DAVIS DERBY

STEDFAST

Belt Alignment and Tear Unit

Description

The complete transducer comprises of two identical units, one positioned each side of the conveyor to be protected. This device prevents belt misalignment or 'wander', which can cause a conveyor belt to turn over causing considerable damage and spillage of the conveyed material.

Belt alignment protection is provided by a pair of vertically mounted nylon 66 or ceramic rollers.

When belt mis-alignment occurs, one of the rollers is bought into contact with the edge of the belt which activates a rotary switch housed in the associated unit. The mechanism is arranged such that either latching or non-latching operation is possible.

The belt tear protection facility is provided by dual plastic coated steel wires each set at an angle to suit the curvature of the conveyor belt.

Advantages

The same units can be used on conveyors of different widths by simply changing the length of the two plastic coated steel wires.

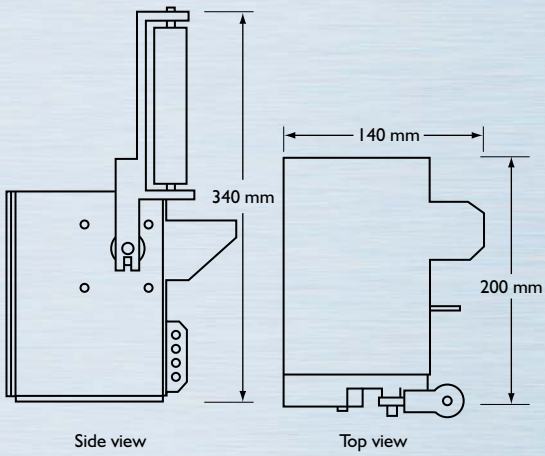
Installation is greatly simplified since only the plastic coated steel wires are underneath the conveyor belt. The switch enclosures are mounted at the side of the conveyor eliminating the need to carry out work underneath the conveyor belt.

Installation in Hazardous Atmospheres

When installing in GpI hazardous atmospheres (methane in coal mines) this equipment is considered as "simple apparatus" as defined in EN60079-11 and must only be supplied with electrical power from an appropriately certified Intrinsically Safe source.

Dimensions

The overall dimensions are shown below:



Switch Rating

The Belt Alignment and Tear Unit is fitted with a rotary switch with one normally open and one normally closed contact.

The contact ratings are as follows:

16 Amps 250 volts ac 3 kw
1 Amp 125 volts dc

Ordering Details

Ordering details are as follows:

Version	Description	Code Number
Standard	Nylon Rollers	B1100201/FP
	Ceramic Rollers	B1100201/C/FP
Time delay on operate	Nylon Rollers	B1100208/N/FP
	Ceramic Rollers	B1100208/FP

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ISO9001 · ISO14001

DAVIS DERBY

Davis Derby Limited

Davis Derby is a long established designer and manufacturer of intrinsically safe electronics and explosion-proof electrical equipment. All our equipment is designed for use in underground coalmining and other hazardous or demanding atmospheres. Davis Derby is also a leading provider of off-road vehicle driver access control and fleet management information systems. Our products are in service across the world in a variety of mining and arduous environments.

Davis Derby Limited comprises of 4 core strategic business units:

STEDFAST

StedFAST™

Mines, quarries, steelworks, power stations and processing plants are demanding environments. Hazards are many and varied and nowhere more so than where bulk materials are being conveyed in the presence of personnel. Incidents involving product spillage, misaligned or torn conveyor belts and other mechanical malfunctions can cause injury to staff as well as costly downtime, damage to machinery and loss of revenue.

MINEWATCH

MineWATCH™

Mine productivity and personal safety have been priorities at Davis Derby for more that two decades. In this time we have led the way in product development, harnessing cutting-edge technologies and the potential of microprocessor based outstations.

Bespoke

With a long history of developing unrivalled safety, communication and monitoring products for hazardous, explosive and arduous environments, Davis Derby is uniquely positioned to offer a bespoke design and manufacturing service for industrial applications. Our engineers are also specialists in adapting existing technology to be suitable for operation in hazardous gas and dusty atmospheres and obtaining the appropriate certification to ATEX, IECEx, UL and CSA standards.

TRUCKLOG

TruckLOG™

Designed with demanding materials handling environments in mind, the Davis Derby TruckLOG suite of modules tell you everything you need to know about who's driving your trucks – and how. It puts you firmly in control of driver access, shock reporting and investigation, driver training needs and vehicle service and maintenance schedules.

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