

# 050-1901 8mm Single Rotary Latch - Two Position and Integrated State Sensing



TriMark's newest innovation in rotary latches features a robust modular design that offers extensive actuation locations and options providing application flexibility in a compact design. This product includes an integrated door position switch that indicates electrically the door positions - door ajar/door secure. Designed for medium to heavy-duty applications for on or off-highway applications, this single rotor latch is available to meet FMVSS 206 (ECE R11).

## **DESIGNED FOR:**

- Personnel, compartment door and door hold-open applications for on and off-highway vehicles where it is desirable to electrically identify the door position
- Interior door thickness of 45-57mm (1.77-2.25"). Depending on the actuator type and location the overall height could be greater. Please contact TriMark for specific details.
- Medium to heavy duty doors of 23-81 kg (50-175 lbs.) with maximum door seal pressure of 36 kg (80 lbs.)

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## FEATURES/BENEFITS:

- Modular case construction is preconfigured with multiple actuation points on the front case allowing top/bottom actuation including stacked actuator levers providing the most configurable rotary door latch ever offered
- Compact size and shape allows maximum use of door space and minimizes visibility issues without compromising strength and robustness
- Rotor provides for vertical clearance of strike allowing for door sag, misalignment and ease of installation
- Two position rotor version for personnel door for FMVSS 206 (ECE R11) applications
- Integrated door position switch that is closed when latch is fully open - indicates when latch is not latched in either primary or secondary conditions (door ajar)
- 8mm diameter automotive style hoop-type strike minimizes clothing snag hazard

## AVAILABLE:

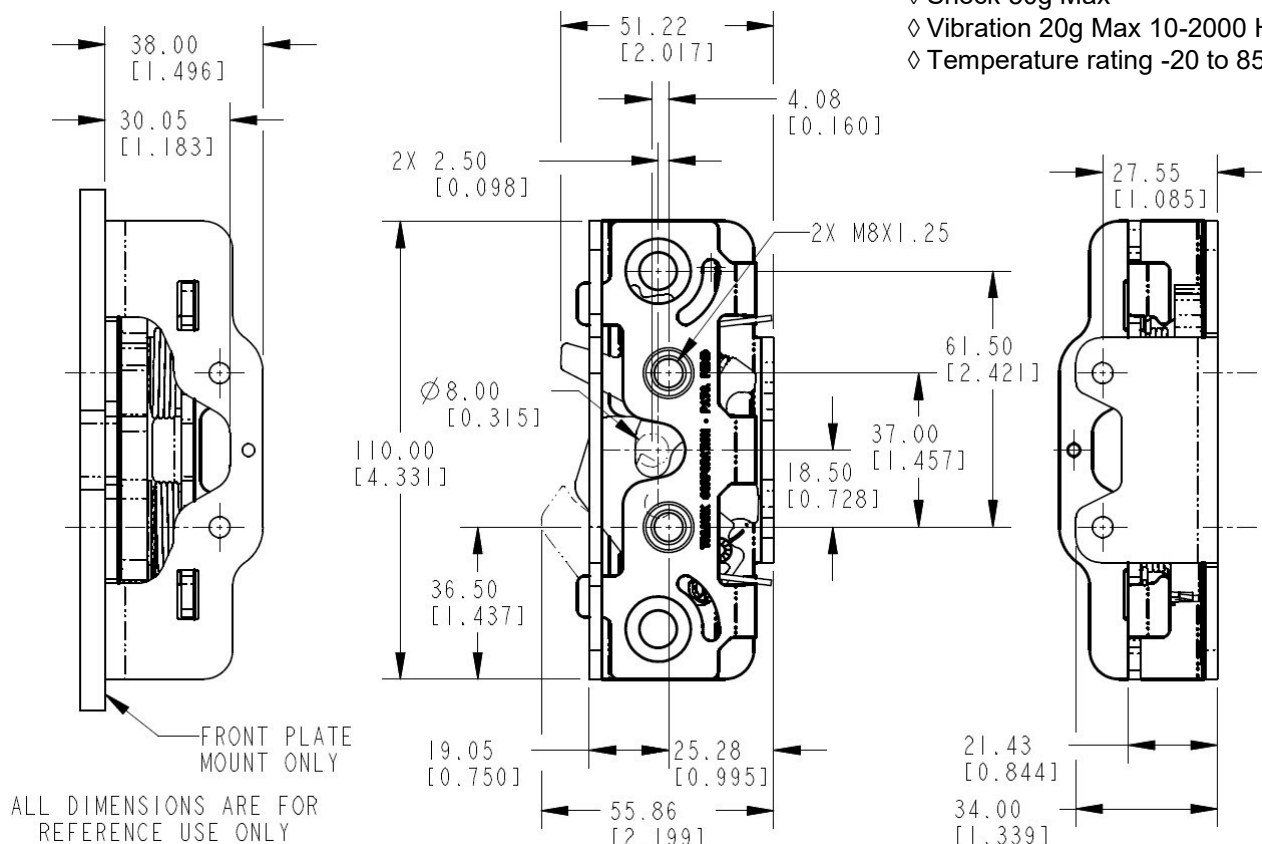
- In left or right hand configurations (right hand shown)
- Versions are available to allow direct actuation from exterior push button or pull handles and interior releases providing a simple, low cost and compact application
- Platform allows for reuse of TriMark's extensive selection of existing actuation levers reducing application engineering and tooling requirements
- Several actuator return spring options
- Coaxial actuator mechanism for applications where it is desirable to provide additional support to the actuation levers
- Innovative barrel release for ease of use/installation
- Future provisions for power release mechanisms and logic mechanism
- Standard Deutsch DTM04-2P connector shown (others available upon request)

## ELECTRICAL:

- Integrated magnetic reed switch offers durable and reliable, sand and freeze resistant detection mechanism designed to last the life of the product
  - ◇ Contact Rating 10 W
  - ◇ Switching voltage 200 V Max
  - ◇ Switching current 0.5 Amp Max
  - ◇ Carry current 1.0 Amp Max
  - ◇ Shock 50g Max
  - ◇ Vibration 20g Max 10-2000 Hz
  - ◇ Temperature rating -20 to 85° C

For more information visit  
[www.trimarkcorp.com](http://www.trimarkcorp.com)

Base Latch Shown Without Actuators





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## MATERIAL:

- Case halves: high strength steel
- Rotor and catch: heat treated steel
- Springs: non-corrosive stainless steel

## FINISH:

- Zinc plated, clear chromate steel components

## INSTALLATION:

- Easy to install, mounts with (2) M8 x 1.25 class 8.8 or better fasteners are required for FMVSS 206 (ECE R11) applications (not included)
- Tighten to manufacturers' recommended torque value, however, do not exceed 26.0 N-m (230.1 in-lbs)

## USE WITH:

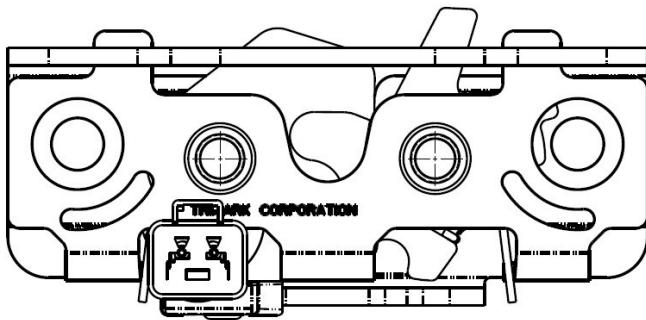
- TriMark 070-1000 8mm Hoop Strike (required for FMVSS 206 (ECE R11) applications)

U.S. Patent Nos. 10,676,967 / 10,697,207

**CAUTION:** Applications of this latch may fall within the requirements of FMVSS 206 (ECE R11) and SAE J839 safety standards. These safety related requirements are dependent on door application, e.g. front and rear hinged doors, sliding doors, or hinged upward swinging doors. The entire door hardware system must be included in the design/analysis process: latch, handle, lock mechanism, cables/rods/linkages, fasteners, hinges, etc. This ensures compatibility of all components within the hardware system. If FMVSS 206 (ECE R11) is a requirement, then all of the components within the door system must comply with strength, inertia and locking requirements as specified within the Standard. Note that this product complies with FMVSS 206 (ECE R11) when tested with approved TriMark Striker Bolts in accordance with SAE J839 and that this product meets FMVSS 206 (ECE R11) load requirements and may be used in FMVSS 206 (ECE R11) applications pending TriMark application approval.

Individual part dimensions are for reference only. Refer to individual part drawings for complete dimensions, specifications, and installation procedures. Engineering assistance and application drawings are available.

SWITCH ACTIVATION  
(LATCH SHOWN IN PRIMARY CLOSED POSITION)

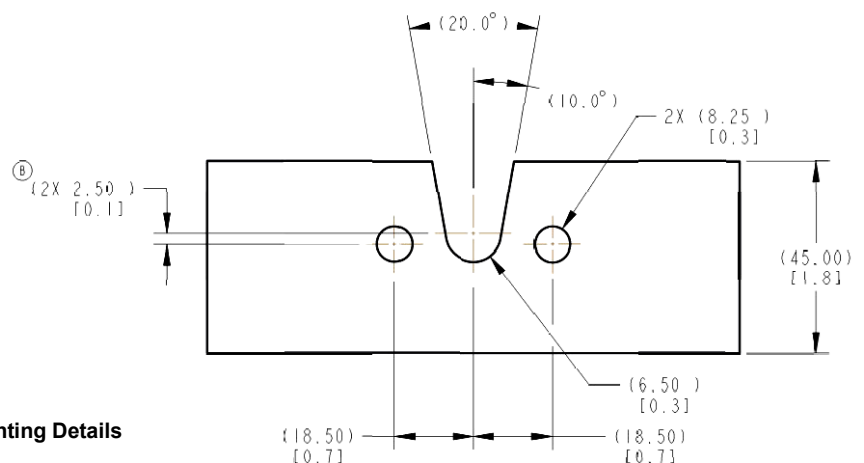


LATCH POSITION	SWITCH STATE	
	TO INDICATE	DOOR-AJAR
1 (FULL OPEN)	CLOSED	
2 (SECONDARY CLOSED)	OPEN	
3 (PRIMARY CLOSED)	OPEN	

070-1000 8mm Hoop Strike



Barrel Actuation With Direct Release Cam and Top Direct Release Actuator



Mounting Details

CUTOUT



# 050-1901 8mm Single Rotary Latch - Two Position and Integrated State Sensing

Modular construction with multiple actuation points allows top/bottom actuation including stacked actuators as well as combinations of actuation points.

