

Mini Limit Switches



Bhartia Cutler-Hammer's Mini Limit Switches are designed with a single aim to improve productivity better....faster....with less production down time. These Limit Switches deliver flawless, continuous and consistent performance even in highly contaminated atmospheres and in high shock and vibration applications. Manufactured to worldclass and exacting standards, each product passes through Stringent Quality Tests.

Features

- Compact design requiring less mounting space.
- Excellent contact reliability using crossbar contact method.
- Dual cutoff circuit with minimum chatter and bounce.
- Zinc Die cast base & high end polyamide cover.
- Terminals spread in a tiered array allow ample wiring space
- Dust-proof, waterproof, oil resistant construction.
- Long mechanical & electrical life

Typical Applications

- Machine tools
- Material handling
- Food & beverages
- Textile machinery
- Conveyors
- Packaging machinery

Technical Data

Ref. standards	IS 13947-5-1 EN 60947-5-1	Conditional S. C. Current	100A
Operating temp limits	-20 to + 60° C	Short Ckt Protection Device	10A fuse
Rated operating voltage (Ue)	250V	Contact Combination	1 NO+ 1 NC
Rated insulation voltage (Ui)	250V	Mech. Life	10 million oprns.
Rated impulse withstand voltage (Uimp)	2.5kV	Frequency of Operation	7200 oprns / hr.
Rated Frequency	50/60 Hz	Electrical Life	0.3 million oprns.
Rated thermal current (Ith)	5A	IP category	IP 64
Resistive Load	5A, 250V AC 0.4 A, 125V DC	Pollution Degree	3
AC 15 Duty	3A, 125V AC 2A, 250V AC	Termination	1.5 sq. mm. cable
DC 13 Duty	0.1A, 125 V DC	Tightening Torque	0.6 Nm
		Shock resistance as per IEC 68-2-27	10g in free condition, 30 g in fully operated condition
		Vibration resistance as per IEC 68-2-6	Max. 55 Hz

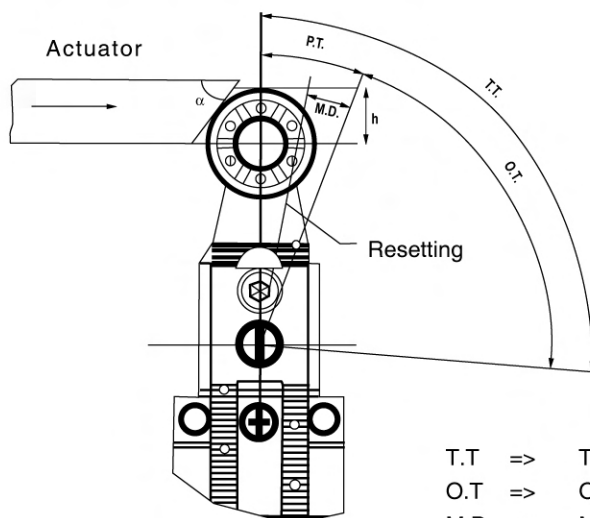


	OPERATING FORCE Max. gms (N)	RETURN FORCE Min. gms (N)	PRE TRAVEL (P.T) Max. mm	MOVEMENT DIFF. (M.D), Max. mm	OVER TRAVEL (O.T) Min. mm	TOTAL TRAVEL (T.T) Min. mm
Push Plunger Roller Plunger Cross Roller Plunger	900 (8.83)	150 (1.47)	1.5	0.7	4	5.5
Roller Arm	600 (5.88)	50 (0.49)	20°	10°	75°	95°
Adjustable Roller Arm	800 (7.84)~ 342 (3.35)	50 (0.49)~ 21 (0.21)	20°	10°	75°	95°
Adjustable Rod	800 (7.84)~ 203 (1.99)	50 (0.49)~ 12 (0.12)	20°	10°	75°	95°
Cat's Whisker	90 (0.80)	-	30	-	20	50
Flexible Rod	90 (0.88)	-	50	-	20	70
General Purpose	1000 (9.81)	-	1.5	-	4.3	5.8

Travel & Operation Diagrams

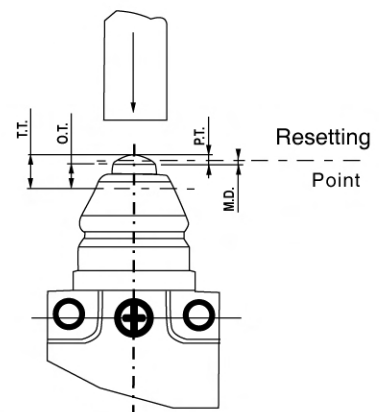
Rotary Movement

(DLSMRL/DLSMRLA/DLSMJWA)



Linear Movement




(DLSMRP/DLSMRP/DLSMRPX/DLSMPP/DLSMAR)



- T.T => Total Travel
- O.T => Over Travel
- M.D => Movement Differential
- P.T => Pre Travel
- h => 80% of T.T.
- α => 45°

Catalogue Reference Table

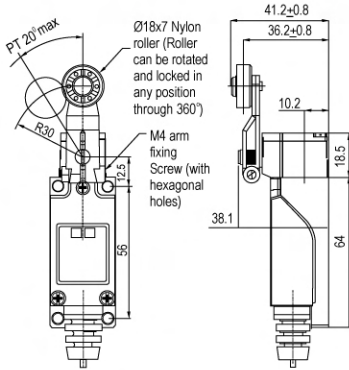


	TYPE	DESCRIPTION	CAT. REF.
	Push Plunger	Standard	DLSMPP
	Roller Plunger	Standard Cross	DLSMRP DLSMRPX
	Roller Lever	Standard - 30 mm	DLSMRL
	Roller Lever	Adjustable 30 mm - 70 mm	DLSMRLA
	Rod Arm	Adjustable	DLSMJWA
	Flexible Rod	Nylon	DLSMSR
	Cat's Whisker	Steel Wire	DLSMSW
	General Purpose	Standard	DLSMAR

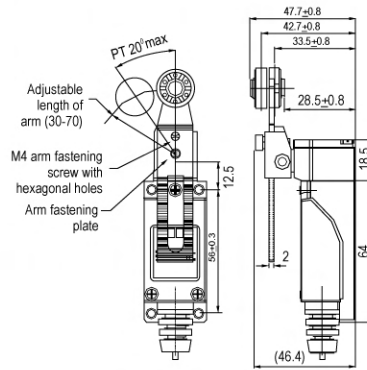
Dimensions (mm)



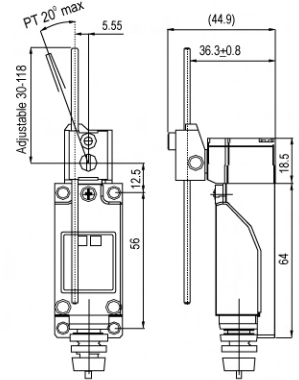
Roller Arm (DLSMRL)



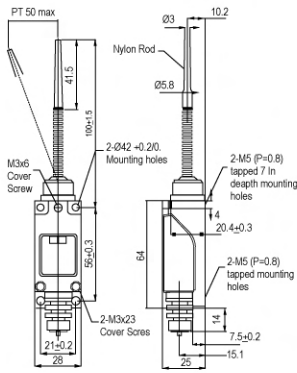
Adjustable Roller Arm (DLSMRLA)



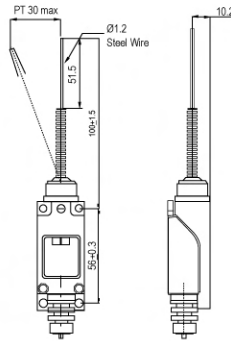
Adjustable Rod Arm (DLSMJWA)



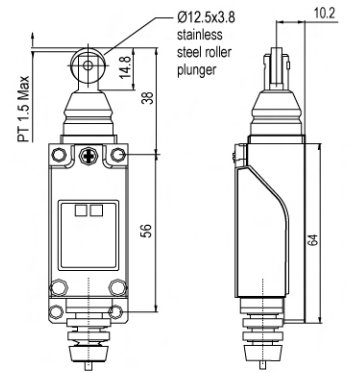
Flexible Rod (DLSMSR)



Cat Whisker (DLSMSW)

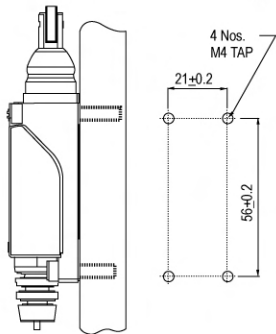


Roller/Cross Roller Plunger (DLSMRP/DLSMRPX)

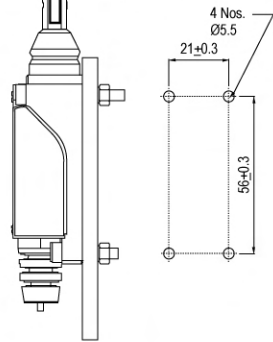


Mounting Dimensions

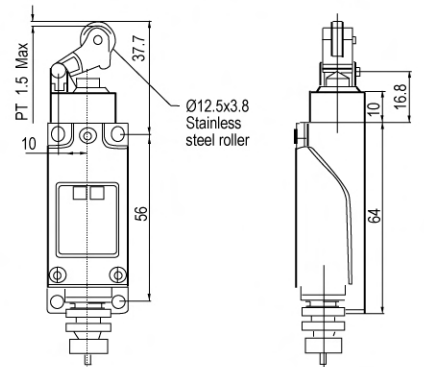
Surface Mounting
(Depth of Screws holes > 15mm)



Through Hole Mounting
(Thickness of Panel < 5mm)



General Purpose (DLSMAR)



Push Plunger (DLSMPP)

