

EPR Insulated, HD PCP & LSZH Sheathed Cables



Application

Anixter signalling cables are designed for use in remote operation of trackside signalling systems.

Construction

These cables feature heavy duty PCP sheaths for protection from abrasion, mechanical impact, contact with oils and greases. Type A1, A2 and A3 cables feature a LSZH insulation, with Type A2 and A3 cables having an additional LSZH sheath.

Specification

- In accordance with Network Rail Specification NR/PS/SIG/00005 for Type A1, A2, A3, B1, B2, C1, C2, C3, D1, D2, E1, E2 and E3 cables.
- **Conductors:** Stranded class 2 or flexible class 5 tinned copper conductors to BS EN 60228 and Table 1 of NR/PS/SIG/00005.
- **Insulation:** EPR insulation Type GP4 to BS7655 for Types B1, B2, C1, C2, C3, D1, D2, E1, E2 and E3 cables. Type A1, A2 and A3 cables will have LSZH insulation.
- **Core Identification:**
Type A1 (single core) cable – various colours.
Type A2, B1, C1, D1 and E1 (single core) cables – black.
Type A3, B2, C2, C3, D2, E2 and E3 cables – white printed numbers on black insulation.
Option of red, black on two core cable only.
- **Screen:** Type C3 and E3 cables have collective screen, featuring aluminium/p.e.t.p. tape in contact with tinned copper drain wire.
- **Outer Sheath:** Black heavy duty PCP Type RS2 to BS7655 for Types B1, B2, C1, C2 and C3 cables. LSZH outer sheath to NR/PS/SIG/00005 for Type A2, A3, D1, D2, E1, E2 and E3 cables.
- **Flame Retardant** to BS EN 60332-1-2
- **Voltage Rating:** 650/1100V.
- **Temperature Rating:** 60°C maximum conductor operating temperature (85°C for LSZH sheathed cables).

NR/PS/SIG/00005 replaces RT.

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PADS (BR) Catalogue Number	Anixter Number	Cable Type	Conductor			Nominal Outer Diameter mm	Nominal Weight kg/km	Minimum Bending Radius Fixed Bend mm
			Number of Cores	Nominal Conductor Area mm ²	Number and Nominal Diameter of Strands #/mm			
6/120001	A3A1-010075-06	A1 (blue)	1	0.75	7/0.37	2.9	16	10
6/120002	A3A1-010075-07	A1 (brown)	1	0.75	7/0.37	2.9	16	10
6/120003	A3A1-010075-03	A1 (red)	1	0.75	7/0.37	2.9	16	10
6/120004	A3A1-010075-08	A1 (orange)	1	0.75	7/0.37	2.9	16	10
6/120005	A3A1-010075-09	A1 (grey)	1	0.75	7/0.37	2.9	16	10
6/120006	A3A1-010075-10	A1 (violet)	1	0.75	7/0.37	2.9	16	10
6/120007	A3A1-010075-02	A1 (black)	1	0.75	7/0.37	2.9	16	10
6/120008	A3A1-010115-02	A1 (black)	1	1.15	16/0.30	3.2	20	10
6/120024	A3A2-010115-02	A2	1	1.15	16/0.30	4.7	35	15
6/120040	A3A3-020075-02	A3	2	0.75	7/0.37	8.1	67	30
6/120041	A3A3-040075-02	A3	4	0.75	7/0.37	9.5	108	30
6/120042	A3A3-060075-02	A3	6	0.75	7/0.37	11.5	160	40
6/120043	A3A3-100075-02	A3	10	0.75	7/0.37	13.8	259	60
6/120044	A3A3-140075-02	A3	14	0.75	7/0.37	15.1	495	70
6/120045	A3A3-360075-02	A3	36	0.75	7/0.37	21.9	752	90
6/120062	A3B1-010100-02	B1	1	10	7/1.35	10.5	205	60
6/120063	A3B1-010350-02	B1	1	35	19/1.53	14.6	495	90
6/120081	A3B2-020015-02	B2	2	1.5	7/0.53	10.9	135	60
6/120082	A3B2-020025-02	B2	2	2.5	7/0.67	11.93	170	60
6/120083	A3B2-020100-02	B2	2	10	7/1.35	17.0	443	110
6/120084	A3B2-020350-02	B2	2	35	19/1.53	25.8	1232	160
6/120085	A3B2-020700-02	B2	2	70	19/2.14	32.8	2043	200
6/120086	A3B2-020950-02	B2	2	95	19/2.52	38.1	2945	230
6/120094	A3B2-100015-02	B2	10	1.5	7/0.53	17.7	401	110
6/120093	A3B2-100075-02	B2	10	0.75	7/0.37	15.6	280	100
6/120097	A3B2-120015-02	B2	12	1.5	7/0.53	17.3	410	110
6/120096	A3B2-120075-02	B2	12	0.75	7/0.37	16.2	321	100
6/120100	A3B2-190015-02	B2	19	1.5	7/0.53	19.9	615	120
6/120101	A3B2-190025-02	B2	19	2.5	7/0.67	22.0	815	140
6/120099	A3B2-190075-02	B2	19	0.75	7/0.37	17.4	425	110
6/120103	A3B2-270015-02	B2	27	1.5	7/0.53	24.09	897	150
6/120104	A3B2-270025-02	B2	27	2.5	7/0.67	26.5	1200	160
6/120102	A3B2-270075-02	B2	27	0.75	7/0.37	22.5	606	140
6/120106	A3B2-370015-02	B2	37	1.5	7/0.53	27.9	1126	170
6/120107	A3B2-370025-02	B2	37	2.5	7/0.67	29.8	1600	180
6/120105	A3B2-370075-02	B2	37	0.75	7/0.37	25.3	786	160
6/120109	A3B2-480015-02	B2	48	1.5	7/0.53	32.5	1280	200
6/120108	A3B2-480075-02	B2	48	0.75	7/0.37	28.9	972	180
6/120130	A3C1-010025-02	C1	1	2.5	50/0.25	11.7	174	60
6/120140	A3C2-020025-02	C2	2	2.5	50/0.25	16.8	342	70
6/120141	A3C2-040025-02	C2	4	2.5	50/0.25	18.6	445	80
6/120142	A3C2-070025-02	C2	7	2.5	50/0.25	21.2	590	90
6/120143	A3C2-100025-02	C2	10	2.5	50/0.25	25.5	784	110
6/120144	A3C2-120025-02	C2	12	2.5	50/0.25	26.2	868	110
6/160086	A3C3-020025-02	C3 TPWS	1 pair	2.5	50/0.25	16.6	250	100

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			Number of Cores	Nominal Conductor Area mm ²	Number and Nominal Diameter of Strands #/mm			
6/120214	A3D1-010100-02	D1	1	10	7/1.35	10.5	205	60
6/120215	A3D1-010350-02	D1	1	35	19/1.53	14.6	495	90
-	A3D2-020015-02	D2	2	1.5	7/0.53	10.9	135	60
6/120217	A3D2-020025-02	D2	2	2.5	7/0.67	11.93	170	60
6/120218	A3D2-020100-02	D2	2	10	7/1.35	17.0	443	110
6/120219	A3D2-020350-02	D2	2	35	19/1.53	25.8	1232	160
-	A3D2-020700-02	D2	2	70	19/2.14	32.8	2043	200
-	A3D2-020950-02	D2	2	95	19/2.52	38.1	2945	230
-	A3D2-100015-02	D2	10	1.5	7/0.53	17.7	401	110
-	A3D2-100075-02	D2	10	0.75	7/0.37	15.6	280	100
-	A3D2-120015-02	D2	12	1.5	7/0.53	17.3	410	110
-	A3D2-120075-02	D2	12	0.75	7/0.37	16.2	321	100
-	A3D2-190015-02	D2	19	1.5	7/0.53	19.9	615	120
-	A3D2-190025-02	D2	19	2.5	7/0.67	22.0	815	140
-	A3D2-190075-02	D2	19	0.75	7/0.37	17.4	425	110
6/120239	A3D2-270015-02	D2	27	1.5	7/0.53	24.09	897	150
-	A3D2-270025-02	D2	27	2.5	7/0.67	26.5	1200	160
6/120238	A3D2-270075-02	D2	27	0.75	7/0.37	22.5	606	140
6/120242	A3D2-370015-02	D2	37	1.5	7/0.53	27.9	1126	170
-	A3D2-370025-02	D2	37	2.5	7/0.67	29.8	1600	180
6/120241	A3D2-370075-02	D2	37	0.75	7/0.37	25.3	786	160
6/120245	A3D2-480015-02	D2	48	1.5	7/0.53	32.5	1280	200
6/120244	A3D2-480075-02	D2	48	0.75	7/0.37	28.9	972	180
6/120172	A3E1-010025-02	E1	1	2.5	50/0.25	11.7	174	60
6/120170	A3E2-020025-02	E2	2	2.5	50/0.25	16.8	342	70
6/120171	A3E2-040025-02	E2	4	2.5	50/0.25	18.6	445	80
6/120173	A3E2-070025-02	E2	7	2.5	50/0.25	21.2	590	90
6/120174	A3E2-100025-02	E2	10	2.5	50/0.25	25.5	784	110
6/120175	A3E2-120025-02	E2	12	2.5	50/0.25	26.2	868	110
6/160090	A3E3-020025-02	E3 TPWS	1 pair	2.5	50/0.25	16.6	250	100

EPR Insulated, HD PCP & LSZH Technical Information – Sheathed Cables

Nominal Conductor Area mm ²	Cable Type	Maximum d.c. Conductor Resistance @20 ohms/km	Minimum Insulation Resistance per km of Cable (MegOhms)
0.75	A1/A2/A3	24.8	400
1.15	A1/A2/A3	17.3	350
0.75	B1/B2/D1/D2	24.8	900
1.5	B1/B2/D1/D2	12.2	700
2.5	B1/B2/D1/D2	7.56	550
10.0	B1/B2/D1/D2	1.84	400
35	B1/B2/D1/D2	1.16	250
70	B2/D2	0.270	200
95	B2/D2	0.195	200
2.5	C1/C2/C3	8.21	650
2.5	E1/E2/E3	8.21	650

Anixter also stock a complete range of accessories for the cables featured in this section. More details are available on request.