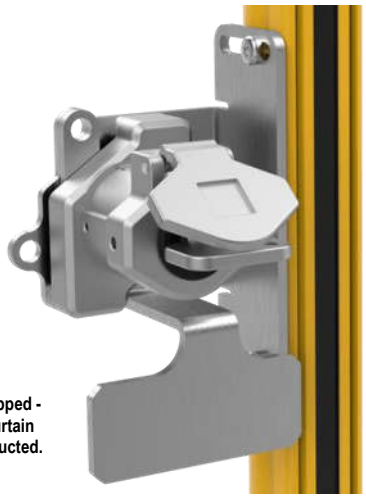
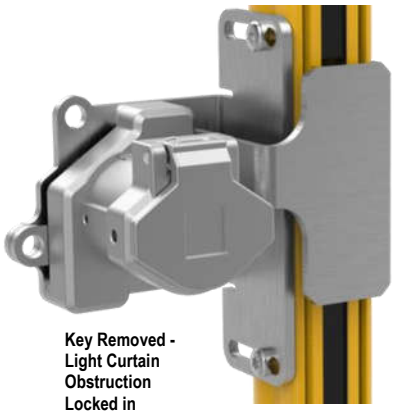
LCB (LIGHT CURTAIN BLOCKING) DEVICE
Operating Instructions



Key Trapped - Light Curtain Unobstructed.



Key Removed - Light Curtain Obstruction Locked in Position.

Right-Handed shown.

Note: SS-LCB-R-35-30 (Right-handed) shown above.
Light Curtain Device sold separately.

The Skorpion Trapped Key Light Curtain Blocking Device, is designed to be installed or retrofitted to provide a prohibitive blocking function, alongside compatible light curtain devices. While the light curtain installation is able to offer maximum accessibility to a machine or production line by removing or complementing the requirement for mechanical guarding, when installed correctly, the LCB device allows the user to safely lock-off and prohibit the re-engagement of the light curtain barrier. It also allows for this lock off to be integrated into a wider Skorpion trapped key system if desired. In addition, the Idem LCB provides dual lock-off functionality, allowing for an 8mm padlock hasp to be applied in either the light curtain operational, or light curtain blocked positions.

Part Number	Description
SS-LCB-L-35-30	SS Light Curtain Blocking Device (Left Handed) (35mm Blocking Depth) (30mm Bracket)
SS-LCB-R-35-30	SS Light Curtain Blocking Device (Right Handed) (35mm Blocking Depth) (30mm Bracket)
SS-LCB-L-75-30	SS Light Curtain Blocking Device (Left Handed) (75mm Blocking Depth) (30mm Bracket)
SS-LCB-R-75-30	SS Light Curtain Blocking Device (Right Handed) (75mm Blocking Depth) (30mm Bracket)
Please note: For non-standard blocking plate or bracket size requirements, please contact technical@idemsafety.com for further information.	

READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING, OPERATING, OR MAINTAINING THIS EQUIPMENT.
The product is designed to be a component of a customized safety-oriented control system. It is the responsibility of the user to ensure the correct overall functionality of its systems and machines. IDEM, its subsidiaries and affiliates, are not in a position to guarantee all of the characteristics of a given system or product not designed by IDEM.

FUNCTION: The LCB (Light Curtain Blocking) Device, is designed to provide prohibitive stop function in conjunction with compatible light curtain devices. In order to block the light curtain and lock off the machine, rotate the key from the horizontal position, 90 degrees and remove. The blocking plate should at this point fully obstruct the required light curtain beam / receiver. With the key removed, it is not possible to rotate the blocking plate away from the light curtain beam or sensor, and the machine is unable to restart. The device then offers an additional padlock hasp lockout point, to the side of the body. The operator is able if they wish to add additional padlock or hasps in this position when locked off, in order to further prevent unauthorised disengagement of the interlock. To unblock the light curtain and allow for normal machine operation, insert the key, and rotate 90 degrees from the vertical position. This will retract the blocking plate to either the top or bottom of the interlock, allowing for the light curtain to function as normal. It is then possible to lock-out the device in this position, using the padlock hasp at the top of the device (right-handed variant) or at the bottom of the device (left-handed variant). This inhibits the unauthorised operation of the device, where this may not be desirable for any unauthorised personnel to operate and lock off the light curtain stopping the machine until disengaged.

INSTALLATION: Installation must only be carried out by competent personnel and in accordance with these instructions.
Always use correct size metal mounting bolts (M6). Tightening torque 2Nm. When engaged, the Light Curtain Blocking Device must fully obstruct the required light beam or sensor rendering the Light Curtain unable to initiate the machine run command. Please consult the appropriate Light Curtain Installation Instructions and safety regulations with regards to the correct installation and operation of the compatible Light Curtain Device. This is considered separate to the correct installation of this interlocking trapped key device.

IMPORTANT: To maintain the existing application safety rating, the overall system must be re-validated to EN ISO 13849-2.

MAINTENANCE: Every month: Check for correct operation of the key, rotation of the blocking plate into the retracted position when key trapped, and through to the obstructed position when in the key released position. Ensure that when the key is removed, that the light curtain is successfully blocked such that the intended beam(s) are broken, and the machine cannot be restarted. Ensure that all fixings remain secure, and that it is not possible to move or adjust the installation in such a way that would affect its ability to block the light curtain device as required.

Check the key and interlock for correct operation. If the key or housing display signs of mechanical damage then remove and replace. IDEM will not accept responsibility for failure of the switch functions if the installation and maintenance requirements are not implemented.
THESE INSTRUCTIONS FORM PART OF THE PRODUCT WARRANTY.

Technical Specification:

Construction: Stainless Steel
Operating Temperature: -20C. to +80C.
Mechanical Life (B10d): 1,000,000 cycles

WARNING: DO NOT DEFEAT, TAMPER, OR BYPASS THE SAFETY FUNCTION. FAILURE TO DO SO CAN RESULT IN DEATH OR SERIOUS INJURY.

AVERTISSMENT: NE PAS DESACTIVER, MODIFIER, RETIRER, OU CONTOURNER CETI INTERVERROUILLAGE IL PEUT EN RESULTER DES BLESSURES GRAVES DU PERSONNEL UTILISATEUR.

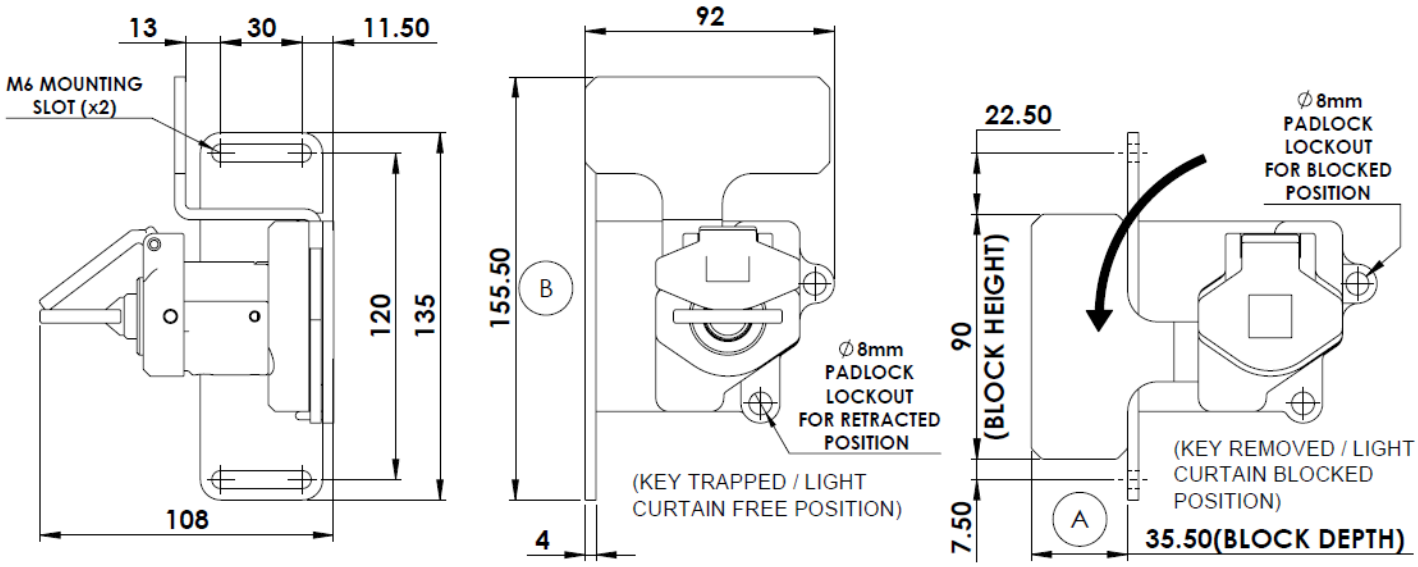
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IDEM SAFETY SWITCHES USA, Inc. 2574 S.Beverley St., Suite 104, Boise, ID 83709 Tel: 510-445-0751 Fax: 866-431-7064 email: sales@idemsafety.com Web: www.idemsafety.com

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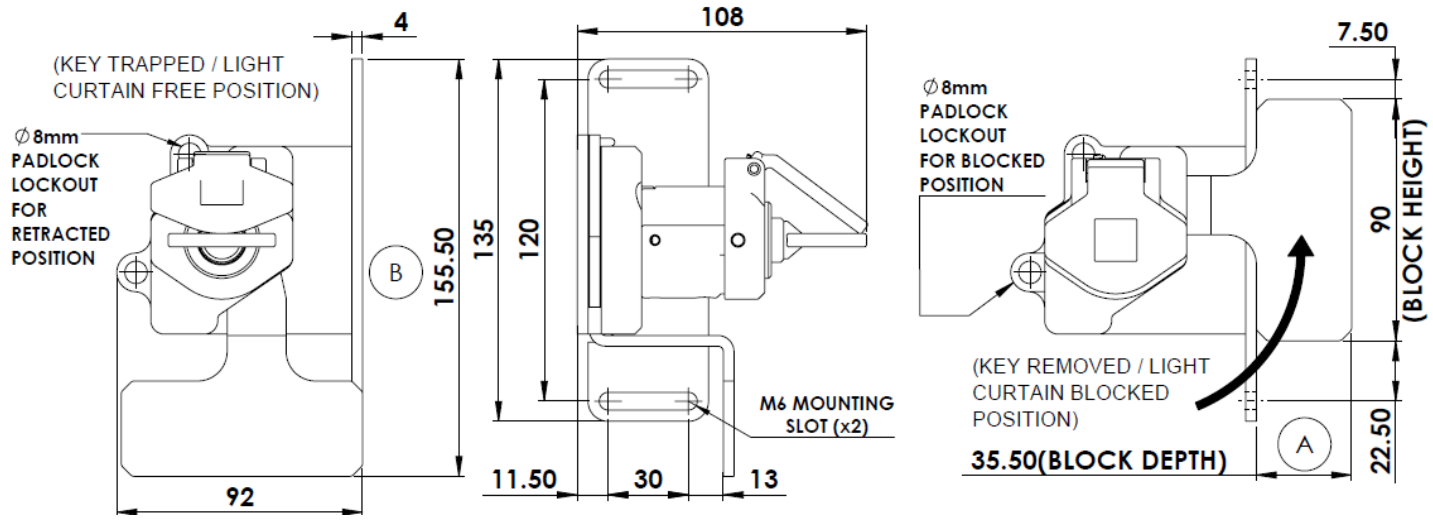
LCB (LIGHT CURTAIN BLOCKING) DEVICE

Dimensions (mm)

LCB-L-35-30 (Left-Handed) – shown in open and blocked position.



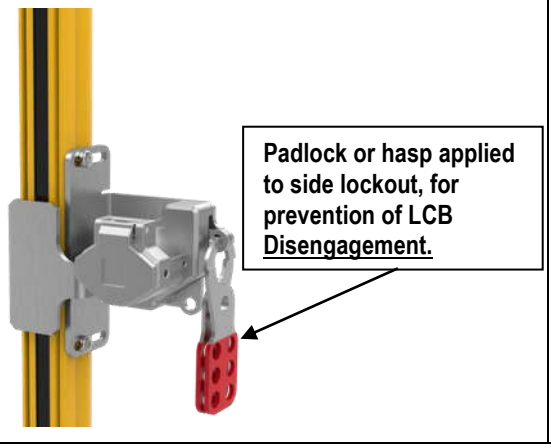
LCB-R-35-30 (Right-Handed) – shown in open and blocked position.



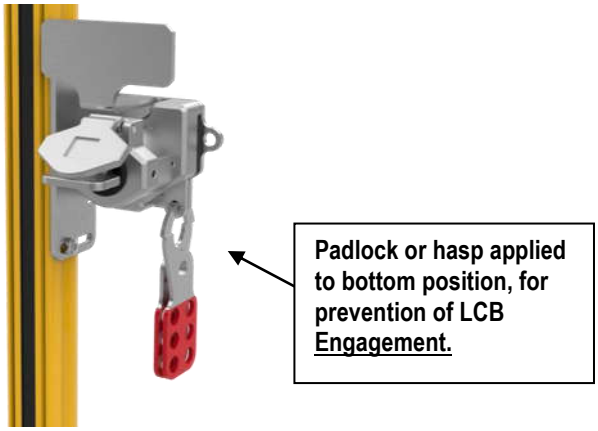
Variable Dimensions		
Blocking Plate Size (Part Number)	Dimension A (mm)	Dimension B (mm)
xx-xxx-x-**35**-xx	35.50	155.50
xx-xxx-x-**75**-xx	75.50	195.50

Additional Lock-Out Positioning / Operation:

SS-LCB-L-35-30 (Light Curtain Blocked – Locked off)



SS-LCB-L-35-30 (Light Curtain Operational – Locked off)



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