

# AFU and AFUX conveyor belt control switches

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7CD, 9EFG

Explosionproof  
Dust-ignitionproof  
Raintight  
Wet Locations

5C

## Applications:

AFU and AFUX conveyor control switches are used:

- As emergency or normal "STOP" switch for conveyor lines, cranes, unloaders, bulk handling systems and similar equipment
- In steel mills, mining and ore and coal handling operations, automotive and other assembly lines, warehouses, loading docks and various process industry facilities
- In the control circuit of magnetic motor starters to shut down motor-driven conveyors or other machinery when switch is actuated

AFU series complies with requirements for use in Class II areas having combustible dusts that may or may not be electrically conductive.

AFU series are also gasketed for use in hose down areas even when combustible dusts are present.

AFUX series complies with requirements for use in NEC Class I areas which are hazardous due to the presence of flammable vapors or gases. AFUX series also complies with requirements for use in NEC Class I areas which are hazardous due to the presence of flammable vapors or gases. AFUX series also complies with NEC requirements for use in Class II hazardous areas, or for use in NEC hazardous areas classified simultaneously as Class I and Class II.

## Features:

- Furnished with one or two end units, each containing 2-NO and 2-NC contact arrangements
- Precision switches provide maintained contact (switches have a snap action mechanism)
- Multiple conduit hubs (AFU: two 1"; AFUX: three 1"); cast mounting lugs on 1½" centers permit attachment to the web of a standard 3" angle iron
- In installation, the actuating line or cable is connected from a fixed point to the loop on the end unit. A pull on the line of the required operating force and with a total movement of ½" actuates the plunger, opens the switch and trips the red painted indicating arm forward, which locks the plunger in the actuated (switch open) position. Returning the indicating arm to its normal position resets the mechanism. A typical installation would include single end switch units at each end of the conveyor with double end switch units between.
- Depending on the size and length of line, supports at properly spaced intervals may be necessary to ensure that the line or cable weight alone will not actuate switch
- Standard design allows for slack protection to be activated or deactivated based on customer preference
- Addressable module allows for instant communication to identify emergency situation

## Certifications and compliances:

### AFU:

#### NEC/CEC:

- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- Class III
- Encl. 3, 5
- NEMA 3, 4, 9EFG
- IP66

#### UL standard:

- UL698

#### CSA standard:

- C22.2 No. 30

### AFUX:

#### NEC:

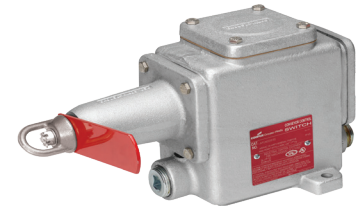
- Class I, Divisions 1 & 2, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- Class III
- NEMA 3, 7CD, 9EFG
- IP65

#### UL standards:

- UL698
- cUL

## Electrical ratings:

- Control circuit switch – 15A, 600 VAC max.



AFU0333-50 single end left



AFU0333-66 double end

## Standard materials:

- Enclosure – Feraloy iron alloy
- Plunger – stainless steel
- Loop – bronze
- Indicating arm – steel

## Standard finishes:

- Feraloy iron alloy – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized with chromate finish (red acrylic paint on indicating arm)
- Bronze – natural

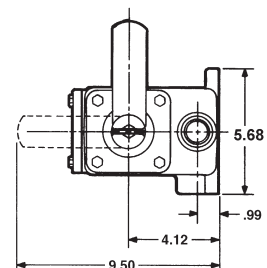
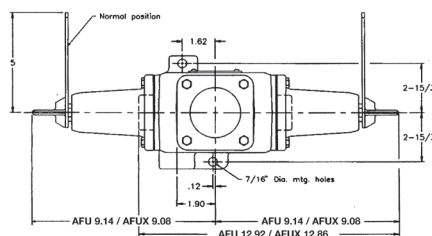
## Options:

| Description                                                         | Suffix         |
|---------------------------------------------------------------------|----------------|
| • Corro-free external epoxy powder coat.....                        | <b>S752</b>    |
| • Copper-free aluminum housing with external epoxy powder coat..... | <b>SA S752</b> |
| • Communication: internal addressable module.....                   | <b>AST</b>     |
| Available with AFU only                                             |                |

## Ordering information:

| Description      | Maximum weight of unsupported line or cable without actuating switch <sup>Ⓐ</sup> (lbs.) | Total operating force required (lbs.) | Contact arrangements with 2-NO, 2-NC in each end unit |             |
|------------------|------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------|-------------|
|                  |                                                                                          |                                       | Cat. # AFU                                            | Cat. # AFUX |
| Single end left  | 15                                                                                       | 25                                    | AFU0333 50                                            | AFUX0333 50 |
| Single end left  | 25                                                                                       | 50                                    | AFU0333 60                                            | AFUX0333 60 |
| Single end right | 15                                                                                       | 25                                    | AFU0333 05                                            | AFUX0333 05 |
| Single end right | 25                                                                                       | 50                                    | AFU0333 06                                            | AFUX0333 06 |
| Double end       | 15                                                                                       | 25                                    | AFU0333 55                                            | AFUX0333 55 |
| Double end       | 25                                                                                       | 50                                    | AFU0333 66                                            | AFUX0333 66 |

## Dimensions<sup>Ⓑ</sup> (in inches):



<sup>Ⓐ</sup> A galvanized steel aircraft cable, supported every 10' is recommended.

<sup>Ⓑ</sup> Dimensions are approximate, not for construction purposes.