

# Profibus DP PEL Dragchain :

## Drag-chain compatible data cables



PE foam insulation, PUR sheath and colored cores with double screened

### HIGHLIGHT CHARACTERISTIC

*Continuous flex PROFIBUS cable for drag chain applications. Stable PROFIBUS communication under continuous movement.*

### APPROVALS (Norm references)



### Applications

This cable is used as drag-chain compatible connecting cable at the process level. The screenings provide excellent electromagnetic compatibility. The PUR outer sheath is characterized by its high impact strength and oil resistance and ensures a long cable service life.

### Fast connect system:

Cables designed to this new specification and featuring this special structure allow installation times to be reduced to a fraction of the original time when using a commercial stripping tool.

The pre-adjusted knife distances and cutting depths ensure that stripping of the outer sheath and removal of the braided screen can be performed in a single operation and with maximum dimensional accuracy.

Stripping and installation errors can be avoided.

### Electrical and technical specifications

Peak operating voltage: max. 100 V

Test voltage: 3600 V/3 sec

Conductor loop resistance:  
max. 133 Ohm/km

Insulation resistance:  
≥ 16000 MOhm x km

Mutual capacitance at 1 kHz:  
approx. 28.0 nF/km

Bending radius: min. 65 mm

Temperature range: -40° C to +60° C

### Design

- Stranded bare Cu conductor
- Core insulation: expanded PE
- Core colours: red and green
- Partly also available with turquoise blue lapping
- Cores twisted in layers, with optimal lay lengths
- Intersheath
- Lapping
- Overall screening with composite aluminium foil, metal layer on the outside, and tinned copper braided screening
- Outer sheath: special PUR
- Sheath colour: preferably RAL 4001 red lilac

### Available special types:

- UL-listed type

Wave impedance:

|               |                 |
|---------------|-----------------|
| Nominal value | 150 Ohm         |
| 3 to 20 MHz   | 150 +/-15 Ohm   |
| 38.4 kHz      | 185 +/-18.5 Ohm |
| 9.6 kHz       | 270 +/-27 Ohm   |

Attenuation:

|             |            |
|-------------|------------|
| at 16 MHz   | < 49 dB/km |
| at 4 MHz    | < 25 dB/km |
| at 38.4 kHz | < 4 dB/km  |
| at 9.6 kHz  | < 3 dB/km  |

Flame retardant to IEC 60332-1

The cable is resistant to mineral oils and grease.

| Item No.      | Conductor diameter mm <sup>2</sup> | Cu content kg/km | Outer diameter approx. mm | Weight approx. kg/km |
|---------------|------------------------------------|------------------|---------------------------|----------------------|
| 742150 640211 | 1x2x0.64                           | 28.0             | 5.7                       | 65                   |