

Divex Interlock



Introduction

The Divex Interlock is designed to prevent the doors of medical equipment or transfer locks being opened whilst under pressure. This is achieved by the positive engagement of the Interlock bolt with an appropriate part of the door mechanism.

As the chamber is pressurised, the interlock mechanically locks the bolt in the extended position.

The interlock bolt cannot be retracted until the chamber pressure is less than 1psi.

When the bolt is in the retracted position the gas supply to the chamber is isolated and the chamber cannot be pressurised.

When the bolt is retracted the chamber is vented through the interlock vent ports, this ensures that the chamber cannot be pressurised from another source. This facility also allows the interlock to be used in a vent only configuration, in which case port B would be plugged.

The interlock is supplied with two connection ports, both 1/2" NPT.

A bracket to mount the interlock (not supplied, due to the varying dimensions of chambers) must be attached to the chamber and provide six holes for the M8 mounting screws. A clearance hole is also required to facilitate connection of pipework or a plug to Port B. Location of

the interlock must be such that when the interlock bolt is in the extended position there is sufficient engagement with the door mechanism to prevent opening.

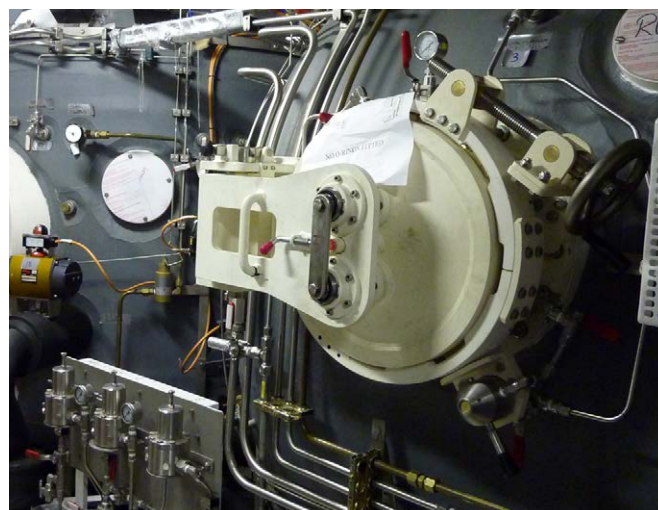
Operation

The Divex interlock is very simple to operate. Firstly the bolt is fully pushed inwards to engage with the mechanism to be locked. As the bolt reaches the extremity of travel, the locking/sealing piston will move across under the action of a spring to mechanically lock the bolt in that into position. The system is now ready to be pressurised ensuring that the locking/sealing piston remains fully engaged making retraction impossible.

Operation of the release button whilst the system is pressurised will have no effect whatsoever as the button spring cannot provide sufficient force to dislodge the locking/sealing piston. To release the interlock, the chamber must be totally depressurised. The release button can then be pushed and actuated. The locking/sealing piston will be dislocated from the groove in the bolt allowing full retraction of the bolt from the door mechanism.

Port A can be handed to either side to suit piping by simple re-assembly.

The standard bolt stroke is 50mm however bolt length and bolt stroke length can be any practical length by changing the bolt only. Please contact JFD for details.





Design & Operational Notes

DC0300AA

Interlock bolt cannot be retracted with port pressure above 1psi.

Maximum Working Pressure 45 bar

Design Pressure 49.5 bar

Hydrostatic Test Pressure 68 bar

Design Temperature -20°C to +50°C

Bolt and bolt stroke can be any practical length.
(By changing interlock bolt only).
Interlock can lock in any attitude.

DC0319AA

Interlock bolt cannot be retracted with port pressure above 1psi.

Maximum Working Pressure 103 bar

Design Pressure 113 bar

Hydrostatic Test Pressure 150 bar

Design Temperature -20°C to +50°C

Bolt and bolt stroke can be any practical length.
(By changing interlock bolt only).
Interlock can lock in any attitude.



Order Codes

Divex Interlock 45 bar
DC0300AA

Divex Interlock 103 bar
DC0319AA

Interlock Spares Kit
DC0300202

Divex Interlock 45 bar
DNV Approved
DC0300DA

Divex Interlock 45 bar
Lloyds Approved
DC0300LA

Divex Interlock 103 bar
Lloyds Approved
DC0319LA

DC-MDS-300 R2