SAFE-T-LANYARD

LANYARD PULL WIRE ROPE

SAFE-T-LANYARD is a UV Stable Red Polyurethane coated 304 Stainless Steel 3mm ID x 5mm OD 6 x 19 construction wire rope, designed and manufactured for the purpose of a lanyard emergency stop pull wire system.

SAFE-T-LANYARD is designed to comply with the Machinery Standards AS 4024.1604-2006 Clause 5.4.6 Actuator Colour. The actuator of the emergency stop device SHALL be coloured red.

The Actuator of a Lanyard switch is the Pull Wire thus it is made in a Red UV stable Polyurethane so to withstand the harsh environments that the wires are placed in, without cracking of the cover or fading of the colour. Once the SAFE-T-LANYARD is fitted to a SAFE-T-PULL Lanyard Switch and run through SAFE-T-GUIDE Rope Guides and installed as per the switch Installation Instruction, you will then make sure your site is complying to the relevant Australian or International Standards for conveyor Emergency Stops.

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STL - 10 - #8</td>
<td>3mm ID x 5mm OD Red 6x19 Construction UV Stable Polyurethane 304 Stainless Steel Wire Rope</td>
</tr>
</tbody>
</table>

LANYARD PULL WIRE ROPE

Head Office - 08 8723 3333  Adelaide - 08 8251 3204

www.seconveyors.com.au
SAFE 'T' LANYARD

WIRE LANYARD PULL ROPES:

How do they Compare and Work?

Wire Sizes:
3mm ID x 5mm OD 6 x 7 Construction Blue PVC coated Wire Rope @ 0.049Kg per M
Electric Control Products SAFE 'T' LANYARD (Part No STL-10-SS) 3mm ID x 5mm OD 6 x 19 Construction Red UV Stable Polyurethane coated 304 Stainless Steel Wire Rope @0.052Kg per M
3.5mm ID x 5.5mm OD 6 x 7 Construction Blue PVC coated Wire Rope @ 0.060 Kg per M
4mm ID x 6mm OD 6 x 7 Construction Blue PVC coated Wire Rope @ 0.083Kg per M

QUESTION: Our Lanyard run is 80m, how does the wire size affect the workings and parameters of the Lanyard Switch?

- Over an 80m Lanyard run 3mm ID x 5mm OD 6 x 7 Construction Blue PVC coated Wire Rope @ 0.049Kg per M over 80m is 3.92Kg in weight.
- Over an 80m Lanyard run Electric Control Products SAFE 'T' LANYARD (Part No STL-10-6H) 3mm ID x 5mm OD 6 x 19 Construction Red UV Stable Polyurethane coated 304 Stainless Steel Wire Rope @ 0.052Kg per M is 4.16Kg in weight.
- Over an 80m Lanyard run 3.5mm ID x 5.5mm OD 6 x 7 Construction Blue PVC coated Wire Rope @ 0.060 Kg per M is 4.8Kg in weight.
- Over an 80m Lanyard run 4mm ID x 6mm OD 6 x 7 Construction Blue PVC coated Wire Rope @ 0.083Kg per M is 6.46Kg in weight.

When a lanyard is pulled in either the slack wire operation or the 90 degree to the run operation, you need to pull the weight of the wire and the tension of the springs at the remote end of the run and inside the switch to activate a trip. If you use a 3mm ID x 5mm OD 6 x 7 Construction Blue PVC coated Wire Rope you are adding an extra 1.44Kg in wire weight to the recommended Electric Control Products wire size. So when you try to test the switch and installation to the AS 1755 Standard in any direction you are needing to pull an extra 1.44Kg of weight plus the extra friction caused by the extra weight if you are at either end of the switch or 1.84Kg of weight plus the extra friction caused by the extra weight if you pull in the centre of the run. The extra weight and friction may cause the Switch and Installation NOT to perform to the AS1755 Standards. Electric Control Products has tested their Switch the SAFE 'T' PULL using the recommended Electric Control Products SAFE 'T' LANYARD 3mm ID x 5mm OD 6 x 7 Construction Red UV Stable Polyurethane coated 304 Stainless Steel Wire Rope and found it to comply with the AS1755 Standards over a 100m lanyard run, when set up to Electric Control Products Installation Instructions.

Now we have the right wire else the next thing is friction reduction.

Using Galvanised or Zinc plated Pig Tails or Eye Bolts cause extra friction plus premature wire wear, using a purpose made rope guide like Electric Control Products SAFE 'T' GUIDE which is designed to reduce friction and wire wear will increase the effectiveness of the workings of the switch thus improving the Kg pull to activate the switch.

At the end is the ongoing maintenance of the lanyard installation with a testing procedure being done every 3-4 months depending on the environment it is installed in.