

FIRE RESISTANT CABLES



ITALCOND - MADE IN ITALY

BS 6387 CWZ EN 50200 PH120 LSZH

TECHNICAL FEATURES

Conductor	Solid or stranded bare copper
Insulation	High performance ceramifiable Silicone Rubber
Drain wire	Tinned copper
Shield	Aluminium/Polyester 115% coverage
Sheath material	LSZH Colour Red or White
Standards	IEC 60332-1 - IEC 60332-3-24 / EN50200 / BS 6387
Core colours identification	blue, brown blue, brown, grey, black

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

Physical characteristics

ITALCOND part number		ITAL080	ITAL081	ITAL082	ITAL086	ITAL083	ITAL084
No. of cores	num	2c	2c	2c	4c	2c	2c
Conductor size	mm ²	0,75	1,00	1,50	1,50	2,50	4,00
Conductor stranding cl.1	n.xmm	1x0,98	1x1,13	1x1,38	1x1,38	1x1,78	
Conductor stranding cl.2	n.xmm	7x0,37	7x0,43	7x0,52	7x0,52	7x0,67	7x0,83
Drain wire size	mm ²	0,50	0,50	0,50	0,50	0,50	0,50
Drain wire stranding	n.xmm	1x0,80	1x0,80	1x0,80	1x0,80	1x0,80	1x0,80
Nom. Diameter of copper conductor	mm	0,98	1,13	1,38	1,38	1,75	2,60
Insulation material	type	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
Nom. Radial Thickness insulation	mm	0,70	0,60	0,70	0,70	0,80	0,80
Shield	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
Individual shield	Yes/No	No	No	No	No	No	No
Screen (braid)	Yes/No	No	No	No	No	No	No
Sheath material	type	LSZH	LSZH	LSZH	LSZH	LSZH	LSZH
Overall diameter of conductor	mm	1,90	2,50	3,00	3,00	3,50	4,50
Nom. Radial sheath thickness	mm	0,90	0,90	0,90	0,90	1,00	1,10
Nom. overall outer diameter	mm	7,50	8,00	8,50	9,50	10,50	12,50

Electrical Characteristics

Max. DC Resistance conductor at 20°C	Ω/km	24,5	18,1	12,10	12,10	7,41	4,61
Min. insulation resistance	Ω/km	200	200	200	200	200	200
Max. recommended Current at 25°C	Amps	12	18	21	21	30	40
Max. operating voltage	Vrms	300/500	300/500	300/500	300/500	300/500	300/500

Miscellaneous

Operating temperature (3h 950°C)	°C	-40 / +70	-40 / +70	-40 / +70	-40 / +70	-40 / +70	-40 / +70
Max. recommended pulling tension	N	205	265	405	405	670	1250
Min. bending radius (install)	mm	75	78	87	87	99	120
Nominal cable weight	kg/km	67	75	100	130	143	201

FIRE TEST to BS 6387

fire test category C= 950°C for 3 hours	BS 6387 D 2	test applied 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		
resistance to fire with mechanical shock (one shock every 5 min)	EN 50200	OK
category (PH120) temperature 842°C	EN 50200	PH120
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