Description

Davis Derby’s comprehensive range of StedFAST® conveyor protection devices protect people and plant in quarries, mines, tunnels, processing plants, ports and railway depots worldwide.

All Davis Derby devices are compatible and can be easily installed by qualified electrical engineers on new or retrofit schemes. The primary stopping device on any conveyor system is the pull cable/wire operated safety switch, now available in compliance to BS EN ISO 13849-I PLe Category 3 standards.

Davis Derby design and manufacture a double-ended stop device, which can be adopted as either a normal stop switch, or wired to function as an emergency stop switch, isolating conveyor movement in the event of incidents. When required to operate as a normal stop switch, the pull key device can be either, wired and fitted to some or all of the moving parts of conveyor machinery to render them safe.

Alternatively, when required to operate as an emergency stop switch, all the pull keys internal positive break micro-switches should be used and connected to any/all parts of conveyor machinery.

By connecting up all the micro switches to a certified safety relay, the pull key system will comply with the emergency stop standards of BS EN ISO 13849-I PLe (Category 3). To enable a successful emergency stop control, all pull keys and safety relays must be connected to the machinery it is protecting and to all upstream and downstream equipment, where deemed necessary.

Dimensions: 303mm L x 135mm D x 116mm H; Fixing Hole Centres: 178mm, 10mm Diameter; Weight: 2.2Kg.
Types

All Davis Derby’s StedFAST® HT 800 Series pull key range is designed for use in safety critical systems for controlling conveyors. Each key can therefore be used as either a Stop Switch or as a Category 2 or Category 3 Emergency Stop Switch as defined in BS EN ISO 13849-1 PLe.

All pull keys are moulded from high stability UV protected polycarbonate, which is tough and lightweight.

All pull keys can be used in conjunction with all StedFAST® relay control units, or on a control circuit up to 110 volts ac. For systems to comply with emergency stop safety regulations, safety relays* must be used.

<table>
<thead>
<tr>
<th>HT 800 Series Pull key Type</th>
<th>32 kg Springs</th>
<th>12 kg Springs</th>
<th>6 kg Springs</th>
<th>Optional Semaphore Flag Indication</th>
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</thead>
<tbody>
<tr>
<td>HT832V3 (Standard)</td>
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<tr>
<td>HT832FV3 (Standard + Semaphore Flag)</td>
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<tr>
<td>HT806V3 (Basic)</td>
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<tr>
<td>HT806FV3 (Standard + Semaphore Flag)</td>
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<tr>
<td>HT812DP23 (Dustproof)</td>
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<td>HT812FDP23 (Dustproof + Semaphore Flag)</td>
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<tr>
<td>HT812CSA/DD (Dustproof + Semaphore Flag)</td>
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* Relays available to order: ICR3 (2 relay output); 23418 (standard relay); and the SRP1 (Pilz Safety Relay).

Installation

Recommended spacing between StedFAST® pull keys for taut-wire systems is up to 50 metres maximum (40 metres for Dustproof), in conjunction with pig tails at 3 metre intervals. (However, spacing can be up to 100m maximum[80m dustproof] when installed on slack-cable/wire installations, in conjunction with pigtails at 2-3m intervals for Normal Stopping).

Incoming and outgoing cables are connected via 2 x 20mm threaded cable entries to the internal 12-way easy-access terminal block. The operating knob is sealed with an O-ring and the lid is fitted with a fully recoverable closed cell silicon gasket.

Each pull key comes boxed with wiring instructions, and several types can be supplied with the wiring and mechanism preconfigured to suit specific applications upon request, and manuals are available upon request.

Operating the Safety Switch

The StedFAST® pull key has a snap action mechanism to meet the requirements of :-

Stop/trip system via Pull Switch
To stop, turn the red switch 90° to the right.
To reset, turn 90° to left
(to the normal operating position).

Stop/trip system via Pull Cable/Wire
Pull cable or wire until the red switch turns to the right and clicks.
To reset, turn 90° to left
(to the normal operating position).