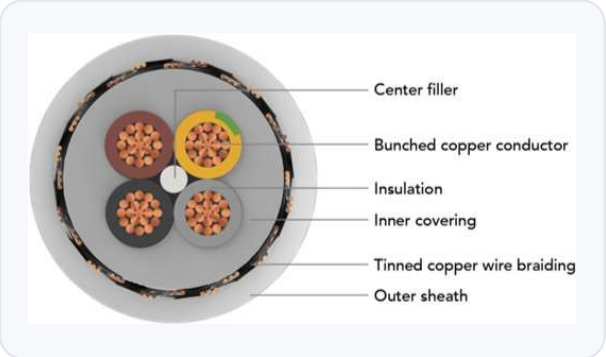
FLEXIBLE SCREENED CONTROL CABLE · PVC · TINNED COPPER BRAID · IEC 60227-7

INDOCABLES 110 CY, IEC 60227-7



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES 110 CY cable is suitable to use in plant engineering, Industry machinery, heating & air conditioning system, conveyor & transport system where EMC (electromagnetic compatibility) is prime importance. This cable conforming the construction generally as per IEC 60227-7

CONSTRUCTION

01 **Conductor:** Bunched bare copper conductor as per IEC 60228, class 5

02 **Insulation:** Insulated with PVC Type D to IEC 60227

03 **Inner covering:** PVC inner sheath, Grey

04 **Screen:** Tinned copper wire braiding

05 **Outer sheath:** Sheathed with transparent PVC

CHARACTERISTICS

VOLTAGE RATING	300/500 V
OPERATION TEMPERATURE	Fixed: -5°C to 70°C

CORE IDENTIFICATION	Two core	Blue & Brown
	Three core	Green/yellow, blue, brown Or Brown, Black, Grey
	Four core	Green/Yellow, Brown, Black, Grey Or Blue, Brown, Black, Grey
	Five core	Green/Yellow, Blue, Brown, Black and Grey Or Blue, Brown, Black Grey, Black
	More than 5 core	Green/yellow, Black with numbering Or Black with numbering
BENDING RADIUS		Fixed installation 10 x Overall diameter Occasional 12 x Overall diameter

OUTSTANDING FEATURES

- FLAME RETARDANT
- GOOD INSULATION RESISTANCE
- OIL RESISTANT

STANDARD FOLLOWS

- IEC 60228
- IEC 60227
- IEC 60332-1-2

COMPLIANCE

Conductor resistance	IEC 60228
Insulation resistance	IEC 60227
Flame retardance	IEC 60332-1
Mineral oil resistance	IEC 60811-1-2

ACCREDITATIONS & APPROVAL

ISI · ISO 9001 · Make in India

CM/L 6200267409

Parth Chhaperia +918073533289 **Aryan Chhaperia** +918088107850 **Neelmani Chaudhary** +91 7011005815
www.indocables.com / www.indocables.in
cables@micagroup.net

TABLE 1 WEIGHT & DIMENSION DATA

PRODUCT CODE	CONSTRUCTION n x mm²	INSULATION THICKNESS mm	OVERALL DIAMETER mm	WEIGHT (APPROX.) kg/km
IC-CT-02-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 0.5	0.6	6.8	74
IC-CT-03-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 G 0.5	0.6	7.2	83
IC-CT-03-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 X 0.5	0.6	7.2	83
IC-CT-04-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 0.5	0.6	7.7	97
IC-CT-04-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 X 0.5	0.6	7.7	97
IC-CT-05-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 0.5	0.6	8.5	105
IC-CT-05-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 X 0.5	0.6	8.5	105
IC-CT-07-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 0.5	0.6	9.2	128
IC-CT-07-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 X 0.5	0.6	9.2	128
IC-CT-12-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 G 0.5	0.6	12.1	206
IC-CT-12-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 X 0.5	0.6	12.1	206
IC-CT-18-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	18 G 0.5	0.6	14.3	301
IC-CT-25-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	25 G 0.5	0.6	16.9	400
IC-CT-30-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	30 G 0.5	0.6	17.7	453
IC-CT-40-00050-CU-PVC-H05VK-0300-IEC60227P7-OSCR	40 G 0.5	0.6	20.1	584
IC-CT-02-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 0.75	0.6	7.2	85
IC-CT-03-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 G 0.75	0.6	7.6	97
IC-CT-03-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 X 0.75	0.6	7.6	97
IC-CT-04-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 0.75	0.6	8.4	119
IC-CT-04-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 X 0.75	0.6	8.4	119
IC-CT-05-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 0.75	0.6	9.1	124
IC-CT-05-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 X 0.75	0.6	9.1	124
IC-CT-07-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 0.75	0.6	9.8	152
IC-CT-07-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 X 0.75	0.6	9.8	152
IC-CT-12-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 G 0.75	0.6	13.1	264
IC-CT-12-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 X 0.75	0.6	13.1	264
IC-CT-18-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	18 G 0.75	0.6	15.5	369
IC-CT-18-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	18 X 0.75	0.6	15.5	369
IC-CT-25-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	25 G 0.75	0.6	18.1	487
IC-CT-34-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	34 G 0.75	0.6	20.9	640

PRODUCT CODE	CONSTRUCTION n x mm²	INSULATION THICKNESS mm	OVERALL DIAMETER mm	WEIGHT (APPROX.) kg/km
IC-CT-40-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	40 X 0.75	0.6	21.8	728
IC-CT-41-00075-CU-PVC-H05VK-0300-IEC60227P7-OSCR	41 G 0.75	0.6	22.6	752
IC-CT-02-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 1	0.6	7.6	95
IC-CT-03-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 G 1	0.6	8	109
IC-CT-03-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 X 1	0.6	8	109
IC-CT-04-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 1	0.6	8.9	134
IC-CT-04-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 X 1	0.6	8.9	134
IC-CT-05-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 1	0.6	9.6	141
IC-CT-07-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 1	0.6	10.5	180
IC-CT-12-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 G 1	0.6	14.1	310
IC-CT-16-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	16 G 1	0.6	15.6	389
IC-CT-18-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	18 G 1	0.6	16.4	425
IC-CT-25-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	25 G 1	0.6	19.4	574
IC-CT-34-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	34 G 1	0.6	22.3	755
IC-CT-41-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	41 G 1	0.6	24.3	913
IC-CT-50-00100-CU-PVC-H05VK-0300-IEC60227P7-OSCR	50 G 1	0.6	26.4	1080
IC-CT-02-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 1.5	0.7	8.7	125
IC-CT-03-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 G 1.5	0.7	9.2	145
IC-CT-03-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 X 1.5	0.7	9.2	145
IC-CT-04-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 1.5	0.7	10.2	176
IC-CT-04-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 X 1.5	0.7	10.2	176
IC-CT-05-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 1.5	0.7	11.1	187
IC-CT-05-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 X 1.5	0.7	11.1	187
IC-CT-07-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 1.5	0.7	12.2	240
IC-CT-07-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 X 1.5	0.7	12.2	240
IC-CT-12-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 G 1.5	0.7	16.3	412
IC-CT-18-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	18 G 1.5	0.7	19.2	580
IC-CT-25-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	25 G 1.5	0.7	22.6	782
IC-CT-34-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	34 G 1.5	0.7	26.2	1045
IC-CT-41-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	41 G 1.5	0.7	28.6	1242
IC-CT-50-00150-CU-PVC-H05VK-0300-IEC60227P7-OSCR	50 G 1.5	0.7	31	1487

Parth Chhaperia +918073533289 **Aryan Chhaperia** +918088107850 **Neelmani Chaudhary** +91 7011005815
cables@micagroup.net

PRODUCT CODE	CONSTRUCTION n x mm²	INSULATION THICKNESS mm	OVERALL DIAMETER mm	WEIGHT (APPROX.) kg/km
IC-CT-02-00250-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 2.5	0.8	10.3	176
IC-CT-03-00250-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 G 2.5	0.8	10.9	206
IC-CT-04-00250-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 2.5	0.8	12	255
IC-CT-05-00250-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 2.5	0.8	13.4	292
IC-CT-07-00250-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 2.5	0.8	14.6	366
IC-CT-12-00250-CU-PVC-H05VK-0300-IEC60227P7-OSCR	12 G 2.5	0.8	19.4	602
IC-CT-02-00400-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 4	0.8	11.4	224
IC-CT-04-00400-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 4	0.8	13.7	358
IC-CT-05-00400-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 4	0.8	15.1	386
IC-CT-02-00600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 6	0.8	12.9	307
IC-CT-04-00600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 6	0.8	15.4	467
IC-CT-05-00600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 6	0.8	16.9	505
IC-CT-07-00600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 6	0.8	18.5	657
IC-CT-02-01000-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 10	1	16.1	493
IC-CT-03-01000-CU-PVC-H05VK-0300-IEC60227P7-OSCR	3 G 10	1	17.3	604
IC-CT-04-01000-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 10	1	19.1	763
IC-CT-05-01000-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 10	1	21	830
IC-CT-07-01000-CU-PVC-H05VK-0300-IEC60227P7-OSCR	7 G 10	1	23.1	1092
IC-CT-02-01600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	2 X 16	1	18.6	684
IC-CT-04-01600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 16	1	22	1075
IC-CT-05-01600-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 16	1	24.3	1177
IC-CT-04-02500-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 25	1.2	26.8	1631
IC-CT-05-02500-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 25	1.2	29.5	1782
IC-CT-04-03500-CU-PVC-H05VK-0300-IEC60227P7-OSCR	4 G 35	1.2	30.2	2147
IC-CT-05-03500-CU-PVC-H05VK-0300-IEC60227P7-OSCR	5 G 35	1.2	33.2	2357

The above data is approximate & subject to manufacturing tolerance.

Product codes follow the Indo Cables product-code structure: IC – LINE – CORES – SIZE – CONDUCTOR – INSULATION – DESIGNATION – VOLTAGE – STANDARD – OPTION. H05VK denotes the class 5 flexible multicore PVC construction at 300/500 V, 0300 the 300/500 V grade, and OSCR the overall tinned-copper braid screen. The Item Master register holds no IEC 60227-7 item: every code on this sheet is derived from the code structure and is pending entry and approval by the Item Master Steward.

TABLE 2 ELECTRICAL CHARACTERISTICS

Current ratting and maximum DC conductor resistance

NOMINAL CROSS SECTIONAL AREA mm²	REFERENCE METHOD A — enclosed in conduit in thermally insulating wall etc.		REFERENCE METHOD B — enclosed in conduit on a wall or in trunking etc.		REFERENCE METHOD C — clipped direct		REFERENCE METHOD E — free air or on a perforated cable tray etc, horizontal or vertical		MAXIMUM DC CONDUCTOR RESISTANCE AT 20°C Ω/km
	1 two-core cable* or 1 single-phase a.c. or d.c. Amp.	1 three-core cable* or 1 four-core cable, three-phase a.c. Amp.	1 two-core cable* or 1 single-phase a.c. or d.c. Amp.	1 three-core cable* or 1 four-core cable, three-phase a.c. Amp.	1 two-core cable* or 1 single-phase a.c. or d.c. Amp.	1 three-core cable* or 1 four-core cable, three-phase a.c. Amp.	1 two-core cable* or 1 single-phase a.c. or d.c. Amp.	1 three-core cable* or 1 four-core cable, three-phase a.c. Amp.	
0.5	–	–	–	–	–	–	–	–	39
0.75	–	–	–	–	–	–	–	–	26
1	10.5	9.5	12	11	14	13	16	14	19.5
1.5	13	12	16	14	18.5	17	21	18	13.3
2.5	18	17	22	19	26	23	28.5	24	7.98
4	24	22	29	26	34	30	38	32	4.95
6	30	28	36	32	44	39	48.5	41	3.3
10	41	37	49	44	60	54	66.5	57	1.91
16	54	49	66	59	81	72	89	76	1.21
25	–	–	–	–	–	–	–	–	0.78
35	–	–	–	–	–	–	–	–	0.554

AIR AMBIENT TEMPERATURE
30°C

GROUND AMBIENT TEMPERATURE
20°C

CONDUCTOR OPERATING TEMPERATURE
70°C

The above table is in accordance with Table 4D2A of BS 7671:2018

TABLE 3 DE-RATING FACTOR

De-rating factor for 70°C thermoplastic insulated cable

AIR TEMPERATURE	35°C	40°C	45°C	50°C	55°C
DE-RATING FACTOR	0.91	0.82	0.71	0.58	0.41

FLAGGED FOR CONFIRMATION

01 The source sheet repeats one code across different constructions — the 3 X 0.5 row carries the four-core code, and 4 G 35 and 5 G 35 carry the 25 mm² codes. New codes here are built from the construction column, not from the old code. Source values are otherwise reproduced unchanged.

02 The code structure has no G / X segment, so a G variant (with green/yellow protective core) and its X variant carry the same code — 17 rows on this sheet repeat a code already used by their counterpart. A distinguishing segment or option is needed before these go ACTIVE.

03 Core counts 18, 25, 34, 40, 41 and 50 are not in the CORES block on tab 5 REF TABLES. They follow the two-digit rule and are used here; they need one typed row each.

04 The asterisk against “two-core cable*” and “three-core cable*” in Table 2 has no corresponding note in the source sheet. Reproduced as written.

05 Line CT (control cable) is used to match this sheet series. A class 5 flexible construction also reads as FX (flexible cord / multicore flexible) — steward to confirm.

06 The ISO 9001 mark is a 52 × 53 px crop from a supplied screenshot and prints well below the resolution a 300 dpi sheet needs; supply a vector or print-resolution file. No RoHS or REACH mark is printed: no control-cable source sheet claims either, so the marks would be an unsupported compliance claim. Confirm whether the range is RoHS and REACH certified and supply those logo files if it is. The Make in India mark is a 76 × 39 px crop from a supplied screenshot and prints at roughly a quarter of the resolution a 300 dpi sheet needs; supply a print-resolution file or hold the mark off the sheet. The reference header shows a lockup carrying the tagline EVERY CONNECTION MATTERS. No supplied logo file contains it and the design system has no confirmed tagline, so the header prints the stacked lockup alone; supply that lockup, or confirm the tagline, to set it.