

QWPK 450/750V

Flexible cable with Polyurethane sheath



NEN: BMqL 450/750 V
CLC: H07BQ-F

Application:

- Especially suitable for heavy-duty applications, where cables have to endure rubbing and dragging across rough and/or sharp surfaces
- For applications, like on building sites, in garages, on shipyards, in refrigeration engineering or at road works

General properties:

- Excellent resistance to heavy mechanical stress
- Highly abrasion resistant
- Very good cold resistance
- Excellent resistance to the effects of oil and greases
- Very good resistance to weather influences (including ozone)

Construction:

Conductor: flexible tinned copper (class 5)
Insulation: ethylene propylene rubber (EPR)
Assembly: cores cabled together, filled to make a round shape
Outer sheath: polyurethane (PUR)

Electrical properties:

Voltage rating: 450/750 V
Test voltage: 2,5 kV

Core colours:

2 cores: brown, blue
3 cores: brown, blue, green-and-yellow
4 cores: brown, black, grey, green-and-yellow
5 cores: brown, black, grey, blue, green-and-yellow

Standards/References:

NEN-EN 50525

Additional information:

Minimum installation temperature: -40 °C
Maximum conductor temperature: +90 °C
Operating temperature: min. -40 °C, max. +75 °C
Sheath colour: yellow
Approval: <HAR>
Packaging: coils, drums

Construction data

Conductor category	Class 5 = flexible
Core insulation	Rubber (EPR)
Core identification	Colour
Screen	No
Material outer sheath	PUR (Polyurethane)
Colour outer sheath	Yellow
Model	Round
Conductor material	Cu, tinned
Stranding	Multi-core

Properties

Low smoke (acc. EN 61034-2)	No
Halogen free (acc. EN 60754-1/2)	Yes
Flame retardant	No
Oil resistant (acc. EN 60811-404)	Yes
Max. conductor temperature	90 °C
Permitted cable outer temperature, in movement	-40 / 75 °C
Permitted cable outer temperature, fixed	-40 / 75 °C

Electrical

Nominal voltage U ₀	450 V
Nominal voltage U	750 V

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Product Range

Produkt nr.	No. of cores and conductor cross-section ¹ (n x mm ²)	Outer sheath colour	Nominal diameter over insulation (mm)	Nominal overall diameter (mm)	Minimum bending radius ² (mm)	Maximum tensile strength ³ (N)	Approx. weight (kg/km)
120423	2x1,5	Yellow	3,1	8,6	35	45	110
120424	2x2,5	Yellow	3,7	10,1	45	75	155
120425	3x1,5	Yellow	3,1	9,1	40	67	125
120428	3x2,5	Yellow	3,7	10,7	45	110	180
120431	3x4	Yellow	4,4	12,5	65	180	260
120426	4x1,5	Yellow	3,1	10,1	45	90	155
120429	4x2,5	Yellow	3,7	11,9	50	150	225
120432	4x4	Yellow	4,4	13,8	70	240	325
120427	5x1,5	Yellow	3,1	11,0	45	110	185
120430	5x2,5	Yellow	3,7	13,2	70	185	275
120433	5x4	Yellow	4,4	15,4	80	300	390
120434	5x6	Yellow	5	17,2	90	450	520

1) The letter G in this column indicates presence of a green-and-yellow core. The letter x indicates absence of a green-and-yellow core.

2) For flexible wiring.

3) Static tensile strength; also during dynamic application, when often higher forces are expected, the mentioned tensile strength may not be exceeded.

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Electrical features

Produkt nr.	No. of cores and conductor cross-section ¹ (n x mm ²)	Outer sheath colour	Conductor resistance at 20 °C, DC (ohm/km)	Conductor resistance at 60 °C, 50 Hz (ohm/km)	Maximum current rating ² (A)	Mutual inductance ³ (mH/km)
120423	2x1,5	Yellow	13,7	17,5	22	0,33
120424	2x2,5	Yellow	8,21	10,5	35	0,32
120425	3x1,5	Yellow	13,7	17,5	22	0,33
120428	3x2,5	Yellow	8,21	10,5	35	0,32
120431	3x4	Yellow	5,09	6,49	48	0,3
120426	4x1,5	Yellow	13,7	17,5	19	0,4
120429	4x2,5	Yellow	8,21	10,5	31	0,39
120432	4x4	Yellow	5,09	6,49	41	0,37
120427	5x1,5	Yellow	13,7	17,5	19	0,4
120430	5x2,5	Yellow	8,21	10,5	31	0,39
120433	5x4	Yellow	5,09	6,49	41	0,37
120434	5x6	Yellow	3,39	4,32	50	0,36

1) The letter G in this column indicates presence of a green-and-yellow core. The letter x indicates absence of a green-and-yellow core.

2) The maximum current rating applies to one cable in free air, at an ambient temperature of 30 °C based on HD 516 and NEN 1010:2007, table E.52-1. Correction factors for other ambient temperatures than 30 °C are given in table E.52-6. For 4- and 5-cores cables the maximum current is given for 3 cores loaded.

3) For 4- and 5-cores the working self-inductance for 2 not adjacent cores is given.