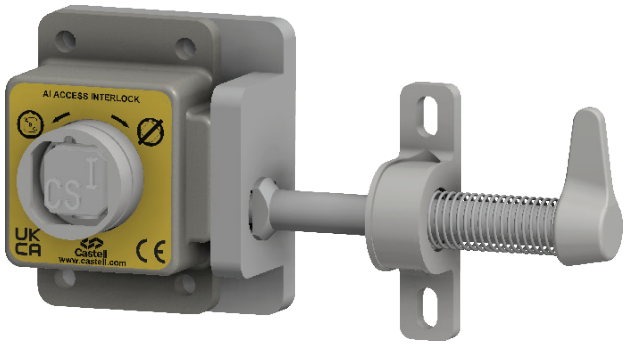
AI-HD

Single Key Heavy Duty Access Interlock



The AI-HD is a Heavy Duty (HD) robust single key access interlock ideal for use on hinged doors. The interlock has an open cavity design manufactured in stainless steel. Typical industries using the AI-HD are food, chemical, pharmaceutical, mining, steel and power generation.

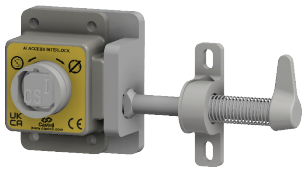
OPERATION

The Castell single key access interlocks are used in various applications to control part body access to hazardous areas.

AI Heavy Duty single key access interlock (bolt trapped - key free)

1

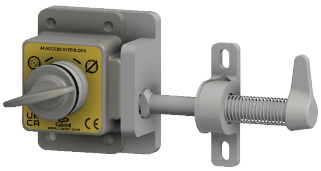
Key is free, bolt is trapped



While the key is free, the bolt of the AI-HD is trapped in the mechanism. The door is locked.

2

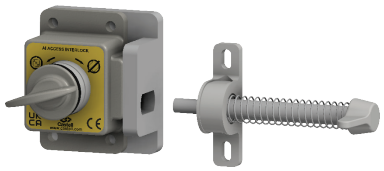
Insert and turn key, then turn and release bolt



By inserting and turning the key in the Access Interlock, you can release the bolt. This will trap the key in the lock.

3

Key is trapped, bolt is unlocked



The key stays trapped while the bolt is released and the door is open.

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Sentric Safety Group reserves the right to alter specifications and introduce improvements without prior notice.

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AI-HD
Single Key Heavy Duty Access Interlock

USAGE

The AI-HD Access Interlock should be used to allow safe access to potential hazardous and dangerous areas. The AI-HD Access Interlock should be used on part body access doors where the use of personal safety keys is not essential (to prevent accidental lock in).

The AI-HD Access Interlock is not designed for security purposes, such as access to a building.

No hazardous substances were used in the manufacture of this product. The product can be disposed of in standard waste.

INSTALLATION

The housing of the AI-HD access interlock should normally be mounted on the static frame of the guard and the bolt to the hinged door using suitable fasteners. Fixed bolt bracket is highly tolerant to misaligned guards and should be fitted with suitable fasteners. Please refer to the drawing on page 4 for mounting details for the housing and bolt. The AI-HD interlocks are avalable in Hand 1 and Hand 2 version suitable for left or right hinged doors, respectively. Anti vibration pads should be used on machines that generate a high level of vibration.

IMPORTANT: The AI-HD Access Interlock should be mounted on the guard using anti-tamper fasteners to prevent unauthorised removal.

The AI-HD Access Interlock must be installed by a competent and qualified person who has read and understood these instructions. Please retain this document in your technical file.

Force required to shear lock bolt is 24KN for both stainless steel and brass interlocks.

You must use M6 anti-tamper stainless steel screws secured using threadlock set to a torque of 5 Nm.

The manufacturer should be consulted when use in a corrosive environment is planned.

Alignment limits 0.5 mm must be sent in all planes. Angular displacement +/ - 1˚ between lock and bolt.

MAINTENANCE

Periodic visual checks should be carried out by the site manager/safety officer.

Do not lubricate lock barrel with oil or grease, use CK dry powder graphite if necessary.

In case of defects being detected please contact your nearest Castell Support Department for further actions. Please see Contact section for contact details.

The interlock must be inspected every 6 months. Safety checks should include ensuring the keys and lock bolt can only be removed in the correct safety operating conditions (see page 1).

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AI-HD
Single Key Heavy Duty Access Interlock

TECHNICAL DATA

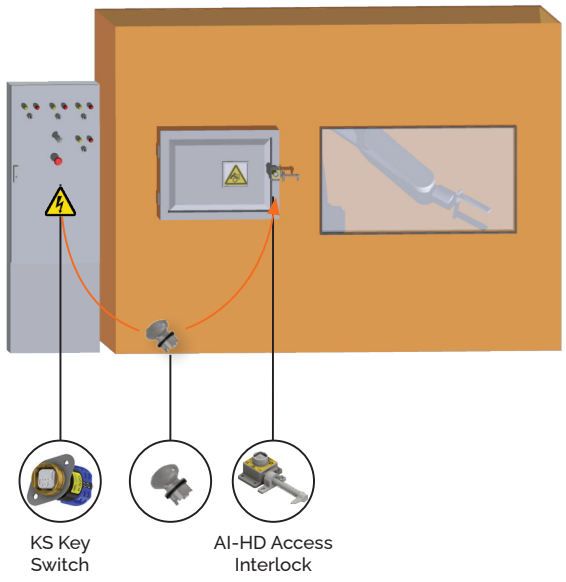
	AI-HD Single Key Heavy Duty Access Interlock
Temperature rating	Minimum: -40˚C [-40˚F] ice free for FS lock type
	Maximum: 140˚C [284˚F] for FS lock type
Type of mounting	Surface mount using M6 stainless steel anti-tamper fasteners
Weight	1.0 kg
Material	Stainless steel
Operation	Suitable for 1,000,000 operations
B10d	1,250,000
Retention force	3.4 KN
Shock & vibration	In accordance with BS EN 50155 & IEC 61373
PL rating	PLd

APPLICATION

A typical application of the AI-HD Single Key Access Interlock is machine guarding with part body access.

The AI-HD is used as a part of a safety system, which ensures a machine is shut down, before access to the hazardous area is allowed.

The system involves a KS key switch that breaks the machine safety circuit, when the key is removed. The key can then be taken to the AI-HD Access Interlock to enable access to the machine. The machine cannot be restarted until the door is closed, the bolt is replaced and the key is removed and taken to the KS key switch.



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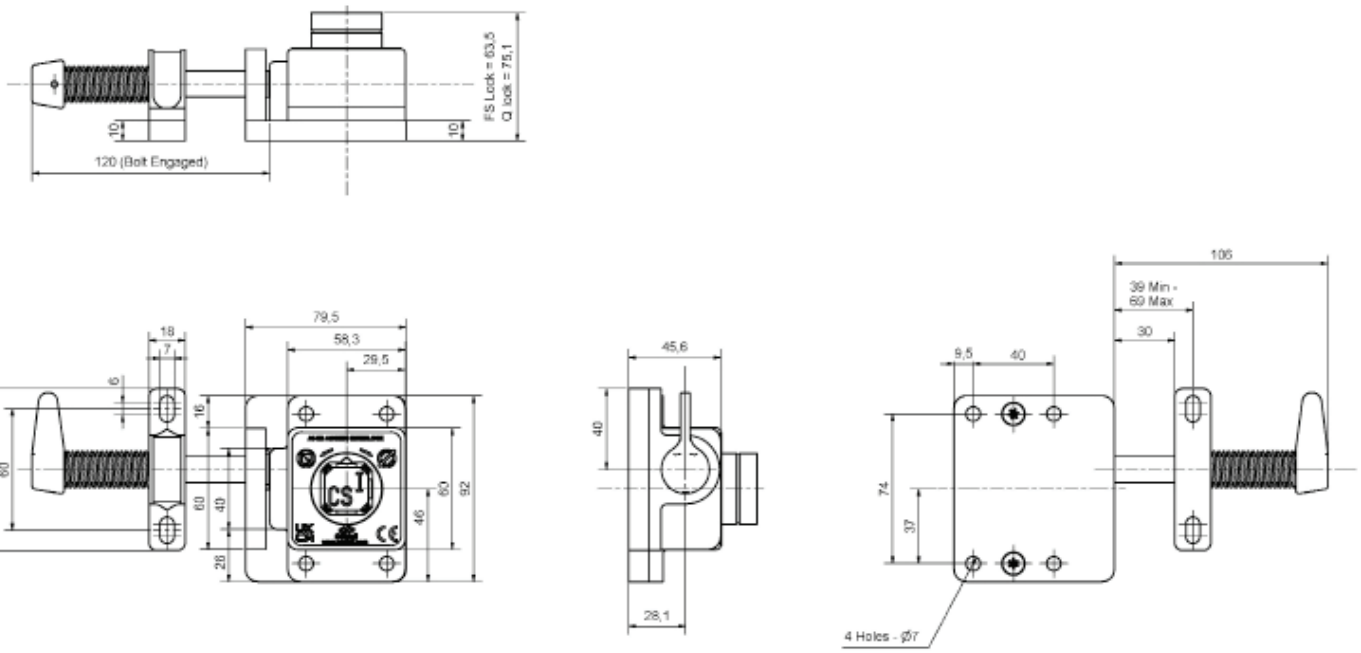
AI-HD
Single Key Heavy Duty Access Interlock

DRAWING

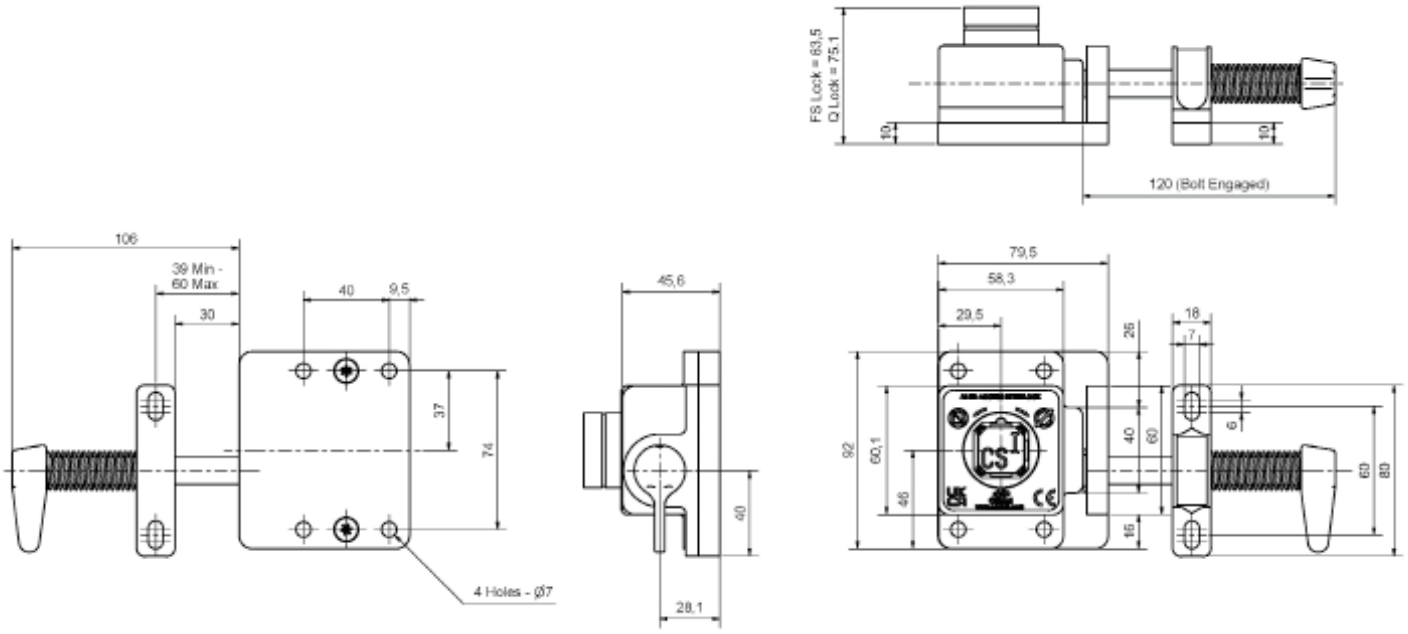
Dimensions: in mm

Note: For safe mounting, use security screws

AI-HD, Hand 1



AI-HD, Hand 2



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AI-HD

Single Key Heavy Duty Access Interlock

ORDER INFORMATION

	Component type	1	2	3	4
Part number	AI-HD	-		-	-	
Example	AI-HD	- FS	S	- 1	- ABC

1	Lock portion type	FS [1]
2	Material	S = Stainless steel
3	Handing	1 = Left hinged door (bolt enters left) [2] 2 = Right hinged door (bolt enters right) [2]
4	Lock portion symbol	FS [1] up to 3 characters

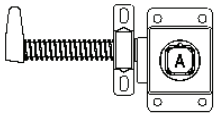
(1) **FS - Lock type**

Up to 3 characters

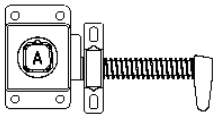


(2) **Handing**

1



2



ACCESSORIES

	Product	Part number
	Flip Cap	FLIP-S

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