



SPECIFICATION

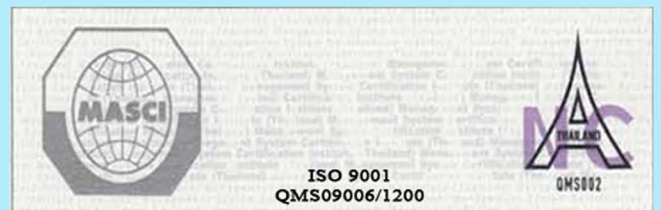
For Electric Wires and Cables



- TIS.11 PART3-2553
- TIS.11 PART4-2553
- TIS.11 PART5-2553
- TIS.11 PART101-2553
- TIS.85-2548
- TIS 293-2541



- TIS 64-2517
- TIS 85-2522
- TIS 86-2522
- TIS 2143-2546
- TIS 2341-2555



INDEX

COPPER CONDUCTOR CABLES

Building Wires and Cables		PAGE
60227 IEC 01 THW	450/750 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 1)	2
60227 IEC 02 THW (f)	450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 3)	3
60227 IEC 05 IV	300/500 V 70 °C SOLID CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 5)	4
60227 IEC 06 VSF	300/500 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 7)	5
60227 IEC 10 NYY	300/500 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED (TIS 11 PART 4-2553, TABLE 1)	7
60227 IEC 52 VCT/VCT-G	300/300 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE (TIS 11 PART 5-2553, TABLE 7)	14
60227 IEC 52 VKF	300/300 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, FLAT TYPE (TIS 11 PART 5-2553, TABLE 7)	16
60227 IEC 53 VCT/VCT-G	300/500 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE (TIS 11 PART 5-2553, TABLE 9)	17
60227 IEC 53 VKF	300/500 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, FLAT TYPE (TIS 11 PART 5-2553, TABLE 9)	18
VAF	300/500 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED AND SHEATHED, FLAT TYPE (TIS 11 PART 101-2553, TABLE 1)	21
VAF-G	300/500 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED AND SHEATHED, WITH GROUND FLAT TYPE (TIS 11 PART 101- 2553, TABLE 1)	22
NYY	450/750 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED (TIS 11 PART 101-2553, TABLE 3 AND TABLE 4)	23
NYY-G	450/750 V 70 °C STRANEDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED WITH GROUND (TIS 11 PART 101-2553, TABLE 5)	27
VCT	450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE (TIS 11 PART 101-2553, TABLE 7)	30
VCT-G	450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED WITH GROUND, ROUND TYPE (TIS 11 PART 101-2553, TABLE 8)	33
 Low Voltage Power Cables		
0.6/1KV-CV	0.6/1 kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE (IEC 60502-1)	39

Medium voltage Power Cables		PAGE
12/20KV-CV	12/20(24)kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE (IEC 60502-2)	41
18/30KV-CV	18/30(36)kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE (IEC 60502-2) Control Cable	42
CVV	600 V 70 °C PVC INSULATED AND SHEATHED CONTROL CABLE	44
CVV-S	600 V 70 °C PVC INSULATED AND SHEATHED WITH SHIELD CONTROL CABLE	49
 Automobile Wire and Cables		
T-AV	60 °C LOW VOLTAGE FLEXIBLE CONDUCTOR FOR AUTOMOBILE (TIS 118-2522)	55
 Bare Conductor		
FHC	HARD DRAWN COPPER STANDED STANDED CONDUCTOR (TIS 64-2517)	58

Building Wires and Cables

PAGE

NAY	750 V 70 °C INSULATED ALUMINIUM CONDUCTOR, SINGLE CORE	61
THWA	750 V 70 °C ALUMINIUM CONDUCTOR PVC INSULATED,SINGLE CORE (TIS 293-2541)	63
THWA-C	750 V 70 °C COMPACTED ALUMINIUM CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 293-2541)	65

High Voltage Power Cables

25KV-OC	25kV CROSS-LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE (ICEA S-66-524, ICEA S-93-639)	68
35KV-OC	35kV CROSS-LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE (ICEA S-66-524, ICEA S-93-639)	70
25KV-CC	25kV ALL ALUMINIUM CONDUCTOR SPACED AERIAL CABLE (ICEA S-66-524, ICEA S-93-639)	72
35KV-CC	35kV ALL ALUMINIUM CONDUCTOR SPACED CABLE (ICEA S-66-524, ICEA S-93-639)	74

Bare Conductor

AAC	ALL ALUMINIUM STRANDED CONDUCTOR (TIS 85-2548)	77
ACSR	ALUMINIUM CONDUCTOR STEEL REINFORCED (TIS 85-2548)	78

COPPER CONDUCTOR CABLES

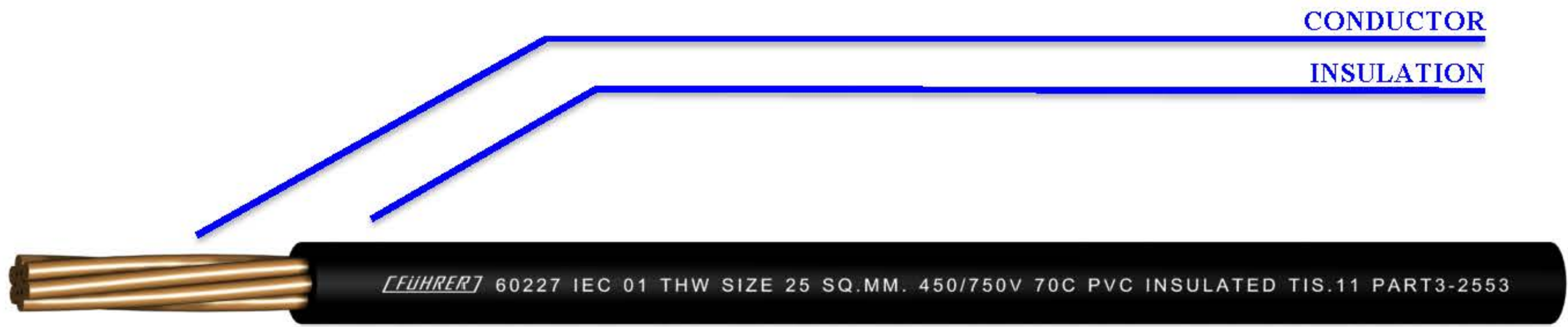
Building Wires and Cables

TIS 11 Part 3-2553 : Non-Sheathed Cables for Fixed Wiring

		PAGE
600227 IEC 01 THW	450/750 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 1)	2
60227 IEC 02 THW (f)	450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 3)	3
60227 IEC 05 IV	300/500 V 70 °C SOLID CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 5)	4
60227 IEC 06 VSF	300/500 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 11 PART 3-2553, TABLE 7)	5



450/750 V 70°C PVC INSULATED



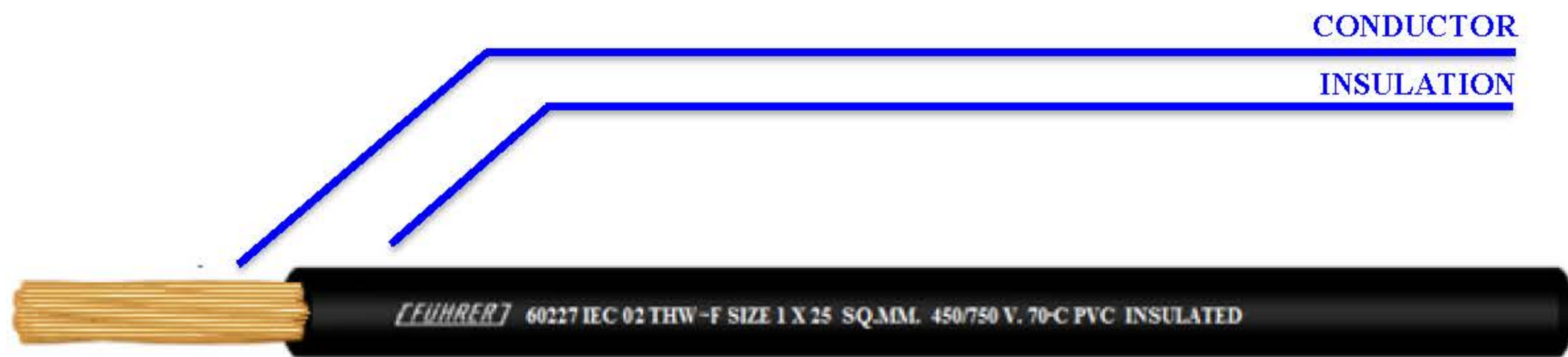
CONDUCTOR :	Solid and Standard annealed copper Size 1.5 mm ² up to 400 mm ²	CLASSIFICATION :	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volt
INSULATION :	Polyvinyl chloride Black, Light Blue, Brown, Gray, Green/Yellow , any colour	TESTING VOLTAGE :	2,500 VAC
		REFERENCE STANDARD :	TIS.11 PART 3-2553

Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Number of wire (Min)	Diameter (mm) (Approx.)		Lower Limit (mm)	Upper Limit (mm)				
1.5	1	1.38	0.7	2.6	3.2	21	0.011	22	100/C
1.5	7	1.50	0.7	2.7	3.3	21	0.010	24	100/C
2.5	1	1.78	0.8	3.2	3.9	29	0.010	32	100/C
2.5	7	2.01	0.8	3.3	4.0	29	0.009	35	100/C
4	1	2.25	0.8	3.6	4.4	37	0.0085	49	100/C
4	7	2.55	0.8	3.8	4.6	37	0.0077	50	100/C
6	1	2.76	0.8	4.1	5.0	48	0.0070	75	100/C
6	7	3.12	0.8	4.3	5.2	48	0.0065	80	100/C
10	1	3.57	1.0	5.3	6.4	67	0.0070	120	100/C
10	7	4.05	1.0	5.6	6.7	67	0.0065	130	100/C
16	7	5.10	1.0	6.4	7.8	92	0.0050	180	100/C
25	7	6.42	1.2	8.1	9.7	127	0.0050	280	100/C
35	19	4.59	1.2	9.0	10.9	157	0.0043	380	100/C
50	19	8.90	1.4	10.6	12.8	191	0.0043	500	500/D
70	19	10.70	1.4	12.1	14.6	244	0.0035	700	500/D
95	19	12.60	1.6	14.1	17.1	297	0.0035	1000	500/D
120	37	14.21	1.6	15.6	18.8	345	0.0032	1200	500/D
150	37	15.75	1.8	17.3	20.9	397	0.0032	1500	500/D
185	37	17.64	2	19.3	23.3	453	0.0032	1900	500/D
240	61	20.25	2.2	22.0	26.6	535	0.0032	2500	500/D
300	61	22.68	2.4	24.5	29.6	617	0.0030	3100	500/D
400	61	25.65	2.6	27.5	33.2	741	0.0028	3900	500/D

C:Packing in coil.
D:Packing in drum.



450/750 V 70°C PVC INSULATED

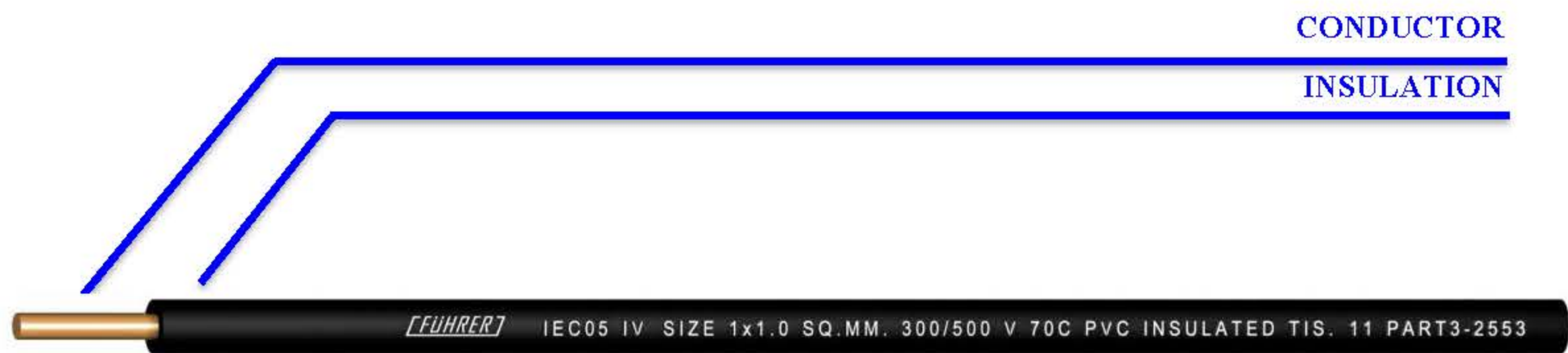


CONDUCTOR :	Flexible stranded annealed copper Size 1.5 mm ² up to 240 mm ²	CLASSIFICATION :	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volt
INSULATION :	Polyvinyl chloride Black, Light Blue, Brown, Gray, Green/Yellow , any colour	TESTING VOLTAGE :	2,500 VAC
		REFERENCE STANDARD :	TIS.11 PART 3-2553

Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Diameter of wire (Max)	Diameter (mm) (Approx.)		Lower Limit (mm)	Upper Limit (mm)				
1.5	0.26	1.60	0.7	2.8	3.4	16	0.010	22	100/C
2.5	0.26	2.10	0.8	3.4	4.1	25	0.009	34	100/C
4	0.31	2.60	0.8	3.9	4.8	30	0.007	50	100/C
6	0.31	3.70	0.8	4.4	5.3	39	0.0060	73	100/C
10	0.41	4.90	1.0	5.7	6.8	51	0.0056	120	100/C
16	0.41	6.00	1.0	6.7	8.1	73	0.0046	180	100/C
25	0.41	7.50	1.2	8.4	10.2	97	0.0044	280	100/C
35	0.41	8.80	1.2	9.7	11.7	140	0.0038	380	100/C
50	0.41	10.80	1.4	11.5	13.9	175	0.0037	550	500/D
70	0.51	12.80	1.4	13.2	16.0	216	0.0032	760	500/D
95	0.51	14.70	1.6	15.1	18.2	258	0.0032	1000	500/D
120	0.51	16.80	1.6	16.7	20.2	302	0.0029	1310	500/D
150	0.51	18.80	1.8	18.6	22.5	347	0.0029	1620	500/D
185	0.51	20.50	2.0	20.6	24.9	394	0.0029	1930	500/D
240	0.51	23.50	2.2	23.5	28.4	471	0.0028	2530	500/D

C:Packing in coil.**D:Packing in drum.**


300/500 V 70°C PVC INSULATED



CONDUCTOR : Solid annealed copper wire
Size 0.5 mm² up to 1.0 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

INSULATION : Polyvinyl chloride
Black, Light Blue, Brown, Gray,
Green/Yellow , any colour

TESTING VOLTAGE : 2,000 VAC

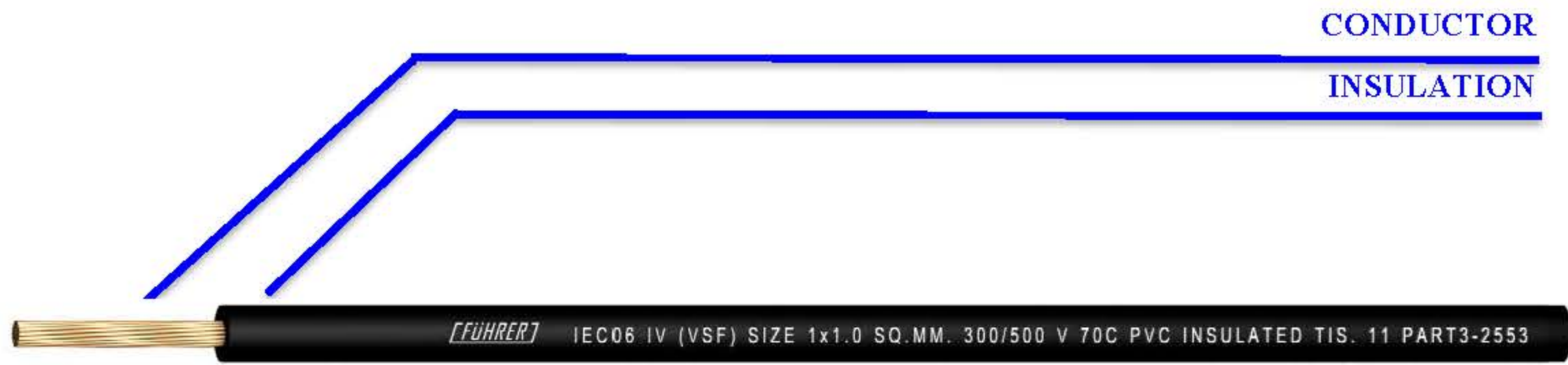
REFERENCE STANDARD : TIS.11 PART 3-2553

Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Number of wire (Min.)	Diameter (mm) (Approx.)		Lower Limit (mm)	Upper Limit (mm)				
0.5	1	0.8	0.6	1.9	2.3	3	0.015	9	100/C
0.75	1	1.0	0.6	2.1	2.5	6	0.012	11	100/C
1	1	1.1	0.6	2.2	2.7	10	0.011	14	100/C

C:Packing in coil.



300/500 V 70°C PVC INSULATED



CONDUCTOR : Flexible stranded annealed copper wire
Size 0.5 mm² up to 1.0 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

INSULATION : Polyvinyl chloride
Black, Light Blue, Brown, Gray,
Green/Yellow , any colour

TESTING VOLTAGE : 2,000 VAC
REFERENCE STANDARD : TIS.11 PART 3-2553

Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Diameter of wires (Max.)	Diameter (mm) (Approx.)		Lower Limit (mm)	Upper Limit (mm)				
0.5	0.21	0.9	0.6	2.1	2.5	3	0.013	9	100/C
0.75	0.21	1.1	0.6	2.2	2.7	6	0.011	12	100/C
1	0.21	1.3	0.6	2.4	2.8	10	0.010	15	100/C

C:Packing in coil.



COPPER CONDUCTOR CABLES

Building Wires and Cables

TIS 11 Part 4-2553 : Sheathed Cables for Fixed Wiring

		PAGE
60227 IEC 10 NYY	300/500 V 70 °C SOLID AND STRANEDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED (TIS 11 PART 4-2553, TABLE 1)	7



CONDUCTOR : Solid and Standard annealed copper
Size 1.5 mm² up to 35 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

INSULATION : Polyvinyl chloride (PVC)
Brown , Black , Grey

TESTING VOLTAGE : 2,000 VAC

INNER SHEATH : Polyvinyl chloride (Black colour)

REFERENCE STANDARD : TIS.11 PART 4-2553

OUTER SHEATH : Polyvinyl chloride (Black colour)

No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)				Lower Limit	Upper Limit				
2	1.5	1	1.36	0.7	0.4	1.2	7.6	10.0	16	0.011	120	100/C
	2.5	1	1.75	0.8	0.4	1.2	8.6	11.5	22	0.010	160	100/C
	4	1	2.21	0.8	0.4	1.2	9.6	12.5	30	0.0085	210	100/C
	6	7	3.09	0.8	0.4	1.2	11.0	14.0	37	0.0065	290	100/C
	10	7	4.00	1.0	0.6	1.4	13.5	17.5	52	0.0065	470	100/C
	16	7	5.00	1.0	0.6	1.4	15.5	20.0	70	0.0052	650	500/D
	25	7	6.3	1.2	0.8	1.4	18.5	24.0	88	0.0050	980	500/D
	35	7	7.55	1.2	1.0	1.6	21.0	27.5	110	0.0044	1310	500/D

C:Packing in coil.

D:Packing in drum.



300/500 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE

CONDUCTOR

INSULATED

INNER SHEATH

OUTER SHEATH



1. CONDUCTOR : Solid and Standard annealed copper
Size 1.5 mm² up to 35 mm²

CLASSIFICATION :

Maximum conductor temperature 70°C

Circuit voltage not exceeding 500 volt

2. INSULATION : Polyvinyl chloride (PVC)
Brown , Black , Grey

TESTING VOLTAGE :

2,000 VAC

3. INNER SHEATH : Polyvinyl chloride (Black colour)

REFERENCE STANDARD :

TIS.11 PART 4-2553

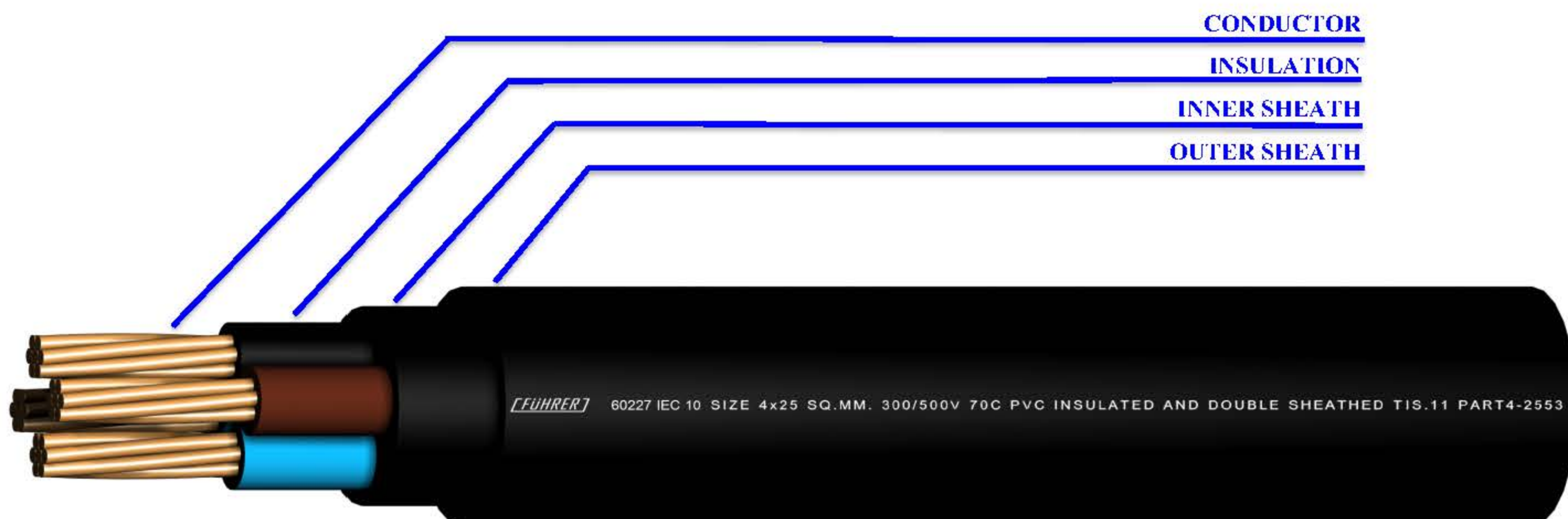
4. OUTER SHEATH : Polyvinyl chloride (Black colour)

No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)				Lower Limit	Upper Limit				
	2.5	1	1.75	0.8	0.4	1.2	9.2	12.0	22	0.010	190	100/C
	4	1	2.21	0.8	0.4	1.2	10.0	13.0	30	0.0085	250	100/C
	6	7	3.09	0.8	0.4	1.4	12.0	15.5	37	0.0065	370	100/C
	10	7	4.00	1.0	0.6	1.4	14.5	19.0	52	0.0065	590	500/D
	16	7	5.00	1.0	0.8	1.4	16.5	21.5	70	0.0052	840	500/D
	25	7	6.3	1.2	0.8	1.6	20.5	26.0	88	0.0050	1270	500/D
	35	7	7.55	1.2	1.0	1.6	22.0	29.0	110	0.0044	1680	500/D

C:Packing in coil.

D:Packing in drum.





CONDUCTOR : Solid and Standard annealed copper
Size 1.5 mm² up to 35 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

INSULATION : Polyvinyl chloride (PVC)
Light blue , Brown , Black , Grey

TESTING VOLTAGE : 2,000 VAC

INNER SHEATH : Polyvinyl chloride (Black colour)

REFERENCE STANDARD : TIS.11 PART 4-2553

OUTER SHEATH : Polyvinyl chloride (Black colour)

No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)				Lower Limit	Upper Limit				
	2.5	1	1.75	0.8	0.4	1.2	10.0	13.0	22	0.010	240	100/C
	4	1	2.21	0.8	0.4	1.4	11.5	14.5	30	0.0085	330	100/C
	6	7	3.09	0.8	0.6	1.4	13.0	17.0	37	0.0065	480	100/C
	10	7	4.00	1.0	0.6	1.4	16.0	20.5	52	0.0065	740	500/D
	16	7	5.00	1.0	0.8	1.4	18.0	23.5	70	0.0052	1060	500/D
	25	7	6.3	1.2	1.0	1.6	22.5	28.5	88	0.0050	1640	500/D
	35	7	7.55	1.2	1.0	1.6	24.5	32.0	110	0.0044	2130	500/D

C:Packing in coil.

D:Packing in drum.





- 1. CONDUCTOR :** Solid and Standard annealed copper
Size 1.5 mm² up to 35 mm²
- 2. INSULATION :** Polyvinyl chloride (PVC)
Light blue , Brown , Green/Yellow
- 3. INNER SHEATH :** Polyvinyl chloride (Black colour)
- 4. OUTER SHEATH :** Polyvinyl chloride (Black colour)

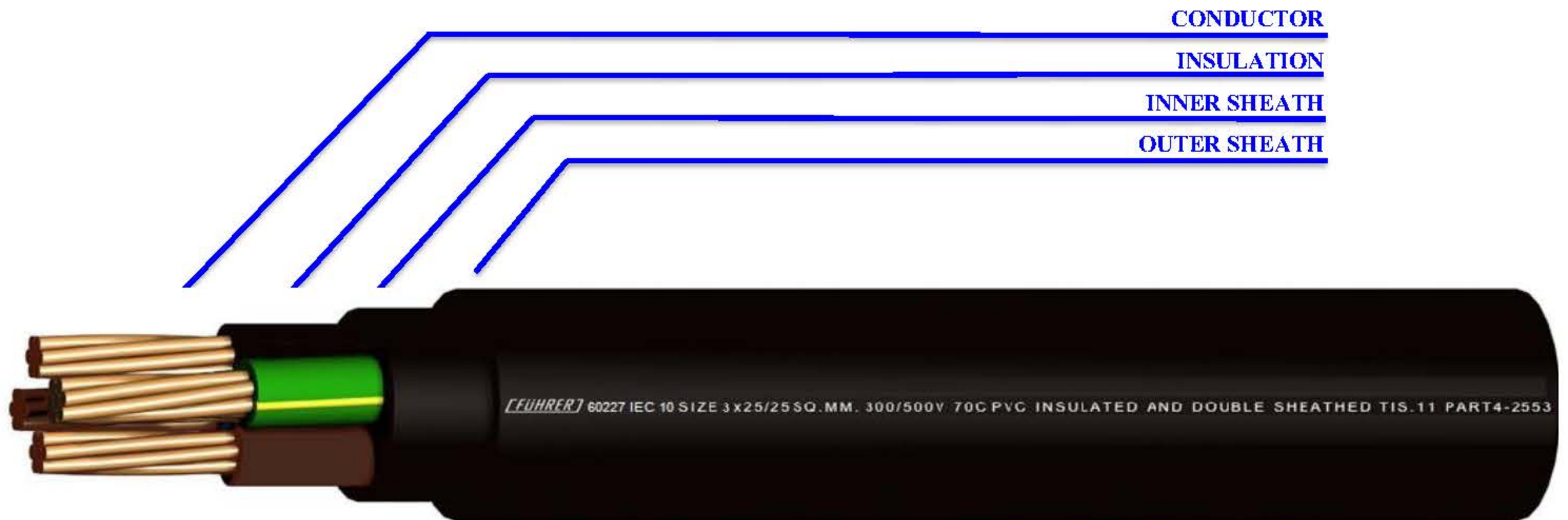
- CLASSIFICATION :** Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt
- TESTING VOLTAGE :** 2,000 VAC
- REFERENCE STANDARD :** TIS.11 PART 4-2553

No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)				Lower Limit	Upper Limit				
2/1	1.5	1	1.36	0.7	0.4	1.2	8.0	10.5	16	0.011	140	100/C
	2.5	1	1.75	0.8	0.4	1.2	9.2	12.0	22	0.010	190	100/C
	4	1	2.21	0.8	0.4	1.2	10.0	13.0	30	0.0085	250	100/C
	6	7	3.09	0.8	0.4	1.4	12.0	15.5	37	0.0065	370	100/C
	10	7	4.00	1.0	0.6	1.4	14.5	19.0	52	0.0065	590	500/D
	16	7	5.00	1.0	0.8	1.4	16.5	21.5	70	0.0052	840	500/D
	25	7	6.3	1.2	0.8	1.6	20.5	26.0	88	0.0050	1270	500/D
	35	7	7.55	1.2	1.0	1.6	22.0	29.0	110	0.0044	1680	500/D

C:Packing in coil.

D:Packing in drum.





1. CONDUCTOR : Solid and Standard annealed copper
Size 1.5 mm² up to 35 mm²

2. INSULATION : Polyvinyl chloride (PVC)
Brown , Black , Grey , Green/Yellow

3. INNER SHEATH : Polyvinyl chloride (Black colour)

4. OUTER SHEATH : Polyvinyl chloride (Black colour)

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 4-2553

No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)				Lower Limit	Upper Limit				
	2.5	1	1.75	0.8	0.4	1.2	10.0	13.0	22	0.010	240	100/C
	4	1	2.21	0.8	0.4	1.4	11.5	14.5	30	0.0085	330	100/C
	6	7	3.09	0.8	0.6	1.4	13.0	17.0	37	0.0065	480	100/C
	10	7	4.00	1.0	0.6	1.4	16.0	20.5	52	0.0065	740	500/D
	16	7	5.00	1.0	0.8	1.4	18.0	23.5	70	0.0052	1060	500/D
	25	7	6.3	1.2	1.0	1.6	22.5	28.5	88	0.0050	1640	500/D
	35	7	7.55	1.2	1.0	1.6	24.5	32.0	110	0.0044	2130	500/D

C:Packing in coil.

D:Packing in drum.





1. **CONDUCTOR** : Solid and Standard annealed copper
Size 1.5 mm² up to 35 mm²
2. **INSULATION** : Polyvinyl chloride (PVC)
Light blue , Brown , Black , Grey , Green/Yellow
3. **INNER SHEATH** : Polyvinyl chloride (Black colour)
4. **OUTER SHEATH** : Polyvinyl chloride (Black colour)

- CLASSIFICATION** : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt
- TESTING VOLTAGE** : 2,000 VAC
- REFERENCE STANDARD** : TIS.11 PART 4-2553

No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)				Lower Limit	Upper Limit				
	2.5	1	1.75	0.8	0.4	1.2	11.0	14.0	22	0.010	290	100/C
	4	1	2.21	0.8	0.6	1.4	12.5	16.0	30	0.0085	420	100/C
	6	7	3.09	0.8	0.6	1.4	14.5	18.5	37	0.0065	600	100/C
	10	7	4.00	1.0	0.6	1.4	17.5	22.0	52	0.0065	920	500/D
	16	7	5.00	1.0	0.8	1.6	20.5	26.0	70	0.0052	1350	500/D
	25	7	6.3	1.2	1.0	1.6	24.5	31.5	88	0.0050	2050	500/D
	35	7	7.55	1.2	1.2	1.6	27.0	35.0	110	0.0044	2710	500/D

C:Packing in coil.

D:Packing in drum.

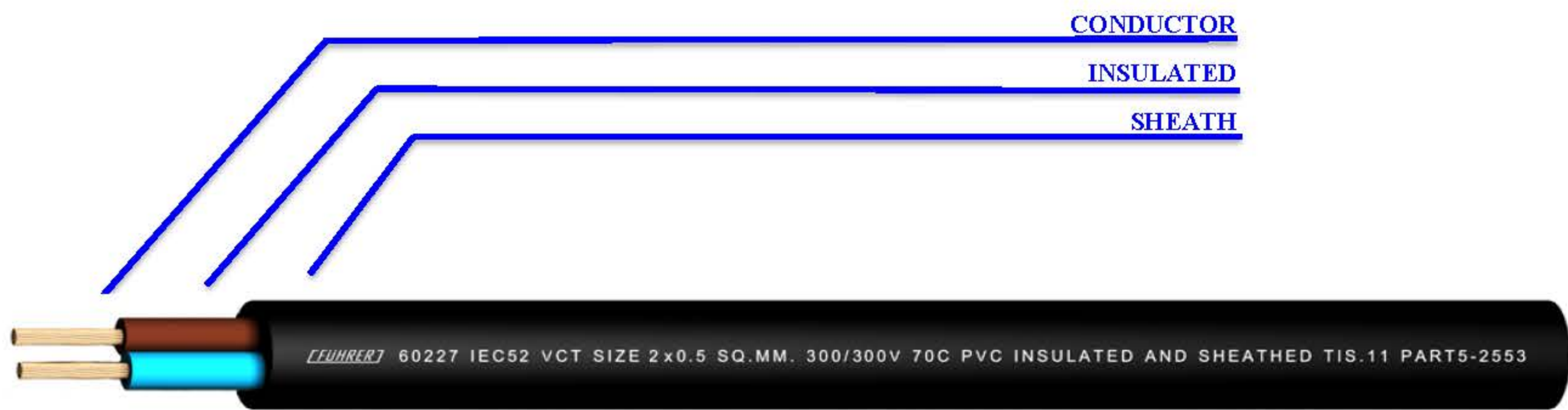


COPPER CONDUCTOR CABLES

Building Wires and Cables

TIS 11 PART 5-2553 : FLEXIBLE CABLES (CORDS)

	PAGE
60227 IEC 52 VCT/VCT-G 300/300 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE (TIS 11 PART 5-2553, TABLE 7)	14
60227 IEC 52 VKF 300/300 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, FLAT TYPE (TIS 11 PART 5-2553, TABLE 7)	16
60227 IEC 53 VCT/VCT-G 300/500 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE (TIS 11 PART 5-2553, TABLE 9)	17
60227 IEC 53 VKF 300/500 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, FLAT TYPE (TIS 11 PART 5-2553, TABLE 9)	19



CONDUCTOR : Flexible stranded annealed copper wire
Size 0.5 , 0.75 mm²

INSULATION : Polyvinyl chloride (PVC)
Light Blue, Brown

Sheath : Polyvinyl chloride (PVC)
Black colour

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 300 volt

TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 5-2553

Nominal Cross Sectional area (mm ²)	No. of core	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) (Kg/Km)	standard length (m)
		Diameter of wires (Max.) (mm)	Diameter (Approx.) (mm)			Lower Limit (mm)	Upper Limit (mm)				
0.5	2	0.21	0.7	0.5	0.6	4.6	5.9	3	0.012	41	100/C
0.75	2	0.21	0.9	0.5	0.6	4.9	6.3	6	0.010	50	100/C

C:Packing in coil.





300/300 V 70°C PVC INSULATED AND SHEATHED WITH GROUND



CONDUCTOR : Flexible stranded annealed copper wire
Size 0.5 , 0.75 mm²

INSULATION : Polyvinyl chloride (PVC)
Light Blue , Brown + Green/yellow

Sheath : Polyvinyl chloride (PVC) : Black colour

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 300 volt

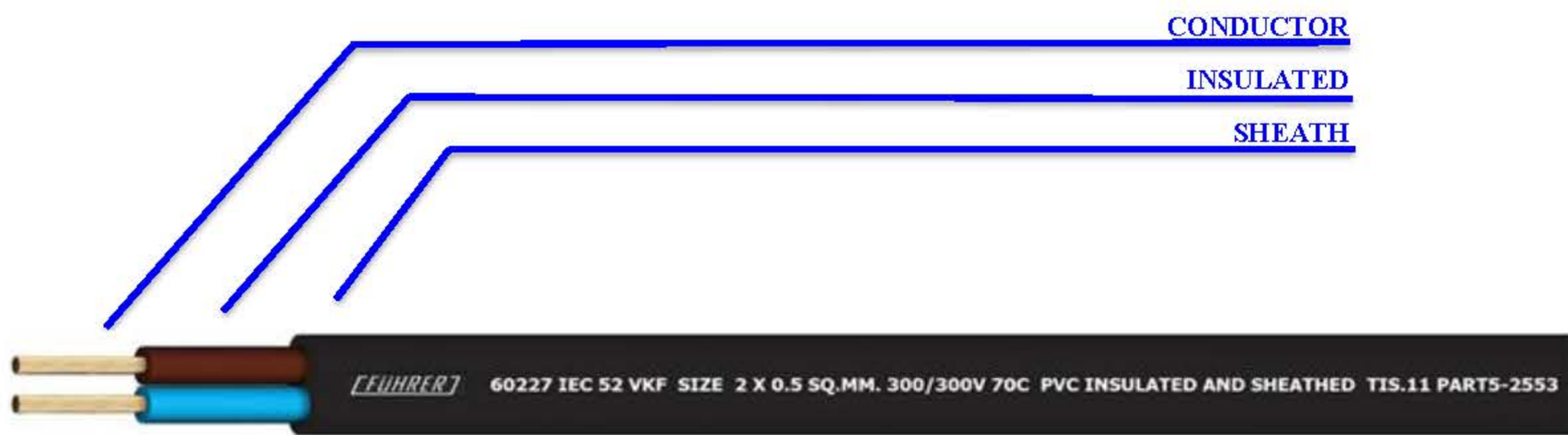
TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 5-2553

No. of core	Nominal Cross Sectional area (mm ²)		Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
			Diameter of wires (Max.)	Diameter (mm) (Approx.)			Lower Limit (mm)	Upper Limit (mm)				
	Phase	Ground										
2/1	0.5	0.5	0.21	1.13	0.5	0.6	4.9	6.3	3	0.012	48	100/C
2/1	0.75	0.75	0.21	1.31	0.5	0.6	5.2	6.7	6	0.010	60	100/C

C:Packing in coil.





CONDUCTOR : Flexible stranded annealed copper wire
Size 0.5 , 0.75 mm²

INSULATION : Polyvinyl chloride (PVC)
Light Blue, Brown

Sheath : Polyvinyl chloride (PVC)
Black colour

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 300 volt

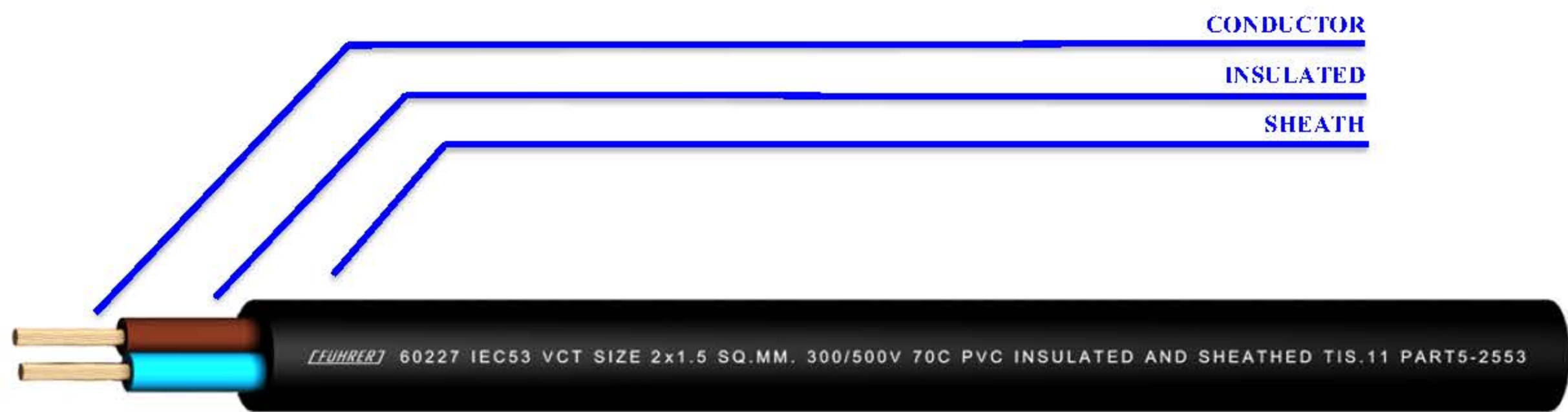
TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 5-2553

Nominal Cross Sectional area (mm ²)	No. of core	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) (Kg/Km)	standard length (m)
		Diameter of wires (Max.)	Diameter (mm) (Approx.)			Lower Limit (mm)	Upper Limit (mm)				
0.5	2	0.21	0.7	0.5	0.6	3.0 x 4.9	3.7 x 5.9	3	0.012	29	100/C
0.75	2	0.21	0.9	0.5	0.6	3.2 x 5.2	3.8 x 6.3	6	0.010	36	100/C

C:Packing in coil.

300/500 V 70°C PVC INSULATED AND SHEATHED



CONDUCTOR : Flexible stranded annealed copper wire
Size 0.75 mm² up to Size 2.5 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

INSULATION : Polyvinyl chloride (PVC)
2 cores Light Blue , Brown
3 cores Brown , Black , Grey
4 cores Light Blue ,Brown , Black , Grey

TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 5-2553

Sheath : Polyvinyl chloride (PVC) : Black colour

Nominal Cross Sectional area (mm ²)	No. of core	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) (Kg/Km)	standard length (m)
		Diameter of wires (Max.)	Diameter (mm) (Approx.)			Lower Limit (mm)	Upper Limit (mm)				
0.75	2	0.21	1.13	0.6	0.8	5.7	7.2	6	0.011	63	100/C
1	2	0.21	1.31	0.6	0.8	5.9	7.5	10	0.010	72	100/C
1.5	2	0.26	1.58	0.7	0.8	6.8	8.6	16	0.010	96	100/C
2.5	2	0.26	2.04	0.8	1.0	8.4	10.6	25	0.009	150	100/C

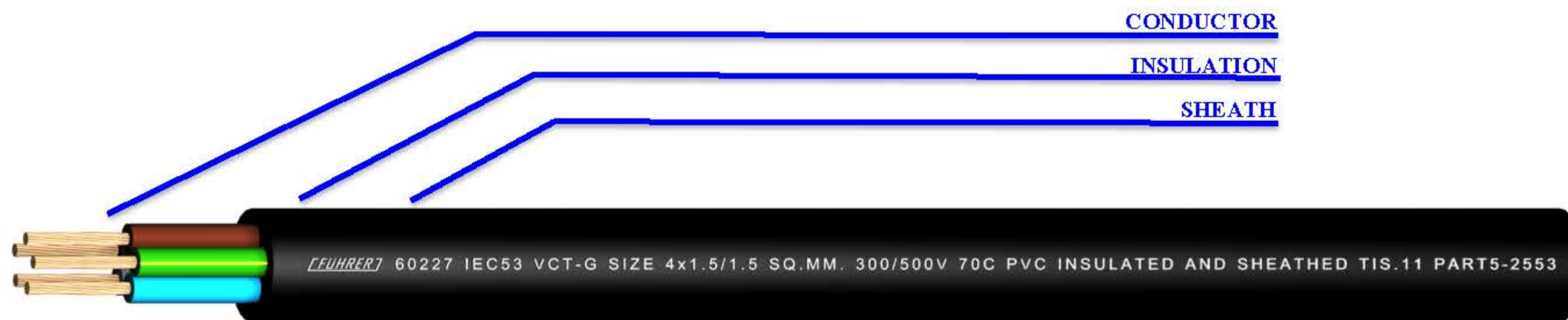
0.75	3	0.21	1.13	0.6	0.8	6.0	7.6	6	0.011	74	100/C
1	3	0.21	1.31	0.6	0.8	6.3	8.0	10	0.010	87	100/C
1.5	3	0.26	1.58	0.7	0.9	7.4	9.4	16	0.010	120	100/C
2.5	3	0.26	2.04	0.8	1.1	9.2	11.4	20	0.009	190	100/C

0.75	4	0.21	1.13	0.6	0.8	6.6	8.3	6	0.011	91	100/C
1	4	0.21	1.31	0.6	0.9	7.1	9.0	10	0.010	110	100/C
1.5	4	0.26	1.58	0.7	1.0	8.4	10.5	16	0.010	150	100/C
2.5	4	0.26	2.04	0.8	1.1	10.1	12.5	20	0.009	230	100/C

C:Packing in coil.



300/500 V 70°C PVC INSULATED AND SHEATHED WITH GROUND



CONDUCTOR : Flexible stranded annealed copper wire
Size 0.75 mm² up to Size 2.5 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

INSULATION : Polyvinyl chloride (PVC)
2 cores Light Blue , Brown and Green/Yellow
3 cores Brown , Black , Grey and Green/Yellow
4 cores Light Blue ,Brown , Black , Grey and Green/Yellow

TESTING VOLTAGE : 2,000 VAC

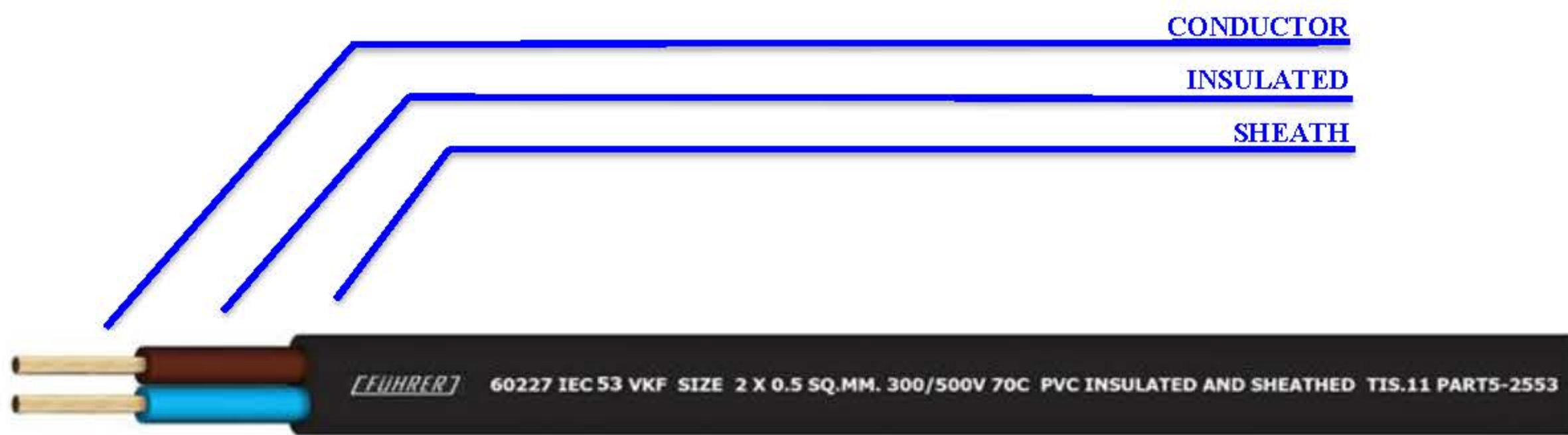
REFERENCE STANDARD : TIS.11 PART 5-2553

Sheath : Polyvinyl chloride (PVC) : Black colour

No. of core (Phase/GRD)	Nominal Cross Sectional area (mm ²)		Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) (Kg/Km)	standard length (m)
			Diameter of wires (Max.)	Diameter (Approx.)			Lower Limit (mm)	Upper Limit (mm)				
2/1	0.75	0.75	0.21	1.13	0.6	0.8	6.0	7.6	6	0.011	74	100/C
2/1	1	1	0.21	13.1	0.6	0.8	6.3	8.0	10	0.010	87	100/C
2/1	1.5	1.5	0.26	1.58	0.7	0.9	7.4	9.4	16	0.010	120	100/C
2/1	2.5	2.5	0.26	2.04	0.8	1.1	9.2	11.4	20	0.009	190	100/C
3/1	0.75	0.75	0.21	1.13	0.6	0.8	6.6	8.3	6	0.011	91	100/C
3/1	1	1	0.21	13.1	0.6	0.9	7.1	9.0	10	0.010	110	100/C
3/1	1.5	1.5	0.26	1.58	0.7	1.0	8.4	10.5	16	0.010	150	100/C
3/1	2.5	2.5	0.26	2.04	0.8	1.1	10.1	12.5	20	0.009	230	100/C
4/1	0.75	0.75	0.21	1.13	0.6	0.9	7.4	9.3	6	0.011	110	100/C
4/1	1	1	0.21	13.1	0.6	0.9	7.8	9.8	10	0.010	130	100/C
4/1	1.5	1.5	0.26	1.58	0.7	1.1	9.3	11.6	16	0.010	190	100/C
4/1	2.5	2.5	0.26	2.04	0.8	1.2	11.2	13.9	20	0.009	290	100/C

C: Packing in coil.





CONDUCTOR : Flexible stranded annealed copper wire
Size 0.75 , 1.0 mm²

INSULATION : Polyvinyl chloride (PVC)
Light Blue, Brown

Sheath : Polyvinyl chloride (PVC)
Black colour

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 5-2553

Nominal Cross Sectional area (mm ²)	No. of core	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter		Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) (Kg/Km)	standard length (m)
		Diameter of wires (Max.) (mm)	Diameter (Approx.) (mm)			Lower Limit (mm)	Upper Limit (mm)				
0.75	2	0.21	0.7	0.6	0.8	3.7 x 6.0	4.5 x 7.2	6	0.011	44	100/C
1.00	2	0.21	0.9	0.6	0.8	3.9 x 6.2	4.7 x 7.5	10	0.010	52	100/C

C:Packing in coil.

FUHRER

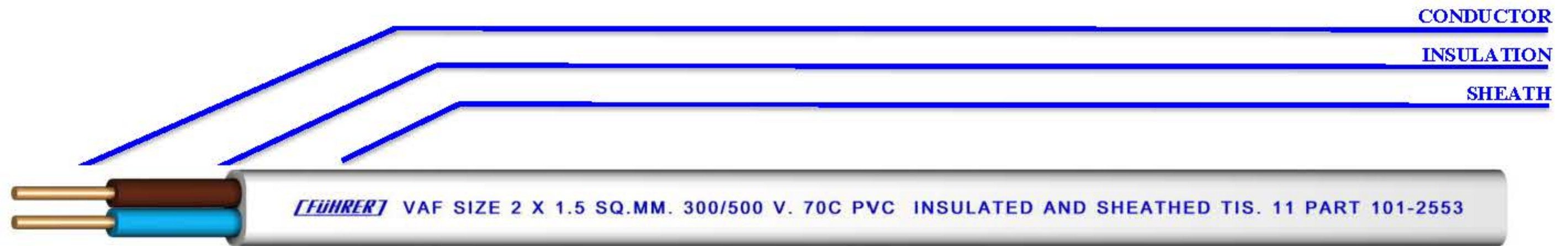
COPPER CONDUCTOR CABLES

Building Wires and Cables

TIS 11 Part 101-2553 : Sheathed Cables for General Purchases

		PAGE
VAF	300/500 V 70 °C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND SHEATHED, FLAT TYPE (TIS 11 PART 101-2553, TABLE 1)	21
VAF-G	300/500 V 70 °C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND SHEATHED, WITH GROUND FLAT TYPE (TIS 11 PART 101-2553, TABLE 1)	22
NYY	450/750 V 70 °C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED (TIS 11 PART 101-2553, TABLE 3 AND TABLE 4)	23
NYY-G	450/750 V 70 °C STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED WITH GROUND (TIS 11 PART 101-2553, TABLE 5)	27
VCT	450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE (TIS 11 PART 101-2553, TABLE 7)	30
VCT-G	450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED WITH GROUND, ROUND TYPE (TIS 11 PART 101-2553, TABLE 8)	33

300/500 V 70°C PVC INSULATED AND SHEATHED



CONDUCTOR : Solid and Standard annealed copper
Size 1.0 mm² up to 16 mm²

INSULATION : Polyvinyl chloride (PVC)
Light blue , Brown

SHEATH : Polyvinyl chloride (PVC)
White

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

TESTING VOLTAGE : 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 101-2553

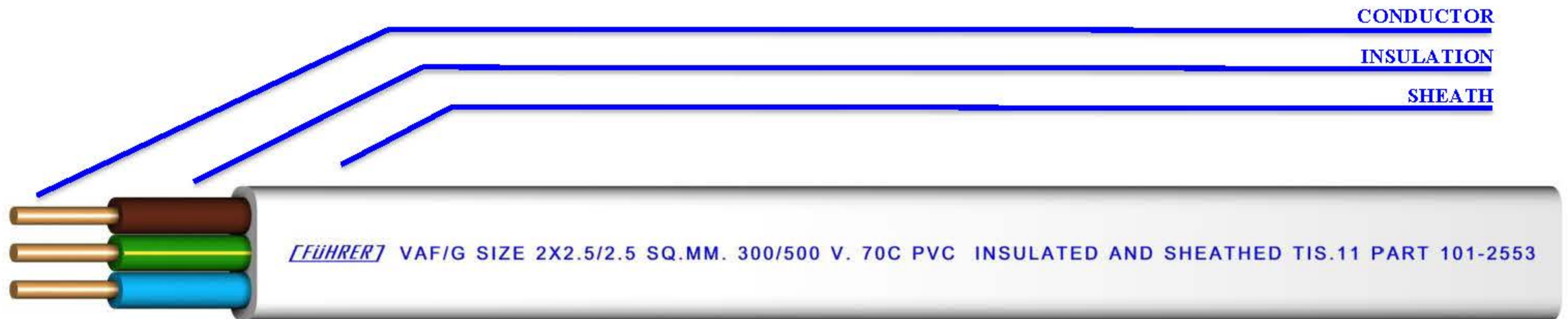
No of core	Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
		Number of wire (Min)	Diameter (mm) (Approx.)			Lower Limit	Upper Limit				
2	1	1	1.13	0.6	0.9	4.0 x 6.2	4.7 x 7.4	14	0.011	50	100/C
	1.5	1	1.38	0.7	0.9	4.4 x 7.0	5.4 x 8.4	17	0.011	67	100/C
	2.5	1	1.78	0.8	1.0	5.2 x 8.4	6.2 x 9.8	23	0.010	100	100/C
	4	7	2.55	0.8	1.1	5.6 x 9.6	7.2 x 11.5	32	0.0077	150	100/C
	6	7	3.12	0.8	1.1	6.4 x 10.5	8.0 x 13.0	41	0.0065	200	100/C
	10	7	4.08	1.0	1.2	7.8 x 13.0	9.6 x 16.0	56	0.0065	320	100/C
	16	7	5.13	1.0	1.3	9.0 x 15.5	11.0 x 18.5	74	0.0052	460	100/C

C:Packing in coil.

D:Packing in drum.



300/500 V 70°C PVC INSULATED AND SHEATHED



CONDUCTOR : Solid and Standard annealed copper
Size 1.0 mm² up to 16 mm²

INSULATION : Polyvinyl chloride (PVC)
Light blue , Brown , Green/Yellow

SHEATH : Polyvinyl chloride (PVC)
White

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 500 volt

TESTING VOLTAGE 2,000 VAC

REFERENCE STANDARD : TIS.11 PART 101-2553

No of core	Nominal Cross Sectional area (mm ²)		Conductor				Thickness of Insulation (mm)		Thickness of Sheath (mm)	Overall diameter (mm)		Maximum continuous current rating (A) on cable ladder	Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
			Number of wire (Min)		Diameter (mm) (Approx.)										
	Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground		Lower Limit	Upper Limit				
2/1	1	1	1	1	1.13	1.13	0.6	0.6	0.9	4.0 x 8.4	4.7 x 9.8	14	0.011	74	100/C
	1.5	1.5	1	1	1.38	1.38	0.7	0.7	0.9	4.4 x 9.8	5.4 x 11.5	17	0.01	100	100/C
	2.5	2.5	1	1	1.78	1.78	0.8	0.8	1.0	5.2 x 11.5	6.2 x 13.5	23	0.0092	150	100/C
	4	4	7	7	2.55	2.55	0.8	0.8	1.1	5.8 x 13.4	7.4 x 16.5	32	0.0078	230	100/C
	6	6	7	7	3.12	3.12	0.8	0.8	1.1	6.4 x 15.0	8.0 x 18.0	41	0.0066	300	100/C
	10	10	7	7	4.08	4.08	1.0	1.0	1.2	7.8 x 19.0	9.6 x 22.5	56	0.0065	490	100/C
	16	16	7	7	5.13	5.13	1.0	1.0	1.3	9.0 x 22.0	11.0 x 26.5	74	0.0053	710	100/C

C:Packing in coil.

D:Packing in drum.



450/750 V 70°C PVC INSULATED AND SHEATHED ROUND TYPE



CONDUCTOR :	Solid and Standard annealed copper Size 1.0 mm ² up to 500 mm ²	CLASSIFICATION :	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volt
INSULATION :	Polyvinyl chloride (Black colour)	TESTING VOLTAGE :	2,500 VAC
SHEATH :	Polyvinyl chloride (Black colour)	REFERENCE STANDARD :	TIS.11 PART 101-2553

Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Sheath (mm)	Overall diameter (mm) (Approx.)	Maximum continuous current rating in free air (A)		Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
	Number of wire (Min)	Diameter (mm) (Approx.)				Free air	Under ground			
1	1	1.15	1.5	1.8	8.6	-	21	0.0207	80	100/C
1	7	1.29	1.5	1.8	8.8	-	21	0.0200	80	100/C
1.5	1	1.38	1.5	1.8	9.0	-	26	0.0184	85	100/C
1.5	7	1.59	1.5	1.8	9.2	-	26	0.0175	90	100/C
2.5	1	1.78	1.5	1.8	9.4	-	35	0.0157	100	100/C
2.5	7	2.01	1.5	1.8	9.8	-	35	0.0146	110	100/C
4	1	2.25	1.5	1.8	10.0	-	45	0.0135	120	100/C
4	7	2.55	1.5	1.8	10.5	-	45	0.0124	130	100/C
6	7	3.12	1.5	1.8	11.0	-	57	0.0107	160	100/C
10	7	4.05	1.5	1.8	12.0	-	76	0.0088	210	500/D
16	7	5.10	1.5	1.8	13.0	-	99	0.0074	280	500/D
25	7	6.42	1.5	1.8	14.5	127	128	0.0061	390	500/D
35	19	4.59	1.5	1.8	16.0	157	154	0.0053	490	500/D
50	19	8.90	1.5	1.8	17.0	191	181	0.0046	600	500/D
70	19	10.70	1.5	1.8	19.0	244	223	0.0039	850	500/D
95	19	12.60	1.7	1.8	21.5	297	267	0.0038	1100	500/D
120	37	14.21	1.7	1.8	23.0	345	304	0.0034	1400	500/D
150	37	15.75	1.9	2.0	26.0	397	342	0.0034	1700	500/D
185	37	17.64	2.1	2.0	28.0	453	386	0.0034	2100	500/D
240	61	20.25	2.3	2.2	31.5	535	448	0.0033	2700	500/D
300	61	22.68	2.5	2.2	35.0	617	507	0.0032	3400	500/D
400	61	25.65	2.7	2.2	38.5	741	577	0.0030	4300	500/D
500	61	25.65	3.1	2.4	43.0	854	654	0.0031	5400	500/D

C:Packing in coil.

D:Packing in drum.





CONDUCTOR : Solid and Standard annealed copper

Size 50 mm² up to 300 mm²

INSULATION : Polyvinyl chloride (PVC)

Light Blue , Brown

INNER SHEATH : Polyvinyl chloride (Black colour)

OUTER SHEATH : Polyvinyl chloride (Black colour)

CLASSIFICATION : Maximum conductor temperature 70°C

Circuit voltage not exceeding 750 volt

TESTING VOLTAGE : 2,500 VAC

REFERENCE STANDARD : TIS.11 PART 101-2553

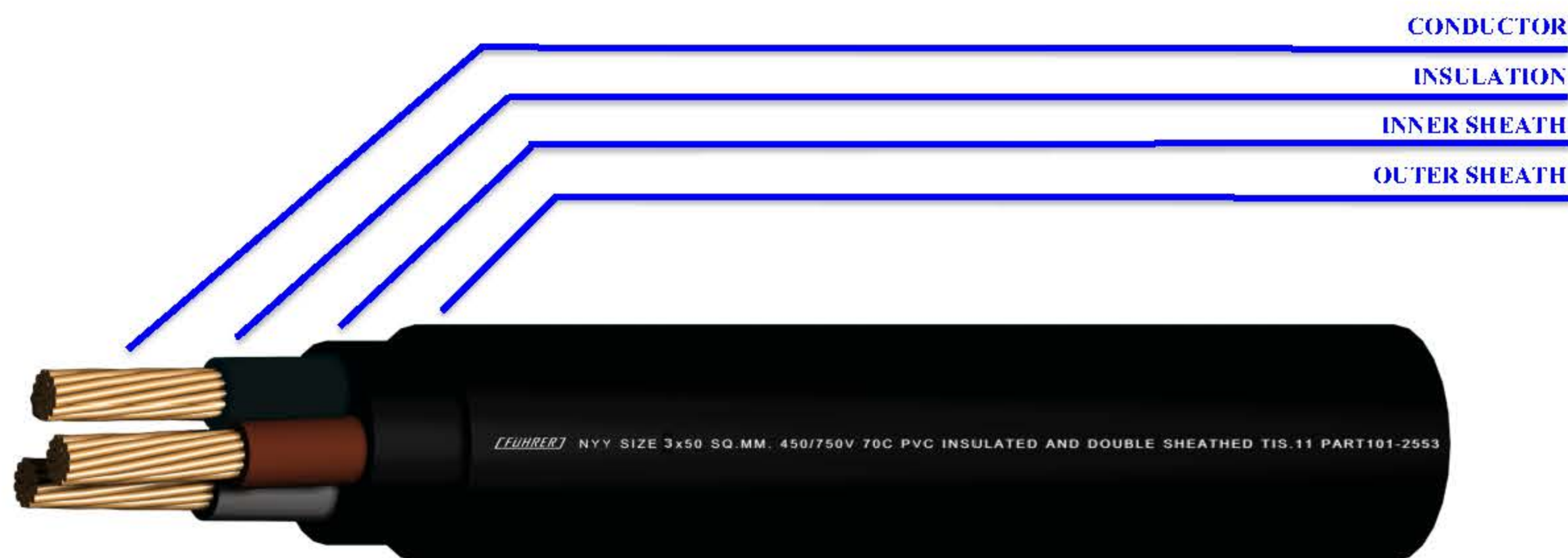
Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm) (Approx.)	Maximum continuous current rating (A)		Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
	Number of wire (Min)	Diameter (mm) (Approx.)									
							on cable ladder	Under ground			
50	19	8.75	1.5	1.2	2.2	33.5	133	133	0.0046	1850	500/D
70	19	10.5	1.5	1.5	2.2	38.0	171	171	0.0039	2500	500/D
95	19	12.35	1.7	1.5	2.2	42.5	207	207	0.0038	3300	500/D
120	37	13.93	1.7	1.5	2.4	46.5	240	240	0.0034	4010	500/D
150	37	15.47	1.9	1.8	2.6	52.0	278	278	0.0034	4970	300/D
185	37	17.29	2.1	1.8	2.8	57.0	317	317	0.0034	6110	300/D
240	37	19.89	2.3	2.0	3.0	64.0	374	374	0.0033	7900	300/D
300	61	22.23	2.5	2.0	3.2	70.5	432	432	0.0032	9690	200/D

C:Packing in coil.

D:Packing in drum.



450/750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE



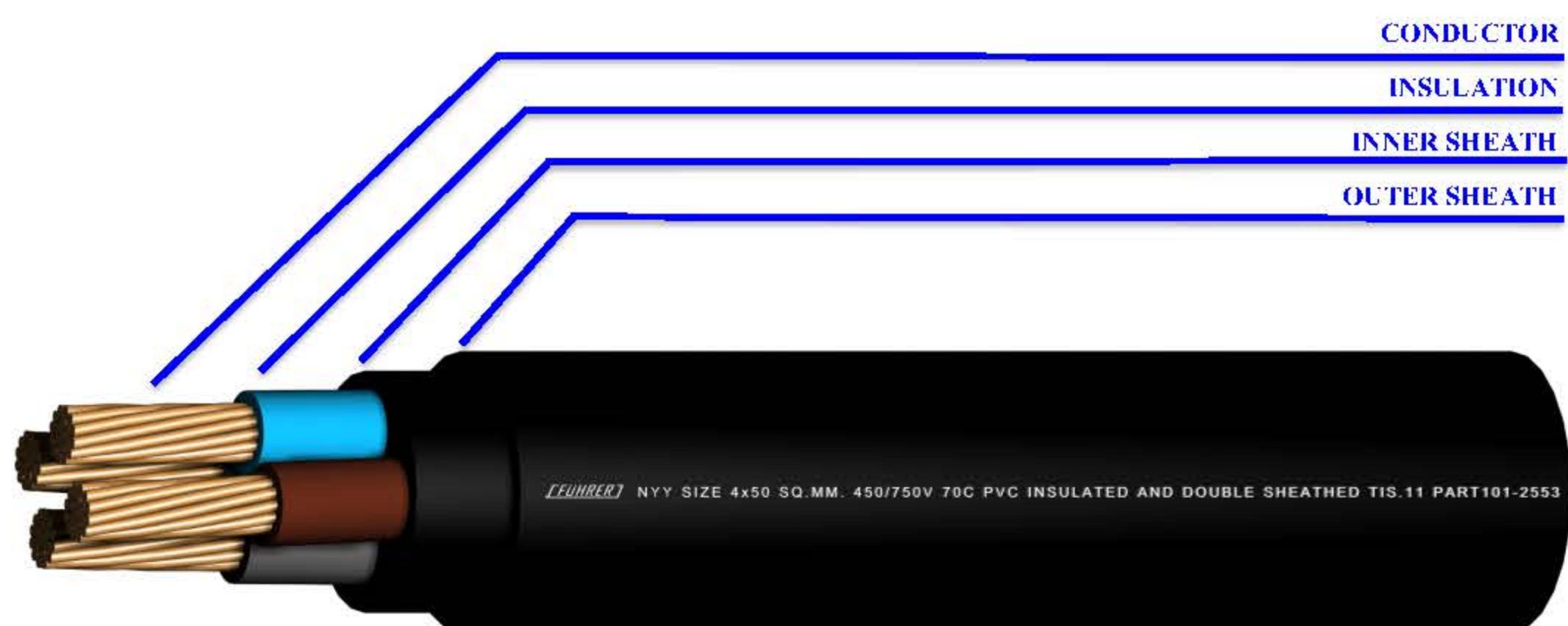
- | | | | |
|-----------------------|---|-----------------------------|--|
| CONDUCTOR : | Solid and Standard annealed copper
Size 50 mm ² up to 300 mm ² | CLASSIFICATION : | Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt |
| INSULATION : | Polyvinyl chloride (PVC)
Brown , Black , Grey | TESTING VOLTAGE : | 2,500 VAC |
| INNER SHEATH : | Polyvinyl chloride (Black colour) | REFERENCE STANDARD : | TIS.11 PART 101-2553 |
| OUTER SHEATH : | Polyvinyl chloride (Black colour) | | |

Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm) (Approx.)	Maximum continuous current rating (A)		Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
	Number of wire (Min)	Diameter (mm) (Approx.)									
							on cable ladder	Under ground			
50	19	8.75	1.5	1.5	2.2	36.0	133	181	0.0046	2410	500/D
70	19	10.5	1.5	1.5	2.2	40.5	171	223	0.0039	3200	500/D
95	19	12.35	1.7	1.5	2.4	46.0	207	267	0.0038	4300	500/D
120	37	13.93	1.7	1.8	2.6	50.5	240	3.04	0.0034	4320	300/D
150	37	15.47	1.9	1.8	2.8	56.0	278	342	0.0034	6490	300/D
185	37	17.29	2.1	2.0	3.0	61.5	317	386	0.0034	8060	300/D
240	37	19.89	2.3	2.0	3.2	69.0	374	448	0.0033	10360	200/D
300	61	22.23	2.5	2.2	3.4	76.0	432	507	0.0032	12810	200/D

C:Packing in coil.
D:Packing in drum.



450/750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE



CONDUCTOR : Solid and Standard annealed copper

Size 50 mm² up to 300 mm²

INSULATION : Polyvinyl chloride (PVC)

Light Blue , Brown , Black , Grey

INNER SHEATH : Polyvinyl chloride (Black colour)

OUTER SHEATH : Polyvinyl chloride (Black colour)

CLASSIFICATION : Maximum conductor temperature 70°C

Circuit voltage not exceeding 750 volt

TESTING VOLTAGE : 2,500 V. AC.

REFERENCE STANDARD : TIS.11 PART 101-2553

Nominal Cross Sectional area (mm ²)	Conductor		Thickness of Insulation (mm)	Thickness of Inner Sheath (mm)	Thickness of Outer Sheath (mm)	Overall diameter (mm) (Approx.)	Maximum continuous current rating (A)		Minimum insulation resistance at 70°C (MΩ-Km)	Cable weight (approx.) Kg/Km	Standard length (m)
	Number of wire (Min)	Diameter (mm) (Approx.)									
							on cable ladder	Under ground			
50	19	8.75	1.5	1.5	2.2	39.5	133	181	0.0046	3020	500/D
70	19	10.5	1.5	1.5	2.4	44.5	171	223	0.0039	4090	500/D
95	19	12.35	1.7	1.5	2.6	51.5	207	267	0.0038	5580	300/D
120	37	13.93	1.7	1.8	2.8	56.0	240	3.04	0.0034	6800	300/D
150	37	15.47	1.9	1.8	3	62.0	278	342	0.0034	8360	300/D
185	37	17.29	2.1	2.0	3.2	68.0	317	386	0.0034	10310	200/D
240	37	19.89	2.3	2.0	3.4	76.5	374	448	0.0033	13350	200/D
300	61	22.23	2.5	2.2	3.8	85.0	432	507	0.0032	16500	200/D

C:Packing in coil.

D:Packing in drum.



450/750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE WITH GROUND



CONDUCTOR : Solid and Standard annealed copper
Size 25 mm² up to 300 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt

INSULATION : Polyvinyl chloride (PVC)
Phase - Light blue , Brown
Ground - Green/Yellow

TESTING VOLTAGE : 2,500 VAC

REFERENCE STANDARD : TIS.11 PART 101-2553

INNER SHEATH : Polyvinyl chloride (Black colour)

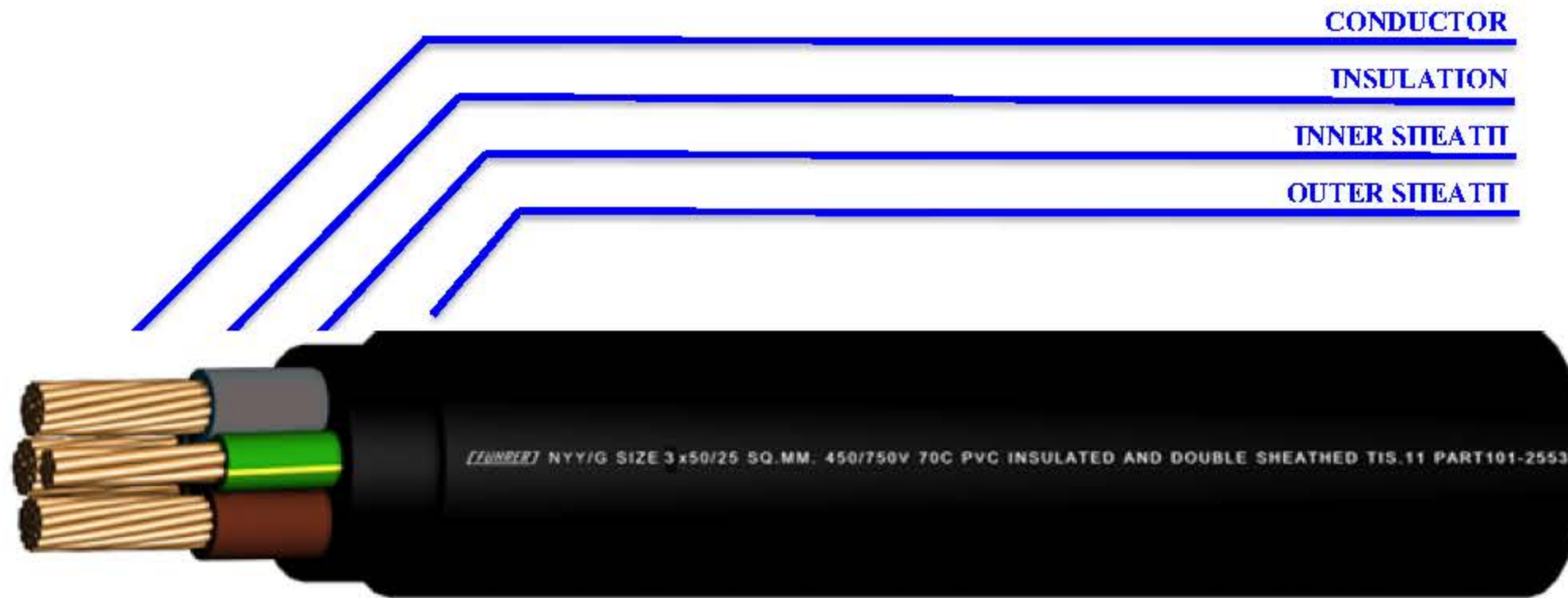
OUTER SHEATH : Polyvinyl chloride (Black colour)

Nominal Cross Sectional area (mm ²)		Conductor				thickness of Insulation (mm)		thickness of Inner Sheath (mm)	thickness of Outer Sheath (mm)	Overall Diameter	Maximum continuous current rating (A)		Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
		No. of wire of wires (Min.)		Diameter (mm) (Approx.)							on cable ladder	under ground			
Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground								
25	16	7	7	6.30	5.01	1.3	1.1	1.2	2.0	28.0	88	128	0.0054	1280	500/D
35	16	7	7	7.55	5.01	1.3	1.1	1.2	2.0	30.0	110	154	0.0047	1550	500/D
50	25	19	7	8.75	6.30	1.5	1.3	1.2	2.2	34.0	133	181	0.0046	2080	500/D
70	35	19	7	10.5	7.55	1.5	1.3	1.5	2.2	28.5	171	223	0.0039	2810	500/D
95	50	19	19	12.35	8.75	1.7	1.5	1.5	2.2	43.5	207	267	0.0038	3710	500/D
120	70	37	19	13.93	10.50	1.7	1.5	1.5	2.4	47.5	240	304	0.0034	4620	300/D
150	95	37	19	15.47	12.35	1.9	1.7	1.8	2.6	53.0	278	342	0.0034	5840	300/D
185	95	37	19	17.29	12.35	2.1	1.7	1.8	2.8	57.5	317	386	0.0034	6910	300/D
240	120	37	37	19.89	13.93	2.3	1.7	2.0	3.0	64.5	374	448	0.0033	8860	200/D
300	150	61	37	22.23	15.47	2.5	1.9	2.0	3.2	71.0	432	507	0.0032	10880	200/D

C:Packing in coil.

D:Packing in drum.





CONDUCTOR : Solid and Standard annealed copper
Size 25 mm² up to 300 mm²

CLASSIFICATION : Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt

INSULATION : Polyvinyl chloride (PVC)
Phase - Brown , Black , Grey
Ground - Green/Yellow

TESTING VOLTAGE : 2,500 VAC

REFERENCE STANDARD : TIS.11 PART 101-2553

INNER SHEATH : Polyvinyl chloride (Black colour)

OUTER SHEATH : Polyvinyl chloride (Black colour)

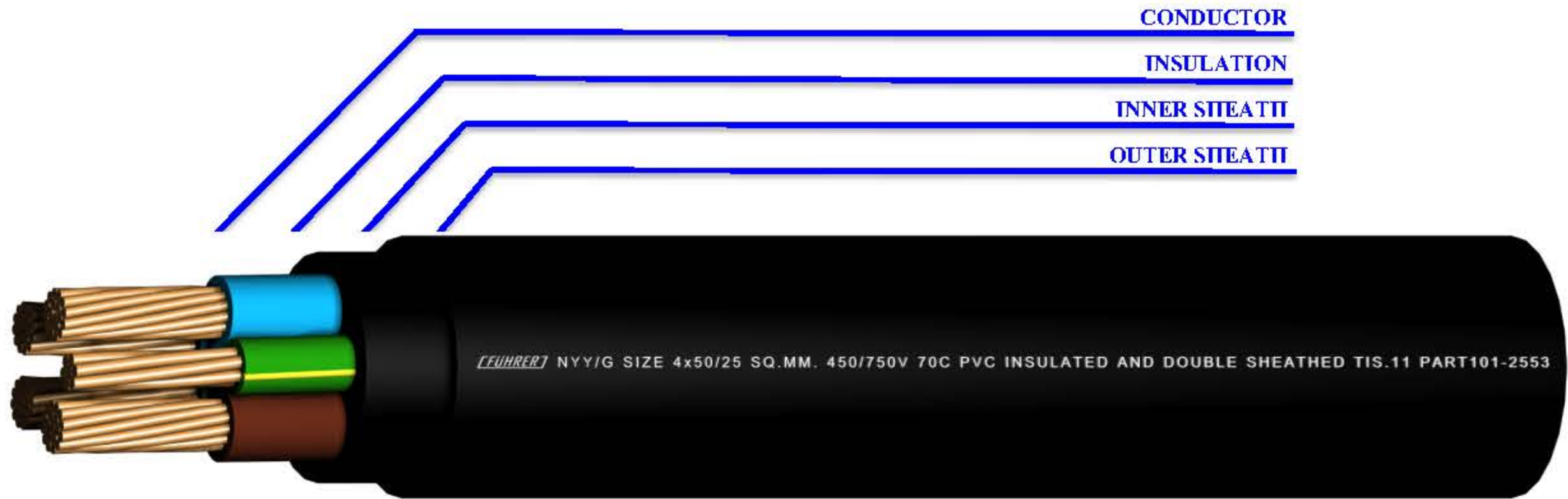
Nominal Cross Sectional area (mm ²)		Conductor				thickness of Insulation (mm)		thickness of Inner Sheath (mm)	thickness of Outer Sheath (mm)	Overall Diameter	Maximum continuous current rating (A)		Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
		No. of wire of wires (Min.)		Diameter (mm) (Approx.)							on cable ladder	under ground			
Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground								
25	16	7	7	6.30	5.01	1.3	1.1	1.2	2.0	30.5	88	128	0.0054	1620	500/D
35	16	7	7	7.55	5.01	1.3	1.1	1.2	2.0	33.0	110	154	0.0047	1990	500/D
50	25	19	7	8.75	6.30	1.5	1.3	1.5	2.2	38.5	133	181	0.0046	2730	500/D
70	35	19	7	10.5	7.55	1.5	1.3	1.5	2.2	42.5	171	223	0.0039	3630	500/D
95	50	19	19	12.35	8.75	1.7	1.5	1.5	2.4	48.5	207	267	0.0038	4870	500/D
120	70	37	19	13.93	10.50	1.7	1.5	1.8	2.6	53.5	240	304	0.0034	6120	300/D
150	95	37	19	15.47	12.35	1.9	1.7	1.8	2.8	59.0	278	342	0.0034	7610	300/D
185	95	37	19	17.29	12.35	2.1	1.7	2.0	3.0	64.5	317	386	0.0034	9130	300/D
240	120	37	37	19.89	13.93	2.3	1.7	2.0	3.2	72.0	374	448	0.0033	11660	200/D
300	150	61	37	22.23	15.47	2.5	1.9	2.2	3.4	79.5	432	507	0.0032	14410	200/D

C:Packing in coil.

D:Packing in drum.



450/750 V 70°C PVC INSULATED AND DOUBLE SHEATHED ROUND TYPE WITH GROUND



- | | | | |
|-----------------------|--|-----------------------------|--|
| CONDUCTOR : | Solid and Standard annealed copper
Size 25 mm ² up to 300 mm ² | CLASSIFICATION : | Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt |
| INSULATION : | Polyvinyl chloride (PVC)
Phase - Light blue , Brown , Black , Grey
Ground - Green/Yellow | TESTING VOLTAGE : | 2,500 VAC |
| INNER SHEATH : | Polyvinyl chloride (Black colour) | REFERENCE STANDARD : | TIS.11 PART 101-2553 |
| OUTER SHEATH : | Polyvinyl chloride (Black colour) | | |

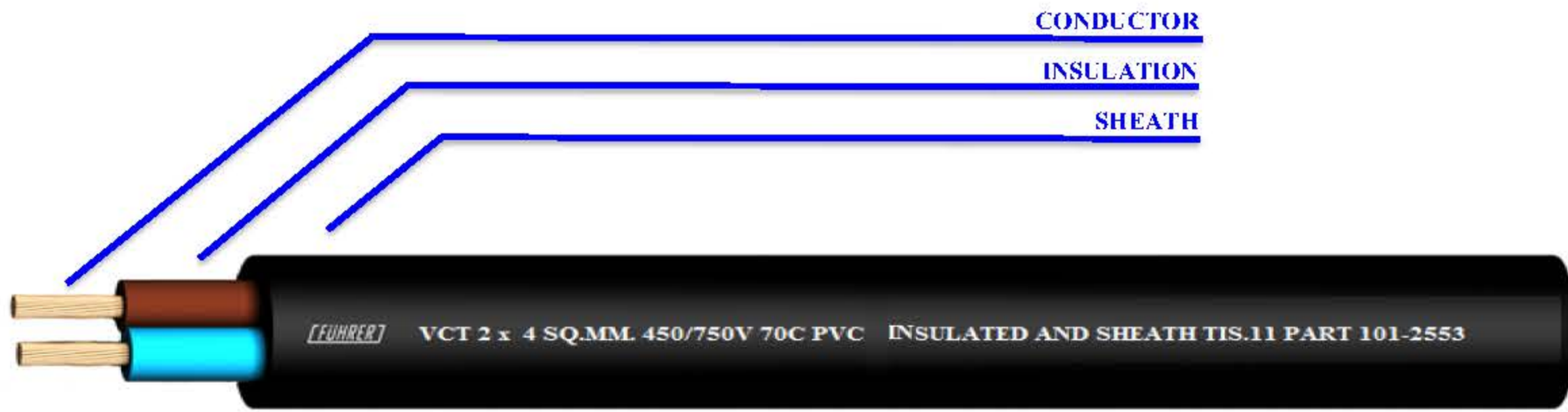
Nominal Cross Sectional area (mm ²)		Conductor				thickness of Insulation (mm)		thickness of Inner Sheath (mm)	thickness of Outer Sheath (mm)	Overall Diameter	Maximum continuous current rating (A)		Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
		No. of wire of wires (Min.)		Diameter (mm) (Approx.)							on cable ladder	under ground			
Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground								
25	16	7	7	6.30	5.01	1.3	1.1	1.2	2.0	34.0	88	128	0.0054	1990	500/D
35	16	7	7	7.55	5.01	1.3	1.1	1.5	2.2	29.0	110	154	0.0047	2570	500/D
50	25	19	7	8.75	6.30	1.5	1.3	1.5	2.2	43.5	133	181	0.0046	3390	500/D
70	35	19	7	10.5	7.55	1.5	1.3	1.5	2.4	49.0	171	223	0.0039	4570	500/D
95	50	19	19	12.35	8.75	1.7	1.5	1.8	2.6	56.5	207	267	0.0038	6230	300/D
120	70	37	19	13.93	10.50	1.7	1.5	1.8	2.8	61.5	240	304	0.0034	7700	300/D
150	95	37	19	15.47	12.35	1.9	1.7	2.0	3.0	68.0	278	342	0.0034	9610	300/D
185	95	37	19	17.29	12.35	2.1	1.7	2.0	3.2	75.0	317	386	0.0034	11530	200/D
240	120	37	37	19.89	13.93	2.3	1.7	2.2	3.4	84.5	374	448	0.0033	14840	200/D
300	150	61	37	22.23	15.47	2.5	1.9	2.2	3.8	93.5	432	507	0.0032	18340	150/D

C:Packing in coil.
D:Packing in drum.





450/750 V 70°C PVC INSULATED AND SHEATHED



CONDUCTOR : Flexible stranded annealed copper wire
Size 4 mm² up to Size 35 mm²

CLASSIFICATION: Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt

INSULATION : Polyvinyl chloride (PVC)
Light Blue , Brown

TESTING VOLTAGE: 2,500 VAC

SHEATH : Polyvinyl chloride (PVC)
Black colour

REFERENCE STANDARD: TIS. 11 PART 101-2553

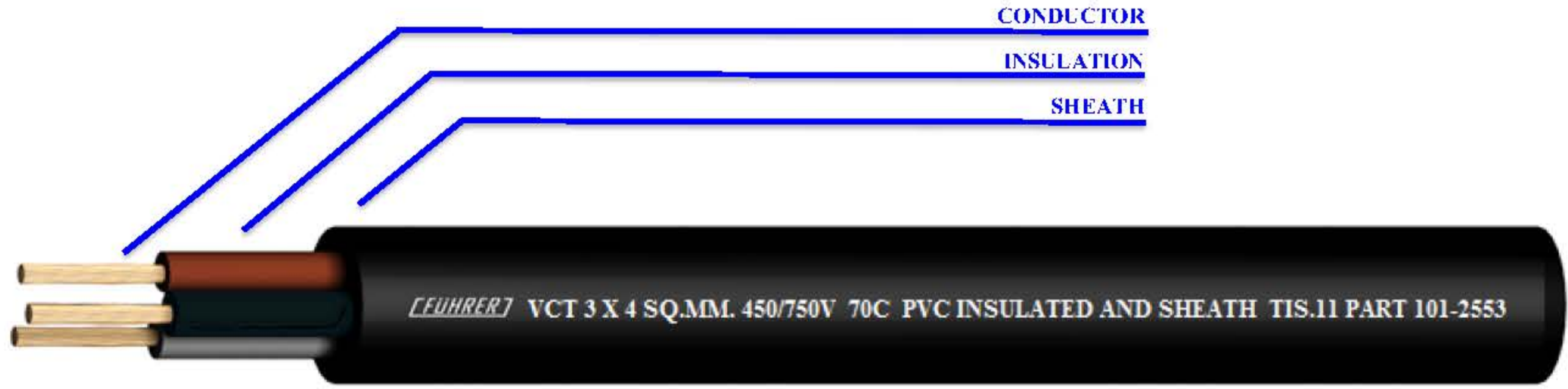
Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter	Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Diameter of wires (Max.)	Diameter (mm) (Approx.)							
4	0.31	2.59	0.9	1.6	14.5	30	0.0084	250	100/C
6	0.31	3.60	0.9	1.6	16.0	39	0.0071	340	100/C
10	0.41	4.79	1.1	1.8	20.0	51	0.0068	540	500/D
16	0.41	5.88	1.1	2.2	23.0	73	0.0050	770	500/D
25	0.41	7.32	1.3	2.4	27.5	97	0.0048	1130	500/D
35	0.41	8.61	1.3	2.6	31.0	140	0.0041	1470	500/D

C:Packing in coil.





450/750 V 70°C PVC INSULATED AND SHEATHED



CONDUCTOR : Flexible stranded annealed copper wire
Size 4 mm² up to Size 35 mm²

CLASSIFICATION: Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt

INSULATION : Polyvinyl chloride (PVC)
Brown , Black , Grey

TESTING VOLTAGE: 2,500 VAC

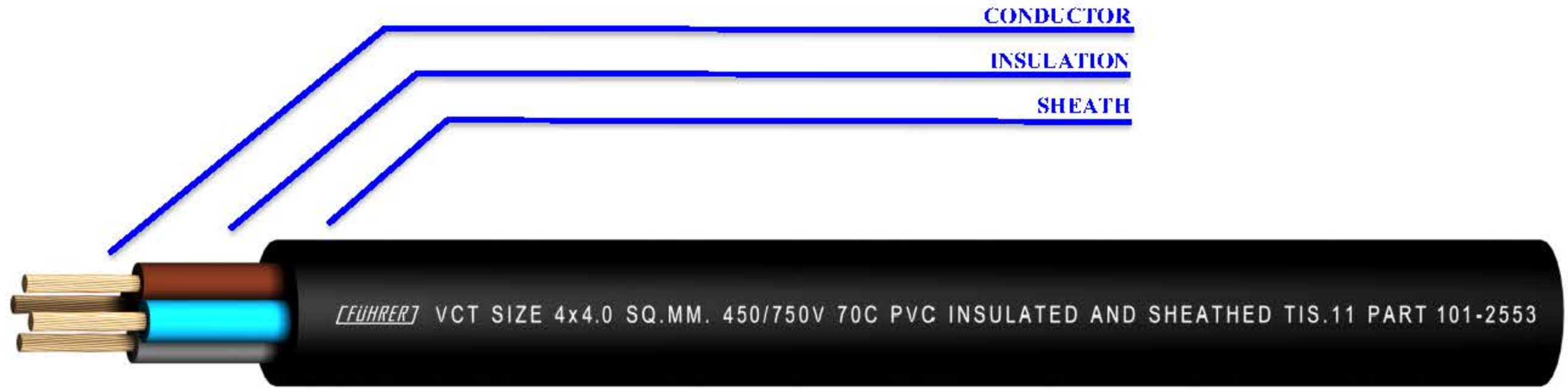
SHEATH : Polyvinyl chloride (PVC)
Black colour

REFERENCE STANDARD: TIS. 11 PART 101-2553

Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter	Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Diameter of wires (Max.)	Diameter (mm) (Approx.)							
4	0.31	2.59	0.9	1.6	15.5	26	0.0084	300	100/C
6	0.31	3.60	0.9	1.8	17.5	34	0.0071	420	100/C
10	0.41	4.79	1.1	2	21.5	43	0.0068	670	500/D
16	0.41	5.88	1.1	2.4	25.0	63	0.0050	960	500/D
25	0.41	7.32	1.3	2.6	30.0	83	0.0048	1420	500/D
35	0.41	8.61	1.3	2.8	33.5	102	0.0041	1850	500/D

C:Packing in coil.





CONDUCTOR : Flexible stranded annealed copper wire
Size 4 mm² up to Size 35 mm²

INSULATION : Polyvinyl chloride (PVC)
Light Blue , Brown , Black , Grey

SHEATH : Polyvinyl chloride (PVC)
Black colour

CLASSIFICATION: Maximum conductor temperature 70°C
Circuit voltage not exceeding 750 volt

TESTING VOLTAGE: 2,500 VAC

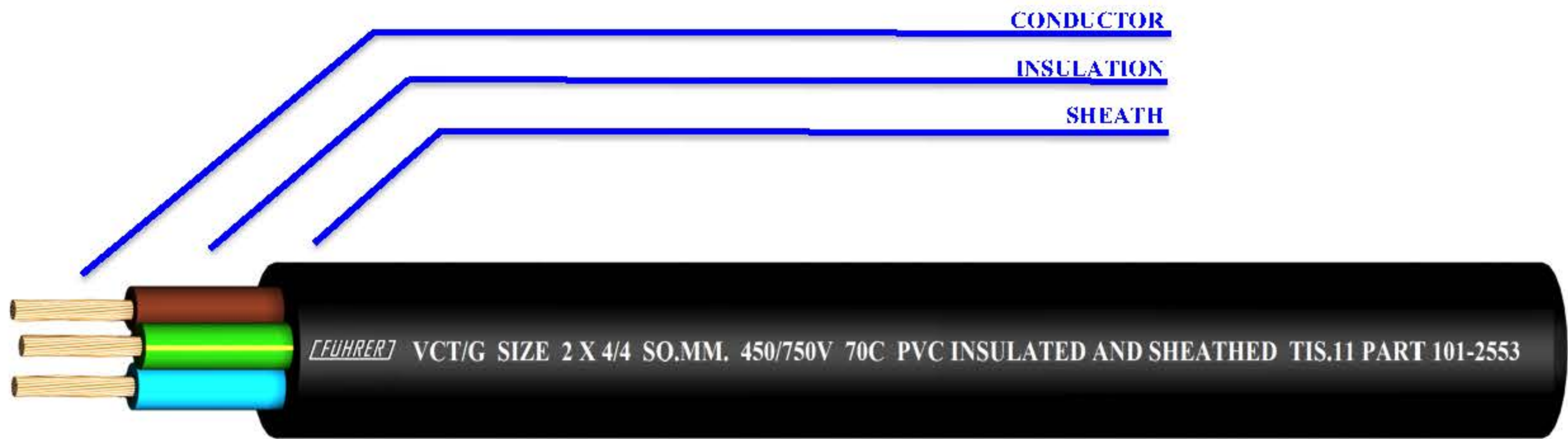
REFERENCE STANDARD: TIS. 11 PART 101-2553

Nominal Cross Sectional area (mm ²)	Conductor		thickness of Insulation (mm)	thickness of Sheath (mm)	Overall Diameter	Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
	Diameter of wires (Max.)	Diameter (mm) (Approx.)							
4	0.31	2.59	0.9	1.8	17.0	26	0.0084	380	100/C
6	0.31	3.60	0.9	2.0	19.5	34	0.0071	540	100/C
10	0.41	4.79	1.1	2.2	24.0	47	0.0068	860	500/D
16	0.41	5.88	1.1	2.6	28.0	63	0.0050	1220	500/D
25	0.41	7.32	1.3	2.8	33.0	83	0.0048	1800	500/D
35	0.41	8.61	1.3	3.1	37.0	102	0.0041	2380	500/D

C:Packing in coil.



450/750 V 70°C PVC INSULATED AND SHEATHED WITH GROUND



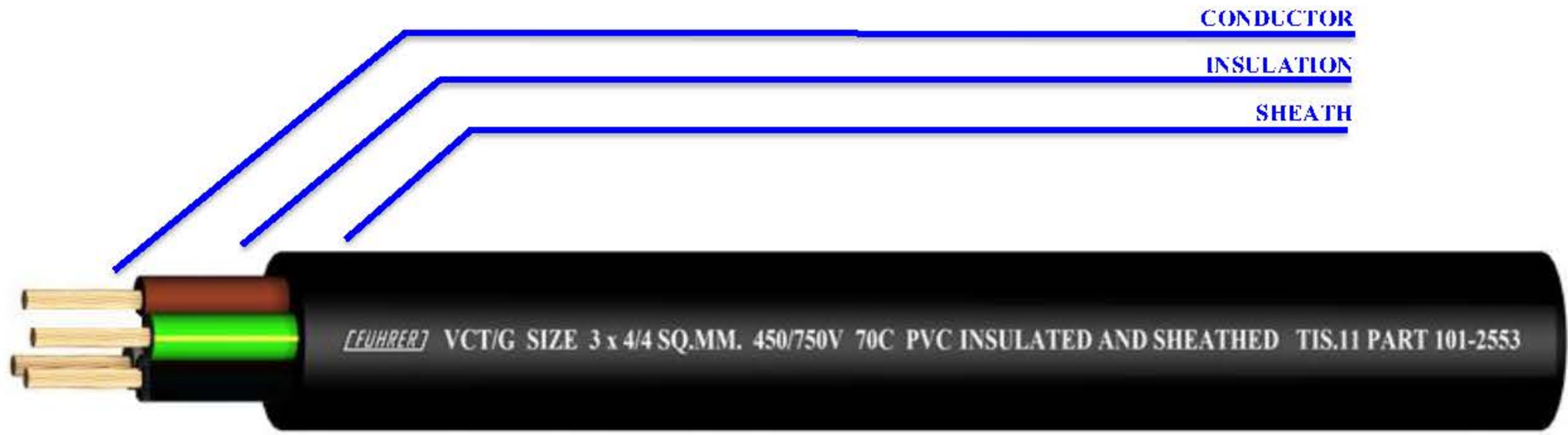
CONDUCTOR :	Flexible stranded annealed copper wire Size 4 mm ² up to Size 35 mm ²	CLASSIFICATION:	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volt
INSULATION :	Polyvinyl chloride (PVC) Phase - Light Blue , Brown Ground - Green/Yellow	TESTING VOLTAGE:	2,500 VAC
SHEATH :	Polyvinyl chloride (PVC) Black colour	REFERENCE STANDARD:	TIS. 11 PART 101-2553

Nominal Cross Sectional area (mm ²)		Conductor				thickness of Insulation (mm)		thickness of Sheath (mm)	Overall Diameter	Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
		Diameter of wires (Max.)		Diameter (mm) (Approx.)									
Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground						
4	4	0.31	0.31	2.59	2.59	0.9	0.9	1.6	15.5	30	0.0084	300	100/C
6	6	0.31	0.31	3.60	3.60	0.9	0.9	1.8	17.5	39	0.0071	400	100/C
10	10	0.41	0.41	4.79	4.79	1.1	1.1	2.0	21.5	51	0.0068	670	500/D
16	16	0.41	0.41	5.88	5.88	1.1	1.1	2.4	25.0	73	0.0050	960	500/D
25	16	0.41	0.41	7.32	5.88	1.3	1.1	2.6	28.5	97	0.0048	1290	500/D
35	16	0.41	0.41	8.61	5.88	1.3	1.1	2.8	31.5	140	0.0041	1610	500/D

C:Packing in coil.



450/750 V 70°C PVC INSULATED AND SHEATHED WITH GROUND



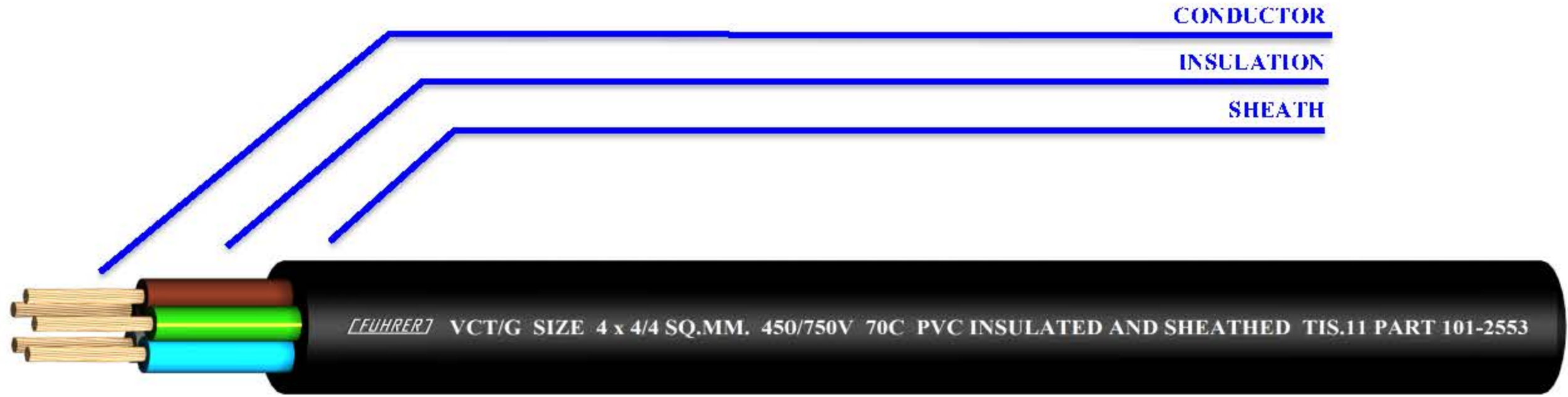
CONDUCTOR :	Flexible stranded annealed copper wire Size 4 mm ² up to Size 35 mm ²	CLASSIFICATION:	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volt
INSULATION :	Polyvinyl chloride (PVC) Phase - Brown , Black , Gray Ground - Green/Yellow	TESTING VOLTAGE:	2,500 VAC
SHEATH :	Polyvinyl chloride (PVC) Black colour	REFERENCE STANDARD:	TIS. 11 PART 101-2553

Nominal Cross Sectional area (mm ²)		Conductor				thickness of Insulation (mm)		thickness of Sheath (mm)	Overall Diameter	Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
		Diameter of wires (Max.)		Diameter (mm) (Approx.)									
Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground						
4	4	0.31	0.31	2.59	2.59	0.9	0.9	1.8	17.0	26	0.0084	380	100/C
6	6	0.31	0.31	3.60	3.60	0.9	0.9	2	19.5	34	0.0071	540	100/C
10	10	0.41	0.41	4.79	4.79	1.1	1.1	2.2	24.0	47	0.0068	860	500/D
16	16	0.41	0.41	5.88	5.88	1.1	1.1	2.6	28.0	63	0.0050	1220	500/D
25	16	0.41	0.41	7.32	5.88	1.3	1.1	2.8	33.0	83	0.0048	1670	500/D
35	16	0.41	0.41	8.61	5.88	1.3	1.1	3.1	37.0	102	0.0041	2110	500/D

C:Packing in coil.



450/750 V 70°C PVC INSULATED AND SHEATHED WITH GROUND



CONDUCTOR :	Flexible stranded annealed copper wire Size 4 mm ² up to Size 35 mm ²	CLASSIFICATION:	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volt
INSULATION :	Polyvinyl chloride (PVC) Phase - Light blue , Brown , Black , Gray Ground - Green/Yellow	TESTING VOLTAGE:	2,500 VAC
SHEATH :	Polyvinyl chloride (PVC) Black colour	REFERENCE STANDARD:	TIS. 11 PART 101-2553

Nominal Cross Sectional area (mm ²)		Conductor				thickness of Insulation (mm)		thickness of Sheath (mm)	Overall Diameter	Maximum continuous current rating in free air (A)	Minimum insulation resistance at 70°C (MΩ-Km)	cable weight (approx.) Kg/Km	standard length (m)
		Diameter of wires (Max.)		Diameter (mm) (Approx.)									
Phase	Ground	Phase	Ground	Phase	Ground	Phase	Ground						
4	4	0.31	0.31	2.59	2.59	0.9	0.9	1.8	18.5	26	0.0084	460	100/C
6	6	0.31	0.31	3.60	3.60	0.9	0.9	2	21.5	34	0.0071	650	100/C
10	10	0.41	0.41	4.79	4.79	1.1	1.1	2.2	26.5	47	0.0068	1030	500/D
16	16	0.41	0.41	5.88	5.88	1.1	1.1	2.6	30.5	63	0.0050	1480	500/D
25	16	0.41	0.41	7.32	5.88	1.3	1.1	2.8	36.5	83	0.0048	2050	500/D
35	16	0.41	0.41	8.61	5.88	1.3	1.1	3.1	41.5	102	0.0041	2630	500/D

C:Packing in coil.

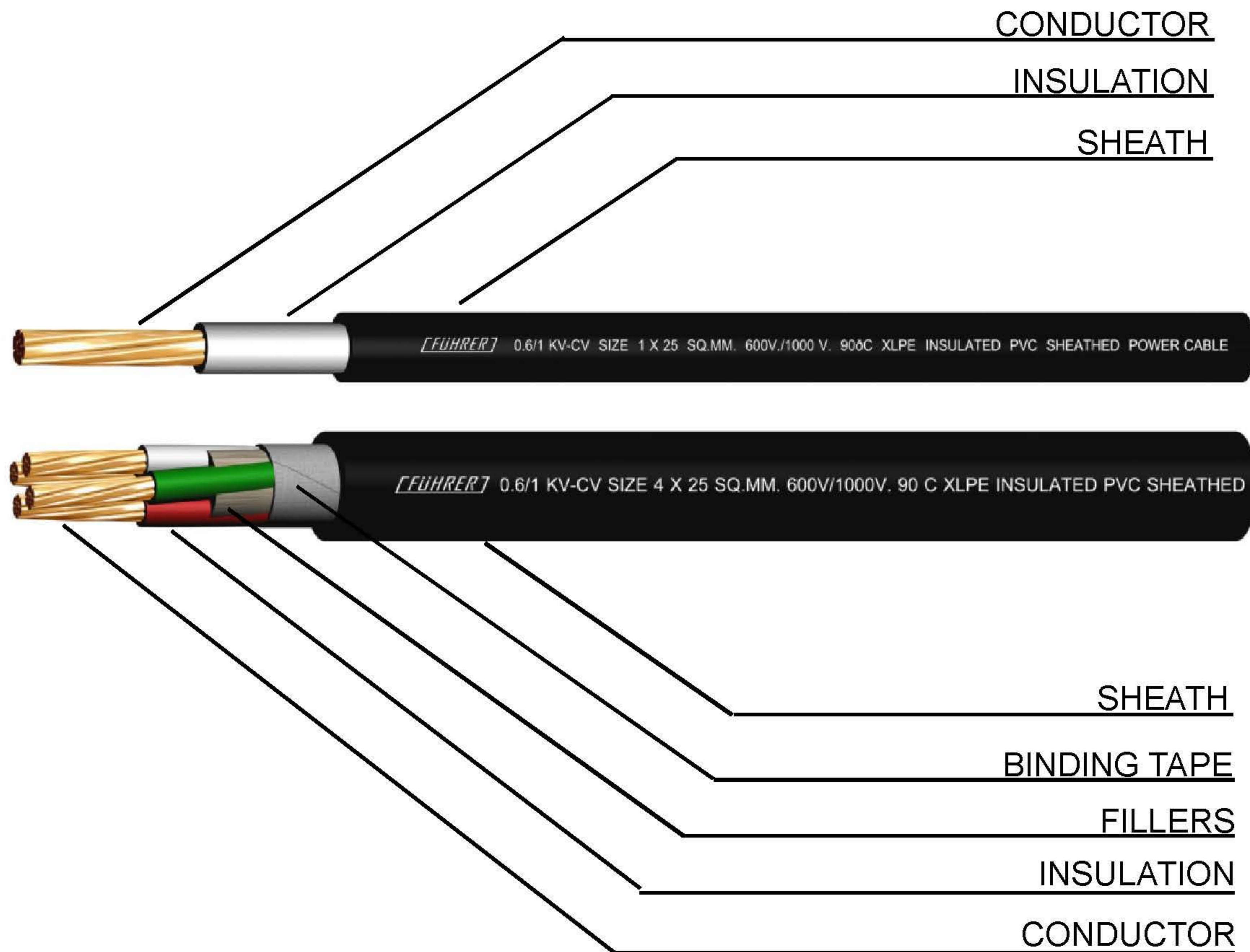


COPPER CONDUCTOR CABLES

Low Voltage Power Cables

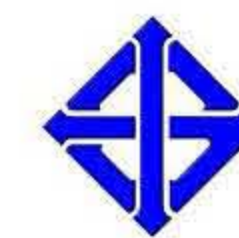
		PAGE
0.6/1KV-CV	0.6/1 kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED PVC SHEATHED POWER CABLE (IEC 60502-1)	37

600V/1000V 90°C CROSS-LINKED POLYETHYLENE INSULATED, PVC SHEATHED POWER CABLE



CABLE STRUCTURE

NUMBER OF CORE	Up to 4 cores
CONDUCTOR	: Concentric stranded and compact round stranded annealed copper, Sizes. 1.5 mm ² up to 630 mm ²
INSULATION	: Cross-linked polyethylene Colour : Natural (Translucent) Core identification: Compound color Black, White, Red, green or color tape
SHEATH	: PVC Colour : Black
CLASSIFICATION	: Maximum conductor temperature 90°C Circuit voltage not exceeding 1,200 volts
TESTING VOLTAGE	: 3,500 Volts
REFERENCE	: TIS 2143-2546 , IEC 60502-1



0.6/1KV-CV

Number of cores	Nominal cross sectional area (mm ²)	Number of stranded	Insulation thickness (mm)	Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20°C (MΩ-Km)	Minimum insulation resistance at 20°C (MΩ-Km)	Maximum continuous current rating in free air (MΩ-Km)	Cable weight (approx.) (Kg/Km)	Standard length (m)
3	1.5	7/0.53	0.7	1.8	11.5	12.1	2,500	21	150	500/D
	2.5	7/0.67	0.7	1.8	12.5	7.41	2,100	28	190	500/D
	4	7/0.85	0.7	1.8	13.5	4.61	1,700	37	240	500/D
	6	7/1.04	0.7	1.8	15	3.08	1,450	48	320	500/D
	10	6	0.7	1.8	16	1.83	1,250	64	440	500/D
	16	6	0.7	1.8	18	1.15	1,000	86	650	500/D
	25	6	0.9	1.8	22	0.727	1,050	115	950	500/D
	35	6	0.9	1.8	24	0.524	900	140	1,300	500/D
	50	6	1.0	1.8	27	0.387	850	170	1,600	500/D
	70	12	1.1	1.9	31	0.268	800	215	2,300	500/D
	95	15	1.1	2.0	36	0.193	650	260	3,100	500/D
	120	18	1.2	2.1	39	0.153	650	305	4,000	500/D
	150	18	1.4	2.3	44	0.124	700	350	4,900	500/D
	185	30	1.6	2.4	49	0.0991	700	405	6,000	500/D
240	34	1.7	2.6	55	0.0754	650	490	8,000	300/D	
4	1.5	7/0.53	0.7	1.8	12	12.1	2,500	21	180	500/D
	2.5	7/0.67	0.7	1.8	13.5	7.41	2,100	28	230	500/D
	4	7/0.85	0.7	1.8	14.5	4.61	1,700	37	300	500/D
	6	7/1.04	0.7	1.8	16	3.08	1,450	48	400	500/D
	10	6	0.7	1.8	17.5	1.83	1,250	64	550	500/D
	16	6	0.7	1.8	20	1.15	1,000	86	800	500/D
	25	6	0.9	1.8	24	0.727	1,050	115	1,200	500/D
	35	6	0.9	1.8	27	0.524	900	140	1,600	500/D
	50	6	1.0	1.9	30	0.387	850	170	2,200	500/D
	70	12	1.1	2.0	35	0.268	800	215	3,000	500/D
	95	15	1.1	2.1	39	0.193	650	260	4,100	500/D
	120	18	1.2	2.3	44	0.153	650	305	5,000	500/D
	150	18	1.4	2.4	49	0.124	700	350	6,500	500/D
	185	30	1.6	2.6	54	0.0991	700	405	8,000	300/D
240	34	1.7	2.8	61	0.0754	650	490	10,500	300/D	

C: Packing in coil.
D: Packing in drum.



0.6/1KV-CV

Number of cores	Nominal cross sectional area (mm ²)	Number of stranded	Insulation thickness (mm)	Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20°C (MΩ-Km)	Minimum insulation resistance at 20°C (MΩ-Km)	Maximum continuous current rating in free air (MΩ-Km)	Cable weight (approx.) (Kg/Km)	Standard length (m)
3	1.5	7/0.53	0.7	1.8	11.5	12.1	2,500	21	150	500/D
	2.5	7/0.67	0.7	1.8	12.5	7.41	2,100	28	190	500/D
	4	7/0.85	0.7	1.8	13.5	4.61	1,700	37	240	500/D
	6	7/1.04	0.7	1.8	15	3.08	1,450	48	320	500/D
	10	6	0.7	1.8	16	1.83	1,250	64	440	500/D
	16	6	0.7	1.8	18	1.15	1,000	86	650	500/D
	25	6	0.9	1.8	22	0.727	1,050	115	950	500/D
	35	6	0.9	1.8	24	0.524	900	140	1,300	500/D
	50	6	1.0	1.8	27	0.387	850	170	1,600	500/D
	70	12	1.1	1.9	31	0.268	800	215	2,300	500/D
	95	15	1.1	2.0	36	0.193	650	260	3,100	500/D
	120	18	1.2	2.1	39	0.153	650	305	4,000	500/D
	150	18	1.4	2.3	44	0.124	700	350	4,900	500/D
	185	30	1.6	2.4	49	0.0991	700	405	6,000	500/D
240	34	1.7	2.6	55	0.0754	650	490	8,000	300/D	
4	1.5	7/0.53	0.7	1.8	12	12.1	2,500	21	180	500/D
	2.5	7/0.67	0.7	1.8	13.5	7.41	2,100	28	230	500/D
	4	7/0.85	0.7	1.8	14.5	4.61	1,700	37	300	500/D
	6	7/1.04	0.7	1.8	16	3.08	1,450	48	400	500/D
	10	6	0.7	1.8	17.5	1.83	1,250	64	550	500/D
	16	6	0.7	1.8	20	1.15	1,000	86	800	500/D
	25	6	0.9	1.8	24	0.727	1,050	115	1,200	500/D
	35	6	0.9	1.8	27	0.524	900	140	1,600	500/D
	50	6	1.0	1.9	30	0.387	850	170	2,200	500/D
	70	12	1.1	2.0	35	0.268	800	215	3,000	500/D
	95	15	1.1	2.1	39	0.193	650	260	4,100	500/D
	120	18	1.2	2.3	44	0.153	650	305	5,000	500/D
	150	18	1.4	2.4	49	0.124	700	350	6,500	500/D
	185	30	1.6	2.6	54	0.0991	700	405	8,000	300/D
240	34	1.7	2.8	61	0.0754	650	490	10,500	300/D	

C: Packing in coil.
D: Packing in drum.



COPPER CONDUCTOR CABLES

Medium voltage Power Cables

		PAGE
12/20KV-CV	12/20(24)kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE (IEC 60502-2)	41
18/30KV-CV	18/30(36)kV 90 °C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE (IEC 60502-2)	42



- CONDUCTOR : Compact round stranded annealed copper
 - CONDUCTOR SCREEN : Semiconducting cross-linked polyethylene
 - INSULATION : Cross-linked polyethylene (XLPE)
 - INSULATION SCREEN : Semiconducting cross-linked polyethylene
 - METALLIC SHIELD : Annealed copper wire with copper contact tape
 - SEPARATOR TAPE : Spunbond tape (Optional : water blocking tape)
 - OUTER SHEATH : Black polyethylene (Optional : Polyvinyl chloride (S12))
- CLASSIFICATION : Maximum Conductor Temperature
90 °C (Normal operation)
Maximum Conductor Temperature
250 °C (Short - circuit at 5 s maximum duration)
 - REFERENCE : IEC 60228 & IEC 60502-2
 - AC TESR VOLTAGE : 42 Kv. For 5 minutes

SIZE core x mm ²	Nominal section area mm ²	Minimum number of wire No.	Diameter of conductor (Approx) mm	Thickness of conductor screen (Approx) mm	Thickness of insulation mm	Diameter over insulation (Approx) mm	Thickness of insulation screen (Approx) mm	Copper wire shield		Thickness of sheath mm	Overall diameter (Approx) mm	Maximum DC conductor resistance at 20 °C Ω/Km	Cable weight (Approx) Kg/Km	Standard packing m/R
								Number of wire	Diameter of wire mm					
1 x 35	35	6	6.95	0.5	5.5	19.5	0.5	20	0.8	1.8	28	0.5240	860	1,000
1 x 50	50	6	8.33	0.5	5.5	21.0	0.5	20	0.8	1.8	30	0.3870	1040	1,000
1 x 70	70	12	9.73	0.5	5.5	22.5	0.5	20	0.8	1.9	32	0.2680	1260	1,000
1 x 95	95	15	11.45	0.5	5.5	24.0	0.5	20	0.8	1.9	33	0.1930	1550	1,000
1 x 120	120	18	12.95	0.5	5.5	25.5	0.5	20	0.8	2.0	34	0.1530	1820	1,000
1 x 150	150	18	14.27	0.5	5.5	27.0	0.5	25	0.9	2.1	37	0.1240	2190	1,000
1 x 185	185	30	15.98	0.5	5.5	28.5	0.5	30	1.03	2.1	38	0.0991	2560	1,000
1 x 240	240	34	18.47	0.5	5.5	31.0	0.5	30	1.03	2.2	42	0.0754	3,230	500
1 x 300	300	53	20.68	0.5	5.5	33.5	0.5	30	1.03	2.3	45	0.0601	3,850	500
1 x 400	400	53	23.39	0.5	5.5	36.5	0.5	30	1.03	2.4	48	0.0470	4870	500
1 x 500	500	53	26.67	0.5	5.5	40.0	0.5	30	1.03	2.6	52	0.0366	5890	250

C:Packing in coil.
R:Packing in drum.





- CONDUCTOR : Compact round stranded annealed copper
- CONDUCTOR SCREEN : Semiconducting cross-linked polyethylene
- INSULATION : Cross-linked polyethylene (XLPE)
- INSULATION SCREEN : Semiconducting cross-linked polyethylene
- METALLIC SHIELD : Annealed copper wire with copper contact tape
- SEPARATOR TAPE : Spunbond tape (Optional : water blocking tape)
- OUTER SHEATH : Black polyethylene (Optional : Polyvinyl chloride (S12))
- CLASSIFICATION : Maximum Conductor Temperature 90 °C (Normal operation)
- Maximum Conductor Temperature 250 °C (Short - circuit at 5 s maximum duration)
- REFERENCE IEC 60228 & IEC 60502-2
- AC TEST VOLTAGE : 42 Kv. For 5 minutes

SIZE core x mm ²	Nominal section area mm ²	Minimum number of wire No.	Diameter of conductor (Approx) mm	Thickness of conductor screen (Approx) mm	Thickness of insulation mm	Diameter over insulation (Approx) mm	Thickness of insulation screen (Approx) mm	Copper wire shield		Thickness of sheath mm	Overall diameter (Approx) mm	Maximum DC conductor resistance at 20 °C Ω/KM	Cable weight (Approx) Kg/Km	Standard packing m/R
								Number of wire	Diameter of wire mm					
1 x 50	50	6	8.33	0.5	8.0	25.5	0.5	20	0.8	1.8	30	0.3870	1040	1,000
1 x 70	70	12	9.73	0.5	8.0	27.5	0.5	20	0.8	1.9	32	0.2680	1260	1,000
1 x 95	95	15	11.45	0.5	8.0	28.5	0.5	20	0.8	1.9	33	0.1930	1550	1,000
1 x 120	120	18	12.95	0.5	8.0	30.0	0.5	20	0.8	2.0	34	0.1530	1820	1,000
1 x 150	150	18	14.27	0.5	8.0	32.0	0.5	25	0.9	2.1	37	0.1240	2190	1,000
1 x 185	185	30	15.98	0.5	8.0	33.0	0.5	30	1.03	2.1	38	0.0991	2560	1,000
1 x 240	240	34	18.47	0.5	8.0	35.5	0.5	30	1.03	2.2	42	0.0754	3,230	500
1 x 300	300	53	20.68	0.5	8.0	38.5	0.5	30	1.03	2.3	45	0.0601	3,850	500
1 x 400	400	53	23.39	0.5	8.0	40.5	0.5	30	1.03	2.4	48	0.0470	4870	500
1 x 500	500	53	26.67	0.5	8.0	44.0	0.5	30	1.03	2.6	52	0.0366	5890	250

C:Packing in coil.

D:Packing in drum.

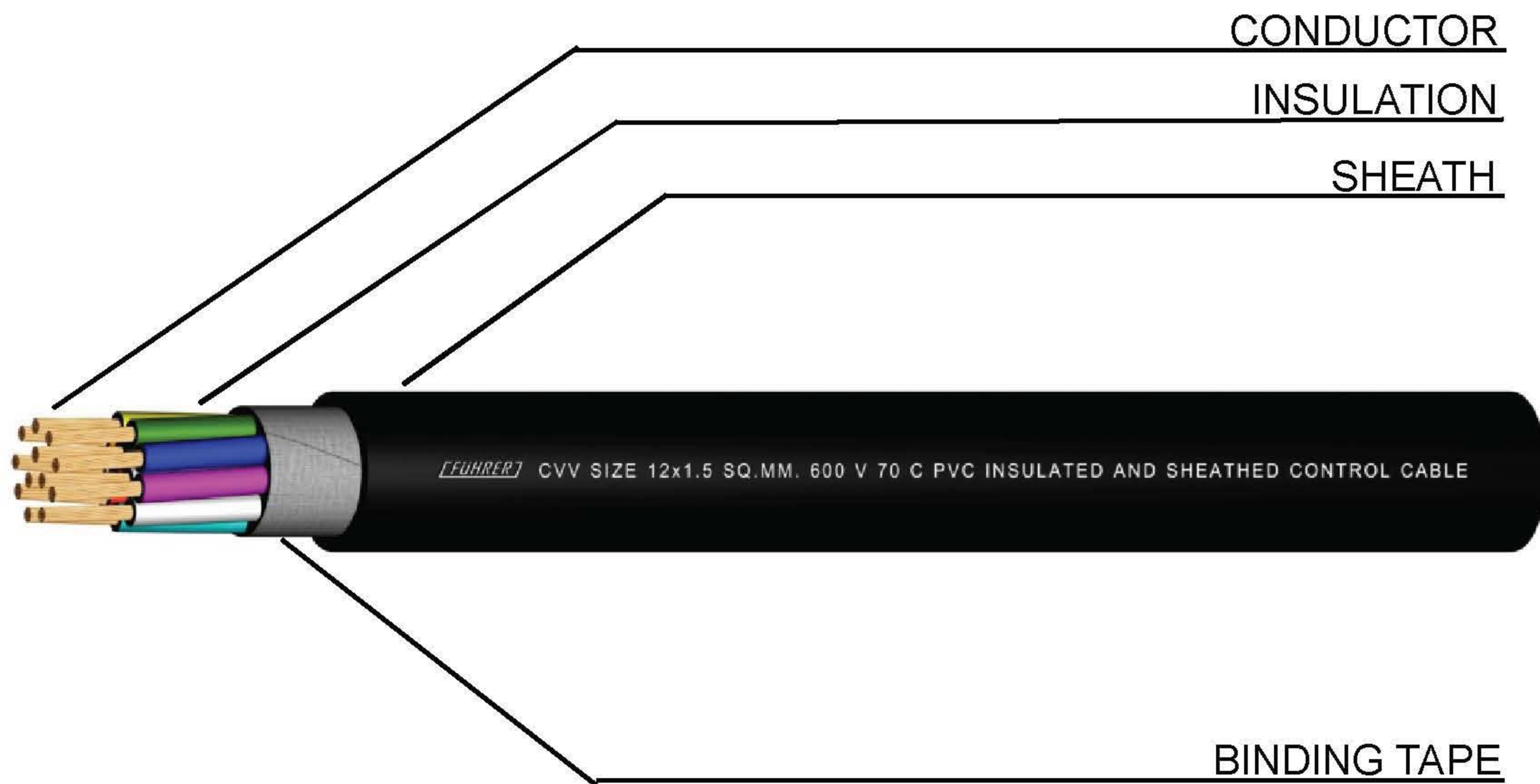


COPPER CONDUCTOR CABLES

Control Cable

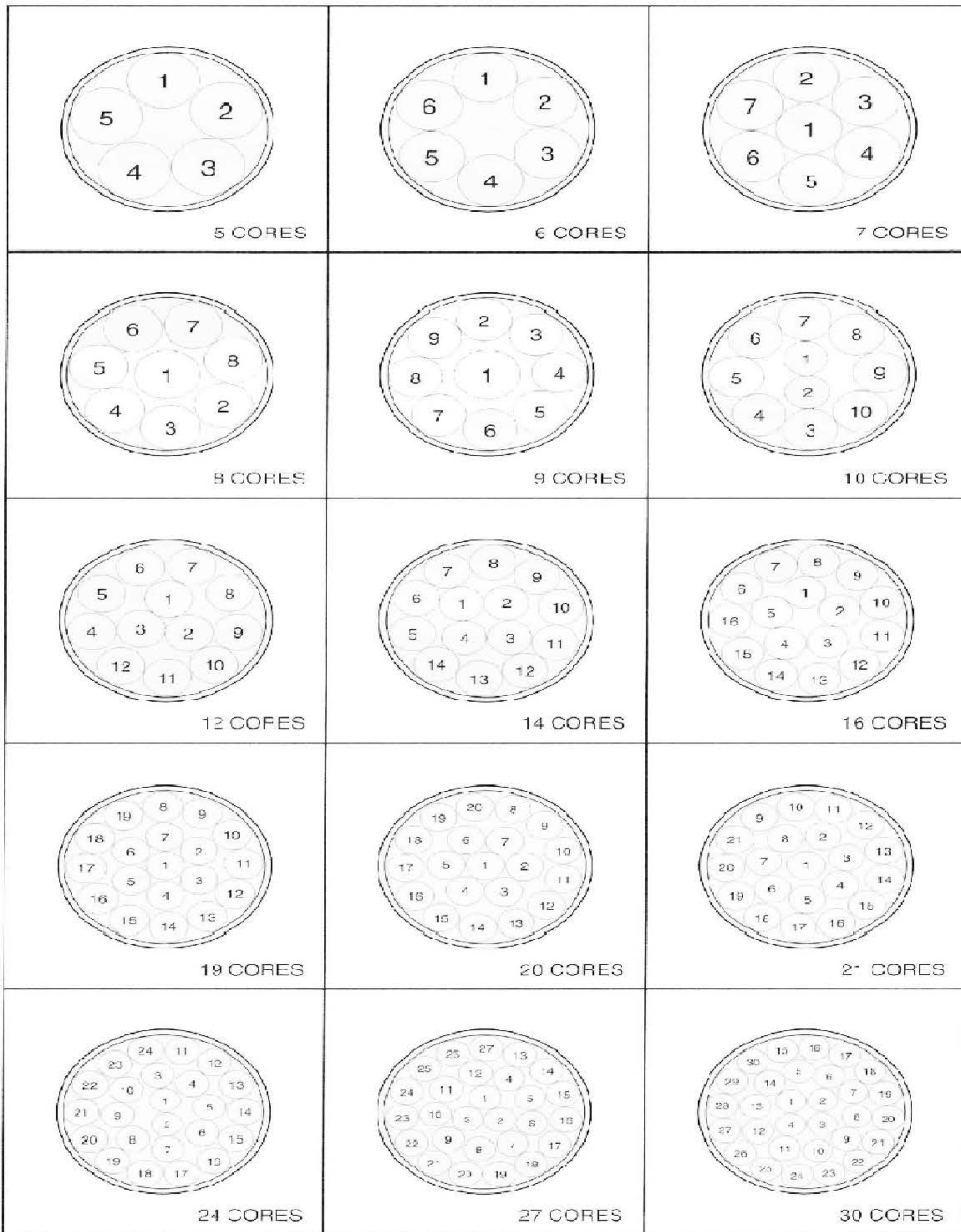
		PAGE
CVV	600 V 70 °C PVC INSULATED AND SHEATHED CONTROL CABLE	44
CVV-S	600 V 70 °C PVC INSULATED AND SHEATHED WITH SHIELD CONTROL CABLE	49

600 V 70°C PVC INSULATED AND SHEATHED CONTROL CABLE



CABLE STRUCTURE

NUMBER OF CORE	: 2 up to 30 core
CONDUCTOR	stranded annealed copper wires. Size. 0.75 mm ² up to 10 mm ²
INSULATION	:PVC Colour : 2-4 core : Black,White,Red and Green More than 4 cores : Any colour
SHEATH	: PVC Colour: Black
CLASSIFICATION	Maximum conductor temperature 70°C Circuit voltage not exceeding 600 volts.
TESTING VOLTAGE	: 2500 Volts.
REFERENCE	:TIS. 838-2531 TABLE 4 (TYPE B)



Number of Core	Nominal cross sectional area (mm ²)	Number and diameter of wire (No./mm)	Diameter of Conductor (approx)	Insulation thickness (mm)	Outer Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20° C (Ω/Km)	Minimum insulation resistance at 15.6° C (MΩ/Km)	Cable weight (approx.) (Kg/Km)	Standard Length (m)
2	0.75	7/0.33	0.99	0.76	1.14	8.5	24.5	257	90	500/D
	1.00	7/0.40	1.20	0.76	1.14	9.0	18.1	228	100	500/D
	1.50	7/0.50	1.50	0.76	1.14	11.5	12.1	252	150	500/D
	2.50	7/0.67	2.01	1.14	1.14	12.5	7.41	209	190	500/D
	4.00	7/0.85	2.55	1.14	1.14	14.0	4.61	177	240	500/D
	6.00	7/1.04	3.12	1.14	1.52	16.0	3.08	153	330	500/D
	10.00	7/1.35	4.05	1.52	1.52	19.5	1.83	154	520	500/D
3	0.75	7/0.33	0.99	0.76	1.14	9.0	24.5	257	100	500/D
	1.00	7/0.40	1.20	0.76	1.14	9.5	18.1	228	110	500/D
	1.50	7/0.50	1.50	0.76	1.14	12.0	12.1	252	180	500/D
	2.50	7/0.67	2.01	1.14	1.14	13.5	7.41	209	230	500/D
	4.00	7/0.85	2.55	1.14	1.52	15.5	4.61	177	320	500/D
	6.00	7/1.04	3.12	1.14	1.52	17.0	3.08	153	410	500/D
	10.00	7/1.35	4.05	1.52	1.52	21.0	1.83	154	650	500/D
4	0.75	7/0.33	0.99	0.76	1.14	10.0	24.5	257	120	500/D
	1.00	7/0.40	1.20	0.76	1.14	10.5	18.1	228	130	500/D
	1.50	7/0.50	1.50	0.76	1.14	13.5	12.1	252	210	500/D
	2.50	7/0.67	2.01	1.14	1.52	15.5	7.41	209	310	500/D
	4.00	7/0.85	2.55	1.14	1.52	17.0	4.61	177	400	500/D
	6.00	7/1.04	3.12	1.14	1.52	18.5	3.08	153	510	500/D
	10.00	7/1.35	4.05	1.52	2.03	24.0	1.83	154	860	500/D
5	0.75	7/0.33	0.99	0.76	1.14	11.0	24.5	257	130	500/D
	1.00	7/0.40	1.20	0.76	1.14	11.5	18.1	228	160	500/D
	1.50	7/0.50	1.50	0.76	1.52	15.5	12.1	252	270	500/D
	2.50	7/0.67	2.01	1.14	1.52	17.0	7.41	209	360	500/D
	4.00	7/0.85	2.55	1.14	1.52	18.7	4.61	177	470	500/D
	6.00	7/1.04	3.12	1.14	1.52	20.5	3.08	153	600	500/D
	10.00	7/1.35	4.05	1.52	2.03	26.5	1.83	154	1020	500/D
6	0.75	7/0.33	0.99	0.76	1.14	12.0	24.5	257	160	500/D
	1.00	7/0.40	1.20	0.76	1.14	12.5	18.1	228	190	500/D
	1.50	7/0.50	1.50	0.76	1.52	17.0	12.1	252	330	500/D
	2.50	7/0.67	2.01	1.14	1.52	18.5	7.41	209	430	500/D
	4.00	7/0.85	2.55	1.14	1.52	20.5	4.61	177	560	500/D
	6.00	7/1.04	3.12	1.14	1.52	22.0	3.08	153	720	500/D
	10.00	7/1.35	4.05	1.52	2.03	29.0	1.83	154	1220	500/D
7	0.75	7/0.33	0.99	0.76	1.14	12.0	24.5	257	160	500/D
	1.00	7/0.40	1.20	0.76	1.14	12.5	18.1	228	200	500/D
	1.50	7/0.50	1.50	0.76	1.52	17.0	12.1	252	340	500/D
	2.50	7/0.67	2.01	1.14	1.52	18.5	7.41	209	450	500/D
	4.00	7/0.85	2.55	1.14	1.52	20.5	4.61	177	600	500/D
	6.00	7/1.04	3.12	1.14	1.52	22.0	3.08	153	770	500/D
	10.00	7/1.35	4.05	1.52	2.03	29.0	1.83	154	1300	500/D
8	0.75	7/0.33	0.99	0.76	1.14	13.0	24.5	257	190	500/D
	1.00	7/0.40	1.20	0.76	1.14	13.5	18.1	228	220	500/D
	1.50	7/0.50	1.50	0.76	1.52	18.0	12.1	252	390	500/D
	2.50	7/0.67	2.01	1.14	1.52	20.0	7.41	209	520	500/D
	4.00	7/0.85	2.55	1.14	1.52	22.0	4.61	177	690	500/D
	6.00	7/1.04	3.12	1.14	2.03	25.0	3.08	153	950	500/D
	10.00	7/1.35	4.05	1.52	2.03	31.5	1.83	154	1500	500/D
9	0.75	7/0.33	0.99	0.76	1.14	13.5	24.5	257	210	500/D
	1.00	7/0.40	1.20	0.76	1.52	15.5	18.1	228	280	500/D
	1.50	7/0.50	1.50	0.76	1.52	19.5	12.1	252	440	500/D
	2.50	7/0.67	2.01	1.14	1.52	21.5	7.41	209	590	500/D
	4.00	7/0.85	2.55	1.14	2.03	25.0	4.61	177	830	500/D
	6.00	7/1.04	3.12	1.14	2.03	27.0	3.08	153	1070	500/D
	10.00	7/1.35	4.05	1.52	2.03	34.0	1.83	154	1700	500/D

Number of Core	Nominal cross sectional area (mm ²)	Number and diameter of wire (No./mm)	Diameter of Conductor (approx)	Insulation thickness (mm)	Outer Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20° c (Ω/Km)	Minimum insulation resistance at 15.6° c (MΩ/Km)	Cable weight (approx.) (Kg/Km)	Standard Length (m)
10	0.75	7/0.33	0.99	0.76	1.52	15.5	24.5	257	270	500/D
	1.00	7/0.40	1.20	0.76	1.52	16.5	18.1	228	310	500/D
	1.50	7/0.50	1.50	0.76	1.52	21.5	12.1	252	500	500/D
	2.50	7/0.67	2.01	1.14	2.03	24.5	7.41	209	720	500/D
	4.00	7/0.85	2.55	1.14	2.03	27.0	4.61	177	940	500/D
	6.00	7/1.04	3.12	1.14	2.03	29.5	3.08	153	1210	500/D
	10.00	7/1.35	4.05	1.52	2.03	37.0	1.83	154	1930	500/D
11	0.75	7/0.33	0.99	0.76	1.52	15.5	24.5	257	280	500/D
	1.00	7/0.40	1.20	0.76	1.52	16.5	18.1	228	330	500/D
	1.50	7/0.50	1.50	0.76	1.52	21.5	12.1	252	520	500/D
	2.50	7/0.67	2.01	1.14	2.03	27.0	7.41	209	760	500/D
	4.00	7/0.85	2.55	1.14	2.03	29.5	4.61	177	990	500/D
	6.00	7/1.04	3.12	1.14	2.03	37.0	3.08	153	1290	500/D
	10.00	7/1.35	4.05	1.52	2.03	39.5	1.83	154	2060	500/D
12	0.75	7/0.33	0.99	0.76	1.52	16.0	24.5	257	300	500/D
	1.00	7/0.40	1.20	0.76	1.52	17.0	18.1	228	350	500/D
	1.50	7/0.50	1.50	0.76	1.52	22.0	12.1	252	560	500/D
	2.50	7/0.67	2.01	1.14	2.03	25.5	7.41	209	810	500/D
	4.00	7/0.85	2.55	1.14	2.03	28.0	4.61	177	1060	500/D
	6.00	7/1.04	3.12	1.14	2.03	30.5	3.08	153	1380	500/D
	10.00	7/1.35	4.05	1.52	2.03	28.0	1.83	154	2210	500/D
13	0.75	7/0.33	0.99	0.76	1.52	16.5	24.5	257	310	500/D
	1.00	7/0.40	1.20	0.76	1.52	17.5	18.1	228	370	500/D
	1.50	7/0.50	1.50	0.76	1.52	22.5	12.1	252	590	500/D
	2.50	7/0.67	2.01	1.14	2.03	26.0	7.41	209	860	500/D
	4.00	7/0.85	2.55	1.14	2.03	28.5	4.61	177	1130	500/D
	6.00	7/1.04	3.12	1.14	2.03	31.0	3.08	153	1470	500/D
	10.00	7/1.35	4.05	1.52	2.03	39.0	1.83	154	2360	500/D
14	0.75	7/0.33	0.99	0.76	1.52	17.0	24.5	257	330	500/D
	1.00	7/0.40	1.20	0.76	1.52	18.0	18.1	228	390	500/D
	1.50	7/0.50	1.50	0.76	2.03	24.0	12.1	252	690	500/D
	2.50	7/0.67	2.01	1.14	2.03	26.5	7.41	209	920	500/D
	4.00	7/0.85	2.55	1.14	2.03	29.5	4.61	177	1210	500/D
	6.00	7/1.04	3.12	1.14	2.03	32.0	3.08	153	1570	500/D
	10.00	7/1.35	4.05	1.52	2.03	40.0	1.83	154	2530	500/D
15	0.75	7/0.33	0.99	0.76	1.52	17.5	24.5	257	350	500/D
	1.00	7/0.40	1.20	0.76	1.52	18.5	18.1	228	420	500/D
	1.50	7/0.50	1.50	0.76	2.03	25.0	12.1	252	720	500/D
	2.50	7/0.67	2.01	1.14	2.03	27.5	7.41	209	970	500/D
	4.00	7/0.85	2.55	1.14	2.03	30.0	4.61	177	1280	500/D
	6.00	7/1.04	3.12	1.14	2.03	33.0	3.08	153	1670	500/D
	10.00	7/1.35	4.05	1.52	2.03	41.5	1.83	154	2690	500/D
16	0.75	7/0.33	0.99	0.76	1.52	18.0	24.5	257	370	500/D
	1.00	7/0.40	1.20	0.76	1.52	19.0	18.1	228	440	500/D
	1.50	7/0.50	1.50	0.76	2.03	25.5	12.1	252	760	500/D
	2.50	7/0.67	2.01	1.14	2.03	28.0	7.41	209	1020	500/D
	4.00	7/0.85	2.55	1.14	2.03	31.0	4.61	177	1350	500/D
	6.00	7/1.04	3.12	1.14	2.03	34.0	3.08	153	1760	500/D
	10.00	7/1.35	4.05	1.52	2.03	42.5	1.83	154	2840	500/D
17	0.75	7/0.33	0.99	0.76	1.52	18.5	24.5	257	390	500/D
	1.00	7/0.40	1.20	0.76	1.52	19.5	18.1	228	460	500/D
	1.50	7/0.50	1.50	0.76	2.03	26.5	12.1	252	850	500/D
	2.50	7/0.67	2.01	1.14	2.03	29.0	7.41	209	1080	500/D
	4.00	7/0.85	2.55	1.14	2.03	32.0	4.61	177	1430	500/D
	6.00	7/1.04	3.12	1.14	2.03	35.0	3.08	153	1860	500/D
	10.00	7/1.35	4.05	1.52	2.03	44.0	1.83	154	3010	500/D
18	0.75	7/0.33	0.99	0.76	1.52	19.0	24.5	257	410	500/D
	1.00	7/0.40	1.20	0.76	1.52	20.0	18.1	228	490	500/D
	1.50	7/0.50	1.50	0.76	2.03	27.0	12.1	252	850	500/D
	2.50	7/0.67	2.01	1.14	2.03	29.5	7.41	209	1140	500/D
	4.00	7/0.85	2.55	1.14	2.03	32.5	4.61	177	1510	500/D
	6.00	7/1.04	3.12	1.14	2.03	35.5	3.08	153	1970	500/D
	10.00	7/1.35	4.05	1.52	2.03	45.0	1.83	154	3190	500/D

C: Packing in coil.

D: Packing in drum.



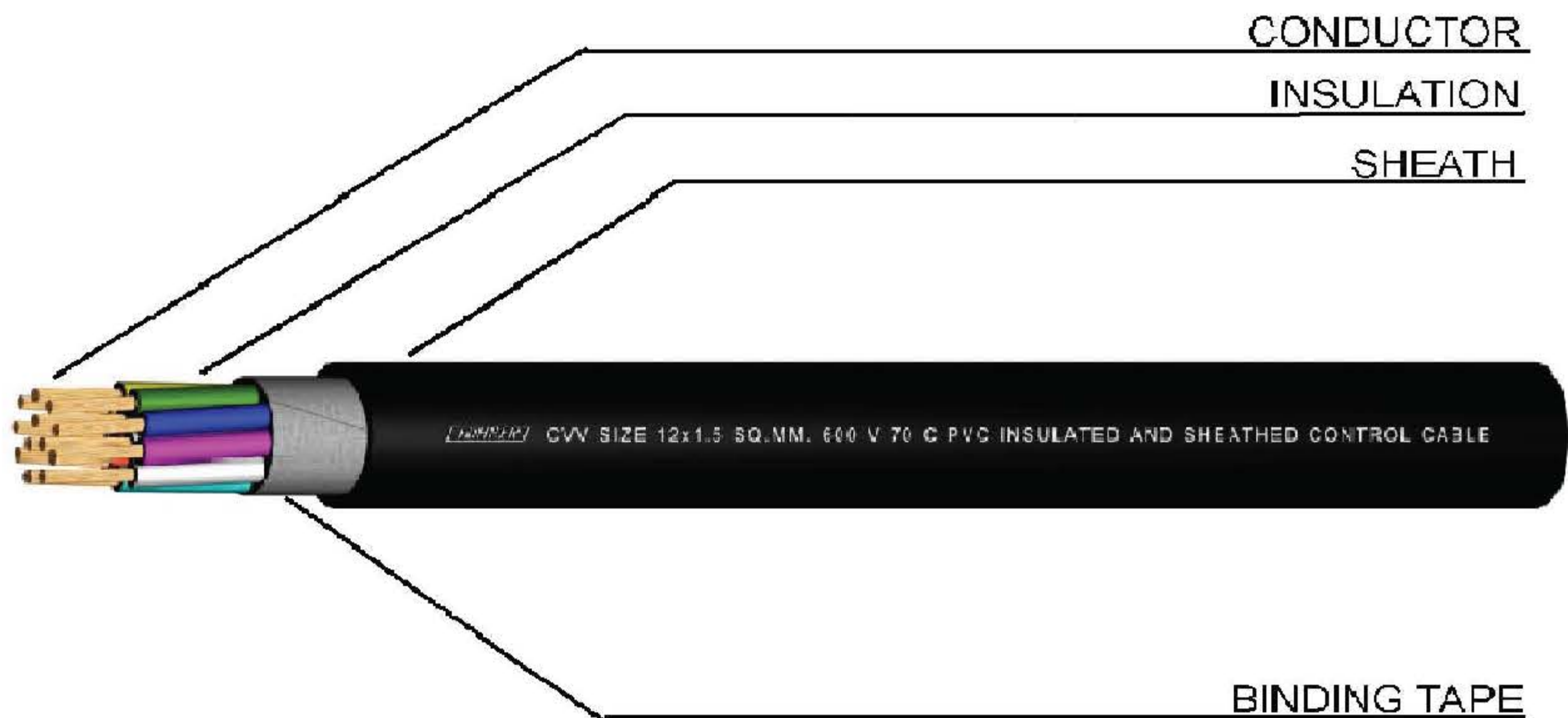
Number of Core	Nominal cross sectional area (mm ²)	Number and diameter of wire (No./mm)	Diameter of conductor (approx)	Insulation thickness (mm)	Outer Sheath thickness (mm)	Approx. Overall diameter (mm)	Minimum conductor resistance at 20° C (Ω/Km)	Minimum insulation resistance at 15.6° C (MΩ/Km)	Cable weight (approx.) (Kg/Km)	Standard length (m)
19	0.75	7/0.33	0.99	0.76	1.52	19.0	24.5	257	410	500/D
	1.00	7/0.40	1.20	0.76	1.52	20.0	18.1	228	490	500/D
	1.50	7/0.50	1.50	0.76	2.03	27.0	12.1	252	860	500/D
	2.50	7/0.67	2.01	1.14	2.03	29.5	7.41	209	1160	500/D
	4.00	7/0.85	2.55	1.14	2.03	32.5	4.61	177	1540	500/D
	6.00	7/1.04	3.12	1.14	2.03	35.5	3.08	153	2020	500/D
10.00	7/1.35	4.05	1.52	2.03	45.0	1.83	154	3270	500/D	
20	0.75	7/0.33	0.99	0.76	1.52	19.0	24.5	257	430	500/D
	1.00	7/0.40	1.20	0.76	1.52	20.5	18.1	228	520	500/D
	1.50	7/0.50	1.50	0.76	2.03	27.5	12.1	252	900	500/D
	2.50	7/0.67	2.01	1.14	2.03	30.5	7.41	209	1220	500/D
	4.00	7/0.85	2.55	1.14	2.03	33.5	4.61	177	1630	500/D
	6.00	7/1.04	3.12	1.14	2.03	37.0	3.08	153	2130	500/D
10.00	7/1.35	4.05	1.52	2.79	48.3	1.83	154	3600	500/D	
21	0.75	7/0.33	0.99	0.76	1.52	19.5	24.5	257	450	500/D
	1.00	7/0.40	1.20	0.76	1.52	21.0	18.1	228	540	500/D
	1.50	7/0.50	1.50	0.76	2.03	28.0	12.1	252	940	500/D
	2.50	7/0.67	2.01	1.14	2.03	31.0	7.41	209	1270	500/D
	4.00	7/0.85	2.55	1.14	2.03	34.5	4.61	177	1700	500/D
	6.00	7/1.04	3.12	1.14	2.03	37.5	3.08	153	2230	500/D
10.00	7/1.35	4.05	1.52	2.79	49.0	1.83	154	3760	500/D	
22	0.75	7/0.33	0.99	0.76	1.52	20.0	24.5	257	470	500/D
	1.00	7/0.40	1.20	0.76	1.52	21.5	18.1	228	570	500/D
	1.50	7/0.50	1.50	0.76	2.03	29.0	12.1	252	990	500/D
	2.50	7/0.67	2.01	1.14	2.03	32.0	7.41	209	1330	500/D
	4.00	7/0.85	2.55	1.14	2.03	35.5	4.61	177	1780	500/D
	6.00	7/1.04	3.12	1.14	2.03	39.0	3.08	153	2330	500/D
10.00	7/1.35	4.05	1.52	2.79	50.5	1.83	154	3950	500/D	
23	0.75	7/0.33	0.99	0.76	1.52	20.5	24.5	257	490	500/D
	1.00	7/0.40	1.20	0.76	1.52	22.0	18.1	228	590	500/D
	1.50	7/0.50	1.50	0.76	2.03	29.8	12.1	252	1020	500/D
	2.50	7/0.67	2.01	1.14	2.03	32.5	7.41	209	1390	500/D
	4.00	7/0.85	2.55	1.14	2.03	36.0	4.61	177	1860	500/D
	6.00	7/1.04	3.12	1.14	2.03	39.5	3.08	153	2430	500/D
10.00	7/1.35	4.05	1.52	2.79	51.5	1.83	154	4110	500/D	
24	0.75	7/0.33	0.99	0.76	1.52	21.5	24.5	257	530	500/D
	1.00	7/0.40	1.20	0.76	1.52	21.5	18.1	228	650	500/D
	1.50	7/0.50	1.50	0.76	2.03	31.0	12.1	252	1100	500/D
	2.50	7/0.67	2.01	1.14	2.03	34.5	7.41	209	1490	500/D
	4.00	7/0.85	2.55	1.14	2.03	38.0	4.61	177	2000	500/D
	6.00	7/1.04	3.12	1.14	2.03	42.0	3.08	153	2610	500/D
10.00	7/1.35	4.05	1.52	2.79	55.0	1.83	154	4100	500/D	
25	0.75	7/0.33	0.99	0.76	1.52	21.5	24.5	257	540	500/D
	1.00	7/0.40	1.20	0.76	1.52	24.5	18.1	228	700	500/D
	1.50	7/0.50	1.50	0.76	2.03	31.0	12.1	252	1130	500/D
	2.50	7/0.67	2.01	1.14	2.03	34.5	7.41	209	1530	500/D
	4.00	7/0.85	2.55	1.14	2.03	38.0	4.61	177	2050	500/D
	6.00	7/1.04	3.12	1.14	2.03	42.0	3.08	153	2680	500/D
10.00	7/1.35	4.05	1.52	2.79	55.0	1.83	154	4530	500/D	
26	0.75	7/0.33	0.99	0.76	1.52	21.5	24.5	257	550	500/D
	1.00	7/0.40	1.20	0.76	1.52	24.5	18.1	228	720	500/D
	1.50	7/0.50	1.50	0.76	2.03	31.0	12.1	252	1160	500/D
	2.50	7/0.67	2.01	1.14	2.03	34.5	7.41	209	1570	500/D
	4.00	7/0.85	2.55	1.14	2.03	38.0	4.61	177	2100	500/D
	6.00	7/1.04	3.12	1.14	2.03	42.0	3.08	153	2760	500/D
10.00	7/1.35	4.05	1.52	2.79	55.0	1.83	154	4660	500/D	
27	0.75	7/0.33	0.99	0.76	1.52	22.0	24.5	257	570	500/D
	1.00	7/0.40	1.20	0.76	1.52	24.5	18.1	228	740	500/D
	1.50	7/0.50	1.50	0.76	2.03	32.0	12.1	252	1200	500/D
	2.50	7/0.67	2.01	1.14	2.03	35.5	7.41	209	1620	500/D
	4.00	7/0.85	2.55	1.14	2.03	39.0	4.61	177	2170	500/D
	6.00	7/1.04	3.12	1.14	2.03	43.0	3.08	153	2850	500/D
10.00	7/1.35	4.05	1.52	2.79	56.0	1.83	154	4820	500/D	
28	0.75	7/0.33	0.99	0.76	1.52	22.0	24.5	257	580	500/D
	1.00	7/0.40	1.20	0.76	1.52	24.5	18.1	228	760	500/D
	1.50	7/0.50	1.50	0.76	2.03	32.0	12.1	252	1220	500/D
	2.50	7/0.67	2.01	1.14	2.03	35.5	7.41	209	1670	500/D
	4.00	7/0.85	2.55	1.14	2.03	39.0	4.61	177	2230	500/D
	6.00	7/1.04	3.12	1.14	2.03	43.0	3.08	153	2930	500/D
10.00	7/1.35	4.05	1.52	2.79	56.0	1.83	154	4950	500/D	
29	0.75	7/0.33	0.99	0.76	1.52	22.5	24.5	257	600	500/D
	1.00	7/0.40	1.20	0.76	1.52	25.0	18.1	228	780	500/D
	1.50	7/0.50	1.50	0.76	2.03	32.5	12.1	252	1260	500/D
	2.50	7/0.67	2.01	1.14	2.03	36.0	7.41	209	1710	500/D
	4.00	7/0.85	2.55	1.14	2.03	39.5	4.61	177	2300	500/D
	6.00	7/1.04	3.12	1.14	2.03	43.5	3.08	153	3020	500/D
10.00	7/1.35	4.05	1.52	2.79	56.5	1.83	154	5110	500/D	
30	0.75	7/0.33	0.99	0.76	1.52	24.0	24.5	257	670	500/D
	1.00	7/0.40	1.20	0.76	1.52	25.5	18.1	228	800	500/D
	1.50	7/0.50	1.50	0.76	2.03	33.0	12.1	252	1300	500/D
	2.50	7/0.67	2.01	1.14	2.03	36.5	7.41	209	1760	500/D
	4.00	7/0.85	2.55	1.14	2.03	40.5	4.61	177	2370	500/D
	6.00	7/1.04	3.12	1.14	2.03	44.5	3.08	153	3120	500/D
10.00	7/1.35	4.05	1.52	2.79	58.0	1.83	154	5260	500/D	

C: Packing in coil.

D: Packing in drum.

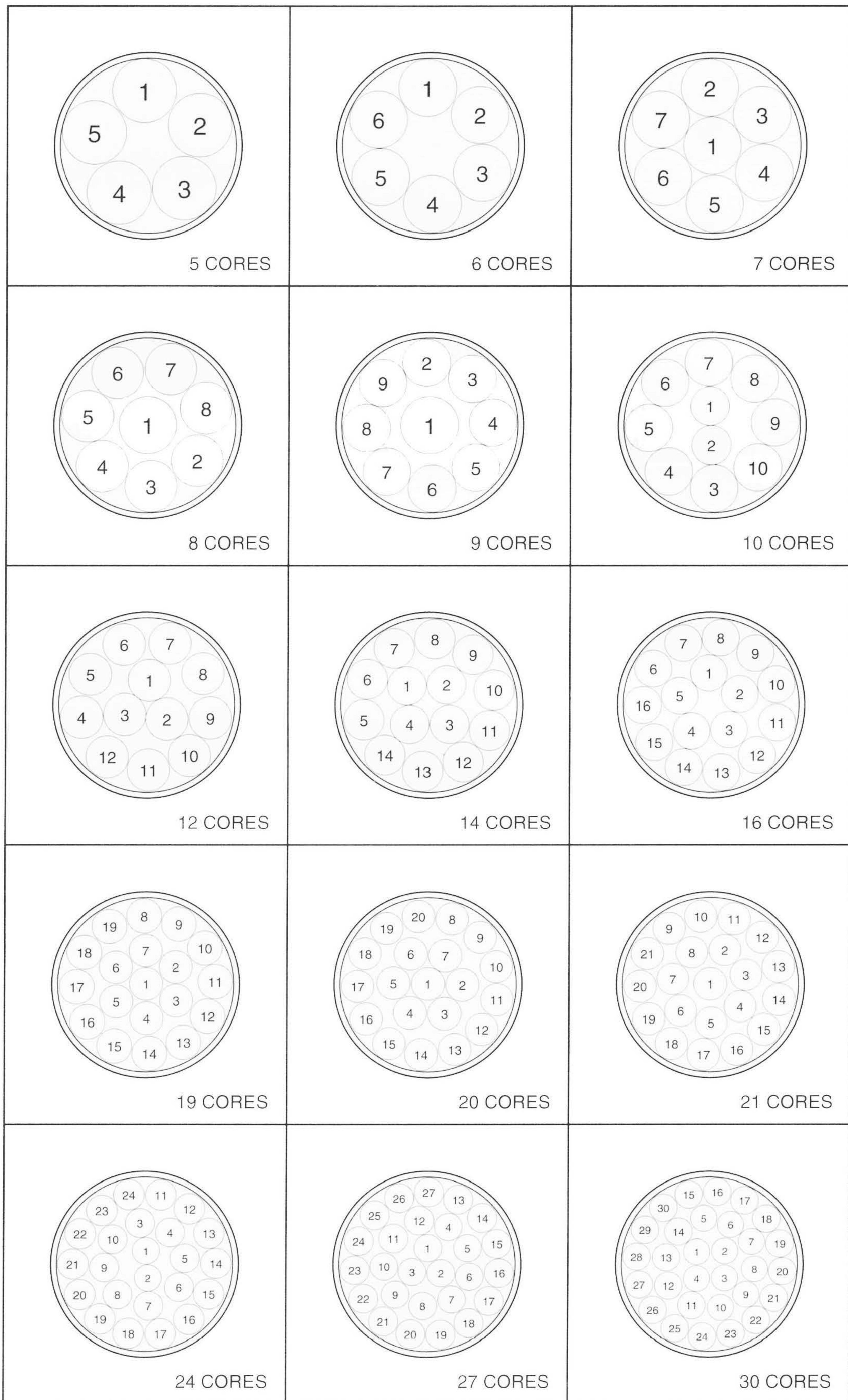


600 V 70°C PVC INSULATED AND SHEATHED CONTROL CABLE



CABLE STRUCTURE

NUMBER OF CORE	: 2 up to 30 core
CONDUCTOR	stranded annealed copper wires. Size. 0.75 mm ² up to 10 mm ²
INSULATION	:PVC Colour : 2-4 core : Black,White,Red and Green More than 4 cores : Any colour
SHEATH	: PVC Colour: Black
CLASSIFICATION	Maximum conductor temperature 70°C Circuit voltage not exceeding 600 volts.
TESTING VOLTAGE	: 2500 Volts.
REFERENCE	:TIS. 838-2531 TABLE 4 (TYPE B)



Number of Core	Nominal cross sectional area (mm ²)	Number and diameter of wire (No/mm)	Diameter of Conductor (approx)	Insulation thickness (mm)	Thickness of Inner Sheath (mm)	Outer Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20° c (Ω/Km)	Minimum insulation resistance at 15.6° c (MΩ/Km)	Cable weight (approx.) (Kg/Km)	Standard Length (m)
2	0.75	7/0.33	0.99	0.76	1.14	1.14	11.5	24.5	257	170	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.14	12.5	18.1	228	180	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	15.5	12.1	252	280	500/D
	2.50	7/0.67	2.01	1.14	1.14	1.52	16.5	7.41	209	340	500/D
	4.00	7/0.85	2.55	1.14	1.14	1.52	17.5	4.61	177	406	500/D
	6.00	7/1.04	3.12	1.14	1.14	1.52	19.0	3.08	153	480	500/D
	10.00	7/1.35	4.05	1.52	1.14	1.52	22.5	1.83	154	700	500/D
3	0.75	7/0.33	0.99	0.76	1.14	1.14	12.5	24.5	257	190	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.14	12.5	18.1	228	210	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	16.0	12.1	252	320	500/D
	2.50	7/0.67	2.01	1.14	1.14	1.52	17.0	7.41	209	390	500/D
	4.00	7/0.85	2.55	1.14	1.14	1.52	18.5	4.61	177	470	500/D
	6.00	7/1.04	3.12	1.14	1.14	1.52	20.0	3.08	153	570	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	25.0	1.83	154	890	500/D
4	0.75	7/0.33	0.99	0.76	1.14	1.14	13.0	24.5	257	210	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.14	13.5	18.1	228	240	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	17.0	12.1	252	370	500/D
	2.50	7/0.67	2.01	1.14	1.14	1.52	18.5	7.41	209	450	500/D
	4.00	7/0.85	2.55	1.14	1.14	1.52	20.0	4.61	177	560	500/D
	6.00	7/1.04	3.12	1.14	1.14	1.52	21.5	3.08	153	680	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	27.0	1.83	154	1080	500/D
5	0.75	7/0.33	0.99	0.76	1.14	1.14	14.0	24.5	257	240	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	15.5	18.1	228	290	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	18.5	12.1	252	420	500/D
	2.50	7/0.67	2.01	1.14	1.14	1.52	20.0	7.41	209	520	500/D
	4.00	7/0.85	2.55	1.14	1.14	1.52	21.5	4.61	177	640	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	24.5	3.08	153	840	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	29.5	1.83	154	1250	500/D
6	0.75	7/0.33	0.99	0.76	1.14	1.52	15.5	24.5	257	300	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	16.5	18.1	228	330	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	20.0	12.1	252	480	500/D
	2.50	7/0.67	2.01	1.14	1.14	1.52	21.5	7.41	209	600	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	24.5	4.61	177	800	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	26.5	3.08	153	980	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	32.0	1.83	154	1480	500/D
7	0.75	7/0.33	0.99	0.76	1.14	1.52	15.5	24.5	257	300	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	16.5	18.1	228	340	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	20.0	12.1	252	490	500/D
	2.50	7/0.67	2.01	1.14	1.14	1.52	21.5	7.41	209	620	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	24.5	4.61	177	830	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	26.5	3.08	153	1030	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	32.0	1.83	154	1560	500/D
8	0.75	7/0.33	0.99	0.76	1.14	1.52	16.5	24.5	257	340	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	17.5	18.1	228	380	500/D
	1.50	7/0.50	1.50	1.14	1.14	1.52	21.5	12.1	252	560	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	24.0	7.41	209	750	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	26.0	4.61	177	940	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	28.0	3.08	153	1170	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	34.5	1.83	154	1780	500/D
9	0.75	7/0.33	0.99	0.76	1.14	1.52	17.5	24.5	257	370	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	18.5	18.1	228	420	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	22.5	12.1	252	620	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	25.5	7.41	209	840	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	28.0	4.61	177	1050	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	30.0	3.08	153	1310	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	37.0	1.83	154	2000	500/D

C: Packing in coil.

D: Packing in drum.



Number of Core	Nominal cross sectional area (mm ²)	Number and diameter of wire (No/mm)	Diameter of Conductor (approx)	Insulation thickness (mm)	Thickness of Inner Sheath (mm)	Outer Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20° c (Ω/Km)	Minimum insulation resistance at 15.6° c (MΩ/Km)	Cable weight (approx.) (Kg/Km)	Standard Length (m)
10	0.75	7/0.33	0.99	0.76	1.14	1.52	18.5	24.5	257	410	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	19.5	18.1	228	470	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	25.5	12.1	252	750	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	27.5	7.41	209	940	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	30.0	4.61	177	1180	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	32.5	3.08	153	1470	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	40.0	1.83	154	2260	500/D
11	0.75	7/0.33	0.99	0.76	1.14	1.52	18.5	24.5	257	420	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	19.5	18.1	228	480	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	25.5	12.1	252	770	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	27.5	7.41	209	980	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	30.0	4.61	177	1240	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	32.5	3.08	153	1550	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	39.5	1.83	154	2380	500/D
12	0.75	7/0.33	0.99	0.76	1.14	1.52	19.0	24.5	257	440	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	20.0	18.1	228	510	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	26.0	12.1	252	820	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	28.5	7.41	209	1040	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	31.0	4.61	177	1310	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	33.5	3.08	153	1650	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	41.0	1.83	154	2550	500/D
13	0.75	7/0.33	0.99	0.76	1.14	1.52	19.5	24.5	257	460	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	20.5	18.1	228	530	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	26.5	12.1	252	850	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	29.0	7.41	209	1090	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	31.5	4.61	177	1380	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	34.0	3.08	153	1740	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	42.0	1.83	154	2700	500/D
14	0.75	7/0.33	0.99	0.76	1.14	1.52	20.0	24.5	257	490	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	21.0	18.1	228	560	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	27.0	12.1	252	900	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	30.0	7.41	209	1160	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	32.5	4.61	177	1470	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	35.0	3.08	153	1860	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	43.5	1.83	154	2890	500/D
15	0.75	7/0.33	0.99	0.76	1.14	1.52	20.5	24.5	257	510	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	21.5	18.1	228	590	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	28.0	12.1	252	950	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	30.5	7.41	209	1210	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	33.0	4.61	177	1550	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	36.0	3.08	153	1960	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	44.5	1.83	154	3060	500/D
16	0.75	7/0.33	0.99	0.76	1.14	1.52	21.0	24.5	257	530	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	22.0	18.1	228	610	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	28.5	12.1	252	990	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	31.0	7.41	209	1270	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	34.0	4.61	177	1630	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	37.0	3.08	153	2060	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.03	45.5	1.83	154	3210	500/D
17	0.75	7/0.33	0.99	0.76	1.14	1.52	21.5	24.5	257	550	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	22.5	18.1	228	640	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	29.5	12.1	252	1040	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	32.0	7.41	209	1330	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	35.0	4.61	177	1710	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	38.0	3.08	153	2170	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.79	48.5	1.83	154	3550	500/D
18	0.75	7/0.33	0.99	0.76	1.14	1.52	22.0	24.5	257	580	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	23.0	18.1	228	670	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	30.0	12.1	252	1090	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	32.5	7.41	209	1410	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	35.5	4.61	177	1800	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	39.0	3.08	153	2290	500/D
	10.00	7/1.35	4.05	1.52	1.14	2.79	50.0	1.83	154	3750	500/D

C: Packing in coil.
 D: Packing in drum.



Number of Core	Nominal cross sectional area (mm²)	Number and diameter of wire (No/mm)	Diameter of Conductor (approx)	Insulation thickness (mm)	Thickness of Inner Sheath (mm)	Outer Sheath thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20° C (Ω/Km)	Minimum insulation resistance at 15.6° C (MΩ/Km)	Cable weight (approx.) (Kg/Km)	Standard Length (m)
19	0.75	7/0.33	0.99	0.76	1.14	1.52	22.0	24.5	257	580	500/D
	1.00	7/0.40	1.20	0.76	1.14	1.52	23.0	18.1	228	680	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	30.0	12.1	252	1100	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	32.5	7.41	209	1430	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	35.5	4.61	177	1840	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	39.0	3.08	153	2340	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	50.0	1.83	154	3830	500/D	
20	0.75	7/0.33	0.99	0.76	1.14	1.52	22.5	24.5	257	610	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	24.5	18.1	228	760	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	30.5	12.1	252	1150	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	33.5	7.41	209	1490	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	36.5	4.61	177	1920	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	39.5	3.08	153	2450	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	51.0	1.83	154	4020	500/D	
21	0.75	7/0.33	0.99	0.76	1.14	1.52	22.5	24.5	257	630	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	25.0	18.1	228	790	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	31.0	12.1	252	1190	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	34.0	7.41	209	1550	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	37.5	4.61	177	2010	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	40.5	3.08	153	2560	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	52.0	1.83	154	4190	500/D	
22	0.75	7/0.33	0.99	0.76	1.14	2.03	24.5	24.5	257	710	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	25.5	18.1	228	820	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	32.0	12.1	252	1240	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	35.0	7.41	209	1620	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	38.5	4.61	177	2100	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	42.0	3.08	153	2680	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	54.0	1.83	154	4390	500/D	
23	0.75	7/0.33	0.99	0.76	1.14	2.03	24.5	24.5	257	730	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	26.0	18.1	228	850	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	32.5	12.1	252	1290	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	35.5	7.41	209	1680	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	39.0	4.61	177	2170	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	42.5	3.08	153	2780	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	55.0	1.83	154	4560	500/D	
24	0.75	7/0.33	0.99	0.76	1.14	2.03	26.0	24.5	257	780	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	27.5	18.1	228	900	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	34.5	12.1	252	1380	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	37.5	7.41	209	1800	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	41.0	4.61	177	2330	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	45.0	3.08	153	2980	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	58.0	1.83	154	4880	500/D	
25	0.75	7/0.33	0.99	0.76	1.14	2.03	26.0	24.5	257	800	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	27.5	18.1	228	920	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	34.5	12.1	252	1410	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	37.5	7.41	209	1840	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	41.0	4.61	177	2380	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	45.0	3.08	153	3050	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	58.0	1.83	154	5010	500/D	
26	0.75	7/0.33	0.99	0.76	1.14	2.03	26.0	24.5	257	810	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	27.5	18.1	228	930	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	34.5	12.1	252	1430	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	37.5	7.41	209	1880	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	41.0	4.61	177	2440	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	45.0	3.08	153	3130	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	58.0	1.83	154	5140	500/D	
27	0.75	7/0.33	0.99	0.76	1.14	2.03	26.5	24.5	257	830	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	28.0	18.1	228	960	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	35.0	12.1	252	1480	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	38.5	7.41	209	1940	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	42.0	4.61	177	2520	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.03	46.0	3.08	153	3230	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	59.0	1.83	154	5310	500/D	
28	0.75	7/0.33	0.99	0.76	1.14	2.03	28.0	24.5	257	840	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	28.0	18.1	228	980	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	35.0	12.1	252	1510	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	38.5	7.41	209	1980	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	42.0	4.61	177	2580	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.79	46.0	3.08	153	3310	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	59.0	1.83	154	5440	500/D	
29	0.75	7/0.33	0.99	0.76	1.14	2.03	26.5	24.5	257	860	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	28.0	18.1	228	1000	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	35.5	12.1	252	1540	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	39.0	7.41	209	2030	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	42.5	4.61	177	2650	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.79	48.0	3.08	153	3560	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	59.5	1.83	154	5600	500/D	
30	0.75	7/0.33	0.99	0.76	1.14	2.03	27.0	24.5	257	890	500/D
	1.00	7/0.40	1.20	0.76	1.14	2.03	28.5	18.1	228	1030	500/D
	1.50	7/0.50	1.50	1.14	1.14	2.03	36.0	12.1	252	1590	500/D
	2.50	7/0.67	2.01	1.14	1.14	2.03	40.0	7.41	209	2094	500/D
	4.00	7/0.85	2.55	1.14	1.14	2.03	43.5	4.61	177	2730	500/D
	6.00	7/1.04	3.12	1.14	1.14	2.79	49.5	3.08	153	3670	500/D
10.00	7/1.35	4.05	1.52	1.14	2.79	61.0	1.83	154	5770	500/D	

C: Packing in coil.

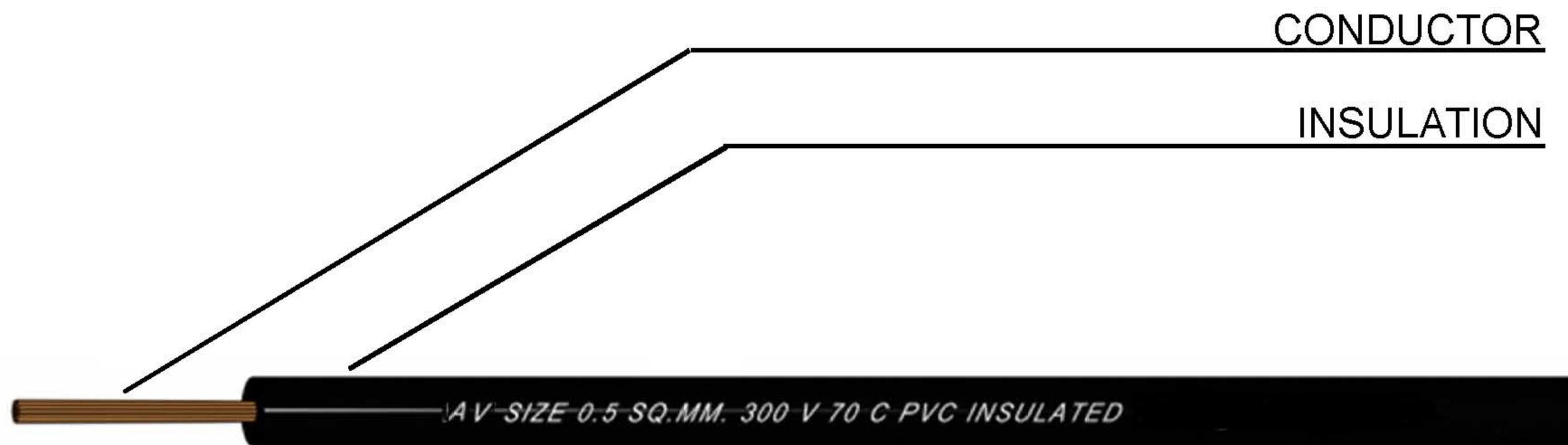
D: Packing in drum.



COPPER CONDUCTOR CABLES

Automobile Wire and Cables

		PAGE
AV	60 °C LOW VOLTAGE FLEXIBLE CONDUCTOR FOR AUTOMOBILE (TIS 118-2522)	55

60°C LOW VOLTAGE FLEXIBLE CONDUCTOR FOR AUTOMOBILE**CABLE STRUCTURE**

CONDUCTOR	: Flexible annealed copper wires Sizes. 0.5 mm ² up to 95 mm ²
INSULATION	: PVC Colour : Any color
CLASSIFICATION	: Maximum conductor temperature 60°C Low voltage circuit
TESTING VOLTAGE	: 5,000 Volts
REFERENCE	: TIS 118-2522

**AV**

Number of core	Nominal cross sectional area (mm ²)	Number and diameter of wire (No./mm)	Approx. conductor diameter (mm)	Mean value of insulation thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20°C (Ω-Km)	Maximum continuous current rating in free air (Ampere)	Cable weight (approx.) (Kg/Km)	Standard length (m)
1	0.5	16/0.20	0.95	0.6	2.2	37.1	8	9	100/C
	0.5	7/0.30	0.95	0.6	2.2	37.1	8	9	100/C
	0.75	24/0.20	1.15	0.6	2.4	24.7	11	11	100/C
	0.85	12/0.30	1.2	0.6	2.4	22.0	11	12	100/C
	1.0	32/0.20	1.3	0.6	2.6	18.5	13	14	100/C
	1.25	40/0.20	1.5	0.6	2.7	14.8	15	17	100/C
	1.25	18/0.30	1.5	0.6	2.7	14.7	15	17	100/C
	1.5	30/0.25	1.6	0.6	2.8	12.7	16	19	100/C
	2.0	28/0.30	1.9	0.6	3.1	9.42	20	24	100/C
	2.5	50/0.25	2.1	0.7	3.5	7.6	23	30	100/C
	3.0	44/0.30	2.3	0.7	3.7	6.00	26	37	100/C
	4.0	56/0.30	2.6	0.8	4.2	4.71	31	47	100/C
	5.0	70/0.30	3.0	0.8	4.6	3.77	36	57	100/C
	6.0	84/0.30	3.2	0.9	5.0	3.14	40	69	100/C
	8.0	63/0.40	3.7	0.9	5.5	2.31	48	88	100/C
	10	84/0.40	4.2	1.1	6.4	1.82	58	114	100/C
	16	126/0.40	5.8	1.1	8.0	1.16	75	173	100/C
	25	196/0.60	7.0	1.4	9.8	0.770	98	261	100/C
	35	280/0.40	8.5	1.4	11.3	0.524	124	366	100/C
50	399/0.40	10.9	1.6	14.1	0.357	163	537	500/D	
70	361/0.50	12.6	2.0	16.6	0.268	200	727	500/D	
95	475/0.50	14.1	2.0	18.1	0.193	248	971	500/D	

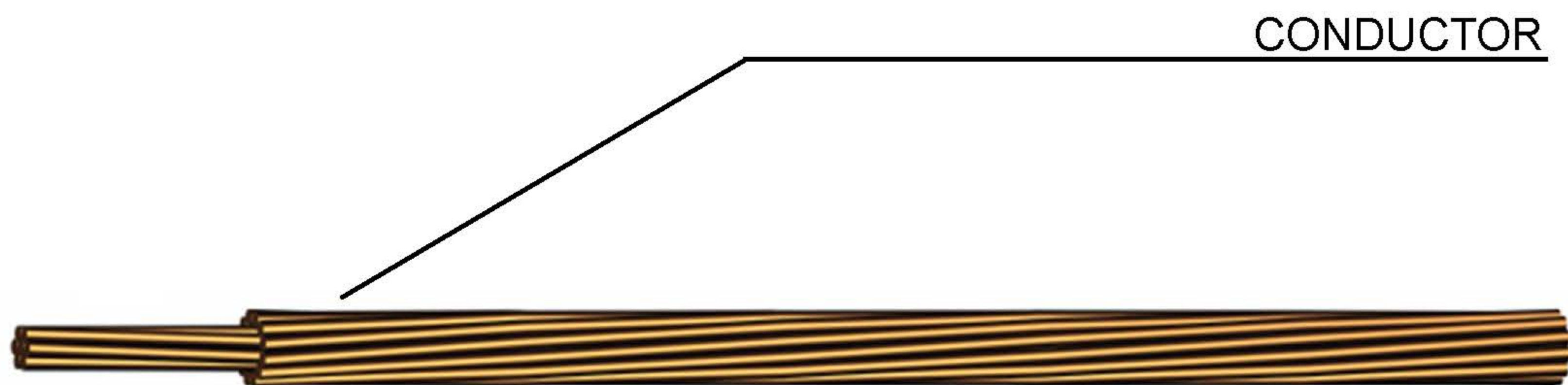
C: Packing in coil.

D: Packing in drum.

COPPER CONDUCTOR CABLES

Bare Conductor

		PAGE
FHC	HARD DRAWN COPPER STANDED STANDED CONDUCTOR (TIS 64-2517)	58

HARD DRAWN COPPER STRANDED CONDUCTOR**CABLE STRUCTURE**

- CONDUCTOR** : Hard drawn copper wires, concentric stranded conductor
Sizes. 10 mm² up to 500 mm²
Direction of outermost layer Z
- REFERENCE** : TIS 64-2517

**FHC**

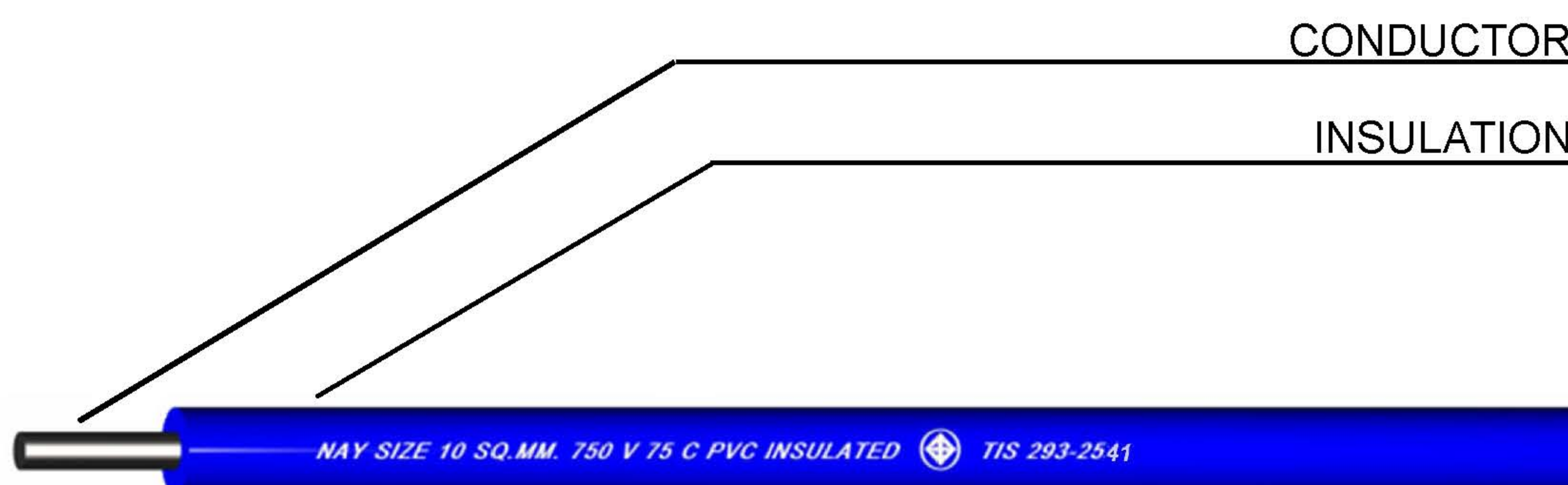
Nominal Cross Sectional area (mm²)	Number and diameter of wire (No./mm)	Approx conductor diameter (mm)	Maximum conductor resistance at 20°C (Ω-Km)	Breaking Strength (Kgf)	Maximum continuous current rating in free air (Ampere)	Cable weight (approx.) (Kg/Km)	Standard length (m)
10	7/1.35	4.05	1.80548	438	90	90	1000/D
16	7/1.70	5.10	1.13857	694	125	140	1000/D
25	7/2.14	6.42	0.71851	1,076	160	230	1000/D
35	7/2.25	7.56	0.51815	1,459	200	320	1000/D
50	7/3.02	9.06	0.35896	2,095	250	450	1000/D
50	19/1.78	8.90	0.38252	2,021	250	430	1000/D
70	19/2.14	10.70	0.26466	2,921	310	600	1000/D
95	19/2.52	12.60	0.19183	3,961	380	850	1000/D
120	19/2.85	14.25	0.14922	5,067	440	1,100	500/D
150	37/2.25	15.75	0.12384	6,289	510	1,300	500/D
185	37/2.52	17.64	0.09813	7,713	585	1,700	500/D
240	61/2.25	20.25	0.07528	10,369	700	2,200	500/D
300	61/2.52	22.68	0.06002	12,717	800	2,800	500/D
400	61/2.85	25.65	0.04692	16,266	900	3,600	500/D
500	61/3.20	28.80	0.03703	20,506	1110	4,500	500/D

C: Packing in coil.

ALUMINIUM CONDUCTOR CABLES

Building Wires and Cables

		PAGE
NAY	750 V 70 °C INSULATED ALUMINIUM CONDUCTOR, SINGLE CORE	61
THWA	750 V 70 °C ALUMINIUM CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 293-2541)	63
THWA-C	750 V 70 °C COMPACTED ALUMINIUM CONDUCTOR PVC INSULATED, SINGLE CORE (TIS 293-2541)	65

750 V 70°C PVC INSULATED ALUMINIUM CONDUCTOR, SINGLE CORE**CABLE STRUCTURE**

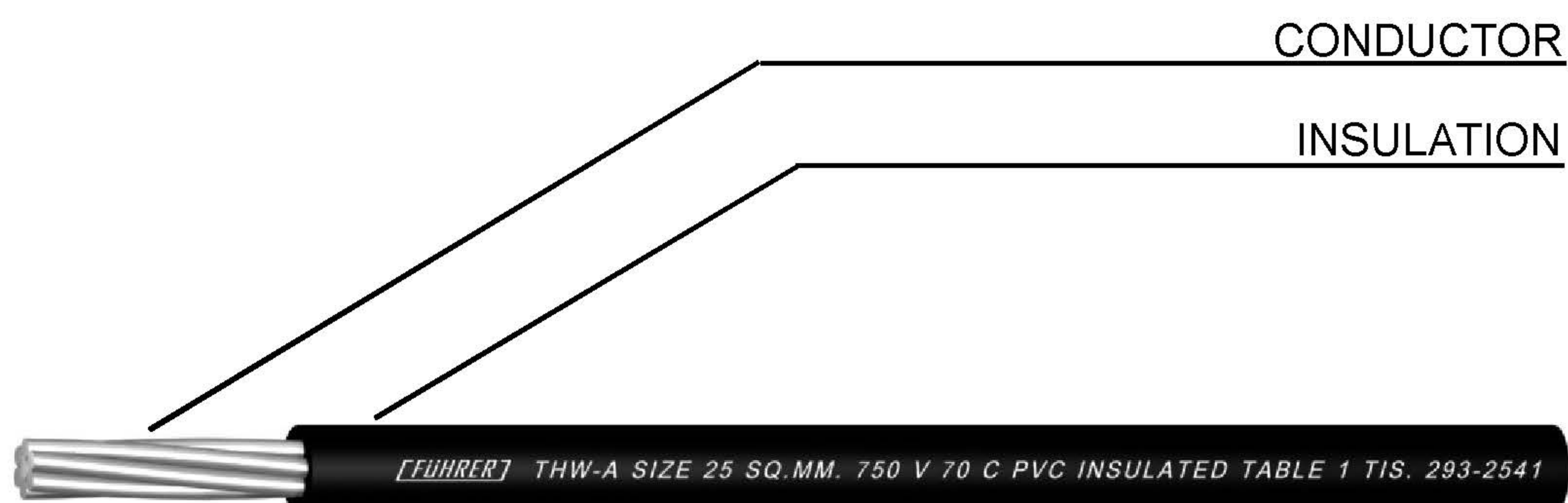
CONDUCTOR	: Solid hard drawn aluminum wires, Sizes. 10 mm ² up to 16 mm ²
INSULATION	: PVC Colour : Blue
CLASSIFICATION	: Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volts
TESTING VOLTAGE	: 2,500 Volts
REFERENCE	: TIS 293-2541 Table 1



NAY

Nominal cross Sectional Area (mm ²)	Number and diameter of wire (NO./mm)	Insulation thickness (mm)	Approx. overall diameter (mm)	Maximum Conductor Resistance at 20°C (Ω/Km)	Minimum insulation Resistance at 20°C (MΩ-Km)	Maximum continuous current rating in free air (Ampere)	Cable weight (approx.) (Kg/Km)	Standard length (m)
10	1/3.49	2.7	9.3	3.08	40	51	110	500/C
16	1/4.43	2.9	10.5	1.91	40	68	147	500/C

C: Packing in coil.

750 V 70°C PVC INSULATED ALUMINIUM CONDUCTOR, SINGLE CORE**CABLE STRUCTURE**

CONDUCTOR	:	Solid and stranded hard drawn aluminum wires, Sizes. 10 mm ² up to 500 mm ²
INSULATION	:	Heat resisting PVC Colour : Black
CLASSIFICATION	:	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volts
TESTING VOLTAGE	:	2,500 Volts
REFERENCE	:	TIS 293-2541 Table 1

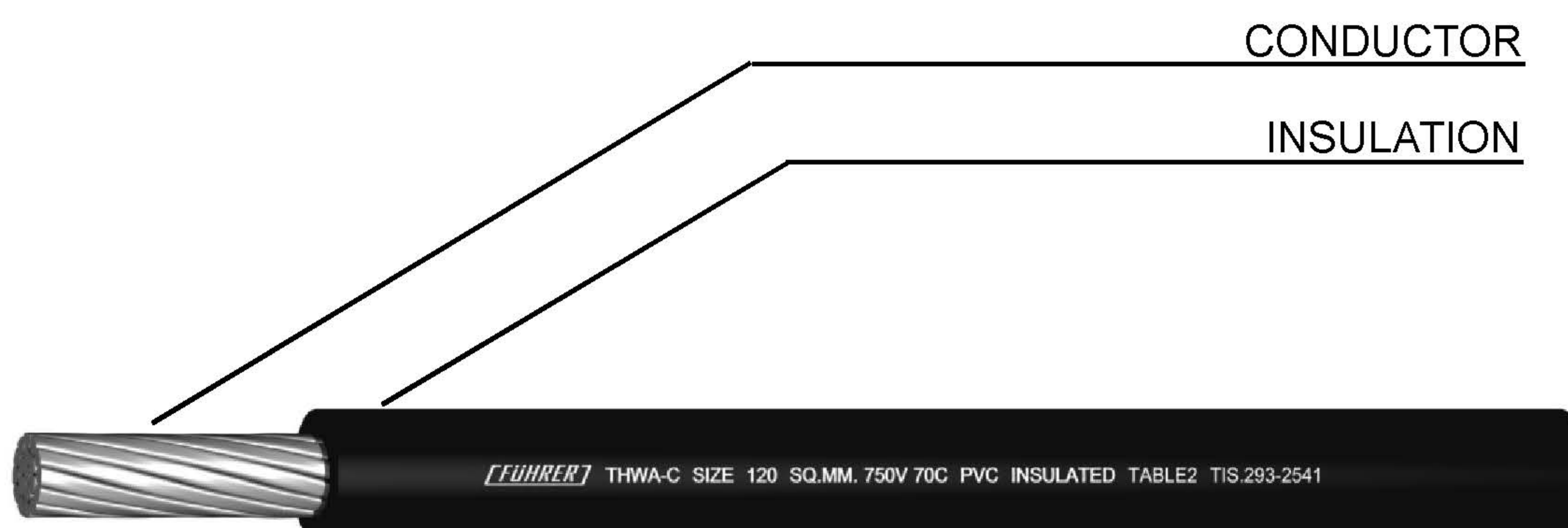


THWA

Nominal Cross Sectional area (mm ²)	Number and diameter of wire (No./mm)	Insulation thickness (mm)	Approx. Overall diameter (mm)	Maximum Conductor Resistance at 20°C (Ω-Km)	Minimum insulation resistance at 20°C (MΩ-Km)	Maximum continuous current rating in free air (Ampere)	Cable weight (approx.) (Kg/Km)	Standard length (m)
10	1/3.49	1.1	5.9	3.08	0.038	50	50	500/D
10	7/1.32	1.1	6.4	3.08	0.034	52	55	500/D
16	1/4.43	1.1	6.8	1.91	0.032	67	70	500/D
16	7/1.68	1.1	7.4	1.91	0.028	69	80	500/D
25	7/2.12	1.3	9.2	1.20	0.027	92	120	500/D
35	7/2.49	1.3	10.5	0.868	0.023	113	160	500/D
50	7/2.90	1.5	12.0	0.641	0.023	135	210	500/D
50	19/1.76	1.5	12.5	0.641	0.023	135	210	500/D
70	19/2.12	1.5	14.0	0.443	0.020	173	280	500/D
95	19/2.49	1.7	16.5	0.320	0.019	218	390	500/D
120	19/2.80	1.7	18.0	0.253	0.017	257	470	500/D
120	37/2.01	1.7	18.0	0.253	0.017	258	470	500/D
150	37/2.23	1.9	20.0	0.206	0.017	298	600	500/D
185	37/2.50	2.1	22.0	0.164	0.017	351	700	500/D
240	61/2.23	2.3	25.0	0.125	0.016	426	900	500/D
300	61/2.49	2.5	28.0	0.100	0.016	498	1,100	500/D
400	61/2.82	2.7	32.0	0.0778	0.015	594	1,400	500/D
500	61/3.20	3.1	36.0	0.0605	0.015	708	1,900	500/D

C: Packing in coil.

D: Packing in drum.

750 V 70°C PVC INSULATED ALUMINIUM COMPACTED CONDUCTOR, SINGLE CORE**CABLE STRUCTURE**

CONDUCTOR	:	Compact stranded hard drawn aluminum wires, Sizes. 10 mm ² up to 500 mm ²
INSULATION	:	Heat resisting PVC Colour : Black
CLASSIFICATION	:	Maximum conductor temperature 70°C Circuit voltage not exceeding 750 volts
TESTING VOLTAGE	:	2,500 Volts
REFERENCE	:	TIS 293-2541 Table 2



THWA-C

Nominal Cross Sectional area (mm ²)	Minimum number of wire (No)	Approx. Overall Conductor diameter (mm)	Insulation thickness (mm)	Approx. Overall diameter (mm)	Maximum conductor resistance at 20°C (Ω-Km)	Minimum insulation resistance at 70°C (MΩ-Km)	Maximum continuous current rating in free air (Ampere)	Cable weight (approx.) (Kg/Km)	Standard length (m)
10	6	3.70	1.1	6.20	3.08	0.0075	52	55	500/D
16	6	4.70	1.1	7.20	1.91	0.0062	71	75	500/D
25	6	5.90	1.3	8.80	1.20	0.0059	95	115	500/D
35	6	6.96	1.3	9.80	0.868	0.0051	115	150	500/D
50	6	8.28	1.5	11.60	0.641	0.0051	130	200	500/D
70	12	9.75	1.5	13.00	0.443	0.0043	180	270	500/D
95	15	11.45	1.7	15.20	0.320	0.0042	220	370	500/D
120	15	12.95	1.7	16.70	0.253	0.0038	270	450	500/D
150	15	14.20	1.9	18.40	0.206	0.0038	300	555	500/D
185	30	15.98	2.1	20.50	0.164	0.0038	370	695	500/D
240	30	18.47	2.3	23.40	0.125	0.0036	450	900	500/D
300	30	20.50	2.5	25.90	0.110	0.0035	520	1115	500/D
400	53	23.35	2.7	33.10	0.0778	0.0033	620	1415	500/D
500	53	26.50	3.1	33.20	0.0605	0.0034	750	1835	500/D

C: Packing in coil.

D: Packing in drum.

ALUMINIUM CONDUCTOR CABLES

High Voltage Power Cables

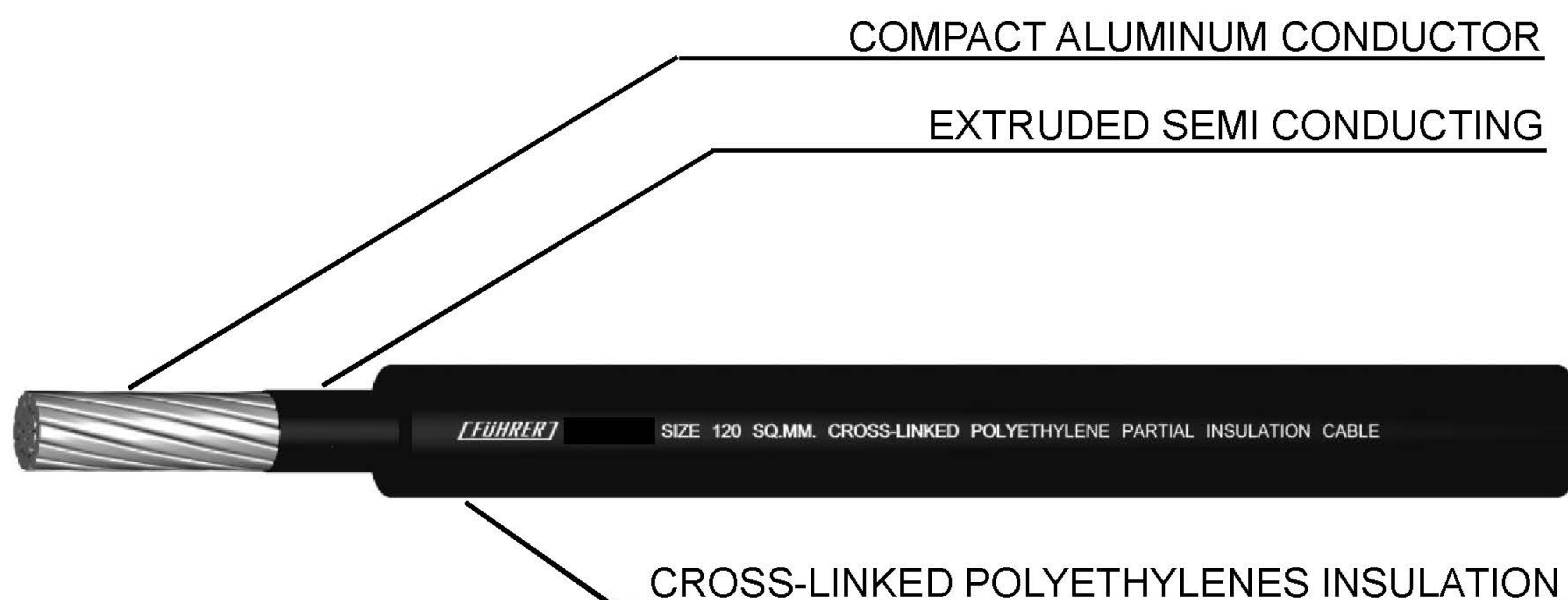
		PAGE
25KV-OC	25kV CROSS-LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE (ICEA S-66-524, ICEA S-93-639)	68
35KV-OC	35kV CROSS-LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE (ICEA S-66-524, ICEA S-93-639)	70
25KV-CC	25kV ALL ALUMINIUM CONDUCTOR SPACED AERIAL CABLE (ICEA S-66-524, ICEA S-93-639)	72
35KV-CC	35kV ALL ALUMINIUM CONDUCTOR SPACED CABLE (ICEA S-66-524, ICEA S-93-639)	74

PIC 25 KV

STANDARD

ICEA S-66-524/MEA/PEA TIS. 2341-2555

CROSS - LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE



CABLE STRUCTURE

NUMBER OF CORE	:	Single core
CONDUCTOR	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm ² up to 240 mm ²
CONDUCTOR SHIELD	:	Semi conducting cross-linked polyethylene
INSULATION	:	Track resistant cross-linked polyethylene Colour : Black
CLASSIFICATION	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 25 Kv.(Phase to Phase)
TESTING VOLTAGE	:	11KV for 5 minutes
REFERENCE	:	ICEA S-66-524 /MEA/PEA



STANDARD

ICEA S-66-524/MEA/PEA TIS. 2341-2555

PIC 25 KV

Number of core	Nominal cross sectional area (mm ²)	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Minimum Thickness of conductor shield & insulation (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MΩ-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	2.27	11.50	0.868	5,591	1,038	146	160	1,000/D
	50	7	8.28	2.36	13.00	0.641	7,313	990	178	215	1,000/D
	70	18	9.80	2.49	14.70	0.443	10,420	901	222	300	1,000/D
	95	18	11.45	2.58	16.60	0.320	14,098	832	274	380	1,000/D
	120	18	12.95	2.63	18.20	0.253	18,518	776	319	460	1,000/D
	150	18	14.20	2.62	19.50	0.206	22,457	728	363	560	1,000/D
	185	34	15.98	2.71	21.40	0.164	28,974	676	421	680	1,000/D
	240	34	18.47	2.82	24.10	0.125	37,506	630	503	880	1,000/D

D: Packing in drum.

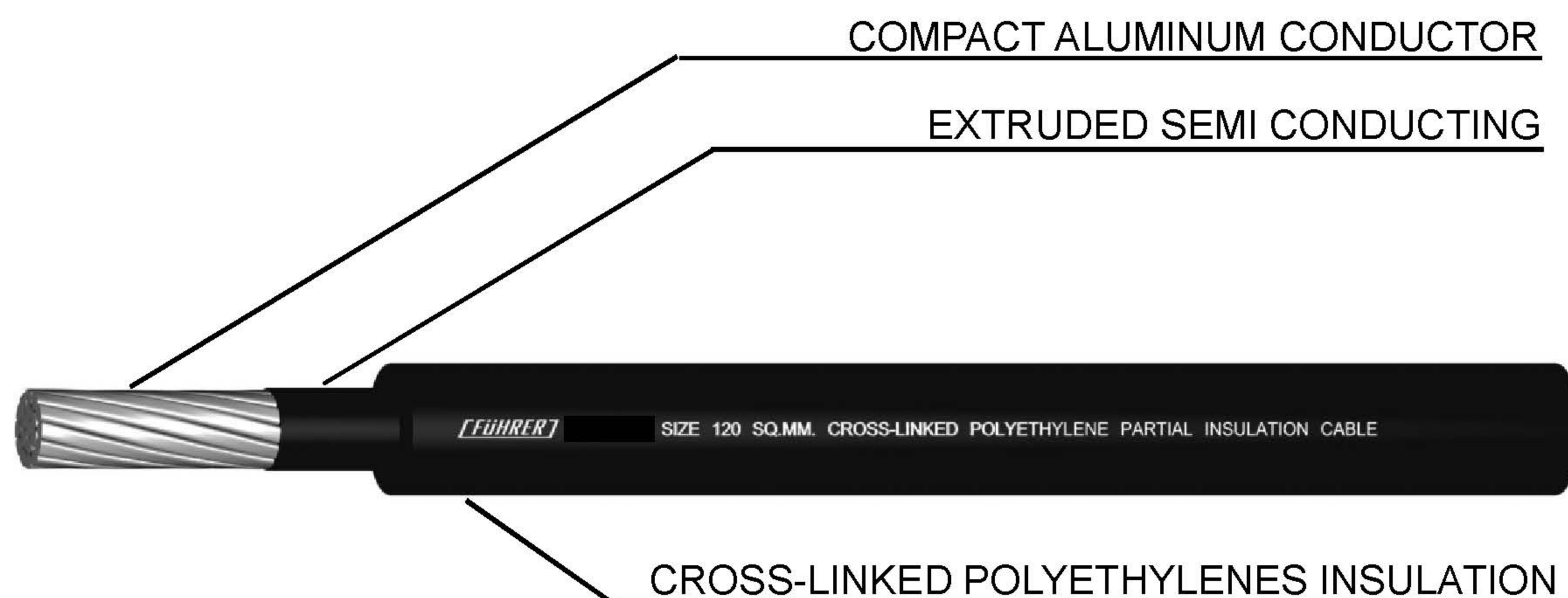


PIC 35 KV

STANDARD

ICEA S-66-524/MEA/PEA TIS. 2341-2555

CROSS - LINKED POLYETHYLENE PARTIAL INSULATED ALL ALUMINIUM CABLE



CABLE STRUCTURE

NUMBER OF CORE	:	Single core
CONDUCTOR	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm ² up to 240 mm ²
CONDUCTOR SHIELD	:	Semi conducting cross-linked polyethylene
INSULATION	:	Track resistant cross-linked polyethylene Colour : Black
CLASSIFICATION	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 35 Kv.(Phase to Phase)
TESTING VOLTAGE	:	17KV for 5 minutes
REFERENCE	:	ICEA S-66-524 /MEA/PEA

STANDARD

ICEA S-66-524/MEA/PEA TIS. 2341-2555

PIC 35 KV

Number of core	Nominal cross sectional area (mm ²)	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Minimum Thickness of conductor shield & insulation (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MΩ-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	3.25	13.56	0.868	5,591	1,506	148	200	1,000/D
	50	7	8.28	3.40	15.18	0.641	7,313	1,429	180	215	1,000/D
	70	18	9.80	3.60	17.10	0.443	10,420	1,309	224	300	1,000/D
	95	18	11.45	3.70	18.95	0.320	14,098	1,213	275	380	1,000/D
	120	18	12.95	3.80	20.65	0.253	18,518	1,139	319	460	1,000/D
	150	18	14.20	3.80	21.90	0.206	22,457	1,069	363	560	1,000/D
	185	34	15.98	3.90	23.88	0.164	28,974	990	420	680	1,000/D
	240	34	18.47	3.95	26.47	0.125	37,506	901	501	880	1,000/D

D: Packing in drum.

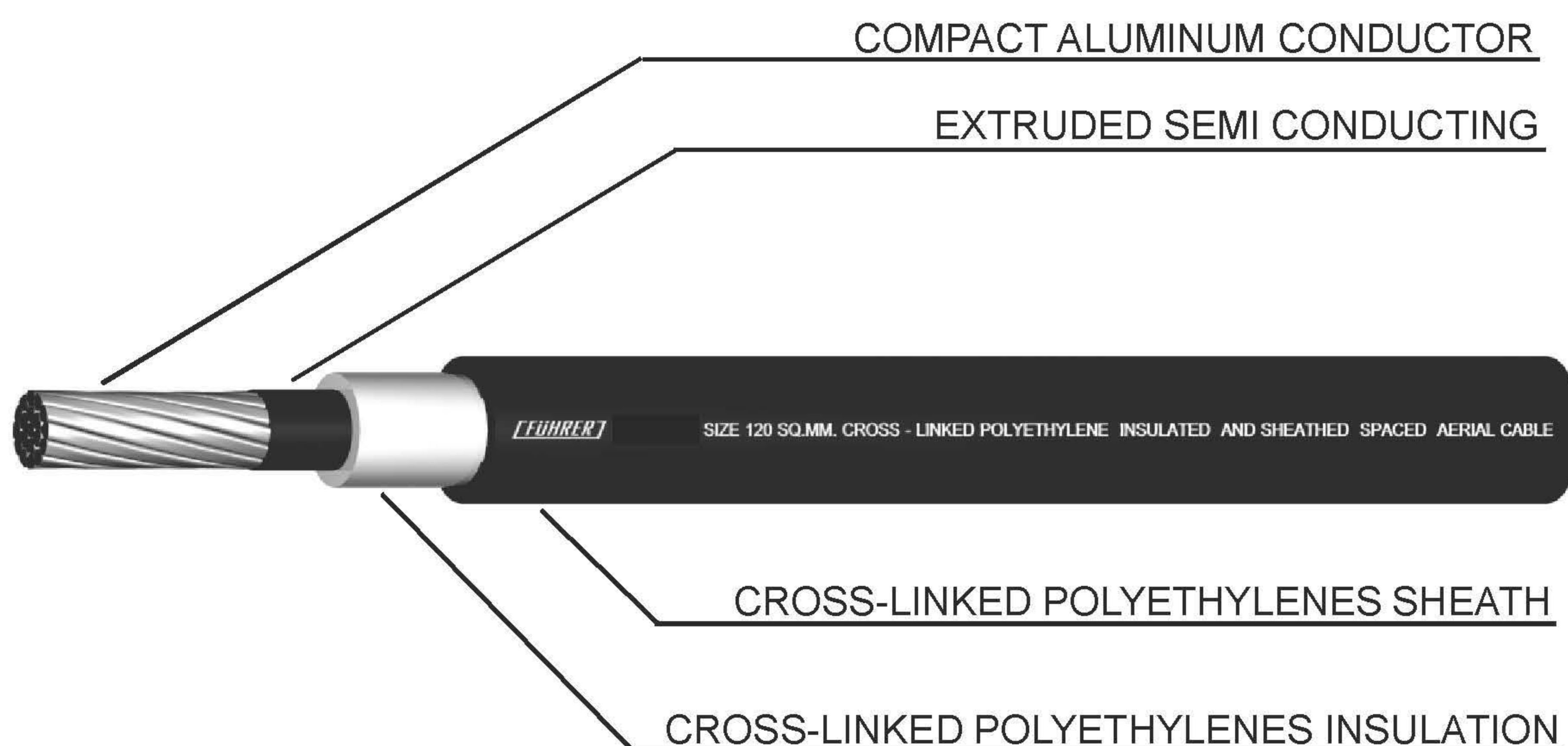


SAC 25 KV

STANDARD

ICEA S-66-524 / MEA / PEA / TIS.2341-2555

ALUMINUM STRANDED CONDUCTOR CROSS-LINKED POLYETHYLENE INSULATED AND SHEATHED SPACED AERIAL CABLE



CABLE STRUCTURE

NUMBER OF CORE	:	Single core
CONDUCTOR	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm ² up to 240 mm ²
CONDUCTOR SHIELD	:	Semi conducting cross-linked polyethylene
INSULATION	:	Cross-linked polyethylene Colour : Natural
SHEATH	:	Track resistant cross-linked polyethylene Colour : Black
CLASSIFICATION	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 25 Kv.(Phase to Phase)
TESTING VOLTAGE	:	38KV for 5 minutes
REFERENCE	:	ICEA S-66-524 /MEA/PEA



STANDARD

ICEA S-66-524 / MEA / PEA / TIS.2341-2555

SAC 25 KV

Number of core	Nominal cross sectional area (mm ²)	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Thickness of insulation (mm)	Thickness of sheath (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MΩ-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	3.175	3.175	20.88	0.868	5,591	2,500	149	390	1,000/D
	50	7	8.28	3.175	3.175	22.20	0.641	7,313	2,250	186	440	1,000/D
	70	18	9.80	3.175	3.175	23.72	0.443	10,420	2,050	229	540	1,000/D
	95	18	11.45	3.175	3.175	25.37	0.320	14,098	1,850	279	640	1,000/D
	120	18	12.95	3.175	3.175	26.87	0.253	18,518	1,700	321	740	1,000/D
	150	18	14.20	3.175	3.175	28.12	0.206	22,457	1,600	371	850	1,000/D
	185	34	15.98	3.175	3.175	29.90	0.164	28,974	1,500	429	990	1,000/D
	240	34	18.47	3.175	3.175	32.39	0.125	37,506	1,300	520	1,190	1,000/D

D: Packing in drum.

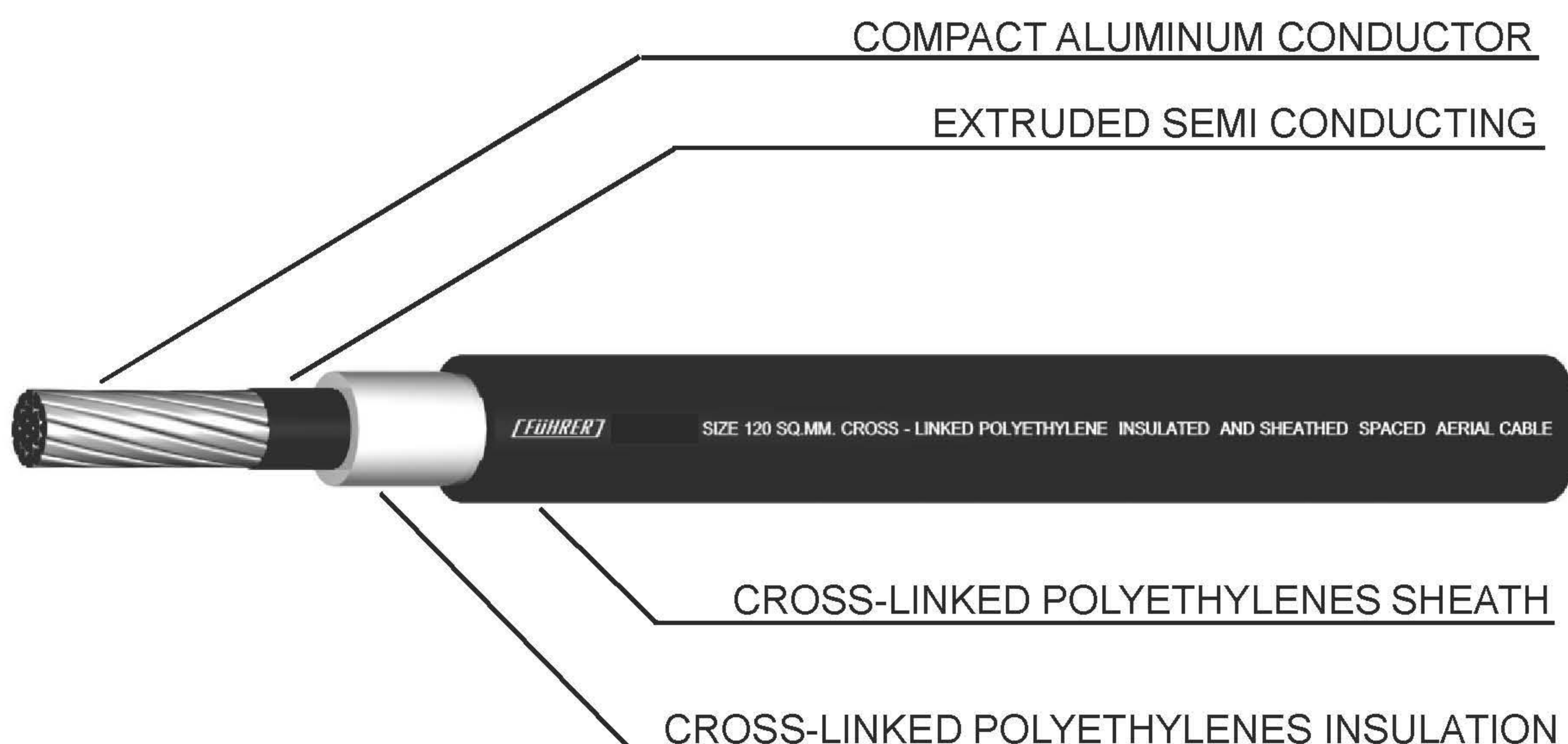


SAC 35 KV

STANDARD

ICEA S-66-524 / MEA / PEA / TIS.2341-2555

ALUMINUM STRANDED CONDUCTOR CROSS-LINKED POLYETHYLENE INSULATED AND SHEATHED SPACED AERIAL CABLE



CABLE STRUCTURE

NUMBER OF CORE	:	Single core
CONDUCTOR	:	Compact stranded hard drawn Aluminum wire Conductor sizes 35 mm ² up to 240 mm ²
CONDUCTOR SHIELD	:	Semi conducting cross-linked polyethylene
INSULATION	:	Cross-linked polyethylene Colour : Natural
SHEATH	:	Track resistant cross-linked polyethylene Colour : Black
CLASSIFICATION	:	Normal operation 90 °C Emergency overload conditions 130 °C Short circuit conditions 250°C Voltage rating 35 Kv.(Phase to Phase)
TESTING VOLTAGE	:	49KV for 5 minutes
REFERENCE	:	ICEA S-66-524 /MEA/PEA



STANDARD

ICEA S-66-524 / MEA / PEA / TIS.2341-2555

SAC 35 KV

Number of core	Nominal cross sectional area (mm ²)	Minimum number of wire (no.)	Diameter of conductor approx. (mm)	Thickness of insulation (mm)	Thickness of sheath (mm)	Overall Diameter (Approx) (mm)	Maximum DC conductor resistance at 20°C (Ω-Km)	Minimum breaking strength of conductor (N)	Minimum insulation resistance at 15.6°C (MΩ-Km)	Allowable current amp cities in free air at 40°C (ambient) (A)	Cable weight (Approx) (Kg/Km)	Standard length (m/d)
1	35	7	6.96	4.445	3.175	23.42	0.868	5,591	2,900	148	490	1,000/D
	50	7	8.28	4.445	3.175	14.93	0.641	7,313	2,600	184	530	1,000/D
	70	18	9.80	4.445	3.175	26.26	0.443	10,420	2,400	227	630	1,000/D
	95	18	11.45	4.445	3.175	27.91	0.320	14,098	2,100	276	750	1,000/D
	120	18	12.95	4.445	3.175	29.41	0.253	18,518	2,000	318	850	1,000/D
	150	18	14.20	4.445	3.175	30.66	0.206	22,457	1,800	367	960	1,000/D
	185	34	15.98	4.445	3.175	32.44	0.164	28,974	1,700	125	1,100	1,000/D
	240	34	18.47	4.445	3.175	34.93	0.125	37,506	1,500	515	1,400	1,000/D

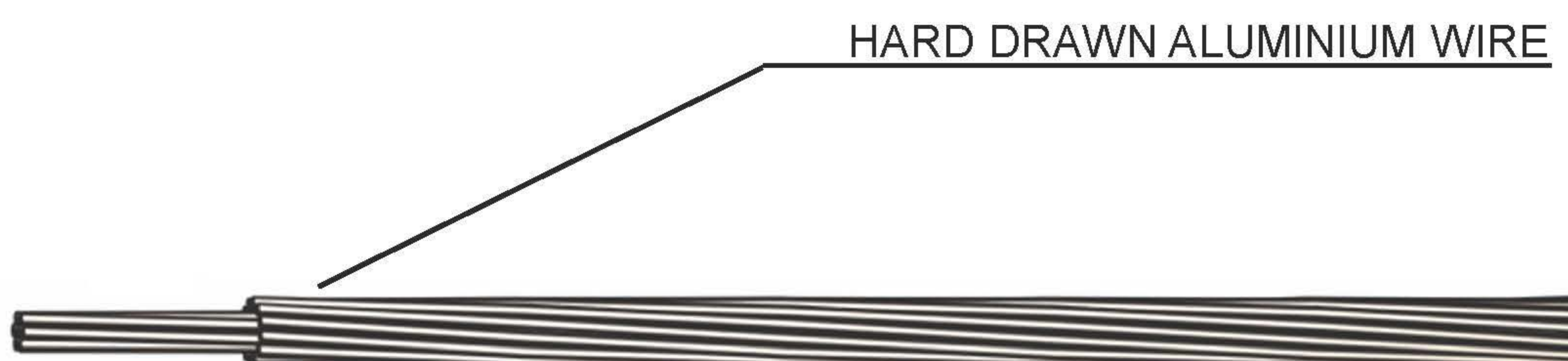
D: Packing in drum.



ALUMINIUM CONDUCTOR CABLES

Bare Conductor

		PAGE
AAC	ALL ALUMINIUM STRANDED CONDUCTOR (TIS 85-2548)	77
ACSR	ALUMINIUM CONDUCTOR STEEL REINFORCED (TIS 85-2548)	78

ALL ALUMINIUM STRANDED CONDUCTOR**CABLE STRUCTURE**

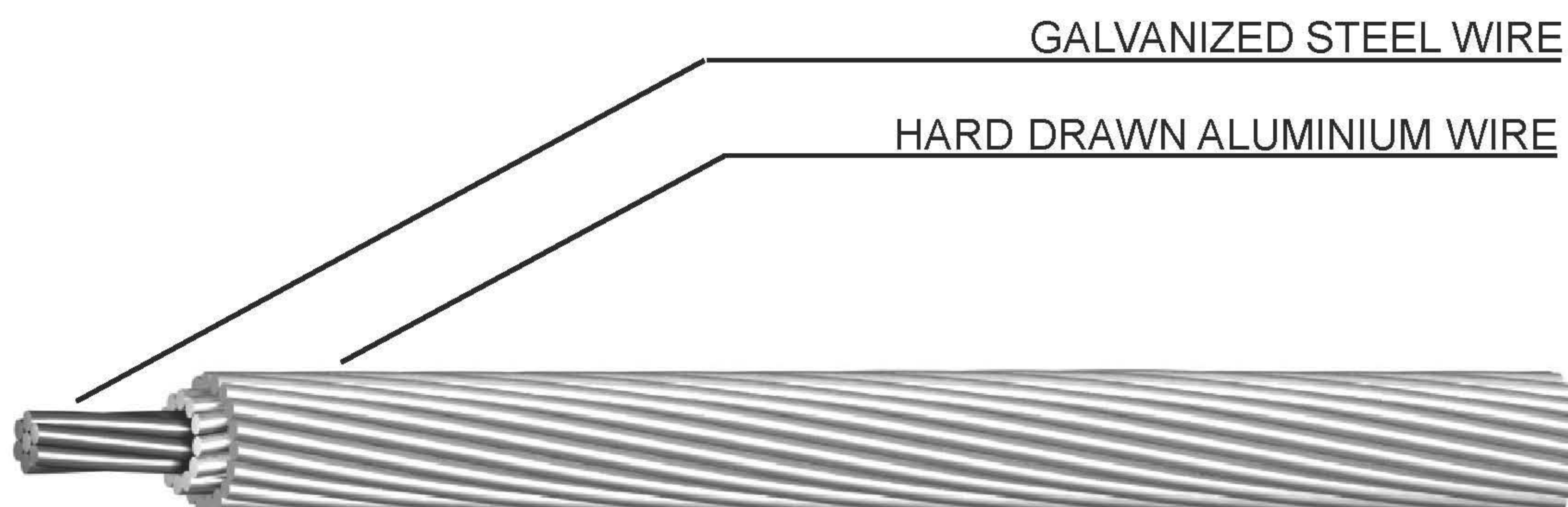
CONDUCTOR	:	Concentric stranded hard drawn aluminium wires, Sizes. 16 mm ² up to 500 mm ²
STANDING DIRECTION	:	Z - Stranding
REFERENCE	:	TIS 85-2548

**AAC**

Nominal Cross Sectional Area (mm²)	Number and approx. diameter of wire (No./mm)	Approx. Overall Conductor diameter (mm)	Maximum Conductor resistance at 20°C (Ω-Km)	Breaking Strength (Kgf)	Maximum Continuous Current Rating in Free air (Ampere)	Cable Weight (approx.) (Kg/Km)	Standard length (m)
16	7/1.70	5.10	1.802	290	110	44	3000/D
25	7/2.14	6.42	1.138	440	145	70	3000/D
35	7/2.52	7.56	0.820	585	180	95	3000/D
50	7/3.02	9.06	0.571	805	225	140	2500/D
50	19/1.83	9.15	0.5757	890	225	140	2500/D
70	19/2.15	10.75	0.4171	1,205	270	190	2500/D
95	19/2.52	12.60	0.3036	1,585	340	260	2500/D
120	19/2.85	14.25	0.2374	1,980	390	330	2000/D
150	37/2.25	15.75	0.1960	2,570	455	400	2000/D
185	37/2.52	17.64	0.1563	3,085	550	500	2000/D
240	61/2.25	20.25	0.1192	4,015	625	650	1500/D
300	91/2.52	22.68	0.0950	4,820	710	850	1500/D
400	61/2.85	25.65	0.0743	6,025	855	1,100	1000/D
500	61/3.25	29.25	0.0571	7,695	990	1,400	1000/D

C: Packing in coil.

D: Packing in drum.

ALUMINIUM CONDUCTOR STEEL REINFORCED**CABLE STRUCTURE**

CONDUCTOR	:	Hard drawn aluminium wire Sizes. 16 mm ² up to 550 mm ²
STANDING DIRECTION	:	Z - Stranding
STEEL CORE	:	Galvanized steel (Zinc coated), solid and concentric stranded, sizes 2.5 mm ² up to 70 mm ²
REFERENCE	:	TIS 85-2548

**ACSR**

Nominal cross sectional area	ALUMINIUM		STEEL WIRE		Approx. Overall conductor diameter	Maximum conductor resistance at 20°C	Breaking strength	Maximum continuous current rating in free air	Cable weight (approx.)	Standard length
	Number and approx. diameter of wire	Cross sectional area	Number and approx. diameter of wire	Cross sectional area						
(mm ²)	(No/mm)	(mm ²)	(No/mm)	(mm ²)	(mm)	(Ω/Km)	(Kgf.)	(Ampere)	(Kg/Km)	(m)
16/2.5	6/1.80	15.3	1/1.80	2.54	5.40	1.880	592	90	60	4,000/D
25/4	6/2.25	23.9	1/2.25	3.98	6.75	1.203	916	125	95	4,000/D
35/6	6/2.70	34.4	1/2.70	5.73	8.10	0.8353	1,265	145	140	3,000/D
50/8	6/3.20	48.3	1/3.20	8.04	9.60	0.5947	1,716	170	200	3,000/D
50/30	12/2.33	51.2	7/2.33	29.85	11.50	0.5644	4,380	170	380	3,000/D
70/12	26/1.85	69.9	7/1.44	11.40	11.50	0.4131	2,676	290	280	3,000/D
95/15	26/2.15	94.4	7/1.67	15.33	13.50	0.3058	3,565	350	380	3,000/D
95/55	12/3.20	96.5	7/3.20	56.30	16.00	0.2993	7,965	350	700	3,000/D
120/20	26/2.44	121.6	7/1.90	19.85	15.50	0.2375	4,555	410	490	2,000/D
120/70	12/3.60	122.1	7/3.60	71.25	18.00	0.2365	10,034	410	900	2,000/D
125/30	30/2.33	127.9	7/2.33	29.85	16.00	0.2259	5,759	425	600	2,000/D
150/25	26/2.70	148.9	7/2.10	24.25	17.00	0.1939	5,513	470	600	2,000/D
170/40	30/2.70	171.8	7/2.70	40.08	18.50	0.1683	7,675	520	800	2,000/D
185/30	26/3.00	183.8	7/2.33	29.85	18.50	0.1571	6,618	535	750	2,000/D
210/35	26/3.20	209.1	7/2.49	34.09	20.00	0.1381	7,489	590	850	1,500/D
210/50	30/3.00	212.1	7/3.00	49.48	21.00	0.1363	9,390	610	1,000	1,500/D
230/30	24/3.50	230.9	7/2.33	29.85	21.00	0.1250	7,313	630	900	1,500/D
240/40	26/3.45	243.1	7/2.68	39.49	21.00	0.1188	8,640	645	1,000	1,500/D
265/35	24/3.74	263.7	7/2.49	34.10	22.00	0.1095	8,307	680	1,000	1,000/D
300/50	26/3.86	304.3	7/3.00	49.50	24.00	0.0949	10,702	740	1,200	1,000/D
305/40	54/2.68	304.6	7/2.68	39.50	24.00	0.0949	9,942	740	1,200	1,000/D
380/50	54/3.00	381.7	7/3.00	49.50	27.00	0.0758	1,2312	840	1,500	1,000/D
435/55	54/3.20	434.3	7/3.20	56.30	28.00	0.0666	1,3673	900	1,700	1,000/D
490/65	54/3.40	490.3	7/3.40	63.60	30.00	0.0590	15,343	960	1,900	1,000/D
550/70	54/3.60	549.7	7/3.60	71.30	32.00	0.0526	17,096	1020	2,100	500/D
680/85	54/4.00	678.6	19/2.40	86.00	36.00	0.0426	12,040	1150	2,600	500/D

C: Packing in coil.

D: Packing in drum.

Technical Data and General Information

WIRE GAUGE	A1
CONTINUOUS CURRENT RATING FOR EACH CONDITION OF WIRES AND CABLES	A5
TEMPERATURE CORRECTION FACTORS FOR CONDUCTOR RESISTANCE	A6
TABLE OF THE DIMENSIONS FOR THE MOTOR STARTES	A7



Wire Gauges

Gauge				Diameter		Sectional Area			Weight	
B.W.G.	A.W.G.	S.W.G.	mm.G	Mil	mm.	Cir.Mil	in ²	mm ²	Ib1,000 ft	kg/km
5/0	-	7/0	-	500	12.700	250,000	0.1964	126.70	756.9	1,126
-	-	-	12	472.4	12.000	223,162	0.1753	113.10	675.6	1,005
-	-	6/0	-	464	11.789	215,296	0.1691	109.10	651.7	969.9
-	4/0	-	-	460	11.684	211,600	0.1662	107.20	640.5	953.0
4/0	-	-	-	454	11.532	206,100	0.1619	104.40	624.0	928.1
-	-	5/0	-	432	10.973	186,624	0.1466	94.56	565.0	840.6
3/0	-	-	-	425	10.795	180,600	0.1419	91.52	546.9	813.6
-	3/0	-	-	409.6	10.404	167,772	0.1318	85.03	508.0	755.9
-	-	4/0	-	400	10.160	160,000	0.1257	81.07	484.5	720.7
-	-	-	10	393.7	10.000	155,000	0.1217	78.54	468.0	698.2
2/0	-	-	-	380	9.652	144,400	0.1134	73.17	437.1	650.5
-	-	3/0	-	372	6.440	138,384	0.1087	70.12	418.9	623.4
-	2/0	-	-	364.8	9.266	133,079	0.1045	67.42	402.7	599.4
-	-	-	9	354.3	9.000	125,528	0.9859	63.62	380.0	565.6
-	-	2/0	-	348	8.839	121,104	0.09512	61.36	366.6	545.5
0	-	-	-	340	8.636	115,600	0.09079	58.58	349.9	520.8
-	0	-	-	324.9	8.250	105,560	0.08291	53.49	319.5	475.5
-	-	0	-	324	8.230	104,976	0.08245	53.19	317.8	472.8
-	-	-	8	315	8.000	99,225	0.07793	50.27	300.3	446.9
1	-	1	-	300	7.629	90,000	0.07069	45.60	272.4	405.4
-	1	-	-	289.3	7.348	83,694	0.06573	42.41	253.3	377.0
2	-	-	-	284	7.214	80,660	0.06335	40.87	244.2	363.3
-	-	2	-	276	7.010	76,176	0.05983	40.87	230.6	343.2
-	-	-	7.0	275.6	7.000	75,955	0.05966	39.60	229.9	342.1
3	-	-	-	259	6.579	67,080	0.05269	38.48	203.1	302.2
-	2	-	-	257.6	6.544	66,358	0.05212	33.99	200.9	299.0
-	-	-	6.5	255.9	6.500	65,485	0.05143	22.18	189.2	295.0
-	-	3	-	252	6.401	63,504	0.04988	32.18	192.2	286.1
4	-	-	-	238	6.045	56,640	0.04449	28.70	171.5	255.1
-	-	-	6.0	236.2	6.000	55,790	0.04382	28.27	168.9	251.1
-	-	4	-	232	5.893	53,824	0.04227	27.27	162.9	242.4
-	3	-	-	229.4	5.827	52,624	0.04133	26.66	159.3	237.0
5	-	-	-	220	5.588	48,400	0.03801	24.52	146.5	218.0
-	-	-	5.5	216.5	5.500	46,872	0.03681	23.72	141.9	210.9
-	-	5	-	212	5.385	44,944	0.03530	22.77	136.0	202.4
-	4	-	-	204.3	5.189	41,738	0.03278	21.15	126.3	188.0
6	-	-	-	203	5.156	41,210	0.03237	20.88	124.8	185.6
-	-	-	5.0	196.9	5.000	38,770	0.03045	19.63	117.4	174.5
-	-	6	-	192	4.877	36,846	0.02895	18.68	111.6	166.3
-	5	-	-	181.9	4.621	33,088	0.02599	16.77	100.2	149.1
7	-	-	-	180	4.572	32,400	0.02545	16.42	98.08	146.0
-	-	-	4.5	177.2	4.500	31,400	0.02466	15.9	9.04	141.4
-	-	7	-	176	4.470	30,976	0.02433	15.70	93.77	139.6
8	-	-	-	165	4.191	27,220	0.02138	13.80	8.4	122.7
-	6	-	-	162	4.115	26,244	0.02061	13.30	79.43	118.2



Gauge				Diameter		Sectional Area			Weight	
B.W.G.	A.W.G.	S.W.G.	mm.G	Mil	mm.	Cir.Mil	in ²	mm ²	lb/1,000 ft	kg/km
-	-	8	-	160	4.064	25,600	0.02011	12.97	77.50	115.30
-	-	-	4.0	157.5	4.000	24,806	0.01948	12.57	75.08	111.80
9	-	-	-	148	3.759	21,900	0.01720	11.10	66.29	98.68
-	7	-	-	144.3	3.665	20,822	0.01635	10.55	63.01	93.79
-	-	9	-	144	3.658	20,736	0.01629	10.52	62.78	93.52
-	-	-	3.5	137.8	3.500	18,989	0.01491	9.621	57.46	85.53
10	-	-	-	134	3.404	17,960	0.1410	9.098	54.34	80.88
-	8	-	-	128.5	3.264	16,512	0.01297	8.368	49.99	74.39
-	-	10	-	128	3.251	16,384	0.01287	8.302	49.60	73.39
-	-	-	3.2	126	3.200	15,876	0.01247	8.042	48.06	71.49
11	-	-	-	120	3.048	14,400	0.01131	7.297	43.59	64.87
-	-	11	-	116	2.946	13,456	0.01057	6.818	40.74	60.61
-	9	-	-	114.4	2.906	13,087	0.01028	6.632	39.62	58.96
-	-	-	2.9	114.2	2.900	13,042	0.01024	6.605	39.47	58.72
12	-	-	-	109	2.769	11,880	0.009331	6.020	35.96	53.52
-	-	12	-	104	2.642	10,816	0.008495	5.481	32.74	48.73
-	-	-	2.6	102.4	2.600	10,486	0.008246	5.309	31.78	47.29
-	10	-	-	101.9	2.588	10,384	0.008156	5.262	31.43	46.78
13	-	-	-	95	2.413	9,025	0.007088	4.573	27.32	40.65
-	-	13	-	92	2.337	8,464	0.006648	4.289	25.62	38.13
-	11	-	-	90.74	2.305	8,234	0.006467	4.172	24.92	37.09
-	-	-	2.3	90.55	2.300	8,199	0.006439	4.155	24.82	36.94
14	-	-	-	83	2.108	6,889	0.005411	3.491	20.85	31.04
-	12	-	-	80.81	2.053	6,530	0.005129	3.309	19.77	29.42
-	-	14	-	80	2.032	6,400	0.005027	3.243	19.37	28.83
-	-	-	2.0	78.74	2.000	6,200	0.004869	3.142	18.77	27.93
15	-	15	-	72	1.829	5,184	0.004072	2.627	18.46	27.36
-	13	-	-	71.96	1.828	5,178	0.004067	2.624	15.67	23.33
-	-	-	1.8	78.87	1.800	5,023	0.003945	2.545	15.20	22.63
16	-	-	-	65	1.651	4,225	0.003318	2.141	12.79	19.03
-	14	-	-	64.08	1.628	4,106	0.003225	2.081	12.43	18.50
-	-	16	-	64	1.626	4,096	0.003217	2.075	12.40	18.45
-	-	-	1.6	62.99	1.600	3,968	0.003116	2.011	12.01	17.88
17	-	-	-	58	1.473	3,364	0.002642	1.705	10.18	15.16
-	15	-	-	57.07	1.450	3,257	0.002558	1.650	9.859	14.67
-	-	17	-	56	1.422	3,136	0.002463	1.589	9.493	14.13
-	-	-	1.4	55.12	1.400	3,038	0.002386	1.539	9.196	13.68
-	16	-	-	50.82	1.291	2,583	0.002029	1.309	7.820	11.64
18	-	-	-	49	1.245	2,401	0.001886	1.217	7.269	10.82
-	-	18	-	48	1.219	2,304	0.001810	1.167	6.976	10.38
-	-	-	1.2	47.24	1.200	2,232	0.001753	1.131	6.756	10.06
-	17	-	-	45.26	1.150	2,048	0.001608	1.037	6.197	9.22
19	-	-	-	42	1.067	1,764	0.001385	0.8938	5.388	7.946
-	18	-	-	40.3	1.024	1,624	0.001275	0.8226	4.914	7.313
-	-	19	-	40	1.016	1,600	0.001257	0.8107	4.845	7.207
-	-	-	1.0	39.37	1.000	1,550	0.001217	0.7854	4.690	6.982
-	-	20	-	36	0.914	1,296	0.001018	0.6576	3.923	5.838



Gauge				Diameter		Sectional Area			Weight	
B.W.G.	A.W.G.	S.W.G.	mm.G	Mil	mm.	Cir.Mil	in ²	mm ²	lb1,000 ft	kg/km
-	19	-	-	35.89	0.9116	1,288	0.001012	0.6529	3.900	5.804
-	-	-	0.90	35.43	0.9000	1,255	0.0009857	0.6362	3.799	5.656
20	-	-	-	35	0.8890	1,225	0.009621	0.6207	3.708	5.518
21	-	21	-	32	0.8128	1,024	0.0008042	0.5189	3.099	4.613
-	20	-	-	31.96	0.8118	1,021	0.0008019	0.5174	3.091	4.600
-	-	-	0.80	31.50	0.8000	992.3	0.0007794	0.5027	3.004	4.469
-	21	-	-	28.46	0.7229	810.0	0.0006362	0.4105	2.452	3.649
22	-	22	-	28	0.7112	784.0	0.0006158	0.3973	2.373	3.532
-	-	-	0.70	27.56	0.7000	759.6	0.0005966	0.3848	2.299	3.421
-	-	-	0.65	25.59	0.6500	654.8	0.0005143	0.3318	1.982	2.950
-	22	-	-	25.35	0.6438	642.6	0.0005047	0.3256	1.945	2.895
23	-	-	-	25	0.6350	625.0	0.0004909	0.3167	1.892	2.816
-	-	23	-	24	0.6096	576.0	0.0004524	0.2919	1.744	2.595
-	-	-	0.60	23.62	0.6000	557.9	0.0004382	0.2827	1.689	2.513
-	23	-	-	22.57	0.5733	509.4	0.0004001	0.2581	1.542	2.295
24	-	24	-	22	0.5583	484.0	0.0003801	0.2452	1.465	2.180
-	-	-	0.55	21.65	0.5500	468.7	0.0003681	0.2376	1.419	2.112
-	24	-	-	20.10	0.5106	404.0	0.0003173	0.2047	1.223	1.820
25	-	25	-	20	0.5080	400.0	0.0003142	0.2027	1.211	1.802
-	-	-	0.50	19.69	0.5000	387.7	0.0003045	0.1963	1.174	1.745
26	-	26	-	18	0.4572	324.0	0.0002545	0.1642	0.9809	1.460
-	25	-	-	17.90	0.4572	320.4	0.0002516	0.1623	0.9697	1.443
-	-	-	0.45	17.72	0.4500	314.0	0.0002466	0.1590	0.9504	1.414
-	-	27	-	16.4	0.4166	269.0	0.0002113	0.1363	0.7844	1.212
27	-	-	-	16	0.4064	256.0	0.0002011	0.1297	0.7750	1.153
-	26	-	-	15.94	0.4049	254.0	0.0001996	0.1288	0.7693	1.145
-	-	-	0.40	15.75	0.4000	248.1	0.0001949	0.1257	0.7512	1.118
-	-	28	-	14.8	0.3759	219.0	0.0001720	0.1110	0.6629	0.9868
-	27	-	-	14.20	0.3610	201.6	0.0001583	0.1021	0.6101	0.9077
28	-	-	-	14	0.3556	196.0	0.0001539	0.09932	0.5931	0.8330
-	-	-	0.35	13.78	0.3500	189.9	0.0001491	0.09621	0.5746	0.8553
-	-	29	-	13.6	0.3454	185.0	0.0001453	0.09372	0.5600	0.8332
29	-	-	-	13	0.3302	169.0	0.0001327	0.08563	0.5114	0.7613
-	28	-	-	12.64	0.3211	159.8	0.0001255	0.08097	0.4837	0.7198
-	-	-	0.30	12.60	0.3200	158.8	0.0001246	0.08042	0.7806	0.7149
-	-	30	-	12.4	0.3150	153.8	0.0001208	0.07791	0.4656	0.6926
30	-	-	-	12	0.3048	144.0	0.0001131	0.07297	0.4359	0.6487
-	-	31	-	11.6	0.2946	134.6	0.0001057	0.06818	0.4074	0.6061
-	-	-	0.29	11.42	0.2900	130.4	0.0001024	0.06605	0.3947	0.5872
-	29	-	-	11.26	0.2859	126.8	0.00009959	0.06425	0.3838	0.5712
-	-	32	-	10.8	0.2743	116.6	0.00009158	0.05913	0.3530	0.5257
-	-	-	0.26	10.24	0.2600	104.9	0.00008239	0.05309	0.3175	0.4720
-	30	-	-	10.03	0.2546	100.6	0.00007901	0.05097	0.3050	0.4531
31	-	33	-	10	0.2540	100.0	0.00007954	0.05067	0.3027	0.4505
-	-	34	-	9.2	0.2337	84.64	0.00006648	0.04289	0.2562	0.3813



Gauge				Diameter		Sectional Area			Weight	
B.W.G.	A.W.G.	S.W.G.	mm.G	Mil	mm.	Cir.Mil	in ²	mm ²	Ib1,000 ft	kg/km
32	-	-	-	9	0.2286	81.10	0.00006362	0.04104	0.2452	0.3649
-	31	-	-	8.928	0.2238	79.71	0.00006260	0.04039	0.2413	0.3591
-	-	35	-	8.4	0.2134	70.56	0.00005542	0.03575	0.2136	0.3178
33	-	-	-	8	0.2032	64.00	0.00005027	0.03243	0.1937	0.2883
-	32	-	-	7.950	0.2019	65.20	0.00004964	0.03203	0.1913	0.2847
-	-	-	0.20	7.874	0.2000	62.00	0.00004869	0.03142	0.1877	0.2793
-	-	36	-	7.6	0.1930	57.76	0.00004536	0.02927	0.1748	0.2602
-	-	-	0.18	7.087	0.1800	50.23	0.00003945	0.02545	0.1520	0.2263
-	33	-	-	7.080	0.1798	50.13	0.00003937	0.02540	0.1517	0.2258
34	-	-	-	7	0.1778	49.00	0.00003848	0.02483	0.1483	0.2207
-	-	37	-	6.8	0.1727	46.24	0.00003632	0.02343	0.1400	0.2083
-	34	-	-	6.305	0.1601	39.75	0.00003122	0.02014	0.1203	0.1790
-	-	-	0.16	6.299	0.1600	39.68	0.00003116	0.02011	0.1201	0.1788
-	-	38	-	6	0.1524	36.00	0.00002827	0.01824	0.1090	0.1622
-	35	-	-	5.615	0.1426	31.53	0.00002476	0.01597	0.09543	0.1420
-	-	-	0.14	5.512	0.1400	30.38	0.00002386	0.01539	0.09196	0.1368
-	-	39	-	5.2	0.1321	27.04	0.00002124	0.01370	0.08186	0.1218
35	36	-	-	5.000	0.1270	25.00	0.00001963	0.01267	0.07565	0.1126
-	-	40	-	4.8	0.1219	23.04	0.00001810	0.01167	0.06976	0.1037
-	-	-	0.12	4.724	0.1200	22.32	0.00001753	0.01131	0.06756	0.1006
-	37	-	-	4.453	0.1131	19.83	0.00001557	0.01005	0.06001	0.08934
-	-	41	-	4.4	0.1118	19.36	0.00001521	0.009810	0.05812	0.08721
36	-	42	-	4	0.1016	16.00	0.00001257	0.008107	0.04845	0.07207
-	38	-	-	3.965	0.1007	15.72	0.00001235	0.007968	0.04760	0.07084
-	-	-	0.10	3.937	0.1000	15.50	0.00001217	0.007854	0.04690	0.06982
-	-	43	-	3.6	0.09114	12.96	0.00001018	0.006567	0.03923	0.05838
-	39	-	-	3.531	0.08969	12.47	0.000009794	0.006319	0.03775	0.05618
-	-	44	-	3.2	0.08138	10.24	0.000008042	0.005819	0.03099	0.04613
-	40	-	-	3.145	0.07987	9.891	0.000007768	0.005012	0.02994	0.04456
-	41	45	-	3.800	0.07113	7.842	0.000006159	0.003973	0.02374	0.03532
-	42	-	-	2.494	0.06334	6.219	0.000004884	0.003151	0.01882	0.02801
-	-	46	-	2.4	0.06096	5.760	0.000004528	0.002929	0.01744	0.02595
-	43	-	-	2.221	0.05641	4.932	0.000003873	0.002495	0.01498	0.02222
-	-	47	-	2	0.05080	4.000	0.000003142	0.002027	0.01211	0.01802
-	44	-	-	1.987	0.05023	3.911	0.000003072	0.001982	0.01184	0.01762
-	-	-	0.05	1.969	0.05000	3.877	0.000003045	0.001963	0.01174	0.01745
-	45	-	-	1.761	0.04473	3.102	0.000002436	0.001572	0.009383	0.01398
-	-	48	-	1.6	0.04064	2.560	0.000002011	0.001297	0.007750	0.01153
-	46	-	-	1.568	0.03984	2.460	0.000001931	0.001246	0.007446	0.01108
-	47	-	-	1.397	0.03547	1.951	0.000001532	0.0009884	0.005904	0.008787
-	48	-	-	1.224	0.03159	1.547	0.000001215	0.0007838	0.004683	0.006968
-	-	49	-	1.2	0.03048	1.440	0.000001131	0.0007297	0.004359	0.006487
-	49	-	-	1.108	0.02813	1.227	0.000009635	0.0006216	0.003713	0.005526
-	-	50	-	1	0.02540	1.000	0.000007854	0.0005067	0.003027	0.004505
-	50	-	-	0.986	0.02505	0.9728	0.000007641	0.0004929	0.002945	0.004382

NOTE B.W.G. - Birmingham Iron Wire Gauge
S.W.G. - British Standard Wire Gauge

A.W.G. - American Wire Gauge
mm.G. - Millimeter Gauge



Continuous Current Rating

for Each Condition of Wires & Cables

1. Maximum allowable current carrying capacities for the insulated cables installed in location where the ambient temperature is not exceed 40 °C shall not be less then those stated in the tables.
2. In location where the ambient temperrature differ from 40 °C (Install in free air) and 30°C (Install in ground) The multiplier in the table below shall be used to obtain the maximum allowble current carrying capacities.

Temperature (°C)	Multiplier			
	Iin air (Ambient temperature 40 ° C)		Iin ground (Ambient temperature 30 ° C)	
	Insulation grede		Insulation grede	
	70 °C	90°C	70 °C	90°C
	21-25	1.23	1.14	1.06
26-30	1.16	1.09	1	1
31-35	1.08	1.05	0.94	0.96
36-40	1	1	0.87	0.91
41-45	0.91	0.95	0.79	0.87
46-50	0.82	0.89	0.71	0.82
51-55	0.71	0.84	0.61	0.77
56-60	0.58	0.78	0.5	0.71
61-65	0.41	0.71	0.35	0.65
66-70	-	0.63	-	0.58
71-75	-	0.54	-	0.5
76-80	-	0.45	-	0.41
81-85	-	32	-	29
86-90	-	-	-	-

3. In a single conduit where the conductors are installed, the allowable ampacity of each conductor shall be reduced as shown in the following table.

Numbre of Core	Multiplier
4-6	0.82
7-9	0.72
10-20	0.56
21-30	0.48
31-40	0.44
Over-40	0.38

Remark : For multicore cables, the number of core is core is core is counted as number of wire by excepting the ground.

* Ref to MEA (Metropolitan Electricity Authority)



Temperature Correction Factors for Conductor Resistance

Factors for correcting resistances at various temperatures of conductor to the standard referencetemperature of 20 °C and reciprocals of the factors for calculating resistances at other temperatures from the value at 20°C

Temperature ° C	Correction Factor		Reciprocal of Factor	
	Copper	Aluminum	Copper	Aluminum
0	1.085	1.088	0.921	0.919
5	1.063	1.064	0.941	0.940
10	1.041	1.042	0.961	0.960
15	1.020	1.021	0.980	0.980
20	1.000	1.000	1.000	1.000
25	0.981	0.980	1.020	1.020
30	0.962	0.961	1.039	1.040
35	0.944	0.943	1.059	1.060
40	0.927	0.925	1.079	1.081
45	0.911	0.908	1.098	1.101
50	0.895	0.892	1.118	1.121
55	0.879	0.876	1.138	1.141
60	0.864	0.861	1.157	1.161
65	0.850	0.846	1.177	1.181
70	0.836	0.832	1.197	1.202
75	0.822	0.819	1.216	1.222
80	0.809	0.805	1.236	1.242
85	0.797	0.792	1.255	1.262
90	0.784	0.780	1.275	1.282

The correction factor is given by:

$$k = \frac{1}{k_1} = \frac{1}{1 + \alpha (\theta - 20)}$$

Where:

k = temperature correction factor of conductor

k₁ = reciprocal of k

α = constant mass temperature coefficient at 20°C per °C

= 0.00393 for copper (based on 100% conductivity)

= 0.00403 for aluminum (based on 61 % conductivity)

θ = referred temperature, °C



Table of The Dimensions for The Motor Starters

The figures are based on normal 3 - phase motors for a.c. at 50 c.p.s. 1400 - 1450 r.p.m.

Motor ratings in HP at service voltage						Rating of motor starter (A)	Relay setting (A)	Max. quick-blow back-up fuse (A)	Min cross section of cables (mm ²)
220 V		380 V		440 V					
HP	Full load current (A)	HP	Full load current (A)	HP	Full load current (A)				
		0.05		0.05		15	0.15 - 0.25	1	1.5
0.05		0.1		0.1		15	0.25 - 0.4	2	1.5
		0.15		0.2		15	0.4 - 0.65	4	1.5
0.1		0.2		0.25	0.5	15	0.4 - 0.65	4	1.5
0.15		0.25	0.6	0.50	0.9	15	0.6 - 1	6	1.5
0.25	1.1	0.5	1.0			15	1.0 - 1.6	6	1.5
		0.75	1.5	0.75	1.2	15	1.0 - 1.6	6	1.5
0.5	1.8	1.0	1.9	1.0	1.6	15	1.5 - 2.5	15(10)	1.5
0.75	2.5	1.5	2.6	2	3.2	15	2.5 - 4	25(15)	1.5
1.0	3.2	2	3.4	2.5	3.9	15	2.5 - 4	25(15)	1.5
1.5	4.4	2.5	4.2	3	4.5	15	4 - 6.5	25(20)	1.5
2.0	5.8	3	4.9	4	6.0	15	4 - 6.5	25(20)	1.5
2.5	7.3	4	6.3	5	7.5	15	6 - 10	35(25)	1.5
3	8.4	5	7.8	6	8.5	15	6 - 10	35(25)	1.5
4	11	6	9.3	7.5	11.0	15	9 - 14	35	1.5
5	13.5	7.5	11.5			15	9 - 14	35	1.5
		10	15	10	14	25	13 - 20	60	2.5
7.5	19.5	15	22	15	21	25	16 - 25	60	4
10	26	20	29	20	27	60	20 - 31	100	6
15	39	25	36	30	39	60	28 - 43	125	10
20	51	30	42			60	40 - 60	160	16
		35	50	35	46	60	40 - 60	160	16
		40	56	40	52	60	40 - 60	160	16
25	63	50	69	50	65	100	50 - 75	200	16
35	91	60	83	60	76	100	70 - 100	200	25
40	100	75	104	75	96	200	84 - 120	400	35
50	125	100	136	100	125	200	105 - 150	500	50
75	184	125	167	125	155	200	140 - 200	500	95
		150	200	150	180	350	175 - 250	600	120
100	245	175	235	175	215	350	175 - 250	600	120
120	295	200	268	200	240	350	210 - 300	850	150
150	370	250	335	250	300	600	280 - 400	850	240
175	425	300	400	300	360	600	350 - 500	1000	400
200	475	350	470	350	410	600	350 - 500	1000	400
225	540	400	535	400	450	600	420 - 600	1000	

