

**A Note About Pre-Travel Adjustment of Balluff Limit Switches**

The pre-travel adjustment of Balluff limit switches has been carefully set by the Balluff factory. Do not tamper with the pre-travel adjustment screw for the following reasons:

1. If the pre-travel is increased beyond factory specifications, the switch will fail to reliably function.
2. If the pre-travel is reduced below factory specifications, excessive overtravel will lead to premature switch failure due to return spring fatigue. Excessive overtravel will also cause premature failure of the sealing membrane, allowing fluid leaks into the housing.

**Field Replacement of Snap Switches in Existing Limit Switch Installations**

Balluff recommends complete replacement of any product that malfunctions, but sometimes field repairs are unavoidable. When replacing snap switches in the field, every effort should be made to insure proper pre-travel adjustment according to the following table:

<b>Switch Type</b>	<b>Pre-Travel Specification</b>	<b>Notes</b>
BSE-30	2.0 mm ± 0.1 mm	
BSE-61	1.0 mm ± 0.1 mm	Forced opening at 2.3 mm depression
BSE-85	1.5 mm ± 0.1 mm	Forced opening at 3.3 mm depression

**\*\*Always be sure to adequately seal all threaded openings!\*\***

It is very important for the installer to ensure that all threaded openings are properly sealed by fully compressing the O-ring on the fittings. Be sure to use fittings and cord seals that are rated for IP 67 to maintain the IP 67 enclosure rating of Balluff limit switches. Balluff recommends using high quality metal-to-rubber cord seals such as those manufactured by Schlemmer (available through Balluff). Avoid plastic fittings – experience has shown that these invariably leak.

**Properly Re-install Limit Switch Housing Cover**

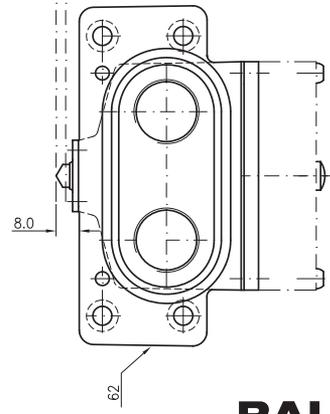
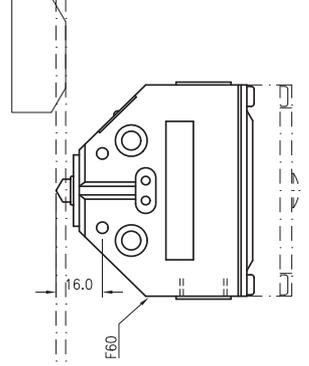
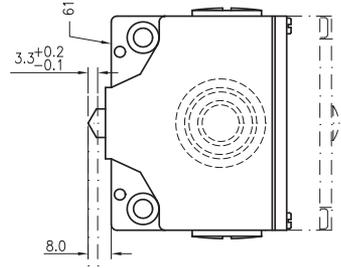
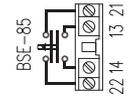
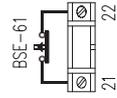
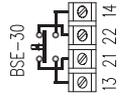
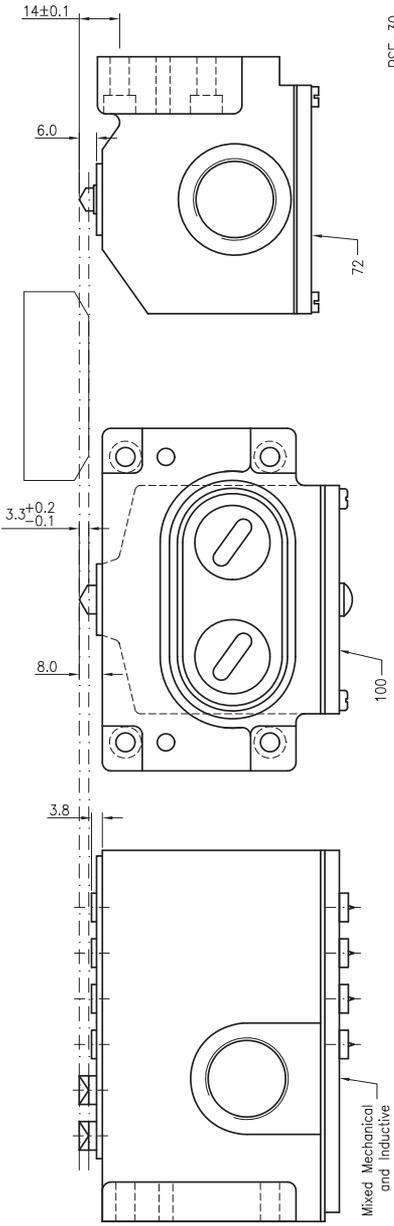
(Non-pre-wired limit switches only)

After field wiring of the limit switch is complete, care should be taken to equally tighten all housing cover screws to ensure a good gasket seal between the cover and the housing. First, carefully snug all cover screws, then use a criss-crossing pattern (starting at the flange and working outward) to complete the tightening sequence.

**Balluff Pre-Wired Limit Switches**

To maintain factory warranty, do not open the housing cover. Simply attach the correct mating cordset and firmly tighten.

# Technical Drawings



No. 873017 E • Edition 2010-01 • Subject to modification • 0003

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