

FIRE RESISTANT CABLES

ITALFIRE BS 6387 CWZ EN 50200 PH120 LSZH



ITALCOND - MADE IN ITALY

TECHNICAL FEATURES

Conductor	Solid or stranded bare copper (class 1 or 2)
Insulation	High performance Silicone Rubber
Drain wire	Tinned copper
Shield	Aluminium/Polyester 115% coverage
Sheath material	LSZH Colour Red or White
Core colours identification	blue, brown, black, grey
Standards	IEC 60332-1 - IEC 60332-3-24 BS 6387:2013 (category CWZ) - EN 61034-2:2005 EN 60754-1:2014 - EN 50200:2015 (class PH120) EN 50200:2015 Annex E (30mins)



Cert/LPCB ref. 1168a

APPLICATION

Fire performance power cable, suitable for fire alarm systems and emergency lighting, designed to maintain circuit integrity under fire conditions according to BS6387 Categories C, W & Z: up to 950°C for 3 hours

SPECIAL FEATURES

Compliant to IEC-EN-BS standards:
IEC 60332-1: Flame retardant; IEC 60332-3-24: Circuit integrity vertically mounted-bunched; IEC 60331-11-21: Circuit integrity; EN 50200, BS 6387 CWZ: Circuit integrity and EN 50267-2-3: Determination of degree of acidity of gases; EN 61034-2: Measurement of smoke density.

REMARKS

Conform to RoHS
CE acc. to EC Low-Voltage Directive 73/23/EEC and 93/68/EEC
Standard put up: 305/500/1000 meters drums

ITALCOND part number class 1 ITALCOND part number class 2		ITAL082 ITAL087	ITAL083 ITAL088	ITAL078	ITAL086
No. of cores	num	2c	2c	3c	4c
Conductor size	mm ²	1,50	2,50	1,50	1,50
Conductor stranding cl.1	n.xmm	1x1,38	1x1,78	1x1,38	1x1,38
Conductor stranding cl.2	n.xmm	7x0,52	7x0,67		
Drain wire size	mm ²	0,50	0,50	0,50	0,50
Drain wire stranding	n.xmm	1x0,80	1x0,80	1x0,80	1x0,80
Nom. Diameter of copper conductor	mm	1,38	1,78	1,38	1,38
Insulation material	type	Silicone	Silicone	Silicone	Silicone
Nom. Radial Thickness insulation	mm	0,70	0,80	0,70	0,70
Shield	Yes/No	Yes	Yes	Yes	Yes
Individual shield	Yes/No	No	No	No	No
Screen (braid)	Yes/No	No	No	No	No
Sheath material	type	LSZH	LSZH	LSZH	LSZH
Overall diameter of conductor	mm	2,80	3,40	2,80	2,80
Nom. Radial sheath thickness	mm	1,20	1,20	1,20	1,20
Nom. overall outer diameter cl.1±0,50	mm	8,00	9,40	8,70	9,50
Nom. overall outer diameter cl.2±0,50	mm	8,00	9,40		
Electrical Characteristics					
Max. DC Resistance conductor at 20°C	Ω/km	12,10	7,41	12,10	12,10
Min. insulation resistance	Ω/km	200	200	200	200
Max. recommended Current at 25°C	Amps	21	30	21	21
Max. operating voltage	Vrms	300/500	300/500	300/500	300/500
Miscellaneous					
Operating temperature (3h 950°C)	°C	-40 / +70	-40 / +70	-40 / +70	-40 / +70
Max. recommended pulling tension	N	300	250	225	150
Min. bending radius (install)	mm	80	95	87	95
Nominal cable weight	kg/km	90	120	115	130

FIRE TEST to BS 6387		test applied
fire test category C= 950°C for 3 hours	BS 6387 D 2	C
resistance to Fire with Water	BS 6387 D 3	30 min
category W at 650°C for 30 mins, 15 min of water	BS 6387 D 3	W
resistance to fire with mechanical shock (one shock every 30 sec)	BS 6387 D 4	15 min
category X at 650°C; Y=750°C; Z=950°C	BS 6387 D 4	Z
RESISTANCE TO FIRE CEI EN 50200		
category (PH120) temperature 842°C	EN 50200	PH120
resistance to fire with mechanical shock (one shock every 5 min)	EN 50200	OK
resistance to fire with water and shock (one shock every 5 min)	EN 50200-E	30 min
category (temperature 842°C for 30 min, 15 min water)	EN 50200-E	OK