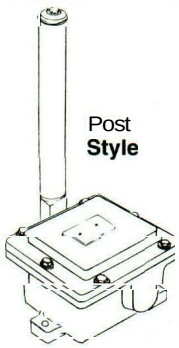
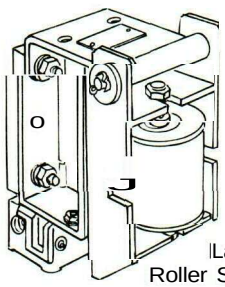
AFA, AFAX Conveyor Belt Alignment Switches

Post Style or Large Roller Style.



Post Style

Catalog Number	Classification	Switch Quantity/ Description	Switch Rating t	Crouse-Hinds Cross Over
AFA10	NEMA 1, 3, 4	1 - sp/dt	1	AFA10
AFA20	NEMA 1, 3, 4	2 - sp/dt	1	AFA20
AFAX10	NEMA 7: Class I; Groups C,D	1 - sp/dt	1	AFAX10
AFAX20	NEMA 9; Class II; Groups E,F,G	2 - sp/dt	1	AFAX20

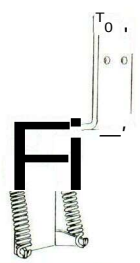


Large Roller Style

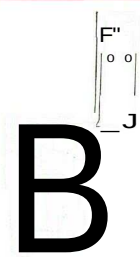
Catalog Number	Classification	Switch Quantity/ Description	Switch Rating t	Crouse-Hinds Cross Over
AFA1	NEMA 1, 3, 4	1 - sp/dt	1	Not Offered
AFA2	NEMA 1, 3, 4	1 - dp/dt	2	Not Offered
AFAX1	NEMA 7: Class I; Groups C,D	1 - sp/dt	3	Not Offered
AFAX2	NEMA 9; Class II; Groups E,F,G	1 - dp/dt	2	Not Offered

t Switch Electrical Ratings:
1. 20 AMP at 125, 250 or 480 VAC; 1 HP at 125 VAC; 2 HP at 250 VAC; 1/2 AMP at 125 VDC; 1/4 AMP at 250 VDC
2. 10 AMP at 125 or 250 VAC; 0.3 AMP at 125 VAC; 0.15 AMP 250 VDC
3. 10 AMP at 125, 250 or 480 VAC; 1/2 AMP at 125 VDC; 0.15 AMP 250 VDC

Breakaway Mounting
AFA1, AFA2, AFAX1, AFAX2 Accessories



Catalog Number	Classification	Switch Description
AFABMB	———	———



AFABMBS	NEMA 1, 3, 4, 13	1 -sp/dt 10 AMP
AFABMBSX	NEMA 7: Class I; Groups C,D NEMA 9: Class II; Groups E,F,G	1 - sp/dt 10 AMP

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Appleton ELECTRIC COMPANY

1701 West Wellington Avenue
Chicago, Illinois 60657

Class I*, Div. 1 and 2; Groups C,D
Class II*, Div. 1 and 2; Groups E,F,G
Class III*
NEMA 3†, 4†, 4X†, 7*CD, 9*EFG

•AFAX Series, tAFA Series

AFA, AFAX Conveyor Belt Alignment Switches

Post Style or Large Roller Style.

Applications

• Emergency stop switch for conveyor lines and bulk handling systems which become misaligned or run off their tracks due to excessive speed, uneven load, leveling, breakage or other problems.

• Used where alarm or computer interface capabilities are needed.

• Used in the control circuit of magnetic motor starters to shut down motor-driven conveyors in case of abnormal belt misalignment or run-off.

• For installation in steel mills, mining (ore and coal) handling operations; automotive and other assembly lines; and warehouses, loading docks and other industrial processes.

• AFAX Series is used in Class I and II areas where flammable vapors or highly combustible dusts are present.

• AFA Series has a gasketed cover rated for NEMA 3, 3R, 4 and 4X.

• Unit is used in pairs with one switch placed on each side of the conveyor belt. Recommended installation locates switches near the tail and head pulleys on conveyors 300 ft. and longer.

Features

AFA10, AFA20, AFAX10, AFAX20:

• Each unit can be equipped with two micro switches to produce signals indicating belt misalignment at two deviation points.

• The first signal point could indicate small belt deviations by sounding an alarm.

• The second signal point could guard against extreme belt runoff by shutting down the conveyor.

• Operating arm has 9.75" high and 1.25" diameter roller and moves 90 degrees in both directions.

• 3/4" NPT standard conduit opening.

• Spring loaded arm returns to original position when belt is realigned.

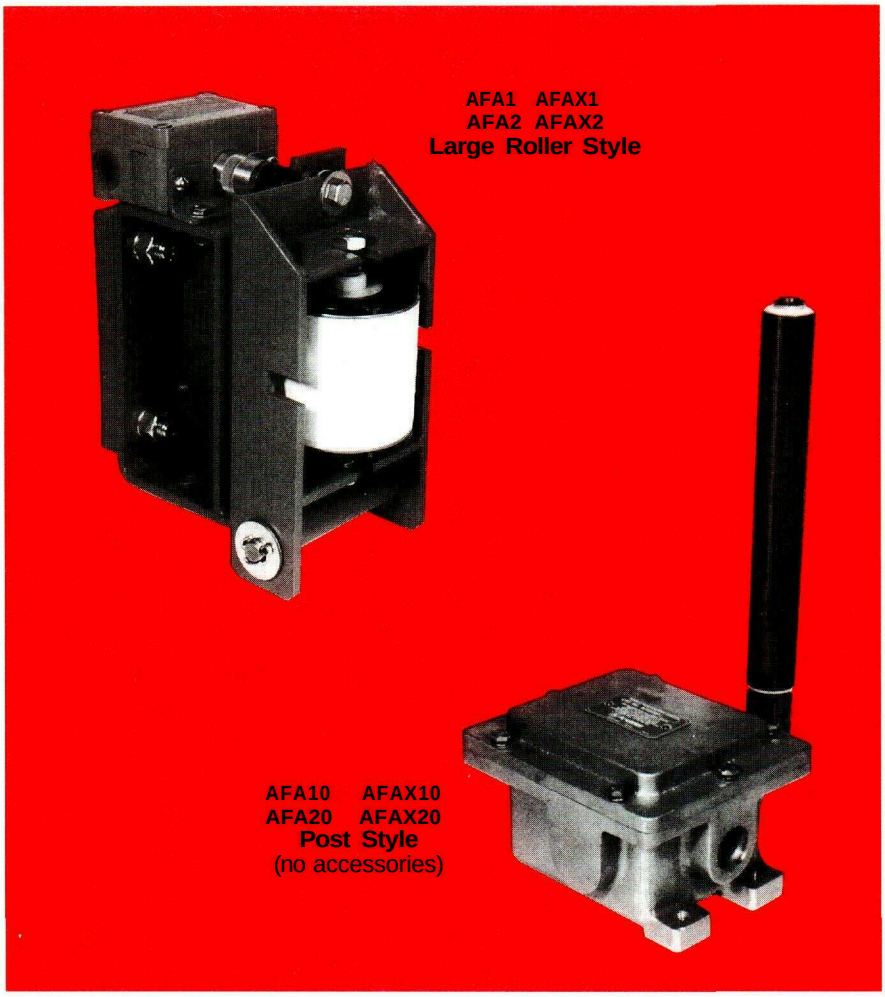
AFA1, AFA2, AFAX1, AFAX2:

• Roller is 3.5" high and actuates with 0.25" travel.

• Unit should be mounted about 1" from belt to eliminate false signals.

• Operating temperatures are -40°F to 150°F.

• 1/2" NPT standard, one conduit opening.



AFA1 AFAX1
AFA2 AFAX2
Large Roller Style

AFA10 AFAX10
AFA20 AFAX20
Post Style
(no accessories)

Standard Materials

AFA10, AFA20, AFAX10, AFAX20:

• Cast aluminum housing also available with corrosion resistant epoxy powder coating.

• Actuating arm contains a red epoxy coated steel roller with stainless steel shaft.

• Stainless steel hardware.

AFA1, AFA2, AFAX1, AFAX2:

• Steel coated with enamel paint.

Options

• For NEMA 4X epoxy coated switches AFA10 and AFA20, add suffix -"N4".

• Cast iron enclosure available for AFA10, X10, AFA20, X20, consult factory.

Standard Finishes

• Standard enclosure is peened; epoxy powder coat is optional.

Accessories

AFA1, AFA2, AFAX1, AFAX2:

• AFABMB: Breakaway mounting bracket.

• AFABMBS: Breakaway mounting bracket with switch.

• AFABMBSX: Breakaway mounting bracket with explosion-proof switch.

Compliances

• UL Standard 698.

• CSA Certified.

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