

PERFORMANCE UNDER FIRE CONDITIONS

To BS 5839-1 2002 + A2:2008 'Enhanced Grade' to BS EN 50200 classification PH 120.

Circuit Integrity Performance	Resistance to fire and mechanical shock Followed by fire, mechanical shock and water	60 min at 930°C 60 min same sample at 930°C
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To BS 5839-1 2002 + A2:2008 'Standard Grade' to BS EN 50200 classification PH 30.

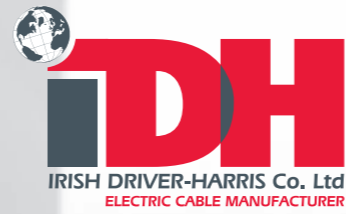
Circuit Integrity Performance	Resistance to fire and mechanical shock Followed by fire, mechanical shock and water	15 min at 830°C 15 min same sample at 830°C
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To BS 6387 CWZ

Circuit Integrity	Resistance to fire alone	CAT C	3 hours at 950°C
	Resistance to fire and water	CAT W	15 mins at 650°C
	Resistance to fire and mechanical shock	CAT Z	15 mins at 950°C

Flame Retardancy BS EN 60332-1-2

Flame Propagation IEC 332 Part 1



RoHS



All our cables are manufactured with materials which are compliant with RoHS and WEEE directives.

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Cables for BS 5839-1 2002 + A2:2008 Enhanced Grade, Standard Grade, BS EN 50200 & BS6387 CWZ

Approvals with LPCB & BASEC

Reduced installation time

Superior electrical performance

Pliable fire resistant cables

No toxic fumes

KILFLAM™
FIRE RESISTANT CABLES

KILFLAM™ 1000 SINGLE CORE FIRE RESISTANT CABLE



FIRE RESISTANCE:	Meets the requirements of IEC331 and BS 6387 C, W and Z when tested in a steel conduit
SMOKE EMISSION:	Complies with low smoke emissions as of BS 7211
ACID GAS:	Meets acid gas emissions of BS EN 50267 with an HCL level <0.5%
FLAME RETARDANCE:	Meets BS EN 60332-1-2
TEMPERATURE RANGE:	Can operate in the range -25°C to 90°C
CONSTRUCTION:	Conductor - Plain annealed copper to BS EN 60228 class 2 Fire Barrier - Mica covered conductor Insulation - Low smoke zero halogen to BS EN 50363 - E15
COLOURS:	Blue; Brown; Green/Yellow; Other colours available on request.
SUPPLIED LENGTHS:	100 and 500 metre drums
APPROVALS:	LPCB approved to BS 6387 C, W and Z when tested in a metal conduit

Area mm ²	Conductor No. of strands (mm)	Nominal Cable Diametre (mm)	Conductor Resistance ohm/km @20°C
1.5	7 / 0.53	3.3	12.1
2.5	7 / 0.67	3.75	7.41
4.0	7 / 0.85	4.3	4.61
6.0	7 / 1.04	5.0	3.08
10.0	7 / 1.35	6.8	1.83
16.0	7 / 1.70	8	1.15

KILFLAM™ STANDARD



CABLE DESCRIPTION:	BS EN 5020:2000 Class PH30
COLOURS:	White and Red sheath as standard. Other colours available on request.
SUPPLIED LENGTHS:	100 and 500 metre reels. Other packaging/lengths available on request.
APPROVALS:	LPCB to BS 5839-1 'Standard Grade'; BASEC to BS 7629 and BS 6387 CWZ LPCB to BS 7629 and BS 6387 CWZ; BASEC and LPCB approval to BS EN ISO 9001:2008
KEY APPLICATIONS:	The use of Kilflam Standard is recommended for general use as a fire resistant cable.

No. of Cores	2	2	2	2	3	3	3	4	4	4
Conductor Area (mm)	1.0	1.5	2.5	4.0	1.0	1.5	2.5	1.0	1.5	2.5
No. of Wires	1	1	7	7	1	1	7	1	1	7
Nominal Diametre of Conductor (mm)	1.13	1.37	0.67	0.85	1.13	1.37	0.67	1.13	1.37	0.67
Nominal Insulation Thickness (mm)	0.6	0.70	0.80	0.80	0.60	0.70	0.80	0.60	0.70	0.80
Nominal OD (mm)	8.05	8.40	10.05	11.40	8.55	9.15	11.15	9.20	10.20	11.65
Min. Bend Radius (mm)	50	60	70	80	60	70	80	60	70	80
Cable Weight (kg/km)	79.80	98.30	146.40	213.50	93.60	121.00	178.80	120.10	148.20	210.70
Max Conductor Resist. 20°C ohm/km	18.1	12.1	7.41	4.61	18.1	12.1	7.41	18.1	12.1	7.41
Max Conductor Resist. 70°C ohm/km	21.7	14.5	8.8	5.5	21.7	14.5	8.8	21.7	14.5	8.8
Capacitance (Adjacent Cores) PF/km	85	95	100	100	85	95	100	85	95	100
Capacitance (Core to Screen) PF/km	170	180	190	190	170	180	190	170	180	190

KILFLAM™ 3000



To meet the toughest requirements of a fire alarm cable. An easy to use alternative to the traditional cable solution for areas requiring enhanced performance.

CABLE DESCRIPTION:	A pliable triple fire barrier cable.
COLOURS:	White and Red sheath as standard. Other colours available on request.
SUPPLIED LENGTHS:	100 and 500 metre reels. Other packaging/lengths available on request.
APPROVALS:	LPCB approved. This cable is designed to meet the requirements of BS 5839-1 'Enhanced Grade' BS 7629, BS 6387 CWZ, BS EN 50200. Class PH 120, BS 8434-2:2003.
KEY APPLICATIONS:	The use of cables with 'enhanced' fire resistance is recommended in systems and buildings, in which cables need to operate correctly during a fire for longer than required for single phase evacuation. Examples: Unsprinkled high-rise buildings with phased evacuation arrangements and; premises of such a nature/size that areas remote from the fire could be occupied for a prolonged period during a fire, which might damage cables serving parts of the fire alarm system in occupied areas.

No. of Cores	2	2	2	2	3	3	3	4	4	4
Conductor Area (mm)	1.0	1.5	2.5	4.0	1.0	1.5	2.5	1.0	1.5	2.5
No. of Wires	1	1	7	7	1	1	7	1	1	7
Nominal Diametre of Conductor (mm)	1.13	1.37	0.67	0.85	1.13	1.37	0.67	1.13	1.37	0.67
Nominal Insulation Thickness (mm)	0.6	0.70	0.80	0.80	0.60	0.70	0.80	0.60	0.70	0.80
Nominal OD (mm)	8.5	9.4	10.7	11	9.4	10.2	11	10.20	11	13.2
Min. Bend Radius (mm)	50	60	65	70	60	60	70	60	70	80
Cable Weight (kg/km)	115.16	131.25	188.11	269.78	128.38	166.81	225.37	156.6	192.44	271.16
Max Conductor Resist. 20°C ohm/km	18.1	12.1	7.41	4.61	18.1	12.1	7.41	18.1	12.1	7.41
Max Conductor Resist. 70°C ohm/km	21.7	14.5	8.8	5.5	21.7	14.5	8.8	21.7	14.5	8.8
Capacitance (Adjacent Cores) PF/km	85	95	100	100	85	95	100	85	95	100
Capacitance (Core to Screen) PF/km	170	180	190	190	170	180	190	170	180	190

CABLE CONSTRUCTION

CONDUCTORS:	Copper wire class 1 to BS EN 60228 for sections 1.0-1.5mm Copper wire class 2 to BS EN 60228 for sections 2.5-4.0mm Conductor resistance	As per BS EN 60228
INSULATION:	Silicon rubber type E1 2 to BS EN 50363 Insulation thickness Tensile strength (min) Elongation (min) Hot set elongation (max)	As per BS 7629 Table 2 5 N/mm 150% 100% at 250°C
ELECTROSTATIC SCREEN:	Metal tape	
SHEATHING:	Hard polyolefine compound zero halogen type LT53 Sheath thickness Sheath hardness Tensile strength (min) Elongation (min) Tear strength (min)	As per BS 7629 Table 2 Shore A. 96 10 N/mm 100% 6.5 N/mm
THERMOMECHANICAL PROPERTIES:	Hot pressure deformation Heat shock Cold impact Cold elongation	at 80°C <50% 1 hour at 150°C PASS at -15°C PASS at -15°C min elongation 30%