



# PRODUCT STANDARD

## SWITCHGEAR ENGINEERING DIVISION

SG12754 REV.02

PAGE 1 OF 2

### SPECIFICATION OF LIMIT SWITCHES

#### APPLICATION

Limit switches are used in Switchgears for Indication & Control as Service position & Test position and multiplication of breaker contact. The mechanical motion is converted in to control signal by means of the Limit switches.

#### TECHNICAL PARAMETERS :-

- 2.1 Type : Open execution with push rod with plastic protective cover.
- 2.2 Contacts : ITEM 001: 1 N.O. + 2 N.C. ;STYLE CODE - BP9049259359  
 ITEM 002: 2 N.O. + 1 N.C. ;STYLE CODE – BP9049259367  
 ITEM 003: 2 N.C. ; STYLE CODE - BP9049259260  
 ITEM 004: 2 N.O. + 2 N.C. STYLE CODE – BP9049259391
- 2.3 Rating : Electrical – 10A at 500V AC  
 0.8 A at 250 V DC non inductive &  
 0.4 A at 440 V DC non inductive.  
 Mechanical – More than 1,00,000 switching cycles.  
 Contact Life – More than 1,00,000 switching cycles.  
 Dielectric strength – 2.5 KV AC r.m.s.  
 Insulation resistance – 1000 Mohms min.

2.3 Dimensions :-

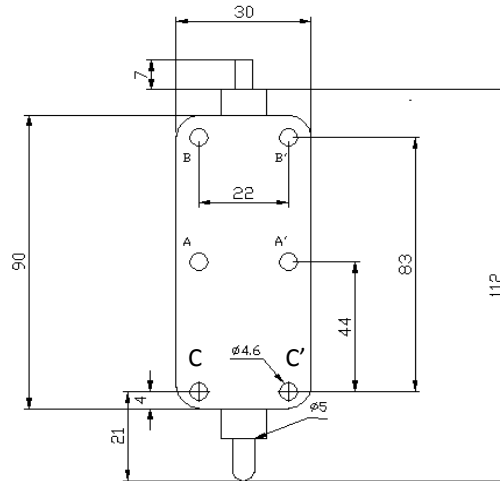


Figure 1: Item 004:

(Total four fixing holes for mounting are required for Item 004. Pitch for the holes to be either CC' & AA' OR CC' & BB')

**COPYRIGHT AND CONFIDENTIAL**

The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in any way detrimental to interest of Co.

<b>REV.</b>	02	<b>PRINTS TO :-</b>			<b>APPROVED –</b>		
<b>ALTD.</b>	RG	SWM (PLNG) QCX (SCR) PDG	1 1 1 1	IP			
<b>APPD.</b>	MAK			<b>PREPARED</b>	<b>ISSUED</b>	<b>DATE</b>	
<b>DATE.</b>	02.01.13	O/C		HRP	RKK	29.08.05	

**COPYRIGHT AND CONFIDENTIAL**

The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in any way detrimental to interest of Co.

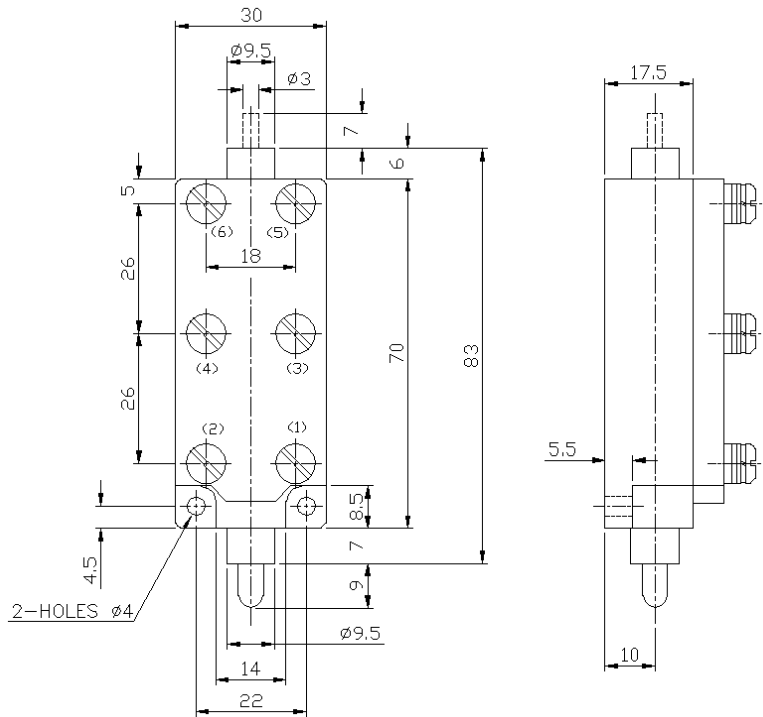


Figure 2: Item 001, Item 002 and Item 003

2.5 Switch type reference shall be indicated on all switches.

2.6 Terminal marking :- FOR ITEM 001 – 1,2,3,4 N.C. 5,6 N.O.  
FOR ITEM 002 – 1,2 N.C. 3,4,5,6 N.O.  
FOR ITEM 003 – 1,2,3,4 N.C.  
FOR ITEM 004 – 1,2,5,6 N.C. 3,4,7,8 N.O.

**(TERMINAL MARKING MUST BE SUBMITTED ALONGWITH THE OFFER)**

2.7 All type test as per IEC60947-5-1:2000 shall be submitted along with the offer.

**2.8 Tests**

Routine test for the lot shall be carried out for P.F. test at 2.5 kV in both Pressed and Un-pressed condition (of the plunger) and report to be submitted.

**2.9 Acceptance Criteria :**

- (i) Visual inspections for damage – free push movement of rod and proper operation. The contacts should be made upon the permissible movement of the plunger.
- (ii) The permissible movement of plunger is minimum of 7 mm. Tolerance in movement of the plunger is +1 mm.
- (iii) Verification of contact arrangement in both Pressed and Un-pressed condition of plunger.
- (iv) Verification of terminal marking.
- (v) Availability of P.F. test report for the lot.
- (v) Switch shall be with plastic cover for insulation.