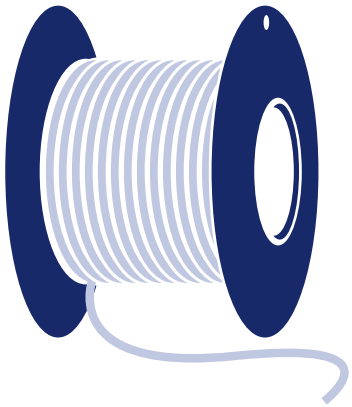
Prestaq Co., Ltd.
9F, No. 651-9, Jung Jeng Rd., Shin Juang Dist., New Taipei City, Taiwan Tel +886 2 2908 1988 www.prestaq.com e-mail: sales@grayle.com

Product Specifications

Product: 4PR 23AWG S/FTP CAT7 LSZH CLASS B2ca CABLE



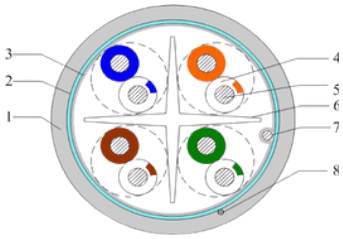
Description

- Rated temperature: 75℃
- Flame rate: IEC 60332-1, EUROCLASS B2ca s1ad1a1
- Product standard certification: CPR
- Conductor: Solid bare copper
- Insulation: Color-coded Foam PE
- Jacket: LSZH material
- Packaging: Per customer request
- Rreference: IEC 61156-5,ISO/IEC 11801 UL 444; EN 50575;

Application

- 100Base-T4
- 100Base-TX
- 100VG-AnyLAN
- 1000Base-T
- 1000Base-TX
- 155Mbps ATM
- 622Mbps ATM
- 10 Gb Ethernet

Product figure



1. **Outer jacket**
2. **Braid**
3. **AL-Foil**
4. **Insulation**
5. **Conductor**

- Material: LSZH
- Thickness (Min.)0.4mm
- Outer diameter: 7.1±0.3mm
- Rip cord: N/A
- Color:Per customer request

Physical characteristics

Structure

- Construction: S/UTP
- Number of pairs: 4 Pairs

Conductor

- AWG: 23 AWG
- Material: Solid bare copper
- Dimension: 0.566 ±0.02 mm

Insulation

- Insulation material: Foam PE
- Insulation dimension: 1.30 ±0.05 mm
- Number colour (Stripe marking): **1.**White/Blue(Stripe) & Blue | **2.**White/Orange(Stripe)&Orange | **3.**White/Green(Stripe) & Green | **4.**White/Brown(Stripe) & Brown

Cabling

- Twisting lay length: ≦30mm
- Cabling lay length: ≦200mm

Filler

- Filler: N/A

Binder

- Binder material: N/A

Shield

- Individual shield & material: AL/PET
- Primary overall shield & material: Tinned copper wire, 40% coverage(Nom)
- Secondary overall shield & material: N/A
- Shield coverage: 100%
- Drain wire Nom: N/A

Mechanical characteristics

- Operating temperature range: -20 ℃ ~ +75 ℃
- Installation temperature range: 0 ℃ ~ + 50 ℃
- Recommended pulling tension (max.): 80 N IEC 61156-5
- Bending radius (Installation) (min.): 8 x O.D.
- Outer jacket tensile strength: ≧8.3 Mpa UL 444
- Outer jacket elongation: ≧100% UL 444
- Outer jacket aging condition: 100 ℃ x 48 hrs UL 444
- Tensile strength retention after aging: ≧75% of Unaging UL 444
- Elongation retention after aging: ≧75% of Unaging UL 444
- Cold bend: No crack (@ -20℃ x 4hrs) UL 444

Electrical characteristics

- Insulation resistance (min.): 5000 MΩ.m IEC 61156-5
- Operating voltage (max.): 300V UL444
- Mutual capactiance (nom.): ≦5.6 nF/100m @1kHz
- Capacitance unbalance: pair-to-ground: ≦160 pF/100m @1kHz | IEC 61156-5
- Delay skew (max.): 25 ns/100m | IEC 61156-5
- Conductor DC resistance (max.): 9.5 Ω/100m @20 ℃ | IEC 61156-5
- Conductor DC resistance unbalance (max.) Within pair: 2% @20 ℃ | IEC 61156-5
- Nominal velocity of propagation: 74%

Transmission characteristics (Test length：100m)

Frequency	Input Impedance Upper limit	Input Impedance Lower limit	ATT	RL	NEXT	PS NEXT	ELFEXT	PS ELFEXT	PD	TCL
(MHz)	Zu(Ω)	Zl(Ω)	(dB Max)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(ns/100m Max)	(dB Min)
1	-	-	-	-	-	-	-	-	-	40.0
4	115.2	86.8	3.74	23.0	78.0	75.0	78.0	75.0	552.0	34.0
8	112.6	88.8	5.24	24.5	78.0	75.0	77.2	74.2	546.7	31.0
10	111.9	89.4	5.86	25.0	78.0	75.0	75.3	72.3	545.4	30.0
16	111.9	89.4	7.41	25.0	78.0	75.0	71.2	68.2	543.0	28.0
20	111.9	89.4	8.29	25.0	78.0	75.0	69.3	66.3	542.0	27.0
25	112.9	88.5	9.29	24.3	78.0	75.0	67.3	64.3	541.2	26.0
31.25	114.1	87.7	10.41	23.6	78.0	75.0	65.4	62.4	540.4	25.1
62.5	118.3	84.5	14.88	21.5	75.5	72.5	59.4	56.4	538.6	22.0
100	121.9	82.0	19.02	20.1	72.4	69.4	55.3	52.3	537.6	20.0
150	125.7	79.6	23.56	18.9	69.8	66.8	51.8	48.8	536.9	18.2
200	128.8	77.6	27.47	18.0	67.9	64.9	49.3	46.3	536.5	17.0
250	131.5	76.0	30.97	17.3	66.4	63.4	47.3	44.3	536.3	16.0
300	131.6	76.0	34.19	17.3	65.2	62.2	45.8	42.8	536.1	-
600	131.6	76.0	50.10	17.3	60.7	57.7	39.7	36.7	535.5	-

Remarks: * If FEXT loss is greater than 90 dB, PSACR-F, ACR-F loss does not need to be measured.

* Cable that meet the requirements of the characteristic impedance are not required to be measured for return loss; alternately cables that meet the return loss requirements are not required to be measured for characteristic impedance.

*The test temperature is 20℃.

* Cable measurement precautions : Mutual capacitance, capacitance unbalance, characteristic impedance, return loss, insertion loss, SRL, NEXT loss, ACRF, TCL, and TCTL measurements and calculations shall be performed on cable samples of 100 m (328 ft) removed from the reel or packaging. The test sample shall be laid out along a non-conducting surface, loosely coiled, or supported in aerial spans, and all pairs shall be terminated according to the specific requirements of this annex. Other test configurations are acceptable if correlation to the reference method has been verified. In case of conflict, the reference method (100 m, off-reel, resistor terminated) shall be used to determine conformance to the minimum requirements of this Standard.

Revision history:

Rev. 0 2020.11.30 | Rev.1 Add jacket marking

```
ZN762335000 Class B2ca-s1a,d1,a1
ZYBRNET 10G CAT.7 4PR 23AWG SOLID
S/FTP LSZH PRESTAQ ***M
```

Note: 1 * *** * is Cycle Printed, From 500 meter down to 000 meter or 305 meter down to 000 meter . marking interval is 1m; printing. 2, Marking color shall be blue printing . 3. Ink jet marking size : High*Width : 3(±0.3)mm * 2(±0.3)mm