638*TQ / H07BN4-F
450/750V

EN 50525-2-21

Heat resisting 90°C epr insulated and cpe sheathed flexible cable, 450/750V

APPLICATIONS

For general use in hot situations and heating applications. Heavy-duty flexible cables for medium mechanical stress in dry and wet, suitable for large boiling installations, heating plates Inspections lamps , electrical tools such as drills circular saws Domestic electric tools, transportable motors etc. Other industrial applications. Cable may be rated at 600/1000V when installed with mechanical protection

Standard length cable packing	1000m on drums. Other forms of packing and delivery are available on request

CONSTRUCTION

Conductors	Annealed flexible stranded tin coated or bare copper class 5 to EN 60228, IEC 60228
Separator	If needed a suitable tape separator between the conductor and insulation
Insulation	Ethylene-propylene rubber (EPR) type EI7
Circuit identification Twin 3-core 4-core 5-core Above 5-core	Colour coding of power conductors comply to HD 308 Blue and brown Green-yellow, blue, brown Green-yellow, brown, black, grey Green-yellow, blue, brown black, grey Green-yellow, other cores black with white numbering
Outer jacket	A synthetic thermosetting compound type EM7
Colour of outer jacket	Black or colours can be provided
Flame propagation	EN 60332-1-2:2004, IEC 60332-1-2:2004

Minimum bending radius:	**For cable diameter D (mm)**			
	D < 8	**8 < D < 12**	**12 < D < 20**	**D > 20**
For fixed installation:	3 D	3 D	4 D	4 D
At inlet of portable appliance or mobile equipment. No mechanical load on cable	4 D	4 D	5 D	6 D
Under mechanical load	6 D	6 D	6 D	8 D

Features

- Maximum conductor operating temperature: +90°C
- Maximum conductor temperature during short circuit: +250°C
- Lowest ambient temperature for fixed installation: -40°C
- Lowest ambient temperature for mobile installation: -25°C
- UV, sunlight, oil resistant

Number and cross-sectional area of conductor	Maximum diameter of wires	Nominal thickness of insulation	Nominal thickness of sheath	Approximate overall diameter	Approximate net weight	Maximum resistance of conductor at 20°C
n x mm²	**mm**	**mm**	**mm**	**mm**	**kg/km**	**Ω/km**
1 x 1,5	0,26	0,8	1,4	5,9	50	13,7
1 x 2,5	0,26	0,9	1,4	6,6	65	8,21
1 x 4	0,31	1,0	1,5	7,5	89	5,09
1 x 6	0,31	1,0	1,6	8,4	118	3,39
1 x 10	0,41	1,2	1,8	10,1	179	1,95
1 x 16	0,41	1,2	1,9	11,5	248	1,24
1 x 25	0,41	1,4	2,0	13,2	354	0,795
1 x 35	0,41	1,4	2,2	14,7	460	0,565
1 x 50	0,41	1,6	2,4	17,2	640	0,393
1 x 70	0,51	1,6	2,6	19,3	877	0,277
1 x 95	0,51	1,8	2,8	22,2	1138	0,210
1 x 120	0,51	1,8	3,0	23,7	1399	0,164
1 x 150	0,51	2,0	3,2	26,4	1732	0,132
1 x 185	0,51	2,2	3,4	29,4	2102	0,108
1 x 240	0,51	2,4	3,5	31.5	2657	0,0817
1 x 300	0,51	2,6	3,6	35,7	3296	0,0654
1 x 400	0,51	2,8	3,8	38,3	4205	0,0495
1 x 500	0,61	3,0	4,0	43,8	5285	0,0391
1 x 630	0,61	3,0	4,1	48,4	6837	0,0292
2 x 4	0,31	1,0	1,8	13,0	236	5,09
2 x 6	0,31	1,0	2,0	14,2	292	3,39
2 x 10	0,41	1,2	3,1	19,3	561	1,95
2 x 16	0,41	1,2	3,3	22,0	719	1,24
2 x 25	0,41	1,4	3,6	25,7	1026	0,795
3 x 4	0,31	1,0	1,9	13,9	295	5,09

Number and cross-sectional area of conductor	Maximum diameter of wires	Nominal thickness of insulation	Nominal thickness of sheath	Approximate overall diameter	Approximate net weight	Maximum resistance of conductor at 20°C
n x mm²	**mm**	**mm**	**mm**	**mm**	**kg/km**	**Ω/km**
3 x 6	0,31	1,0	2,1	15,4	359	3,39
3 x 10	0,41	1,2	3,3	20,7	648	1,95
3 x 16	0,41	1,2	3,5	23,5	908	1,24
3 x 25	0,41	1,4	3,8	27,5	1302	0,795
3 x 35	0,41	1,4	4,1	29,7	1633	0,565
3 x 50	0,41	1,6	4,5	35,7	2310	0,393
4 x 4	0,31	1,0	2,0	14,9	337	5,09
4 x 6	0,31	1,0	2,3	16,9	456	3,39
4 x 16	0,41	1,2	3,6	25,7	1119	1,24
4 x 25	0,41	1,4	4,1	30,5	1642	0,795
4 x 35	0,41	1,4	4,4	32,9	2092	0,565
4 x 50	0,41	1,6	4,8	39,5	2965	0,393

*Based on EN 50525-2-21 - as 07BN4-F, special colour coding can be provided