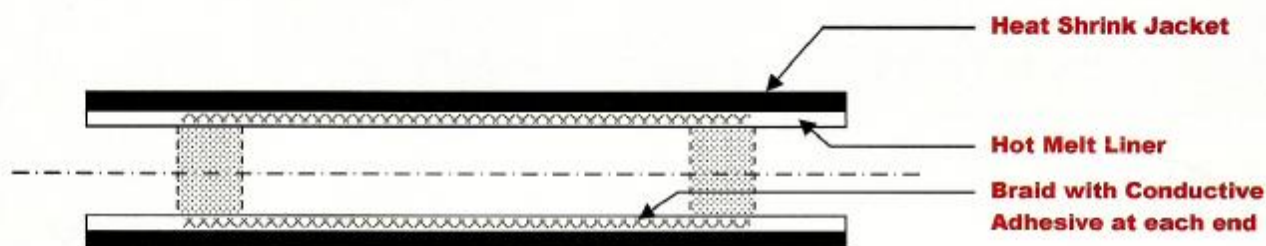


# ShieldFast Devices

## Product Design

The general design features a heat shrinkable sleeve which contains shielding braid, conductive adhesive and hot melt adhesive. Products are supplied circular in cross-section to specified internal diameter and length. The basic ShieldFast design is easily adapted to suit different cable braid termination requirements or configurations as illustrated below:

## ShieldFast Sleeves as supplied

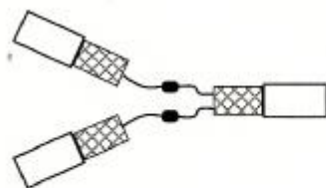


## Typical ShieldFast Applications

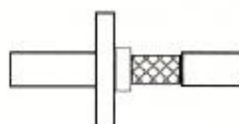
Cable Splice  
Braid Replacement



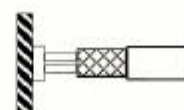
Cable Transition



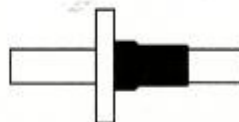
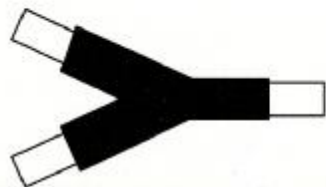
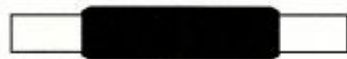
Earth Bond to  
Spigot, Gland,  
Feedthrough



Braid Termination  
at Connector  
or Adaptor



## After Installation



## Generic Specification

|                           |                                       |
|---------------------------|---------------------------------------|
| Tensile strength:         | 15Mpa                                 |
| Elongation:               | 300%                                  |
| Braid coverage:           | 360° > 93%                            |
| Temperature range:        | -55°C to 80°C                         |
| DC end-to-end resistance: | < 1m ohm                              |
| Sealing:                  | IP68                                  |
| Tubing:                   | Low smoke, low toxicity, zero halogen |

## Cable Harnessing



### Cable Harnessing Adhesives

#### RT125

RT125 is the industry standard adhesive for high performance cable harness assemblies.

#### Benefits and properties

- ◆ Excellent flexibility
- ◆ Chemical and fluid resistant
- ◆ Operates to 150°C
- ◆ Cures in 2 hrs @ 85°C
- ◆ 18 month shelf life

#### RT183

RT183 is an electrically conductive epoxy for EMC applications.

#### Benefits and properties

- ◆ Easy to use
- ◆ Room or elevated temperature cure
- ◆ Operates to 150°C
- ◆ 6 month shelf life



### The SHIELDFAST range of Shielded Continuity Devices

#### Description Features & Benefits

The ShieldFast range of screened devices offers full shielding and grounding continuity to cables where they are most vulnerable at terminations, splices and transitions.

The unique one-piece parts are heat shrinkable to give a snug fit and provide mechanical protection, strain relief and sealing to the underlying structure.

- ◆ One piece part
- ◆ Simple to specify, stock, handle and install
- ◆ Wide choice of design options for length, supplied diameter, shrink ratio, material specification and more
- ◆ Sealing to IP68
- ◆ Low interface resistance.
- ◆ High optical coverage. 360° all round protection and earth bonding
- ◆ Heat shrinkable installation
- ◆ No calibrated tool, no threads to work loose and no solder giving zero installed stress
- ◆ A wide range of sizes already available

#### Typical Applications



Shielded Connector



Standard Range

#### Helping you choose...

If you think you have an application where ShieldFast could be of use, we are happy to provide you with more information and samples to your specification (i.e. length, diameter etc.).

# ShieldFast®

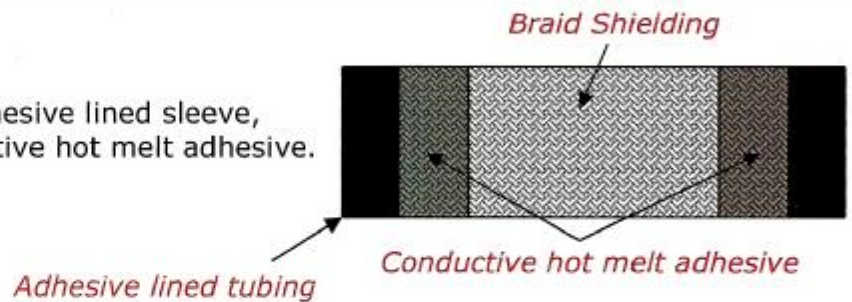


## Standard 3:1 Range of Screened Devices

### Design

The ShieldFast® range of screened devices offers full shielding and grounding continuity to cables where they are most vulnerable at terminations, splices and transitions. The Unique one-piece parts are heat shrinkable to give a snug fit and provide mechanical protection, strain relief and sealing to the underlying structure.

The design features a heat shrinkable, adhesive lined sleeve, which contains shielding braid and conductive hot melt adhesive.



### Dimensions

| Part No. | Supplied I.D. Minimum | Recovered I.D. Minimum | Length | Recovered Wall Thickness |
|----------|-----------------------|------------------------|--------|--------------------------|
| RSCD-230 | 9.0                   | 3.0                    | 40     | 1.4                      |
| RSCD-231 | 12.0                  | 4.0                    | 40     | 1.8                      |
| RSCD-232 | 18.0                  | 6.0                    | 60     | 2.2                      |
| RSCD-233 | 24.0                  | 8.0                    | 60     | 2.5                      |
| RSCD-234 | 40.0                  | 13.0                   | 80     | 2.5                      |

### Specification

|  |  |
|--|--|
| Tubing material:                             | Flame retarded cross-linked polyolefin |
| Shrink ratio:                                | 3:1                                    |
| Continuous operating temperature:            | -55°C to 110°C                         |
| Tensile strength:                            | 14 Mpa                                 |
| Elongation at break (insulation):            | 300%                                   |
| Dielectric strength (insulation):            | 10 kV/mm                               |
| Braid coverage:                              | 360° >95%                              |
| Installation temperature:                    | 110°C                                  |
| Adhesion: Peel strength to cable insulation: | 100N / 25mm                            |
| Peel strength to cable braid:                | 100N / 25mm                            |
| Chemical resistance to fluids and water:     | Excellent                              |
| EMC shielding performance (overall):         | >70dB at 100 Mhz                       |
| DC resistance end-to-end:                    | <1 mΩ                                  |