

BS EN 50288-7 COMMUNICATION & CONTROL CABLE PVC ICAT



APPLICATION

BS EN 50288-7:2005 Multi-element metallic cables which are used in analogue and digital communication and control systems. The cables have a mechanically robust construction and electrical transmission handling properties. These cables are designed to connect electrical instrument circuits and provide communication services in and around process plants and are not to be used for power supply. BS EN 50288-7 replaces the BS5308 Standard. BS 5308 has been subsequently changed to PAS5308. Cleveland Cable still support the older standards.

CABLE STANDARDS

BS EN 50288-7
BS EN 50288-1
BS EN/IEC 60332-3-24
HD383
Flame Retardant to BS EN/IEC 60332-1-2

CONSTRUCTION

Conductor:

0.5 - 0.75mm²: Class 5 flexible copper conductor
1mm² & above: Class 2 stranded copper conductor

Insulation: Cross-Linked Polyethylene (XLPE)
laid up in pairs

Individual and Collective Screens: Individual and collective aluminium / mylar tape screen with tinned copper drain wire

Sheath: Polyvinyl Chloride (PVC)

Sheath Colour: ■ Blue ■ Black

CHARACTERISTICS

Voltage Rating:

300 Volts: Communication & control cable – not for power applications
500 Volt cables available on request

Temperature Limits: Fixed: -40°C to +80°C

Minimum Bending Radius: As per cable manufacturer datasheet

CORE IDENTIFICATION

Pairs: 3 White 3 Black
Triple: White Black Red

Should not be installed at temperatures below 0°C

BS EN 50288-7 COMMS & CONTROL CABLE PVC ICAT - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM)	NUMBER OF CONDUCTORS	NUMBER OF PAIRS / TRIPLES	WEIGHT (KG/KM)	OVERALL DIAMETER (MM)
RE2X9151	0.5	4	2P	161	7.3
RE2X9175	0.5	3	1T	111	7.8
RE2X9152	0.5	10	5P	253	9.4
RE2X9153	0.5	20	10P	408	13.1
RE2X9154	0.5	30	15P	531	15.1
RE2X9155	0.5	40	20P	753	17.1
RE2X9156	0.5	60	30P	1153	20.1
RE2X9157	0.75	4	2P	184	8.3
RE2X9176	0.75	3	1T	146	8.8
RE2X9158	0.75	10	5P	299	10.7
RE2X9159	0.75	20	10P	489	15
RE2X9160	0.75	30	15P	728	17.4
RE2X9161	0.75	40	20P	920	19.7
RE2X9162	0.75	60	30P	1445	23.2
RE2X9163	1	4	2P	195	8.1
RE2X9177	1	3	1T	132	8.7
RE2X9164	1	10	5P	262	10.4
RE2X9165	1	20	10P	425	14.7
RE2X9166	1	30	15P	562	17
RE2X9167	1	40	20P	1162	19.1
RE2X9168	1	60	30P	1624	22.6
RE2X9169	1.5	4	2P	242	10.5
RE2X9178	1.5	3	1T	195	11.2
RE2X9170	1.5	10	5P	408	13.7
RE2X9171	1.5	20	10P	714	19.5
RE2X9172	1.5	30	15P	957	25.6
RE2X9173	1.5	40	20P	1337	25.6
RE2X9174	1.5	60	30P	1860	30.3

BS EN 50288-7 COMMS & CONTROL CABLE- ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA (MM ²)	CONDUCTOR CLASS	MUTUAL CAPACITANCE PF/M			MAXIMUM RESISTANCE CONDUCTOR AT 20°C Ω/Km	MAXIMUM L/R RATIO μH/ohms
		CABLES WITH COLLECTIVE SCREEN ONLY	1 PAIR, 2 PAIRS, 1 TRIPLE COLLECTIVELY SCREENED	CABLES WITH INDIVIDUALLY SCREENED PAIRS		
0.5	5	75	115	115	39	25
0.75	5	75	115	115	26	25
1	2	75	115	115	18.1	25
1.5	2	85	120	120	12.1	40
2.5	2	85	120	120	7.41	65

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

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