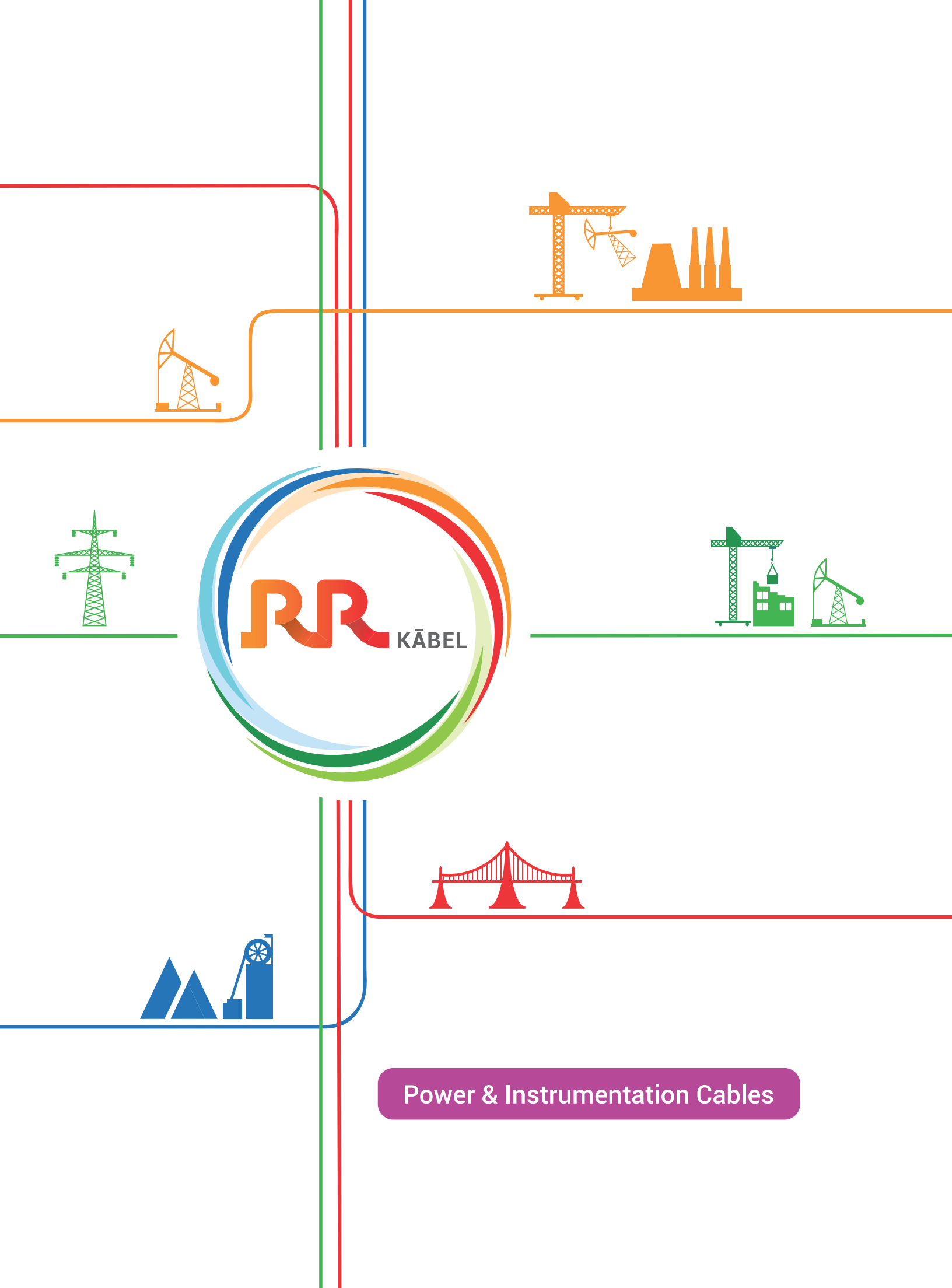


Power & Instrumentation Cables

RR Kabel is a part of RR Global, which is one of the leading conglomerates in the electrical sector. Working with determination to produce products with best technologies, RR Kabel has always made the latest advances in wire design and engineering. Today, RR Kabel offers the latest and widest range of premium wires & cables for various residential, commercial, industrial and infrastructure purposes.

For us at RR Kabel think wires are not just objects, we believe that wires play the role of nerves in the body. When you believe this, you have designers, engineers, fabricators, and other partners who need to have incredible design and commitment to pursue and create a product that can be trusted, and relied upon.

We believe that the future of design lies with innovation that instigates one to push boundaries, eliminate borders between sciences. The materials we use may sometimes be unique, sometimes experimental, many are collaborations but they all represent extraordinary research and dedication by engineers, designers and visionaries.

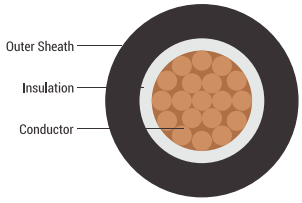
RR Kabel is constantly emerging with new marketing and technical perspectives that are globally significant, we are aiming to create significance of our multi-faceted range when designing making it better environment and the customers.

POWER CABLES

CROSS SECTIONAL VIEW

AYY/YY-1 CORE

REACH I RoHS



Cable Construction

1.1 kV, 1 cores AL / CU conductor, PVC insulated, unarmoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl.1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl.1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm & above stranded round or stranded compact Cl. 2 as per IS 8130

Insulation : PVC Type - A, as per IS 5831. (Option : HR PVC Type - C, as per IS 5831)

Core Color : Red or yellow or blue or black or natural

Outer Sheath : PVC Type ST-1 as per IS 5831. (Option : PVC Type - ST 2 as per IS 5831 / FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST-1 / FR / FRLS; PVC Type ST-2 / FR / FRLS.

Colour from above technical details.

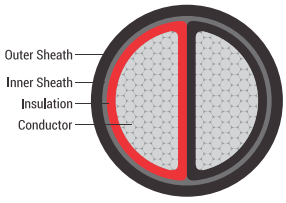
Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thickness of Insulation (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg / km)	
		AL	CU				AL Cable AYY	CU Cable YY
110100100016	16	6	6	1.0	1.8	11	160	260
110100100025	25	6	6	1.2	1.8	13	210	365
110100100035	35	6	6	1.2	1.8	14	250	460
110100100050	50	6	6	1.4	1.8	16	300	610
110100100070	70	12	12	1.4	1.8	17	400	830
110100100095	95	15	15	1.6	1.8	19	500	1100
110100100120	120	15	18	1.6	2.0	21	600	1350
110100100150	150	15	18	1.8	2.0	23	750	1680
110100100185	185	30	30	2.0	2.0	25	900	2050
110100100240	240	30	34	2.2	2.0	28	1100	2600
110100100300	300	30	34	2.4	2.0	30	1350	3200
110100100400	400	53	53	2.6	2.2	35	1700	4200
110100100500	500	53	53	3.0	2.2	38	2150	5250
110100100630	630	53	53	3.4	2.4	43	2750	6650
110100100800	800	53	53	3.4	2.4	48	3300	8250
110100101000	1000	53	53	3.4	2.6	52	4100	10300

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110100100016	16	1.91	1.15	2.29	1.38	0.11	1.01	66	65	64	85	83	82	1.22	1.84
110100100025	25	1.2	0.727	1.44	0.87	0.105	1.05	86	84	84	110	110	110	1.9	2.88
110100100035	35	0.868	0.524	1.04	0.63	0.1	1.22	100	100	105	130	125	130	2.66	4.03
110100100050	50	0.641	0.387	0.769	0.464	0.098	1.22	120	115	130	155	150	165	3.8	5.75
110100100070	70	0.443	0.268	0.532	0.322	0.091	1.43	140	135	155	190	175	205	5.32	8.05
110100100095	95	0.32	0.193	0.384	0.232	0.088	1.47	175	155	190	220	200	245	7.22	10.9
110100100120	120	0.253	0.153	0.304	0.184	0.086	1.62	195	170	220	250	220	280	9.12	13.8
110100100150	150	0.206	0.124	0.247	0.1488	0.085	1.62	220	190	250	280	245	320	11.14	17.3
110100100185	185	0.164	0.0991	0.197	0.1189	0.084	1.62	240	210	290	305	260	370	14.1	21.3
110100100240	240	0.125	0.0754	0.151	0.0912	0.082	1.72	270	225	335	345	285	425	18.2	27.3
110100100300	300	0.1	0.0601	0.122	0.0733	0.08	1.74	295	245	380	375	310	475	22.8	34.5
110100100400	400	0.0778	0.047	0.0961	0.058	0.08	1.81	325	275	435	400	335	550	30.4	46
110100100500	500	0.0605	0.0366	0.0759	0.0459	0.079	1.86	345	295	480	425	355	590	38	57.5
110100100630	630	0.0469	0.0283	0.061	0.0368	0.077	1.87	390	320	550	470	375	660	47.9	72.5
110100100800	800	0.0367	0.0221	0.0503	0.0303	0.077	1.98	450	380	610	530	425	725	60.8	92
110100101000	1000	0.0291	0.0176	0.0422	0.0255	0.076	2.2	500	415	680	590	740	870	76	115

AYY/YY-2 CORE

REACH I RoHS



Cable Construction

1.1 kV, 2 cores AL / CU conductor, PVC insulated, unarmoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact round or Compact shape conductor Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded round Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded round or stranded compact conductor Cl. 2 as per IS 8130

Above 10 Sq. mm conductor are stranded round or compact round or compacted shaped Cl. 2 as per IS 8130

Insulation : PVC Type - A, as per IS 5831.(Option : HR PVC Type - C, as per IS 5831)

Core Color : Red, black

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type - ST - 2 as per IS 5831 / FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

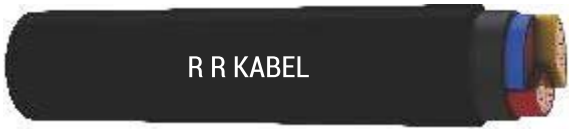
Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (Kg/Km)	
		AL	CU					AL Cable AYY	CU Cable YY
110200200004	4	_	1/7	1.0	0.3	1.8	14	240	290
110200200006	6	1	1/7	1.0	0.3	1.8	17	300	370
110200200010	10	1	6	1.0	0.3	1.8	18	400	520
110200200016	16	6	6	1.0	0.3	1.8	17	430	630
110200200025	25	6	6	1.2	0.3	2.0	19	450	750
110200200035	35	6	6	1.2	0.3	2.0	21	550	980
110200200050	50	6	6	1.4	0.3	2.0	24	700	1300
110200200070	70	12	12	1.4	0.3	2.0	26	850	1700
110200200095	95	15	15	1.6	0.4	2.2	30	1150	2300
110200200120	120	15	18	1.6	0.4	2.2	32	1300	2800
110200200150	150	15	18	1.8	0.4	2.4	34	1600	3450
110200200185	185	30	30	2.0	0.5	2.4	38	2000	4300
110200200240	240	30	34	2.2	0.5	2.6	42	2500	5500
110200200300	300	30	34	2.4	0.6	2.8	46	3000	6700
110200200400	400	53	53	2.6	0.7	3.2	52	3800	8750
110200200500	500	53	53	3.0	0.7	3.4	54	4800	11000
110200200630	630	53	53	3.4	0.7	3.8	65	6000	13800

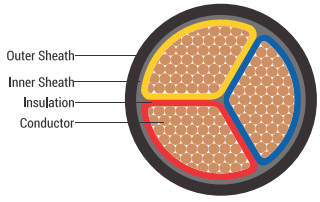
Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110200200004	4	_	4.61	_	5.53	0.098	0.23	34	28	30	44	37	39	0.304	0.46
110200200006	6	4.61	3.08	5.53	3.7	0.096	0.28	43	37	40	55	47	50	0.456	0.69
110200200010	10	3.08	1.83	3.7	2.2	0.091	0.34	57	48	53	74	61	67	0.76	1.15
110200200016	16	1.91	1.15	2.29	1.38	0.085	0.40	78	61	70	94	78	85	1.22	1.84
110200200025	25	1.2	0.727	1.44	0.87	0.083	0.42	95	80	99	120	100	125	1.9	2.88
110200200035	35	0.868	0.524	1.04	0.63	0.082	0.48	116	94	117	145	120	155	2.66	4.03
110200200050	50	0.641	0.387	0.769	0.464	0.082	0.49	140	110	140	170	145	190	3.8	5.75
110200200070	70	0.443	0.268	0.532	0.322	0.076	0.56	170	140	176	210	175	235	5.32	8.05
110200200095	95	0.32	0.193	0.384	0.232	0.076	0.58	200	165	221	250	210	290	7.22	10.90
110200200120	120	0.253	0.153	0.304	0.184	0.075	0.63	225	185	258	285	240	330	9.12	13.80
110200200150	150	0.206	0.124	0.247	0.1488	0.074	0.63	255	210	294	315	270	375	11.4	17.30
110200200185	185	0.164	0.0991	0.197	0.1189	0.074	0.64	285	235	339	355	300	435	14.1	21.28
110200200240	240	0.125	0.0754	0.151	0.0912	0.073	0.67	325	270	402	410	350	510	18.2	27.6
110200200300	300	0.1	0.0601	0.122	0.0733	0.073	0.68	370	305	461	460	390	590	22.8	34.5
110200200400	400	0.0778	0.047	0.0961	0.058	0.072	0.70	435	350	542	520	440	670	30.4	46.0
110200200500	500	0.0605	0.0366	0.0759	0.0459	0.072	0.70	481	405	624	580	480	750	38	57.5
110200200630	630	0.0469	0.0283	0.061	0.0368	0.072	0.70	537	470	723	680	575	875	47.9	72.55

AYY/YY-3 CORE

REACH I RoHS





Cable Construction

1.1 kV, 3 cores AL / CU conductor, PVC insulated, unarmoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130.

Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : PVC Type - A, as per IS 5831.(Option : HR PVC Type - C, as per IS 5831)

Core Color : Red, yellow, blue

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type - ST - 2 as per IS 5831, FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

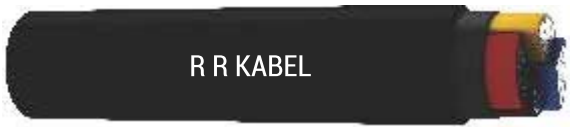
Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

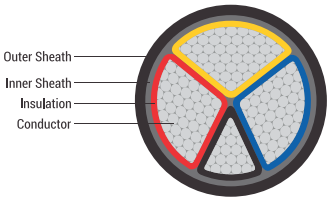
Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
		AL	CU					AL Cable AYY	CU Cable YY
110300300004	4	_	1/7	1.0	0.3	1.8	16	280	330
110300300006	6	1	1/7	1.0	0.3	1.8	18	350	460
110300300010	10	1	6	1.0	0.3	1.8	19	430	640
110300300016	16	6	6	1.0	0.3	1.8	19	450	720
110300300025	25	6	6	1.2	0.3	2.0	22	610	1070
110300300035	35	6	6	1.2	0.3	2.0	24	730	1390
110300300050	50	6	6	1.4	0.3	2.0	27	930	1860
110300300070	70	12	12	1.4	0.4	2.2	30	1190	2490
110300300095	95	15	15	1.6	0.4	2.2	34	1590	3340
110300300120	120	15	18	1.6	0.4	2.2	37	1890	4090
110300300150	150	15	18	1.8	0.5	2.4	40	2290	5090
110300300185	185	30	30	2.0	0.5	2.6	44	2740	6190
110300300240	240	30	34	2.2	0.6	2.8	50	3490	7940
110300300300	300	30	34	2.4	0.6	3.0	55	4290	9890
110300300400	400	53	53	2.6	0.7	3.4	62	5430	12790
110300300500	500	53	53	3.0	0.7	3.6	69	6900	16190
110300300630	630	53	53	3.4	0.7	4.0	77	8690	20390

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110300300004	4	_	4.61	_	5.53	0.098	0.23	28	23	23	36	30	30	0.304	0.46
110300300006	6	4.61	3.08	5.53	3.7	0.096	0.28	35	30	30	45	38	39	0.456	0.69
110300300010	10	3.08	1.83	3.7	2.2	0.091	0.34	46	39	40	60	50	52	0.76	1.15
110300300016	16	1.91	1.15	2.29	1.38	0.085	0.4	60	50	51	77	64	66	1.22	1.84
110300300025	25	1.2	0.727	1.44	0.87	0.083	0.42	76	63	70	99	81	90	1.9	2.88
110300300035	35	0.868	0.524	1.04	0.63	0.082	0.48	92	77	86	120	99	110	2.66	4.03
110300300050	50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.8	5.75
110300300070	70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
110300300095	95	0.32	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.9
110300300120	120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.8
110300300150	150	0.206	0.124	0.247	0.1488	0.074	0.63	210	175	205	270	225	265	11.4	17.3
110300300185	185	0.164	0.0991	0.197	0.1189	0.074	0.64	235	200	240	300	255	305	14.1	21.3
110300300240	240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.2	27.6
110300300300	300	0.1	0.0601	0.122	0.0733	0.073	0.68	305	260	315	385	335	400	22.8	34.5
110300300400	400	0.0778	0.047	0.0961	0.058	0.072	0.7	335	290	375	425	360	435	30.4	46
110300300500	500	0.0605	0.0366	0.0759	0.0459	0.072	0.7	370	320	425	470	390	520	38	57.5
110300300630	630	0.0469	0.0283	0.061	0.0368	0.072	0.7	405	350	480	555	470	675	47.9	72.5

AYY/YY-3.5 CORE





Cable Construction

1.1 kV, 3.5 cores AL / CU conductor, PVC insulated, unarmoured cables as per IS 1554 Part-1.
Conductor : AL / CU stranded compact shaped conductor as per Cl. 2, IS 8130
Insulation : PVC Type - A as per IS 5831. (Option : HR PVC Type - C, as per IS 5831)
Phase Core Color : Red, yellow, blue
Neutral Core Color : Black
Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)
Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831 / FR Type / FRLS Type)
Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised :
Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).
Insulation Type - PVC Type A / C.
Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

Part Number	Size Cores x Sq. mm + Neutral (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
		AL	CU					AL Cable AYY	CU Cable YY
110401010211	3 x 25 + 16	6/6	6/6	1.2/1.0	0.3	2.0	24	680	1250
110401020211	3 x 35 + 16	6/6	6/6	1.2/1.0	0.3	2.0	26	830	1585
110401030211	3 x 50 + 25	6/6	6/6	1.4/1.2	0.3	2.0	29	1030	2080
110401040211	3 x 70 + 35	12/6	12/6	1.4/1.2	0.4	2.2	32	1380	2880
110401050211	3 x 95 + 50	15/6	15/6	1.6/1.4	0.4	2.2	36	1785	3885
110401060211	3 x 120 + 70	15/12	18/12	1.6/1.4	0.5	2.4	40	2190	4830
110401070211	3 x 150 + 70	15/12	18/12	1.8/1.4	0.5	2.4	44	2580	5780
110401080211	3 x 185 + 95	30/15	30/15	2.0/1.6	0.5	2.6	48	3185	7180
110401090211	3 x 240 + 120	30/15	34/18	2.2/1.6	0.6	3.0	54	4085	9280
110401100211	3 x 300 + 150	30/15	34/18	2.4/1.8	0.6	3.2	62	4980	11480
110401110211	3 x 400 + 185	53/30	53/30	2.6/2.0	0.7	3.4	68	6280	14985
110401120211	3 x 500 + 240	53/30	53/34	3.0/2.2	0.7	3.8	77	7985	18480
110401130211	3 x 630 + 300	53/30	53/34	3.4/2.4	0.7	4.0	87	9980	23485

Electrical Parameters

Part Number	Size Cores x Sq. mm + Neutral (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
							With AL Cond.			With CU Cond.				
		AL	CU	AL	CU		Ground	Duct	Air	Ground	Duct	Air	AL	CU
110401010211	3 x 25 + 16	1.2	0.727	1.44	0.87	0.083	76	63	70	99	81	90	1.9	2.88
110401020211	3 x 35 + 16	0.868	0.524	1.04	0.63	0.082	92	77	86	120	99	110	2.66	4.03
110401030211	3 x 50 + 25	0.641	0.387	0.769	0.464	0.082	110	95	105	145	125	135	3.8	5.75
110401040211	3 x 70 + 35	0.443	0.268	0.532	0.322	0.076	135	115	130	175	150	165	5.32	8.05
110401050211	3 x 95 + 50	0.32	0.193	0.384	0.232	0.076	165	140	155	210	175	200	7.22	10.9
110401060211	3 x 120 + 70	0.253	0.153	0.304	0.184	0.075	185	155	180	240	195	230	9.12	13.8
110401070211	3 x 150 + 70	0.206	0.124	0.247	0.1488	0.074	210	175	205	270	225	265	11.4	17.3
110401080211	3 x 185 + 95	0.164	0.0991	0.197	0.1189	0.074	235	200	240	300	255	305	14.1	21.3
110401090211	3 x 240 + 120	0.125	0.0754	0.151	0.0912	0.073	275	235	280	345	295	355	18.2	27.6
110401100211	3 x 300 + 150	0.1	0.0601	0.122	0.0733	0.073	305	260	315	385	335	400	22.8	34.5
110401110211	3 x 400 + 185	0.0778	0.047	0.0961	0.058	0.072	335	290	375	425	360	435	30.4	46
110401120211	3 x 500 + 240	0.0605	0.0366	0.0759	0.459	0.072	370	320	425	470	390	520	38	57.5
110401130211	3 x 630 + 300	0.0469	0.0283	0.061	0.0368	0.072	405	350	480	555	470	675	47.9	72.5

AYY/YY-4 CORE

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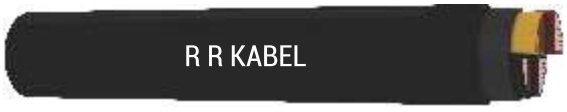

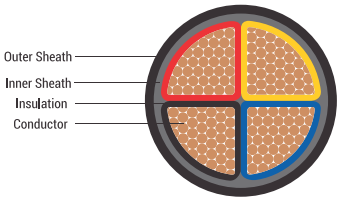

Cable Construction

1.1 kV, 4 cores AL / CU conductor, PVC insulated, unarmoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : PVC Type - A, as per IS 5831. (Option : HR PVC Type - C, as per IS 5831)

Core Color : Red, yellow, blue, black

Inner Sheath : PVC/PVC tape as per IS 1554 (P-1)

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type - ST - 2 as per IS 5831, FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
		AL	CU					AL Cable AYY	CU Cable YY
110500400004	4	_	1/7	1.0	0.3	1.8	16	290	390
110500400006	6	1	1/7	1.0	0.3	1.8	18	380	530
110500400010	10	1	6	1.0	0.3	1.8	20	530	770
110500400016	16	6	6	1.0	0.3	2.0	23	550	940
110500400025	25	6	6	1.2	0.3	2.0	26	740	1350
110500400035	35	6	6	1.2	0.3	2.0	30	925	1785
110500400050	50	6	6	1.4	0.4	2.2	34	1230	2480
110500400070	70	12	12	1.4	0.4	2.2	38	1540	3285
110500400095	95	15	15	1.6	0.4	2.4	43	2030	4385
110500400120	120	15	18	1.6	0.5	2.4	46	2385	5360
110500400150	150	15	18	1.8	0.5	2.6	51	2925	6650
110500400185	185	30	30	2.0	0.6	2.8	55	3630	8230
110500400240	240	30	34	2.2	0.6	3.0	60	4580	10530
110500400300	300	30	34	2.4	0.7	3.4	66	5480	12950
110500400400	400	53	53	2.6	0.7	3.6	73	6780	16700
110500400500	500	53	53	3.0	0.7	4.0	82	8580	20980
110500400630	630	53	53	3.4	0.7	4.0	92	10980	25980

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110500400004	4	_	4.61	_	5.53	0.098	0.23	28	23	23	36	30	30	0.304	0.46
110500400006	6	4.61	3.08	5.53	3.7	0.096	0.28	35	30	30	45	38	39	0.456	0.69
110500400010	10	3.08	1.83	3.7	2.2	0.091	0.34	46	39	40	60	50	52	0.76	1.15
110500400016	16	1.91	1.15	2.29	1.38	0.085	0.4	60	50	51	77	64	66	1.22	1.84
110500400025	25	1.2	0.727	1.44	0.87	0.083	0.42	76	63	70	99	81	90	1.9	2.88
110500400035	35	0.868	0.524	1.04	0.63	0.082	0.48	92	77	86	120	99	110	2.66	4.03
110500400050	50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.8	5.75
110500400070	70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
110500400095	95	0.32	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.9
110500400120	120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.8
110500400150	150	0.206	0.124	0.247	0.1488	0.074	0.63	210	175	205	270	225	265	11.4	17.3
110500400185	185	0.164	0.0991	0.197	0.1189	0.074	0.64	235	200	240	300	255	305	14.1	21.3
110500400240	240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.2	27.6
110500400300	300	0.1	0.0601	0.122	0.0733	0.073	0.68	305	260	315	385	335	400	22.8	34.5
110500400400	400	0.0778	0.047	0.0961	0.058	0.072	0.7	335	290	375	425	360	435	30.4	46
110500400500	500	0.0605	0.0366	0.0759	0.0459	0.072	0.7	370	320	425	470	390	520	38	57.5
110500400630	630	0.0469	0.0283	0.061	0.0368	0.072	0.7	405	350	480	555	470	675	47.9	72.5

AYFaY/YFaY-AYWaY/YWaY

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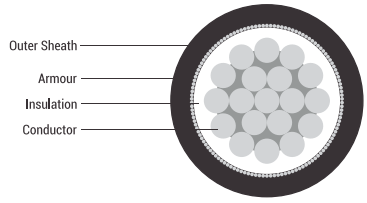


Cable Construction

1.1 kV, 1 cores AL / CU conductor, PVC insulated, aluminum steel strip / wire armoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm & above stranded round or stranded compact Cl. 2 as per IS 8130

Insulation : PVC Type - A, as per IS 5831.(Option : HR PVC Type - C, as per IS 5831)

Core Color : Red or yellow or blue or black or natural

Armouring : Single armouring of aluminum wire or aluminum strip as per IS 1554 P - 1

Outer Sheath: PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831 / FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR /FRLS.

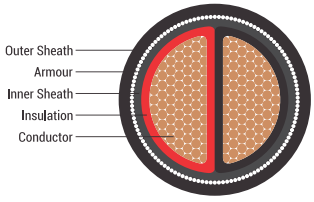
Colour from above technical detail.

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thickness of Insulation (mm)	Armouring with Flat AL Strip (AYFaY/YFaY)					Armouring with Round Wire (AYWaY/YWaY)				
					Nominal Thick. of Arm. Strip (mm)	Minimum Thick. of Out. Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thick. of Out. Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt of Cable (kg/km)	
		AL	CU					AL Cable AYFaY	CU Cable YFaY				AL Cable AYWaY	CU Cable YWaY
110600100016	16	6	6	1.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	14	250	350
110600100025	25	6	6	1.5	N/A	N/A	N/A	N/A	N/A	1.4	1.24	15	300	450
110600100035	35	6	6	1.5	N/A	N/A	N/A	N/A	N/A	1.4	1.24	16	350	560
110600100050	50	6	6	1.7	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	450	750
110600100070	70	12	12	1.7	N/A	N/A	N/A	N/A	N/A	1.4	1.40	20	550	980
110600100095	95	15	15	1.9	0.8	1.40	21	650	1230	1.6	1.40	22	700	1300
110600100120	120	15	18	1.9	0.8	1.40	23	750	1500	1.6	1.40	24	800	1550
110600100150	150	15	18	2.1	0.8	1.40	24	900	1830	1.6	1.40	26	950	1880
110600100185	185	30	30	2.3	0.8	1.40	27	1050	2200	1.6	1.40	29	1100	2250
110600100240	240	30	34	2.5	0.8	1.40	30	1300	2800	1.6	1.56	32	1400	2900
110600100300	300	30	34	2.7	0.8	1.56	32	1600	3450	1.6	1.56	33	1650	3500
110600100400	400	53	53	3.0	0.8	1.56	37	1950	4400	2.0	1.56	39	2100	4580
110600100500	500	53	53	3.4	0.8	1.56	40	2400	5500	2.0	1.72	42	2700	5800
110600100630	630	53	53	3.9	0.8	1.72	45	3100	7000	2.0	1.88	48	3300	7200
110600100800	800	53	53	3.9	0.8	1.88	49	3700	8650	2.0	1.88	52	4000	8950
110600101000	1000	53	53	3.9	0.8	2.04	55	4600	10800	2.5	2.04	59	4900	11000

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal* Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110600100016	16	1.91	1.15	2.29	1.38	0.128	0.81	66	65	64	85	83	82	1.22	1.84
110600100025	25	1.2	0.727	1.44	0.87	0.12	0.87	86	84	84	110	110	110	1.9	2.88
110600100035	35	0.868	0.524	1.04	0.63	0.114	1	100	100	105	130	125	130	2.66	4.03
110600100050	50	0.641	0.387	0.769	0.464	0.11	1.03	120	115	130	155	150	165	3.8	5.75
110600100070	70	0.443	0.268	0.532	0.322	0.103	1.21	140	135	155	190	175	205	5.32	8.05
110600100095	95	0.32	0.193	0.384	0.232	0.101	1.27	175	155	190	220	200	245	7.22	10.9
110600100120	120	0.253	0.153	0.304	0.184	0.096	1.42	195	170	220	250	220	280	9.12	13.8
110600100150	150	0.206	0.124	0.247	0.1488	0.094	1.42	220	190	250	280	245	320	11.4	17.3
110600100185	185	0.164	0.0991	0.197	0.1189	0.092	1.44	240	210	290	305	260	370	14.1	21.3
110600100240	240	0.125	0.0754	0.151	0.0912	0.09	1.53	270	225	335	345	285	425	18.2	27.6
110600100300	300	0.1	0.0601	0.122	0.0733	0.088	1.56	295	245	380	375	310	475	22.8	34.5
110600100400	400	0.0778	0.047	0.0961	0.058	0.088	1.59	325	275	435	400	335	550	30.4	46
110600100500	500	0.0605	0.0366	0.076	0.0459	0.087	1.67	345	295	480	425	355	590	38	57.5
110600100630	630	0.0469	0.0283	0.061	0.0368	0.086	1.67	390	320	550	470	375	660	47.88	72.5
110600100800	800	0.0367	0.0221	0.0503	0.0303	0.083	1.75	450	380	610	530	423	725	60.8	92
110600101000	1000	0.0291	0.0176	0.0422	0.0255	0.082	1.94	500	414	680	590	471	870	76	115

AYFY/YFY-AYWY/YWY-2 CORE



Cable Construction

1.1 kV, 2 cores AL / CU conductor, PVC insulated, galvanised steel strip / wire armoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact round or compact shape conductor Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded round Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded round or stranded compact conductor Cl. 2 as per IS 8130

Above 10 Sq. mm conductor are stranded round or compact round or compacted shaped Cl. 2 as per IS 8130.

Insulation : PVC Type - A, as per IS 5831. (Option : HR PVC Type - C, as per IS 5831)

Core Color : Red, black

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Armouring : Single armouring of G.I. Wire or G.I. Strip as per IS 3975

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831 / FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR /FRLS.

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thick.of Insulation (mm)	Minimum Thick. of Inner Sheath (mm)	Armouring with Flat Strip (AYFY/YFY)					Armouring with Round Wire (AYWY/YWY)				
						Nominal Thickness of Arm. Strip (mm)	Minimum Thick. of Outer Sheath. (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thick. of Outer Sheath. (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
		AL	CU						AL Cable AYFY	CU Cable YFY				AL Cable AYWY	CU Cable YWY
110700200004	4	_	1/7	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	600	650
110700200006	6	1	1/7	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	19	660	730
110700200010	10	1	6	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	20	750	870
110700200016	16	6	6	1.0	0.3	0.8	1.40	18	580	780	1.6	1.40	20	750	950
110700200025	25	6	6	1.2	0.3	0.8	1.40	20	700	1000	1.6	1.40	22	900	1200
110700200035	35	6	6	1.2	0.3	0.8	1.40	22	800	1230	1.6	1.40	23	1030	1450
110700200050	50	6	6	1.4	0.4	0.8	1.40	25	1000	1620	1.6	1.56	26	1300	1900
110700200070	70	12	12	1.4	0.4	0.8	1.56	27	1200	2050	1.6	1.56	29	1500	2350
110700200095	95	15	15	1.6	0.4	0.8	1.56	30	1550	2720	2.0	1.56	33	2050	3200
110700200120	120	15	18	1.6	0.5	0.8	1.56	32	1800	3290	2.0	1.72	35	2400	3900
110700200150	150	15	18	1.8	0.5	0.8	1.72	35	2100	3970	2.0	1.72	37	2760	4600
110700200185	185	30	30	2.0	0.6	0.8	1.88	38	2500	4800	2.0	1.88	41	3200	5500
110700200240	240	30	34	2.2	0.6	0.8	2.04	43	3100	6080	2.5	2.04	47	4200	7200
110700200300	300	30	34	2.4	0.7	0.8	2.20	48	3700	7400	2.5	2.20	50	5000	8700
110700200400	400	53	53	2.6	0.7	0.8	2.36	53	4500	9450	3.2	2.52	58	6600	11500
110700200500	500	53	53	3.0	0.7	0.8	2.68	56	5600	11800	3.2	2.84	64	8000	14000
110700200630	630	53	53	3.4	0.7	0.8	2.84	66	6900	14700	4.0	3.00	72	11000	18800

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110700200004	4	_	4.61	_	5.53	0.098	0.23	32	27	27	41	35	35	0.304	0.46
110700200006	6	4.61	3.08	5.53	3.7	0.096	0.28	40	34	35	50	44	45	0.456	0.69
110700200010	10	3.08	1.83	3.7	2.2	0.091	0.34	55	45	47	70	58	60	0.76	1.15
110700200016	16	1.91	1.15	2.29	1.38	0.085	0.4	70	58	59	90	75	78	1.22	1.84
110700200025	25	1.2	0.727	1.44	0.87	0.083	0.42	90	76	78	115	97	105	1.9	2.88
110700200035	35	0.868	0.524	1.04	0.63	0.082	0.48	110	92	99	140	120	125	2.66	4.03
110700200050	50	0.641	0.387	0.769	0.464	0.082	0.49	135	115	125	165	145	155	3.8	5.75
110700200070	70	0.443	0.268	0.532	0.322	0.076	0.56	160	140	150	205	180	195	5.32	8.05
110700200095	95	0.32	0.193	0.384	0.232	0.076	0.58	190	170	185	240	215	230	7.22	10.9
110700200120	120	0.253	0.153	0.304	0.184	0.075	0.63	210	190	210	275	235	265	9.12	13.8
110700200150	150	0.206	0.124	0.247	0.1488	0.074	0.63	240	210	240	310	270	305	11.4	17.3
110700200185	185	0.164	0.0991	0.197	0.1189	0.074	0.64	275	240	275	350	300	350	14.1	21.3
110700200240	240	0.125	0.0754	0.151	0.0912	0.073	0.67	320	275	325	405	345	410	18.2	27.6
110700200300	300	0.1	0.0601	0.122	0.0733	0.073	0.68	355	305	365	450	385	465	22.8	34.5
110700200400	400	0.0778	0.047	0.0961	0.058	0.072	0.7	385	345	420	490	485	530	30.4	46
110700200500	500	0.0605	0.0366	0.0759	0.0459	0.072	0.7	425	380	475	540	460	605	38	57.5
110700200630	630	0.0469	0.0283	0.061	0.0368	0.072	0.7	465	415	540	640	550	785	47.9	72.5

AYFY/YFY-AYWY/YWY-3 CORE

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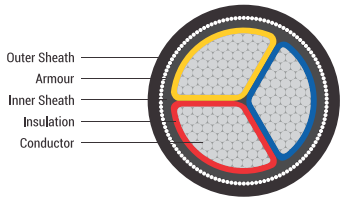

Cable Construction

1.1 kV, 3 cores AL / CU conductor, PVC insulated, galvanised steel strip / wire armoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded class-2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : PVC Type - A as per IS 5831. (Option : PVC Type - C as per IS 5831)

Core Color : Red, yellow, blue

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST-1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831, FR Type, FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thick.of Insulation (mm)	Minimum Thick. of Inner Sheath (mm)	Armouring with Flat Strip (AYFY/YFY)					Armouring with Round Wire (AYWY/YWY)				
						Nominal Thickness of Arm. Strip (mm)	Minimum Thick. of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thick. of Outer Sheath. (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
		AL	CU						AL Cable AYFY	CU Cable YFY				AL Cable AYWY	CU Cable YWY
110800300004	4	_	1/7	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	570	620
110800300006	6	1	1/7	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	19	670	780
110800300010	10	1	6	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.40	21	870	1080
110800300016	16	6	6	1.0	0.3	0.8	1.40	20	690	990	1.6	1.40	21	920	1230
110800300025	25	6	6	1.2	0.3	0.8	1.40	23	890	1340	1.6	1.40	23	1070	1520
110800300035	35	6	6	1.2	0.3	0.8	1.40	24	990	1640	1.6	1.56	26	1280	1930
110800300050	50	6	6	1.4	0.4	0.8	1.56	27	1300	2220	1.6	1.56	29	1580	2510
110800300070	70	12	12	1.4	0.4	0.8	1.56	31	1590	2900	2.0	1.56	33	2130	3430
110800300095	95	15	15	1.6	0.4	0.8	1.56	35	1990	3740	2.0	1.72	37	2630	4380
110800300120	120	15	18	1.6	0.5	0.8	1.72	37	2390	4620	2.0	1.88	39	2980	5180
110800300150	150	15	18	1.8	0.5	0.8	1.88	41	2790	5600	2.0	2.04	43	3530	6280
110800300185	185	30	30	2.0	0.6	0.8	1.88	46	3400	6830	2.5	2.20	49	4590	7980
110800300240	240	30	34	2.2	0.6	0.8	2.20	51	4200	8640	2.5	2.36	54	5580	9980
110800300300	300	30	34	2.4	0.7	0.8	2.36	56	5040	10620	2.5	2.68	59	6580	11980
110800300400	400	53	53	2.6	0.7	0.8	2.68	63	6290	13730	3.2	2.84	68	8690	15990
110800300500	500	53	53	3.0	0.7	0.8	3.00	70	7790	17090	3.2	3.00	75	10980	19980
110800300630	630	53	53	3.4	0.7	0.8	3.00	78	9690	21410	4.0	3.00	84	15990	25480

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110800300004	4	_	4.61	_	5.53	0.098	0.23	28	23	23	36	30	30	0.304	0.46
110800300006	6	4.61	3.08	5.53	3.7	0.096	0.28	35	30	30	45	38	39	0.456	0.69
110800300010	10	3.08	1.83	3.7	2.2	0.091	0.34	46	39	40	60	50	52	0.76	1.15
110800300016	16	1.91	1.15	2.29	1.38	0.085	0.4	60	50	51	77	64	66	1.22	1.84
110800300025	25	1.2	0.727	1.44	0.87	0.083	0.42	76	63	70	99	81	90	1.9	2.88
110800300035	35	0.868	0.524	1.04	0.63	0.082	0.48	92	77	86	120	99	110	2.66	4.03
110800300050	50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.8	5.75
110800300070	70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
110800300095	95	0.32	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.9
110800300120	120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.8
110800300150	150	0.206	0.124	0.247	0.1488	0.074	0.63	210	175	205	270	225	265	11.4	17.3
110800300185	185	0.164	0.0991	0.197	0.1189	0.074	0.64	235	200	240	300	255	305	14.1	21.3
110800300240	240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.2	27.6
110800300300	300	0.1	0.0601	0.122	0.0733	0.073	0.68	305	260	315	385	335	400	22.8	34.5
110800300400	400	0.0778	0.047	0.0961	0.058	0.072	0.7	335	290	375	425	360	435	30.4	46
110800300500	500	0.0605	0.0366	0.0759	0.0459	0.072	0.7	370	320	425	470	390	520	38	57.5
110800300630	630	0.0469	0.0283	0.061	0.0368	0.072	0.7	405	350	480	555	470	675	47.9	72.5

AYFY/YFY-AYWY/YWY-3.5 CORE

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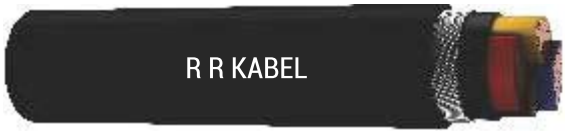

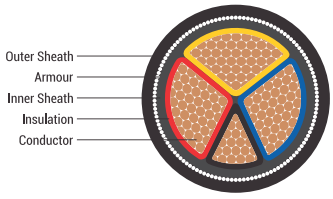

Cable Construction

1.1 kV, 3.5 cores AL / CU Conductor, PVC insulated, galvanised steel strip / wire armoured cables as per IS 1554 Part - 1.

Conductor : AL/ CU Stranded compact shaped conductor as per Cl. 2, IS 8130

Insulation : PVC Type - A as per IS 5831. (Option : HR PVC Type - C, as per IS 5831)

Phase Core Color : Red, yellow, blue

Neutral Core Color : Black

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831, FR Type, FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

Part Number	Size Cores x Sq. mm + Neutral (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thick.of Insulation (mm)	Minimum Thick. of Inner Sheath (mm)	Armouring with Flat Strip (AYFY/YFY)					Armouring with Round Wire (AYWY/YWY)				
						Nominal Thickness of Arm. Strip (mm)	Minimum Thick. of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thick. of Outer Sheath. (mm)	Approx. Overall Dia. (mm)	Approx Net Wt of Cable (kg/km)	
		AL	CU						AL Cable AYFY	CU Cable YFY				AL Cable AYWY	CU Cable YWY
110901010211	3 x 25 + 16	6/6	6/6	1.2/1.0	0.3	0.8	1.40	24	1000	1550	1.6	1.40	26	1285	1825
110901020211	3 x 35 + 16	6/6	6/6	1.2/1.0	0.3	0.8	1.40	26	1200	1950	1.6	1.40	28	1425	2125
110901030211	3 x 50 + 25	6/6	6/6	1.4/1.2	0.3	0.8	1.56	30	1500	2600	1.6	1.56	31	1785	2790
110901040211	3 x 70 + 35	12/6	12/6	1.4/1.2	0.4	0.8	1.56	34	1800	3300	2.0	1.56	36	2390	3780
110901050211	3 x 95 + 50	15/6	15/6	1.6/1.4	0.4	0.8	1.56	37	2300	4350	2.0	1.72	39	2980	4980
110901060211	3 x 120 + 70	15/12	18/12	1.6/1.4	0.5	0.8	1.72	41	2800	5450	2.0	1.88	43	3480	6080
110901070211	3 x 150 + 70	15/12	18/12	1.8/1.4	0.5	0.8	1.88	45	3200	6400	2.0	1.88	47	3970	7180
110901080211	3 x 185 + 95	30/15	30/15	2/1.6	0.5	0.8	2.04	49	3900	7900	2.5	2.04	53	5185	9150
110901090211	3 x 240 + 120	30/15	34/18	2.20/1.6	0.6	0.8	2.20	55	4800	10000	2.5	2.30	58	6385	11480
110901100211	3 x 300 + 150	30/15	34/18	2.4/1.8	0.6	0.8	2.36	61	5800	12300	3.2	2.52	65	8180	14480
110901110211	3 x 400 + 185	53/30	53/30	2.6/2.0	0.7	0.8	2.68	69	7300	15800	3.2	2.63	75	9885	18380
110901120211	3 x 500 + 240	53/30	53/34	3.0/2.2	0.7	0.8	2.84	77	9000	19500	4.0	3.00	84	13480	23985
110901130211	3 x 630 + 300	53/30	53/34	3.4/2.40	0.7	0.8	3.00	87	11500	25000	4.0	3.00	92	15980	28480

Electrical Parameters

Part Number	Size Cores x Sq. mm + Neutral (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
110901010211	3x25+16	1.2	0.727	1.44	0.87	0.083	0.42	76	63	70	99	81	90	1.9	2.88
110901020211	3x35+16	0.868	0.524	1.04	0.63	0.082	0.48	92	77	86	120	99	110	2.66	4.03
110901030211	3x50+25	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.8	5.75
110901040211	3x70+35	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
110901050211	3x95+50	0.32	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.9
110901060211	3x120+70	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.8
110901070211	3x150+70	0.206	0.124	0.247	0.1488	0.074	0.63	210	175	205	270	225	265	11.4	17.3
110901080211	3x185+95	0.164	0.0991	0.197	0.1189	0.074	0.64	235	200	240	300	255	305	14.1	21.3
110901090211	3x240+120	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.2	27.6
110901100211	3x300+150	0.1	0.0601	0.122	0.0733	0.073	0.68	305	260	315	385	335	400	22.8	34.5
110901110211	3x400+185	0.0778	0.047	0.0961	0.058	0.072	0.7	335	290	375	425	360	435	30.4	46
110901120211	3x500+240	0.0605	0.0366	0.0759	0.459	0.072	0.7	370	320	425	470	390	520	38	57.5
110901130211	3x630+300	0.0469	0.0283	0.061	0.0368	0.072	0.7	405	350	480	555	470	675	47.9	72.5

AYFY/YFY-AYWY/YWY-4 CORE

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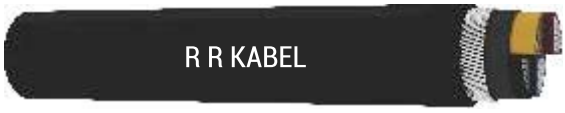
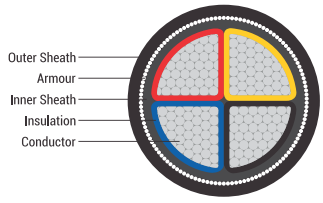




Cable Construction

1.1 kV, 4 Cores AL / CU conductor, PVC insulated, galvanised steel strip / wire armoured cables as per IS 1554 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl.2 as per IS 8130

Insulation : PVC Type - A as per IS 5831. (Option : PVC Type - C as per IS 5831)

Core Color : Red, yellow, blue, black

Inner Sheath : PVC / PVC tape as per IS 1554 (P-1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831, FR Type, FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While Ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Insulation Type - PVC Type A / C.

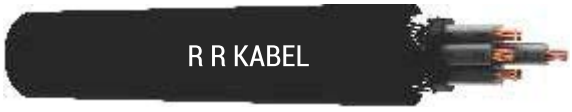
Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

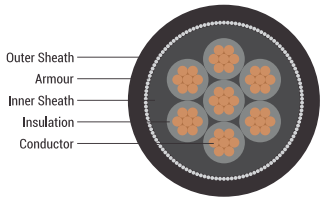
Part Number	Nominal Cross - Sectional Area (Sq. mm)	Minimum No. of Strands in Conductor		Nominal Thick.of Insulation (mm)	Minimum Thick. of Inner Sheath (mm)	Armouring with Flat Strip (AYFY/YFY)					Armouring with Round Wire (AYWY/YWY)				
						Nominal Thickness of Arm. Strip (mm)	Minimum Thick. of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thick. of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
		AL	CU						AL Cable AYFY	CU Cable YFY				AL Cable AYWY	CU Cable YWY
111000400004	4	_	1/7	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	630	775
111000400006	6	1	1/7	1.0	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	21	870	1010
111000400010	10	1	6	1.0	0.3	0.8	1.40	21	750	998	1.6	1.40	22	890	1130
111000400016	16	6	6	1.0	0.3	0.8	1.40	22	860	1260	1.6	1.40	23	1110	1500
111000400025	25	6	6	1.2	0.3	0.8	1.40	25	1100	1720	1.6	1.40	27	1385	2000
111000400035	35	6	6	1.2	0.3	0.8	1.40	28	1300	2170	1.6	1.56	30	1580	2450
111000400050	50	6	6	1.4	0.4	0.8	1.56	32	1600	2850	2.0	1.56	34	2185	3425
111000400070	70	12	12	1.4	0.4	0.8	1.56	35	2000	3740	2.0	1.56	37	2625	4370
111000400095	95	15	15	1.6	0.4	0.8	1.72	40	2600	5000	2.0	1.72	42	3285	5640
111000400120	120	15	18	1.6	0.5	0.8	1.88	43	3050	6030	2.0	1.88	47	3825	6820
111000400150	150	15	18	1.8	0.5	0.8	1.88	48	3600	7325	2.5	2.04	51	4830	8560
111000400185	185	30	30	2.0	0.6	0.8	2.04	52	4300	8890	2.5	2.20	56	5780	10370
111000400240	240	30	34	2.2	0.6	0.8	2.36	59	5400	11355	2.5	2.36	62	7685	12940
111000400300	300	30	34	2.4	0.7	0.8	2.52	67	6600	14050	3.2	2.68	70	9185	16630
111000400400	400	53	53	2.6	0.7	0.8	2.84	74	8200	18128	3.2	2.84	76	10980	20390
111000400500	500	53	53	3.0	0.7	0.8	3.00	80	10500	22900	4.0	3.00	86	14980	27360
111000400630	630	53	53	3.4	0.7	0.8	3.00	90	13000	28625	4.0	3.00	96	17975	33600

Electrical Parameters

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Max. DC Conductor Resistance at 20°C (Ω/km)		Max. AC Conductor Resistance at 70°C (Ω/km)		Approx. Reactance at 50 Hz (Ω/km)	Approx. Capacitance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Rating for 1sec. Duration (K.Amps)	
								With AL Cond.			With CU Cond.				
		AL	CU	AL	CU			Ground	Duct	Air	Ground	Duct	Air	AL	CU
111000400004	4	_	4.61	_	5.53	0.098	0.23	28	23	23	36	30	30	0.304	0.46
111000400006	6	4.61	3.08	5.53	3.7	0.096	0.28	35	30	30	45	38	39	0.456	0.69
111000400010	10	3.08	1.83	3.7	2.2	0.091	0.34	46	39	40	60	50	52	0.76	1.15
111000400016	16	1.91	1.15	2.29	1.38	0.085	0.4	60	50	51	77	64	66	1.22	1.84
111000400025	25	1.2	0.727	1.44	0.87	0.083	0.42	76	63	70	99	81	90	1.9	2.88
111000400035	35	0.868	0.524	1.04	0.63	0.082	0.48	92	77	86	120	99	110	2.66	4.03
111000400050	50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.8	5.75
111000400070	70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
111000400095	95	0.32	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.9
111000400120	120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.8
111000400150	150	0.206	0.124	0.247	0.1488	0.074	0.63	210	175	205	270	225	265	11.4	17.3
111000400185	185	0.164	0.0991	0.197	0.1189	0.074	0.64	235	200	240	300	255	305	14.1	21.3
111000400240	240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.2	27.6
111000400300	300	0.1	0.0601	0.122	0.0733	0.073	0.68	305	260	315	385	335	400	22.8	34.5
111000400400	400	0.0778	0.047	0.0961	0.058	0.072	0.7	335	290	375	425	360	435	30.4	46
111000400500	500	0.0605	0.0366	0.0759	0.0459	0.072	0.7	370	320	425	470	390	520	38	57.5
111000400630	630	0.0469	0.0283	0.061	0.0368	0.072	0.7	405	350	480	555	470	675	47.9	72.5

YY/YFY/YWY-1.5 Sq. mm





Cable Construction

1.1 kV, 1.5 Sq. mm copper conductor, PVC insulated unarmoured & galvanised steel strip / wire armoured control cables as per IS 1554 Part - 1.

Conductor : CU conductor solid as per Cl.1 IS 8130 or stranded as per Cl. 2 IS 8130

Insulation Material : PVC Type - A as per IS 5831 / Option : HR PVC (Type - C) as per IS 5831. Nominal Thickness of Insulation is 0.8 mm.

Core Colours : Up to 5 cores by colour coding & more than 5 cores number printing on core as per IS 1554 (P-1)

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831, FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Class of conductor - Cl. 1 or 2.

Insulation Type - PVC Type A / C.

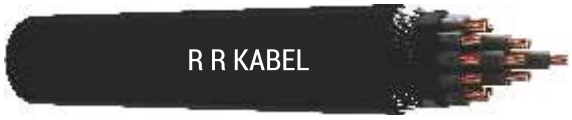
Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

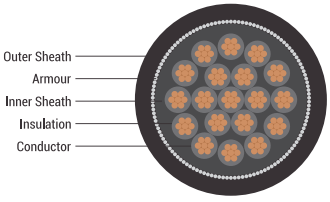
Part Number	No. of Cores	Minimum Thickness of Inner Sheath (mm)	Unarmoured (YY)			Armoured With Flat Strips (YFY)				Armoured With Round Wire (YWY)			
			Nominal Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Thickness of Strip for Arm. (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. (kg/km)	Nominal Thickness of Strip for Arm. (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. (kg/km)
111100201105	2	0.3	1.8	12	180	N/A	N/A	N/A	N/A	1.4	1.24	13	380
111100301105	3	0.3	1.8	12.5	200	N/A	N/A	N/A	N/A	1.4	1.24	14	440
111100401105	4	0.3	1.8	13	230	N/A	N/A	N/A	N/A	1.4	1.24	15	480
111100501105	5	0.3	1.8	14	250	N/A	N/A	N/A	N/A	1.4	1.24	16	510
111100601105	6	0.3	1.8	15	290	N/A	N/A	N/A	N/A	1.4	1.24	17	570
111100701105	7	0.3	1.8	15	310	N/A	N/A	N/A	N/A	1.4	1.24	17	630
111101001105	10	0.3	1.8	18	420	N/A	N/A	N/A	N/A	1.4	1.24	20	780
111101201105	12	0.3	1.8	19	470	0.8	1.24	19	700	1.6	1.40	21	900
111101401105	14	0.3	1.8	20	530	0.8	1.40	20	800	1.6	1.40	22	980
111101601105	16	0.3	1.8	21	600	0.8	1.40	21	850	1.6	1.40	23	1050
111101901105	19	0.3	2.0	22	700	0.8	1.40	22	950	1.6	1.40	24	1160
111102401105	24	0.3	2.0	25	850	0.8	1.40	25	1150	1.6	1.40	27	1400
111102701105	27	0.3	2.0	26	920	0.8	1.40	26	1250	1.6	1.40	28	1480
111103001105	30	0.3	2.0	27	1000	0.8	1.40	27	1330	1.6	1.40	29	1600
111103701105	37	0.3	2.0	28	1200	0.8	1.40	29	1530	1.6	1.40	30	1800
111104001105	40	0.3	2.0	29	1270	0.8	1.40	30	1650	1.6	1.56	32	1980
111104401105	44	0.3	2.0	31	1400	0.8	1.56	32	1850	1.6	1.56	34	2150
111105201105	52	0.4	2.0	33	1650	0.8	1.56	34	2050	2.0	1.56	36	2650
111106101105	61	0.4	2.2	35	1850	0.8	1.56	35	2300	2.0	1.56	38	2950

Electrical Parameters

Part Number	No. of Cores	Max. DC Conductor Resistance at 20°C (Ω/km)	Approx. AC Conductor Resistance (Ω/km)		Reactance of Cable at 50 Hz (Ω/km)	Approx. Capaci-tance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Ratingfor 1sec. Duration	
							With General Insulation			With H.R. Insulation				
			at 70°C	at 85°C			Ground	Duct	Air	Ground	Duct	Air	With Gen. Purpose Insulation	With Heat Resistance Insulation
111100201105	2	12.1	14.52	15.2	0.112	0.2	23	20	20	26	24	24	0.156	0.173
111100301105	3	12.1	14.52	15.2	0.112	0.2	21	17	17	24	21	21	0.156	0.173
111100401105	4	12.1	14.52	15.2	0.112	0.2	21	17	17	24	21	21	0.156	0.173
111100501105	5	12.1	14.52	15.2	0.112	0.2	21	17	17	24	21	21	0.156	0.173
111100601105	6	12.1	14.52	15.2	0.112	0.2	15	13	13	17	16	16	0.156	0.173
111100701105	7	12.1	14.52	15.2	0.112	0.2	14	13	13	16	15	15	0.156	0.173
111101001105	10	12.1	14.52	15.2	0.112	0.2	13	11	11	15	13	13	0.156	0.173
111101201105	12	12.1	14.52	15.2	0.112	0.2	12	10	10	14	12	12	0.156	0.173
111101401105	14	12.1	14.52	15.2	0.112	0.2	11	10	10	13	12	12	0.156	0.173
111101601105	16	12.1	14.52	15.2	0.112	0.2	11	9	9	13	11	11	0.156	0.173
111101901105	19	12.1	14.52	15.2	0.112	0.2	10	9	9	11	11	11	0.156	0.173
111102401105	24	12.1	14.52	15.2	0.112	0.2	9	8	8	10	10	10	0.156	0.173
111102701105	27	12.1	14.52	15.2	0.112	0.2	9	8	8	10	10	10	0.156	0.173
111103001105	30	12.1	14.52	15.2	0.112	0.2	9	7	7	10	8	8	0.156	0.173
111103701105	37	12.1	14.52	15.2	0.112	0.2	8	7	7	9	8	8	0.156	0.173
111104001105	40	12.1	14.52	15.2	0.112	0.2	8	7	7	9	8	8	0.156	0.173
111104401105	44	12.1	14.52	15.2	0.112	0.2	7	7	7	8	7	7	0.156	0.173
111105201105	52	12.1	14.52	15.2	0.112	0.2	6	6	6	7	7	7	0.156	0.173
111106101105	61	12.1	14.52	15.2	0.112	0.2	6	6	6	7	7	7	0.156	0.173

YY/YFY/YWY-2.5 Sq. mm





Cable Construction

1.1 kV, 2.5 Sq. mm copper conductor, PVC insulated unarmoured & galvanised steel strip / wire armoured control cables as per IS 1554 Part - 1.

Conductor : CU conductor solid as per Cl .1 IS 8130 or stranded as per Cl. 2 IS 8130

Insulation Material : PVC Type - A as per IS 5831/ Option : HR PVC (Type - C) as per IS 5831. Nominal thickness of insulation is 0.9 mm

Core Colours : Up to 5 cores by colour coding & more than 5 cores number printing on core as per IS 1554 (P - 1)

Inner Sheath : PVC / PVC tape as per IS 1554 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 1 as per IS 5831 (Option : PVC Type ST - 2 as per IS 5831, FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Class of conductor - Cl. 1 or 2.

Insulation Type - PVC Type A / C.

Sheath Type - PVC Type ST - 1 / FR / FRLS; PVC Type ST - 2 / FR / FRLS.

Part Number	No. of Cores	Minimum Thickness of Inner Sheath (mm)	Unarmoured (YY)			Armoured With Flat Strips (YFY)				Armoured With Round Wire (YWY)			
			Nominal Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Thickness of Strip for Arm. (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. (kg/km)	Nominal Thickness of Strip for Arm. (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. (kg/km)
111200201205	2	0.3	1.8	13	220	N/A	N/A	N/A	N/A	1.4	1.24	14	440
111200301205	3	0.3	1.8	14	260	N/A	N/A	N/A	N/A	1.4	1.24	15	480
111200401205	4	0.3	1.8	15	310	N/A	N/A	N/A	N/A	1.4	1.24	16	560
111200501205	5	0.3	1.8	16	340	N/A	N/A	N/A	N/A	1.4	1.24	17	600
111200601205	6	0.3	1.8	17	390	N/A	N/A	N/A	N/A	1.4	1.24	19	685
111200701205	7	0.3	1.8	17	424	N/A	N/A	N/A	N/A	1.6	1.24	19	720
111201001205	10	0.3	1.8	20	570	0.8	1.40	21	850	1.6	1.40	23	1040
111201201205	12	0.3	2.0	21	670	0.8	1.40	22	950	1.6	1.40	24	1130
111201401205	14	0.3	2.0	22	750	0.8	1.40	23	1050	1.6	1.40	25	1080
111201601205	16	0.3	2.0	24	840	0.8	1.40	24	1120	1.6	1.40	26	1180
111201901205	19	0.3	2.0	25	950	0.8	1.40	25	1250	1.6	1.40	27	1340
111202401205	24	0.3	2.0	28	1200	0.8	1.40	29	1550	1.6	1.56	31	1680
111202701205	27	0.3	2.0	29	1300	0.8	1.40	30	1650	1.6	1.56	32	1840
111203001205	30	0.3	2.0	30	1400	0.8	1.56	31	1800	1.6	1.56	33	1985
111203701205	37	0.4	2.2	33	1700	0.8	1.56	34	2100	2.0	1.56	36	2580
111204001205	40	0.4	2.2	34	1850	0.8	1.56	35	2300	2.0	1.56	37	2740
111204401205	44	0.4	2.2	36	2000	0.8	1.56	37	2500	2.0	1.56	40	2980
111205201205	52	0.4	2.2	38	2350	0.8	1.56	39	2850	2.0	1.72	42	3380
111206101205	61	0.4	2.2	40	2700	0.8	1.56	41	3250	2.0	1.72	44	3780

Electrical Parameters

Part Number	No. of Cores	Max. DC Conductor Resistance at 20°C (Ω/km)	Approx. AC Conductor Resistance (Ω/km)		Reactance of Cable at 50 Hz (Ω/km)	Approx. Capaci-tance of Cable (microF /KM)	Normal Current Rating (Amps)						Short Circuit Current Ratingfor 1sec. Duration	
							With General Insulation			With H.R. Insulation				
			at 70°C	at 85°C			Ground	Duct	Air	Ground	Duct	Air	With Gen. Purpose Insulation	With Heat Resistance Insulation
111200201205	2	7.41	8.89	9.34	0.107	0.22	32	27	27	38	32	32	0.26	0.288
111200301205	3	7.41	8.89	9.34	0.107	0.22	27	24	24	30	28	28	0.26	0.288
111200401205	4	7.41	8.89	9.34	0.107	0.22	27	24	24	30	28	28	0.26	0.288
111200501205	5	7.41	8.89	9.34	0.107	0.22	27	24	24	30	28	28	0.26	0.288
111200601205	6	7.41	8.89	9.34	0.107	0.22	21	18	18	24	21	21	0.26	0.288
111200701205	7	7.41	8.89	9.34	0.107	0.22	20	17	17	22	20	20	0.26	0.288
111201001205	10	7.41	8.89	9.34	0.107	0.22	18	15	15	20	16	16	0.26	0.288
111201201205	12	7.41	8.89	9.34	0.107	0.22	17	14	14	19	16	16	0.26	0.288
111201401205	14	7.41	8.89	9.34	0.107	0.22	16	13	13	18	15	15	0.26	0.288
111201601205	16	7.41	8.89	9.34	0.107	0.22	15	13	13	17	15	15	0.26	0.288
111201901205	19	7.41	8.89	9.34	0.107	0.22	14	12	12	16	14	14	0.26	0.288
111202401205	24	7.41	8.89	9.34	0.107	0.22	13	11	11	14	13	13	0.26	0.288
111202701205	27	7.41	8.89	9.34	0.107	0.22	12	10	10	13	12	12	0.26	0.288
111203001205	30	7.41	8.89	9.34	0.107	0.22	12	10	10	13	12	12	0.26	0.288
111203701205	37	7.41	8.89	9.34	0.107	0.22	11	9	9	12	10	10	0.26	0.288
111204001205	40	7.41	8.89	9.34	0.107	0.22	11	9	9	12	10	10	0.26	0.288
111204401205	44	7.41	8.89	9.34	0.107	0.22	10	9	9	11	10	10	0.26	0.288
111205201205	52	7.41	8.89	9.34	0.107	0.22	9	8	8	10	10	10	0.26	0.288
111206101205	61	7.41	8.89	9.34	0.107	0.22	8	8	8	9	9	9	0.26	0.288

A2XY/2XY-1 CORE

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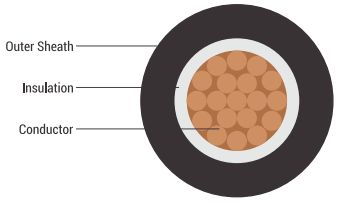

Cable Construction

1.1 kV, 1 cores AL / CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm & above stranded round or stranded compact Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red or yellow or blue or black or natural

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option: FR Type / FRLS Type)

Cable Color : Black (Options: Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Colour from above technical details.

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
					AL Cable A2XY	CU Cable 2XY
111300100016	16	0.7	1.8	11	125	225
111300100025	25	0.9	1.8	12	170	330
111300100035	35	0.9	1.8	13	205	425
111300100050	50	1.0	1.8	15	250	550
111300100070	70	1.1	1.8	16	335	750
111300100095	95	1.1	1.8	18	425	1000
111300100120	120	1.2	1.8	20	515	1250
111300100150	150	1.4	2.0	22	615	1520
111300100185	185	1.6	2.0	24	770	1880
111300100240	240	1.7	2.0	27	965	2415
111300100300	300	1.8	2.0	30	1160	2980
111300100400	400	2.0	2.2	33	1480	3800
111300100500	500	2.2	2.2	36	1840	4815
111300100630	630	2.4	2.2	40	2350	6150
111300100800	800	2.6	2.4	47	2830	7840
111300101000	1000	2.8	2.6	51	3670	9800

A2XY/2XY-2 CORE

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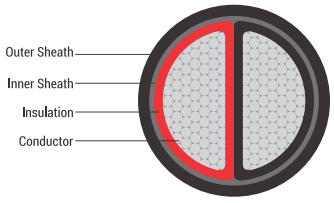

Cable Construction

1.1 kV, 2 cores AL / CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact round or compact shape conductor Cl. 2 as per IS:8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded round Cl. 2 as per IS:8130. 10 Sq. mm conductor is stranded round or stranded compact conductor Cl. 2 as per IS 8130

Above 10 Sq. mm conductor are stranded round or compact round or compacted shaped Cl. 2 as per : IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (class 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
						AL Cable A2XY	CU Cable 2XY
111400200004	4	0.7	0.3	1.8	13	180	235
111400200006	6	0.7	0.3	1.8	14	220	300
111400200010	10	0.7	0.3	1.8	17	280	400
111400200016	16	0.7	0.3	1.8	17	300	440
111400200025	25	0.9	0.3	2.0	19	340	650
111400200035	35	0.9	0.3	2.0	20	415	840
111400200050	50	1.0	0.3	2.0	22	520	1090
111400200070	70	1.1	0.3	2.0	25	680	1500
111400200095	95	1.1	0.4	2.2	28	880	2010
111400200120	120	1.2	0.4	2.2	31	1080	2500
111400200150	150	1.4	0.4	2.2	33	1295	3060
111400200185	185	1.6	0.5	2.4	37	1630	3840
111400200240	240	1.7	0.5	2.6	41	2070	4970
111400200300	300	1.8	0.6	2.8	44	2520	6160
111400200400	400	2.0	0.6	3.0	48	3200	7830
111400200500	500	2.2	0.7	3.4	54	4040	9990
111400200630	630	2.4	0.7	3.6	62	5130	12840

A2XY/2XY-3 CORE

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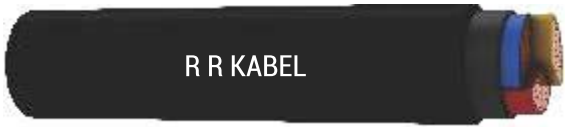

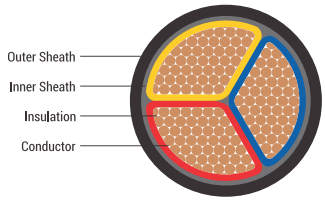

Cable Construction

1.1 kV, 3 Cores AL / CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl.1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Over all Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
						AL Cable A2XY	CU Cable 2XY
111500300004	4	0.7	0.3	1.8	14	170	240
111500300006	6	0.7	0.3	1.8	16	200	300
111500300010	10	0.7	0.3	1.8	18	250	430
111500300016	16	0.7	0.3	1.8	18	310	600
111500300025	25	0.9	0.3	2.0	21	470	920
111500300035	35	0.9	0.3	2.0	22	570	1210
111500300050	50	1.0	0.3	2.0	25	720	1590
111500300070	70	1.1	0.4	2.2	30	950	2200
111500300095	95	1.1	0.4	2.2	32	1250	2980
111500300120	120	1.2	0.4	2.2	35	1520	3720
111500300150	150	1.4	0.5	2.4	39	1840	4550
111500300185	185	1.6	0.5	2.6	43	2310	5700
111500300240	240	1.7	0.6	2.8	49	3010	7390
111500300300	300	1.8	0.6	3.0	53	3600	9190
111500300400	400	2.0	0.7	3.2	59	4560	11700
111500300500	500	2.2	0.7	3.6	66	5780	14940
111500300630	630	2.4	0.7	3.8	73	7360	19230

A2XY/2XY-3.5 CORE

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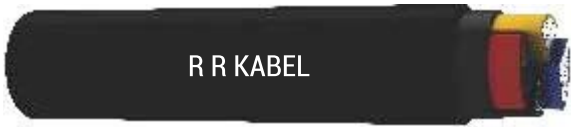
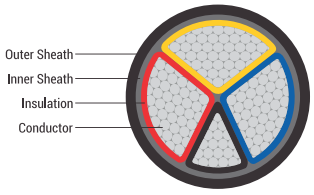




Cable Construction

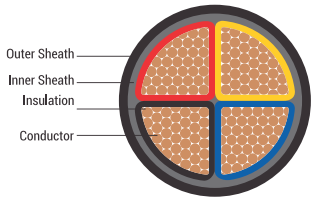
1.1 kV, 3.5 Cores AL / CU Conductor, XLPE Insulated, Unarmoured Cables as per IS:7098 Part-1.
Conductor : AL / CU Stranded compact shaped conductor as per Cl. 2, IS:8130
Insulation : Crosslinked polyethylene (XLPE)
Phase Core Color : Red, yellow, blue
Neutral Core Color : Black
Inner Sheath : PVC / PVC tape as per IS:7098 (P-1)
Outer Sheath : PVC Type ST-2 as per IS:5831 (Option: FR Type / FRLS Type)
Cable Color : Black (Options: Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:
Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).
Sheath Type - PVC Type ST-2 (FR or FRLS).

Part Number	Size Cores x Sq. mm + Neutral (mm^2)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
						AL Cable A2XY	CU Cable 2XY
111601010211	3 x 25 + 16	0.9/0.7	0.3	2.0	22	575	1125
111601020211	3 x 35 + 16	0.9/0.7	0.3	2.0	24	685	1425
111601030211	3 x 50 + 25	1.0/0.9	0.3	2.0	27	880	1980
111601040211	3 x 70 + 35	1.1/0.9	0.4	2.2	31	1185	2680
111601050211	3 x 95 + 50	1.1/1.0	0.4	2.2	34	1480	3580
111601060211	3 x 120 + 70	1.2/1.1	0.4	2.2	38	1880	4480
111601070211	3 x 150 + 70	1.4/1.1	0.5	2.4	43	2275	5485
111601080211	3 x 185 + 95	1.6/1.1	0.5	2.6	46	2770	6785
111601090211	3 x 240 + 120	1.7/1.2	0.6	2.8	52	3580	8675
111601100211	3 x 300 + 150	1.8/1.4	0.6	3.0	57	4380	10780
111601110211	3 x 400 + 185	2.0/1.6	0.7	3.4	65	5580	13980
111601120211	3 x 500 + 240	2.2/1.7	0.7	3.6	73	6980	17425
111601130211	3 x 630 + 300	2.4/1.8	0.7	4.0	82	8885	21970

A2XY/2XY-4 CORE



Cable Construction

1.1 kV, 4 cores AL /CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl.2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)	
						AL Cable A2XY	CU Cable 2XY
111700400004	4	0.7	0.3	1.8	16	225	340
111700400006	6	0.7	0.3	1.8	17	315	480
111700400010	10	0.7	0.3	1.8	19	370	640
111700400016	16	0.7	0.3	1.8	20	440	840
111700400025	25	0.9	0.3	2.0	24	650	1290
111700400035	35	0.9	0.3	2.0	26	780	1685
111700400050	50	1.0	0.3	2.0	29	985	2190
111700400070	70	1.1	0.4	2.2	34	1380	3090
111700400095	95	1.1	0.4	2.2	37	1685	3980
111700400120	120	1.2	0.5	2.4	41	2125	5130
111700400150	150	1.4	0.5	2.6	45	2630	6230
111700400185	185	1.6	0.5	2.8	50	3230	7830
111700400240	240	1.7	0.6	3.0	56	4080	9980
111700400300	300	1.8	0.7	3.2	63	5030	12030
111700400400	400	2.0	0.7	3.6	70	6385	15980
111700400500	500	2.2	0.7	3.8	79	7980	19985
111700400630	630	2.4	0.7	4.0	88	9985	25985

A2XFaY/2XFaY-A2XWaY/2XWaY

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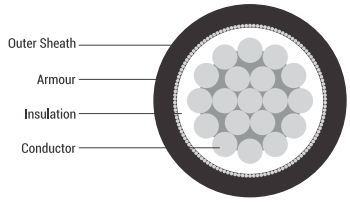

Cable Construction

1.1 kV, 1 cores AL / CU conductor, XLPE insulated, aluminum strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm & above stranded round or stranded compact Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red or yellow or blue or black

Armouring : Single armouring of aluminum strip or aluminum wire as per IS 7098 P - 1

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Colour from above technical details.

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Armouring with flat strip (A2XFaY/ 2XFaY)					Armouring with Round Wire (AYWaY/YWaY)				
			Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt. of Cable (kg/km)	
						AL Cable A2XFaY	CU Cable 2XFaY				AL Cable AYWaY	CU Cable YWaY
111800100016	16	1.0	N/A	N/A	N/A	N/A	N/A	1.4	1.24	13	200	300
111800100025	25	1.2	N/A	N/A	N/A	N/A	N/A	1.4	1.24	14	300	455
111800100035	35	1.2	N/A	N/A	N/A	N/A	N/A	1.4	1.24	15	350	567
111800100050	50	1.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	17	420	730
111800100070	70	1.4	N/A	N/A	N/A	N/A	N/A	1.4	1.24	19	520	954
111800100095	95	1.4	0.8	1.40	21	600	1195	1.6	1.4	22	650	1235
111800100120	120	1.5	0.8	1.40	23	700	1450	1.6	1.4	24	750	1494
111800100150	150	1.7	0.8	1.40	24	800	1730	1.6	1.4	25	850	1780
111800100185	185	1.9	0.8	1.40	26	950	2100	1.6	1.4	28	1000	2147
111800100240	240	2.0	0.8	1.40	30	1200	2690	1.6	1.4	30	1250	2738
111800100300	300	2.1	0.8	1.56	32	1400	3270	1.6	1.56	33	1500	3360
111800100400	400	2.4	0.8	1.56	36	1750	4230	2.0	1.56	38	1900	4380
111800100500	500	2.6	0.8	1.56	39	2150	5250	2.0	1.56	41	2350	5450
111800100630	630	2.8	0.8	1.72	44	2700	6610	2.0	1.72	46	2900	6806
111800100800	800	3.1	0.8	1.72	48	3350	8320	2.0	1.88	51	3600	8560
111800101000	1000	3.3	0.8	1.88	54	4100	10300	2.5	2.04	56	4600	10800

A2XFY/2XFY-A2XWY/2XWY-2 CORE

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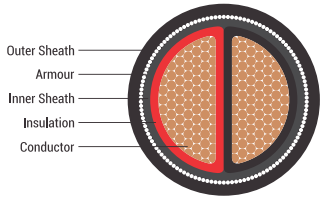

Cable Construction

1.1 kV, 2 cores AL / CU conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded round or compact round or compact shape conductor Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded round Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded round or stranded compact conductor Cl. 2 as per IS 8130

Above 10 Sq. mm conductor are stranded round or compact round or compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P-1)

Armouring : Single armouring of galvanised steel strip / wire as per IS 3975

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)					Armouring with round wire (A2XWY/ 2XWY)				
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
							AL Cable A2XFY	CU Cable 2XFY				AL Cable AYWaY	CU Cable YWaY
111900200004	4	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	15	500	550
111900200006	6	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	16	550	600
111900200010	10	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	650	770
111900200016	16	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.40	19	700	900
111900200025	25	0.9	0.3	0.8	1.40	20	650	950	1.6	1.40	21	850	1150
111900200035	35	0.9	0.3	0.8	1.40	21	750	1200	1.6	1.40	23	950	1400
111900200050	50	1.0	0.3	0.8	1.40	23	900	1500	1.6	1.40	25	1100	1700
111900200070	70	1.1	0.3	0.8	1.56	26	1100	1950	1.6	1.56	28	1400	2250
111900200095	95	1.1	0.4	0.8	1.56	29	1350	2500	2.0	1.56	31	1850	3000
111900200120	120	1.2	0.4	0.8	1.56	31	1600	3100	2.0	1.56	34	2150	3600
111900200150	150	1.4	0.4	0.8	1.72	34	1900	3750	2.0	1.72	37	2450	4300
111900200185	185	1.6	0.5	0.8	1.72	37	2250	4500	2.0	1.88	40	2900	5200
111900200240	240	1.7	0.5	0.8	1.88	42	2800	5800	2.5	2.04	45	3850	6800
111900200300	300	1.8	0.6	0.8	2.04	45	3300	7000	2.5	2.20	49	4450	8200
111900200400	400	2.0	0.6	0.8	2.36	50	4100	9050	2.5	2.36	52	5350	10300
111900200500	500	2.2	0.7	0.8	2.52	55	5000	11000	3.2	2.68	60	7100	13300
111900200630	630	2.4	0.7	0.8	2.68	63	6100	14000	3.2	2.84	66	8500	16300

A2XFY/2XFY-A2XWY/2XWY-3 CORE

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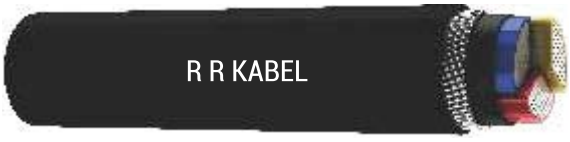

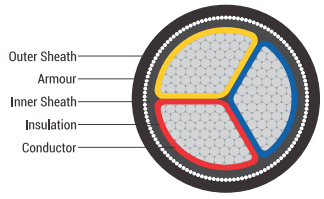

Cable Construction

1.1 kV, 3 cores AL / CU conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130.

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2,round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130.

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831. (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)					Armouring with round wire (A2XWY/ 2XWY)				
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
							AL Cable A2XFY	CU Cable 2XFY				AL Cable A2XWY	CU Cable 2XWY
112000300004	4	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	430	510
112000300006	6	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	19	470	600
112000300010	10	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	20	520	750
112000300016	16	0.7	0.3	0.8	1.24	19	590	890	1.6	1.40	20	730	1020
112000300025	25	0.9	0.3	0.8	1.40	21	790	1190	1.6	1.40	23	940	1400
112000300035	35	0.9	0.3	0.8	1.40	23	940	1490	1.6	1.40	25	1130	1750
112000300050	50	1.0	0.3	0.8	1.40	26	1090	1990	1.6	1.56	29	1330	2180
112000300070	70	1.1	0.4	0.8	1.56	29	1450	2690	2.0	1.56	32	1820	3070
112000300095	95	1.1	0.4	0.8	1.56	32	1740	3490	2.0	1.56	35	2210	3950
112000300120	120	1.2	0.4	0.8	1.56	35	2100	4190	2.0	1.72	39	2670	4840
112000300150	150	1.4	0.5	0.8	1.72	42	2520	5200	2.0	1.88	43	3450	6150
112000300185	185	1.6	0.5	0.8	1.88	44	2990	6300	2.5	2.04	48	3830	7160
112000300240	240	1.7	0.6	0.8	2.04	49	3740	8190	2.5	2.20	53	4720	8870
112000300300	300	1.8	0.6	0.8	2.20	54	4490	10000	2.5	2.36	58	6130	11380
112000300400	400	2.0	0.7	0.8	2.52	60	5590	12990	3.2	2.68	65	7390	14410
112000300500	500	2.2	0.7	0.8	2.68	66	6890	15990	3.2	2.84	72	9980	18490
112000300630	630	2.4	0.7	0.8	2.84	74	8540	19990	4.0	3.00	81	11820	22560

A2XFY/2XFY-A2XWY/2XWY-3.5 CORE

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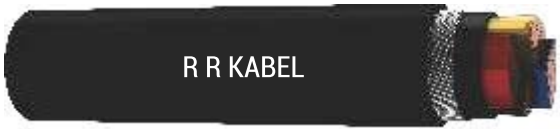

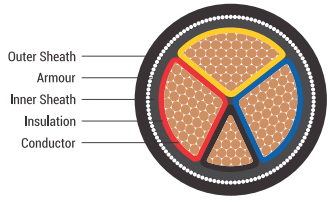

Cable Construction

1.1 kV, 3.5 cores AL / CU conductor, XLPE insulated, galvanised steel strip / wire armoured Cables as per IS 7098 Part -1.
Conductor : AL / CU stranded compact shaped conductor as per Cl. 2, IS 8130.
Insulation : Crosslinked polyethylene (XLPE)
Phase Core Color : Red, yellow, blue
Neutral Core Color : Black
Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)
Armouring : Single armouring of galvanised steel strip / wire
Outer Sheath : PVC Type ST - 2 as per IS 5831. (Option : FR Type / FRLS Type)
Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:
Conductor Type (Aluminium or Copper) and class of conductor (Cl. 1 or 2).
Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Size Cores x Sq. mm + Neutral (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)					Armouring with round wire (A2XWY/ 2XWY)				
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
							AL Cable A2XFY	CU Cable 2XFY				AL Cable A2XWY	CU Cable 2XWY
112101010211	3 x 25 + 16	0.9/0.7	0.3	0.8	1.40	23	900	1400	1.6	1.40	25	1080	1685
112101020211	3 x 35 + 16	0.9/0.7	0.3	0.8	1.40	25	1000	1800	1.6	1.40	27	1285	1980
112101030211	3 x 50 + 25	1.0/0.9	0.3	0.8	1.40	28	1200	2300	1.6	1.56	30	1580	2685
112101040211	3 x 70 + 35	1.1/0.9	0.4	0.8	1.56	32	1600	3200	2.0	1.56	35	2190	3690
112101050211	3 x 95 + 50	1.1/1.0	0.4	0.8	1.56	35	2000	4100	2.0	1.56	38	2580	4585
112101060211	3 x 120 + 70	1.2/1.1	0.4	0.8	1.72	39	2400	5100	2.0	1.72	42	3085	5680
112101070211	3 x 150 + 70	1.4/1.1	0.5	0.8	1.72	43	2800	6000	2.0	1.88	46	3590	6790
112101080211	3 x 185 + 95	1.6/1.1	0.5	0.8	1.88	47	3400	7400	2.5	2.04	51	4675	8615
112101090211	3 x 240 + 120	1.7/1.2	0.6	0.8	2.04	53	4300	9500	2.5	2.20	56	5680	10485
112101100211	3 x 300 + 150	1.8/1.4	0.6	0.8	2.20	57	5000	11500	2.5	2.36	60	6685	12990
112101110211	3 x 400 + 185	2.0/1.6	0.7	0.8	2.52	66	6400	14500	3.2	2.68	71	8980	16980
112101120211	3 x 500 + 240	2.2/1.7	0.7	0.8	2.68	74	7900	18000	3.2	2.84	79	10985	21485
112101130211	3 x 630 + 300	2.4/1.8	0.7	0.8	3.00	82	9900	23000	4.0	3.00	88	14490	27985

A2XFY/2XFY-A2XWY/2XWY-4 CORE

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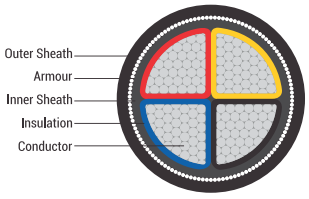

Cable Construction

1.1 kV, 4 cores AL / CU conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : AL up to 10 Sq. mm conductor are solid Cl. 1 as per IS 8130. And above 10 Sq. mm conductor are stranded compacted shape Cl. 2 as per IS 8130

In CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2, round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type (Aluminium or Copper) and Class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)					Armouring with round wire (A2XWY/ 2XWY)				
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
							AL Cable A2XFY	CU Cable 2XFY				AL Cable A2XWY	CU Cable 2XWY
112200400004	4	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	18	540	640
112200400006	6	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.24	19	590	760
112200400010	10	0.7	0.3	N/A	N/A	N/A	N/A	N/A	1.4	1.40	21	655	940
112200400016	16	0.7	0.3	0.8	1.40	20	700	1100	1.6	1.40	22	920	1280
112200400025	25	0.9	0.3	0.8	1.40	24	900	1500	1.6	1.40	26	1185	1750
112200400035	35	0.9	0.3	0.8	1.40	27	1100	2000	1.6	1.40	28	1420	2185
112200400050	50	1.0	0.3	0.8	1.56	30	1400	2500	1.6	1.56	32	1730	2830
112200400070	70	1.1	0.4	0.8	1.56	34	1800	3400	2.0	1.56	37	2375	3980
112200400095	95	1.1	0.4	0.8	1.56	37	2200	4400	2.0	1.72	40	2870	5130
112200400120	120	1.2	0.5	0.8	1.72	41	2700	5600	2.0	1.88	44	3475	6285
112200400150	150	1.4	0.5	0.8	1.88	46	3200	6800	2.5	2.04	49	4480	7980
112200400185	185	1.6	0.5	0.8	2.04	51	3900	8300	2.5	2.20	54	5185	9680
112200400240	240	1.7	0.6	0.8	2.20	57	4850	10500	2.5	2.36	65	6385	11985
112200400300	300	1.8	0.7	0.8	2.36	63	5850	13000	3.2	2.52	68	8280	15385
112200400400	400	2.0	0.7	0.8	2.68	71	7320	17000	3.2	2.84	76	9985	19480
112200400500	500	2.2	0.7	0.8	2.84	79	9000	21000	4.0	3.00	86	13480	24985
112200400630	630	2.4	0.7	0.8	3.00	88	11000	27000	4.0	3.00	94	15975	30485

2XY/2XFY/2XWY-1.5 Sq. mm

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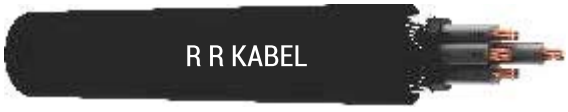

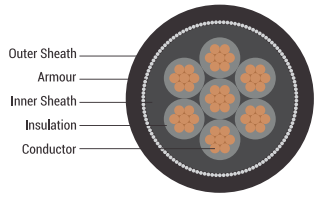

Cable Construction

1.5 Sq. mm copper conductor, XLPE insulated unarmoured & galvanised steel strip / wire armoured control cables as per IS 7098 Part - 1

Conductor : CU Conductor solid as per Cl. 1 IS 8130 or Stranded as per Cl. 2 IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Colours : Up to 5 cores by colour coding & more than 5 cores number printing on core as per IS 7098 Part - 1

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Class of conductor - Cl. 1 or 2.

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	No. of Cores	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Unarmoured (2XY)			Armoured With Flat Strips (2XFY)				Armoured With Round Wire (2XWY)			
				Nominal Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	App. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)
112300201105	2	0.7	0.3	1.8	10.0	140	N/A	N/A	N/A	N/A	1.4	1.24	12.5	370
112300301105	3	0.7	0.3	1.8	10.5	160	N/A	N/A	N/A	N/A	1.4	1.24	13.0	390
112300401105	4	0.7	0.3	1.8	11.5	200	N/A	N/A	N/A	N/A	1.4	1.24	13.5	415
112300501105	5	0.7	0.3	1.8	12.5	225	N/A	N/A	N/A	N/A	1.4	1.24	14.5	465
112300601105	6	0.7	0.3	1.8	13.5	250	N/A	N/A	N/A	N/A	1.4	1.24	15.5	500
112300701105	7	0.7	0.3	1.8	13.5	260	N/A	N/A	N/A	N/A	1.4	1.24	15.5	520
112301001105	10	0.7	0.3	1.8	17.0	340	N/A	N/A	N/A	N/A	1.4	1.24	18.5	655
112301201105	12	0.7	0.3	1.8	17.5	390	N/A	N/A	N/A	N/A	1.6	1.40	19.0	720
112301401105	14	0.7	0.3	1.8	18.0	430	N/A	N/A	N/A	N/A	1.6	1.40	20.0	825
112301601105	16	0.7	0.3	1.8	18.5	475	0.8	1.40	19.0	750	1.6	1.40	21.0	925
112301901105	19	0.7	0.3	2.0	19.5	540	0.8	1.40	20.0	815	1.6	1.40	22.0	1010
112302401105	24	0.7	0.3	2.0	22.5	665	0.8	1.40	23.0	1000	1.6	1.40	25.0	1250
112302701105	27	0.7	0.3	2.0	23.0	750	0.8	1.40	23.5	1050	1.6	1.40	25.5	1330
112303001105	30	0.7	0.3	2.0	23.5	820	0.8	1.40	24.0	1125	1.6	1.40	26.0	1400
112303701105	37	0.7	0.3	2.0	26.0	665	0.8	1.40	26.0	1325	1.6	1.40	28.0	1550
112304001105	40	0.7	0.3	2.0	26.0	1050	0.8	1.40	26.5	1400	1.6	1.40	29.5	1700
112304401105	44	0.7	0.3	2.0	28.0	1150	0.8	1.40	28.5	1500	1.6	1.56	30.5	1850
112305201105	52	0.7	0.3	2.0	29.0	1300	0.8	1.56	30.5	1700	1.6	1.56	32.0	2050
112306101105	61	0.7	0.4	2.2	31.0	1500	0.8	1.56	32.0	1950	2.0	1.56	34.5	2550

2XY/2XFY/2XWY-2.5 Sq. mm

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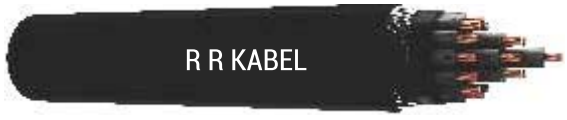

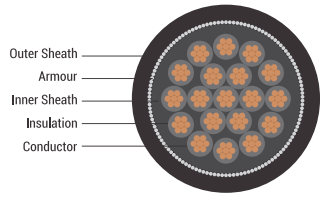

Cable Construction

2.5 Sq. mm copper conductor, XLPE insulated unarmoured & galvanised steel strip / wire armoured control cables as per IS 7098 Part - 1.

Conductor : CU conductor solid as per Cl. 1 IS 8130 or stranded as per Cl. 2 IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Colours : Up to 5 cores by colour coding & more than 5 cores number printing on core as per IS 7098 Part - 1

Inner Sheath : PVC / PVC tape as per IS 7098 (P-1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Class of conductor - Cl. 1 or 2.

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	No. of Cores	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Unarmoured (2XY)			Armoured With Flat Strips (2XFY)				Armoured With Round Wire (2XWY)			
				Nominal Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	App. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)
112400201205	2	0.7	0.3	1.8	10.5	170	N/A	N/A	N/A	N/A	1.4	1.24	12.5	390
112400301205	3	0.7	0.3	1.8	11.5	200	N/A	N/A	N/A	N/A	1.4	1.24	13.0	420
112400401205	4	0.7	0.3	1.8	12.0	235	N/A	N/A	N/A	N/A	1.4	1.24	14.0	480
112400501205	5	0.7	0.3	1.8	13.0	270	N/A	N/A	N/A	N/A	1.4	1.24	15.0	540
112400601205	6	0.7	0.3	1.8	14.0	310	N/A	N/A	N/A	N/A	1.4	1.24	15.5	595
112400701205	7	0.7	0.3	1.8	14.0	335	N/A	N/A	N/A	N/A	1.4	1.24	15.5	620
112401001205	10	0.7	0.3	1.8	17.0	350	N/A	N/A	N/A	N/A	1.6	1.40	19.5	870
112401201205	12	0.7	0.3	1.8	19.0	520	0.8	1.40	19.0	760	1.6	1.40	21.0	985
112401401205	14	0.7	0.3	1.8	19.5	575	0.8	1.40	19.5	820	1.6	1.40	21.5	1030
112401601205	16	0.7	0.3	2.0	20.0	655	0.8	1.40	20.0	890	1.6	1.40	22.0	1105
112401901205	19	0.7	0.3	2.0	21.0	745	0.8	1.40	21.0	990	1.6	1.40	23.0	1225
112402401205	24	0.7	0.3	2.0	23.5	910	0.8	1.40	24.0	1210	1.6	1.40	25.5	1470
112402701205	27	0.7	0.3	2.0	24.0	1040	0.8	1.40	24.5	1300	1.6	1.40	26.5	1580
112403001205	30	0.7	0.3	2.0	25.0	1085	0.8	1.40	25.5	1400	1.6	1.40	27.0	1680
112403701205	37	0.7	0.3	2.0	27.0	1290	0.8	1.40	27.5	1635	1.6	1.56	29.0	1950
112404001205	40	0.7	0.3	2.0	28.0	1390	0.8	1.56	28.5	1770	1.6	1.56	30.5	2145
112404401205	44	0.7	0.4	2.2	31.0	1550	0.8	1.56	31.0	1950	2.0	1.56	33.5	2525
112405201205	52	0.7	0.4	2.2	32.0	1790	0.8	1.56	32.5	2200	2.0	1.56	35.0	2785
112406101205	61	0.7	0.4	2.2	34.0	2050	0.8	1.56	34.0	2490	2.0	1.56	36.5	3105

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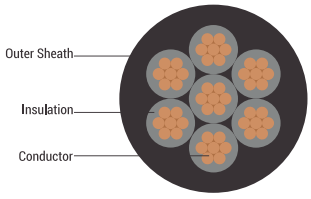


Application

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations, for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected.

Technical Data

Power and control cable to IEC 60502-1

Temperature Range : Flexing - 5°C to + 50°C. Fixed installation -20°C to +70°C

Nominal Voltage : U_0 / U 0.6 / 1 kV

Test Voltage : 4 kV

Max. permissible tensile stress with cable grip for CU-conductor : 50 N/mm²

Minimum Bending Radius : For single core approx. 15 x cable ø. For multi core approx. 12 x cable ø.

Cable Construction

Plain copper conductor, to DIN VDE 0295.

Cl. 1 or Cl. 2 solid or stranded type, BS 6360.

Cl. 1 or Cl.2, IEC 60228 and HD 383.

PVC core insulation, DIV4 to HD 603.1.

Cores stranded concentrically.

Colour coded to DIN VDE 0293 - 308, 0276 part 603 or HD 186.

Core colour for 3 + 1/2 conductor.

J-type : gnyl (1/2) bn, bk, gy.

O-type : bu (1/2) bn, bk, gy.

PVC outer jacket, DMV5 to HD 603.1.

Sheath Colour : Black.

Properties

Flame propagation test according to IEC 60332 - 1 - 2.

Highest permissible voltage.

Direct current systems 1.8 kV.

Alternating current systems, single-phase systems 1.4 kV.

Both conductor insulated, single-phase systems 0.7 kV.

One conductor earthed, three-phase systems 1.2 kV with concentric conductor and a cross-section of 240 mm² and above 3.6 kV.

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the type required: 01 - J - Type, 02 - O - Type.

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Weight Cable (kg/km)
112500101xx11	1 x 4 re	6.5	34	80
112500102xx11	1 x 6 re	7.0	51	102
112500103xx11	1 x 10 re	7.9	86	147
112500104xx11	1 x 16 re	8.9	137	210
112500105xx11	1 x 25 rm	11.3	217	335
112500106xx11	1 x 35 rm	12.5	301	439
112500107xx11	1 x 50 rm	14.3	408	587
112500108xx11	1 x 70 rm	16.2	589	807
112500109xx11	1 x 95 rm	18.6	818	1100
112500110xx11	1 x 120 rm	20.3	1031	1357
112500111xx11	1 x 150 rm	22.4	1273	1665
112500112xx11	1 x 185 rm	24.8	1592	2067
112500113xx11	1 x 240 rm	28.0	2093	2686
112500114xx11	1 x 300 rm	30.9	2626	3341
112500115xx11	1 x 400 rm	34.5	3357	4231
112500116xx11	1 x 500 rm	38.5	4311	5379
112500117xx11	1 x 630 rm	42.7	5576	6846
112500118xx11	2 x 1.5 re	10.5	26.1	156.1
112500119xx11	2 x 2.5 re	11.3	42.6	191.5
112500120xx11	2 x 4 re	13.1	68.5	268.5
112500121xx11	2 x 6 re	14.2	102.5	332.4
112500122xx11	2 x 10 re	15.9	172.5	454.4
112500123xx11	2 x 16 re	17.9	274.4	621.1
112500124xx11	2 x 25 rm	24.2	441.9	1089.2
112500125xx11	3 x 1.5 re	11.0	39.1	180
112500126xx11	3 x 2.5 re	11.9	63.9	225
112500127xx11	3 x 4 re	13.9	102.7	320
112500128xx11	3 x 6 re	15.0	153.7	403
112500129xx11	3 x 10 re	16.9	258.7	564
112500130xx11	3 x 16 re	19.0	411.6	785
112500131xx11	3 x 25 rm	24.2	662.8	1270
112500132xx11	3 x 35 sm	22.6	901.4	1382
112500133xx11	3 x 50 sm	25.7	1220.5	1829
112500134xx11	3 x 70 sm	28.7	1762.5	2487
112500135xx11	3 x 95 sm	33.3	2447.4	3410

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Weight Cable (kg/km)
112500136xx11	3 x 120 sm	35.9	3087.2	4171
112500137xx11	3 x 150 sm	39.5	3809.3	5107
112500138xx11	3 x 185 sm	44.0	4766.4	6372
112500139xx11	3 x 240 sm	49.3	6264.6	8234
112500140xx11	4 x 1.5 re	11.8	52.2	214
112500141xx11	4 x 2.5 re	12.8	85.2	271
112500142xx11	4 x 4 re	15.0	136.9	390
112500143xx11	4 x 6 re	16.3	204.9	496
112500144xx11	4 x 10 re	18.4	344.9	701
112500145xx11	4 x 16 re	20.7	548.9	986
112500146xx11	4 x 25 rm	26.7	883.7	1604
112500147xx11	4 x 35 sm	27.1	1201.9	1813
112500148xx11	4 x 50 sm	30.9	1627.4	2404
112500149xx11	4 x 70 sm	35.3	2350.0	3324
112500150xx11	4 x 95 sm	40.5	3263.2	4512
112500151xx11	4 x 120 sm	44.3	4116.3	5582
112500152xx11	4 x 150 sm	48.8	5079.0	6833
112500153xx11	4 x 185 sm	54.3	6355.2	8520
112500154xx11	4 x 240 sm	61.0	8352.7	11016
112500155xx11	5 x 1.5 re	12.7	65.2	251
112500156xx11	5 x 2.5 re	13.8	106.5	321
112500157xx11	5 x 4 re	16.3	171.1	467
112500158xx11	5 x 6 re	17.7	256.2	597
112500159xx11	5 x 10 re	20.0	431.1	851
112500160xx11	5 x 16 re	22.7	686.1	1203
112500161xx11	5 x 25 rm	29.3	1104.6	1966
112500162xx11	5 x 35 rm	32.9	1532.6	2602
112500163xx11	5 x 50 rm	37.9	2075.1	3482
112500164xx11	7 x 1.5 re	13.6	91.3	295
112500165xx11	7 x 2.5 re	14.9	149.1	384
112500166xx11	7 x 4 re	17.6	239.6	564
112500167xx11	7 x 6 re	19.2	358.6	731
112500168xx11	7 x 10 re	21.8	603.6	1058
112500169xx11	10 x 1.5 re	18.5	130.4	477
112500170xx11	10 x 2.5 re	18.4	213.0	543

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Weight Cable (kg/km)
112500171xx11	12 x 1.5 re	17.3	156.5	466
112500172xx11	12 x 2.5 re	19.0	255.5	616
112500173xx11	14 x 1.5 re	18.1	182.6	524
112500174xx11	14 x 2.5 re	19.9	298.1	696
112500175xx11	16 x 1.5 re	19.0	208.7	584
112500176xx11	16 x 2.5 re	20.9	340.7	779
112500177xx11	19 x 1.5 re	20.0	247.8	667
112500178xx11	19 x 2.5 re	22.0	404.6	895
112500179xx11	21 x 1.5 re	21.0	273.9	731
112500180xx11	21 x 2.5 re	23.2	447.2	983
112500181xx11	24 x 1.5 re	23.1	273.9	779
112500182xx11	24 x 2.5 re	25.6	511.1	1133
112500183xx11	30 x 1.5 re	24.4	391.2	999
112500184xx11	30 x 2.5 re	27.0	638.9	1354
112500185xx11	40 x 1.5 re	27.4	521.6	1282
112500186xx11	40 x 2.5 re	30.8	851.8	1782
112500187xx11	52 x 2.5 re	34.6	1107.4	2268
112500188xx11	61 x 1.5 re	33.1	795.5	1905

*3 + 1/2 - Conductors

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Weight Cable (kg/km)
112500189xx11	3 x 25 / 16 rm	23.6	786.6	200
112500190xx11	3 x 35 / 16 sm	25.4	1038.3	225
112500191xx11	3 x 50 / 25 sm	29.3	1437.1	281
112500192xx11	3 x 70 / 35 sm	33.3	2063.0	346
112500193xx11	3 x 95 / 50 sm	38.1	2854.2	433
112500194xx11	3 x 120 / 70 sm	41.7	3674.7	503
112500195xx11	3 x 150 / 70 sm	45.4	4396.8	580
112500196xx11	3 G 185 / 95 sm	50.6	5582.2	698
112500197xx11	3 x 240 / 120 sm	56.8	7293.6	854
112500198xx11	3 x 300 / 150 sm	62.7	9129.1	1013

Note :

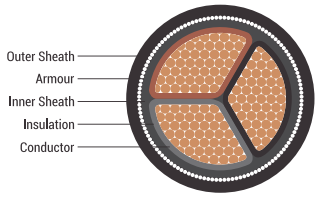
re = round conductor, single-wire; rm = round conductor, multiply-wire; sm = stranded, sectional core.

***In respect to 3 + 1/2 conductors**

Whereby only one conductor is allowed to contain a smaller cross-section (as per DIN VDE 0276 part 603 table 5) and permitted to place as insulated core (Green/Yellow and Blue as 1/2-conductor) stranded in layer.

POWER CABLE-BS 5467

REACH I RoHS I CE



Application

Industrial wiring and mains distribution. Can be laid direct in the ground, or in ducts, clipped to surface, on trays or in free air. May be embedded in concrete.

Standard

BS 5467

Technical Data

Voltage Rating : 600/1000V

Minimum Bending Radius : 15 x Cable diameter

Maximum Conductor Temperature : 90°C

Cable Construction

Single, two, three, four and five core cables. Stranded plain copper conductors, XLPE insulated, cores laid up, extruded PVC bedding, galvanised steel wire armoured (Aluminium wires for single cores) and PVC sheathed.

Core colours:

Single core : Brown or blue.

Two core : Brown, blue.

Three core : Brown, black, grey.

Four core : Brown, black, grey, blue.

Five code : Brown, black, grey, green/yellow, blue.

(There is the option for core colour as per customer requirement).

Sheath Colour : Black (Other colour as per customer requirement)

Note : Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see regulation 512-1-2 of BS 7671, the 17th Edition of IEE Wiring Regulations).

Cables with reduced Flame Propagation and designs with alternative core identification are available to order.

Cables up to 1 x 300 Sq. mm, 2...4 x 400 Sq. mm BASEC Certified.

Cable Design Parameters

	Part Number	Nominal Cross - Sectional Area (Sq. mm)	Insulation Thickness (mm)	Armour Wire Diameter (mm)	Approx. Dia. under Armour (mm)	Approx Overall Diameter (mm)	Approx Cable Weight (kg/km)	Maximum Resistance of Cable		Reactance at 50 Hz (Ω/km)	Impedance AC at 90°C (Ω/km)	Star Capacitance (µF/km)	Maximum Armour Resistance (Ω/km)
								DC at 20°C (Ω/km)	AC at 90°C (Ω/km)				
Single Core Aluminium Wire Armour	112600100050	50	1.0	0.9	12.7	17.5	800	0.387	0.4938	0.104	0.505	0.41	1.3
	112600100070	70	1.1	1.25	14.7	20.2	960	0.268	0.341	0.101	0.356	0.46	0.75
	112600100095	95	1.1	1.25	16.6	22.3	1240	0.193	0.2469	0.097	0.265	0.53	0.67
	112600100120	120	1.2	1.25	18.5	24.2	1510	0.153	0.1962	0.094	0.217	0.56	0.61
	112600100150	150	1.4	1.6	20.8	27.4	1900	0.124	0.1594	0.095	0.186	0.52	0.42
	112600100185	185	1.6	1.6	23.2	30.0	2320	0.0991	0.128	0.093	0.158	0.54	0.38
	112600100240	240	1.7	1.6	26.0	32.8	2930	0.0754	0.0985	0.09	0.134	0.59	0.34
	112600100300	300	1.8	1.6	28.6	35.6	3580	0.0601	0.0797	0.088	0.119	0.63	0.31

	Part Number	Nominal Cross - Sectional Area (Sq. mm)	Insulation Thickness (mm)	Armour Wire Diameter (mm)	Approx. Dia. under Armour (mm)	Approx Overall Diameter (mm)	Approx Cable Weight (kg/km)	Maximum Resistance of Cable		Reactance at 50 Hz (Ω/km)	Impedance AC at 90°C (Ω/km)	Star Capacitance (µF/km)	Maximum Armour Resistance (Ω/km)
								DC at 20°C (Ω/km)	AC at 90°C (Ω/km)				
	112600100400	400	2.0	2	32.4	40.4	4600	0.047	0.0635	0.089	0.109	0.62	0.22
	112600100500	500	2.2	2	36.0	44.2	5770	0.0366	0.0513	0.087	0.101	0.66	0.2
	112600100630	630	2.4	2	40.4	48.8	7250	0.0283	0.0419	0.085	0.095	0.7	0.18
	112600100800	800	2.6	2.5	45.6	55.4	9381	0.0221	0.0349	0.087	0.094	0.85	0.13
	112600101000	1000	2.8	2.5	50.6	60.6	11540	0.0176	0.0303	0.085	0.09	0.87	0.12
Two Core Steel Wire Armour	112600201105	1.5	0.6	0.9	7. 3	12.1	302	12.1	15.428	0.104	15.428	0.23	10.2
	112600201205	2.5	0.7	0.9	8.5	13.6	346	7.41	9.448	0.101	9.449	0.25	8.8
	112600200004	4	0.7	0.9	9.4	14.7	410	4.61	5.878	0.099	5.879	0.27	7.9
	112600200006	6	0.7	0.9	10.5	15.9	499	3.08	3.927	0.094	3.928	0.3	7
	112600200010	10	0.7	0.9	12.3	18.0	648	1.83	2.333	0.093	2.335	0.32	6
	112600200016	16	0.7	1.25	14.3	20.4	978	1.15	1.466	0.088	1.469	0.35	3.7
	112600200025	25	0.9	1.25	14.7	20.4	1290	0.727	0.926	0.082	0.93	0.38	3.7
	112600200035	35	0.9	1.6	16.8	23.3	1500	0.524	0.6685	0.077	0.673	0.42	2.6
	112600200050	50	1.0	1.6	19.0	25.8	1890	0.387	0.494	0.076	0.5	0.45	2.3
	112600200070	70	1.1	1.6	22.0	29.0	2450	0.268	0.3412	0.075	0.349	0.49	2
	112600200095	95	1.1	2	25.1	33.1	3300	0.193	0.2471	0.074	0.258	0.55	1.4
	112600200120	120	1.2	2	27.9	36.1	4020	0.153	0.1964	0.072	0.209	0.57	1.3
	112600200150	150	1.4	2	30.9	39.3	4750	0.124	0.1597	0.073	0.176	0.57	1,20
	112600200185	185	1.6	2.5	34.9	44.7	6180	0.0991	0.1284	0.073	0.148	0.55	0.82
	112600200240	240	1.7	2.5	39.0	49.0	7570	0.0754	0.0989	0.072	0.122	0.6	0.73
	112600200300	300	1.8	2.5	43.3	53.5	9180	0.0601	0.0801	0.072	0.107	0.62	0.67
	112600200400	400	2.0	2.5	48.4	59.0	10500	0.047	0.0641	0.071	0.096	0.64	0.59
Three Core Steel Wire Armour	112600301105	1.5	0.6	0.9	7.8	12.6	330	12.1	15.428	0.104	15.428	0.23	9.5
	112600301205	2.5	0.7	0.9	9.2	14.1	390	7.41	9.448	0.101	9.449	0.25	8.2
	112600300004	4	0.7	0.9	10.0	15.3	464	4.61	5.878	0.099	5.879	0.27	7.5
	112600300006	6	0.7	0.9	11.2	16.6	568	3.08	3.927	0.094	3.928	0.3	6.7
	112600300010	10	0.7	1.25	13.1	19.5	866	1.83	2.333	0.093	2.335	0.32	4
	112600300016	16	0.7	1.25	15.3	21.6	1152	1.15	1.466	0.088	1.469	0.35	3.5
	112600300025	25	0.9	1.6	18.9	25.5	1800	0.727	0.926	0.082	0.93	0.37	2.5
	112600300035	35	0.9	1.6	21.3	28.0	2230	0.524	0.6685	0.077	0.673	0.42	2.3
	112600300050	50	1.0	1.6	21.7	28.5	2490	0.3870	0.494	0.076	0.5	0.45	2
	112600300070	70	1.1	1.6	25.2	32.2	3290	0.268	0.3412	0.075	0.349	0.49	1.8
	112600300095	95	1.1	2	28.8	37.0	4440	0.193	0.2471	0.074	0.258	0.55	1.3
	112600300120	120	1.2	2	32.0	40.4	5470	0.153	0.1964	0.072	0.209	0.57	1.2
	112600300150	150	1.4	2.5	35.9	45.5	6930	0.124	0.1597	0.073	0.176	0.55	0.78
	112600300185	185	1.6	2.5	40.0	49.8	8350	0.0991	0.1284	0.073	0.148	0.55	0.71
	112600300240	240	1.7	2.5	44.9	55.1	10400	0.0754	0.0989	0.072	0.122	0.6	0.63
	112600300300	300	1.8	2.5	49.8	60.2	12600	0.0601	0.0801	0.072	0.107	0.62	0.58
	112600300400	400	2.0	2.5	55.8	66.6	14600	0.047	0.0641	0.071	0.096	0.64	0.52

	Part Number	Nominal Cross - Sectional Area (Sq. mm)	Insulation Thickness (mm)	Armour Wire Diameter (mm)	Approx. Dia. under Armour (mm)	Approx Overall Diameter (mm)	Approx Cable Weight (kg/km)	Maximum Resistance of Cable		Reactance at 50 Hz (Ω/km)	Impedance AC at 90°C (Ω/km)	Star Capacitance (µF/km)	Maximum Armour Resistance (Ω/km)
								DC at 20°C (Ω/km)	AC at 90°C (Ω/km)				
Four Core Steel Wire Armour	112600401105	1.5	0.6	0.9	8.5	13.5	365	12.1	15.428	0.104	15.428	0.23	8.8
	112600401205	2.5	0.7	0.9	9.9	15.0	438	7.41	9.448	0.101	9.449	0.25	7.7
	112600400004	4	0.7	0.9	11.0	16.4	532	4.61	5.878	0.099	5.879	0.27	6.8
	112600400006	6	0.7	1.25	12.3	18.7	764	3.08	3.927	0.094	3.928	0.3	4.3
	112600400010	10	0.7	1.25	14.5	21.1	1013	1.83	2.333	0.093	2.336	0.32	3.7
	112600400016	16	0.7	1.25	17.0	22.9	1360	1.15	1.466	0.088	1.469	0.35	3.1
	112600400025	25	0.9	1.6	21.0	27.6	2160	0.727	0.926	0.082	0.93	0.37	2.3
	112600400035	35	0.9	1.6	23.6	30.4	2690	0.524	0.6685	0.077	0.673	0.42	2.0
	112600400050	50	1.0	1.6	25.0	32.0	3130	0.387	0.494	0.076	0.5	0.45	1.8
	112600400070	70	1.1	2	29.5	37.7	4500	0.268	0.3412	0.075	0.349	0.48	1.2
	112600400095	95	1.1	2	33.3	41.7	5600	0.193	0.2471	0.074	0.258	0.55	1.1
	112600400120	120	1.2	2.5	37.5	47.1	7400	0.153	0.1964	0.072	0.209	0.55	0.76
	112600400150	150	1.4	2.5	41.6	51.4	8780	0.124	0.1597	0.073	0.176	0.55	0.68
	112600400185	185	1.6	2.5	46.4	56.6	10630	0.0991	0.1284	0.073	0.148	0.55	0.61
	112600400240	240	1.7	2.5	52.6	63.0	13390	0.0754	0.0989	0.072	0.122	0.58	0.54
	112600400300	300	1.8	2.5	58.0	68.8	16290	0.0601	0.0801	0.072	0.107	0.62	0.49
	112600400400	400	2.0	3.15	65.4	78.1	19800	0.047	0.0641	0.071	0.096	0.63	0.35
Five Core Steel Wire Armour	112600501105	1.5	0.6	0.9	9.7	14.3	410	12.1	15.428	0.104	15.428	0.23	8.2
	112600501205	2.5	0.7	0.9	11.7	16.3	470	7.41	9.448	0.101	9.449	0.25	6.8
	112600500004	4	0.7	0.9	13.0	17.8	710	4.61	5.878	0.099	5.879	0.27	6.2
	112600500006	6	0.7	1.25	14.5	20.0	876	3.08	3.927	0.094	3.928	0.3	3.9
	112600500010	10	0.7	1.25	17.2	22.9	1165	1.83	2.333	0.093	2.336	0.32	3.4
	112600500016	16	0.7	1.6	20.0	26.6	1742	1.15	1.466	0.088	1.469	0.35	2.2
	112600500025	25	0.9	1.6	24.7	31.5	2323	0.727	0.926	0.082	0.93	0.37	1.8
	112600500035	35	0.9	1.6	27.8	34.8	2932	0.524	0.6685	0.077	0.673	0.42	1.6
	112600500050	50	1.0	2	32.4	40.4	4192	0.387	0.494	0.076	0.5	0.45	1.1
	112600500070	70	1.1	2	37.9	46.3	5336	0.268	0.3412	0.075	0.349	0.48	0.9

MULTICORE CONTROL CABLE STANDARD: BS 5467

Application

Industrial wiring for remote control and telemetry circuits etc. Can be laid direct in the ground, or in ducts, clipped to surface, on trays or in free air. May be embedded in concrete.

Technical Data

Voltage Rating : 600 / 1000V

Cable Construction

Multicore Cables : Stranded plain copper conductors, XLPE insulated, cores laid up, extruded PVC bedding, galvanised steel wire armoured and PVC sheathed

Core Colours : White with black numerals

Sheath Colour : Black. (Other Colour As per customer requirement)

Minimum Bending Radius : 12 x Cable Diameter

Maximum Conductor Temperature : 90°C

Note: Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conduct or operating temperature (see regulation 512 - 1 - 2 of BS 7671, the 17th Edition of IEE Wiring Regulations).

BASEC Certified up to and including 48 x 4 Sq. mm.

Cable Design Parameters

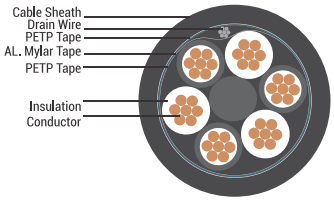
Part Number	Number of Cores	Nominal Cross - Sectional Area (Sq. mm)	Approx. Diameter Under Armour (mm)	Approx. Diameter Over Armour (mm)	Approx. Overall Diameter (mm)	Approx. Net Weight (kg/km)
112600701105	7	1.5	10.2	12.1	15.2	470
112600701205	7	2.5	12.3	14.1	17.1	600
112600700004	7	4	14.0	16.5	19.7	890
112601201105	12	1.5	13.7	16.2	19.4	780
112601201205	12	2.5	16.3	18.8	22.4	1000
112601200004	12	4	19.1	22.2	25.7	1410
112601901105	19	1.5	16.2	18.7	22.2	1000
112601901205	19	2.5	19.9	23.1	26.6	1540
112601900004	19	4	22.5	25.7	29.3	1830
112602701105	27	1.5	20.0	23.2	26.7	1500
112602701205	27	2.5	24.0	27.2	30.7	1950
112602700004	27	4	27.5	30.7	34.4	2500
112603701105	37	1.5	22.3	25.5	29.0	1800
112603701205	37	2.5	26.9	30.1	33.8	2350
112603700004	37	4	31.0	35.0	39.2	3100
112604801105	48	1.5	25.4	28.6	32.7	2050
112604801205	48	2.5	31.0	35.0	39.3	3100
112604800004	48	4	35.3	39.3	44.1	4100

INSTRUMENTATION CABLES

CROSS SECTIONAL VIEW

RE-Y(St)Y - SINGLE & MULTI-PAIR

REACH I RoHS I CE



Standard

Adapted to EN 50288-7.

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Polyvinyl chloride PVC
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Cable Sheath : Polyvinyl Chloride PVC
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +70°C
Bending Radius : 7.5 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request
Marking : RR KABEL n x m x a RE-Y(St)Y 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance* at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	20	250	1	2000	2000
0.5	5	16/0.2	39.0	25	20	250	1	2000	2000
0.75	2	7/0.37	24.5	25	20	250	1	2000	2000
0.75	5	24/0.2	26.0	25	20	250	1	2000	2000
1	2	7/0.43	18.1	25	20	250	1	2000	2000
1	5	32/0.2	19.5	25	20	250	1	2000	2000
1.5	2	7/0.53	12.1	40	20	250	1	2000	2000
2.5	2	7/0.67	7.41	60	20	250	1	2000	2000

*For multi-pair maximum resistance shall be increased by 2%

Cable Design Parameters

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070150121050	1 x 2 x 0.5	0.44	1.0	6.4	48.2
	070150221050	2 x 2 x 0.5	0.44	1.0	7.7	74.2
	070150321050	3 x 2 x 0.5	0.44	1.1	9.0	100.8
	070150421050	4 x 2 x 0.5	0.44	1.1	10.1	126.5
	070150521050	5 x 2 x 0.5	0.44	1.2	11.1	151.8
	070150821050	8 x 2 x 0.5	0.44	1.3	13.6	225.5
	070151021050	10 x 2 x 0.5	0.44	1.3	15.0	274.0
	070151221050	12 x 2 x 0.5	0.44	1.4	16.2	321.9
	070151621050	16 x 2 x 0.5	0.44	1.4	18.4	416.1
	070152021050	20 x 2 x 0.5	0.44	1.5	20.4	510.0
	070152421050	24 x 2 x 0.5	0.44	1.6	22.2	603.1
	070150121075	1 x 2 x 0.75	0.44	1.0	6.8	56.7
	070150221075	2 x 2 x 0.75	0.44	1.1	8.3	89.5
	070150321075	3 x 2 x 0.75	0.44	1.1	9.7	122.9
	070150421075	4 x 2 x 0.75	0.44	1.2	10.9	155.8
	070150521075	5 x 2 x 0.75	0.44	1.2	12.0	188.0
	070150821075	8 x 2 x 0.75	0.44	1.3	14.7	282.2
	070151021075	10 x 2 x 0.75	0.44	1.4	16.2	345.0
	070151221075	12 x 2 x 0.75	0.44	1.4	17.6	406.3
	070151621075	16 x 2 x 0.75	0.44	1.5	20.0	527.7
	070152021075	20 x 2 x 0.75	0.44	1.6	22.2	649.5
	070152421075	24 x 2 x 0.75	0.44	1.6	24.1	769.0
	070150120001	1 x 2 x 1	0.44	1.0	7.1	64.1
	070150220001	2 x 2 x 1	0.44	1.1	8.7	103.4
	070150320001	3 x 2 x 1	0.44	1.1	10.2	143.1
	070150420001	4 x 2 x 1	0.44	1.2	11.5	182.2
	070150520001	5 x 2 x 1	0.44	1.2	12.6	220.5
	070150820001	8 x 2 x 1	0.44	1.3	15.5	333.8
	070151020001	10 x 2 x 1	0.44	1.4	17.1	408.9
	070151220001	12 x 2 x 1	0.44	1.4	18.6	482.3
	070151620001	16 x 2 x 1	0.44	1.5	21.2	629.0
	070152020001	20 x 2 x 1	0.44	1.6	23.5	776.5
	070152420001	24 x 2 x 1	0.44	1.7	25.5	920.3

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070120121050	1 x 2 x 0.5	0.44	1.0	6.4	48.0
	070120221050	2 x 2 x 0.5	0.44	1.0	7.7	73.9
	070120321050	3 x 2 x 0.5	0.44	1.1	9.0	100.4
	070120421050	4 x 2 x 0.5	0.44	1.1	10.1	125.9
	070120521050	5 x 2 x 0.5	0.44	1.2	11.1	151.2
	070120821050	8 x 2 x 0.5	0.44	1.3	13.6	224.5
	070121021050	10 x 2 x 0.5	0.44	1.3	15.0	272.7
	070121221050	12 x 2 x 0.5	0.44	1.4	16.2	320.4
	070121621050	16 x 2 x 0.5	0.44	1.4	18.4	414.1
	070122021050	20 x 2 x 0.5	0.44	1.5	20.4	507.5
	070122421050	24 x 2 x 0.5	0.44	1.6	22.2	600.1
	070120121075	1 x 2 x 0.75	0.44	1.0	6.8	56.7
	070120221075	2 x 2 x 0.75	0.44	1.1	8.3	89.5
	070120321075	3 x 2 x 0.75	0.44	1.1	9.7	123.4
	070120421075	4 x 2 x 0.75	0.44	1.2	10.9	155.9
	070120521075	5 x 2 x 0.75	0.44	1.2	12.0	188.0
	070120821075	8 x 2 x 0.75	0.44	1.3	14.7	282.4
	070121021075	10 x 2 x 0.75	0.44	1.4	16.3	345.1
	070121221075	12 x 2 x 0.75	0.44	1.4	17.6	406.4
	070121621075	16 x 2 x 0.75	0.44	1.5	20.1	527.9
	070122021075	20 x 2 x 0.75	0.44	1.6	22.2	649.7
	070122421075	24 x 2 x 0.75	0.44	1.6	24.2	769.4
	070120120001	1 x 2 x 1	0.44	1.0	7.2	65.2
	070120220001	2 x 2 x 1	0.44	1.1	8.8	105.6
	070120320001	3 x 2 x 1	0.44	1.1	10.4	146.7
	070120420001	4 x 2 x 1	0.44	1.2	11.7	186.8
	070120520001	5 x 2 x 1	0.44	1.2	12.9	226.1
	070120820001	8 x 2 x 1	0.44	1.3	15.8	342.3
	070121020001	10 x 2 x 1	0.44	1.4	17.4	419.3
	070121220001	12 x 2 x 1	0.44	1.5	19.0	495.5
	070121620001	16 x 2 x 1	0.44	1.6	21.6	646.0
	070122020001	20 x 2 x 1	0.44	1.6	23.9	796.2
	070122420001	24 x 2 x 1	0.44	1.7	26.0	945.0
	070120121105	1 x 2 x 1.5	0.44	1.0	7.9	81.9
	070120221105	2 x 2 x 1.5	0.44	1.1	9.7	136.4

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070120321105	3 x 2 x 1.5	0.44	1.2	11.5	191.5
	070120421105	4 x 2 x 1.5	0.44	1.2	13.0	246.0
	070120521105	5 x 2 x 1.5	0.44	1.3	14.3	299.7
	070120821105	8 x 2 x 1.5	0.44	1.4	17.7	457.6
	070121021105	10 x 2 x 1.5	0.44	1.5	19.5	563.2
	070121221105	12 x 2 x 1.5	0.44	1.5	21.2	666.6
	070121621105	16 x 2 x 1.5	0.44	1.6	24.2	872.3
	070122021105	20 x 2 x 1.5	0.44	1.7	26.8	1079.7
	070122421105	24 x 2 x 1.5	0.44	1.8	29.2	1283.9
	070120121205	1 x 2 x 2.5	0.53	1.1	9.3	113.8
	070120221205	2 x 2 x 2.5	0.53	1.2	11.5	195.3
	070120321205	3 x 2 x 2.5	0.53	1.3	13.6	278.3
	070120421205	4 x 2 x 2.5	0.53	1.3	15.5	360.2
	070120521205	5 x 2 x 2.5	0.53	1.4	17.1	441.1
	070120821205	8 x 2 x 2.5	0.53	1.5	21.1	680.6
	070121021205	10 x 2 x 2.5	0.53	1.6	23.4	840.3
	070121221205	12 x 2 x 2.5	0.53	1.7	25.5	998.3
	070121621205	16 x 2 x 2.5	0.53	1.8	29.1	1310.9
	070122021205	20 x 2 x 2.5	0.53	1.9	32.3	1627.1
	070122421205	24 x 2 x 2.5	0.53	2.1	35.2	1938.7

RE-Y(St)Y PiMF - MULTI-PAIR

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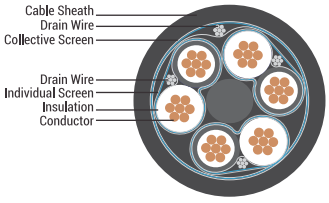

Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Polyvinyl Chloride PVC
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Individual Screen : Aluminium / PETP tape over tinned copper drain wire, plastic tape under and above screen
Assembly : Concentric layers
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Cable Sheath : Polyvinyl chloride PVC
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +70°C
Bending Radius : 7.5 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-Y(St)Y PiMF 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm²)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (µH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.7	25	20	250	1	2000	2000
0.5	5	16/0.2	39.8	25	20	250	1	2000	2000
0.75	2	7/0.37	25.0	25	20	250	1	2000	2000
0.75	5	24/0.2	26.5	25	20	250	1	2000	2000
1	2	7/0.43	18.5	25	20	250	1	2000	2000
1	5	32/0.2	19.9	25	20	250	1	2000	2000
1.5	2	7/0.53	12.3	40	20	250	1	2000	2000
2.5	2	7/0.67	7.6	60	20	250	1	2000	2000

Cable Design Parameters

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070250221050	2 x 2 x 0.5	0.44	1.1	8.1	77.0
	070250321050	3 x 2 x 0.5	0.44	1.1	9.7	104.8
	070250421050	4 x 2 x 0.5	0.44	1.2	11.0	132.3
	070250521050	5 x 2 x 0.5	0.44	1.2	12.2	159.7
	070250821050	8 x 2 x 0.5	0.44	1.3	15.3	239.4
	070251021050	10 x 2 x 0.5	0.44	1.4	17.1	292.9
	070251221050	12 x 2 x 0.5	0.44	1.4	18.8	345.5
	070251621050	16 x 2 x 0.5	0.44	1.6	21.9	451.5
	070252021050	20 x 2 x 0.5	0.44	1.7	24.7	557.4
	070252421050	24 x 2 x 0.5	0.44	1.8	27.3	663.8
	070250221075	2 x 2 x 0.75	0.44	1.1	8.7	92.4
	070250321075	3 x 2 x 0.75	0.44	1.1	10.4	127.6
	070250421075	4 x 2 x 0.75	0.44	1.2	11.8	161.9
	070250521075	5 x 2 x 0.75	0.44	1.2	13.1	196.1
	070250821075	8 x 2 x 0.75	0.44	1.4	16.4	296.8
	070251021075	10 x 2 x 0.75	0.44	1.4	18.4	364.9
	070251221075	12 x 2 x 0.75	0.44	1.5	20.2	431.0
	070251621075	16 x 2 x 0.75	0.44	1.6	23.5	563.9
	070252021075	20 x 2 x 0.75	0.44	1.7	26.5	699.6
	070252421075	24 x 2 x 0.75	0.44	1.8	29.3	833.1
	070250220001	2 x 2 x 1	0.44	1.1	9.1	105.9
	070250320001	3 x 2 x 1	0.44	1.2	10.9	147.9
	070250420001	4 x 2 x 1	0.44	1.2	12.4	188.4
	070250520001	5 x 2 x 1	0.44	1.3	13.7	228.9
	070250820001	8 x 2 x 1	0.44	1.4	17.2	348.8
	070251020001	10 x 2 x 1	0.44	1.5	19.3	429.4
	070251220001	12 x 2 x 1	0.44	1.5	21.2	508.8
	070251620001	16 x 2 x 1	0.44	1.7	24.7	667.6
	070252020001	20 x 2 x 1	0.44	1.8	27.8	828.6
	070252420001	24 x 2 x 1	0.44	1.9	30.7	986.8

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070220221050	2 x 2 x 0.5	0.44	1.1	8.1	76.7
	070220321050	3 x 2 x 0.5	0.44	1.1	9.7	104.4
	070220421050	4 x 2 x 0.5	0.44	1.2	11.0	131.8
	070220521050	5 x 2 x 0.5	0.44	1.2	12.2	159.0
	070220821050	8 x 2 x 0.5	0.44	1.3	15.3	238.4
	070221021050	10 x 2 x 0.5	0.44	1.4	17.1	291.6
	070221221050	12 x 2 x 0.5	0.44	1.4	18.8	344.0
	070221621050	16 x 2 x 0.5	0.44	1.6	21.9	449.5
	070222021050	20 x 2 x 0.5	0.44	1.7	24.7	555.0
	070222421050	24 x 2 x 0.5	0.44	1.8	27.3	660.8
	070220221075	2 x 2 x 0.75	0.44	1.1	8.7	92.4
	070220321075	3 x 2 x 0.75	0.44	1.1	10.4	127.6
	070220421075	4 x 2 x 0.75	0.44	1.2	11.8	162.0
	070220521075	5 x 2 x 0.75	0.44	1.2	13.1	196.2
	070220821075	8 x 2 x 0.75	0.44	1.4	16.4	296.9
	070221021075	10 x 2 x 0.75	0.44	1.4	18.4	365.0
	070221221075	12 x 2 x 0.75	0.44	1.5	20.2	431.2
	070221621075	16 x 2 x 0.75	0.44	1.6	23.5	565.3
	070222021075	20 x 2 x 0.75	0.44	1.7	26.5	699.9
	070222421075	24 x 2 x 0.75	0.44	1.8	29.3	833.5
	070220220001	2 x 2 x 1	0.44	1.1	9.3	108.5
	070220320001	3 x 2 x 1	0.44	1.2	11.0	151.0
	070220420001	4 x 2 x 1	0.44	1.2	12.6	193.1
	070220520001	5 x 2 x 1	0.44	1.3	14.0	234.6
	070220820001	8 x 2 x 1	0.44	1.4	17.5	357.5
	070221020001	10 x 2 x 1	0.44	1.5	19.6	440.1
	070221220001	12 x 2 x 1	0.44	1.5	21.5	521.4
	070221620001	16 x 2 x 1	0.44	1.7	25.0	684.0
	070222020001	20 x 2 x 1	0.44	1.8	28.2	848.9
	070222420001	24 x 2 x 1	0.44	1.9	31.2	1012.4
	070220221105	2 x 2 x 1.5	0.44	1.1	10.2	139.0
	070220321105	3 x 2 x 1.5	0.44	1.2	12.2	196.6
	070220421105	4 x 2 x 1.5	0.44	1.3	13.9	252.7
	070220521105	5 x 2 x 1.5	0.44	1.3	15.4	308.7
	070220821105	8 x 2 x 1.5	0.44	1.5	19.4	473.9

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070221021105	10 x 2 x 1.5	0.44	1.6	21.7	585.5
	070221221105	12 x 2 x 1.5	0.44	1.6	23.8	695.5
	070221621105	16 x 2 x 1.5	0.44	1.8	27.7	914.4
	070222021105	20 x 2 x 1.5	0.44	1.9	31.2	1136.7
	070222421105	24 x 2 x 1.5	0.44	2.0	34.4	1357.0
	070220221205	2 x 2 x 2.5	0.53	1.2	11.9	198.7
	070220321205	3 x 2 x 2.5	0.53	1.3	14.3	283.3
	070220421205	4 x 2 x 2.5	0.53	1.4	16.3	367.6
	070220521205	5 x 2 x 2.5	0.53	1.4	18.2	451.1
	070220821205	8 x 2 x 2.5	0.53	1.6	22.8	698.8
	070221021205	10 x 2 x 2.5	0.53	1.7	25.5	865.5
	070221221205	12 x 2 x 2.5	0.53	1.8	28.0	1029.7
	070221621205	16 x 2 x 2.5	0.53	2.0	32.6	1358.9
	070222021205	20 x 2 x 2.5	0.53	2.1	36.6	1692.1
	070222421205	24 x 2 x 2.5	0.53	2.2	40.4	2022.3

RE-2X(St)Y - SINGLE & MULTI-PAIR

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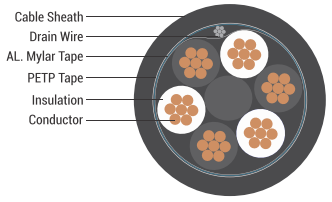

Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Crosslinked polyethylene XLPE
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Cable Sheath : Polyvinyl chloride PVC (Also available in halogen free construction on request.)
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +90°C
Bending Radius : 7.5 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-2X(St)Y 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance* at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	5000	150	1	2000	2000
0.5	5	16/0.2	39.0	25	5000	150	1	2000	2000
0.75	2	7/0.37	24.5	25	5000	150	1	2000	2000
0.75	5	24/0.2	26.0	25	5000	150	1	2000	2000
1	2	7/0.43	18.1	25	5000	150	1	2000	2000
1	5	32/0.2	19.5	25	5000	150	1	2000	2000
1.5	2	7/0.53	12.1	40	5000	150	1	2000	2000
2.5	2	7/0.67	7.41	60	5000	150	1	2000	2000

*For multi-pair maximum resistance shall be increased by 2%.

Cable Design Parameters

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070350121050	1 x 2 x 0.5	0.44	1.0	6.4	45.1
	070350221050	2 x 2 x 0.5	0.44	1.0	7.7	67.9
	070350321050	3 x 2 x 0.5	0.44	1.1	9.0	91.3
	070350421050	4 x 2 x 0.5	0.44	1.1	10.1	113.8
	070350521050	5 x 2 x 0.5	0.44	1.2	11.1	136.0
	070350821050	8 x 2 x 0.5	0.44	1.3	13.6	200.1
	070351021050	10 x 2 x 0.5	0.44	1.3	15.0	242.3
	070351221050	12 x 2 x 0.5	0.44	1.4	16.2	283.9
	070351621050	16 x 2 x 0.5	0.44	1.4	18.4	365.3
	070352021050	20 x 2 x 0.5	0.44	1.5	20.4	446.6
	070352421050	24 x 2 x 0.5	0.44	1.6	22.2	527.1
	070350121075	1 x 2 x 0.75	0.44	1.0	6.8	53.1
	070350221075	2 x 2 x 0.75	0.44	1.1	8.3	82.2
	070350321075	3 x 2 x 0.75	0.44	1.1	9.7	112.0
	070350421075	4 x 2 x 0.75	0.44	1.2	10.9	141.3
	070350521075	5 x 2 x 0.75	0.44	1.2	12.0	169.8
	070350821075	8 x 2 x 0.75	0.44	1.3	14.7	253.1
	070351021075	10 x 2 x 0.75	0.44	1.4	16.2	308.6
	070351221075	12 x 2 x 0.75	0.44	1.4	17.6	362.6
	070351621075	16 x 2 x 0.75	0.44	1.5	20.0	469.5
	070352021075	20 x 2 x 0.75	0.44	1.6	22.2	576.7
	070352421075	24 x 2 x 0.75	0.44	1.6	24.1	681.7
	070350120001	1 x 2 x 1	0.44	1.0	7.1	60.1
	070350220001	2 x 2 x 1	0.44	1.1	8.7	95.5
	070350320001	3 x 2 x 1	0.44	1.1	10.2	131.2
	070350420001	4 x 2 x 1	0.44	1.2	11.5	166.3
	070350520001	5 x 2 x 1	0.44	1.2	12.6	200.6
	070350820001	8 x 2 x 1	0.44	1.3	15.5	302.0
	070351020001	10 x 2 x 1	0.44	1.4	17.1	369.2
	070351220001	12 x 2 x 1	0.44	1.4	18.6	434.7
	070351620001	16 x 2 x 1	0.44	1.5	21.2	565.4
	070352020001	20 x 2 x 1	0.44	1.6	23.5	697.1
	070352420001	24 x 2 x 1	0.44	1.7	25.5	825.0

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070320121050	1 x 2 x 0.5	0.44	1.0	6.4	44.9
	070320221050	2 x 2 x 0.5	0.44	1.0	7.7	67.6
	070320321050	3 x 2 x 0.5	0.44	1.1	9.0	90.8
	070320421050	4 x 2 x 0.5	0.44	1.1	10.1	113.2
	070320521050	5 x 2 x 0.5	0.44	1.2	11.1	135.3
	070320821050	8 x 2 x 0.5	0.44	1.3	13.6	199.0
	070321021050	10 x 2 x 0.5	0.44	1.3	15.0	240.9
	070321221050	12 x 2 x 0.5	0.44	1.4	16.2	282.3
	070321621050	16 x 2 x 0.5	0.44	1.4	18.4	363.2
	070322021050	20 x 2 x 0.5	0.44	1.5	20.4	443.9
	070322421050	24 x 2 x 0.5	0.44	1.6	22.2	523.9
	070320121075	1 x 2 x 0.75	0.44	1.0	6.8	53.0
	070320221075	2 x 2 x 0.75	0.44	1.1	8.3	82.2
	070320321075	3 x 2 x 0.75	0.44	1.1	9.7	112.4
	070320421075	4 x 2 x 0.75	0.44	1.2	10.9	141.2
	070320521075	5 x 2 x 0.75	0.44	1.2	12.0	169.7
	070320821075	8 x 2 x 0.75	0.44	1.3	14.7	253.0
	070321021075	10 x 2 x 0.75	0.44	1.4	16.3	308.4
	070321221075	12 x 2 x 0.75	0.44	1.4	17.6	362.4
	070321621075	16 x 2 x 0.75	0.44	1.5	20.1	469.2
	070322021075	20 x 2 x 0.75	0.44	1.6	22.2	576.3
	070322421075	24 x 2 x 0.75	0.44	1.6	24.2	681.2
	070320120001	1 x 2 x 1	0.44	1.0	7.2	61.1
	070320220001	2 x 2 x 1	0.44	1.1	8.8	97.2
	070320320001	3 x 2 x 1	0.44	1.1	10.4	134.2
	070320420001	4 x 2 x 1	0.44	1.2	11.7	170.1
	070320520001	5 x 2 x 1	0.44	1.2	12.9	205.2
	070320820001	8 x 2 x 1	0.44	1.3	15.8	308.9
	070321020001	10 x 2 x 1	0.44	1.4	17.4	377.7
	070321220001	12 x 2 x 1	0.44	1.5	19.0	445.5
	070321620001	16 x 2 x 1	0.44	1.6	21.6	579.4
	070322020001	20 x 2 x 1	0.44	1.6	23.9	712.9
	070322420001	24 x 2 x 1	0.44	1.7	26.0	845.0
	070320121105	1 x 2 x 1.5	0.44	1.0	7.9	76.8
	070320221105	2 x 2 x 1.5	0.44	1.1	9.7	126.3

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070320321105	3 x 2 x 1.5	0.44	1.2	11.5	176.3
	070320421105	4 x 2 x 1.5	0.44	1.2	13.0	225.7
	070320521105	5 x 2 x 1.5	0.44	1.3	14.3	274.3
	070320821105	8 x 2 x 1.5	0.44	1.4	17.7	417.0
	070321021105	10 x 2 x 1.5	0.44	1.5	19.5	512.4
	070321221105	12 x 2 x 1.5	0.44	1.5	21.2	605.6
	070321621105	16 x 2 x 1.5	0.44	1.6	24.2	791.0
	070322021105	20 x 2 x 1.5	0.44	1.7	26.8	978.1
	070322421105	24 x 2 x 1.5	0.44	1.8	29.2	1162.0
	070320121205	1 x 2 x 2.5	0.53	1.1	9.3	106.4
	070320221205	2 x 2 x 2.5	0.53	1.2	11.5	180.6
	070320321205	3 x 2 x 2.5	0.53	1.3	13.6	256.2
	070320421205	4 x 2 x 2.5	0.53	1.3	15.5	330.7
	070320521205	5 x 2 x 2.5	0.53	1.4	17.1	404.3
	070320821205	8 x 2 x 2.5	0.53	1.5	21.1	621.6
	070321021205	10 x 2 x 2.5	0.53	1.6	23.4	766.7
	070321221205	12 x 2 x 2.5	0.53	1.7	25.5	909.9
	070321621205	16 x 2 x 2.5	0.53	1.8	29.1	1193.1
	070322021205	20 x 2 x 2.5	0.53	1.9	32.3	1479.8
	070322421205	24 x 2 x 2.5	0.53	2.1	35.2	1762.0

RE-2X(St)Y PiMF - MULTI-PAIR

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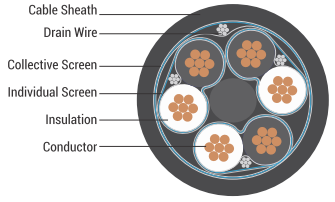

Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Crosslinked polyethylene XLPE
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Individual Screen : Aluminium / PETP tape over tinned copper drain wire, plastic tape under and above screen
Assembly : Concentric layers
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Cable Sheath : Polyvinyl chloride PVC (Also available in halogen free construction on request.)
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +90°C
Bending Radius : 7.5 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-2X(St)Y PiMF 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (µH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.7	25	5000	150	1	2000	2000
0.5	5	16/0.2	39.8	25	5000	150	1	2000	2000
0.75	2	7/0.37	25.0	25	5000	150	1	2000	2000
0.75	5	24/0.2	26.5	25	5000	150	1	2000	2000
1	2	7/0.43	18.5	25	5000	150	1	2000	2000
1	5	32/0.2	19.9	25	5000	150	1	2000	2000
1.5	2	7/0.53	12.3	40	5000	150	1	2000	2000
2.5	2	7/0.67	7.6	60	5000	150	1	2000	2000

Cable Design Parameters

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070450221050	2 x 2 x 0.5	0.44	1.1	8.1	70.7
	070450321050	3 x 2 x 0.5	0.44	1.1	9.7	95.3
	070450421050	4 x 2 x 0.5	0.44	1.2	11.0	119.6
	070450521050	5 x 2 x 0.5	0.44	1.2	12.2	143.9
	070450821050	8 x 2 x 0.5	0.44	1.3	15.3	214.1
	070451021050	10 x 2 x 0.5	0.44	1.4	17.1	261.2
	070451221050	12 x 2 x 0.5	0.44	1.4	18.8	307.5
	070451621050	16 x 2 x 0.5	0.44	1.6	21.9	400.8
	070452021050	20 x 2 x 0.5	0.44	1.7	24.7	494.1
	070452421050	24 x 2 x 0.5	0.44	1.8	27.3	587.8
	070450221075	2 x 2 x 0.75	0.44	1.1	8.7	85.1
	070450321075	3 x 2 x 0.75	0.44	1.1	10.4	116.6
	070450421075	4 x 2 x 0.75	0.44	1.2	11.8	147.3
	070450521075	5 x 2 x 0.75	0.44	1.2	13.1	177.9
	070450821075	8 x 2 x 0.75	0.44	1.4	16.4	267.7
	070451021075	10 x 2 x 0.75	0.44	1.4	18.4	328.5
	070451221075	12 x 2 x 0.75	0.44	1.5	20.2	387.3
	070451621075	16 x 2 x 0.75	0.44	1.6	23.5	505.6
	070452021075	20 x 2 x 0.75	0.44	1.7	26.5	626.8
	070452421075	24 x 2 x 0.75	0.44	1.8	29.3	745.7
	070450220001	2 x 2 x 1	0.44	1.1	9.1	98.0
	070450320001	3 x 2 x 1	0.44	1.2	10.9	135.9
	070450420001	4 x 2 x 1	0.44	1.2	12.4	172.6
	070450520001	5 x 2 x 1	0.44	1.3	13.7	209.0
	070450820001	8 x 2 x 1	0.44	1.4	17.2	317.0
	070451020001	10 x 2 x 1	0.44	1.5	19.3	389.7
	070451220001	12 x 2 x 1	0.44	1.5	21.2	461.2
	070451620001	16 x 2 x 1	0.44	1.7	24.7	604.1
	070452020001	20 x 2 x 1	0.44	1.8	27.8	749.2
	070452420001	24 x 2 x 1	0.44	1.9	30.7	891.5

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070420221050	2 x 2 x 0.5	0.44	1.1	8.1	70.3
	070420321050	3 x 2 x 0.5	0.44	1.1	9.7	94.9
	070420421050	4 x 2 x 0.5	0.44	1.2	11.0	119.1
	070420521050	5 x 2 x 0.5	0.44	1.2	12.2	143.1
	070420821050	8 x 2 x 0.5	0.44	1.3	15.3	213.0
	070421021050	10 x 2 x 0.5	0.44	1.4	17.1	259.9
	070421221050	12 x 2 x 0.5	0.44	1.4	18.8	305.8
	070421621050	16 x 2 x 0.5	0.44	1.6	21.9	398.6
	070422021050	20 x 2 x 0.5	0.44	1.7	24.7	491.4
	070422421050	24 x 2 x 0.5	0.44	1.8	27.3	584.6
	070420221075	2 x 2 x 0.75	0.44	1.1	8.7	85.0
	070420321075	3 x 2 x 0.75	0.44	1.1	10.4	116.6
	070420421075	4 x 2 x 0.75	0.44	1.2	11.8	147.3
	070420521075	5 x 2 x 0.75	0.44	1.2	13.1	177.8
	070420821075	8 x 2 x 0.75	0.44	1.4	16.4	267.5
	070421021075	10 x 2 x 0.75	0.44	1.4	18.4	328.3
	070421221075	12 x 2 x 0.75	0.44	1.5	20.2	387.1
	070421621075	16 x 2 x 0.75	0.44	1.6	23.5	506.5
	070422021075	20 x 2 x 0.75	0.44	1.7	26.5	626.5
	070422421075	24 x 2 x 0.75	0.44	1.8	29.3	745.3
	070420220001	2 x 2 x 1	0.44	1.1	9.3	100.2
	070420320001	3 x 2 x 1	0.44	1.2	11.0	138.5
	070420420001	4 x 2 x 1	0.44	1.2	12.6	176.5
	070420520001	5 x 2 x 1	0.44	1.3	14.0	213.7
	070420820001	8 x 2 x 1	0.44	1.4	17.5	324.1
	070421020001	10 x 2 x 1	0.44	1.5	19.6	398.4
	070421220001	12 x 2 x 1	0.44	1.5	21.5	471.4
	070421620001	16 x 2 x 1	0.44	1.7	25.0	617.4
	070422020001	20 x 2 x 1	0.44	1.8	28.2	765.6
	070422420001	24 x 2 x 1	0.44	1.9	31.2	912.4
	070420221105	2 x 2 x 1.5	0.44	1.1	10.2	128.9
	070420321105	3 x 2 x 1.5	0.44	1.2	12.2	181.4
	070420421105	4 x 2 x 1.5	0.44	1.3	13.9	232.4
	070420521105	5 x 2 x 1.5	0.44	1.3	15.4	283.3
	070420821105	8 x 2 x 1.5	0.44	1.5	19.4	433.2

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070421021105	10 x 2 x 1.5	0.44	1.6	21.7	534.7
	070421221105	12 x 2 x 1.5	0.44	1.6	23.8	634.5
	070421621105	16 x 2 x 1.5	0.44	1.8	27.7	833.2
	070422021105	20 x 2 x 1.5	0.44	1.9	31.2	1035.1
	070422421105	24 x 2 x 1.5	0.44	2.0	34.4	1235.1
	070420221205	2 x 2 x 2.5	0.53	1.2	11.9	184.0
	070420321205	3 x 2 x 2.5	0.53	1.3	14.3	261.2
	070420421205	4 x 2 x 2.5	0.53	1.4	16.3	338.1
	070420521205	5 x 2 x 2.5	0.53	1.4	18.2	414.3
	070420821205	8 x 2 x 2.5	0.53	1.6	22.8	639.9
	070421021205	10 x 2 x 2.5	0.53	1.7	25.5	791.8
	070421221205	12 x 2 x 2.5	0.53	1.8	28.0	941.4
	070421621205	16 x 2 x 2.5	0.53	2.0	32.6	1241.1
	070422021205	20 x 2 x 2.5	0.53	2.1	36.6	1544.8
	070422421205	24 x 2 x 2.5	0.53	2.2	40.4	1845.5

RE-Y(St)YSWAY - SINGLE & MULTI-PAIR

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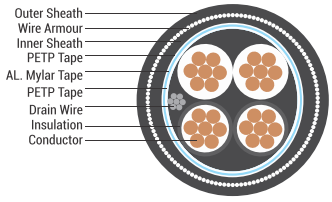


Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Polyvinyl chloride PVC
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Inner Sheath : Polyvinyl chloride PVC
Armour : Galvanised round steel wires
Cable Sheath : Polyvinyl chloride PVC
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +70°C
Bending Radius : 10 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-Y(St)YSWAY 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance* at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	20	250	1	2000	2000
0.5	5	16/0.2	39.0	25	20	250	1	2000	2000
0.75	2	7/0.37	24.5	25	20	250	1	2000	2000
0.75	5	24/0.2	26.0	25	20	250	1	2000	2000
1	2	7/0.43	18.1	25	20	250	1	2000	2000
1	5	32/0.2	19.5	25	20	250	1	2000	2000
1.5	2	7/0.53	12.1	40	20	250	1	2000	2000
2.5	2	7/0.67	7.41	60	20	250	1	2000	2000

*For multi-pair maximum resistance shall be increased by 2%.

Cable Design Parameters

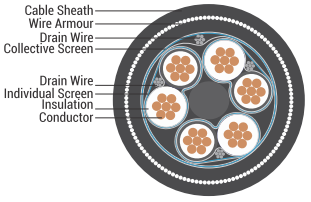
	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070550121050	1 x 2 x 0.5	0.44	1	6.4	0.9	1.4	11.1	212.7
	070550221050	2 x 2 x 0.5	0.44	1	7.6	0.9	1.5	12.4	266.4
	070550321050	3 x 2 x 0.5	0.44	1	8.9	0.9	1.5	13.7	320.1
	070550421050	4 x 2 x 0.5	0.44	1	9.9	0.9	1.5	14.7	368.6
	070550521050	5 x 2 x 0.5	0.44	1	10.8	0.9	1.6	15.7	413.8
	070550821050	8 x 2 x 0.5	0.44	1	13.1	0.9	1.6	18.1	537.2
	070551021050	10 x 2 x 0.5	0.44	1	14.4	0.9	1.7	19.5	613.5
	070551221050	12 x 2 x 0.5	0.44	1	15.5	1.25	1.7	21.4	786.1
	070551621050	16 x 2 x 0.5	0.44	1	17.6	1.25	1.8	23.6	936.9
	070552021050	20 x 2 x 0.5	0.44	1	19.4	1.25	1.8	25.5	1080.4
	070552421050	24 x 2 x 0.5	0.44	1	21.0	1.25	1.9	27.2	1217.3
	070550121075	1 x 2 x 0.75	0.44	1	6.8	0.9	1.4	11.5	230.0
	070550221075	2 x 2 x 0.75	0.44	1	8.2	0.9	1.5	12.9	293.3
	070550321075	3 x 2 x 0.75	0.44	1	9.5	0.9	1.5	14.3	356.6
	070550421075	4 x 2 x 0.75	0.44	1	10.6	0.9	1.5	15.5	414.1
	070550521075	5 x 2 x 0.75	0.44	1	11.6	0.9	1.6	16.6	468.0
	070550821075	8 x 2 x 0.75	0.44	1	14.1	0.9	1.6	19.2	616.4
	070551021075	10 x 2 x 0.75	0.44	1	15.5	1.25	1.7	21.4	809.1
	070551221075	12 x 2 x 0.75	0.44	1	16.8	1.25	1.7	22.8	905.3
	070551621075	16 x 2 x 0.75	0.44	1	19.0	1.25	1.8	25.1	1088.2
	070552021075	20 x 2 x 0.75	0.44	1	21.0	1.25	1.9	27.2	1263.5
	070552421075	24 x 2 x 0.75	0.44	1	22.8	1.25	1.9	29.1	1431.3
	070550120001	1 x 2 x 1	0.44	1	7.1	0.9	1.4	11.8	244.2
	070550220001	2 x 2 x 1	0.44	1	8.5	0.9	1.5	13.3	315.6
	070550320001	3 x 2 x 1	0.44	1	10.0	0.9	1.5	14.8	387.2
	070550420001	4 x 2 x 1	0.44	1	11.2	0.9	1.6	16.1	452.6
	070550520001	5 x 2 x 1	0.44	1	12.2	0.9	1.6	17.2	514.2
	070550820001	8 x 2 x 1	0.44	1	14.9	0.9	1.7	20.0	684.7
	070551020001	10 x 2 x 1	0.44	1	16.4	1.25	1.7	22.3	897.2
	070551220001	12 x 2 x 1	0.44	1	17.7	1.25	1.8	23.8	1008.1
	070551620001	16 x 2 x 1	0.44	1	20.1	1.25	1.8	26.3	1219.5
	070552020001	20 x 2 x 1	0.44	1	22.3	1.25	1.9	28.5	1423.3
	070552420001	24 x 2 x 1	0.44	1	24.2	1.25	1.9	30.6	1618.8

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070520121050	1 x 2 x 0.5	0.44	1	6.4	0.9	1.4	11.1	212.5
	070520221050	2 x 2 x 0.5	0.44	1	7.6	0.9	1.5	12.4	266.1
	070520321050	3 x 2 x 0.5	0.44	1	8.9	0.9	1.5	13.7	319.7
	070520421050	4 x 2 x 0.5	0.44	1	9.9	0.9	1.5	14.7	368.1
	070520521050	5 x 2 x 0.5	0.44	1	10.8	0.9	1.6	15.7	413.1
	070520821050	8 x 2 x 0.5	0.44	1	13.1	0.9	1.6	18.1	536.2
	070521021050	10 x 2 x 0.5	0.44	1	14.4	0.9	1.7	19.5	612.2
	070521221050	12 x 2 x 0.5	0.44	1	15.5	1.25	1.7	21.4	784.6
	070521621050	16 x 2 x 0.5	0.44	1	17.6	1.25	1.8	23.6	934.9
	070522021050	20 x 2 x 0.5	0.44	1	19.4	1.25	1.8	25.5	1077.9
	070522421050	24 x 2 x 0.5	0.44	1	21.0	1.25	1.9	27.2	1214.3
	070520121075	1 x 2 x 0.75	0.44	1	6.8	0.9	1.4	11.5	230.4
	070520221075	2 x 2 x 0.75	0.44	1	8.2	0.9	1.5	12.9	293.7
	070520321075	3 x 2 x 0.75	0.44	1	9.5	0.9	1.5	14.3	357.1
	070520421075	4 x 2 x 0.75	0.44	1	10.6	0.9	1.5	15.5	414.8
	070520521075	5 x 2 x 0.75	0.44	1	11.6	0.9	1.6	16.6	468.8
	070520821075	8 x 2 x 0.75	0.44	1	14.1	0.9	1.6	19.2	617.4
	070521021075	10 x 2 x 0.75	0.44	1	15.6	1.25	1.7	21.5	810.5
	070521221075	12 x 2 x 0.75	0.44	1	16.8	1.25	1.7	22.8	906.9
	070521621075	16 x 2 x 0.75	0.44	1	19.1	1.25	1.8	25.2	1090.0
	070522021075	20 x 2 x 0.75	0.44	1	21.1	1.25	1.9	27.3	1265.6
	070522421075	24 x 2 x 0.75	0.44	1	22.9	1.25	1.9	29.2	1433.6
	070520120001	1 x 2 x 1	0.44	1	7.2	0.9	1.4	11.7	241.9
	070520220001	2 x 2 x 1	0.44	1	8.7	0.9	1.5	13.5	320.4
	070520320001	3 x 2 x 1	0.44	1	10.1	0.9	1.5	15.0	393.4
	070520420001	4 x 2 x 1	0.44	1	11.4	0.9	1.6	16.3	460.2
	070520520001	5 x 2 x 1	0.44	1	12.4	0.9	1.6	17.4	523.0
	070520820001	8 x 2 x 1	0.44	1	15.1	1.25	1.7	21.0	794.7
	070521020001	10 x 2 x 1	0.44	1	16.7	1.25	1.7	22.6	913.4
	070521220001	12 x 2 x 1	0.44	1	18.1	1.25	1.8	24.1	1026.4
	070521620001	16 x 2 x 1	0.44	1	20.5	1.25	1.8	26.7	1242.1
	070522020001	20 x 2 x 1	0.44	1	22.7	1.25	1.9	29.0	1449.9
	070522420001	24 x 2 x 1	0.44	1	24.6	1.25	2.0	31.0	1649.4

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070520121105	1 x 2 x 1.5	0.44	1	7.9	0.9	1.5	12.6	278.7
	070520221105	2 x 2 x 1.5	0.44	1	9.5	0.9	1.5	14.4	369.8
	070520321105	3 x 2 x 1.5	0.44	1	11.2	0.9	1.6	16.1	461.2
	070520421105	4 x 2 x 1.5	0.44	1	12.6	0.9	1.6	17.6	545.4
	070520521105	5 x 2 x 1.5	0.44	1	13.8	0.9	1.6	18.9	625.2
	070520821105	8 x 2 x 1.5	0.44	1	16.9	1.25	1.7	22.8	956.4
	070521021105	10 x 2 x 1.5	0.44	1	18.6	1.25	1.8	24.7	1108.5
	070521221105	12 x 2 x 1.5	0.44	1	20.1	1.25	1.8	26.3	1253.9
	070521621105	16 x 2 x 1.5	0.44	1	22.9	1.25	1.9	29.2	1532.9
	070522021105	20 x 2 x 1.5	0.44	1	25.4	1.6	2.0	32.6	1964.5
	070522421105	24 x 2 x 1.5	0.44	1.2	28.0	1.6	2.1	35.3	2282.1
	070520121205	1 x 2 x 2.5	0.53	1	9.1	0.9	1.5	13.9	338.1
	070520221205	2 x 2 x 2.5	0.53	1	11.1	0.9	1.6	16.1	464.0
	070520321205	3 x 2 x 2.5	0.53	1	13.1	0.9	1.6	18.2	590.4
	070520421205	4 x 2 x 2.5	0.53	1	14.8	0.9	1.7	20.0	708.2
	070520521205	5 x 2 x 2.5	0.53	1	16.3	1.25	1.7	22.3	925.5
	070520821205	8 x 2 x 2.5	0.53	1	20.1	1.25	1.8	26.2	1265.4
	070521021205	10 x 2 x 2.5	0.53	1	22.2	1.25	1.9	28.4	1481.4
	070521221205	12 x 2 x 2.5	0.53	1	24.1	1.25	1.9	30.5	1688.8
	070521621205	16 x 2 x 2.5	0.53	1.2	27.9	1.6	2.1	35.2	2306.2
	070522021205	20 x 2 x 2.5	0.53	1.2	30.8	1.6	2.2	38.3	2719.3
	070522421205	24 x 2 x 2.5	0.53	1.2	33.5	1.6	2.2	41.2	3117.3

RE-Y(St)YSWAY PiMF - MULTI-PAIR

REACH I RoHS I CE



Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Polyvinyl chloride PVC
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Individual Screen : Aluminium / PETP tape over tinned copper drain wire, plastic tape under and above screen
Assembly : Concentric layers
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Inner Sheath : Polyvinyl chloride PVC
Armour : Galvanised round steel wires
Cable Sheath : Polyvinyl chloride PVC
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +70°C
Bending Radius : 10 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-Y(St)YSWAY PiMF 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance* at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	20	250	1	2000	2000
0.5	5	16/0.2	39.0	25	20	250	1	2000	2000
0.75	2	7/0.37	24.5	25	20	250	1	2000	2000
0.75	5	24/0.2	26.0	25	20	250	1	2000	2000
1	2	7/0.43	18.1	25	20	250	1	2000	2000
1	5	32/0.2	19.5	25	20	250	1	2000	2000
1.5	2	7/0.53	12.1	40	20	250	1	2000	2000
2.5	2	7/0.67	7.41	60	20	250	1	2000	2000

*For multi-pair maximum resistance shall be increased by 2%.

Cable Design Parameters

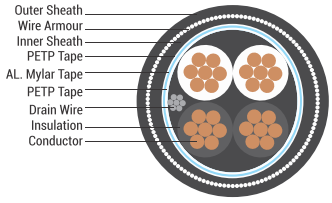
	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070650221050	2 x 2 x 0.5	0.44	1	8.0	0.9	1.5	12.8	277.9
	070650321050	3 x 2 x 0.5	0.44	1	9.5	0.9	1.5	14.3	337.6
	070650421050	4 x 2 x 0.5	0.44	1	10.7	0.9	1.5	15.6	392.2
	070650521050	5 x 2 x 0.5	0.44	1	11.8	0.9	1.6	16.8	443.6
	070650821050	8 x 2 x 0.5	0.44	1	14.7	0.9	1.7	19.8	585.9
	070651021050	10 x 2 x 0.5	0.44	1	16.4	1.25	1.7	22.3	780.5
	070651221050	12 x 2 x 0.5	0.44	1	17.9	1.25	1.8	24.0	875.9
	070651621050	16 x 2 x 0.5	0.44	1	20.8	1.25	1.9	27.0	1058.7
	070652021050	20 x 2 x 0.5	0.44	1	23.4	1.25	1.9	29.7	1235.1
	070652421050	24 x 2 x 0.5	0.44	1	25.8	1.6	2.0	33.1	1569.3
	070650221075	2 x 2 x 0.75	0.44	1	8.6	0.9	1.5	13.3	304.8
	070650321075	3 x 2 x 0.75	0.44	1	10.1	0.9	1.5	15.0	374.2
	070650421075	4 x 2 x 0.75	0.44	1	11.4	0.9	1.6	16.4	437.9
	070650521075	5 x 2 x 0.75	0.44	1	12.6	0.9	1.6	17.6	498.0
	070650821075	8 x 2 x 0.75	0.44	1	15.7	1.25	1.7	21.6	766.9
	070651021075	10 x 2 x 0.75	0.44	1	17.5	1.25	1.8	23.5	883.8
	070651221075	12 x 2 x 0.75	0.44	1	19.2	1.25	1.8	25.3	995.9
	070651621075	16 x 2 x 0.75	0.44	1	22.2	1.25	1.9	28.5	1211.3
	070652021075	20 x 2 x 0.75	0.44	1	25.0	1.25	2.0	31.5	1420.1
	070652421075	24 x 2 x 0.75	0.44	1.2	28.0	1.6	2.1	35.4	1840.1
	070650220001	2 x 2 x 1	0.44	1	8.9	0.9	1.5	13.7	327.3
	070650320001	3 x 2 x 1	0.44	1	10.6	0.9	1.5	15.5	404.9
	070650420001	4 x 2 x 1	0.44	1	12.0	0.9	1.6	16.9	476.5
	070650520001	5 x 2 x 1	0.44	1	13.2	0.9	1.6	18.3	544.4
	070650820001	8 x 2 x 1	0.44	1	16.5	1.25	1.7	22.4	840.3
	070651020001	10 x 2 x 1	0.44	1	18.4	1.25	1.8	24.4	972.4
	070651220001	12 x 2 x 1	0.44	1	20.1	1.25	1.8	26.3	1099.3
	070651620001	16 x 2 x 1	0.44	1	23.3	1.25	1.9	29.7	1343.6
	070652020001	20 x 2 x 1	0.44	1	26.3	1.6	2.0	33.5	1747.4
	070652420001	24 x 2 x 1	0.44	1.2	29.4	1.6	2.1	36.8	2039.0

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070620221050	2 x 2 x 0.5	0.44	1	8.0	0.9	1.5	12.8	277.6
	070620321050	3 x 2 x 0.5	0.44	1	9.5	0.9	1.5	14.3	337.2
	070620421050	4 x 2 x 0.5	0.44	1	10.7	0.9	1.5	15.6	391.7
	070620521050	5 x 2 x 0.5	0.44	1	11.8	0.9	1.6	16.8	442.9
	070620821050	8 x 2 x 0.5	0.44	1	14.7	0.9	1.7	19.8	584.9
	070621021050	10 x 2 x 0.5	0.44	1	16.4	1.25	1.7	22.3	779.2
	070621221050	12 x 2 x 0.5	0.44	1	17.9	1.25	1.8	24.0	874.4
	070621621050	16 x 2 x 0.5	0.44	1	20.8	1.25	1.9	27.0	1056.7
	070622021050	20 x 2 x 0.5	0.44	1	23.4	1.25	1.9	29.7	1232.6
	070622421050	24 x 2 x 0.5	0.44	1	25.8	1.6	2.0	33.1	1566.3
	070620221075	2 x 2 x 0.75	0.44	1	8.6	0.9	1.5	13.4	305.3
	070620321075	3 x 2 x 0.75	0.44	1	10.1	0.9	1.5	15.0	374.7
	070620421075	4 x 2 x 0.75	0.44	1	11.4	0.9	1.6	16.4	438.5
	070620521075	5 x 2 x 0.75	0.44	1	12.6	0.9	1.6	17.7	498.8
	070620821075	8 x 2 x 0.75	0.44	1	15.7	1.25	1.7	21.7	768.1
	070621021075	10 x 2 x 0.75	0.44	1	17.6	1.25	1.8	23.6	885.2
	070621221075	12 x 2 x 0.75	0.44	1	19.2	1.25	1.8	25.3	997.5
	070621621075	16 x 2 x 0.75	0.44	1	22.3	1.25	1.9	28.6	1213.2
	070622021075	20 x 2 x 0.75	0.44	1	25.1	1.6	2.0	32.3	1581.2
	070622421075	24 x 2 x 0.75	0.44	1.2	28.1	1.6	2.1	35.4	1842.9
	070620220001	2 x 2 x 1	0.44	1	9.1	0.9	1.5	13.9	332.0
	070620320001	3 x 2 x 1	0.44	1	10.7	0.9	1.6	15.6	411.1
	070620420001	4 x 2 x 1	0.44	1	12.2	0.9	1.6	17.1	484.1
	070620520001	5 x 2 x 1	0.44	1	13.4	0.9	1.6	18.5	553.2
	070620820001	8 x 2 x 1	0.44	1	16.7	1.25	1.7	22.7	854.2
	070621020001	10 x 2 x 1	0.44	1	18.7	1.25	1.8	24.8	988.7
	070621220001	12 x 2 x 1	0.44	1	20.5	1.25	1.8	26.6	1117.8
	070621620001	16 x 2 x 1	0.44	1	23.7	1.25	1.9	30.1	1366.6
	070622020001	20 x 2 x 1	0.44	1	26.7	1.6	2.0	33.9	1777.1
	070622420001	24 x 2 x 1	0.44	1.2	29.8	1.6	2.1	37.3	2073.4
	070620221105	2 x 2 x 1.5	0.44	1	9.9	0.9	1.5	14.8	381.6
	070620321105	3 x 2 x 1.5	0.44	1	11.8	0.9	1.6	16.7	479.0
	070620421105	4 x 2 x 1.5	0.44	1	13.4	0.9	1.6	18.4	569.6

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070620521105	5 x 2 x 1.5	0.44	1	14.8	0.9	1.7	19.9	655.8
	070620821105	8 x 2 x 1.5	0.44	1	18.5	1.25	1.8	24.5	1016.7
	070621021105	10 x 2 x 1.5	0.44	1	20.6	1.25	1.8	26.8	1184.9
	070621221105	12 x 2 x 1.5	0.44	1	22.5	1.25	1.9	28.8	1346.7
	070621621105	16 x 2 x 1.5	0.44	1	26.1	1.6	2.0	33.4	1824.9
	070622021105	20 x 2 x 1.5	0.44	1.2	29.8	1.6	2.1	37.2	2195.6
	070622421105	24 x 2 x 1.5	0.44	1.2	32.8	1.6	2.2	40.4	2513.8
	070620221205	2 x 2 x 2.5	0.53	1	11.5	0.9	1.6	16.5	475.9
	070620321205	3 x 2 x 2.5	0.53	1	13.7	0.9	1.6	18.8	608.6
	070620421205	4 x 2 x 2.5	0.53	1	15.6	1.25	1.7	21.5	833.6
	070620521205	5 x 2 x 2.5	0.53	1	17.3	1.25	1.8	23.3	962.9
	070620821205	8 x 2 x 2.5	0.53	1	21.7	1.25	1.9	27.9	1327.1
	070621021205	10 x 2 x 2.5	0.53	1	24.2	1.25	1.9	30.6	1559.7
	070621221205	12 x 2 x 2.5	0.53	1	26.5	1.6	2.0	33.7	1951.8
	070621621205	16 x 2 x 2.5	0.53	1.2	31.1	1.6	2.2	38.6	2459.9
	070622021205	20 x 2 x 2.5	0.53	1.2	34.8	1.6	2.3	42.6	2915.1
	070622421205	24 x 2 x 2.5	0.53	1.2	38.3	2.0	2.4	47.1	3631.3

RE-2X(St)YSWAY - SINGLE & MULTI-PAIR

REACH I RoHS I CE



Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Crosslinked polyethylene XLPE
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Inner Sheath : Polyvinyl chloride PVC
Armour : Galvanised round steel wires
Cable Sheath : Polyvinyl chloride PVC (Also available in halogen free construction on request.)
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +90°C
Bending Radius : 10 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-2X(St)YSWAY 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance* at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	5000	150	1	2000	2000
0.5	5	16/0.2	39.0	25	5000	150	1	2000	2000
0.75	2	7/0.37	24.5	25	5000	150	1	2000	2000
0.75	5	24/0.2	26.0	25	5000	150	1	2000	2000
1	2	7/0.43	18.1	25	5000	150	1	2000	2000
1	5	32/0.2	19.5	25	5000	150	1	2000	2000
1.5	2	7/0.53	12.1	40	5000	150	1	2000	2000
2.5	2	7/0.67	7.41	60	5000	150	1	2000	2000

*For multi-pair maximum resistance shall be increased by 2%.

Cable Design Parameters

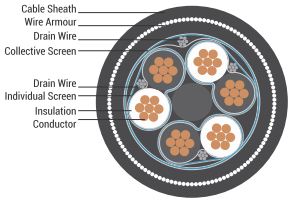
	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070750121050	1 x 2 x 0.5	0.44	1	6.4	0.9	1.4	11.1	209.5
	070750221050	2 x 2 x 0.5	0.44	1	7.6	0.9	1.5	12.4	260.1
	070750321050	3 x 2 x 0.5	0.44	1	8.9	0.9	1.5	13.7	310.6
	070750421050	4 x 2 x 0.5	0.44	1	9.9	0.9	1.5	14.7	356.0
	070750521050	5 x 2 x 0.5	0.44	1	10.8	0.9	1.6	15.7	398.0
	070750821050	8 x 2 x 0.5	0.44	1	13.1	0.9	1.6	18.1	511.8
	070751021050	10 x 2 x 0.5	0.44	1	14.4	0.9	1.7	19.5	581.8
	070751221050	12 x 2 x 0.5	0.44	1	15.5	1.25	1.7	21.4	748.1
	070751621050	16 x 2 x 0.5	0.44	1	17.6	1.25	1.8	23.6	886.2
	070752021050	20 x 2 x 0.5	0.44	1	19.4	1.25	1.8	25.5	1017.0
	070752421050	24 x 2 x 0.5	0.44	1	21.0	1.25	1.9	27.2	1141.2
	070750121075	1 x 2 x 0.75	0.44	1	6.8	0.9	1.4	11.5	226.4
	070750221075	2 x 2 x 0.75	0.44	1	8.2	0.9	1.5	12.9	286.0
	070750321075	3 x 2 x 0.75	0.44	1	9.5	0.9	1.5	14.3	345.6
	070750421075	4 x 2 x 0.75	0.44	1	10.6	0.9	1.5	15.5	399.6
	070750521075	5 x 2 x 0.75	0.44	1	11.6	0.9	1.6	16.6	449.8
	070750821075	8 x 2 x 0.75	0.44	1	14.1	0.9	1.6	19.2	587.3
	070751021075	10 x 2 x 0.75	0.44	1	15.5	1.25	1.7	21.4	772.7
	070751221075	12 x 2 x 0.75	0.44	1	16.8	1.25	1.7	22.8	861.6
	070751621075	16 x 2 x 0.75	0.44	1	19.0	1.25	1.8	25.1	1030.0
	070752021075	20 x 2 x 0.75	0.44	1	21.0	1.25	1.9	27.2	1190.7
	070752421075	24 x 2 x 0.75	0.44	1	22.8	1.25	1.9	29.1	1344.0
	070750120001	1 x 2 x 1	0.44	1	7.1	0.9	1.4	11.8	240.2
	070750220001	2 x 2 x 1	0.44	1	8.5	0.9	1.5	13.3	307.7
	070750320001	3 x 2 x 1	0.44	1	10.0	0.9	1.5	14.8	375.3
	070750420001	4 x 2 x 1	0.44	1	11.2	0.9	1.6	16.1	436.8
	070750520001	5 x 2 x 1	0.44	1	12.2	0.9	1.6	17.2	494.4
	070750820001	8 x 2 x 1	0.44	1	14.9	0.9	1.7	20.0	653.0
	070751020001	10 x 2 x 1	0.44	1	16.4	1.25	1.7	22.3	857.5
	070751220001	12 x 2 x 1	0.44	1	17.7	1.25	1.8	23.8	960.4
	070751620001	16 x 2 x 1	0.44	1	20.1	1.25	1.8	26.3	1156.0
	070752020001	20 x 2 x 1	0.44	1	22.3	1.25	1.9	28.5	1343.9
	070752420001	24 x 2 x 1	0.44	1	24.2	1.25	1.9	30.6	1523.5

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070720121050	1 x 2 x 0.5	0.44	1	6.4	0.9	1.4	11.1	209.3
	070720221050	2 x 2 x 0.5	0.44	1	7.6	0.9	1.5	12.4	259.7
	070720321050	3 x 2 x 0.5	0.44	1	8.9	0.9	1.5	13.7	310.2
	070720421050	4 x 2 x 0.5	0.44	1	9.9	0.9	1.5	14.7	355.4
	070720521050	5 x 2 x 0.5	0.44	1	10.8	0.9	1.6	15.7	397.3
	070720821050	8 x 2 x 0.5	0.44	1	13.1	0.9	1.6	18.1	510.7
	070721021050	10 x 2 x 0.5	0.44	1	14.4	0.9	1.7	19.5	580.4
	070721221050	12 x 2 x 0.5	0.44	1	15.5	1.25	1.7	21.4	746.5
	070721621050	16 x 2 x 0.5	0.44	1	17.6	1.25	1.8	23.6	884.0
	070722021050	20 x 2 x 0.5	0.44	1	19.4	1.25	1.8	25.5	1014.3
	070722421050	24 x 2 x 0.5	0.44	1	21.0	1.25	1.9	27.2	1138.0
	070720121075	1 x 2 x 0.75	0.44	1	6.8	0.9	1.4	11.5	226.7
	070720221075	2 x 2 x 0.75	0.44	1	8.2	0.9	1.5	12.9	286.4
	070720321075	3 x 2 x 0.75	0.44	1	9.5	0.9	1.5	14.3	346.1
	070720421075	4 x 2 x 0.75	0.44	1	10.6	0.9	1.5	15.5	400.1
	070720521075	5 x 2 x 0.75	0.44	1	11.6	0.9	1.6	16.6	450.4
	070720821075	8 x 2 x 0.75	0.44	1	14.1	0.9	1.6	19.2	588.0
	070721021075	10 x 2 x 0.75	0.44	1	15.6	1.25	1.7	21.5	773.8
	070721221075	12 x 2 x 0.75	0.44	1	16.8	1.25	1.7	22.8	862.8
	070721621075	16 x 2 x 0.75	0.44	1	19.1	1.25	1.8	25.2	1031.2
	070722021075	20 x 2 x 0.75	0.44	1	21.1	1.25	1.9	27.3	1192.1
	070722421075	24 x 2 x 0.75	0.44	1	22.9	1.25	1.9	29.2	1345.5
	070720120001	1 x 2 x 1	0.44	1	7.2	0.9	1.4	11.7	237.9
	070720220001	2 x 2 x 1	0.44	1	8.7	0.9	1.5	13.5	312.5
	070720320001	3 x 2 x 1	0.44	1	10.1	0.9	1.5	15.0	381.6
	070720420001	4 x 2 x 1	0.44	1	11.4	0.9	1.6	16.3	444.5
	070720520001	5 x 2 x 1	0.44	1	12.4	0.9	1.6	17.4	503.3
	070720820001	8 x 2 x 1	0.44	1	15.1	1.25	1.7	21.0	763.3
	070721020001	10 x 2 x 1	0.44	1	16.7	1.25	1.7	22.6	874.1
	070721220001	12 x 2 x 1	0.44	1	18.1	1.25	1.8	24.1	979.3
	070721620001	16 x 2 x 1	0.44	1	20.5	1.25	1.8	26.7	1179.3
	070722020001	20 x 2 x 1	0.44	1	22.7	1.25	1.9	29.0	1371.4
	070722420001	24 x 2 x 1	0.44	1	24.6	1.25	2.0	31.0	1555.1

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070720121105	1 x 2 x 1.5	0.44	1	7.9	0.9	1.5	12.6	273.9
	070720221105	2 x 2 x 1.5	0.44	1	9.5	0.9	1.5	14.4	360.3
	070720321105	3 x 2 x 1.5	0.44	1	11.2	0.9	1.6	16.1	446.8
	070720421105	4 x 2 x 1.5	0.44	1	12.6	0.9	1.6	17.6	526.3
	070720521105	5 x 2 x 1.5	0.44	1	13.8	0.9	1.6	18.9	601.2
	070720821105	8 x 2 x 1.5	0.44	1	16.9	1.25	1.7	22.8	918.1
	070721021105	10 x 2 x 1.5	0.44	1	18.6	1.25	1.8	24.7	1060.6
	070721221105	12 x 2 x 1.5	0.44	1	20.1	1.25	1.8	26.3	1196.4
	070721621105	16 x 2 x 1.5	0.44	1	22.9	1.25	1.9	29.2	1456.3
	070722021105	20 x 2 x 1.5	0.44	1	25.4	1.6	2.0	32.6	1868.7
	070722421105	24 x 2 x 1.5	0.44	1.2	28.0	1.6	2.1	35.3	2167.1
	070720121205	1 x 2 x 2.5	0.53	1	9.1	0.9	1.5	13.9	331.1
	070720221205	2 x 2 x 2.5	0.53	1	11.1	0.9	1.6	16.1	450.1
	070720321205	3 x 2 x 2.5	0.53	1	13.1	0.9	1.6	18.2	569.5
	070720421205	4 x 2 x 2.5	0.53	1	14.8	0.9	1.7	20.0	680.4
	070720521205	5 x 2 x 2.5	0.53	1	16.3	1.25	1.7	22.3	890.7
	070720821205	8 x 2 x 2.5	0.53	1	20.1	1.25	1.8	26.2	1209.8
	070721021205	10 x 2 x 2.5	0.53	1	22.2	1.25	1.9	28.4	1411.9
	070721221205	12 x 2 x 2.5	0.53	1	24.1	1.25	1.9	30.5	1605.5
	070721621205	16 x 2 x 2.5	0.53	1.2	27.9	1.6	2.1	35.2	2195.1
	070722021205	20 x 2 x 2.5	0.53	1.2	30.8	1.6	2.2	38.3	2580.4
	070722421205	24 x 2 x 2.5	0.53	1.2	33.5	1.6	2.2	41.2	2950.5

RE-2X(St)YSWAY PiMF - MULTI-PAIR

REACH I RoHS I CE



Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Crosslinked polyethylene XLPE
Pairs : Twisted
Identification Pairs : Black & white, continuously numbered on white core (1, 2, 3...) for multi-element
Individual Screen : Aluminium / PETP tape over tinned copper drain wire, plastic tape under and above screen
Assembly : Concentric layers
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Inner Sheath : Polyvinyl chloride PVC
Armour : Galvanised round steel wires
Cable Sheath : Polyvinyl chloride PVC (Also available in halogen free construction, on request.)
Colour : Black. Blue for intrinsically safe system.

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +90°C
Bending Radius : 10 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL n x m x a RE-2X(St)YSWAY PiMF 500V EN 50288-7 CE + 0001m
n - No. of pairs
m - Pairs
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (µH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.7	25	5000	150	1	2000	2000
0.5	5	16/0.2	39.8	25	5000	150	1	2000	2000
0.75	2	7/0.37	25.0	25	5000	150	1	2000	2000
0.75	5	24/0.2	26.5	25	5000	150	1	2000	2000
1	2	7/0.43	18.5	25	5000	150	1	2000	2000
1	5	32/0.2	19.9	25	5000	150	1	2000	2000
1.5	2	7/0.53	12.3	40	5000	150	1	2000	2000
2.5	2	7/0.67	7.6	60	5000	150	1	2000	2000

Cable Design Parameters

	Part Number	No. of Pairs and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070850221050	2 x 2 x 0.5	0.44	1	8.0	0.9	1.5	12.8	271.6
	070850321050	3 x 2 x 0.5	0.44	1	9.5	0.9	1.5	14.3	328.1
	070850421050	4 x 2 x 0.5	0.44	1	10.7	0.9	1.5	15.6	379.6
	070850521050	5 x 2 x 0.5	0.44	1	11.8	0.9	1.6	16.8	427.7
	070850821050	8 x 2 x 0.5	0.44	1	14.7	0.9	1.7	19.8	560.6
	070851021050	10 x 2 x 0.5	0.44	1	16.4	1.25	1.7	22.3	748.8
	070851221050	12 x 2 x 0.5	0.44	1	17.9	1.25	1.8	24.0	837.9
	070851621050	16 x 2 x 0.5	0.44	1	20.8	1.25	1.9	27.0	1008.0
	070852021050	20 x 2 x 0.5	0.44	1	23.4	1.25	1.9	29.7	1171.7
	070852421050	24 x 2 x 0.5	0.44	1	25.8	1.6	2.0	33.1	1493.2
	070850221075	2 x 2 x 0.75	0.44	1	8.6	0.9	1.5	13.3	297.6
	070850321075	3 x 2 x 0.75	0.44	1	10.1	0.9	1.5	15.0	363.2
	070850421075	4 x 2 x 0.75	0.44	1	11.4	0.9	1.6	16.4	423.3
	070850521075	5 x 2 x 0.75	0.44	1	12.6	0.9	1.6	17.6	479.8
	070850821075	8 x 2 x 0.75	0.44	1	15.7	1.25	1.7	21.6	737.8
	070851021075	10 x 2 x 0.75	0.44	1	17.5	1.25	1.8	23.5	847.4
	070851221075	12 x 2 x 0.75	0.44	1	19.2	1.25	1.8	25.3	952.2
	070851621075	16 x 2 x 0.75	0.44	1	22.2	1.25	1.9	28.5	1153.1
	070852021075	20 x 2 x 0.75	0.44	1	25.0	1.25	2.0	31.5	1347.3
	070852421075	24 x 2 x 0.75	0.44	1.2	28.0	1.6	2.1	35.4	1752.7
	070850220001	2 x 2 x 1	0.44	1	8.9	0.9	1.5	13.7	319.3
	070850320001	3 x 2 x 1	0.44	1	10.6	0.9	1.5	15.5	393.0
	070850420001	4 x 2 x 1	0.44	1	12.0	0.9	1.6	16.9	460.6
	070850520001	5 x 2 x 1	0.44	1	13.2	0.9	1.6	18.3	524.5
	070850820001	8 x 2 x 1	0.44	1	16.5	1.25	1.7	22.4	808.5
	070851020001	10 x 2 x 1	0.44	1	18.4	1.25	1.8	24.4	932.7
	070851220001	12 x 2 x 1	0.44	1	20.1	1.25	1.8	26.3	1051.6
	070851620001	16 x 2 x 1	0.44	1	23.3	1.25	1.9	29.7	1280.1
	070852020001	20 x 2 x 1	0.44	1	26.3	1.6	2.0	33.5	1668.0
	070852420001	24 x 2 x 1	0.44	1.2	29.4	1.6	2.1	36.8	1943.7

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070820221050	2 x 2 x 0.5	0.44	1	8.0	0.9	1.5	12.8	271.3
	070820321050	3 x 2 x 0.5	0.44	1	9.5	0.9	1.5	14.3	327.7
	070820421050	4 x 2 x 0.5	0.44	1	10.7	0.9	1.5	15.6	379.0
	070820521050	5 x 2 x 0.5	0.44	1	11.8	0.9	1.6	16.8	427.0
	070820821050	8 x 2 x 0.5	0.44	1	14.7	0.9	1.7	19.8	559.5
	070821021050	10 x 2 x 0.5	0.44	1	16.4	1.25	1.7	22.3	747.4
	070821221050	12 x 2 x 0.5	0.44	1	17.9	1.25	1.8	24.0	836.3
	070821621050	16 x 2 x 0.5	0.44	1	20.8	1.25	1.9	27.0	1005.9
	070822021050	20 x 2 x 0.5	0.44	1	23.4	1.25	1.9	29.7	1169.1
	070822421050	24 x 2 x 0.5	0.44	1	25.8	1.6	2.0	33.1	1490.1
	070820221075	2 x 2 x 0.75	0.44	1	8.6	0.9	1.5	13.4	297.9
	070820321075	3 x 2 x 0.75	0.44	1	10.1	0.9	1.5	15.0	363.7
	070820421075	4 x 2 x 0.75	0.44	1	11.4	0.9	1.6	16.4	423.8
	070820521075	5 x 2 x 0.75	0.44	1	12.6	0.9	1.6	17.7	480.4
	070820821075	8 x 2 x 0.75	0.44	1	15.7	1.25	1.7	21.7	738.7
	070821021075	10 x 2 x 0.75	0.44	1	17.6	1.25	1.8	23.6	848.5
	070821221075	12 x 2 x 0.75	0.44	1	19.2	1.25	1.8	25.3	953.4
	070821621075	16 x 2 x 0.75	0.44	1	22.3	1.25	1.9	28.6	1154.4
	070822021075	20 x 2 x 0.75	0.44	1	25.1	1.6	2.0	32.3	1507.7
	070822421075	24 x 2 x 0.75	0.44	1.2	28.1	1.6	2.1	35.4	1754.7
	070820220001	2 x 2 x 1	0.44	1	9.1	0.9	1.5	13.9	324.2
	070820320001	3 x 2 x 1	0.44	1	10.7	0.9	1.6	15.6	399.3
	070820420001	4 x 2 x 1	0.44	1	12.2	0.9	1.6	17.1	468.4
	070820520001	5 x 2 x 1	0.44	1	13.4	0.9	1.6	18.5	533.5
	070820820001	8 x 2 x 1	0.44	1	16.7	1.25	1.7	22.7	822.8
	070821020001	10 x 2 x 1	0.44	1	18.7	1.25	1.8	24.8	949.4
	070821220001	12 x 2 x 1	0.44	1	20.5	1.25	1.8	26.6	1070.7
	070821620001	16 x 2 x 1	0.44	1	23.7	1.25	1.9	30.1	1303.7
	070822020001	20 x 2 x 1	0.44	1	26.7	1.6	2.0	33.9	1698.5
	070822420001	24 x 2 x 1	0.44	1.2	29.8	1.6	2.1	37.3	1979.1
	070820221105	2 x 2 x 1.5	0.44	1	9.9	0.9	1.5	14.8	372.0
	070820321105	3 x 2 x 1.5	0.44	1	11.8	0.9	1.6	16.7	464.7
	070820421105	4 x 2 x 1.5	0.44	1	13.4	0.9	1.6	18.4	550.4

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070820521105	5 x 2 x 1.5	0.44	1	14.8	0.9	1.7	19.9	631.8
	070820821105	8 x 2 x 1.5	0.44	1	18.5	1.25	1.8	24.5	978.4
	070821021105	10 x 2 x 1.5	0.44	1	20.6	1.25	1.8	26.8	1136.9
	070821221105	12 x 2 x 1.5	0.44	1	22.5	1.25	1.9	28.8	1289.2
	070821621105	16 x 2 x 1.5	0.44	1	26.1	1.6	2.0	33.4	1748.2
	070822021105	20 x 2 x 1.5	0.44	1.2	29.8	1.6	2.1	37.2	2099.8
	070822421105	24 x 2 x 1.5	0.44	1.2	32.8	1.6	2.2	40.4	2398.8
	070820221205	2 x 2 x 2.5	0.53	1	11.5	0.9	1.6	16.5	462.0
	070820321205	3 x 2 x 2.5	0.53	1	13.7	0.9	1.6	18.8	587.8
	070820421205	4 x 2 x 2.5	0.53	1	15.6	1.25	1.7	21.5	805.8
	070820521205	5 x 2 x 2.5	0.53	1	17.3	1.25	1.8	23.3	928.2
	070820821205	8 x 2 x 2.5	0.53	1	21.7	1.25	1.9	27.9	1271.5
	070821021205	10 x 2 x 2.5	0.53	1	24.2	1.25	1.9	30.6	1490.3
	070821221205	12 x 2 x 2.5	0.53	1	26.5	1.6	2.0	33.7	1868.5
	070821621205	16 x 2 x 2.5	0.53	1.2	31.1	1.6	2.2	38.6	2348.7
	070822021205	20 x 2 x 2.5	0.53	1.2	34.8	1.6	2.3	42.6	2776.2
	070822421205	24 x 2 x 2.5	0.53	1.2	38.3	2.0	2.4	47.1	3464.6

RE-Y(St)Y - MULTICORE

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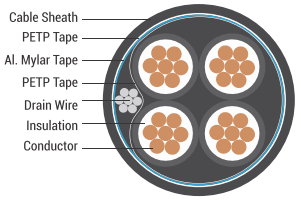

Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Polyvinyl chloride PVC
Colour Code : Black, continuously numbered in white
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Cable Sheath : Polyvinyl chloride PVC
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +70°C
Bending Radius : 7.5 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL c x a RE-Y(St)Y 500V EN 50288-7 CE + 0001m
c - No. of cores
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (µH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	20	250	1	2000	2000
0.5	5	16/0.2	39.0	25	20	250	1	2000	2000
0.75	2	7/0.37	24.5	25	20	250	1	2000	2000
0.75	5	24/0.2	26.0	25	20	250	1	2000	2000
1	2	7/0.43	18.1	25	20	250	1	2000	2000
1	5	32/0.2	19.5	25	20	250	1	2000	2000
1.5	2	7/0.53	12.1	40	20	250	1	2000	2000
2.5	2	7/0.67	7.41	60	20	250	1	2000	2000

Cable Design Parameters

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	070950221050	2 x 0.5	0.44	1.0	6.2	47.1
	070950421050	4 x 0.5	0.44	1.0	7.1	70.7
	070950521050	5 x 0.5	0.44	1.0	7.7	83.6
	070950821050	8 x 0.5	0.44	1.1	9.4	121.8
	070951021050	10 x 0.5	0.44	1.1	10.7	148.8
	070951221050	12 x 0.5	0.44	1.2	11.1	169.7
	070951621050	16 x 0.5	0.44	1.2	12.3	215.5
	070952021050	20 x 0.5	0.44	1.3	13.7	263.8
	070952421050	24 x 0.5	0.44	1.3	15.2	322.4
	070950221075	2 x 0.75	0.44	1.0	6.6	55.4
	070950421075	4 x 0.75	0.44	1.0	7.6	85.7
	070950521075	5 x 0.75	0.44	1.1	8.3	102.0
	070950821075	8 x 0.75	0.44	1.1	10.2	150.5
	070951021075	10 x 0.75	0.44	1.2	11.6	184.8
	070951221075	12 x 0.75	0.44	1.2	11.9	212.1
	070951621075	16 x 0.75	0.44	1.2	13.3	295.4
	070952021075	20 x 0.75	0.44	1.3	14.9	333.2
	070952421075	24 x 0.75	0.44	1.4	16.5	408.7
	070950220001	2 x 1	0.44	1.0	6.9	62.7
	070950420001	4 x 1	0.44	1.0	8.0	99.1
	070950520001	5 x 1	0.44	1.1	8.8	118.6
	070950820001	8 x 1	0.44	1.1	10.7	176.5
	070951020001	10 x 1	0.44	1.2	12.2	217.4
	070951220001	12 x 1	0.44	1.2	12.6	250.5
	070951620001	16 x 1	0.44	1.3	14.1	351.5
	070952020001	20 x 1	0.44	1.3	15.7	396.4
	070952420001	24 x 1	0.44	1.4	17.5	487.4

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070920221050	2 x 0.5	0.44	1.0	6.2	46.9
	070920421050	4 x 0.5	0.44	1.0	7.1	70.4
	070920521050	5 x 0.5	0.44	1.0	7.7	83.3
	070920821050	8 x 0.5	0.44	1.1	9.4	121.2
	070921021050	10 x 0.5	0.44	1.1	10.7	148.1
	070921221050	12 x 0.5	0.44	1.2	11.1	168.9
	070921621050	16 x 0.5	0.44	1.2	12.3	214.4
	070922021050	20 x 0.5	0.44	1.3	13.7	262.5
	070922421050	24 x 0.5	0.44	1.3	15.2	320.9
	070920221075	2 x 0.75	0.44	1.0	6.6	55.5
	070920421075	4 x 0.75	0.44	1.0	7.7	85.8
	070920521075	5 x 0.75	0.44	1.1	8.4	102.2
	070920821075	8 x 0.75	0.44	1.1	10.2	150.8
	070921021075	10 x 0.75	0.44	1.2	11.6	185.2
	070921221075	12 x 0.75	0.44	1.2	12.0	212.5
	070921621075	16 x 0.75	0.44	1.2	13.3	296.0
	070922021075	20 x 0.75	0.44	1.3	14.9	333.9
	070922421075	24 x 0.75	0.44	1.4	16.6	409.6
	070920220001	2 x 1	0.44	1.0	7.0	64.1
	070920420001	4 x 1	0.44	1.1	8.2	101.4
	070920520001	5 x 1	0.44	1.1	8.9	121.4
	070920820001	8 x 1	0.44	1.2	10.9	180.9
	070921020001	10 x 1	0.44	1.2	12.4	222.8
	070921220001	12 x 1	0.44	1.2	12.8	256.8
	070921620001	16 x 1	0.44	1.3	14.3	360.5
	070922020001	20 x 1	0.44	1.3	16.0	406.6
	070922420001	24 x 1	0.44	1.4	17.8	500.0
	070920221105	2 x 1.5	0.44	1.0	7.7	80.5
	070920421105	4 x 1.5	0.44	1.1	9.0	131.3
	070920521105	5 x 1.5	0.44	1.1	9.9	158.3
	070920821105	8 x 1.5	0.44	1.2	12.2	238.9
	070921021105	10 x 1.5	0.44	1.3	13.8	295.5
	070921221105	12 x 1.5	0.44	1.3	14.3	342.5
	070921621105	16 x 1.5	0.44	1.3	16.0	442.6
	070922021105	20 x 1.5	0.44	1.4	17.9	547.6

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	070922421105	24 x 1.5	0.44	1.5	20.0	675.5
	070920221205	2 x 2.5	0.53	1.1	9.1	112.2
	070920421205	4 x 2.5	0.53	1.1	10.6	189.0
	070920521205	5 x 2.5	0.53	1.2	11.7	229.6
	070920821205	8 x 2.5	0.53	1.3	14.5	350.9
	070921021205	10 x 2.5	0.53	1.4	16.5	436.0
	070921221205	12 x 2.5	0.53	1.4	17.1	508.0
	070921621205	16 x 2.5	0.53	1.5	19.1	660.3
	070922021205	20 x 2.5	0.53	1.5	21.5	819.7
	070922421205	24 x 2.5	0.53	1.6	24.0	981.0

RE-2X(St)Y - MULTICORE

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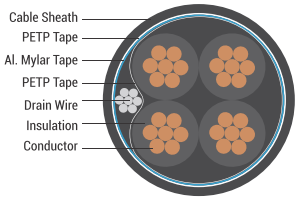

Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Cross-linked polyethylene XLPE
Colour Code : Black, continuously numbered in white
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Cable Sheath : Polyvinyl Chloride PVC (Also available in halogen free construction on request.)
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +90°C
Bending Radius : 7.5 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request.
Marking : RR KABEL c x a RE-2X(St)Y 500V EN 50288-7 CE + 0001m
c - No. of cores
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (µH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	5000	150	1	2000	2000
0.5	5	16/0.2	39.0	25	5000	150	1	2000	2000
0.75	2	7/0.37	24.5	25	5000	150	1	2000	2000
0.75	5	24/0.2	26.0	25	5000	150	1	2000	2000
1	2	7/0.43	18.1	25	5000	150	1	2000	2000
1	5	32/0.2	19.5	25	5000	150	1	2000	2000
1.5	2	7/0.53	12.1	40	5000	150	1	2000	2000
2.5	2	7/0.67	7.41	60	5000	150	1	2000	2000

Cable Design Parameters

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	071050221050	2 x 0.5	0.44	1.0	6.2	43.9
	071050421050	4 x 0.5	0.44	1.0	7.1	64.4
	071050521050	5 x 0.5	0.44	1.0	7.7	75.7
	071050821050	8 x 0.5	0.44	1.1	9.4	109.1
	071051021050	10 x 0.5	0.44	1.1	10.7	132.9
	071051221050	12 x 0.5	0.44	1.2	11.1	150.7
	071051621050	16 x 0.5	0.44	1.2	12.3	190.1
	071052021050	20 x 0.5	0.44	1.3	13.7	232.1
	071052421050	24 x 0.5	0.44	1.3	15.2	282.8
	071050221075	2 x 0.75	0.44	1.0	6.6	51.7
	071050421075	4 x 0.75	0.44	1.0	7.6	78.4
	071050521075	5 x 0.75	0.44	1.1	8.3	92.9
	071050821075	8 x 0.75	0.44	1.1	10.2	136.0
	071051021075	10 x 0.75	0.44	1.2	11.6	166.6
	071051221075	12 x 0.75	0.44	1.2	11.9	190.2
	071051621075	16 x 0.75	0.44	1.2	13.3	262.6
	071052021075	20 x 0.75	0.44	1.3	14.9	296.8
	071052421075	24 x 0.75	0.44	1.4	16.5	363.2
	071050220001	2 x 1	0.44	1.0	6.9	58.8
	071050420001	4 x 1	0.44	1.0	8.0	91.2
	071050520001	5 x 1	0.44	1.1	8.8	108.7
	071050820001	8 x 1	0.44	1.1	10.7	160.7
	071051020001	10 x 1	0.44	1.2	12.2	197.5
	071051220001	12 x 1	0.44	1.2	12.6	226.7
	071051620001	16 x 1	0.44	1.3	14.1	315.8
	071052020001	20 x 1	0.44	1.3	15.7	356.7
	071052420001	24 x 1	0.44	1.4	17.5	437.7

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	071020221050	2 x 0.5	0.44	1.0	6.2	43.7
	071020421050	4 x 0.5	0.44	1.0	7.1	64.1
	071020521050	5 x 0.5	0.44	1.0	7.7	75.3
	071020821050	8 x 0.5	0.44	1.1	9.4	108.5
	071021021050	10 x 0.5	0.44	1.1	10.7	132.2
	071021221050	12 x 0.5	0.44	1.2	11.1	149.9
	071021621050	16 x 0.5	0.44	1.2	12.3	189.0
	071022021050	20 x 0.5	0.44	1.3	13.7	230.7
	071022421050	24 x 0.5	0.44	1.3	15.2	281.1
	071020221075	2 x 0.75	0.44	1.0	6.6	51.8
	071020421075	4 x 0.75	0.44	1.0	7.7	78.5
	071020521075	5 x 0.75	0.44	1.1	8.4	93.0
	071020821075	8 x 0.75	0.44	1.1	10.2	136.1
	071021021075	10 x 0.75	0.44	1.2	11.6	166.7
	071021221075	12 x 0.75	0.44	1.2	12.0	190.4
	071021621075	16 x 0.75	0.44	1.2	13.3	262.8
	071022021075	20 x 0.75	0.44	1.3	14.9	297.0
	071022421075	24 x 0.75	0.44	1.4	16.6	363.5
	071020220001	2 x 1	0.44	1.0	7.0	59.9
	071020420001	4 x 1	0.44	1.1	8.2	93.0
	071020520001	5 x 1	0.44	1.1	8.9	111.0
	071020820001	8 x 1	0.44	1.2	10.9	164.2
	071021020001	10 x 1	0.44	1.2	12.4	202.0
	071021220001	12 x 1	0.44	1.2	12.8	231.8
	071021620001	16 x 1	0.44	1.3	14.3	323.0
	071022020001	20 x 1	0.44	1.3	16.0	364.9
	071022420001	24 x 1	0.44	1.4	17.8	447.9
	071020221105	2 x 1.5	0.44	1.0	7.7	75.4
	071020421105	4 x 1.5	0.44	1.1	9.0	121.1
	071020521105	5 x 1.5	0.44	1.1	9.9	145.6
	071020821105	8 x 1.5	0.44	1.2	12.2	218.6
	071021021105	10 x 1.5	0.44	1.3	13.8	270.1
	071021221105	12 x 1.5	0.44	1.3	14.3	312.0
	071021621105	16 x 1.5	0.44	1.3	16.0	401.9
	071022021105	20 x 1.5	0.44	1.4	17.9	496.8

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	071022421105	24 x 1.5	0.44	1.5	20.0	612.0
	071020221205	2 x 2.5	0.53	1.1	9.1	104.9
	071020421205	4 x 2.5	0.53	1.1	10.6	174.3
	071020521205	5 x 2.5	0.53	1.2	11.7	211.2
	071020821205	8 x 2.5	0.53	1.3	14.5	321.5
	071021021205	10 x 2.5	0.53	1.4	16.5	399.2
	071021221205	12 x 2.5	0.53	1.4	17.1	463.8
	071021621205	16 x 2.5	0.53	1.5	19.1	601.4
	071022021205	20 x 2.5	0.53	1.5	21.5	746.1
	071022421205	24 x 2.5	0.53	1.6	24.0	892.6

RE-Y(St)YSWAY - MULTICORE

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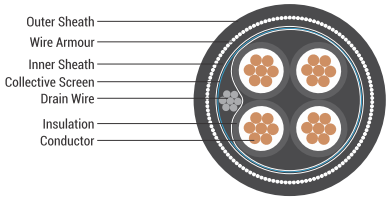


Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Polyvinyl chloride PVC
Colour Code : Black, continuously numbered in white
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Inner Sheath : Polyvinyl chloride PVC
Armour : Galvanised round steel wires
Cable Sheath : Polyvinyl chloride PVC
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +70°C
Bending Radius : 10 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request
Marking : RR KABEL c x a RE-Y(St)YSWAY 500V EN 50288-7 CE + 0001m
c - No. of cores
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	20	250	1	2000	2000
0.5	5	16/0.2	39.0	25	20	250	1	2000	2000
0.75	2	7/0.37	24.5	25	20	250	1	2000	2000
0.75	5	24/0.2	26.0	25	20	250	1	2000	2000
1	2	7/0.43	18.1	25	20	250	1	2000	2000
1	5	32/0.2	19.5	25	20	250	1	2000	2000
1.5	2	7/0.53	12.1	40	20	250	1	2000	2000
2.5	2	7/0.67	7.41	60	20	250	1	2000	2000

Cable Design Parameters

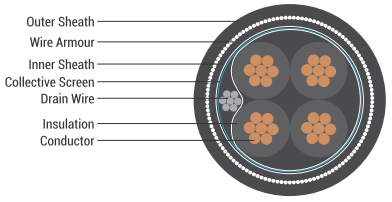
	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	071150221050	2 x 0.5	0.44	1	6.2	0.9	1.4	10.8	206.9
	071150421050	4 x 0.5	0.44	1	7.1	0.9	1.4	11.8	250.4
	071150521050	5 x 0.5	0.44	1	7.7	0.9	1.5	12.4	276.4
	071150821050	8 x 0.5	0.44	1	9.2	0.9	1.5	14.1	349.6
	071151021050	10 x 0.5	0.44	1	10.4	0.9	1.5	15.3	402.1
	071151221050	12 x 0.5	0.44	1	10.7	0.9	1.6	15.6	430.4
	071151621050	16 x 0.5	0.44	1	11.9	0.9	1.6	16.8	501.0
	071152021050	20 x 0.5	0.44	1	13.2	0.9	1.6	18.2	578.1
	071152421050	24 x 0.5	0.44	1	14.6	0.9	1.7	19.7	667.1
	071150221075	2 x 0.75	0.44	1	6.6	0.9	1.4	11.3	224.2
	071150421075	4 x 0.75	0.44	1	7.6	0.9	1.5	12.3	276.2
	071150521075	5 x 0.75	0.44	1	8.2	0.9	1.5	13.0	306.9
	071150821075	8 x 0.75	0.44	1	9.9	0.9	1.5	14.8	393.6
	071151021075	10 x 0.75	0.44	1	11.2	0.9	1.6	16.1	455.7
	071151221075	12 x 0.75	0.44	1	11.6	0.9	1.6	16.5	491.0
	071151621075	16 x 0.75	0.44	1	12.8	0.9	1.6	17.8	601.4
	071152021075	20 x 0.75	0.44	1	14.3	0.9	1.6	19.4	670.5
	071152421075	24 x 0.75	0.44	1	15.8	1.25	1.7	21.7	880.8
	071150220001	2 x 1	0.44	1	6.9	0.9	1.4	11.6	238.3
	071150420001	4 x 1	0.44	1	7.9	0.9	1.5	12.7	297.7
	071150520001	5 x 1	0.44	1	8.6	0.9	1.5	13.4	332.5
	071150820001	8 x 1	0.44	1	10.5	0.9	1.5	15.3	431.0
	071151020001	10 x 1	0.44	1	11.8	0.9	1.6	16.8	501.4
	071151220001	12 x 1	0.44	1	12.2	0.9	1.6	17.2	543.0
	071151620001	16 x 1	0.44	1	13.5	0.9	1.6	18.6	672.8
	071152020001	20 x 1	0.44	1	15.1	1.25	1.7	20.9	848.1
	071152420001	24 x 1	0.44	1	16.7	1.25	1.7	22.7	984.2

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	071120221050	2 x 0.5	0.44	1	6.2	0.9	1.4	10.8	206.7
	071120421050	4 x 0.5	0.44	1	7.1	0.9	1.4	11.8	250.1
	071120521050	5 x 0.5	0.44	1	7.7	0.9	1.5	12.4	276.1
	071120821050	8 x 0.5	0.44	1	9.2	0.9	1.5	14.1	349.1
	071121021050	10 x 0.5	0.44	1	10.4	0.9	1.5	15.3	401.4
	071121221050	12 x 0.5	0.44	1	10.7	0.9	1.6	15.6	429.6
	071121621050	16 x 0.5	0.44	1	11.9	0.9	1.6	16.8	500.0
	071122021050	20 x 0.5	0.44	1	13.2	0.9	1.6	18.2	576.8
	071122421050	24 x 0.5	0.44	1	14.6	0.9	1.7	19.7	665.5
	071120221075	2 x 0.75	0.44	1	6.6	0.9	1.4	11.3	224.7
	071120421075	4 x 0.75	0.44	1	7.6	0.9	1.5	12.3	276.8
	071120521075	5 x 0.75	0.44	1	8.2	0.9	1.5	13.0	307.7
	071120821075	8 x 0.75	0.44	1	10.0	0.9	1.5	14.8	394.7
	071121021075	10 x 0.75	0.44	1	11.2	0.9	1.6	16.2	456.9
	071121221075	12 x 0.75	0.44	1	11.6	0.9	1.6	16.6	492.3
	071121621075	16 x 0.75	0.44	1	12.9	0.9	1.6	17.9	603.0
	071122021075	20 x 0.75	0.44	1	14.3	0.9	1.7	19.4	672.3
	071122421075	24 x 0.75	0.44	1	15.9	1.25	1.7	21.8	883.4
	071120220001	2 x 1	0.44	1	7.0	0.9	1.4	11.7	241.9
	071120420001	4 x 1	0.44	1	8.1	0.9	1.5	12.8	302.7
	071120520001	5 x 1	0.44	1	8.8	0.9	1.5	13.5	338.2
	071120820001	8 x 1	0.44	1	10.6	0.9	1.5	15.5	439.1
	071121020001	10 x 1	0.44	1	12.0	0.9	1.6	17.0	511.1
	071121220001	12 x 1	0.44	1	12.4	0.9	1.6	17.4	553.9
	071121620001	16 x 1	0.44	1	13.8	0.9	1.6	18.8	686.8
	071122020001	20 x 1	0.44	1	15.3	1.25	1.7	21.2	865.7
	071122420001	24 x 1	0.44	1.2	17.4	1.25	1.8	23.4	1034.6
	071120221105	2 x 1.5	0.44	1	7.7	0.9	1.5	12.4	273.1
	071120421105	4 x 1.5	0.44	1	8.8	0.9	1.5	13.6	350.3
	071120521105	5 x 1.5	0.44	1	9.6	0.9	1.5	14.5	394.9
	071120821105	8 x 1.5	0.44	1	11.8	0.9	1.6	16.7	522.1
	071121021105	10 x 1.5	0.44	1	13.3	0.9	1.6	18.4	612.5
	071121221105	12 x 1.5	0.44	1	13.8	0.9	1.6	18.8	669.3

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight \(kg/km)
Class 2 Conductor	071121621105	16 x 1.5	0.44	1	15.3	1.25	1.7	21.2	901.0
	071122021105	20 x 1.5	0.44	1.2	17.5	1.25	1.8	23.5	1084.5
	071122421105	24 x 1.5	0.44	1.2	19.4	1.25	1.8	25.5	1266.1
	071120221205	2 x 2.5	0.53	1	8.9	0.9	1.5	13.7	332.4
	071120421205	4 x 2.5	0.53	1	10.3	0.9	1.5	15.2	441.2
	071120521205	5 x 2.5	0.53	1	11.3	0.9	1.6	16.2	503.0
	071120821205	8 x 2.5	0.53	1	13.9	0.9	1.6	19.0	680.5
	071121021205	10 x 2.5	0.53	1	15.8	1.25	1.7	21.7	908.2
	071121221205	12 x 2.5	0.53	1	16.4	1.25	1.7	22.3	995.3
	071121621205	16 x 2.5	0.53	1.2	18.6	1.25	1.8	24.7	1229.3
	071122021205	20 x 2.5	0.53	1.2	20.8	1.25	1.9	27.0	1449.9
	071122421205	24 x 2.5	0.53	1.2	23.1	1.25	1.9	29.4	1675.5

RE-2X(St)YSWAY - MULTICORE

REACH I RoHS I CE



Standard

Adapted to EN 50288-7

Cable Construction

Conductor : Annealed copper wires according to BS EN 60228
Insulation : Cross-linked polyethylene XLPE
Colour Code : Black, continuously numbered in white
Wrapping : 1 layer of PETP tape
Collective Screen : Aluminium / PETP tape over tinned copper drain wire
Inner Sheath : Polyvinyl chloride PVC
Armour : Galvanised round steel wires
Cable Sheath : Polyvinyl chloride PVC (Also available in halogen free construction, on request.)
Colour : Black. Blue for intrinsically safe system

Technical Data

Flame Propagation : EN 60332-1-2
Operating Temperature Range : -30°C to +90°C
Bending Radius : 10 x cable diameter
Operating Voltage : 500V
*Also available in 300V variant on request
Marking : RR KABEL c x a RE-2X(St)YSWAY 500V EN 50288-7 CE + 0001m
c - No. of cores
a - Cross sectional area

Electrical Properties

Conductor Cross-Section (mm^2)	Class of Conductor	No. of Strands/ Max. Strand Diameter (mm)	Max. DC Conductor Resistance at 20°C (Ω/km)	Max. L/R Ratio (μH/Ω)	Min. Insulation Resistance (GΩ x cm)	Max. Mutual Capacitance (nF/km)	Max. Inductance (mH/km)	Test Voltage V_{rms} (Core-Core)	Test Voltage V_{rms} (Core-Screen)
0.5	2	7/0.3	36.0	25	5000	150	1	2000	2000
0.5	5	16/0.2	39.0	25	5000	150	1	2000	2000
0.75	2	7/0.37	24.5	25	5000	150	1	2000	2000
0.75	5	24/0.2	26.0	25	5000	150	1	2000	2000
1	2	7/0.43	18.1	25	5000	150	1	2000	2000
1	5	32/0.2	19.5	25	5000	150	1	2000	2000
1.5	2	7/0.53	12.1	40	5000	150	1	2000	2000
2.5	2	7/0.67	7.41	60	5000	150	1	2000	2000

Cable Design Parameters

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 5 Conductor	071250221050	2 x 0.5	0.44	1	6.2	0.9	1.4	10.8	203.7
	071250421050	4 x 0.5	0.44	1	7.1	0.9	1.4	11.8	244.0
	071250521050	5 x 0.5	0.44	1	7.7	0.9	1.5	12.4	268.5
	071250821050	8 x 0.5	0.44	1	9.2	0.9	1.5	14.1	336.9
	071251021050	10 x 0.5	0.44	1	10.4	0.9	1.5	15.3	386.3
	071251221050	12 x 0.5	0.44	1	10.7	0.9	1.6	15.6	411.4
	071251621050	16 x 0.5	0.44	1	11.9	0.9	1.6	16.8	475.6
	071252021050	20 x 0.5	0.44	1	13.2	0.9	1.6	18.2	546.4
	071252421050	24 x 0.5	0.44	1	14.6	0.9	1.7	19.7	627.5
	071250221075	2 x 0.75	0.44	1	6.6	0.9	1.4	11.3	220.6
	071250421075	4 x 0.75	0.44	1	7.6	0.9	1.5	12.3	268.9
	071250521075	5 x 0.75	0.44	1	8.2	0.9	1.5	13.0	297.8
	071250821075	8 x 0.75	0.44	1	9.9	0.9	1.5	14.8	379.1
	071251021075	10 x 0.75	0.44	1	11.2	0.9	1.6	16.1	437.5
	071251221075	12 x 0.75	0.44	1	11.6	0.9	1.6	16.5	469.2
	071251621075	16 x 0.75	0.44	1	12.8	0.9	1.6	17.8	568.6
	071252021075	20 x 0.75	0.44	1	14.3	0.9	1.6	19.4	634.1
	071252421075	24 x 0.75	0.44	1	15.8	1.25	1.7	21.7	835.3
	071250220001	2 x 1	0.44	1	6.9	0.9	1.4	11.6	234.3
	071250420001	4 x 1	0.44	1	7.9	0.9	1.5	12.7	289.7
	071250520001	5 x 1	0.44	1	8.6	0.9	1.5	13.4	322.5
	071250820001	8 x 1	0.44	1	10.5	0.9	1.5	15.3	415.1
	071251020001	10 x 1	0.44	1	11.8	0.9	1.6	16.8	481.5
	071251220001	12 x 1	0.44	1	12.2	0.9	1.6	17.2	519.2
	071251620001	16 x 1	0.44	1	13.5	0.9	1.6	18.6	637.1
	071252020001	20 x 1	0.44	1	15.1	1.25	1.7	20.9	808.4
	071252420001	24 x 1	0.44	1	16.7	1.25	1.7	22.7	934.6

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	071220221050	2 x 0.5	0.44	1	6.2	0.9	1.4	10.8	203.5
	071220421050	4 x 0.5	0.44	1	7.1	0.9	1.4	11.8	243.7
	071220521050	5 x 0.5	0.44	1	7.7	0.9	1.5	12.4	268.1
	071220821050	8 x 0.5	0.44	1	9.2	0.9	1.5	14.1	336.3
	071221021050	10 x 0.5	0.44	1	10.4	0.9	1.5	15.3	385.5
	071221221050	12 x 0.5	0.44	1	10.7	0.9	1.6	15.6	410.6
	071221621050	16 x 0.5	0.44	1	11.9	0.9	1.6	16.8	474.5
	071222021050	20 x 0.5	0.44	1	13.2	0.9	1.6	18.2	545.0
	071222421050	24 x 0.5	0.44	1	14.6	0.9	1.7	19.7	625.8
	071220221075	2 x 0.75	0.44	1	6.6	0.9	1.4	11.3	221.1
	071220421075	4 x 0.75	0.44	1	7.6	0.9	1.5	12.3	269.5
	071220521075	5 x 0.75	0.44	1	8.2	0.9	1.5	13.0	298.4
	071220821075	8 x 0.75	0.44	1	10.0	0.9	1.5	14.8	379.9
	071221021075	10 x 0.75	0.44	1	11.2	0.9	1.6	16.2	438.5
	071221221075	12 x 0.75	0.44	1	11.6	0.9	1.6	16.6	470.2
	071221621075	16 x 0.75	0.44	1	12.9	0.9	1.6	17.9	569.8
	071222021075	20 x 0.75	0.44	1	14.3	0.9	1.7	19.4	635.5
	071222421075	24 x 0.75	0.44	1	15.9	1.25	1.7	21.8	837.3
	071220220001	2 x 1	0.44	1	7.0	0.9	1.4	11.7	237.7
	071220420001	4 x 1	0.44	1	8.1	0.9	1.5	12.8	294.3
	071220520001	5 x 1	0.44	1	8.8	0.9	1.5	13.5	327.8
	071220820001	8 x 1	0.44	1	10.6	0.9	1.5	15.5	422.5
	071221020001	10 x 1	0.44	1	12.0	0.9	1.6	17.0	490.3
	071221220001	12 x 1	0.44	1	12.4	0.9	1.6	17.4	528.9
	071221620001	16 x 1	0.44	1	13.8	0.9	1.6	18.8	649.3
	071222020001	20 x 1	0.44	1	15.3	1.25	1.7	21.2	824.0
	071222420001	24 x 1	0.44	1.2	17.4	1.25	1.8	23.4	982.5
	071220221105	2 x 1.5	0.44	1	7.7	0.9	1.5	12.4	268.0
	071220421105	4 x 1.5	0.44	1	8.8	0.9	1.5	13.6	340.2
	071220521105	5 x 1.5	0.44	1	9.6	0.9	1.5	14.5	382.2
	071220821105	8 x 1.5	0.44	1	11.8	0.9	1.6	16.7	501.8
	071221021105	10 x 1.5	0.44	1	13.3	0.9	1.6	18.4	587.1
	071221221105	12 x 1.5	0.44	1	13.8	0.9	1.6	18.8	638.9

	Part Number	No. of Cores and Nom. Cross Sectional Area (Sq. mm)	Min. Insulation Thickness (mm)	Nominal Inner Sheath Thickness (mm)	Approx. Dia. Over Inner Sheath (mm)	Nominal Dia. of Armour Wire (mm)	Nominal Outer Sheath Thickness (mm)	Approx. Cable Diameter (mm)	Approx. Cable Weight (kg/km)
Class 2 Conductor	071221621105	16 x 1.5	0.44	1	15.3	1.25	1.7	21.2	860.4
	071222021105	20 x 1.5	0.44	1.2	17.5	1.25	1.8	23.5	1033.7
	071222421105	24 x 1.5	0.44	1.2	19.4	1.25	1.8	25.5	1202.6
	071220221205	2 x 2.5	0.53	1	8.9	0.9	1.5	13.7	325.0
	071220421205	4 x 2.5	0.53	1	10.3	0.9	1.5	15.2	426.5
	071220521205	5 x 2.5	0.53	1	11.3	0.9	1.6	16.2	484.6
	071220821205	8 x 2.5	0.53	1	13.9	0.9	1.6	19.0	651.1
	071221021205	10 x 2.5	0.53	1	15.8	1.25	1.7	21.7	871.3
	071221221205	12 x 2.5	0.53	1	16.4	1.25	1.7	22.3	951.1
	071221621205	16 x 2.5	0.53	1.2	18.6	1.25	1.8	24.7	1170.4
	071122021205	20 x 2.5	0.53	1.2	20.8	1.25	1.9	27.0	1376.2
	071122421205	24 x 2.5	0.53	1.2	23.1	1.25	1.9	29.4	1587.1

APPENDIX

Appendix

Max. DC Conductor Resistance - EN 60228/DIN VDE 0295/IS 8130

Nominal Cross-Section (Sq. mm)	Max. DC Conductor resistance at 20°C (Ω/km)			
	Tin Coated Copper Conductor		Plain Copper Conductor	
	Class 2	Class 5+6	Class 2	Class 5+6
0.08	-	250.0	-	243.0
0.14	-	142.0	-	138.0
0.25	-	82.0	-	79.0
0.34	-	59.0	-	57.0
0.38	-	52.8	-	48.5
0.5	36.7	40.1	36	39.0
0.75	24.8	26.7	24.5	26.0
1	18.2	20.0	18.1	19.5
1.5	12.2	13.7	12.1	13.3
2.5	7.56	2.21	7.41	7.98
4	4.70	5.09	4.61	4.95
6	3.11	3.39	3.08	3.30
10	1.84	1.95	1.83	1.91
16	1.16	1.24	1.15	1.21
25	0.734	0.795	0.727	0.780
35	0.529	0.565	0.524	0.554
50	0.391	0.393	0.387	0.386
70	0.270	0.277	0.268	0.272
95	0.195	0.210	0.193	0.206
120	0.154	0.165	0.153	0.161
150	0.126	0.132	0.124	0.129
185	0.100	0.108	0.0991	0.106
240	0.0762	0.0817	0.0754	0.0801
300	0.0607	0.0654	0.0601	0.0641
400	0.0475	-	0.0470	-
500	0.0369	-	0.0366	-
630	0.0286	-	0.0283	-
800	0.0224	-	0.0221	-
1000	0.0177	-	0.0176	-

Notes :

* 0.08 Sq. mm to 0.38 Sq. mm as per DIN VDE 0295 (Class 5/6)
* In accordance to
  - IS 8130, Class 1, Plain and tin coated copper max up to and including 150 Sq. mm and 16 Sq. mm respectively
  - IEC 60228, Class 1, Plain and tin coated copper max up to and including 400 Sq. mm and 16 Sq. mm respectively
  - IS 8130, Class 2, Plain and tin coated copper from 1 Sq. mm to 1000 Sq. mm
  - IEC 60228, Class 2, Plain and tin coated copper from 0.5 Sq. mm to 1000 Sq. mm
  - IS 8130 and IEC 60228, Class 5 and 6, Plain and tin coated copper up to and including 630 Sq. mm and 300 Sq. mm respectively

Conductor Stranding (Metric)

Cross-Section (Sq. mm)	Multiwire Conductor	Several-wire Conductor	Fine-Wire Conductor	Extra-Fine Wire Conductor			
Class of Conductor	Class-2	Class-2	Class-5	Class-6	Class-6	Class-6	Class-6
0.14	-	-	8 x 0.15	18 x 0.10	18 x 0.1	36 x 0.07	72 x 0.05
0.25	-	-	14 x 0.15	32 x 0.10	32 x 0.1	65 x 0.07	128 x 0.05
0.34	-	7 x 0.25	19 x 0.15	42 x 0.10	42 x 0.1	88 x 0.07	174 x 0.05
0.38	-	7 x 0.27	19 x 0.16	19 x 0.16	64 x 0.1	100 x 0.07	194 x 0.05
0.5	7 x 0.30	7 x 0.30	16 x 0.20	28 x 0.15	96 x 0.1	131 x 0.07	256 x 0.05
0.75	7 x 0.37	7 x 0.37	24 x 0.20	42 x 0.15	128 x 0.1	195 x 0.07	384 x 0.05
1	7 x 0.43	7 x 0.43	32 x 0.20	56 x 0.15	192 x 0.1	260 x 0.07	512 x 0.05
1.5	7 x 0.52	7 x 0.52	30 x 0.25	84 x 0.15	320 x 0.1	392 x 0.07	768 x 0.05
2.5	7 x 0.67	19 x 0.41	50 x 0.25	140 x 0.15	512 x 0.1	651 x 0.07	1280 x 0.05
4	7 x 0.85	19 x 0.52	56 x 0.30	224 x 0.15	768 x 0.1	1040 x 0.07	-
6	7 x 1.05	19 x 0.64	84 x 0.30	192 x 0.20	1280 x 0.1	1560 x 0.07	-
10	7 x 1.35	49 x 0.51	140 x 0.30	320 x 0.20	2048 x 0.1	2600 x 0.07	-
16	7 x 1.7	49 x 0.65	126 x 0.40	512 x 0.20	3200 x 0.1	-	-
25	7 x 2.13	84 x 0.62	196 x 0.40	800 x 0.20	-	-	-
35	7 x 2.52	133 x 0.58	276 x 0.40	1120 x 0.20	-	-	-
50	19 x 1.83	133 x 0.69	396 x 0.40	705 x 0.30	-	-	-
70	19 x 2.17	189 x 0.69	360 x 0.50	990 x 0.30	-	-	-
95	19 x 2.52	259 x 0.69	480 x 0.50	1340 x 0.30	-	-	-
120	37 x 2.03	336 x 0.67	608 x 0.50	1690 x 0.30	-	-	-
150	37 x 2.27	392 x 0.69	750 x 0.50	2123 x 0.30	-	-	-
185	37 x 2.52	464 x 0.69	931 x 0.50	1470 x 0.40	-	-	-
240	37 x 2.87	627 x 0.70	1200 x 0.50	1905 x 0.40	-	-	-
300	61 x 2.50	790 x 0.70	1500 x 0.50	2385 x 0.40	-	-	-
400	61 x 2.89	-	2013 x 0.50	-	-	-	-
500	61 x 3.23	-	2562 x 0.50	-	-	-	-
630	91 x 2.97	-	3416 x 0.50	-	-	-	-

Conductor Data - IS 7098 P1

Copper & Aluminium conductor for single core & multicore cable conforming to IS 8130.

Nominal Area of Conductor (Sq. mm)	Minimum Bumber of Wire in Conductor Solid Conductor Class-1	Minimum Number of Wire in Conductor Stranded Conductor Class-2				Max. DC Resistance at 20°C (Ω/Km)		Max. AC Resistance at 90°C (Ω/Km)	
		Circular Conductor (Non-Compacted)		Circular Compacted or Shape Conductor					
		Aluminium	Copper	Aluminium	Copper	AL	CU	AL	CU
1.5	1	3	3	NA	NA	18.1	12.1	22.6	15.2
2.5	1	3	3	NA	NA	12.1	7.41	15.2	10.5
4	1	3	7	NA	NA	7.41	4.61	10.5	5.9
6	1	3	7	NA	NA	4.61	3.08	5.9	3.94
10	1	7	7	NA	6	3.08	1.83	3.94	2.34
16	NA	7	7	6	6	1.91	1.15	2.44	1.47
25	NA	7	7	6	6	1.2	0.727	1.54	0.931
35	NA	7	7	6	6	0.868	0.524	1.11	0.671
50	NA	19	19	6	6	0.641	0.387	0.82	0.495
70	NA	19	19	12	12	0.443	0.268	0.567	0.343
95	NA	19	19	15	18	0.32	0.193	0.411	0.248
120	NA	37	37	15	18	0.253	0.153	0.325	0.197
150	NA	37	37	15	18	0.206	0.124	0.265	0.159
185	NA	37	37	30	30	0.164	0.0991	0.211	0.127
240	NA	37	61	30	34	0.125	0.0754	0.162	0.0976
300	NA	61	61	30	34	0.1	0.0601	0.13	0.0778
400	NA	61	61	53	53	0.0778	0.047	0.1023	0.0618
500	NA	61	61	53	53	0.0605	0.0366	0.0808	0.0489
630	NA	91	91	53	53	0.0469	0.0283	0.0648	0.0391
800	NA	91	91	53	53	0.0221	0.0367	0.0533	0.0319
1000	NA	91	91	53	53	0.0176	0.0291	0.0444	0.0268

Single Core Cable Current Rating - IS 7098 P1

Size Cross-Sectional Area (Sq. mm)	Normal Current Rating (Amps)					
	With AL Cond.			With CU Cond.		
	Ground	Duct	Air	Ground	Duct	Air
16	81	80	83	104	102	106
25	99	90	115	130	115	145
35	117	110	135	155	140	175
50	138	125	170	185	165	215
70	168	155	210	225	200	270
95	204	185	255	265	235	330
120	230	210	300	300	265	380
150	265	230	342	335	300	430
185	295	260	385	380	335	495
240	340	300	450	435	385	590
300	390	335	519	490	430	670
400	450	380	605	550	480	780
500	500	430	700	610	530	900
630	555	485	809	680	590	1020
800	625	530	935	740	630	1140
1000	690	570	1065	780	660	1250

Two Core Cable Current Rating - IS 7098 P1

Size Cross-Sectional Area (Sq. mm)	Normal Current Rating (Amps)					
	With AL Cond.			With CU Cond.		
	Ground	Duct	Air	Ground	Duct	Air
4	40	28	34	51	37	44
6	50	37	44	63	46	56
10	69	49	59	88	62	75
16	88	61	74	113	81	98
25	112	81	98	144	109	131
35	138	103	124	175	125	150
50	169	129	156	206	161	194
70	200	156	188	256	203	244
95	238	192	231	300	239	288
120	262	217	262	344	275	331
150	300	249	300	388	316	381
185	344	286	344	438	364	438
240	400	337	406	506	425	512
300	444	378	456	562	482	581
400	481	436	525	612	549	662
500	523	563	678	660	481	580
630	592	652	786	680	726	875

Three, Three & Half & Four Core Cable Current Rating - IS 7098 P1

Size Cross-Sectional Area (Sq. mm)	Normal Current Rating (Amps)					
	With AL Cond.			With CU Cond.		
	Ground	Duct	Air	Ground	Duct	Air
4	34	28	30	44	37	39
6	43	37	40	55	47	50
10	57	48	53	74	61	67
16	78	61	70	94	78	85
25	95	80	99	120	100	125
35	116	94	117	145	120	155
50	140	110	140	170	145	190
70	170	140	176	210	175	235
95	200	165	221	250	210	290
120	225	185	258	285	240	330
150	255	210	294	315	270	375
185	285	235	339	355	300	435
240	325	270	402	410	350	510
300	370	305	461	460	390	590
400	435	350	542	520	440	670
500	481	405	624	580	480	750
630	537	470	723	680	575	875

Capacitance Single & Multicore Cable - IS 7098 P1

Approx. capacitance (µF/km) for XLPE 1100V cable.

Nominal Area of Conductor (Sq. mm)	Single Core Cable		2 Core Cable	Multicore (3, 3.5 & 4 core cable)
	Unarmoured	Armoured		
1.5	0.19	-	0.051	0.15
2.5	0.24	-	0.058	0.18
4	0.29	-	0.065	0.22
6	0.34	-	0.071	0.25
10	0.43	0.32	0.081	0.31
16	0.51	0.38	0.088	0.36
25	0.49	0.38	0.089	0.41
35	0.57	0.44	0.096	0.47
50	0.58	0.46	0.098	0.50
70	0.63	0.51	0.100	0.53
95	0.68	0.57	0.110	0.61
120	0.73	0.61	0.110	0.63
150	0.73	0.61	0.110	0.64
185	0.74	0.64	0.110	0.65
240	0.74	0.64	0.110	0.66
300	0.80	0.69	0.120	0.67
400	0.83	0.70	0.120	0.67
500	0.83	0.71	0.120	0.69
630	0.87	0.75	0.120	0.73
800	0.92	0.78	NA	NA
1000	0.94	0.81	NA	NA

Approx Reactance Single Core & Multi Core Cable - IS 7098 P1

Approx. reactance at 50 Hz (Ω/Km) for XLPE 1100V cable.

Nominal Area of Conductor (Sq. mm)	Single Core Cable		Multicore (2, 3, 3.5 & 4 core cable)
	Unarmoured	Armoured	
1.5	0.155	-	0.107
2.5	0.142	-	0.0985
4	0.132	-	0.0927
6	0.123	-	0.0884
10	0.114	0.134	0.0837
16	0.108	0.125	0.0808
25	0.103	0.120	0.0805
35	0.0986	0.114	0.0783
50	0.0937	0.108	0.0750
70	0.09	0.102	0.0740
95	0.0865	0.100	0.0724
120	0.0841	0.0968	0.0712
150	0.0839	0.0941	0.0716
185	0.0836	0.0932	0.0718
240	0.0813	0.0900	0.0710
300	0.0795	0.0881	0.0705
400	0.0787	0.0873	0.0704
500	0.0779	0.0859	0.0702
630	0.0765	0.0843	0.0698
800	0.0755	0.0826	NA
1000	0.0752	0.0825	NA

Short Circuit Rating - IS 7098 P1

Nominal Area of Conductor (Sq. mm)	Short circuit for 1 Second Duration (K. Amps.)	
	Aluminium	Copper
1.5	0.15	0.21
2.5	0.21	0.36
4	0.38	0.57
6	0.57	0.86
10	0.94	1.40
16	1.5	2.3
25	2.4	3.6
35	3.3	5
50	4.7	7.1
70	6.6	10
95	9	13.6
120	11.3	17.1
150	14.2	21.4
185	17.5	26.4
240	22.6	34.3
300	28.3	42.9
400	37.7	57.1
500	47.2	71.4
630	59.4	90
800	75.5	114.3
1000	94.3	142.3

1. Max. Conductor temperature prior to short circuit : 90^0C
2. Max. Conductor temperature at the termination of short circuit : 250^0C
   Formula for calculating the short circuit rating for other duration.

$$It = \frac{Ish}{\sqrt{\tau}}$$

where

It= Short circuit rating for t second.
t= Short circuit rating for one second.
Ish= Short circuit rating for 1 second.

Current Rating - NYY Cable

Current Carrying Capacity (Amperes).

Nominal Cross-Sectional Area (Sq. mm)	In a Thermally Insulated Walls		On a Walls		Direct installation				In Free Air	
Number of Loaded Cores Cross-Section (Sq. mm)	2	3	2	3	2	3	2	3	2	3
	Current ratings in Ampere (A)									
1.5	14.5	13.0	16.5	15.0	19.5	17.5	22	18.5	-	-
2.5	18.5	17.5	23	20	27	24	30	25	-	-
4	25	23	30	27	36	32	40	34	-	-
4	-	-	-	-	-	33.02[3]	-	-	-	-
6	32	29	38	34	46	41	51	43	-	-
10	43	39	52	46	63	57	70	60	-	-
10	-	-	-	47.17[4]	-	59.43[3]	-	-	-	-
16	57	52	69	62	85	76	94	80	-	-
25	75	68	90	80	112	96	119	101	131	114
35	92	83	111	99	138	119	148	126	162	143
50	110	99	133	118	168	144	180	153	196	174
70	139	125	168	149	213	184	232	196	251	225
95	167	150	201	179	258	223	282	238	304	275
120	192	172	232	206	299	259	328	276	352	321
150	219	196	-	-	344	299	379	319	406	372
185	248	223	-	-	392	341	434	364	463	427
240	291	261	-	-	461	403	514	430	546	507
300	334	298	-	-	530	464	593	497	629	587

Conversion factors for deviating ambient temperature, grouping, installation under the ceiling, multicore cables and insulated wires - see DIN VDE 0298 Part 4.

1) The current rating are valid for cables with concentric conductor, only for multicore versions.
2) For further installation method - see DIN VDE 0298 Part 4.
3) See DIN VDE 0298 Part 4.

Current Ratings - Single Core (Non-Magnetic Armour) Copper Conductor BS 5467

Current Carrying Capacity (Amperes).

Conductor Cross-Sectional Area	Reference Method 1 (Clipped Direct)		Reference Method 2 (On a Perforated Cable Tray)		Reference Method 12 (Free Air)						
	2 Cables Single AC or DC Flat & Touching Phase	3 or 4 Cables, Three-Phase AC Flat & AC Touching Phase	2 Cables, Single-Phase Flat & Touching	3 or 4 Cables, Three-Phase AC Flat & Touching	2 Cables, Single-Phase AC		2 Cables DC		3 or 4 Cables, Three-Phase AC		
					Horizontal Flat Spaced	Vertical Flat Spaced	Horizontal Spaced	Vertical Spaced	Horizontal Flat Spaced	Vertical Flat Spaced	3 Cables Trefoil
1	2	3	4	5	6	7	8	9	10	11	12
Sq. mm	AMP	AMP	AMP	AMP	AMP	AMP	AMP	AMP	AMP	AMP	AMP
50	237	220	253	232	282	266	284	270	288	266	222
70	303	277	322	293	357	337	356	349	358	331	285
95	367	333	389	352	436	412	446	426	425	393	346
120	425	383	449	405	504	477	519	497	485	449	402
150	488	437	516	462	566	539	600	575	549	510	463
185	557	496	587	524	643	614	688	660	618	574	529
240	656	579	689	612	749	714	815	782	715	666	625
300	755	662	792	700	842	805	943	906	810	755	720
400	853	717	899	767	929	889	1137	1094	848	797	815
500	962	791	1016	851	1032	989	1314	1266	923	871	918
630	1082	861	1146	935	1139	1092	1528	1474	992	940	1027
800	1170	904	1246	987	1204	1155	1809	1744	1042	978	1119
1000	1261	961	1345	1055	1289	1238	2100	2026	1110	1041	1214

Voltage Drop - Per Ampere Per Meter (mV)

Single Core (Non-Magnetic Armour) Copper Conductor BS 5467

Conductor Cross-Sectional Area	2 Cables DC	2 Cables, Single-Phase AC						3 or 4 Cables, Three-Phase AC							
		Reference Methods 1 & 11 (Touching)			Reference Method 12 (Spaced)			Reference Methods 1, 11 & 12 (in Trefoil Touching)			Reference Methods 1 & 11 (Flat & Touching)			Reference Method 12 (Flat Spaced)	
1	2	3			4			5			6			7	
Sq. mm	mV	mV			mV			mV			mV			mV	
		r	x	z	r	x	z	r	x	z	r	x	z	r	x
50	0.98	0.99	0.21	1	0.98	0.29	1	0.86	0.18	0.87	0.84	0.25	0.88	0.84	0.33
70	0.67	0.68	0.2	0.71	0.69	0.29	0.75	0.59	0.17	0.62	0.6	0.25	0.65	0.62	0.32
95	0.49	0.51	0.2	0.55	0.53	0.28	0.6	0.44	0.17	0.47	0.46	0.24	0.52	0.49	0.31
120	0.39	0.41	0.19	0.45	0.43	0.27	0.51	0.35	0.17	0.39	0.38	0.24	0.44	0.41	0.3
150	0.31	0.33	0.19	0.38	0.36	0.27	0.45	0.29	0.16	0.33	0.31	0.23	0.39	0.34	0.29
185	0.25	0.27	0.19	0.33	0.3	0.26	0.4	0.23	0.16	0.28	0.26	0.23	0.34	0.29	0.29
240	0.2	0.21	0.18	0.28	0.24	0.26	0.35	0.18	0.16	0.24	0.21	0.22	0.3	0.24	0.28
300	0.16	0.17	0.18	0.25	0.2	0.25	0.32	0.15	0.15	0.21	0.17	0.22	0.28	0.2	0.27
400	0.12	0.15	0.17	0.22	0.18	0.24	0.3	0.13	0.15	0.2	0.16	0.21	0.27	0.2	0.27
500	0.09	0.13	0.17	0.21	0.17	0.24	0.29	0.11	0.15	0.18	0.15	0.2	0.25	0.19	0.24
630	0.07	0.11	0.17	0.2	0.15	0.23	0.27	0.09	0.15	0.17	0.14	0.2	0.24	0.18	0.23
800	0.06	0.09	0.16	0.19	0.15	0.23	0.27	0.09	0.14	0.17	0.13	0.18	0.23	0.18	0.2
1000	0.05	0.09	0.16	0.18	0.14	0.21	0.25	0.08	0.14	0.16	0.13	0.17	0.21	0.17	0.18

Note : Spacings larger than those specified in Method 12 (see Table 4E3B, BS 7671) - 17th Edition, (FE Wiring Regulations) will result in larger voltage drop.
Conductor Operating Temperature : 90°C

Current Ratings - Multicore Armoured Copper Conductor BS 5467

Current Carrying Capacity (Amperes).

Conductor Cross-Sectional Area (Sq. mm)	Reference Method 1 (Clipped Direct) Area		Reference Method 11 (On a Perforated Horizontal or Vertical Tray) or Reference Method 13 (Free Air)	
	2 Core Cable, Single-Phase AC or DC	3 or 4 Core Cable, Three-Phase AC	3 or 4 Core Cable, Three-Phase AC	2 Core Cable, Single-Phase AC or DC
1	2	3	4	5
1.5	27	23	29	25
2.5	36	31	39	33
4	49	42	52	44
6	62	53	66	56
10	85	73	90	78
16	110	94	115	99
25	146	124	152	131
35	180	154	188	162
50	219	187	228	197
70	279	238	291	251
95	338	289	354	304
120	392	335	410	353
150	451	386	472	406
185	515	441	539	463
240	607	520	636	546
300	698	599	732	628
400	787	673	847	728

Notes :

1. Where the conductor is to be protected by a Semi-enclosed fuse to BS 3036, see item 4 of the preface to appendix 4 of BS 7671, the IEE Wiring Regulations, 17th Edition.
2. Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see Regulation 512-1-2 of BS 7671, the IEE Wiring Regulations, 17th Edition).
   Ambient Temperature: 30°C
   Conductor Operating Temperature: 90°C

Voltage Drop - Per Ampere Per Meter (mV)

Multicore Armoured Copper Conductor BS 5467

Conductor Cross-Sectional Area	2 Cables DC	2 Core Cables, Single-Phase AC			3 or 4 Core Cable, Three-Phase AC		
1	2	3			4		
Sq. mm	mV	mV			mV		
1.5	31	-	31	-	-	27	-
2.5	19	-	19	-	-	16	-
4	12	-	12	-	-	10	-
6	7.9	-	7.9	-	-	6.8	-
10	4.7	-	4.7	-	-	4	-
16	2.9	-	2.9	-	-	2.5	-
		r	x	z	r	x	z
25	1.85	1.85	0.16	1.9	1.6	0.14	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1	0.86	0.135	0.87
70	0.67	0.67	0.15	0.69	0.59	0.13	0.6
95	0.49	0.5	0.15	0.52	0.43	0.13	0.45
120	0.39	0.4	0.145	0.42	0.34	0.13	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.3
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.2	0.14	0.24	0.175	0.125	0.21
300	0.155	0.16	0.14	0.21	0.14	0.12	0.185
400	0.12	0.13	0.145	0.195	0.115	0.125	0.17

Conductor Operating Temperature: 90°C

Types of Abbreviations

CONTROL CABLES 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ x8☐	HARMONISED CABLES 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ x8☐ 9☐	TELEPHONE CABLES AND LEADS 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ x8☐ 9☐ 10☐
1. BASIC TYPE	**1. BASIC TYPE**	**1. BASIC TYPE**
N-VDE STANDARD	H - Harmonised Type	A - Outside Cable
(N) OR X - as per VDE Standard	A - National Typer	G - Mine Cable
2. INSULATION MATERIAL	**2. RATED VOLTAGE**	J - Installation Cable
Y - Thermoplastic Resins	01 - 100/100V	Li - Rubber Sheathed Cable
X - Crosslinked Thermoplastic Resins	03 - 300/300V	S - Jumper Cable
G - Elastomers	05 - 300/500V	**2. ADDITIONAL INFORMATION**
HX - Halogen Free Material	07 - 450/750V	B - Lightning Protection Make Up
3. CABLE DESIGNATION	**3. INSULATION MATERIAL**	J - Installation Cable Induction Protection
A - Cored Cable	V - PVC	E - Electronics
D - Solid Wire	V2 - PVC + 90°C	**3. INSULATION MATERIAL**
AF - Fine Wired Cored Cable	V3 - PVC Cold Flexible	Y - PVC
F - Socket Core	B - Ethylenepropylene Rubber	2Y - Polyethylene
L - Fluorescent Tube Cable	E - Polyethylene PE	O2Y - Cellular PE
LH - Connecting Cable Light Mechanical Load	X - XLPE, Crosslinked Polyethylene	5Y - PTFE
MH - Connecting Cable Medium Mechanical Load	R - Rubber	6Y - FEP
SH - Connecting Cable Heavy Mechanical Load	S - Silicon Rubber	7Y - ETFE
SSH - Connecting Cable Special Load	**4. OUTER/INNER SHEATH MATERIAL**	P - Paper
SL - Control Cable/Welding Cable	V - PVC	**4. MAKE UP FEATURES**
S - Control Cable	V2 - PVC + 90°C	F - Petroleum Jelly Filling
LS - Light Control Cable	V3 - PVC Cold Flexible	L - Aluminium Sheath
FL - Flat Cable	V5 - PVC with Enchanced Oil Resistance	LD - Corrugated AL Sheath
Si - Silicone Cable	R - Rubber	(L) - Aluminium Strip
Z - Twin Cable	N - Chloroprene Rubber	(ST) - Metal Foil Screen
GL - Glass Filament	Q - Polyurethane	(K) - Copper Strip Screen
Li - Stranded Core to VDE 0812	J - Glass Fiber Braid	(C) - Copper Braid Screen
LiF - Stranded Core to VDE 0812 Superfined Wire	T - Textile braid	(Z) - Steel Wire Braid
4. SPECIAL FEATURES	**5. SPECIAL FEATURES**	W - Corrugated Steel Sheath
T - Support Wire	C4 - Copper Screen Braiding	M - Lead Sheath
O - Enchanced Oil Resistance	H - Flat Cable, Separable	Mz - Special Lead Sheath
U - Flame Retardant	H2 - Flat Cable, Non Separable	b - Armouring
w - Heat Resistant, Weather Resistant	H6 - Flat Cable, Non Separable for Lifts	c - Jute Sheath + Ground
	H8 - Helical/Spiral Cable	E - Ground Layer + Strip

CONTROL CABLES 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ x8 ☐	HARMONISED CABLES 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ x8 ☐ 9 ☐	TELEPHONE CABLES AND LEADS 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ x8 ☐ 9 ☐ 10 ☐
5. SHEATH MATERIAL	**6. CONDUCTOR TYPE**	**6. NUMBER OF ELEMENTS**
Same as given in Insulation Material	U - Single Wire	..number of stranding elements/cores
FE - Insulation re	R - Multiwire	**7. STRANDING ELEMENTS PAIRS**
C - Screen Braiding	K - Fine Wire (Static)	1 - Single core
D - Screening as Envelope with Copper Wire	F - Fine Wire (Flexible)	2 - Pair
S - Steel Wire Braid as Mechanical Protection	h - Superfine Wire	**8. CONDUCTOR DIAMETER**
5. SHEATH	Y - Tinsel Wire	... in mm
Y -Thermoplastic Resin	D - Fine Wire Core for Welding Cable	**9. STRANDING ELEMENTS**
X - Crosslinked Thermoplastic Resins	E - Superfine Core for Welding Cable	F - Star Quad (Railway)
G - Elastomers	**7. NUMBER OF CORES**	St - Star Quad (Phantom)
HX - Halogen Free Material	**8. PROTECTIVE CONDUCTOR**	Stl - Star Quad (Trunk Cable)
P - PUR (Polyurethane)	X - Without Protective Conductor	Stlll - Star Quad (Local Cable)
6. PROTECTIVE CONDUCTOR	G - With Protective Conductor	TF - Star Quad for TF
O - Without Protective Conductor	**9. CONDUCTOR CROSS SECTION**	S - Signal Cable (Railway)
J - Without Protective Conductor	..mm^2	PiMF - Screened Pair in Metal Foil
7. NUMBER OF CORES	**Example- H05 VV-F**	**10. TYPE OF STRANDING**
8. CONDUCTOR CROSS SECTION		Lg - Twisted in Layers
..mm^2		Bd - Twisted in Bundles
Example- NHSTOUU		**Example- A2Y(L)2Y 6X2X0.8 Bd**

Code Designation - Instrumentation Cable BS EN 50288-7

Abbreviation code

CableType.

Instrumentation and instrumentation control cable. **RE-**

Thermocouple extension or compensation cable. **RT-**

Metal Cladding of conductor.

Copper conductor, tinned. **-v**

Insulation and/or sheath materials.

Insulation, inner or outer sheath of polyvinylchloride(PVC). **Y**

Insulation, inner or outer sheath made of heat resistant polyvinylchloride (PVCw). **Yw**

Outer sheath made of polyvinylchloride of increased thickness. **Yv**

Insulation, inner or outer sheath made of polyethylene (PE). **2Y**

Insulation made of crosslinked polyethylene (XLPE). **2X**

Inner and outer sheath made of zero halogen, flame retardant compound (LSZH). **H**

Insulation made of silicone (Sil). **2G**

Covering made of polyamide (nylon). **4Y**

Screening.

Static screen made of laminated plastic tape laminated with aluminium. **(St)**

Longitudinally applied aluminium foil, one or both sides plastic-coated. **(L)**

Braid made of tinned or untinned copper wires over the cable core. **C**

Wrapping made of copper foil. **K**

Pair in metal foil. **PiMF**

Triple in metal foil. **TiMF**

Braid of tinned or untinned copper wires over a single cabling element. **©**

Metal sheath.

Sheath made of lead. **M**

Armour.

Galvanised round steel wires. **SWA**

Galvanised round steel wires with counter helix made of galvanised steel tape. **RG**

Galvanised flat steel wires with counter helix made of galvanised steel tape. **FG**

Double layer made of galvanised steel tapes. **B**

Braid made of galvanised steel wires. **Q**

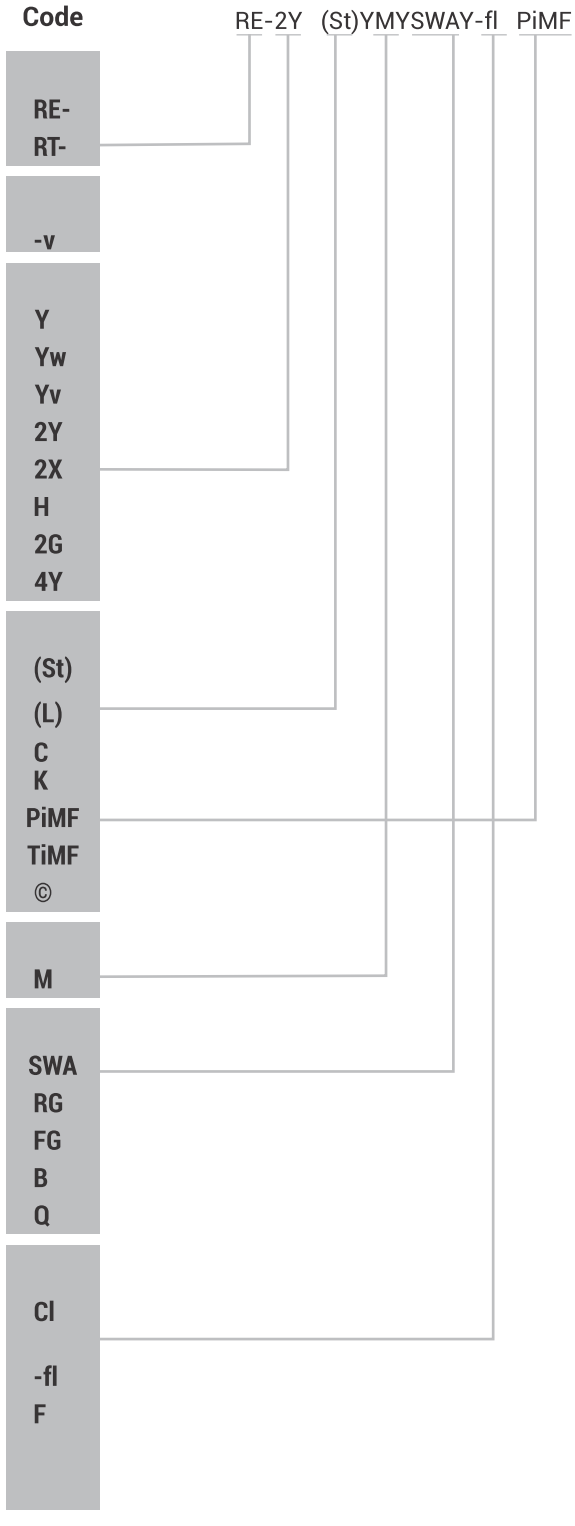
Further properties

Circuit Integrity (resistance to fire). **CI**

Increased flame retardancy. **-fl**

Meets requirements for IEC 60332-3-24 (Cat. C) fulfilled. **F**

1 cable core filled with petrojelly.



Cable Handling & Storage Guideline

Although RR Kabel's cables are durable & high quality products relatively unaffected by ambient conditions, they should be handled and stored properly to avoid incidental damage.

Reel Handling:

Upon receipt, and before acceptance of a shipment, all reels should be inspected for evidence of damage during shipment.

This damage would include broken flanges, damaged wrapping or lagging, interlocked flanges, reels broken loose from their ties or blocking, etc. Any signs of such damage should immediately be reported to the carrier. If the protective wrapping or lagging is removed to inspect for possible damage during shipment, it should be replaced prior to placing the reel into long term storage.

Unloading of reels from the delivery truck must be accomplished in a manner that prevents the transfer equipment from coming into contact with either the cable itself or the protective covering over the reel. A crane may be used to lift reels using a steel shaft of sufficient strength placed through the arbor holes. The shaft must be lifted using a spreader bar to prevent the lifting cable or chain from pressing against the reel flanges (see Figure 1). The force exerted by improperly positioned slings has been known to break reel flanges, resulting in damage to the cable.

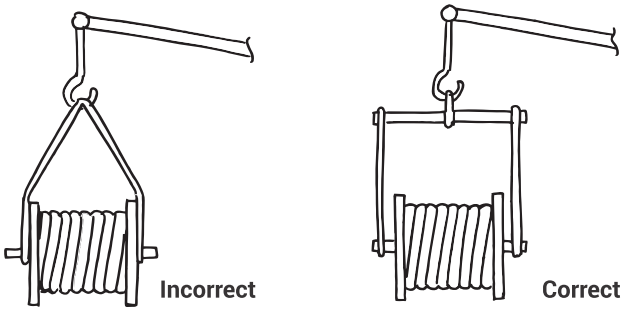


Figure-1

If a fork lift truck is used, the forks must be placed at a 90° angle to the flanges, and must be long enough to make contact with both flanges (see Figure 2). Under no circumstances should the forks make direct contact with the cable or protective covering.

Some facilities may have an inclined ramp available for unloading reels. This ramp must be wide enough to contact both reel flanges with an adequate safety margin. The method used to stop the reel should ensure that the cable or protective covering does not come into contact with any solid object, and that the force transmitted to the reel flanges is not sufficient to damage them.

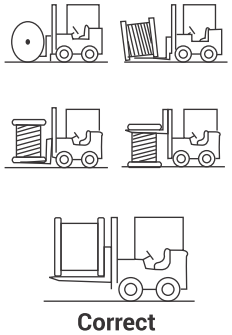


Figure-2

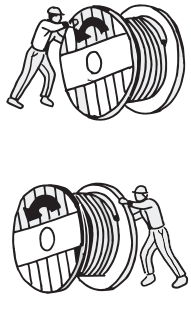


Figure-3

Reels must not be dropped from the delivery vehicle to the ground under any circumstances. When a reel is rolled from one point to another, care must be taken to see that the reel does not straddle objects such as rocks, pipes, or wooden blocks which could damage the cable or protective covering. A reel should always be rolled in the direction indicated by arrows stenciled on the reel. By doing so, you will ensure that the reel is rolled in such a direction as to tighten the cable on the reel. Rolling in the other direction will tend to loosen the turns of cable on the reel (see Figure 3). This can result in turns crossing over one another and subsequently causing kinks in the cable as it is removed from the reel

Storage Conditions:

Reels should be stored in an area reserved for this purpose. The location must be accessible to forklifts and trucks, but removed from areas of constant traffic. If available space prohibits separation, suitable barriers should be erected to prevent damage from moving equipment. Reels must be stored in an area where they cannot be damaged by falling objects, chemical spills including oil and grease, open flames or welding operations, and excessive heat.

It is also advisable to secure the designated area to prevent theft or vandalism. Whenever possible, reels should be stored indoors to provide maximum protection. If the cable must be stored outside, the reels should be placed on a hard, well-drained surface that will prevent the reel flanges sinking into it and allowing the weight of cable and reel to rest on the cable surface. It is recommended, but not required, that cable intended for storage longer than six months have overhead protection or be covered with a suitable material such as canvas or opaque polyethylene to avoid prolonged exposure to sunlight.

If a portion of the cable is used, the open end of the cable remaining on the reel should immediately be re-sealed in a manner equivalent to the factory seal to prevent the entrance of moisture. After re-sealing, the cut end should be fixed to the inside edge of the reel flange to prevent the end from extending beyond the flanges during reel movement.

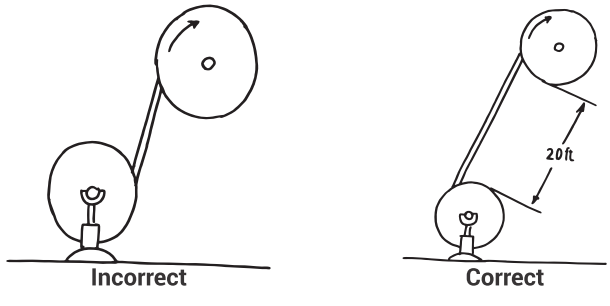


Figure-4

Reels should always be stored with their flanges vertical. They must not be stored on their sides or stacked one on top of another. Care should be taken that reels cannot roll into one another, so that the flange of one reel hits the surface of cable on another reel. If necessary, reel flanges should be chocked to prevent movement.

Removal of Cable from Reel:

Considerable care must be exercised in uncoiling or unreeling flexing cables since their performance is substantially influenced by the way in which they are handled. Reverse bending or twisting can cause internal

damage which can adversely affect the life of the cable. Reels should be placed on jacks or stands with a bar through the arbor holes. This will allow the reel to be turned easily, and the cable to be paid -out. Cables can be paid-out from the bottom or the top of the reel, but if they are to be removed from a shipping reel to be installed on another reel, they should be paid-out in such a manner as to follow the natural cast in the cable. Reverse bending should be avoided (see Figure 4). If possible, the distance between pay-off reel and take-up reel should be at least 20 feet to allow the cable to straighten before it is taken up on the application reel. Cable in coils should be handled in a similar manner. This can be achieved by supporting the coil in a vertical plane and rotating it by hand as the cable is carefully uncoiled (see Figure 5).

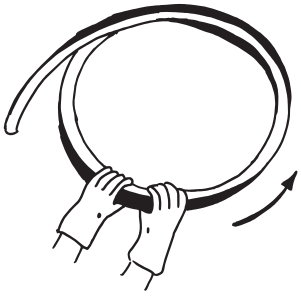
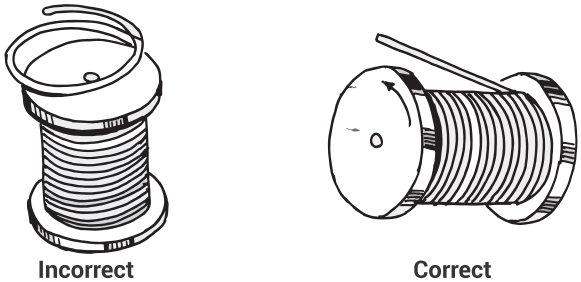


Figure-5

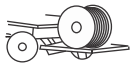
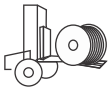
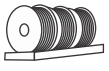
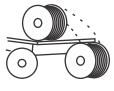
The cable should never be pulled over the flange of a reel, or pulled off the side of a coil, since this will introduce a twist in the cable (see Figure 6).



Incorrect **Correct**

Figure-6

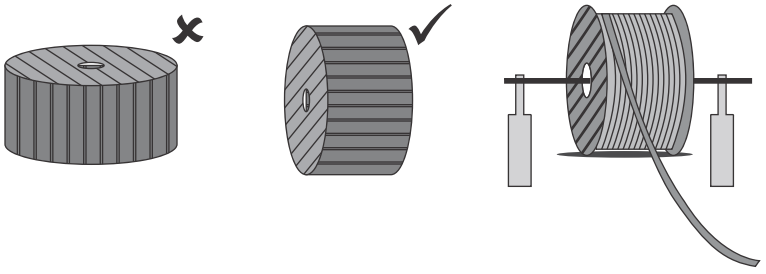
Cable Handling Summary:

YES	NO
 Cradle both reel flanges between forks	 Do not lift by top flanges Cable or reel will be damaged
 Reels can be hoisted with a shaft extended through both flanges	 Use a spreader bar, to prevent bending the reek flanges and mashing the cable
 Place spacers under the bottom flanger and between reels to createa space to insert the forks.	 Opened heavy reels. Will often arrive damaged. Refuse or receive subject to inspection for hidden damage.
 Lower reels from truck hydrilla gate, hoist or lift, LOWER CAREFULLY	 Never allow forks to touch cable surface or reel wrap.
 Always load with flanges on edge and chock and block securely.	 Never drop reels.

Remove all nails and staples from reel flanges before moving a reel before moving a reel, and avoid all objects that could crush damage or impact the cable while it is being moved. NEVER use the cable as a means to move a reel. When re-reeling, observe recommended bending radii, use swivels to prevent twisting and avoid overruns.

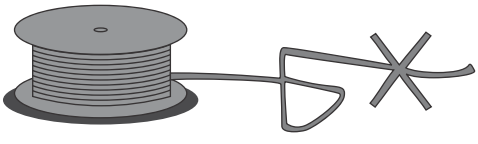
Cable Laying Guideline

For laying of cable, special care is to be taken to prevent sharp bending, kinking and twisting. Cable should be unwound from drum by proper mounting the cable drum on a cable wheel stand. Making sure that the spindle is strong enough to carry the weight without bending and that it is lying horizontally in the bearings so as to prevent the drum creeping to one side or the other while it is rotating.

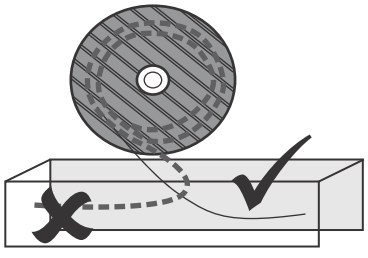


Provision should be made to avoid further rolling & buckling of the cable. A simple wooden plank can serve this purpose.

Cable must be pulled from the top only.



This is the incorrect way of pulling the cable & will cause kinks & twist in cable. **Shall be avoided.**



Cable must not be pulled across hard and sharp objects to avoid damage to the cable.

Cable must be laid in ducts or trenches as shown.

NOTES

The technical data mentioned in this book has been derived to have the best products in place. Having known that Innovation has always been the base for R R Kabel products, the technical data would vary from time to time. Hence, current details should always be checked with R R Kabel for accuracy.

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
RoHS = Restriction of Hazardous Substances | CE = Conformité Européenne
ISI = Indian Standards Institute

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