



■ Shielded Fire Resistant Data Cable (Silicone version)



APPLICATION

BENKA fire performance cables are specially designed and manufactured for application related to cable systems in building and transport infrastructure which needs to be extremely fire resistant and reduce the consequences, personal injury and property damage. As such, they can be used for fire detection, alarm evacuation, fire alarm, audio, emergency lighting and critical communication circuit used in public access buildings and industrial complexes.

These cables are able to maintain circuit integrity in case of fire, which when burnt produces very low quantities of smoke and virtually no acidic gases.



Construction	
Conductor	Stranded bare copper conductor to IEC 60228, DIN VDE 0295, EN 60228, class 5
Insulation (fire barrier)	Cross-linked ceramic forming polymer (silicone) compound, twisted in pair
Wrapping (optional)	Pes tape + fiberglass/mica tape
Overall screen	Aluminium foil with tinned copper drain wire
Outer sheath	Low smoke zero halogen (LSZH) compound. Color: Orange, RAL 2003

Technical Data	
Working voltage	300/500V
Test voltage	2000V
Rated temperature	-20°C to +90°C
Conductor resistance (max) (Ω/km)	0.5 mm ² : 39; 0.75 mm ² : 26; 1.0 mm ² : 19.5; 1.5 mm ² : 13.3; 2.0 mm ² : 10.6; 2.5 mm ² : 8.1
Capacitance (max) (nF/km)	120 (C/C); 240 (C/S)
Impedance	65 Ω
Max recommended current @ 25°C (Amps)	0.5 mm ² : 3.2; 0.75 mm ² : 6.3; 1.0 mm ² : 10.5; 1.5 mm ² : 14.5; 2.0 mm ² : 17.5; 2.5 mm ² : 20.8
Flame retardant	IEC 60332-1
Flame propagation	IEC 60332-3-22
Fire resistant	IEC 60331-21, DIN 4102-12 (~BS 6387 & IEC 60331)
Halogen free	IEC 60754-1
Acid and corrosive gases	IEC 60754-2
Smoke density	IEC 61034-2
Standard & Approval	RoHS, SIRIM, TUV, BV
Minimum bending radius	8 x OD (static)

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Part No.	Dimension n x mm ²	Cable OD mm	Copper index kg/km	Weight kg/km
236 1250-ER	1PR x 0.5	5.2 ± 1.0	13	39
236 2250-ER	2PR x 0.5	7.6 ± 1.0	22	64
236 3250-ER	3PR x 0.5	8.1 ± 1.0	32	81
236 4250-ER	4PR x 0.5	8.8 ± 1.0	40	99
236 5250-ER	5PR x 0.5	10.0 ± 1.0	49	123
236 1275-ER	1PR x 0.75	5.6 ± 1.0	18	43
236 2275-ER	2PR x 0.75	8.3 ± 1.0	31	70
236 3275-ER	3PR x 0.75	8.8 ± 1.0	44	93
236 4275-ER	4PR x 0.75	9.9 ± 1.0	59	136
236 5275-ER	5PR x 0.75	10.9 ± 1.0	70	167
236 1210-ER	1PR x 1.0	6.0 ± 1.0	24	51
236 2210-ER	2PR x 1.0	8.9 ± 1.0	43	80
236 3210-ER	3PR x 1.0	9.7 ± 1.0	60	116
236 4210-ER	4PR x 1.0	10.7 ± 1.0	81	158
236 5210-ER	5PR x 1.0	12.2 ± 1.0	98	194
236 1215-ER	1PR x 1.5	6.6 ± 1.0	33	68
236 2215-ER	2PR x 1.5	9.7 ± 1.0	62	115
236 3215-ER	3PR x 1.5	10.4 ± 1.0	85	175
236 4215-ER	4PR x 1.5	11.4 ± 1.0	120	232
236 5215-ER	5PR x 1.5	13.1 ± 1.0	152	280
236 1225-ER	1PR x 2.5	8.1 ± 1.0	52	100
236 2225-ER	2PR x 2.5	12.4 ± 1.0	100	179
236 3225-ER	3PR x 2.5	13.2 ± 1.0	141	270
236 4225-ER	4PR x 2.5	14.7 ± 1.0	196	362
236 5225-ER	5PR x 2.5	16.5 ± 1.0	246	434