POTTER
The Symbol of Protection

Stock No. 1010077

**Gate Valve Switch For Supervision of OS&Y Valves**

The Model OSYS-U-EX is designed to supervise the open condition of an OS & Y type gate valve in hazardous locations.

Contact Rating   One set of SPDT (Form C)
15 Amps,125/250/480VAC
1/2 Amp, 125VDC
1/4 Amp, 250VDC

Switch Enclosure   UL listed explosion proof switch enclosure

For use in hazardous locations classified as:
Class I, Groups C and D, Div. 1
Class II, Groups E, F and G, Div. 1
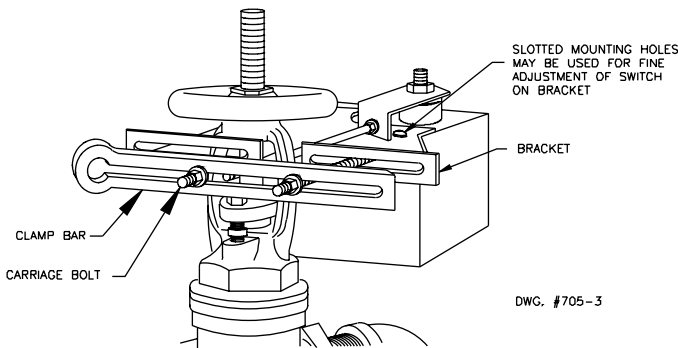
Typical Electrical Connections
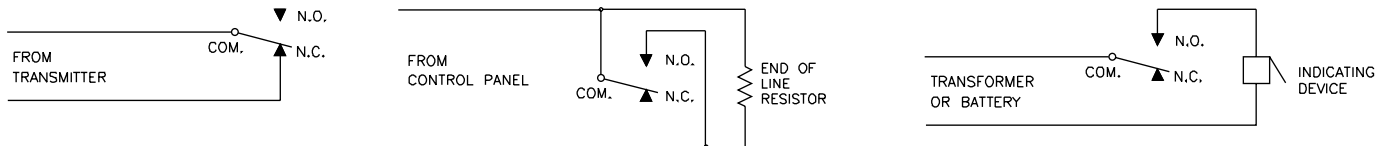
DWG. #705-1

CONTACTS SHOWN IN NORMAL (VALVE OPEN) CONDITION

Valve Sizes 1/2" (12,5mm) Thru 2 1/2" (63,5mm)
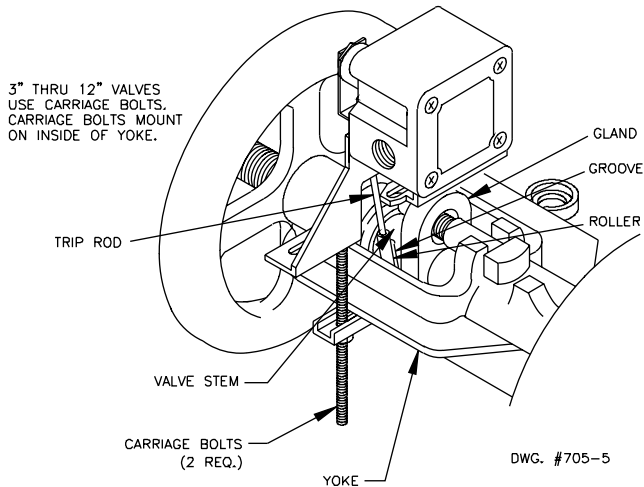## Fig. 1

DWG. #705-3

Small Valve Installation

1. Remove and discard "C" washer and roller from the trip rod.
2. With the valve in the FULL OPEN position, locate the OSYS-U-EX across the valve yoke as far as possible from the valve gland, so that the trip rod lays against the non-threaded portion of the valve stem.
3. Excess trip rod length extending beyond the valve stem must be cut off.

4. Mount the OSYS-U-EX loosely with the carriage bolts and clamp bar supplied. On valves with limited clearance use J-hooks supplied instead of the carriage bolts and clamp bar to mount the OSYS-U-EX.
5. Mark the valve stem at the center of the trip rod.
6. Remove the OSYS-U-EX. File a 3/32" (2,4mm) deep groove centered on the mark on the valve stem utilizing a 1/4" (6,4mm) round, non-tapered file. Round and smooth the edges of the groove to prevent damage to the valve packing and to allow the trip rod to move easily in and out of the groove as the valve is operated.
7. Mount the OSYS-U-EX with the trip rod centered in groove.
8. Final adjustment is made by loosening 2 screws (see Fig. 1) and sliding the OSYS-U-EX on the bracket. Adjustment is correct when switches are not activated with the trip rod seated in the valve stem groove and that the switches activate when the trip rod moves out of the groove.
9. Tighten the adjustment screws and all mounting hardware. Check to insure that the rod moves out of the groove easily and that the switches activate within two turns when the valve is operated from the FULL OPEN towards the CLOSED position.

Note: Close the valve fully to determine that the stem threads do not activate the switch. The switch being activated by the stem threads could result in a ***false valve open*** indication.

Valve Sizes 3'' (76mm) Thru 12'' (300mm)
Fig. 2

3" THRU 12" VALVES USE CARRIAGE BOLTS. CARRIAGE BOLTS MOUNT ON INSIDE OF YOKE.

GLAND
GROOVE
ROLLER
TRIP ROD
VALVE STEM
CARRIAGE BOLTS (2 REQ.)
YOKE
DWG. #705-5

Large Valve Installation

1. With the valve in the FULL OPEN position, locate the OSYS-U-EX across the valve yoke as far as possible from the valve gland, so that the trip rod lays against the non-threaded portion of the valve stem.

2. Mount the OSYS-U-EX loosely with the carriage bolts and clamp bar supplied.

3. If the trip stem extends below the valve yoke, the clamp bar must be discarded and the large J hooks must be used to mount the OSYS-U-EX to the valve.

4. Mark the valve stem at the center of the trip rod.

5. Remove the OSYS-U-EX. File a 1/8" (3,2mm) deep groove centered on the mark of the valve stem utilizing a 3/8" (9,5mm) round, non-tapered file. Round and smooth the edges of the groove to prevent damage to the valve packing and to allow the trip rod to move easily in and out of the groove as the valve is operated.

6. Mount the OSYS-U-EX loosely with the trip rod centered in groove.

7. Final adjustment is made by loosening 2 screws (see Fig. 2) and sliding the OSYS-U-EX on the bracket. Adjustment is correct when switches are not activated with the trip rod seated in the valve stem groove and that the switches activate within two turns when the valve is operated from the FULL OPEN towards the CLOSED position.

8. Tighten the adjustment screws and mounting hardware. Check to insure that the rod moves out of the groove easily and that the switches activate within two turns when the valve is operated from the FULL OPEN towards the CLOSED position.

Note: Close the valve fully to determine that the stem threads do not activate the switch. The switch being activated by the stem threads could result in a ***false valve open*** indication.