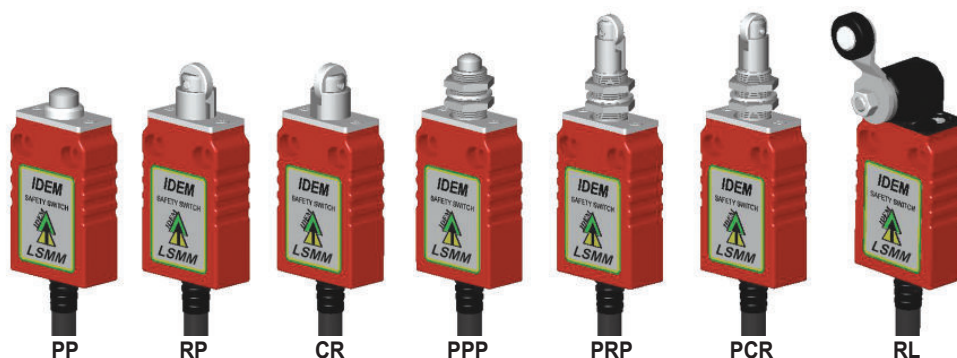


# Safety Limit Switches Type: LSMM (Metal Body)

## APPLICATION:

IDEM's range of LSMM Safety Limit Switches are designed to be mounted for position sensing of moving applications e.g. guard doors, conveyors, machine beds and elevators. They are available with linear plungers, rotary levers or roller plungers with either slow or snap action contacts.



## FEATURES:

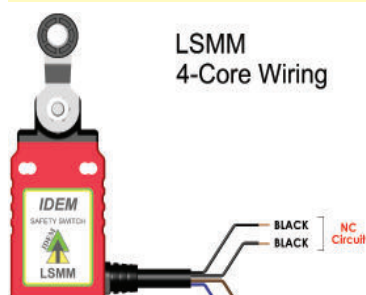
- Heavy Duty Die-Cast metal body (painted red)
- Positive opening NC safety contact to EN60947-5-1
- High mechanical life over 5,000,000 cycles
- Enclosure protection to IP67 - suitable for washdown
- Unique 3 pole positively operated contacts
- Extensive choice of 7 actuator heads - linear and rotary
- Side or end cable exit available to assist with fitting
- Wide operating temperature range from -25C up to +80C

## OPERATION:

Operation of LSMM Safety Limit Switches is achieved by a sliding actuation of the moving object to cause deflection of the switch plungers or levers.

For safety applications it is important that the moving object does not pass completely over the switch actuators so as to either cause damage to the actuator or allow it to return to its original position.

## WIRING:



## ACTUATOR TYPES:

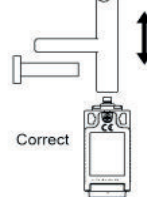
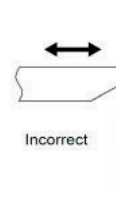
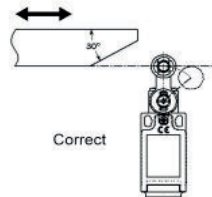
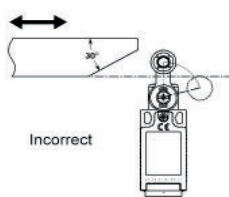
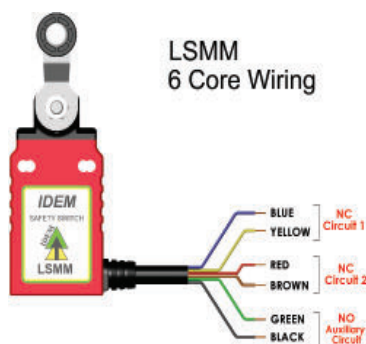
- PP Pin Plunger  
RP Roller Plunger  
CR Cross Roller Plunger  
RL Roller Lever  
PPP Panel Mount Pin Plunger  
PRP Panel Mount Roller Plunger  
PCR Panel Mount Cross Roller Plunger

## CONTACT BLOCKS:

- 2NC 1NO Slow Break  
1NC 1NO Snap Action

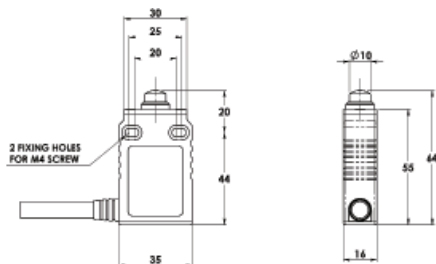
## CONDUIT EXIT:

- S Side Exit version  
E End Exit version

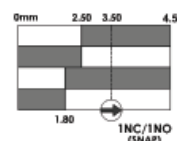
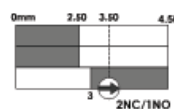


<b>Standards:</b>	ISO14119 EN60947-5-1 UL508
<b>Safety Classification and Reliability Data:</b>	
Mechanical Reliability B10d	2.5x10 <sup>9</sup> operations at 100mA load
ISO13849-1	Up to PLE depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data - Annual Usage	8 cycles per hour/24 hours per day/365 days
PFHd	3.44x10 <sup>-8</sup>
Proof Test Interval (Life)	35 years
MTTFd	356 years
Utilisation Category	AC15 A300 240V 3A
Thermal Current (Ith)	10A
Rated Insulation Voltage	300Vac
Rated Impulse Withstand	2500Vac
Insulation Resistance	100MΩmin
Max. Switching Speed	250mm/sec
Max. Switching Frequency	6,000 operations per hour
Case Material	Die-Cast Metal (painted red)
Roller Material	Various polymers
Enclosure Protection	IP67
Operating Temperature	-25C to +80C
Mechanical Life Expectancy	5,000,000
Vibration	IEC68-2-6 10-55Hz 0.35mm 1octave/min
Conductor Size	1.5mm <sup>2</sup> 4 core or 6 core
Cable OD	8mm max.
Fixing	2xM4
Cable Length	2m

## LSMM (Die-Cast Metal Body) PIN PLUNGER:

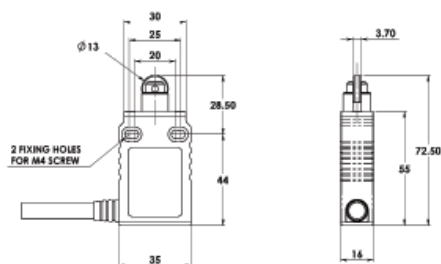


LSMM PIN PLUNGER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172001	172003
1NC 1NO Snap	172002	172004

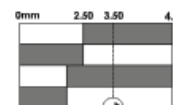
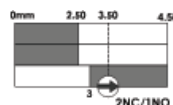


# Safety Limit Switches Type: LSMM (Metal Body)

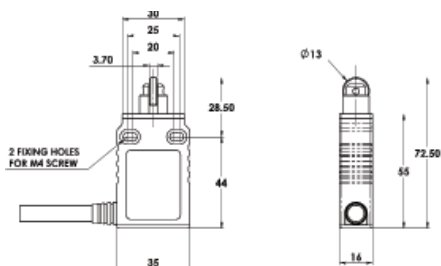
## LSMM (Die-Cast Metal Body) ROLLER PLUNGER:



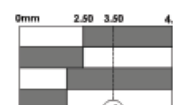
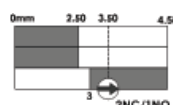
LSMM ROLLER PLUNGER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172005	172007
1NC 1NO Snap	172006	172008



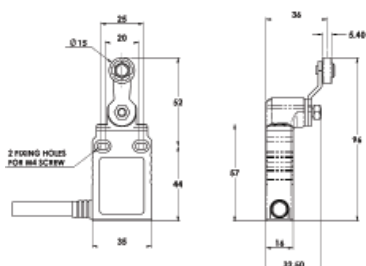
## LSMM (Die-Cast Metal Body) CROSS ROLLER PLUNGER:



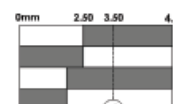
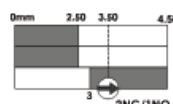
LSMM CROSS ROLLER PLUNGER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172009	172010
1NC 1NO Snap	172011	172012



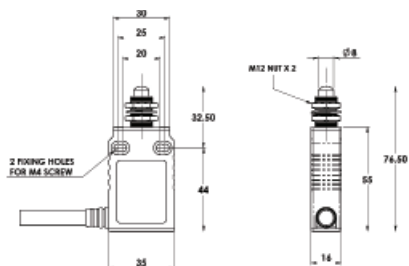
## LSMM (Die-Cast Metal Body) ROLLER LEVER:



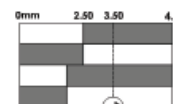
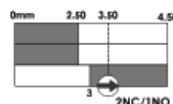
LSMM ROLLER LEVER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172013	172014
1NC 1NO Snap	172015	172016



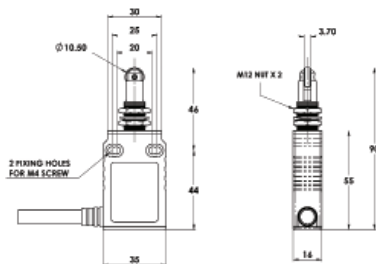
## LSMM (Die-Cast Metal Body) PANEL MOUNT PIN PLUNGER:



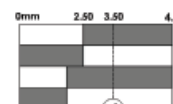
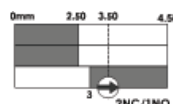
PANEL MOUNT PIN PLUNGER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172017	172018
1NC 1NO Snap	172019	172020



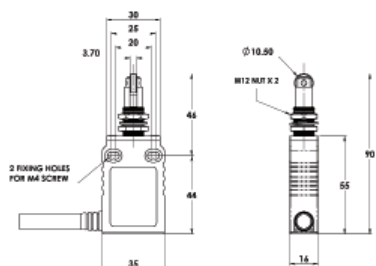
## LSMM (Die-Cast Metal Body) PANEL MOUNT ROLLER PLUNGER:



PANEL MOUNT ROLLER PLUNGER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172021	172022
1NC 1NO Snap	172023	172024



## LSMM (Die-Cast Metal Body) PANEL MOUNT CROSS ROLLER PLUNGER:



PANEL MOUNT CROSS ROLLER PLUNGER	SALES NUMBERS	
Contacts	Cable Side Exit	Cable End Exit
2NC 1NO	172025	172026
1NC 1NO Snap	172027	172028

