



Control & signal cables

MPY-S / MPYC-S / MPYCY-S

JIS Individually Screened Shipboard

JIS C 3410 250 V individually pair-screened EP-rubber marine instrumentation cable



JIS C 3410 Marine

Individual Pair Screen (-S)

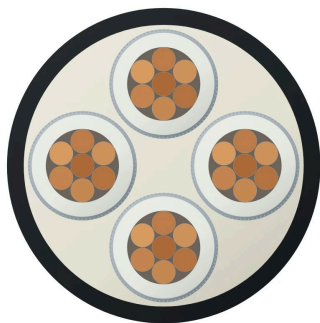
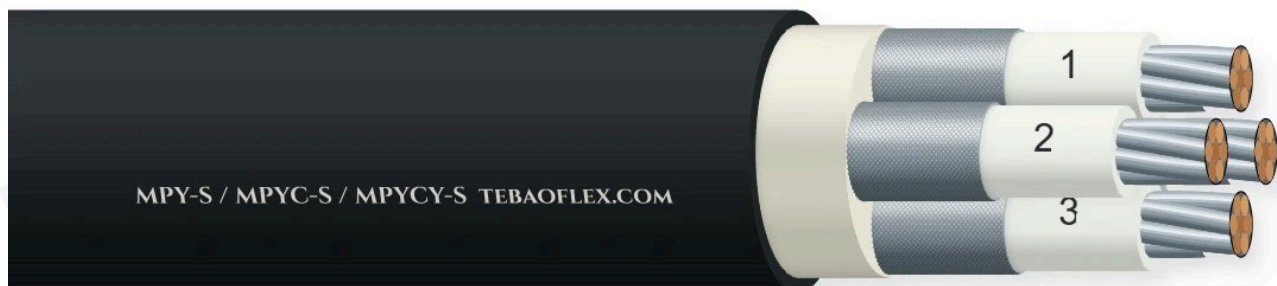
MPY-S / MPYC-S / MPYCY-S

Application

Individually pair/core-screened 250 V marine shipboard instrumentation cable family to JIS C 3410 ('MPY-S', 'MPYC-S', 'MPYCY-S'). Each +90 °C EP-rubber pair is wrapped in its own copper/Al-foil screen ('-S') to eliminate inter-channel crosstalk.

Typical uses: Main engine RTD, thermocouple & pressure loops, Cargo tank radar & custody-transfer gauging, Integrated bridge & propulsion control systems, LNG carrier & chemical tanker safety interlocks, Offshore drilling & production instrumentation

Construction



Cross-section, not to scale

1	Stranded annealed copper conductor	JIS C 3410 / IEC 60228 Cl. 2
2	EP-rubber pair insulation (P)	JIS C 3410 · IEC 60092-360 EPR
3	Individual pair screen (-S)	JIS C 3410
4	Vinyl sheath (Y)	JIS C 3410
5	Optional wire braid + oversheath (C / CY)	JIS C 3410 · IEC 60332-3-22 Cat. A

Technical data

Typical values

Rated voltage	250 V (150/250 V AC)	AC test voltage (50/60 Hz)	1500 V AC for 5 minutes (core/core & core/pair-screen)
Max. DC conductor resistance (20 °C)	0.75 mm ² : ≤ 25.3 Ω/km · 1.25 mm ² : ≤ 15.0 Ω/km · 1.5 mm ² : ≤ 12.1 Ω/km	Inter-pair crosstalk attenuation	≥ 75 dB via individual metallic pair screens
Insulation resistance (20 °C)	≥ 1000 MΩ·km (EP rubber)	Max. conductor temperature	+90 °C continuous operation
Short-circuit temperature	+250 °C max. (5 s)	Fixed ambient range	–25 °C to +80 °C
Min. bending radius, fixed	6 × overall diameter	Pair screen isolation	Each screened pair is wrapped in numbered insulating tape so individual screens remain isolated or selectively grounded
Bunched flame test	IEC 60332-3-22 Category A & IEC 60332-1-2 vertical flame retardant	Marine oil & moisture	Outer PVC oversheath (MPYCY-S) resists bilge water, fuel oil and salt mist
Standards	JIS C 3410	Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends

Sizes

16 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
n × 2 × 0.75 mm² Individually Screened Pairs (MPY-S / MPYC-S / MPYCY-S) 6 sizes							
☐ MPYCY-S 1×2×0.75	1×2×0.75	18	10.9	11.8	22	195	71
☐ MPYCY-S 2×2×0.75	2×2×0.75	18	14.0	15.2	42	320	91
☐ MPYCY-S 4×2×0.75	4×2×0.75	18	16.4	17.8	82	465	107
☐ MPYCY-S 7×2×0.75	7×2×0.75	18	19.1	20.8	140	665	125
☐ MPYCY-S 12×2×0.75	12×2×0.75	18	24.1	26.2	238	1,020	157
☐ MPYCY-S 19×2×0.75	19×2×0.75	18	28.3	30.8	375	1,450	185
n × 2 × 1.25 mm² Individually Screened Pairs (MPY-S / MPYC-S / MPYCY-S) 5 sizes							
☐ MPYCY-S 1×2×1.25	1×2×1.25	16	11.6	12.6	32	228	76
☐ MPYCY-S 2×2×1.25	2×2×1.25	16	15.1	16.4	62	378	98
☐ MPYCY-S 4×2×1.25	4×2×1.25	16	17.8	19.4	122	565	116
☐ MPYCY-S 7×2×1.25	7×2×1.25	16	21.0	22.8	212	825	137
☐ MPYCY-S 12×2×1.25	12×2×1.25	16	26.7	29.0	360	1,290	174
n × 2 × 1.50 mm² Individually Screened Pairs (MPY-S / MPYC-S / MPYCY-S) 5 sizes							
☐ MPYCY-S 1×2×1.5	1×2×1.5	16	12.0	13.0	37	244	78
☐ MPYCY-S 2×2×1.5	2×2×1.5	16	15.6	17.0	72	408	102
☐ MPYCY-S 4×2×1.5	4×2×1.5	16	18.6	20.2	142	618	121
☐ MPYCY-S 7×2×1.5	7×2×1.5	16	21.9	23.8	248	912	143
☐ MPYCY-S 12×2×1.5	12×2×1.5	16	27.8	30.2	422	1,435	181

– Dimensions and weights are typical values per JIS C 3410 / IEC 60092-376. Minimum fixed bending radius shown is 6 × OD.

Electrical & current ratings

3 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	Single pair/core 30 °C, A	Multi-core bundle 30 °C, A
0.75	18	26	12.0	10.0
1.25	16	15.6	18.0	15.0
1.5	16	13.3	23.0	18.0

– Current ratings at 30 °C ambient in free air per DIN VDE 0298-4 / DIN VDE 0891-1. Apply grouping derating factors for multi-core control and signal bundles.

Standards and approvals

✓ JIS C 3410 / IEC 60092-376

✓ CE · RoHS 2 (2011/65/EU) · REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/jis-individually-screened-shipboard-control-cable



Typical values for this cable type, based on JIS C 3410 / IEC 60092-376. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.