

Low Voltage Control and Heavy-Duty Reeling Cable



X'PREM PUR 600™ cable designed for heavy duty reeling and power supply connection applications to all types of mobile equipment. The Polyurethane outer sheath, central strength member and anti-twist element allows for medium to high mechanical stresses, torsion, tension, torque and severe environmental conditions. The special Polyurethane compound is UV resistant and offers exceptionally good protection against hydrolysis and oils.



Mechanical
Stress
Resistance



Cold
Resistant



Tear
Resistant



UV
Resistant



Ozone
Resistant



Weather
Resistant



Explosion
Proof

Design Features:

Conductor:	Circular, flexible plain annealed copper (Class 5, according to IEC 60228).
Insulation:	XLPE (Cross Linked Polyethylene)
Lay-up:	Insulated cores laid in concentric layers
Central strength member:	Aramid yarns
Inner sheath material:	PUR (Polyurethane)
Reinforcement:	Anti-twist element (Textile braiding)
Outer sheath material:	PUR (Polyurethane)
Outer sheath colour:	Black (similar to RAL 9005) or Yellow (similar to RAL 1021)

Special and Main Characteristics:

Excellent mechanical resistance

Flame retardant to IEC 60332-1

Halogen-free

Oil resistant to HD/EN/IEC 60811-2-1, DIN VDE 0473-811-2-1

Moisture resistant

UV resistant

Core Identification:

Power:	4 cores – Black, Brown, Grey and Green/Yellow (3 earth cores for sizes $\geq 25\text{mm}^2$)
	5 cores – Black, Brown, Grey, Blue and Green/Yellow
Control:	White with printed Black number cores

Cable Marking:

X'PREM PUR 600™ – number of cores – cross-section-CSE – week of manufacture – year of manufacture

Mechanical Characteristics:

Maximum tensile load:	25 N/mm ² of phases copper cross section 6
Minimum bending radius	
Fixed installation:	6 x d
Mobile application:	8 x d
S-shape deflection:	20 x d
Tests:	Bending test, torsional test, reeling test
Reeling speed:	Up to 120m/min (higher speed on request)

Chemical Properties:

For outdoor applications, Moisture, UV and Ozone, Oil and Chemical resistant
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Electrical and Thermal Properties:

Nominal voltage:	U ₀ /U 0.6/1kV
Maximum operating voltage in AC systems:	U _m 2 x U
Test voltage	
Power:	3.5 kV in AC
Control:	2.5 kV in AC
Current rating (Amp):	In accordance with IEC 60354-5-52-12
Maximum temperature at the conductor	
In service:	+90°C
Under short-circuit conditions:	+250°C
Maximum surface temperature	
Fixed installation:	-40°C up to +80°C
Mobile operation:	-30°C up to +80°C

Technical Characteristics:

X'PREM PUR 600™ - Power Cable

PART NUMBER	CABLE SIZE (mm ²)	MINIMUM OUTER DIAMETER (mm)	MAXIMUM OUTER DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAXIMUM TENSILE LOAD (N)	CURRENT CARRYING CAPACITY (Amp)
PUR600-4G-2.5	4G 2.5	10.0	11.5	185	250	30
PUR600-4G-4	4G 4.0	11.5	13.0	262	400	40
PUR600-4G-6	4G 6.0	13.0	14.5	378	600	51
PUR600-4G-10	4G 10	15.5	17.0	585	1,000	71
PUR600-4G-16	4G 16	19.5	21.5	860	1,600	95
PUR600-3X25+3G6	3X25+3G6.0	23.5	25.5	1,250	1,960	121
PUR600-3X35+3G6	3X35+3G6.0	27.0	29.5	1,550	2,650	150
PUR600-3X50+3G10	3X50+3G10	30.0	32.5	2,300	3,750	182
PUR600-3X70+3G16	3X70+3G16	35.0	37.5	3,150	5,250	234
PUR600-3X95+3G16	3X95+3G16	39.0	42.0	3,850	7,150	283
PUR600-3X120+3G25	3X120+3G25	44.0	47.0	5,100	9,000	329
PUR600-3X150+3G25	3X150+3G15	49.0	52.5	6,100	11,250	375
PUR600-3X185+3G35	3X185+3G35	54.5	58.5	7,200	13,800	428
PUR600-3X240+3G50	3X240+3G50	60.5	64.5	8,950	18,000	511
PUR600-3X300+3G50	3X300+3G50	68.5	72.5	11,850	22,500	555
PUR600-5G-2.5	5G 2.5	11.0	12.5	220	310	30
PUR600-5G-4	5G 4.0	13.0	14.5	320	500	40
PUR600-5G-6	5G 6.0	15.0	16.5	450	750	51
PUR600-5G-10	5G 10	18.0	20.0	700	1,250	75
PUR600-5G-16	5G 16	22.0	24.0	1,050	2,000	95
PUR600-5G-25	5G 25	27.0	29.5	1,400	3,100	121
PUR600-5G-35	5G 35	31.0	33.5	1,950	4,350	150

X'PREM PUR 600™ - Control Cable

PART NUMBER	CABLE SIZE (mm ²)	MINIMUM OUTER DIAMETER (mm)	MAXIMUM OUTER DIAMETER (mm)	APPROX. CABLE WEIGHT (kg/km)	MAXIMUM TENSILE LOAD (N)	CURRENT CARRYING CAPACITY (Amp)
PUR600-7X1.5	7 X 1.5	11.5	13.0	210	260	20
PUR600-12X1.5	12 X 1.5	16.0	17.5	350	450	16
PUR600-18X1.5	18 X 1.5	16.0	17.5	410	670	12
PUR600-24X1.5	24 X 1.5	19.0	21.5	680	900	10
PUR600-36X1.5	36 X 1.5	22.0	24.0	900	1,350	8
PUR600-7X2.5	7 X 2.5	12.5	14.0	430	430	28
PUR600-12X2.5	12 X 2.5	18.5	20.5	610	750	22
PUR600-18X2.5	18 X 2.5	18.5	20.5	740	1,120	16
PUR600-24X2.5	24 X 2.5	22.5	24.5	1,030	1,500	12
PUR600-36X2.5	36 X 2.5	25.0	28.0	1,380	2,250	10
PUR600-42X2.5	42 X 2.5	27.0	29.5	1,520	2,620	8

Note:

Current carrying capacities are given for an uncoiled cable laid on the ground, a conductor temperature of 90°C and ambient temperature of 30°C. Correction factors must be applied for other conditions.

Options:

Other sizes are available upon request as e.g. composite cable including power and control cores, screened pairs or optical fibre elements.