

CRANE, CONVEYOR, LIFT & REELING CABLES

PR SERIES

High Performance Flexible Rubber Power Reeling / Trailing Cable 0.6/1kV 90°C



APPLICATIONS:

Materials and Handling Systems Suitable for use in cable reelers, crane pendants and festooning systems, conveyor systems and energy chains. Trailing cables are used for high mechanical stress applications, especially for frequent winding and unwinding with simultaneous tensile and torsional loads on cranes, building machinery and conveyors.

Mine Sites Suitable for use in surface mining, stone pits and other heavy industrial applications.

PRODUCT FEATURES:

- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Very good behaviour to variations of outdoor temperatures
- ▶ Good tensile strength, tearing strength and abrasion resistance
- ▶ 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 EPR rubber R90.

Sheath PCP elastomer rubber and inner covering of tape under inner sheath of PCP Elastomer rubber with synthetic yarn for anti-twisting protection.

CHARACTERISTICS:

Operating Temperature Range Fixed -40°C to 90°C / Flexing -25°C to 90°C.

Maximum Conductor Temperature 90°C.

Rated Voltage U_0/U 0.6/1kV.

Max AC Operating Voltage U_0 0.7kV.

Minimum Bending Radius Fixed 7.5 x cable diameter / Flexing 10 x cable diameter.

Sheath Colour Black.

Standard Core Colours

4 Core – Blue, Brown, Black, Green/Yellow.

Multi Core – Black (numbered) + Green/Yellow.

Relevant Standards VDE 0250-814, VDE 0298-4, VDE 0298-3, IEC 60332-1, **CE** Directive 2006/95/EC, **RoHS** Compliant.

CABLES ON A DRUM OR REEL DURING OPERATION (IN LAYERS):

Where layers of flexible cable are accommodated on a cylindrical-type drum or reel, multiply the values by the appropriate factor as follows:

Number of layers de-rating factor	1	2	3	4
	0.85	0.65	0.45	0.35

Where a spiral layer of flexible cable is accommodated on a radial-type drum, multiply the values by a factor of 0.85 for a ventilated drum and 0.75 for unventilated drums. Handling and installing cables on drums and reels requires special care (especially power reeling). Please contact our technical team for details on the correct handling and installation of drum / reeling cables.




Festoons	Cable Winding Reels		Cable Tender Systems	Guide Pulley Systems	Pendant Push Buttons	Cable Carrier Chains	Basket
	Cable laid in ground or in conduit	Vert. Cable					
		X	X	X	X		X

Main Application
Suitable
X Not Suitable - Ask regarding other cable types available

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.

PR SERIES continued

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm ²)	No. of wires x mm	(mm)	(Kg/Km)	Touching 	90°C (Mv/Am)
PR07/1.5	7 x 1.5	30/0.25	19.1	490	15	30.000
PR12/1.5	12 x 1.5	30/0.25	22.3	680	15	30.000
PR18/1.5	18 x 1.5	30/0.25	25.3	890	15	30.000
PR24/1.5	24 x 1.5	30/0.25	29.4	1140	15	30.000
PR30/1.5	30 x 1.5	30/0.25	31.5	1360	15	30.000
PR36/1.5	36 x 1.5	30/0.25	33.5	1540	15	30.000
PR07/2.5	7 x 2.5	50/0.25	21.2	660	20	16.400
PR12/2.5	12 x 2.5	50/0.25	24.8	910	20	16.400
PR18/2.5	18 x 2.5	50/0.25	30.2	1270	20	16.400
PR24/2.5	24 x 2.5	50/0.25	33.6	1680	20	16.400
PR30/2.5	30 x 2.5	50/0.25	35.4	1890	20	16.400
PR36/2.5	36 x 2.5	50/0.25	38.4	2250	20	16.400
PR04/4.0	4 x 4.0	56/0.30	20.0	550	37	10.200
PR04/6.0	4 x 6.0	84/0.30	21.5	680	47	6.800
PR04/10	4 x 10.0	80/0.40	25.5	1030	67	4.050
PR04/16	4 x 16.0	128/0.40	30.0	1470	89	2.550
PR04/25	4 x 25.0	200/0.40	35.0	2130	119	1.160
PR04/35	4 x 35.0	280/0.40	39.0	2750	149	1.170

NOTE:

- ▶ During installation and operation the tensile stress must not exceed 15N/mm² and acceleration must not be more than 0.4m/sec.
- ▶ While in use 1 or 2 revolutions should remain on the operated drum.
- ▶ For reeling cables requiring higher tensile loads or for other applications please enquire with technical department.