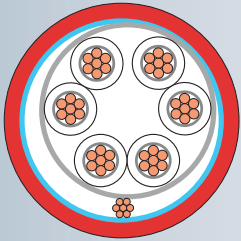


# FR-MI 110 Comms Cables

## Shielded/Unshielded Twisted Pair (S/UTP)

BETAflam® Fire Resistant Comms Cables screened 300 / 500 V, acc. to BS 6387 C.W.Z.



### Advantages

- High safety standard: BS 6387 C.W.Z  
LPCB listed and certified
- Halogen and silicone free
- Operating temperature up to + 110 °C
- In compliance with RoHS directive
- Mineral filled materials

### Application

Shielded communication cable 300 / 500 V for fixed installation in cable systems with excellent fire performance and circuit integrity.

For Fire Alarm Circuits, Fire Detection Circuits, Emergency Signal / Control Circuits, Fire Fighting Systems (water pumps) and Smoke Exhaust Systems etc. Especially recommended in areas where human and animal live as well as valuable property are exposed to risk in case of fire.

### Construction

- **Conductors:** Tinned annealed copper, acc. IEC 60228 class 2
- **Flame barrier:** MICA tape
- **Insulation:** BETAflam® mineral copolymer, cross linked
- **Inner covering:** Plastic tape
- **Screening:** Aluminium laminated foil with drain wire
- **Sheath:** BETAflam® mineral copolymer
- **Core identification:** White cores with black number marking (other colours on request)
- **Sheath colour:** Red or Orange (other colours on request)

### Technical specification

- **Rated voltage:**  $U_0/U$  300 / 500 V
- **Test voltage:** 0.5 / 2 kV / 50 Hz (core-screen / core-core)
- **Temperature range:**
  - Operation temperature from -30 °C to + 110 °C
  - Laying temperature from -5 °C to + 70 °C
  - Short circuit temperature + 250 °C (temperature peak ≤ 5 s)

### Bending radius:

During laying > 12 × outer Ø

Fixed installed > 8 × outer Ø

- **Laying conditions:** For fixed indoor installation in trays, ladders, ducts or concretes. Laying in earth or water only in water-proof dry tubes/ducts.  
Outdoor use only when protected from direct sunlight and other external impacts.

### Material properties

- **Halogen free:** IEC 60754-1; BS EN 50267-2-1; VDE 0482-267-2-1
- **No corrosive gases:** IEC 60754-2; BS EN 50267-2-2; VDE 0482-267-2-2
- **No toxic gases:** NF X 70-100
- **Low smoke density:** IEC 61034-1 & -2; BS EN 61034-2 (as certified)

### Fire performance

- **Flame retardant:** IEC 60332-1; BS EN 60332-1; VDE 0482-332-1
- **No flame propagation:** IEC 60332-3-24; EN 60332-3-24; VDE 0482332-3-24
- **Circuit integrity FE 180:** IEC 60331-21; VDE 0472-814
- **Circuit integrity:** BS 6387 C.W.Z. (as certified)

Cross section	Part no.	Sheath colour	Number of pairs	Conductor stranding	Nominal thickness insulation	Nominal diameter core	Nominal thickness sheath	Nominal diameter cable	Approx. weight	Fire Load
mm <sup>2</sup>	LSA			n × Ø mm	mm	Ø mm	mm	Ø mm	kg / km	kWh / m
0.75	303953	red	1P (BK.WH)	7 × 0.37	0.60	3.05	1.15	8.30	83	0.21
0.75	301973	orange	1P	7 × 0.37	0.60	3.05	1.15	8.30	83	0.21
0.75	301974	orange	2P	7 × 0.37	0.60	3.05	1.25	14.20	205	0.31
0.75	301975	orange	3P	7 × 0.37	0.60	3.05	1.55	16.20	260	0.54
0.75	301976	orange	5P	7 × 0.37	0.60	3.05	1.80	18.60	310	0.88
0.75	301977	orange	7P	7 × 0.37	0.60	3.05	1.90	20.30	400	0.99
0.75	301978	orange	10P	7 × 0.37	0.60	3.05	2.20	26.20	540	1.47
1	303877	red	1P (BK.WH)	7 × 0.43	0.65	3.30	1.20	8.80	92	0.24
1	225323	red	1P	7 × 0.43	0.65	3.30	1.20	8.80	92	0.24
1	301979	orange	2P	7 × 0.43	0.65	3.30	1.25	15.80	230	0.34
1	∅	orange	3P	7 × 0.43	0.65	3.30	1.55	17.80	290	0.59
1	301980	orange	5P	7 × 0.43	0.65	3.30	1.80	20.00	340	0.98
1	∅	orange	7P	7 × 0.43	0.65	3.30	2.00	24.00	440	1.15
1	301981	orange	10P	7 × 0.43	0.65	3.30	2.30	29.00	580	1.69
1.5	226328	red	1P (BK.WH)	7 × 0.53	0.65	3.60	1.25	9.60	113	0.26
1.5	215389	red	1P	7 × 0.53	0.65	3.60	1.25	9.60	113	0.26
1.5	218481	orange	2P	7 × 0.53	0.65	3.60	1.25	16.40	284	0.36
1.5	303775	orange	3P	7 × 0.53	0.65	3.60	1.70	17.40	307	0.69
1.5	301982	orange	5P	7 × 0.53	0.65	3.60	1.90	20.80	471	1.11
1.5	301983	orange	7P	7 × 0.53	0.65	3.60	2.10	23.80	617	1.3
1.5	301984	orange	10P	7 × 0.53	0.65	3.60	2.40	30.80	680	1.9
2.5	226329	red	1P (BK.WH)	7 × 0.68	0.70	4.10	1.25	10.90	151	0.3
2.5	221865	red	1P	7 × 0.68	0.70	4.10	1.25	10.90	151	0.3
2.5	303776	orange	2P	7 × 0.68	0.70	4.10	1.35	18.90	387	0.45
2.5	301985	orange	3P	7 × 0.68	0.70	4.10	1.80	20.00	450	0.83
2.5	∅	orange	5P	7 × 0.68	0.70	4.10	2.10	25.00	680	1.4
2.5	301986	orange	7P	7 × 0.68	0.70	4.10	2.20	27.00	750	1.56
2.5	301987	orange	10P	7 × 0.68	0.70	4.10	2.60	35.00	900	2.35

∅ = On request

P = Pair

BK = Black

WH = White