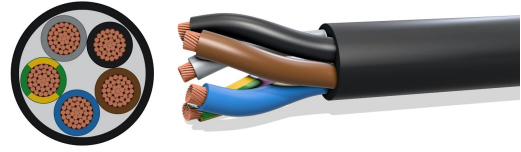


Application

H07BN4-F is a harmonised heavy-duty flexible cable to EN 50525-2-21 with EPR rubber insulation and a chlorosulphonated polyethylene (CSP) sheath, rated 450/750 V and designed for a maximum conductor temperature of 90 °C. It is intended for supply and control connections under very heavy mechanical stress, such as mining, quarrying, construction sites, cranes, conveyors, mobile machinery and generating equipment, in dry, damp and wet locations and outdoors. The sheath is oil-, weather-, ozone- and UV-resistant; the higher conductor temperature allows higher current ratings than H07RN-F for the same cross-section, and the cable may also be used in protected fixed installations up to 1000 V a.c. where the relevant installation rules permit. It is not intended for continuous reeling or forced-guided use.



CONSTRUCTION

Conductor	Fine-wire stranded plain (bare) annealed copper, class 5 to IEC/EN 60228.
Insulation	EPR rubber (compound EI 7 to EN 50363-1), 90 °C.
Sheath	Chlorosulphonated polyethylene (CSP), heavy-duty compound EM 7 to EN 50363-2-1, round; black.
Core colours	To HD 308 S2: 1 core black; 2 cores brown, blue; 3 cores (G) green/yellow, brown, blue; 3 cores (X) brown, black, grey; 4 cores (G) green/yellow, brown, black, grey; 4 cores (X) blue, brown, black, grey; 5 cores (G) green/yellow, blue, brown, black, grey; 5 cores (X) blue, brown, black, grey, black; 7 cores and more black with white numbers plus one green/yellow core.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage Uo/U	450/750 V.
Test voltage	2.5 kV.
Standard	EN 50525-2-21.
Flame-retardant	IEC/EN 60332-1-2.
Conductor standard	IEC/EN 60228 class 5.
Max. conductor temperature	+90 °C.
Permitted outer cable temperature, fixed	-35 °C to +90 °C.
Permitted outer cable temperature, moved	-20 °C to +90 °C.
Min. bending radius, fixed	4 × outer diameter.
Min. bending radius, moved	8 × outer diameter.
Reaction to fire (CPR)	Outside the scope of EN 50575 (flexible connection cable, not for permanent installation in construction works).

DIMENSIONS & TECHNICAL DATA

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 1	19.5	7.7	90
3 × 1	19.5	8.3	110
4 × 1	19.5	9.2	136
5 × 1	19.5	10.2	168
1 × 1.5	13.3	5.7	50
2 × 1.5	13.3	8.5	109
3 × 1.5	13.3	9.2	134
4 × 1.5	13.3	10.2	166
5 × 1.5	13.3	11.2	206
7 × 1.5	13.3	13.4	315
10 × 1.5	13.3	15.95	420
12 × 1.5	13.3	17.6	493
19 × 1.5	13.3	20.7	710
24 × 1.5	13.3	24.3	898
36 × 1.5	13.3	27.8	1246
1 × 2.5	7.98	6.3	65
2 × 2.5	7.98	10.2	158
3 × 2.5	7.98	10.9	196
4 × 2.5	7.98	12.1	241
5 × 2.5	7.98	13.3	297
7 × 2.5	7.98	15.7	445
12 × 2.5	7.98	20.6	702
19 × 2.5	7.98	24.4	1030
24 × 2.5	7.98	28.8	1312
36 × 2.5	7.98	33.2	1851
1 × 4	4.95	7.2	89
2 × 4	4.95	11.8	217
3 × 4	4.95	12.7	271
4 × 4	4.95	14	336
5 × 4	4.95	15.6	422
7 × 4	4.95	18.2	618
12 × 4	4.95	24.4	1004
1 × 6	3.3	7.9	115
2 × 6	3.3	13.1	282
3 × 6	3.3	14.1	355
4 × 6	3.3	15.7	449
5 × 6	3.3	17.5	567
1 × 10	1.91	9.5	190
2 × 10	1.91	17.7	539
3 × 10	1.91	19.1	674
4 × 10	1.91	20.9	833
5 × 10	1.91	22.9	1010
1 × 16	1.21	10.8	259
2 × 16	1.21	20.2	722
3 × 16	1.21	21.8	913

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
4 × 16	1.21	23.8	1138
5 × 16	1.21	26.4	1400
1 × 25	0.78	12.7	375
2 × 25	0.78	24.3	1043
3 × 25	0.78	26.1	1324
4 × 25	0.78	28.9	1714
5 × 25	0.78	32	2096
1 × 35	0.554	14.3	492
3 × 35	0.554	29.3	1754
4 × 35	0.554	32.5	2204
5 × 35	0.554	35.7	2700
1 × 50	0.386	16.5	675
3 × 50	0.386	34.1	2409
4 × 50	0.386	37.7	3029
5 × 50	0.386	41.8	3750
1 × 70	0.272	18.6	908
3 × 70	0.272	38.4	3211
4 × 70	0.272	42.7	4121
5 × 70	0.272	47.5	5040
1 × 95	0.206	20.8	1171
3 × 95	0.206	43.3	4210
4 × 95	0.206	48.4	5361
1 × 120	0.161	22.8	1445
3 × 120	0.161	47.4	5205
4 × 120	0.161	53	6546
1 × 150	0.129	25.2	1783
3 × 150	0.129	52	6389
4 × 150	0.129	58	8095
1 × 185	0.106	27.6	2125
3 × 185	0.106	57	7591
4 × 185	0.106	64	9652
1 × 240	0.0801	30.6	2733
3 × 240	0.0801	65	9944
4 × 240	0.0801	72	12614
1 × 300	0.0641	33.5	3348
3 × 300	0.0641	72	11545
4 × 300	0.0641	80	17045
1 × 400	0.0486	37.4	n/a
1 × 500	0.0384	41.3	n/a
1 × 630	0.0287	45.5	6800

Dimensions and weights are manufacturer values of the leading reference source; conductor resistance is the maximum per IEC/EN 60228 class 5; all values are indicative and non-binding.