



Control & signal cable

NR Type B1 / B2

Network Rail Type B1 / B2 Unarmoured Multicore

Network Rail NR/PS/SIG/00005 650/1100 V GP4 EPR / EM2 PCP unarmoured signalling cable



NR/PS/SIG/00005 Type B1/B2

650/1100 V Trackside Rail

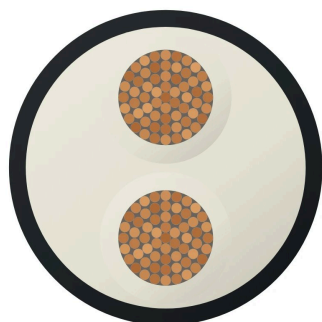
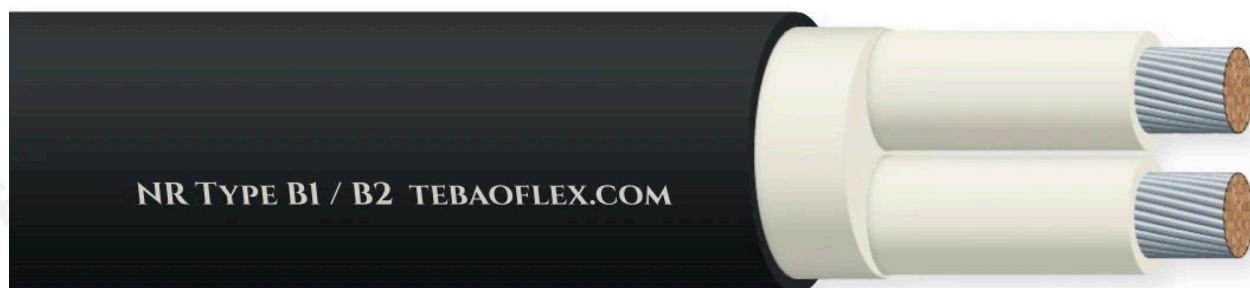
GP4 EPR + EM2 Heavy PCP

Application

NR Type B1 (multicore) and Type B2 (single/twin) UK Network Rail trackside signalling cable (NR/PS/SIG/00005, 650/1100 V AC, -25 to +85 °C) with tinned copper cores (1.5–35 mm²), BS 7655 GP4 EPR insulation, and BS 7655 EM2 heavy-duty PCP sheath.

Typical uses: UK Network Rail Trackside Troughing, Wayside Location Cases & Relay Rooms, Colour-Light LED & Filament Signal Feeds, Clamp-Lock & HW Point Machine Tails, Track-Circuit Feed & Receiver Connections

Construction



Cross-section, not to scale

- 1 Tinned copper conductors
- 2 Type GP4 EPR core insulation
- 3 Core binder tape
- 4 Type EM2 heavy-duty PCP sheath

Technical data

Typical values

Rated voltage U0/U	650/1100 V AC	AC dielectric test voltage	3,500 V AC RMS for 5 minutes
Max. DC resistance (+20 °C)	12.8 Ω/km (1.5 mm ² 30/0.25) · 7.56 Ω/km (2.5 mm ²)	Insulation resistance	GP4 EPR per BS 7655-1.2
Operating temperature range	-25 °C to +85 °C	Short-circuit conductor temp.	+250 °C (thermoset GP4 EPR)
1.5 mm ² conductor stranding	30/0.25 mm tinned copper (flexible)	Min. bending radius	6 × overall cable diameter (fixed)
Core identification	White insulation with black numbers	Oil & fuel resistance	BS 7655-2.1 Type EM2 PCP sheath
Flame retardance	BS EN 60332-1-2 self-extinguishing	Weather & UV resistance	Trackside trough & exposed tail rated
Standards	NR/PS/SIG/00005 (RT/E/PS/00005 / BR 895)		

Sizes

13 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cross-section / size	Conductor build	Wall ≈ mm	Outer Ø ≈ mm	Metal kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard NR Type B1 / B2 configurations 13 sizes							
☐ NR Type B1 2×1.5	2 × 1.5	30/0.25	1.23	11.20	72.6	165.0	68
☐ NR Type B1 4×1.5	4 × 1.5	30/0.25	1.41	12.80	101.2	230.0	77
☐ NR Type B1 7×1.5	7 × 1.5	30/0.25	1.63	14.80	147.4	335.0	89
☐ NR Type B1 10×1.5	10 × 1.5	30/0.25	2.00	18.20	211.2	480.0	110
☐ NR Type B1 12×1.5	12 × 1.5	30/0.25	2.07	18.80	235.4	535.0	113
☐ NR Type B1 19×1.5	19 × 1.5	30/0.25	2.40	21.80	334.4	760.0	131
☐ NR Type B1 27×1.5	27 × 1.5	30/0.25	2.84	25.80	462.0	1,050.0	155
☐ NR Type B1 37×1.5	37 × 1.5	30/0.25	3.17	28.80	607.2	1,380.0	173
☐ NR Type B1 48×1.5	48 × 1.5	30/0.25	3.63	33.00	787.6	1,790.0	198
☐ NR Type B2 2×2.5	2 × 2.5	7/0.67	1.36	12.40	92.4	210.0	75
☐ NR Type B2 2×6.0	2 × 6.0	7/1.04	1.67	15.20	156.2	355.0	92
☐ NR Type B2 2×10	2 × 10	7/1.35	1.94	17.60	224.4	510.0	106
☐ NR Type B2 1×16	1 × 16	7/1.70	1.19	10.80	107.8	245.0	65

– Outer diameters and weights are nominal engineering values for NR Type B1 / B2 subject to standard manufacturing tolerances per Network Rail NR/PS/SIG/00005 (formerly RT/E/PS/00005 & BR 895) Type B1 / B2.

Electrical & rating data

13 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Primary rating (A or nF/km)	Secondary rating	Dielectric test V AC rms
2 × 1.5	12.80	18.0	15.3	3,500
4 × 1.5	12.80	18.0	15.3	3,500
7 × 1.5	12.80	18.0	15.3	3,500
10 × 1.5	12.80	18.0	15.3	3,500
12 × 1.5	12.80	18.0	15.3	3,500
19 × 1.5	12.80	18.0	15.3	3,500
27 × 1.5	12.80	18.0	15.3	3,500
37 × 1.5	12.80	18.0	15.3	3,500
48 × 1.5	12.80	18.0	15.3	3,500
2 × 2.5	12.80	18.0	15.3	3,500
2 × 6.0	12.80	18.0	15.3	3,500

Configuration	Max. DC R @ 20 °C Ω/km	Primary rating (A or nF/km)	Secondary rating	Dielectric test V AC rms
2 × 10	12.80	18.0	15.3	3,500
1 × 16	12.80	18.0	15.3	3,500

– Electrical resistance at +20 °C and dielectric withstand voltages verified per Network Rail NR/PS/SIG/00005 (formerly RT/E/PS/00005 & BR 895) Type B1 / B2.

Standards and approvals

- ✓ Network Rail NR/PS/SIG/00005 (formerly RT/E/PS/00005 & BR 895) Type B1 / B2
- ✓ CE (2014/35/EU) & RoHS 3 (2015/863/EU) Compliant
- ✓ REACH SVHC Compliance Verified

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/network-rail-type-b1-b2-unarmoured-multicore-trackside-railway-signalling-cable



Typical values for this cable type, based on Network Rail NR/PS/SIG/00005 (formerly RT/E/PS/00005 & BR 895) Type B1 / B2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.