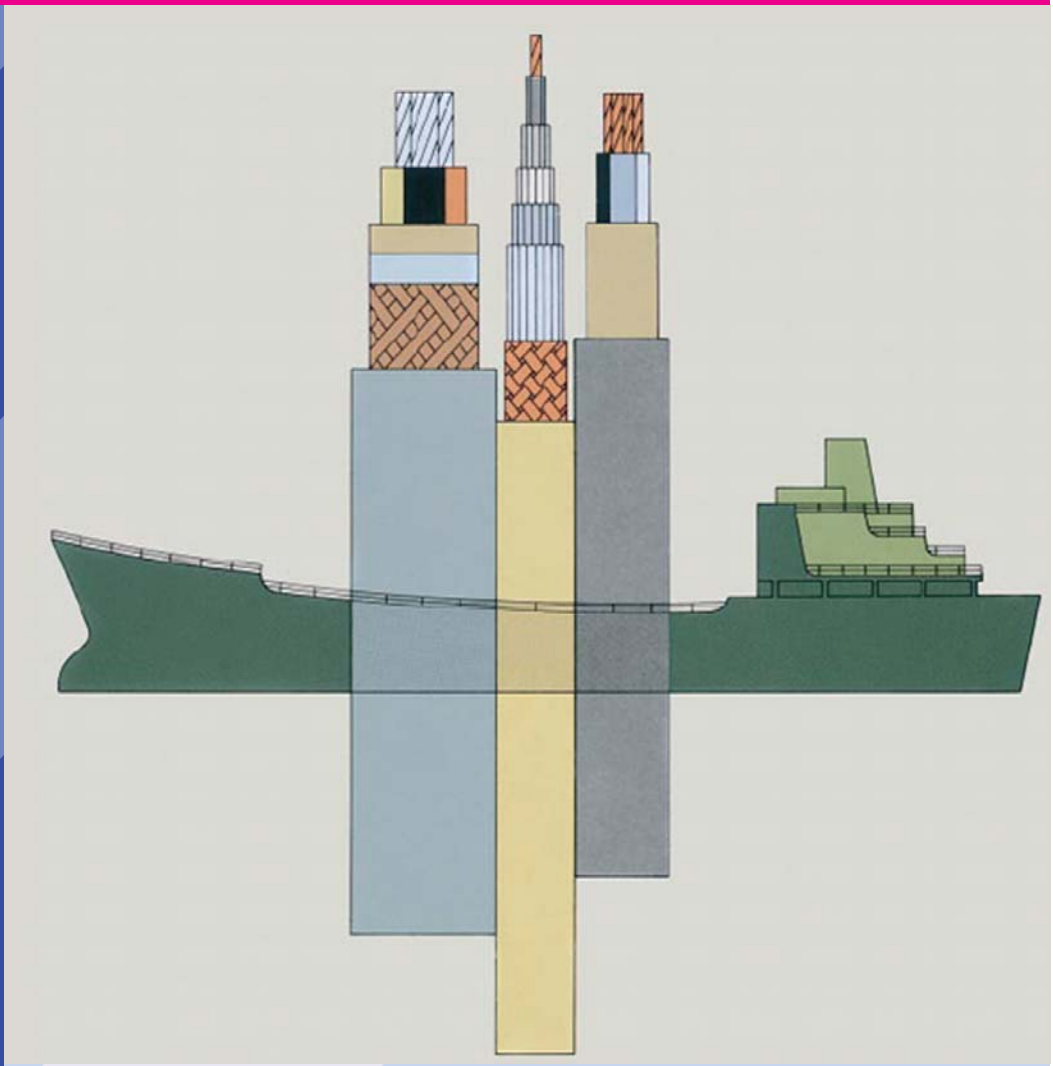
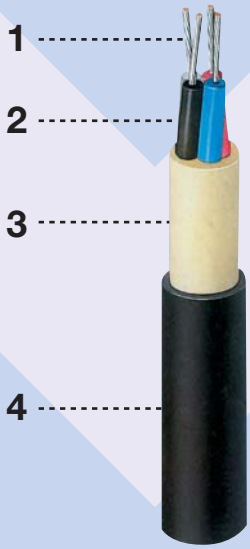
PRYSMIAN
CABLES & SYSTEMS



SHIP CABLES

MGG



1- Stranded copper conductor
2- Protolon® insulation
3- Rubber filler
4- Protofirm® outer sheath

Construction :

Single or multi core ship wiring cables with stranded copper conductor, Protolon® insulation, rubber filler and Protofirm® outer sheath.

Technical Data :

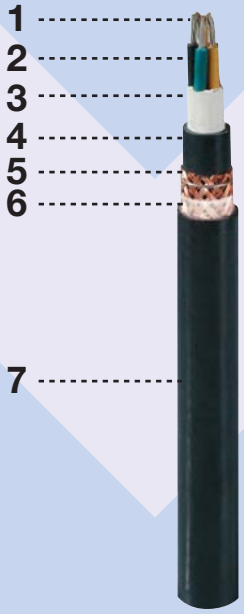
These cables are produced according to DIN 89160 and tested according to below standards :

Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

Used in ships and every type of sea vehicles, externally, below decks, in dry, wet and steamy places, under every sea conditions. They shouldn't
be used near antenna installations, in radio, radar and similar receiver rooms because of not having screen.

MGCG



1- Stranded copper conductor
2- Protolon® insulation
3- Rubber filler
4- Inner sheath
5- Copper wire braiding
6- Polyester tape
7- Protofirm® outer sheath

Construction :

Single or multi core ship wiring cables with stranded copper conductor, Protolon® insulation, rubber filler, inner sheath, copper wire braiding and Protofirm® outer sheath.

Technical Data :

These cables are produced according to DIN 89158 and tested according to below standards :

Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

Used in ships and every type of sea vehicles, wet and steamy places, closed and open decks, in every rooms and closed areas, where sensitive
equipments are located such as stereos, radars, radios, antennas and because of the copper wire braiding, under heavy operating conditions, in places where mechanical and electrical protection needed.

FMGCG

1- Stranded copper conductor
2- Protolon® insulation
3- Polyester tape
4- Copper wire braiding
5- Protofirm® outer sheath

Construction :

Single or multi paired marine type telecommunication cables with stranded
copper conductor, Protolon® insulation, copper wire braiding and Protofirm® outer sheath.

Technical Data :

These cables are produced according to DIN 89159 and tested according to below standards :

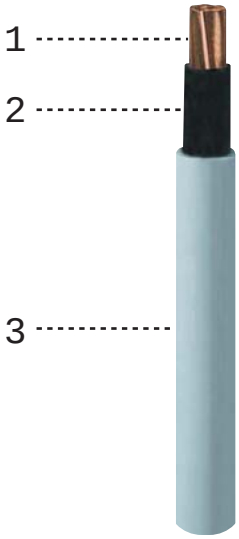
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

Used in ships and every type of sea vehicles, closed and open places, in control and measurement circuits of radio and telecommunication systems, in control and alarm circuits of cruise systems.

PRYSMIAN CABLES & SYSTEMS

1XZ1-R/K (LM-HF)



1- Stranded (R) or fine stranded (K) copper conductor

2- Special XLPE insulation

3- Special synthetic outer sheath

Construction :

Flame retardant, halogen free and low smoke creating ship wiring cables with stranded or fine stranded copper conductor, one or multi core, special halogen free XLPE insulation and special synthetic outer sheath.

Technical Data :

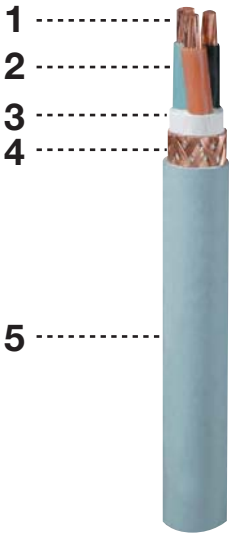
These cables are produced according to IEC 60092-350, IEC 60092-353 and tested according to below standards :

Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

Power and control cables for fixed installations, below decks, dry, wet and steamy places in ships and other marine vehicles.

1XC4Z1-R/K (LSM-HF)



1- Stranded (R) or fine stranded (K) copper conductor

2- Special XLPE insulation

3- Rubber filler

4- Copper wire braiding

5- Special synthetic outer sheath

Construction :

Flame retardant, halogen free and low smoke creating ship wiring cables with stranded or fine stranded copper conductor, special halogen free XLPE insulation, rubber filler, copper wire braiding and special synthetic outer sheath.

Technical Data :

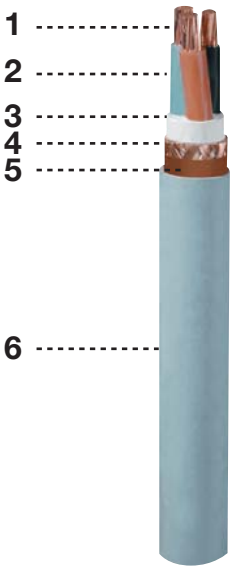
These cables are produced according to IEC 60092-350, IEC 60092-353 and tested according to below standards :

Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

Power and control cables with mechanical and electrical protection for fixed installations in ships and other marine vehicles. Also used for safety, alarm and other critical systems.

1XC7Z1-R/K EMC (LSM-HF EMC)



1- Stranded (R) or fine stranded (K) copper conductor

2- Special XLPE insulation

3- Rubber filler

4- Copper wire braiding

5- Copper tape

6- Special synthetic outer sheath

Construction :

Flame retardant, halogen free, low smoke creating and EMC compatible ship wiring cables with stranded or fine stranded copper conductor, special halogen free XLPE insulation, rubber filler, copper wire braiding and special synthetic outer sheath.

Technical Data :

These cables are produced according to IEC 60092-350, IEC 60092-353 and tested according to below standards :

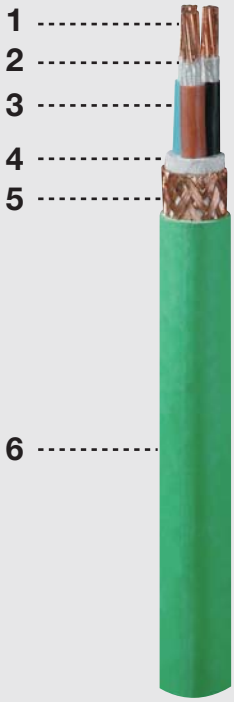
Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

EMC compatible power and control cables with mechanical and electrical protection for fixed installations in ships and other marine vehicles. Also
used for safety, alarm and other critical systems.

PRYSMIAN CABLES & SYSTEMS

1J2XC4Z1-R (LSM-FRHF)



1- Stranded (R) or fine stranded (K) copper conductor

2- Mica tape

3- Special XLPE insulation

4- Rubber filler

5- Copper wire braiding

6- Special synthetic outer sheath

Construction :

Flame retardant, halogen free, low smoke creating ship wiring cables with stranded or fine stranded copper conductor, special halogen free XLPE insulation, rubber filler, copper wire braiding and special synthetic outer sheath. These cables can function under fire for 180 minutes.

Technical Data :

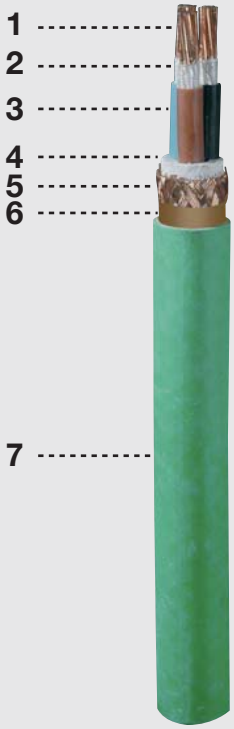
These cables are produced according to IEC 60092-350, IEC 60092-353 and tested according to below standards :

Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A
Fire Resistant	: IEC 60331

Applications :

Power and control cables with mechanical and electrical protection for fixed installations on decks, dry, wet and steamy places in ships and other marine vehicles. Design to maintain operation during fire. Also used for safety, alarm and other critical systems.

1J2XC7Z1-R/K EMC (LSM-FRHF EMC)



1- Stranded (R) or fine stranded (K) copper conductor

2- Mica tape

3- Special XLPE insulation

4- Rubber filler

5- Copper wire braiding

6- Copper tape

7- Special synthetic outer sheath

Construction :

Flame retardant, halogen free, low smoke creating, EMC compatible ship wiring cables with stranded or fine stranded copper conductor, special halogen free XLPE insulation, rubber filler, copper wire braiding and special synthetic outer sheath. These cables can function under fire for 180 minutes.

Technical Data :

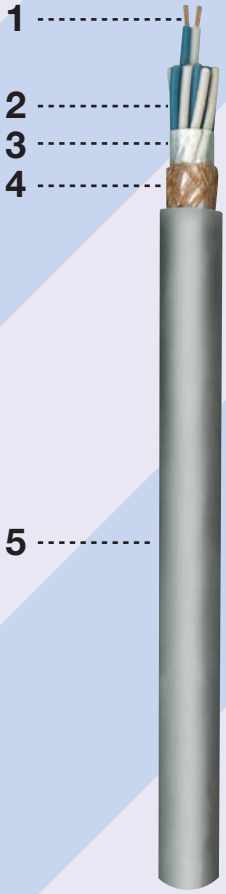
These cables are produced according to IEC 60092-350, IEC 60092-353 and tested according to below standards :

Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A
Fire Resistant	: IEC 60331

Applications :

EMC compatible power and control cables with mechanical and electrical protection for fixed installations on decks, dry, wet and steamy places in ships and other marine vehicles. Design to maintain operation during fire. Also used for safety, alarm and other critical systems.

03XPC4Z1-R (LJST-HF)



1- Stranded copper conductor

2- Special XLPE insulation

3- Polyester tape

4- Copper wire braiding

5- Special synthetic outer sheath

Construction :

Stranded copper conductor, pair twisted, special XLPE insulated, special synthetic outer sheathed, flame retardant, halogen free, low smoke generating, rubber filled, copper wire braided ship wiring cables.

Technical Data :

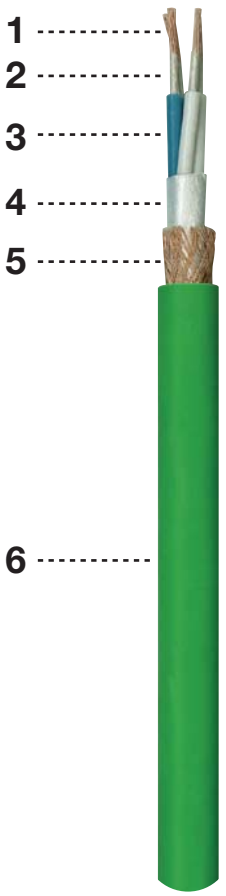
These cables are produced according to IEC 60092-350, IEC 60092-375 and tested according to below standards :

Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A

Applications :

Used as instrumentation, telecommunication and control cables with mechanical and electrical protection for fixed installations in ships and other marine vehicles.

03J2XPC4Z1-R (LJST-FRHF)



1- Stranded copper conductor

2- Mica tape

3- Special XLPE insulation

4- Polyester tape

5- Copper wire braiding

6- Special synthetic outer sheath

Construction :

Stranded copper conductor, special XLPE insulated, special synthetic outer sheathed, flame retardant, halogen free, low smoke generating, rubber filled, copper wire braided marine type telecommunication cables.
These cables can function under fire for 180 minutes.

Technical Data :

These cables are produced according to IEC 60092-350 and IEC 60092-375 and tested according to below standards :

Low Smoke Emission	: IEC 61034-1/2
Halogen Free	: IEC 60754-1/2
Flame Retardant	: IEC 60332-1
Flame Retardant	: IEC 60332-3 Cat.A
Fire Resistant	: IEC 60331

Applications :

Used as instrumentation, telecommunication, signal and control cables with mechanical and electrical protection for fixed installations in ships and other marine vehicles.

PRYSMIAN CABLES & SYSTEMS

GENERAL CHARACTERISTICS

Cable Type	Standard	Rated Voltage	Minimum Operating Temperature (°C)	Maximum Operating Temperature (°C)	LLOYD CERTIFICATES				
					BV	GL	RL	LR	RINA
MGG	DIN 89160	0,6/1 kV	-15 °C	85 °C	✓	✓	-	-	-
MGCG	DIN 89158	0,6/1 kV			✓	✓	-	-	-
FMGCG	DIN 89159	250 V			✓	✓	-	-	-
1XZ1-R (LM-HF)	IEC 60092-350/353	0,6/1 kV		90 °C	✓	✓	-	✓	-
1XZ1-K (LM-HF)	IEC 60092-350/353	0,6/1 kV			✓	✓	-	✓	-
1XC4Z1-R (LSM-HF)	IEC 60092-350/353	0,6/1 kV			✓	✓	✓	✓	✓
1XC4Z1-K (LSM-HF)	IEC 60092-350/353	0,6/1 kV			✓	-	-	✓	
1XC7Z1-R EMC (LSM-HF EMC)	IEC 60092-350/353	0,6/1 kV			✓	-	-	-	-
1XC7Z1-K EMC (LSM-HF EMC)	IEC 60092-350/353	0,6/1 kV			-	-	-	-	-
1J2XC4Z1-R (LSM-FRHF)	IEC 60092-350/353	0,6/1 kV			✓	-	-	-	✓
1J2XC7Z1-R EMC (LSM-FRHF EMC)	IEC 60092-350/353	0,6/1 kV			-	-	-	-	-
1J2XC7Z1-K EMC (LSM-FRHF EMC)	IEC 60092-350/353	0,6/1 kV			-	-	-	-	-
03XPC4Z1-R (LJST-HF)	IEC 60092-350/375	250 V			✓	✓	✓	-	✓
03J2XPC4Z1-R (LJST-FRHF)	IEC 60092-350/375	250 V			✓	✓	-	-	✓

BV : Bureau Veritas - France
GL : Germanischer Lloyd - Germany
RL : Russian Lloyd - Russia
LR : Lloyd's Register - United Kingdom
RINA : Italian Lloyd - Italy

CERTIFICATES

Türk Prysmian Kablo ve Sistemleri A.Ş.

HEAD OFFICE
Haktan Is Merkezi No.39 K.2
Setüstü Kabatas 34427 - Istanbul
Tel : +90 212 393 77 00
Fax : +90 212 393 77 62
Fax : +90 212 393 77 64

FACTORY
Bursa Yolu No.1
Mudanya 16941 - Bursa
Tel : +90 224 270 30 00
Fax : +90 224 270 30 30

www.prysmian.com.tr
tpks@prysmian.com

TPKS EC06-B EN JUL, 2006