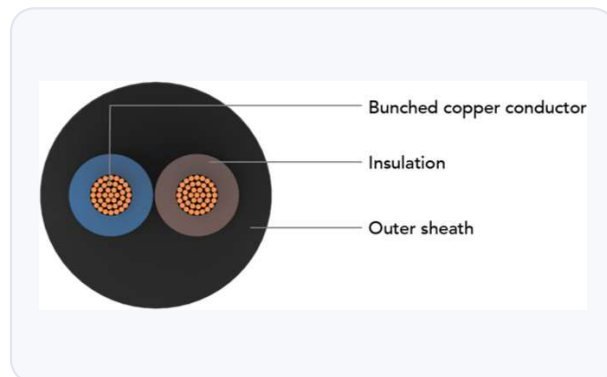


MULTICORE FLEXIBLE CABLE · CLASS 5 COPPER · HALOGEN FREE THERMOPLASTIC TI 6 INSULATION · TM 7 HALOGEN FREE SHEATH

INDOCABLES H05Z1Z1-F INDUSTRIAL CABLE

300/500 V AC · BS EN 50525-3-11



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES H05Z1Z1-F cable insulated and sheathed with halogen free thermoplastic compound and having low emission of smoke and corrosive gases when exposed to fire. This cable intended to use for connection of domestic appliances to the fixed supply.

CONSTRUCTION

- 01 Conductor:** Annealed stranded copper conductor as per IEC 60228, class 5
- 02 Insulation:** Insulated with Halogen free thermoplastic Type TI 6 to EN 50363-7.
- 03 Sheath:** Sheathed with Halogen free thermoplastic Type TM 7 to EN 50363-8

CHARACTERISTICS

VOLTAGE RATING	300/500 V
OPERATION TEMPERATURE	Fixed: -15°C to +70° C
CORE IDENTIFICATION	Two core Blue, Brown Three core Green-Yellow, Blue, Brown Four core Green-Yellow, Brown, Black, Grey Five core Green-Yellow, Blue, Brown, Black, Grey
BENDING RADIUS	Fixed installation – 8 x Overall diameter
TEST VOLTAGE	2000V AC at (20±5) °C

OUTSTANDING FEATURES


HIGHLY FLEXIBLE

GOOD INSULATION RESISTANCE

HALOGEN FREE

LOW SMOKE

STANDARD FOLLOWS

IEC 60228

BS EN 50363-7

BS EN 50363-8

BS EN 50525-3-11

IEC 60332-1-2

COMPLIANCE

 Conductor Resistance
test

IEC 60228

Insulation Resistance test EN 50525-3-11

 Test on sine vertical
cable EN 60332-1-2

Smoke Emission test EN 61034-2

 Flame Retardant
according to IEC 60332-1-2

ACCREDITATIONS & APPROVAL



ISI



ISO 9001


 Make in
India

CM/L 6200267207



TABLE 1 WEIGHT & DIMENSION DATA

PRODUCT CODE	NOMINAL CROSS SECTIONAL AREA mm ²	NO. OF STRANDS / WIRE DIA. No. / mm	OVERALL DIAMETER mm	WEIGHT (APPROX.) kg/km
TWO CORE				
IC-CT-02-00075-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	2 x 0.75	24/0.2	6.23	59
IC-CT-02-00100-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	2 x 1	32/0.2	6.58	68
IC-CT-02-00150-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	2 x 1.5	30/0.25	7.52	91
IC-CT-02-00250-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	2 x 2.5	50/0.25	9.23	141
IC-CT-02-00400-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	2 x 4	56/0.3	10.52	194
THREE CORE				
IC-CT-03-00075-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	3 x 0.75	24/0.2	6.60	70
IC-CT-03-00100-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	3 x 1	32/0.2	6.98	81
IC-CT-03-00150-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	3 x 1.5	30/0.25	8.20	114
IC-CT-03-00250-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	3 x 2.5	50/0.25	10.01	176
IC-CT-03-00400-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	3 x 4	56/0.3	11.38	244
FOUR CORE				
IC-CT-04-00075-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	4 x 0.75	24/0.2	7.21	85
IC-CT-04-00100-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	4 x 1	32/0.2	8.79 *	123
IC-CT-04-00150-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	4 x 1.5	30/0.25	9.17	145
IC-CT-04-00250-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	4 x 2.5	50/0.25	10.95	217
IC-CT-04-00400-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	4 x 4	56/0.3	12.47	303
FIVE CORE				
IC-CT-05-00075-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	5 x 0.75	24/0.2	8.06	106
IC-CT-05-00100-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	5 x 1	32/0.2	8.52	125
IC-CT-05-00150-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	5 x 1.5	30/0.25	10.19	180
IC-CT-05-00250-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	5 x 2.5	50/0.25	12.16	268
IC-CT-05-00400-CU-HFI-H05Z1Z1-0300-EN50525P3P11-ZHFR	5 x 4	56/0.3	14.03	382

The above data is approximate & subject to manufacturing tolerance. * marks a value queried below.

Product codes follow the Indo Cables product-code structure: IC – LINE – CORES – SIZE – CONDUCTOR – INSULATION – DESIGNATION – VOLTAGE – STANDARD – OPTION. CT denotes the control-cable line, HFI the halogen-free flame-retardant compound, H05Z1Z1 the multicore halogen-free thermoplastic flexible construction at 300/500 V and ZHFR the zero-halogen flame-retardant option. Rows are grouped by core count; every value is reproduced from the source sheet. All 20 codes on this sheet are derived from the code structure and are pending entry in the Item Master.

TABLE 2 ELECTRICAL CHARACTERISTICS

Current carrying capacity and max. DC conductor resistance at 20°C

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY		MAX. DC COND. RESISTANCE AT 20°C Ω/km
	Single Phase a.c. Amp.	Three Phase a.c. Amp.	
0.75	6	6	26
1	10	10	19.5
1.5	16	16	13.3
2.5	25	20	7.98
4	32	25	4.95

The ambient temperature is 30°C. Conductor operating temperature 60°C.

The above table is in accordance with Table 4F3A of BS 7671:2018

TABLE 3 DE-RATING FACTOR

De-rating factor for ambient temperature 60°C thermoplastic insulation.

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 No row on this sheet is in the register. The Item Master carries no item on halogen-free insulation (HFI), no H05Z1Z1 designation and no EN 50525 standard. All 20 codes are derived from the code structure and need typed rows before these items go ACTIVE.
- 02 Two segments must be added to tab 5 REF TABLES before the workbook can build these codes: designation H05Z1Z1 (multicore halogen-free thermoplastic flexible, class 5, 300/500 V) and standard EN50525P3P11 (BS EN 50525-3-11). Cores 02-05, all five sizes, insulation HFI and option ZHFR are already in the blocks.
- 03 Line CT is carried, following the sheet number and sheets CC-07, CC-12, CC-13 and CC-26. The register defines FX as flexible cord / multicore flexible, and this sheet's own application — connection of domestic appliances to the fixed supply — reads as a flexible cord. The register's only 300/500 V class 5 flexible family sits on FX with PVC, H05VK and IS694. Confirm the line.
- 04 Every old code on the source sheet reads CTCnnCsizeLZIS694 and ends IS694 — IS 694, the Indian standard for PVC insulated cables and cords — while this sheet is halogen-free thermoplastic and its Standard-follows block lists no Indian Standard. The derived codes carry EN50525P3P11.
- 05 The 4 × 1 mm² overall diameter reads 8.79 mm, out of sequence with the rest of the table: the 0.75–1 mm² step is 0.35 mm on two core, 0.38 mm on three core and 0.46 mm on five core, but 1.58 mm here, and 4 × 1.5 mm² then reads only 9.17 mm. Reproduced as written.
- 06 Three temperatures disagree across the sheet. Characteristics gives operation temperature Fixed: -15°C to +70°C, Table 2 states conductor operating temperature 60°C, and Table 3 is headed "ambient temperature 60°C thermoplastic insulation" above a row of air temperatures 35–55°C. All reproduced as written.
- 07 The compliance block reads "Test on sine vertical cable – EN 60332-1-2". The test is the single vertical insulated wire or cable flame test, and the Standard-follows block cites IEC 60332-1-2, not EN. Reproduced as written.
- 08 One option is carried: ZHFR, zero halogen flame retardant, which covers both the halogen-free compound and the IEC 60332-1-2 flame-retardance line. Confirm no second option (FRLH is the near alternative in the register).
- 09 The source's OUR ACCREDITATIONS block held the NABL laboratory mark and its APPROVAL block held the FQC and CE marks. All three have been removed and replaced by the ISI mark and the ISO 9001 badge, in the page header and in the Certification block.
- 10 No Indian Standard governs this sheet, so no BIS licence covers it. The ISI mark is printed as instructed and the licence line shows CM/L 6200267207, the number the register carries against its class 5 flexible 300/500 V items — which are PVC, not halogen-free. Confirm the correct licence, or hide the line from Tweaks.



- 11 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.