

KIRK Type DM access interlocks provide a physical barrier to either partial or full body access points until risk of hazardous energy or moving equipment has been mitigated.

All Type DM interlocks have two parts; a main body with one or two cylinders and a latch bolt with chain (or spring latch). When the latch bolt is separated from the main body, the key(s) is trapped in the lock. When the door on which the interlock is mounted is properly closed, the latch bolt can be inserted into the main body and the key(s) can be turned and released.

An exception to this rule is a multiple cylinder Type DM interlock which allows release of a "personnel" key when the door is opened. The personnel key can be put in the pocket of the maintenance person ensuring that the door cannot be closed and locked while the released personnel key is on the person.

### **OPERATION**

KIRK Type DM interlocks are mechanically operated and suitable for access applications in which hazardous energy or moving equipment is present.

#### Type DM key operated mechanical access interlock



For HD multiple cylinder interlocks, all missing keys must be inserted and turned before any trapped keys can be released.



### **USAGE**

KIRK Type DM access interlocks should be used to allow safe access into potential hazardous areas. KIRK Type DM access interlocks can be used for partial or full body access points. For full body access, a multiple cylinder interlock is recommended to ensure a personnel key can be released to be kept on the person(s) performing maintenance.



KIRK Type DM interlocks should be utilized in situations where the door and door-frame are ill-fitting, and a degree of latitude is required.

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

#### **INSTALLATION**

Weld or bolt the chain to the door or door frame allowing enough slack to insert and turn the latch bolt in the Type DM lock body when the door is properly closed.

SD series (brass) interlocks are supplied with a key in each cylinder. These keys are needed during installation of the interlocks. SD series (brass) bolt interlocks with multiple cylinders require the insertion of all keys before the lock bolt can be extended or withdrawn. Do not try to force a multiple cylinder interlock that does not have the correct keys fully inserted in every cylinder!

HD series (stainless steel) interlocks are not sold with keys. Keys must be ordered separately and may be required during the installation process.



For all interlock systems to maintain system integrity, additional keys must be removed from the system and destroyed or retained by a responsible person. There should only be enough keys to operate the interlock system sequentially. Kirk Key Interlock Company will not be responsible for extra keys left in the interlock system.



All interlocks and interlock systems must be installed by a competent and qualified person who has read and understood these instructions. Please retain this document in your technical files.

### **MAINTENANCE**

Kirk key interlocks should be periodically lubricated with a small amount of dry powder graphite. DO NOT use oil or grease of any type as these will collect dirt and impede the proper operation of the lock cylinder.

SD SERIES: Apply a small amount of graphite to the key and insert the key into the lock cylinder. Work the key in an out and turn the key several times in order to distribute the graphite inside the lock cylinder.

HD SERIES: Apply a small amount of graphite behind the inner turn shaft. Insert and turn the key a few times in order to distribute the graphite below the lock cylinder.

KIRK offers a Graphite Lubrication kit (part# GL-1) complete with instructions for use.

Protective covers for most products are also available as accessories. Covers can be utilized to protect the lock cylinders when located outdoors or in a demanding environment.



### **TECHNICAL DATA**

Type DM	SD Series	HD Series				
Interlock Housing	Brass	Stainless Steel				
Cylinder Housing	Brass	Stainless Steel				
Plug/Inner Turn Shaft	Brass Stainless Steel					
Key Material	Nickel-Silver	Stainless Steel				
Key Style	7-Pin Tumbler	Dowel Pin				
Latch Bolt	Stainless Steel	Stainless Steel				
Type of Mounting	Main body is mounted to the door frame and the latch bolt is mounted to the door using suitabl fasteners. Refer to drawing for details.					
Temperature Ratings	-65F to +250F	-65F to +700F				
Weight	2.86 pounds	1.98 pounds				

<sup>\*</sup> Weight based on product with 1 cylinder, no key, accessories, or mounting hardware

### **APPLICATION**

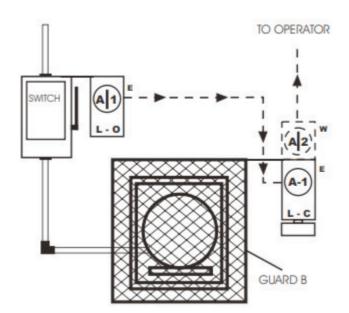
KIRK Type DM interlocks are mechanically operated and suitable for access applications in which hazardous energy or moving equipment is present.

The interlock application scheme 33 from the KIRK scheme book is to prevent the opening of guard B when power is on.

Initial system status: Power is on. Guard B is locked closed and switch is in the closed position. Key A-1 is trapped in the bolt interlock on the switch.

To gain access and begin maintenance on moving equipment, open switch and turn key A-1 in bolt interlock on switch. Key A-1 is now free and switch is locked open. Insert Key A-1 into Type DM L-C (locked closed) interlock on Guard B and turn and unlock. Guard B is now open and Key A-1 is now trapped in Type DM.

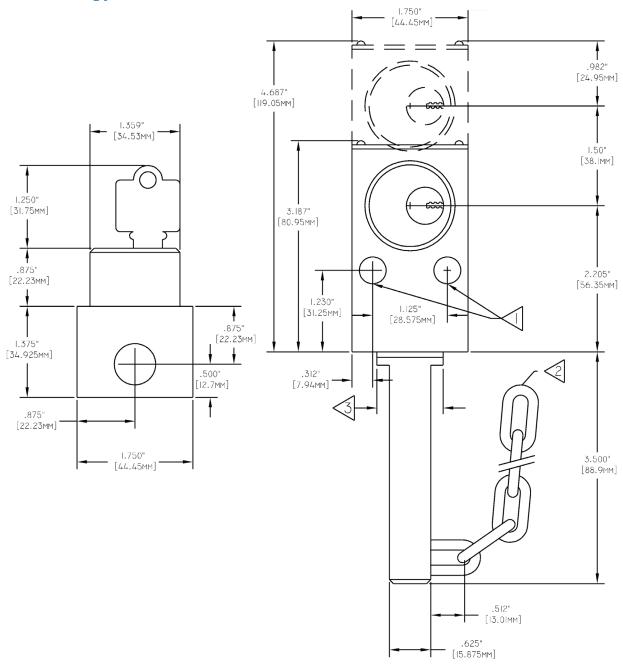
If this is full body access and multiple cylinder Type DM is recommended. This allows for Key A-2 to be released and held with the person performing maintenance.





DRAWING Dimensions: in inches

### **SD Series Type DM**



### NOTES:

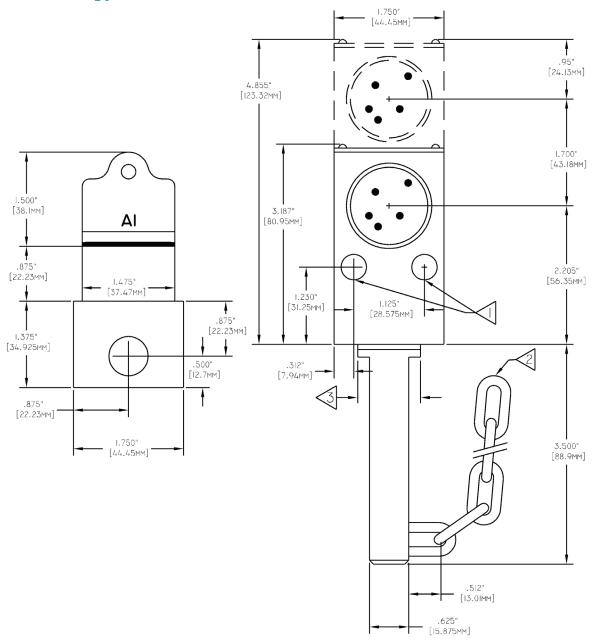
- 1) 0.4062" (10.32mm) holes (2) for mounting bolts.
- 2) 12 links of chain (approx. 11"). Field weld chain to door or jamb. Allow 1" (25.4mm) slack.
- 3) 1" (25.4mm) diameter collar and gasket.

Caution: The Type DM interlock should not be used as the latching means for holding the door, hatch, or cover in the closed position.



DRAWING Dimensions: in inches

### **HD Series Type DM**



#### NOTES:

- 1) 0.4062" (10.32mm) holes (2) for mounting bolts.
- 2) 12 links of chain (approx. 11"). Field weld chain to door or jamb. Allow 1" (25.4mm) slack.
- 3) 1" (25.4mm) diameter collar and gasket.

**Caution:** The Type DM interlock should not be used as the latching means for holding the door, hatch, or cover in the closed position.



### **ORDER INFORMATION**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Part number		D	М		-	-	-				-			

1	Series			K = SD Series (I	brass)	S = HD Series (stainless)					
4	Auxiliary Switch	0 = nor A = 2 N	ne I/O 1 N/	C		Multi-cylinder HD series standard switch options are only available with 1 - 'E' sequence configuration. For other configurations, please consult our sales team.					
	Cylinder(s)		SI	<b>) Series</b> - max cy	/linders 7	HD Series - max cylinders 7					
		1	0	= E 1 CYL		1	0	= E 1 CYL			
		2	0	= EE 2 CYL		2	0	= EE 2 CYL			
8, 9		2	1	= EW 2 CYL	2	1	= EW 2 CYL				
		3	0	= EEE 3 CYL	3	0	= EEE 3 CYL				
		3	1	= EEW 3 CYL		3	1	= EEW 3 CYL			
		3	2	= EWW 3 CYL		3	2	= EWW 3 CYL			
10	Stamp Key Interchange		= No = Yes		Stamp Key interchange only available for HD series when protective Flip Open Cover is added						
12	Protective Covers see protective covers data sheet	_	= No	C = Push On	<b>F</b> = Flip Open	_	= No	<b>F</b> = Flip Open with LOTO provision			
13	Mounting Bolts see mounting bolt data sheet	_	= No		<b>T</b> = Tamperproof						
14	Adapter Plate	_	= No	<b>P</b> = Adapter Pla	ate	see ada	pter plat	e data sheet for more information			

<sup>\*</sup> To order spring latch, please notify your sales rep at time of order



### **ACCESSORIES**

#### **DM2 Plate**

The DM2 Plate is designed for implementation of the Type DM in place of legacy Type DY2 interlocks (no longer available). The DM2 adapter plate is made from zinc plated steel and can be bolted or welded to your door or door jam.

To order with the Type DM, indicate the letter "P" in column 14 of the Type DM ordering guide.

See Adapter Plate data sheet for technical data or to order adapter plate separately.



#### **DM4 Plate**

The DM4 mounting plate can provide additional mounting options by welding the plate to a door or door frame. The Type DM will then bolt to the mounting plate with 3/8-16 x 2-14" bolts. The DM4 is available in 1018 steel or 304 stainless steel.

To order with Type DM, indicate the letter "P" in column 14 of the Type DM ordering guide.

See Adapter Plate data sheet for technical data or to order adapter plate separately.



### **CONTACT INFORMATION**

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