energy'