CRANE, CONVEYOR, LIFT & REELING CABLES

F-PVC SERIES

High Performance Flexible Flatform Cable Indoor/Outdoor 450/750V 70°C



Materials and Handling Systems Suitable for use in indoor and outdoor crane and festooning systems, conveyor systems and energy chains.

Confined Spaces With its flat configuration, this cable can be laid in areas subject to space confinements.

Humid and wet rooms and for outdoor use.

Pumping Suitable for permanent submersion up to 200 metres.

PRODUCT FEATURES:

- ► Special SPVC used for indoor and outdoor applications
- ► Tensile load up to 15 N/mm²
- ► Travel speed 180 metres per minute
- UV stabilised
- ► Flame retardant
- Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Very good behaviour to variations of outdoor temperatures
- ► Heat, oil and chemical resistant (See Technical Section)

See over for full product table



CONSTRUCTION:

Conductor Annealed tinned copper stranded extreme flexibility (Class 5 & 6).

Insulation Special SPVC.

Sheath Special SPVC.

CHARACTERISTICS:

Temperature Range Fixed -40°C to 60°C / Flexing -25°C to 60°C. **Maximum Conductor Temperature** 70°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 450/750V.

Minimum Bending Radius Fixed 5 x cable height /

Flexing 10 x cable height.

Sheath Colour Black.

Standard Core Colours

4 Core - Brown, Black, Grey, Green/Yellow.

5 Core - Blue, Brown, Black, Grey, Green/Yellow.

Multi Core - Black Numbered, Green/Yellow.

Relevant Standards DIN VDE 0295, DIN VDE 0293, IEC 60332-1,

RoHS Compliant.

INSTALLATION NOTES FOR FESTOONING SYSTEMS USING FLATFORM CABLES

- ▶ Put the cable trolley on the guiding rail and push them together at the starting point. The distance between the bedding surface of two trolleys must be wider than double the thickness of all cables when stacked (packeted).
- ▶ Packeting should be started with the smaller cross-section laying on the bedding and built up successively so that the largest cross-section is on top.
- ▶ Also be careful to have a symmetrical load distribution on the bedding of each cable trolley.
- ► For fast moving or multi-packeted systems the larger cross-section cables should have a shorter loop depth than the smaller cross-section cables and be fitted with tow ropes to limit conductor stress and whiplash on acceleration and braking.
- ► Flat cables should never reach full extension especially in the case of multi core flat cables smaller than 2.5mm² where it is critical due to its low tensile strength. Allow +10% cable for calculations of trolley travel length.



F-TPE SERIES continued

| Code | No. of Cores x Size | Approx. Stranding | Approx. Overall Diameter +/-10% | Approx. Weight | Nominal Amps un-enclosed protected from sun @ 30°C fixed application | 3 Phase Volt Drop @50Hz / MAX. Conductor Temp: |
|------------|------------------------|----------------------|---------------------------------------|-------------------|--|--|
| | (mm²) | wires x mm | (mm) | (Kg/Km) | Spaced From 8 | (Mv/Am) |
| F4/1.5PVC | 4 x 1.5 | 84/0.15 | 6.0 x 16.4 | 160 | 18 | 30.000 |
| F4/2.5PVC | 4 x 2.5 | 140/0.15 | 6.9 x 19.6 | 224 | 26 | 16.400 |
| F4/4.0PVC | 4 x 4.0 | 224/0.15 | 8.4 x 24.1 | 328 | 34 | 10.200 |
| F4/6.0PVC | 4 x 6.0 | 192/0.20 | 9.1 x 26.6 | 439 | 44 | 6.800 |
| F4/10PVC | 4 x 10.0 | 320/0.20 | 10.3 x 31.8 | 690 | 61 | 4.050 |
| F4/16PVC | 4 x 16.0 | 512/0.20 | 12.0 x 36.7 | 996 | 82 | 2.550 |
| F4/25PVC | 4 x 25.0 | 800/0.20 | 13.7 x 43.5 | 1490 | 108 | 1.610 |
| F4/35PVC | 4 x 35.0 | 280/0.40 | 15.8 x 49.3 | 1980 | 135 | 1.170 |
| F4/50PVC | 4 x 50.0 | 400/0.40 | 18.1 x 57.7 | 2790 | 168 | 0.868 |
| F4/70PVC | 4 x 70.0 | 356/0.50 | 21.0 x 66.7 | 3630 | 207 | 0.609 |
| F4/95PVC | 4 x 95.0 | 485/0.50 | 23.8 x 76.1 | 4918 | 250 | 0.450 |
| F5/1.5PVC | 5 x 1.5 | 84/0.15 | 5.6 x 21.3 | 200 | 14 | 30.000 |
| F5/2.5PVC | 5 x 2.5 | 140/0.15 | 7.0 x 25.0 | 285 | 20 | 16.400 |
| F5/4.0PVC | 5 x 4.0 | 224/0.15 | 8.4 x 30.4 | 412 | 26 | 10.200 |
| F5/6.0PVC | 5 x 6.0 | 192/0.20 | 9.1 x 33.2 | 550 | 33 | 6.800 |
| F5/10PVC | 5 x 10.0 | 320/0.20 | 10.4 x 40.0 | 866 | 46 | 4.050 |
| F5/25PVC | 5 x 25.0 | 800/0.20 | 14.3 x 54.6 | 1868 | 81 | 1.610 |
| F7/1.5PVC | 7 x 1.5 | 84/0.15 | 5.7 x 27.4 | 270 | 12 | 30.000 |
| F7/2.5PVC | 7 x 2.5 | 140/0.15 | 7.0 x 32.5 | 380 | 17 | 16.400 |
| F7/4.0PVC | 7 x 4.0 | 224/0.15 | 8.5 x 40.4 | 550 | 22 | 10.200 |
| F7/6.0PVC | 7 x 6.0 | 192/0.20 | 9.1 x 44.1 | 740 | 29 | 6.800 |
| F8/1.5PVC | 8 x 1.5 | 84/0.15 | 5.7 x 30.7 | 290 | 12 | 30.000 |
| F8/2.5PVC | 8 x 2.5 | 140/0.15 | 6.9 x 36.7 | 425 | 17 | 16.400 |
| F10/1.5PVC | 10 x 1.5 | 84/0.15 | 6.4 x 39.6 | 365 | 10 | 30.000 |
| F10/2.5PVC | 10 x 2.5 | 140/0.15 | 7.6 x 47.2 | 523 | 14 | 16.400 |
| F12/1.5PVC | 12 x 1.5 | 84/0.15 | 6.4 x 45.6 | 430 | 10 | 30.000 |
| F12/2.5PVC | 12 x 2.5 | 140/0.15 | 7.7 x 53.3 | 628 | 14 | 16.400 |