



# Limit Switches

## HLM-CBA HLM-SS-CBA Operating Instructions

### APPLICATION:

IDEM's HLM-CBA mini conveyor belt alignment limit switches come with either plastic roller or stainless steel roller. They are available with either slow break or snap action contacts.

### FEATURES:

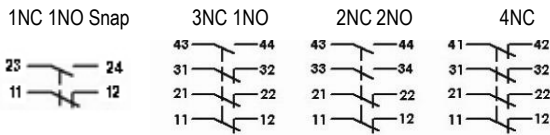
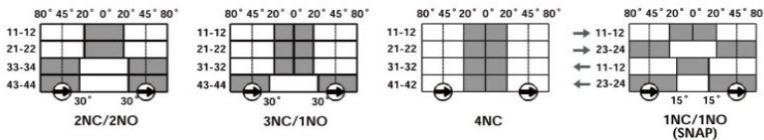
Heavy Duty Die Cast or Stainless Steel 316 bodies.  
Explosion Proof versions available.  
Industry standard mounting to EN50041.

### OPERATION:

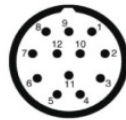
Operation of the switches is achieved by a sliding actuation of the moving object or conveyor belt to cause deflection of the switch arm.  
It is important that the moving object does not pass completely over the switch actuators so as to either cause damage to the actuator or allow it to return to its original position.



### Typical operating parameters:



Quick Connect  
Pin view from switch



Quick Connect (QC) M23 12 way Male (connector Length 26mm) (Pin view from switch)	Switch Circuit
1 3	11 / 12
4 6	21 / 22 or 23 / 24
7 8	33 / 34 or 31 / 32
9 10	41 / 42 or 43 / 44
12	Earth

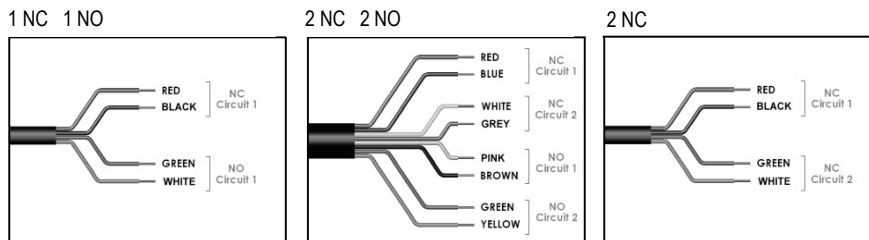
### TECHNICAL SPECIFICATIONS:

Case Material	HLM-CBA (Die Cast) HLM-SS-CBA (Stainless Steel 316)
Roller material	Stainless Steel or Plastic
Enclosure Protection	IP67 (Stainless Steel IP69K)
Operating Temperature	Min. -25°C Max 80°C
Typical operating parameters	0.4Nm Torque 15-30 degrees contact changeover
Mechanical Life Expectancy	500,000 Cycles
Vibration	IEC 68-2-6, 10-55Hz 0.35mm
Conductor size	1.5 sq.mm
Fixing	M5 Bolts (Torque 2.0Nm)
Utilization Category	AC15 A300 240V. 3A.
Min Current	5V. 5mA, DC
Thermal Current (Ith)	10A
Rated Impulse Withstand Volt	2500VAC

### INFORMATION FOR UL508:

Type 1 Enclosures.  
Use 16 - 12AWG copper conductors, rated 75°C minimum.  
Intended for same polarity use.  
Electrical Rating: A300 240V.ac 3A. (6,000 cycles)  
240V. 10A. carry only.  
Wire range: 16AWG - 12AWG Copper Torque 7lb/in (0.8Nm)  
Earth bonding terminal inside enclosure if required.

### Wiring and ratings for EX versions:



### Optional EX circuits:

Type	IDEM LS-EX internal switch
Classification	Ex d IIC T6 (-20C Ta 60C) Gb Ex tb IIIC T85C (-20C Ta 60C) Db
Rated Voltage	250V ac/dc
Rated Current	2 pole 4A. 4 pole 2.5A.

### IMPORTANT:

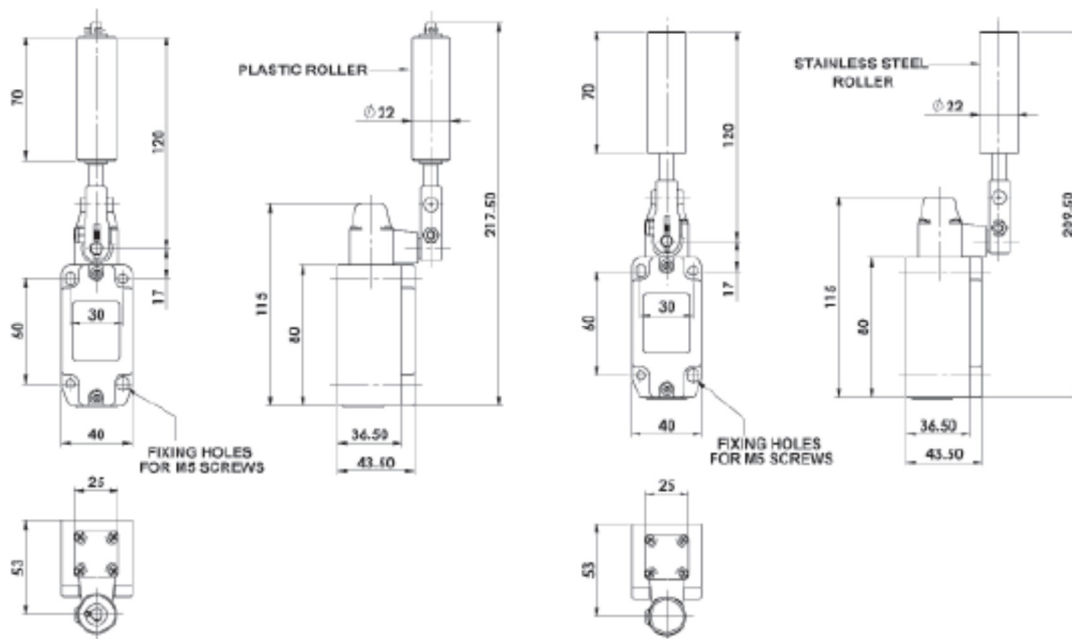
#### SPECIFIC CONDITION OF USE:

THE INTEGRAL CABLE SHALL BE SUITABLY PROTECTED FROM PHYSICAL DAMAGE AND ABRASION.  
THE INTEGRAL CABLE IS TO BE TERMINATED IN A SUITABLE TERMINAL FACILITY.

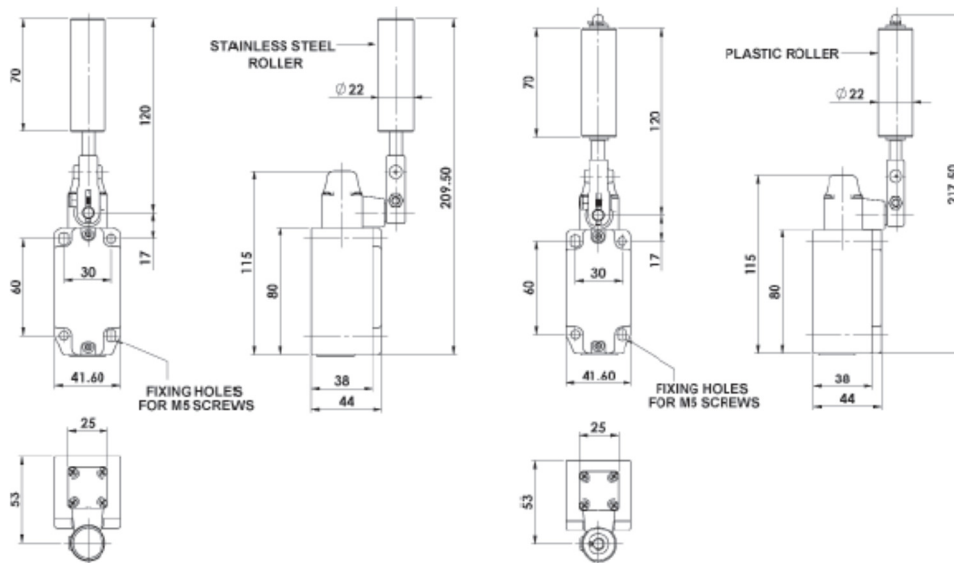
### MAINTENANCE:

Every Month: Check switch actuator and body for signs of mechanical damage and wear. Replace any switch showing damage.  
Every 6 Months: Isolate power and remove cover. Check screw terminal tightness and check for signs of moisture ingress. Never attempt to repair any switch.

# Limit Switches



HLM-CBA



HLS-CBA



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

**AVERTISSEMENT: NE PAS DESACTIVER, MODIFIER, RETIRER, OU CONTOURNER CETI INTERVERROUILLAGE IL PEUT EN RESULTER DES**

## Original Instructions.

To request this data sheet in other languages please contact [info@idemsafety.com](mailto:info@idemsafety.com)  
 Um dieses Datenblatt in Deutscher Sprache wenden Sie sich bitte anfordern [info@idemsafety.com](mailto:info@idemsafety.com)  
 Pour obtenir cette fiche en Français, veuillez contacter [info@idemsafety.com](mailto:info@idemsafety.com)  
 Para solicitar esta hoja de datos en Español, por favor contacto con [info@idemsafety.com](mailto:info@idemsafety.com)