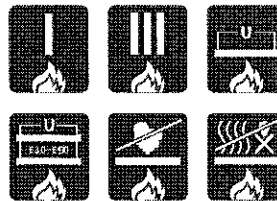
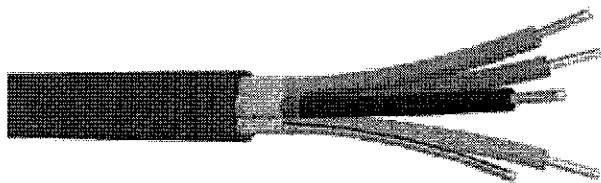


# FLAME-X<sup>950</sup> Standard 300/500V

BS 7629-1, BS 6387, BS 5839-1:200



Standard level fire resistant electric cables having low emission of smoke and corrosive gases when affected by fire

## FIRE PERFORMANCE

Fire resistance:	BS 6387 Category C, W, Z BS EN 50200 Class PH 30 BS 8434-1 duration 30 min. (15 min for the fire and impact and 15 min for the fire, impact and water) BS 5839-1:2002 Clause 26.2d PH 30 Standard fire resistant cable
Flame propagation:	BS EN 60332-1-2 and BS EN 50266-2-2
Smoke emission:	BS EN 61034-2
Gases evolved during combustion:	BS EN 50267-2-1: HCL ≤ 0,5%

## CONSTRUCTION

Conductors:	plain annealed copper solid class 1 (for 1 - 2,5 mm <sup>2</sup> ) and stranded class 2 (for 4 mm <sup>2</sup> ) according to BS EN 60228
Uninsulated circuit protective conductor:	tinned annealed copper of the same nominal cross-sectional area and of the same class as the insulated conductors
Insulation:	special cross-linked heat resistant compound according to BS EN 50363.1
Optional binder:	non hygroscopic halogen free tape
Screen:	aluminium/polyester laminated tape and uninsulated circuit protective conductor
Outer sheath:	thermoplastic zero halogen low smoke compound according to BS 7655-6.1

## CHARACTERISTIC

Colour of sheath:	red or white (other colours are permissible when agreed with the manufacturer)
Core identification:	2 core + ECC: brown, blue 3 core + ECC: brown, blue, grey 4 core + ECC: blue, brown, black, grey
Maximum conductor operating temperature:	+70°C
Lowest temperature ambient for fixed installation:	-30°C
Lowest installation temperature:	0°C
Maximum short-circuit conductor temperature:	+250°C
Minimum bending radius:	6D (D - is the overall cable diameter)

### Application:

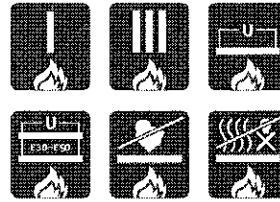
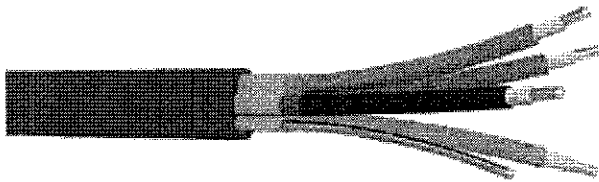
Standard level fire resistance cables in accordance with recommendations of BS 5839-1:2002 clause 26.2. Tested and approved by BASEC and LPCB. For use in Installations emergency lighting and evacuation systems, fire and smoke detection systems air-conditioning and alarm systems, automatic elevator doors, computer control rooms, emergency evacuation communicators.

### Standard packing:

500 m on drums. Other forms of packing and delivery are available on request.

Cable Ref.	Conductor class	Nominal cross-section area of conductor	Nominal cross-sectional area of protective conductor	Approximate overall diameter	Approximate net weight of cable	Maximum conductor resistance at 20°C	Maximum ECC conductor resistance at 20°C
		mm <sup>2</sup>	mm <sup>2</sup>	mm	kg/km	W/km	W/km
FLAME-X 2x1 + ECC	1	1	1	7,1	65	18,1	18,2
FLAME-X 2x1.5 + ECC	1	1,5	1,5	8,0	86	12,1	12,2
FLAME-X 2x2.5 + ECC	1	2,5	2,5	9,3	126	7,41	7,56
FLAME-X 2x4 + ECC	2	4	4	11,1	186	4,61	4,70
FLAME-X 3x1 + ECC	1	1	1	7,5	81	18,1	18,2
FLAME-X 3x1.5 + ECC	1	1,5	1,5	8,4	108	12,1	12,2
FLAME-X 3x2.5 + ECC	1	2,5	2,5	9,9	159	7,41	7,56
FLAME-X 3x4 + ECC	2	4	4	11,7	237	4,61	4,70
FLAME-X 4x1 + ECC	1	1	1	8,3	100	18,1	18,2
FLAME-X 4x1.5 + ECC	1	1,5	1,5	9,6	135	12,1	12,2
FLAME-X 4x2.5 + ECC	1	2,5	2,5	11,4	199	7,41	7,56
FLAME-X 4x4 + ECC	2	4	4	14,6	303	4,61	4,70

\*With protective conductor



Enhanced grade fire resistant cables having low emission of smoke and corrosive gases when affected by fire

## FIRE PERFORMANCE

Fire resistance:	Complies with the PH 120 ENHANCED fire resistant cable described in Clause 26.2 of BS 5839-1:2002 BS 6387 Category C,W,Z BS EN 50200 Class PH 120 BS 8434-2 duration 120 min (60 min for the fire 930°C and impact and 60 min for the fire 930°C, impact and water)
Flame propagation:	BS EN 60332-1-2 and BS EN 50266-2-2
Smoke emission:	BS EN 61034-2
Gases evolved during combustion:	BS EN 50267-2-1: HCL ≤ 0,5%

## CONSTRUCTION

Conductors:	plain annealed copper solid class 1 (for 1 - 2,5 mm <sup>2</sup> ) and stranded class 2 (for 4 mm <sup>2</sup> ) according to BS EN 60228
Uninsulated circuit protective conductor:	tinned annealed copper of the same nominal cross-sectional area and of the same class as the insulated conductors
Insulation:	glass impregnated mica tape and special cross-linked heat resistant compound type EI2 according to BS EN 50363.1
Optional binder:	non hygroscopic halogen free tape
Screen:	aluminium/polyester laminated tape and uninsulated circuit protective conductor
Outer sheath:	thermoplastic zero halogen low smoke compound type LTS 3 according to BS 7655-6.1

## CHARACTERISTIC

Colour of sheath:	red or white (other colours are available on special request)
Core identification:	2 core + ECC: brown, blue 3 core + ECC: brown, blue, grey 4 core + ECC: blue, brown, black, grey
Maximum conductor operating temperature:	+70°C
Lowest temperature ambient for fixed installation:	-30°C
Lowest installation temperature:	0°C
Maximum short-circuit conductor temperature:	+250°C
Minimum bending radius:	6D (D - overall cable diameter)

### Application:

for use in Installations emergency lighting and evacuation systems, fire and smoke detection systems air-conditioning and alarm systems, automatic elevator doors, computer control rooms, emergency evacuation communicators. Recommended for systems, in particular building types, in which cables might need to operate correctly during a fire for periods in excess of those normally required for single phase evacuation of a building. Cables meeting the enhanced requirement should be used in buildings greater than 30 m in height, or with four or more evacuation zones, or for example hospitals, where there are progressive horizontal evacuation arrangements, or where a risk assessment identifies a possible need.

### Standard packing:

500 m on drums. Other forms of packing and delivery are available on request.

Cable Ref.	Conductor class	Nominal cross-section area of conductor	Nominal cross-sectional area of protective conductor	Approximate overall diameter	Approximate net weight of cable	Maximum conductor resistance at 20°C	Maximum ECC conductor resistance at 20°C
		mm <sup>2</sup>	mm <sup>2</sup>	mm	kg/km	W/km	W/km
FLAME-X ENH 2x1 + ECC	1	1	1	8,2	78	18,1	18,2
FLAME-X ENH 2x1.5 + ECC	1	1,5	1,5	9,1	99	12,1	12,2
FLAME-X ENH 2x2.5 + ECC	1	2,5	2,5	10,5	141	7,41	7,56
FLAME-X ENH 2x4 + ECC	2	4	4	12,2	201	4,61	4,70
FLAME-X ENH 3x1 + ECC	1	1	1	8,7	98	18,1	18,2
FLAME-X ENH 3x1.5 + ECC	1	1,5	1,5	9,6	125	12,1	12,2
FLAME-X ENH 3x2.5 + ECC	1	2,5	2,5	11,1	179	7,41	7,56
FLAME-X ENH 3x4 + ECC	2	4	4	12,9	256	4,61	4,70
FLAME-X ENH 4x1 + ECC	1	1	1	9,4	119	18,1	18,2
FLAME-X ENH 4x1.5 + ECC	1	1,5	1,5	10,7	155	12,1	12,2
FLAME-X ENH 4x2.5 + ECC	1	2,5	2,5	12,6	224	7,41	7,56
FLAME-X ENH 4x4 + ECC	2	4	4	15,8	327	4,61	4,70