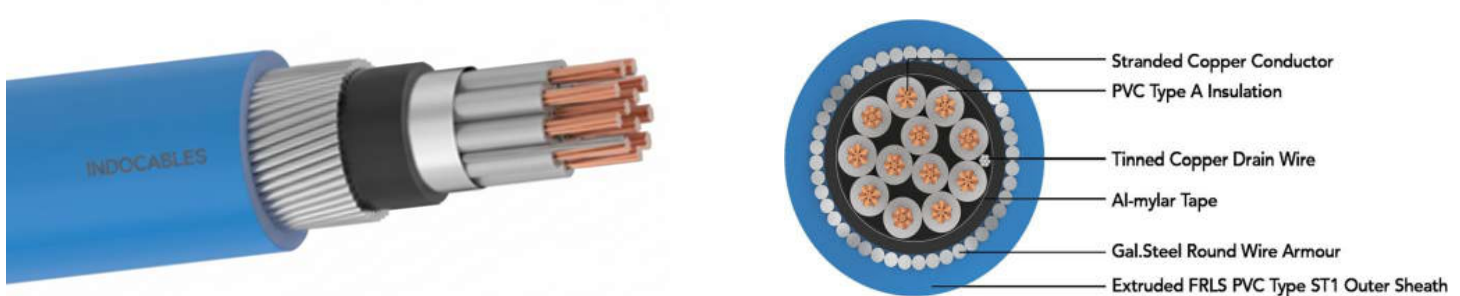


INSTRUMENTATION CABLE · INSTRU 500 MC (ST) · 500 V

INDOCABLES INSTRU 500 MC (ST)

INSTRUMENTATION CABLE, PVC/PE INSULATED, OVERALL SHIELDED — EN 50288-7

VOLTAGE RATING 500 V	STANDARD EN 50288-7	CONDUCTOR 0.5 – 2.5 mm²	CORES 2 – 37	BENDING RADIUS 12 × OD
--------------------------------	-------------------------------	--	------------------------	----------------------------------



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES INSTRU 500 MC, insulated with PVC/PE, Overall, al-mylar shielded, armoured/unarmoured and PVC/LSZH sheathed cable confirming to BS EN 50288-7 are designed for transmission of analogue and digital signals in instrument and control systems. INDOCABLES INSTRU 500 MC cables are used for diverse applications within industrial process for control, communication, data & voice transmission in oil, gas & petrochemical industries, cement, steel, fertilizers etc.

CONSTRUCTION

- 01 Stranded Copper conductor as per EN 60228
- 02 Insulated with PVC/PE as per EN 50288-7
- 03 Collective screen Al/PET (Aluminium/Polyester tape) with drain wire of tinned Cu/Tinned copper braiding
- 04 Extruded inner sheath with PVC/LSZH to EN 50290-2-22/27
- 05 Armoured with Galvanized Steel Strip/Round as per EN 50288-7
- 06 Sheathed with Extruded PVC/LSZH to EN 50290-2-22/27

CHARACTERISTICS

Voltage Rating	500 V
Operation Temperature	Max.: PVC 70°C, HRPVC 85°C, XLPE 90°C, LDPE 60°C.
Bending Radius	12 x Overall diameter

CORE IDENTIFICATION

Core	White/Grey core with number printing
Outer sheath colour	Black/Blue


ISO 9001
 Cert. 99 100 22646 (TÜV SÜD)

ISI
 BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
 Compliant

REACH
 Compliant

Make in India
 Manufactured in India

STANDARD FOLLOWS

EN 50288-7

EN 50288-1

EN 60228

EN 50290-2-22/27

COMPLIANCEConductor resistance
EN 60228Insulation resistance
EN 50288-7L/R Ratio
EN 50288-7Mutual capacitance
EN 50288-7**NOTES**

- Outer sheath also available with PE & FRLS on request.
- As per the application/identification requirement, other colour also available on request.

**ISO 9001**
Cert. 99 100 22646 (TÜV SÜD)**ISI**
BIS CM/L 6200267409 (IS 7098 Pt-1)**RoHS**
Compliant**REACH**
Compliant**Make in India**
Manufactured in India

ORDERING & ITEM CODE

DERIVED

The item master holds instrumentation cable in pair (P) and triad (T) configurations only — there are no multi-core instrumentation rows in the register, so no code on this sheet is a register lookup. Every code below is derived from the published code structure and carries no item ID until the Item Master Steward registers it. Core counts 18 and 20 do not appear in the master's core list at all.

CODE STRUCTURE

IC · IN · CORES · SIZE · TC · PE · DESIGNATION · 0300 · EN50288P7 · 0SCR

IN Instrumentation line	CORES · SIZE Zero-padded count, sq.mm × 100	TC · PE Tinned copper, PE insulated	2YY · 2YWY Unarmoured · round wire armoured	0300 · 0SCR 300/500 V, overall screened
-----------------------------------	---	---	---	---

SIZE	CORES	UNARMOURED · 2YY	ARMOURED · 2YWY
0.5	2	IC-IN-02-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-02-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	3	IC-IN-03-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-03-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	4	IC-IN-04-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-04-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	5	IC-IN-05-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-05-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	6	IC-IN-06-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-06-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	7	IC-IN-07-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-07-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	8	IC-IN-08-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-08-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	10	IC-IN-10-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-10-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	12	IC-IN-12-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-12-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	16	IC-IN-16-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-16-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	18	IC-IN-18-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-18-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	19	IC-IN-19-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-19-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	20	IC-IN-20-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-20-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	24	IC-IN-24-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-24-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	30	IC-IN-30-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-30-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
	37	IC-IN-37-00050-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-37-00050-TC-PE-2YWY-0300-EN50288P7-0SCR
0.75	2	IC-IN-02-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-02-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	3	IC-IN-03-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-03-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	4	IC-IN-04-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-04-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	5	IC-IN-05-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-05-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	6	IC-IN-06-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-06-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	7	IC-IN-07-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-07-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	8	IC-IN-08-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-08-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	10	IC-IN-10-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-10-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	12	IC-IN-12-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-12-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	16	IC-IN-16-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-16-00075-TC-PE-2YWY-0300-EN50288P7-0SCR
	18	IC-IN-18-00075-TC-PE-2YY-0300-EN50288P7-0SCR	IC-IN-18-00075-TC-PE-2YWY-0300-EN50288P7-0SCR



ISO 9001
Cert. 99 100 22646 (TÜV SÜD)



ISI
BIS CM/L 6200267409 (IS 7098 Pt-1)



RoHS
Compliant



REACH
Compliant



Make in India
Manufactured in India



INSTRU 500 MC (ST) • EN 50288-7

IC-06
SHEET NO.

[illegible]

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)



ISI
BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
Compliant

REACH
Compliant



Make in India
Manufactured in India

Heading: INDO CABLES - Global Specification - Rev 00

www.indocables.com / www.indocables.in

#9107656839 #9108880785 #91 70100595

sales@indocables.com - info@indocables.com



Sizes and core counts follow the weight & dimension table. PVC-insulated, strip-armoured and LSZH-sheathed variants use the same structure with the corresponding insulation and designation segments.



WEIGHT & DIMENSION DATA

500 VOLTS, MULTI CORE, STR.COPPER, PVC/PE INSULATED, ALUMINIUM MYLAR TAPED OVERALL SHIELDED, ARMOURED AND UNARMOURED
INSTRUMENTATION CABLES AS PER EN 50288-7

AREA OF CONDUCTOR 0.5 SQ MM

Min. thickness of insulation 0.44 mm

Armoured Cables						Unarmoured Cables				
No. of Cores	Inner Sheath mm	G.I. Armour Wire mm	Outer Sheath mm	Overall Dia. mm	Weight PE kg/km	Weight PVC kg/km	Outer Sheath mm	Overall Dia. mm	Weight PE kg/km	Weight PVC kg/km
2	0.9	0.9	1.3	10.6	215	215	0.9	6.2	48	52
3	0.9	0.9	1.3	11.0	230	235	0.9	6.6	56	61
4	0.9	0.9	1.3	11.5	255	260	0.9	7.1	67	73
5	0.9	0.9	1.3	12.1	270	280	0.9	7.7	75	83
6	0.9	0.9	1.4	12.9	305	315	0.9	8.3	87	97
7	0.9	0.9	1.4	12.9	305	315	0.9	8.3	89	100
8	1.0	0.9	1.4	14.1	345	360	1.0	9.5	105	120
10	1.0	0.9	1.4	15.2	395	410	1.0	10.6	125	140
12	1.0	0.9	1.4	15.6	420	435	1.0	11.0	140	160
16	1.0	0.9	1.4	16.7	480	500	1.0	12.1	180	205
18	1.1	0.9	1.5	17.7	530	560	1.1	12.9	205	235
19	1.1	0.9	1.5	17.7	530	560	1.1	12.9	205	235
20	1.1	0.9	1.5	18.4	570	600	1.1	13.6	225	260
24	1.1	0.9	1.5	19.8	630	670	1.1	15.0	255	295
30	1.2	0.9	1.5	20.9	710	760	1.2	16.1	310	360
37	1.2	0.9	1.6	22.3	800	860	1.2	17.3	370	425



AREA OF CONDUCTOR 0.75 SQ MM

Min. thickness of insulation 0.44 mm

Armoured Cables						Unarmoured Cables				
No. of Cores	Inner Sheath mm	G.I. Armour Wire mm	Outer Sheath mm	Overall Dia. mm	Weight PE kg/km	Weight PVC kg/km	Outer Sheath mm	Overall Dia. mm	Weight PE kg/km	Weight PVC kg/km
2	0.9	0.9	1.3	11.1	230	235	0.9	6.7	57	60
3	0.9	0.9	1.3	11.4	245	255	0.9	7.0	67	72
4	0.9	0.9	1.3	12.0	275	285	0.9	7.6	81	88
5	0.9	0.9	1.4	12.9	305	315	0.9	8.3	91	100
6	0.9	0.9	1.4	13.6	340	350	0.9	9.0	110	120
7	0.9	0.9	1.4	13.6	340	355	0.9	9.0	110	125
8	1.0	0.9	1.4	14.8	390	405	1.0	10.2	130	145
10	1.0	0.9	1.4	16.1	440	460	1.0	11.5	155	175
12	1.0	0.9	1.4	16.4	470	495	1.0	11.8	180	200
16	1.1	0.9	1.5	18.1	570	590	1.1	13.3	235	260
18	1.1	0.9	1.5	18.8	610	640	1.1	14.0	260	295
19	1.1	0.9	1.5	18.8	610	650	1.1	14.0	265	300
20	1.1	0.9	1.5	19.5	660	690	1.1	14.7	290	325
24	1.2	0.9	1.6	21.5	750	800	1.2	16.5	335	375
30	1.2	1.25	1.6	23.1	960	1010	1.2	17.4	400	455
37	1.3	1.25	1.6	24.7	1090	1160	1.3	19.0	485	550

AREA OF CONDUCTOR 1.0 SQ MM

Min. thickness of insulation 0.44 mm

Armoured Cables							Unarmoured Cables			
No. of Cores	Inner Sheath mm	G.I. Armour Wire mm	Outer Sheath mm	Overall Dia. mm	Weight PE kg/km	Weight PVC kg/km	Outer Sheath mm	Overall Dia. mm	Weight PE kg/km	Weight PVC kg/km
2	0.9	0.9	1.3	11.4	245	250	0.9	7.0	65	69
3	0.9	0.9	1.3	11.8	265	270	0.9	7.4	78	84
4	0.9	0.9	1.3	12.5	295	305	0.9	8.1	94	100
5	0.9	0.9	1.4	13.4	330	340	0.9	8.8	105	115
6	1.0	0.9	1.4	14.3	380	390	1.0	9.7	130	145
7	1.0	0.9	1.4	14.3	385	395	1.0	9.7	135	150
8	1.0	0.9	1.4	15.4	425	440	1.0	10.8	155	170
10	1.0	0.9	1.4	16.8	490	510	1.0	12.2	185	205
12	1.1	0.9	1.5	17.6	540	570	1.1	12.8	220	245
16	1.1	0.9	1.5	18.9	640	670	1.1	14.1	280	315
18	1.1	0.9	1.5	19.7	690	720	1.1	14.9	315	350
19	1.1	0.9	1.5	19.7	690	730	1.1	14.9	320	360
20	1.1	0.9	1.5	20.5	740	780	1.1	15.7	350	390
24	1.2	0.9	1.6	22.6	850	900	1.2	17.6	405	455
30	1.2	1.25	1.6	24.3	1080	1140	1.2	18.6	485	550
37	1.3	1.25	1.6	26.0	1230	1310	1.3	20.3	590	670

AREA OF CONDUCTOR 1.5 SQ MM

Min. thickness of insulation 0.44 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF CORES	INNER SHEATH MM	G.I. ARMOUR WIRE MM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
2	0.9	0.9	1.3	12.0	275	280	0.9	7.6	79	84
3	0.9	0.9	1.4	12.7	305	315	0.9	8.1	97	105
4	0.9	0.9	1.4	13.4	345	355	0.9	8.8	120	130
5	1.0	0.9	1.4	14.4	390	400	1.0	9.8	140	155
6	1.0	0.9	1.4	15.2	435	450	1.0	10.6	170	180
7	1.0	0.9	1.4	15.2	445	460	1.0	10.6	175	195
8	1.0	0.9	1.4	16.5	495	510	1.0	11.9	200	220
10	1.1	0.9	1.5	18.4	590	610	1.1	13.6	250	275
12	1.1	0.9	1.5	18.8	640	670	1.1	14.0	285	315
16	1.2	0.9	1.5	20.5	770	810	1.2	15.7	380	415
18	1.2	0.9	1.6	21.6	840	880	1.2	16.6	420	465
19	1.2	0.9	1.6	21.6	850	890	1.2	16.6	430	475
20	1.2	1.25	1.6	23.2	1040	1080	1.2	17.5	470	520
24	1.3	1.25	1.6	25.3	1170	1220	1.3	19.6	540	600
30	1.3	1.25	1.7	26.6	1320	1390	1.3	20.7	660	730
37	1.4	1.25	1.7	28.5	1520	1610	1.4	22.6	800	890

AREA OF CONDUCTOR 2.5 SQ MM

Min. thickness of insulation 0.53 mm

ARMoured CABLES							UNARMoured CABLES			
NO. OF CORES	INNER SHEATH MM	G.I. ARMOUR WIRE MM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM	OUTER SHEATH MM	OVERALL DIA. MM	WEIGHT PE KG/KM	WEIGHT PVC KG/KM
2	1.0	0.9	1.4	13.6	345	350	1.0	9.0	115	120
3	1.0	0.9	1.4	14.2	385	395	1.0	9.6	140	150
4	1.0	0.9	1.4	15.1	435	450	1.0	10.5	175	190
5	1.0	0.9	1.4	16.0	485	500	1.0	11.4	200	220
6	1.1	0.9	1.5	17.4	570	590	1.1	12.6	245	265
7	1.1	0.9	1.5	17.4	580	610	1.1	12.6	260	285
8	1.1	0.9	1.5	19.0	650	680	1.1	14.2	295	325
10	1.2	0.9	1.6	21.2	780	820	1.2	16.2	370	405
12	1.2	0.9	1.6	21.8	850	890	1.2	16.8	430	470
16	1.3	1.25	1.6	24.5	1160	1220	1.3	18.8	560	620
18	1.3	1.25	1.7	25.7	1270	1330	1.3	19.8	630	690
19	1.3	1.25	1.7	25.7	1290	1350	1.3	19.8	650	710
20	1.3	1.25	1.7	26.9	1380	1450	1.3	21.0	700	770
24	1.4	1.25	1.7	29.3	1570	1650	1.4	23.4	820	900
30	1.5	1.25	1.8	31.1	1810	1910	1.5	25.0	1010	1110
37	1.5	1.25	1.8	33.1	2080	2200	1.5	27.0	1210	1330

For Cables of sizes or cores not listed above the product data is available on request Dimensions & Weights are representative figures and may vary

ISO 9001
Cert. 99 100 22646 (TÜV SÜD)

ISI
BIS CM/L 6200267409 (IS 7098 Pt-1)

RoHS
Compliant

REACH
Compliant

Make in India
Manufactured in India

Heading as
INDO CABLES

Heading as
INDO CABLES · Detailed Specification · Rev 00

Heading as
INDO CABLES

www.indocables.com / www.indocables.in
sales@indocables.com · exsales@indocables.in

FLAGGED 1.0 sq mm, armoured, approx. weight PVC insulation: the source reads **30S** at 4 core, **39S** at 7 core and **730** at 19 core — garbled characters, most plausibly 305, 395 and 730. Reproduced exactly as written; confirm the correct figures before publishing.

ELECTRICAL PARAMETER

AREA OF CONDUCTOR	MAX. DC RESISTANCE AT 20°C — PLAIN WIRES	MAX. DC RESISTANCE AT 20°C — METAL COATED WIRES	INSULATION RESISTANCE (PVC)	INSULATION RESISTANCE (PE/XLPE)	MUTUAL CAPACITANCE	L/R RATIO
Sq mm	Ohm/km	Ohm/km	MΩ/Km	MΩ/Km	nF/Km	μH/Ω
0.5	36	36.7	10	1000	< 250	< 25
0.75	24.5	24.8	10	1000	< 250	< 25
1	18.1	18.2	10	1000	< 250	< 25
1.5	12.1	12.2	10	1000	< 250	< 40
2.5	7.41	7.56	10	1000	< 250	< 60

OUTSTANDING FEATURES



FLAME RETARDANT



LONG LIFE



LOW SMOKE EMISSION