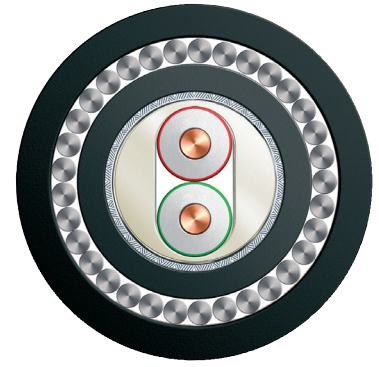


# DataGuard® (SWA)

PROFIBUS PA Permanent Installation PVC



## Cable Design

### Wire

|            |                                    |           |
|------------|------------------------------------|-----------|
| Conductor  | Solid bare copper wire (18awg)     | Ø 1,05 mm |
| Insulation | Foamed Polyethylene (PE) with skin | Ø 2,55 mm |

### Core

|                  |  |           |
|------------------|--|-----------|
| Pair             | 2 wires twisted to a pair (RD-GN)      |           |
| Tape             | Plastic tape overlapped                |           |
| Easystrip Jacket | Soft Polyvinylchloride (PVC)           | Ø 5,40 mm |
| Screen           | Aluminium foil overlapped              |           |
| Braid            | Tinned copper wire braid, 90% coverage | Ø 6,20 mm |

|              |                         |                 |
|--------------|-------------------------|-----------------|
| Inner Jacket | Polyvinylchloride (PVC) | Ø 8,0 ± 0,40 mm |
|--------------|-------------------------|-----------------|

|        |                                     |  |
|--------|-------------------------------------|--|
| Armour | DataGuard® Steel Wire Armour (DSWA) |  |
|--------|-------------------------------------|--|

|              |  |                   |
|--------------|--|-------------------|
| Outer Jacket | Polyvinylchloride (PVC), Black or Blue | Ø 12,80 ± 0,80 mm |
|--------------|--|-------------------|



## Characteristics

- Indoor/Outdoor applications
- Mechanical protection
- Rodent Protection
- Direct Burial
- UV-Stable and colourfast

# DataGuard® (SWA)

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## Electrical Data @ 20°C

|   |           |   |        |         |
|---|-----------|---|--------|---------|
| Conductor resistance                            |           | ≤ | 22     | Ohm/km  |
| Insulation resistance                           |           | ≥ | 10     | MOhm*km |
| Capacitance (1 kHz) wire/wire                   |           | ≈ | 50     | nF/km   |
| Capacitance (1 kHz) wire/screen                 |           | ≈ | 92     | nF/km   |
| Characteristic Impedance                        | 31,25 kHz |   | 100±20 | Ohm     |
| Attenuation                                     | 39 kHz    | ≤ | 3      | dB/km   |
| Capacitance unbalance e                         |           | ≤ | 2      | nF/km   |
| Inductance                                      | 31,25 kHz |   | 650    | μH/km   |
| Surface transfer impedance                      | 20 MHz    | ≤ | 5      | mOhm/m  |
| Rel. Velocity of Propagation                    |           | ≈ | 81     | %       |
| Operating voltage                               |           |   | 100    | V       |
| UL-Rating                                       |           |   | 600    | V       |
| Test Voltage (wire/wire/screen rms 50Hz 1 min.) |           |   | 2000   | V       |

## Mechanical & Thermal Characteristics

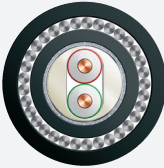
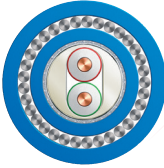
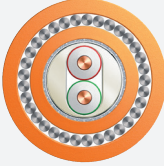
|                               |  |  |           |                       |
|-------------------------------|--|--|-----------|-----------------------|
| Permissible temperature range |  |  | -25 ~ +80 | °C                    |
| Min. Bending radius           |  |  | 10        | x Ø (see Ø tolerance) |
| Weight (approx.)              |  |  | 393       | kg/km                 |

*Belcom Cables Ltd. ("Belcom") reserves the right to make changes to the product described in this specification without prior notice. Belcom does not assume any liability which may occur due to the use of the specification described herein. Drawings are not to scale unless otherwise specified and are provided for general and informational purposes only. All values represented in this specification should be used as a guide only and exact product details can be confirmed at point of enquiry.*

# DataGuard® (SWA)

PROFIBUS PA Permanent Installation PVC

## Specification

| Part Number       | Cross Section   | Type  |
|-------------------|---|---|
| 11L45467-J20-C105 |    | Black PROFIBUS PA ES, cable for permanent installation (easy to strip), 2x18AWG1, DataGuard® (SWA) / PVC                      |
| 11L45467-J20-C95  |    | Blue PROFIBUS PA ES, cable for permanent installation in hazardous Ex-areas (easy to strip), 2x18AWG1, DataGuard® (SWA) / PVC |
| 11L45467-J20-C185 |  | Orange PROFIBUS PA ES, cable for permanent installation (easy to strip), 2x18AWG1, DataGuard® (SWA) / PVC                     |

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