

Diaphragm Switch BM65

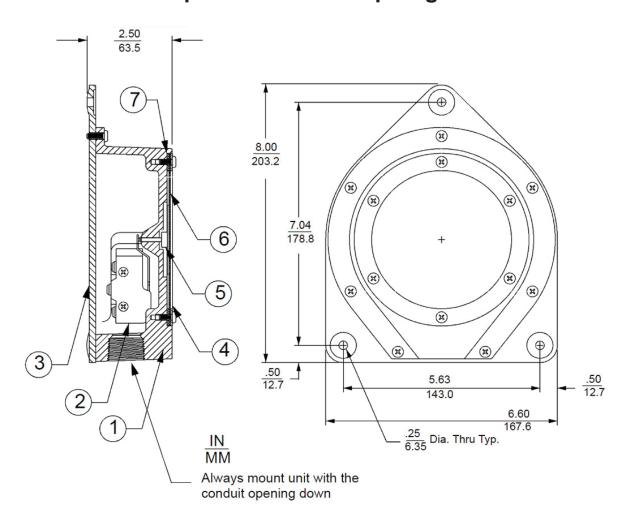


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927-0077 Rev C 1 0319

BM65 R, RH, RHT

Explosion Proof Diaphragm



BM65 R, RH, RHT Explosion Proof Parts list

Item	Part No.	Description
1	220-0016	Cast Aluminum Enclosure
2	530-0017 530-0044 530-0222	Micro Switch Assembly (BM65 R) Micro Switch Assembly (BM65 RHT) Micro Switch Assembly (BM65 RH)
3	270-0063	Back Mounting Plate
4	275-0010	Diaphragm Retaining Ring
5	416-0046	Plunger Assembly
6	225-0003 225-0004 225-0005 225-0027	Neoprene Diaphragm (BM65 R) Heavy Neoprene Diaphragm Silicone Diaphragm (BM65 RHT) Neoprene Diaphragm (BM65 RH)
7	280-0004 280-0057	Gasket Ring Gasket Ring (BM65 RH)

Installation Instructions BM65 Series

Installation Options:

NOTE: Vertical mounting is necessary for proper operation.

Install the **BM65F** Series on the **outside** of the bin wall. The unit must be mounted vertically with the diaphragm facing toward the center of the bin.

Before mounting, determine the desired location of the unit, then cut a five inch hole in the side of the bin.

Do not warp or bow the mounting plate when screwing to the bin wall. Use a shim to mount the unit if mounting to an uneven surface.

The **BM65R** Series mounts on the **inside** of the bin wall, with the diaphragm facing toward the center of the bin. A hole in the vessel is not needed. Secure with four screws.

NOTE: When installing the BM 65 in locations where moisture or moist air could enter the enclosure through the electrical conduit, use a duct seal compound to seal the conduit opening.

Refer to drawings for mounting hole dimensions for either the BM65F series or BM65R series units.

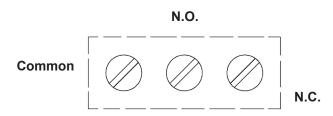
Wiring Instructions:

The BinMaster housing has provisions for connection to a 1/2 inch conduit.

Remove the back plate of the BM65. This will expose the single pole double throw snapswitch.

The switch rating is: 15A @ 125VAC, 10A @ 250VAC, 1/8 HP-125VAC, 1/4 HP-250VAC, 1/2A @ 125VDC.

There are three terminals on the switch: "Common", "Normally Open", and "Normally Closed". The condition referred to as "normal" is with no material covering the diaphragm of the BM65.



Examples:

A. The BinMaster switch may be used to control a motor start relay. To wire the BinMaster switch to stop the motor when material covers the diaphragm, use the "Common" and "Normally Closed" switch terminals.

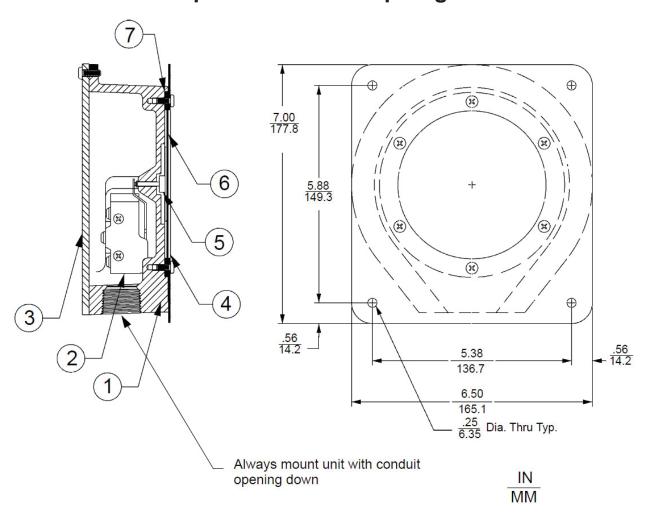
B. To wire the BinMaster switch to turn on a light, or sound an alarm when material covers the diaphragm, use "Common" and "Normally Open".

Safety Warning: When using in atmospheres containing combustible dust, the wiring to this unit must conform to the National Electrical Code for Class II, hazardous locations. Contact a qualified electrician.

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BM65 F, FH, FHT

Explosion Proof Diaphragm

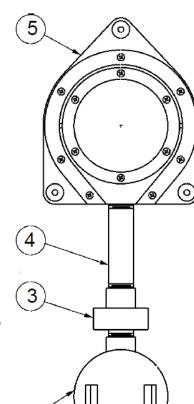


BM65 F, FH, FHT Explosion Proof Parts list

Item	Part No.	Description
1	220-0017	Cast Aluminum Enclosure
2	530-0017 530-0044 530-0222	Micro Switch Assembly (BM65 F) Micro Switch Assembly (BM65 FHT) Micro Switch Assembly (BM65 FH)
3	270-0062	Back Plate
4	270-0022	Front Mounting Plate
5	416-0046	Plunger Assembly
6	225-0003 225-0004 225-0005 225-0027	Neoprene Diaphragm (BM65F) Heavy Neoprene Diaphragm Silicone Diaphragm (BM65 FHT) 1/6 Neoprene Diaphragm (BM65 FH)
7	280-0004 280-0057	Gasket Ring Gasket Ring (BM65 FH)

BM65 R Series

Garner BM-65R series BinMaster Level Indicator

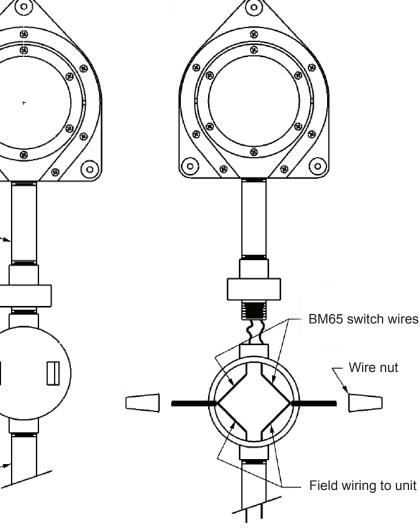


1/2 in rigid conduit nipple (short length to suit 3 to 8 inches)

Union for hazardous locations (Killark GUM-1or equivalent)

Conduit outlet body for hazardous locations (Killark GEMC-1 or equivalent)

1/2 inch rigid conduit



Safety Warning: When using in atmospheres containing dust, the wiring to this unit must conform to the National Electrical Code for Class II, hazardous locations. Contact a qualified electrician.

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Note: For proper operation, the BM65 must be mounted such that the rear cover plate is vertical.

Suggested Installation Procedure:

- 1. Remove the rear cover from the BM65. (Use care not to scratch or nick the mating surfaces. These surfaces are accurately finished to assure safe seal.)
- 2. Connect short lengths of wire to the desired switch terminal in the BM65. The lengths of these wires should be the length of the conduit nipple used (4) plus about 10.00 inches.

- 3. Feed the switch wire through the nipple (4) and tighten the nipple into the BM65 housing.
- 4. Replace the rear cover, again exercise care not to damage the mating surfaces.
- 5. Pass the switch wires through the union (3) into the outlet body (2). Tighten the union onto the nipple (4) and outlet body.
- 6. The BinMaster can now be fastened to the bin wall using four screws through the holes provided in the mounting plate.
- 7. Connection of the switch wires to the field wiring is accomplished at the outlet body (2). Be certain to tighten the cap on the outlet body.

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Installation Instructions BM65D Series

BM65D Series is not listed for Hazardous Locations

Installation Options:

NOTE: Vertical mounting is necessary for proper operation.

Install the **BM65DF** Series on the **outside** of the bin wall. The unit must be mounted vertically with the diaphragm facing toward the center of the bin and the conduit opening downward.

Before mounting, determine the desired location of the unit, then cut a five inch hole in the side of the bin. Do not warp or bow the mounting plate when screwing to the bin wall. Use a shim to mount the unit if mounting to an uneven surface.

The **BM65DR** Series mounts on the **inside** of the bin wall, with the diaphragm facing toward the center of the bin and the conduit opening downward. A hole in the vessel is not needed. Secure with four screws.

NOTE: When installing the BM 65D in locations where moisture or moist air could enter the enclosure through the electrical conduit, use a duct seal compound to seal the conduit opening.

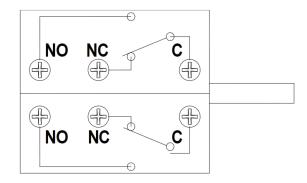
Wiring Instructions:

The BinMaster housing has provisions for connection to a 3/4 inch conduit.

Remove the back plate of the BM65D. This will expose the single pole double throw snap-switch.

The switch rating is: 10A @ 125VAC or 250VAC, 1/8 HP-125VAC, 1/4 HP-250VAC, 1/2A @ 125VDC, 1/4A @ 250VDC.

There are three terminals on each side of the switch: "Common" (C), "Normally Closed" (NC), and "Normally Open" (NO). The condition referred to as "normal" is with no material covering the diaphragm of the BM65D.



Examples:

A. The BinMaster switch may be used to control a motor start relay. To wire the BinMaster switch to stop the motor when material covers the diaphragm, use the "Common" and "Normally Closed" switch terminals.

B. To wire the BinMaster switch to turn on a light, or sound an alarm when material covers the diaphragm, use "Common" and "Normally Open".

CAUTION: Wiring to this unit must conform to the National Electrical Code and any local codes. Contact a qualified electrician.

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