

1 YEAR
WARRANTY

Ω OMEGA® **User's Guide**



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BVLS SERIES
Limit Switch for BVP70, BVPS70,
BVP80, and BVPS80 Series
Actuated Ball Valves



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MATERIALS OF CONSTRUCTION

BODY / COVER: Aluminium with Teflon® Impregnated Hard Anodized (PolyLube®) Surfaces

PROBES: 316 Stainless Steel

SEALS - COVER, PROBES: Buna N

RATINGS / SPECIFICATIONS

TEMPERATURE: 10°F to 180°F

CONDUIT CONNECTION: 1/2" NPT

ELECTRICAL RATING: 10 amp. 250VAC maximum; 1/2 amp. 125VDC; 1/4 amp. 250VDC; 5 amp. 125VAC lamp load. Note: each pole must be the same polarity to utilize these ratings.

MICROSWITCHES: Mechanical S.P.D.T. (Single Pole Double Throw)

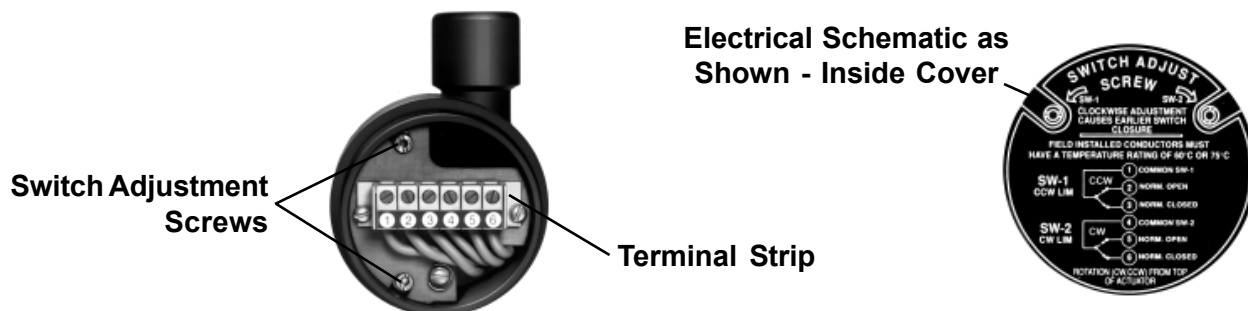
INTERNAL WIRING CONNECTIONS: Screw Clamp

NEMA STANDARDS: NEMA 1 (General Purpose); NEMA 4 (Watertight & Dusttight); NEMA 7 (Hazardous Locations, Class I Groups B, C, & D); NEMA 9 (Hazardous Locations, Class II, Groups E, F, & G); NEMA 12 (Oiltight and Driptight); and NEMA 13 (Oiltight and Dusttight).

UL LISTINGS: Industrial Control Equipment for use in Hazardous Locations, Class I, Groups B,C, & D and Class II, Groups E, F, & G

MAINTENANCE

The BVLS normally requires no maintenance. However, in certain situations the switch adjustment screws may require some attention to either advance or retard the cam actuated switch point. This enables precise adjustment of the switch timing throughout the life of the unit.



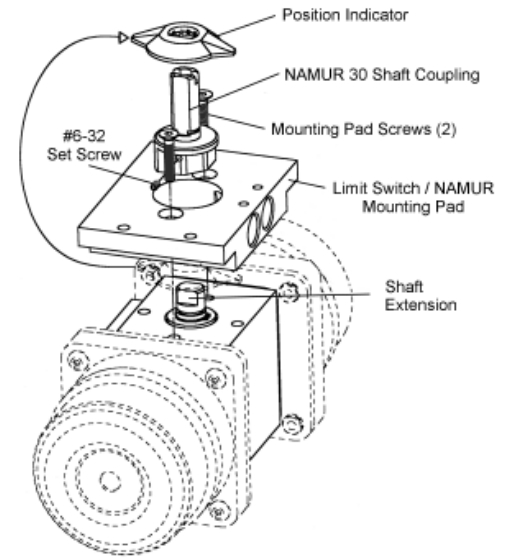
Attachment of Limit Switch / NAMUR Mounting Pad

1. Remove the position indicator from atop the actuator and secure the NAMUR 30 Shaft Coupling to the actuator Shaft Extension with the #6-32 Set Screw using a medium strength (nonpermanent) thread locker (not included in mounting kit).

2. Place the Limit Switch / NAMUR Mounting Pad on top of the actuator. Be sure that the lower flats of the NAMUR 30 Shaft Coupling are oriented such that they align with the Limit Switch Mounting holes on the Limit Switch / NAMUR Mounting Pad.

3. Fasten the Limit Switch / NAMUR Mounting Pad to the actuator using the (2) Mounting Bracket Screws.

4. Slide the position indicator over the NAMUR 30 Shaft Coupling until it 'snaps' into place just above the bracket.



Attachment of Limit Switch

1. Fit the bushings, which extend from the Limit Switch housing, into the matching holes in the mounting pad. Push switch housing against pad and verify that switch body touches pad. Secure switch body to pad with two #10-24 setscrews using a medium strength (nonpermanent) thread locker (not included in mounting kit). Note: Hex wrench supplied with Mounting Kit.

Wiring Instructions

1. Route the wire to be terminated through the conduit hub and up through the access space to the terminal block.

2. Strip insulation back 1/4", insert the stripped ends directly into the proper terminal clamps and tighten screws.

3. Internal interconnections between terminal-block and switches are diagrammed inside the Limit Switch Cover.

Note: If the Switch is installed in a hazardous location i.e. where flammable vapors or dust are present in the atmosphere, replace the cover and tighten securely before connecting the electrical supply circuit. If necessary, a screwdriver shank or similar tool may be engaged in the cover wrenching lugs to assist removal and replacement.

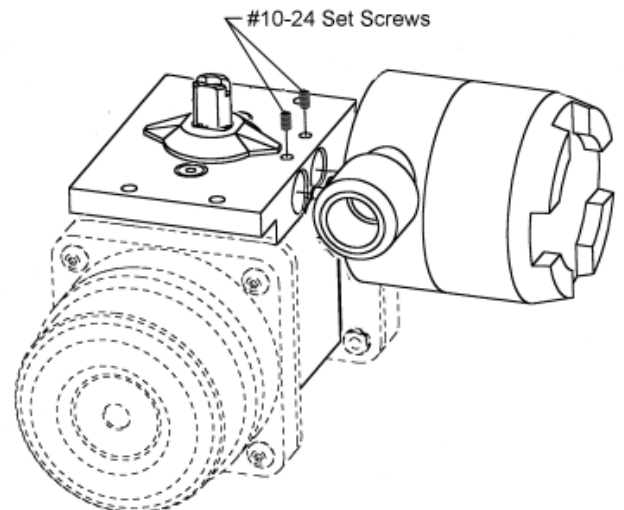
Wiring Specifications

Switch Ratings

AC 250 volts; 10 amps
DC 250 volts; 0.25 amps
125 volts; 0.50 amps
Lamp Load 125 volts; 5 amps

Wire Size

#12 AWG Max.
#24 AWG Min.



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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