CEAM CAVI SPECIALI
research & development dpt.

TECHNICAL CABLE DATA SHEET
SCHEDA TECNICA DI PRODOTTO

NUMBER: *numero*	**3033e**	**revision:** *revisione*	**00**	**cause of release:** *emissione*	☑ **information** *informazione* ☐ **definitive** *definitiva*	**ITEM CODE:** *codice articolo*	**0562077**

ITEM DESCRIPTION: *descrizione articolo*
DATABIT DTB-Y C-5e FTP 4x2x24/1AWG CATEGORY 5e (tested up to 200 MHz)
(ETHERNET™ CABLE) for fixed installation

USE: *impiego*	**INSTALLATION:** *posa*	**INFORMATION:** *informazioni*
☑ **indoor** *interno edificio*	☑ **fixed** *fissa*	☑ **2002/95/EC RoHS compliant**
☐ **outdoor limited** *esterno limitato*	☐ **flexible limited** *flessibile limitata*	☑ **2002/95/EC LVD compliant**
☐ **outdoor direct burial** *esterno interrato*	☐ **dynamic** (drag chain) *mobile in catena*	☑ **CE marking**
☐	☐ **dynamic** (torsion) *mobile in torsione*	☐ .....

Construction

Inner conductor	solid bare copper wire 24/1AWG (1×0,515 mm ∅) - nom. cross section 0,22 mm²
Insulation	foam-skin polyethylene - max ∅ 1,05 mm (RJ-45 plug connector compatible)
Insualation colour	white/blue, blue, white/orange, orange, white/green, green, white/brown, brown
Core assembly	the cores will be stranded to a pair - (**1**) white/blue+blue, (**2**) white/orange+orange, (**3**) white/green+green, (**4**) white/brown+brown
Pair assembly	the four pair will be stranded together
Separation	polyester (PET) tape
Global shield	- aluminium/polyester tape (inside aluminium surface) with 20% overlap - solid tinned copper drain wire 26/1AWG (1×0,40 mm ∅)
Outer jacket	flame retardant PVC compound - grey similar to RAL7032 colour outer ∅: 6,1 (± 0,2) mm - nom. thickness: 0,65 mm
Copper weight	18,8 kg/km
Total weight	approx. 45 kg/km
Printing (ink-jet)	#P/N 0562077# CEAM DTB-Y C-5e FTP 4x2x24/1AWG 100 OHM 75°C CAT.5 ENHANCED - TIA/EIA568A5 - EN50173 - ISO/IEC11801

Electrical and transmission properties @ 20°C

Max DC conductor resistance	93,0 Ω/km
Capacitance	48 pF/m
Max capacitance unbalance	1600 pF/km
Propagation velocity @ 100 MHz	approx. 73 %
Propagation delay @ 100 MHz	nom 470 nsec/100m (max 520 nsec/100m)
Delay skew (4÷100 MHz)	nom 20 nsec/100m (max 45 nsec/100m)
Characteristic impedance (1÷100 MHz)	100 Ω (± 15%)
Dielectric strength (cond./cond. - cond./shield)	0,7 kVac × 1 min
Min insulation resistance	5,0 GΩ×km
Transfer impedance	50 mΩ/m @1MHz - 130 mΩ/m @10MHz - 250 mΩ/m @30MHz

FREQUENCY [MHz]	ATTENUATION [dB/100m]		NEXT [dB]		PS NEXT [dB]		EL-FEXT [dB/100m]		PS EL-FEXT [dB/100m]		PS ACR [dB/100m]		RETURN LOSS [dB]	
	Standard [MAX]	typical	Standard [MIN]	typical	Standard [MIN]	typical	Standard [MIN]	typical	Standard [MIN]	typical	[MIN]	typical	Standard [MIN]	typical
1	2,1	2,0	65,3	75	62,3	72	63,8	73	61,0	70	60,2	68,0	23	26
4	4,0	3,8	56,3	67	53,3	64	51,8	63	49,0	60	49,3	60,2	24,5	28
10	6,3	5,7	50,3	60	47,3	57	43,8	57	41,0	54	41,0	51,3		
16	8,0	7,1	47,2	57	44,2	54	39,7	53	36,8	50	36,2	46,9	25	30
20	9,0	7,9	45,8	56	45,8	53	37,8	49	35,0	46	36,8	45,1		
31,25	11,4	9,8	42,9	53	39,9	50	33,9	47	31,1	44	28,5	40,2	23,6	28
62,5	16,5	14,2	38,4	48	35,4	45	27,9	38	25,1	35	18,9	30,8	21,5	27
100	21,3	18,3	35,3	45	32,3	42	23,8	35	21,0	32	11,0	23,7	20,1	25
125	---	21,9	---	43	---	40	---	34	---	31	---	18,1	---	23
155,52	---	23,4	---	41	---	38	---	33	---	30	---	14,6	---	21
200	---	26,3	---	39	---	36	---	32	---	29	---	9,7	---	19

Fire performance

Flame retardancy	in compliance with IEC 60332-1 Standard requirement
Heat release	690 MJ/km (0,191 kWh/m)

Approvals N/A

Standard reference EN 50288-1; EN 50288-2-1; EN 50173; IEC 61156-2; ISO/IEC 11801; ANSI/TIA/EIA 568-C.2

Other properties

Max operating voltage	125 V (not for power purposes)
Max pull strength	80 N
Operating temperature range	fixed -20/+75 °C - during installation -5/+50 °C
Min bend radius (fixed)	10 x outer ∅ [mm]

MD T007A

note/s:
note
- free of paint wetting impairment substance (eg. silicone)

DATE: *data*	03/09/2010	**FILLED IN BY:** *compilato*	Davide Giaccarello	**AUTHORIZED:** *visto*	