RE-2X(St)HSWAH-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 1000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

Cross Section

Configuration / Cross-Section (mm/mm²)	Cable Diameter (mm) (± 5%)	Copper Weight (kg / km)	~ Cable Weight (kg / km)
1x2x0.5	6.6	14	216
2x2x0.5	10.2	29	366
3x2x0.5	10.7	42	414
4x2x0.5	11.8	54	477
5x2x0.5	12.8	66	529
6x2x0.5	13.9	78	598
7x2x0.5	13.9	91	617
8x2x0.5	15.6	103	824
10x2x0.5	17.7	127	978
12x2x0.5	18.3	152	1053
14x2x0.5	19.2	177	1136
16x2x0.5	20.4	201	1239
18x2x0.5	21.5	226	1467
20x2x0.5	22.8	250	1593
24x2x0.5	25.3	299	1878
30x2x0.5	26.8	373	2353
1x2x0.75	7.1	19	234
2x2x0.75	11.1	39	418
3x2x0.75	11.8	57	477
4x2x0.75	12.8	74	537
5x2x0.75	14.1	91	610
6x2x0.75	15.4	108	818
7x2x0.75	15.4	126	844
8x2x0.75	17.3	143	971
10x2x0.75	19.6	177	1139
12x2x0.75	20.3	212	1235
14x2x0.75	21.4	246	1476
16x2x0.75	22.7	281	1611
18x2x0.75	23.9	315	1726
20x2x0.75	25.3	350	1925
24x2x0.75	28.2	419	2486
30x2x0.75	29.9	523	2750
1x2x1	7.4	24	249
2x2x1	11.7	49	451
3x2x1	12.4	72	515
4x2x1	13.6	94	594
5x2x1	14.8	117	673
6x2x1	16.3	139	897
7x2x1	16.3	161	928
8x2x1	18.3	184	1059
10x2x1	20.7	228	1258
12x2x1	21.5	273	1493
14x2x1	22.7	318	1640

16x2x1	23.9	363	1766
18x2x1	25.3	407	1976
20x2x1	26.8	452	2369
24x2x1	29.9	541	2732
30x2x1	31.7	676	3060
1x2x1.3	7.8	30	275
2x2x1.3	12.4	61	497
3x2x1.3	13.1	89	561
4x2x1.3	14.4	118	656
5x2x1.3	15.8	146	876
6x2x1.3	17.3	174	993
7x2x1.3	17.3	202	1030
8x2x1.3	19.5	231	1171
10x2x1.3	22.2	287	1542
12x2x1.3	23.1	344	1661
14x2x1.3	24.2	400	1816
16x2x1.3	25.7	456	2023
18x2x1.3	27.3	513	2466
20x2x1.3	28.9	569	2646
24x2x1.3	32.1	682	3075
30x2x1.3	34.2	852	3837
1x2x1.5	8.1	33	289
2x2x1.5	12.8	68	514
3x2x1.5	13.6	99	592
4x2x1.5	14.9	131	682
5x2x1.5	16.4	162	917
6x2x1.5	18.0	193	1038
7x2x1.5	18.0	225	1079
8x2x1.5	20.2	256	1243
10x2x1.5	23.1	319	1621
12x2x1.5	23.8	382	1759
14x2x1.5	25.1	445	1967
16x2x1.5	26.6	508	2147
18x2x1.5	28.2	571	2583
20x2x1.5	29.8	634	2803
24x2x1.5	33.4	760	3632
30x2x1.5	35.4	948	4079
1x2x2.5	9.3	51	352
2x2x2.5	15.1	103	647
3x2x2.5	16.0	152	878
4x2x2.5	17.6	201	1021
5x2x2.5	19.4	250	1180
6x2x2.5	21.4	299	1474
7x2x2.5	21.4	348	1537
8x2x2.5	24.1	397	1770
10x2x2.5	27.6	495	2419
12x2x2.5	28.6	593	2629

14x2x2.5	30.1	691	2862
16x2x2.5	31.9	789	3141
18x2x2.5	33.9	887	3826
20x2x2.5	35.9	985	4120
24x2x2.5	40.2	1181	4802
30x2x2.5	42.8	1475	5910

23.11.2026 9:11

Legal Warning: The information in this catalog is for marketing purposes. 2M Kablo can change this catalog during product development and any requirements. 2M Kablo can always change designs, technical specifications, images and other informations in this catalog without any notice.This catalog is only a guide and is valid at the time of download, not valid for an offer or contract.
If you need more information about the products in this catalog, please contact us via info@2mkablo.com or call +90 (212) 222 8250.