

# Specialised to perfection.

All our marine defence cables are VG 95218 approved.



**Prysmian**  
Group



# All our marine defence cables are VG 95218 approved.

Just as the shark has evolved to become a specialist in its habitat, our marine cables for defence are developed to perform with perfection in their environment, too. We have a complete offer of Low Smoke Zero Halogen Cables covering all possible uses on board a ship. And they are all approved according to VG 95218 standards, which is unique on the market worldwide. Uncompromising and all-in, our hard-core cables are ready for duty.

## MARINE DEFENCE CABLES

### Application

We offer a complete package of power, control data-transmission, instrumentation and communication cables, covering all cable needs on board a ship. The product range is designed to create added value for our customers including defence navies, shipyards, ship owners, and marine OEM companies.

### VG 95218 approved

All cables presented in this brochure are VG 95218 approved by the German Navy – Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw). Hence, they can be used in all areas of a naval ship, and of course in any other type of marine vessels.

### Low Smoke Zero Halogen (LSOH)

In case of a fire, especially in narrow and often crowded spaces such as on a ship, it's crucial to have cables with low toxic gas emission and smoke density in order to facilitate the evacuation process. Should a fire erupt, our LSOH cables are recognised by:

- Emitting no toxic gases.
- Good visibility due to low smoke releases, which helps the crew to see and find exits.
- Not letting out any corrosive substances, saving expensive equipment and other metal parts in case of a fire.
- Being environmentally friendlier than traditional cables as they contain no phthalates or dioxin.

### Highly flexible

Space is often cramped on board a ship, installing cables can be tricky and hard to execute. To simplify we've made sure all the cables are flexible, easy to bend, easy to peel and easy to pull. This saves time, money, muscles and body joints.

### Light and small

Weight and space are other major concerns for ship-builders and owners. All items on board should weigh as little as possible, and take up minimum room. That is why our cables are designed with small diameters and light constructions, according to the VG standards. This provides overall benefits to the ship's weight and operation. Plus, smaller cable trays can be used, again saving more space and weight.

## MAIN FEATURES

- ✓ VG 95218 approved – certified for German Navy vessels.
- ✓ DNV-GL certified for civil ships and international customers.
- ✓ Low Smoke Zero Halogen: saves lives and equipment in case of a fire.
- ✓ Flexible – easy to install in tight areas.
- ✓ Lightweight and small – contribute to the ship's overall effectiveness.





ALBERT  
PRINZ VON SACHSEN  
CAROLUS GROSS GOTT  
THEOLOGUS SACRIFICI  
& PHILOSOPHUS  
VIRI DOCTRINARUM  
ET POLITICARUM  
ANNO 1279 IN MONAST.  
SACR. S. S. S. S. S.





# Made in Neustadt

Our Centre of Excellence in Neustadt accommodates the Research & Development department for special cables. Among other highly sophisticated cables, this is where we develop and manufacture our Navy-certified cables. Solutions for demanding safety standards, fire resistance, enhanced supply chain performances, increased data, power and optical transmission for marine application find their way through these gates 24/7/365. In addition, we manufacture all our civil ship cables according to IEC 60092 in the same facilities, which creates valuable synergy effects and increased quality on all levels.

There are several advantages connected to having production and development based in Germany. First of all, the production is continuously and thoroughly monitored by VDE on behalf of the Bundeswehr, which guarantees a consistent state-of-the-art quality. Secondly, it is our own market. We know what you need and can make the cables meet the quality demands that you ask for. Thirdly, the lead times get a lot shorter. The cables will be in place where and when you need it. Fourthly, we can lower transport distances, which will save all of us both on money and the environment.

It is a win-win, for all of us.



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## VG 95218 part 60

### MGSGO / MGGO 0.6/1 kV



Cables and insulated wires with and without screen, with sheath, halogen free, low fire hazard, part 60.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

MGSGO / MGGO 0.6/1 kV	
Global data	
Type designation	MGGO/MGSGO
Standard	VG 95218 part 60
Design features	
Conductor	Copper, round stranded, in accordance with VG 95218 part 60.
Insulation	Ethylene propylene rubber (EPR)
Core identification	According to VG 95218 part 60.
Core arrangement	Transparent foil over the single or laid-up cores.
Inner covering	Only for MGSGO types: Halogen free filler compound.
Screen	Only for MGSGO types: Plain copper wire braid. Transparent foil over the braid.
Outer sheath	Compound from cross-linked elastomer, colour: black.
Electrical parameters	
Rated voltage	0.6/1 kV
Max. permissible operating voltage	AC 0.7/1.2 kV
	DC 0.9/1.8
AC test voltage	3.5 kV
Current carrying capacity description	The definitions in BV 3400 apply.

MGSGO / MGGO 0.6/1 kV	
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	4 x D for all types with flexible conductor (F).
	5 x D for all other types.

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.

## VG 95218 part 61

### LMGSGO 300/500 V



Cable with screen and sheath, light weight, halogen free, low fire hazard, part 61.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

LMGSGO 300/500 V	
Global data	
Type designation	LMGSGO
Standard	VG 95218 part 61
Design features	
Conductor	Copper, round stranded, in accordance with VG 95218 part 61
Insulation	Cross-linked polyalkene compound
Core identification	According to VG 95218 part 61
Core arrangement	Lapped foil over the laid-up cores
Screen	Plain copper wire braid. Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked elastomer, colour: black
Electrical parameters	
Rated voltage	300/500 V
Max. permissible operating voltage	AC 0.318/0.55 kV
	DC 0.413/0.825
AC test voltage	2.5 kV
Current carrying capacity description	The definitions in BV 3400 apply

LMGSGO 300/500 V	
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	5 x D

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.



## VG 95218 part 62

### FMGSGO 250 V



Cable with screen and sheath, pair formation, not screened, halogen free, low fire hazard, part 62.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

FMGSGO 250 V	
Global data	
Type designation	FMGSGO
Standard	VG 95218 part 62
Design features	
Conductor	Copper, round stranded, in acc. with VG 95218 part 62.
Insulation	Cross-linked polyalkene compound.
Core identification	In layers with more than one quad, the black core of two quads laying next to each other have to be marked with following digits: – pilot quad with "1" and the direction quad with "2". Pilot and direction shall be the same in all layers.
Core identification colour code	2 paired cable (1 quad): – black, blue, grey, brown 4 paired cable (4 pairs): – 1 <sup>st</sup> pair: black, blue – 2 <sup>nd</sup> pair: black, brown – 3 <sup>rd</sup> pair: black, grey – 4 <sup>th</sup> pair: black, grey 6 to 16 paired cables (3 to 8 quads): – each quad: black, blue, grey, brown
Core arrangement	4 cores shall be cabled together as quad. The quads shall be cabled together in concentric layers. Only variations the 4 paired cable. 2 core shall be twisted as pairs and the two pairs shall be then twisted together.
Screen	Plain copper wire braid. Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked olefine compound, colour: black.

FMGSGO 250 V	
Electrical parameters	
Rated voltage	250/250 V
Max. permissible operating voltage AC	0.355 kV
AC test voltage	2 kV
Near-end crosstalk attenuation (NEXT)	min. 90 dB (at 10 kHz)
Current carrying capacity description	The definitions in BV 3400 apply.
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	5 x D
Available cross sections are part of the standard. Single datasheets with more information are available upon request.	

## VG 95218 part 63

### FMSGSGO 250 V



Cable with screen and sheath, pair formation, screened, halogen free, low fire hazard, part 63.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

FMSGSGO 250 V	
Global data	
Type designation	FMSGSGO
Standard	VG 95218 part 63
Design features	
Conductor	Copper, round stranded, in acc. with VG 95218 part 63.
Insulation	Cross-linked polyalkene compound.
Core identification colour code	2 paired cable: – 1 <sup>st</sup> pair: black, blue – 2 <sup>nd</sup> pair: black, brown 4 to 24 paired cable, in each layer: – 1 <sup>st</sup> pair: black, blue (pilot pair) – 2 <sup>nd</sup> pair: black, brown (direction pair) – 3 <sup>rd</sup> pair and other: black, grey
Individual screen	Plain copper wire braid over pairs. Over the braid is a transparent foil.
Core arrangement:	2 cores shall be cabled together as pairs. The shielded pairs shall be cabled together in concentric layers. Pilot and direction shall be the same in all layers.
Screen	Plain copper wire braid. Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked olefine compound, colour: black.

FMSGSGO 250 V	
Electrical parameters	
Rated voltage	250/250 V
Max. permissible operating voltage AC	0.355 kV
AC test voltage	2 kV
Near-end crosstalk attenuation (NEXT)	min. 90 dB (at 10 kHz)
Current carrying capacity description	The definitions in BV 3400 apply.
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	5 x D
Available cross sections are part of the standard. Single datasheets with more information are available upon request.	



## VG 95218 part 64

### LFMGSSGO / LFMGSGO 250 V



Cable with single and double screen, with sheath, pair and triple formation, not screened, halogen free, low fire hazard, part 64.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

LFMGSSGO / LFMGSGO 250 V	
Global data	
Type designation	LFMGSSGO/LFMGSGO
Standard	VG 95218 part 64
Design features	
Conductor	Copper, plain, round stranded, in accordance with VG 95218 part 64.
Insulation	Polyalkene compound
Core identification	In acc. with VG 95218 part 64.
Core arrangement	2 cores shall be cabled together as pairs. The pairs shall be cabled together in concentric layers. Pilot and direction shall be the same in all layers.
Screen	Plain copper wire braid (double or single). Over the braid is a transparent foil.
Outer sheath	Cross-linked, CPE based rubber compound, colour: black.
Electrical parameters	
Rated voltage	250/250 V
Max. permissible operating voltage AC	0.355 kV
AC test voltage	2 kV
Near-end crosstalk attenuation (NEXT)	min. 90 dB (at 10 kHz)
Current carrying capacity description	The definitions in BV 3400 apply.

LFMGSSGO / LFMGSGO 250 V	
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-30 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	5 x D

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.

## VG 95218 part 65

### LFMSGSGO 250 V



Cable with screen and sheath, cabled single elements, screened, halogen free, low fire hazard, part 65.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

LFMSGSGO 250 V	
<b>Global data</b>	
Type designation	LFMSGSGO
Standard	VG 95218 part 65
<b>Design features</b>	
Conductor	Copper, plain, round stranded, in accordance with VG 95218 part 65.
Insulation	Polyalkene compound
Core identification	In acc. with VG 95218 part 65.
Individual screen	Plain copper wire braid over pairs. Over the braid is a transparent foil.
Core arrangement	2 cores shall be cabled together as pairs. The pairs shall be cabled together in concentric layers. Pilot and direction shall be the same in all layers.
Screen	Plain copper wire braid (double or single). Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked olefine compound, colour: black.
<b>Electrical parameters</b>	
Rated voltage	250/250 V
Max. permissible operating voltage AC	0.355 kV
AC test voltage	2 kV
Near-end crosstalk attenuation (NEXT)	min. 100 dB (at 10 kHz)
Current carrying capacity description	The definitions in BV 3400 apply.

LFMSGSGO 250 V	
<b>Chemical parameters</b>	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
<b>Thermal parameters</b>	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-30 °C
Laying temperature min.	-15 °C
<b>Mechanical parameters</b>	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	5 x D

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.



## VG 95218 part 66

### LFMSGSSGO 250 V



Cable with double screen, with sheath, triple formation, screened, halogen free, low fire hazard, part 66.

#### Application

For fixed installation on ships in all locations and on open decks. The definitions for installation in BV 3400 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

LFMSGSSGO 250 V	
Global data	
Type designation	LFMSGSSGO
Standard	VG 95218 part 66
Design features	
Conductor	Copper, plain, round stranded, in accordance with VG 95218 part 66.
Insulation	Polyalkene compound
Core identification	In acc. with VG 95218 part 66.
Individual screen	Plain copper wire braid over triples. Over the braid is a transparent foil.
Core arrangement	3 cores shall be cabled together as triples. The shielded triples shall be cabled together in concentric layers. Pilot and direction shall be the same in all layers.
Screen	Plain copper wire braid (double). Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked olefine compound, colour: black.
Electrical parameters	
Rated voltage	250/250 V
Max. permissible operating voltage AC	0.355 kV
AC test voltage	2 kV
Near-end crosstalk attenuation (NEXT)	min. 100 dB (at 10 kHz)
Current carrying capacity description	The definitions in BV 3400 apply.

LFMSGSSGO 250 V	
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-30 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	5 x D
Available cross sections are part of the standard. Single datasheets with more information are available upon request.	

## VG 95218 part 14 A

### MMGSGSGO 6/10 kV



Medium voltage cables, screened, with sheath, halogen free, low fire hazard, part 14 A.

#### Application

These single-core medium-voltage cables are suitable for fixed installation on ships and off-shore units in all locations and on open decks.

The definitions for installation in BV 3400 apply. The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

MMGSGSGO 6/10 kV	
Global data	
Type designation	MMGSGSGO
Standard	VG 95218 part 14
Design features	
Conductor	Copper, round stranded in acc. with VG 95218 part 14.
Insulation	Ethylene-propylene rubber (EPR).
Electrical field control	Inner and outer layer of semiconductive rubber compound.
Core identification	-
Individual screen	Copper wires wrapped in a traverse spiral and/or copper tapes.
Inner covering	Polyolefine compound, black.
Screen	Plain copper wire braid. Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked polyolefine compound, colour: red.
Electrical parameters	
Rated voltage	6 / 10 / 12 kV (U <sub>0</sub> / U / U <sub>m</sub> )
AC test voltage	21 kV
Current carrying capacity description	The definitions in BV 3400 apply.

MMGSGSGO 6/10 kV	
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-30 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	6 x D

Available cross sections are part of the standard. Single datasheets with more information are available upon request.



## VG 95218 part 14 B

### MMGSESGO 6/10 kV



Medium voltage cables, screened, with sheath, halogen free, low fire hazard, part 14 B.

#### Application

These three-core medium-voltage motor supply cables are suitable for pulse-type static inverter-fed three-phase AC drives. For fixed installation on ships and off-shore units in all locations and on open decks.

The definitions for installation in BV 3400 apply. The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

MMGSESGO 6/10 kV	
Global data	
Type designation	MMGSESGO
Standard	VG 95218 part 14
Design features	
Conductor	Copper, round stranded in acc. with VG 95218 part 14.
Insulation	Ethylene-propylene rubber (EPR).
Electrical field control	Inner and outer layer of semiconductive rubber compound.
Core identification	In acc. with VG 95218 part 14.
Individual screen	Copper wires wrapped in a traverse spiral and/or copper tapes. The nominal cross section of the screening is the sum of all individual core screens.
Screen	Plain copper wire braid. Over the braid is a transparent foil.
Outer sheath	Compound from cross-linked polyolefine compound, colour: red.
Electrical parameters	
Rated voltage	6 / 10 / 12 kV (U <sub>0</sub> / U / U <sub>m</sub> )
AC test voltage	21 kV
Current carrying capacity description	The definitions in BV 3400 apply.

MMGSESGO 6/10 kV	
Chemical parameters	
Smoke emission	According to VG 95218-2
Acidity of fire gases	According to VG 95218-2
Flame propagation	According to VG 95218-2
Resistance to oil	According to VG 95218-2
Resistance to chemicals	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-30 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	50 N/mm <sup>2</sup>
Bending radii min.	6 x D
Available cross sections are part of the standard. Single datasheets with more information are available upon request.	

## VG 95218 part 13 A

### H07RN-F 450/750 V



Rubber insulated cables and insulated wires, part 13 A.

#### Application

Suitable for use in dry, humid or moist rooms and outdoor for transportable motors or machines on building sites or in agricultural works. Medium mechanical stresses, e.g. for industrial and agricultural workshop appliances, large boiling installations, heating plates, inspection lamps, electric tools such as drills, circular saws, domestic electric tools.

Can be used in workshops having an explosive atmosphere. When a cable is used in the presence of explosive or flammable atmosphere, guidance should be respected with reference to EN 60079 series of specifications and guidance should be sought in selecting the suitable cables.

Applicable in fixed installations e.g. on rough-cast in temporary buildings for accommodation purposes, also for wiring of constructional components in lifting appliances and machinery. Usage up to 1000 V A/C is permitted for fixed, protected installation (in conduit or in appliances) and also for motor connections of hoisting motors and the like.

The cables are not suitable for applications involving permanent immersion in water. In other aspects the specifications of DIN VDE 0298 part 300 apply. Oil resistant to EN 60811-404. Resistant to ozone (EN 50363-1 for insulation and EN 50363-2-1 for the outer sheath).

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

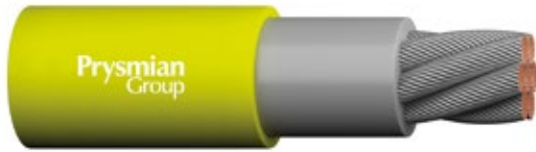
H07RN-F 450/750 V	
Global data	
Brand	OZOFLEX
Type designation	H07RN-F
Standard	VG 95218 part 13 DIN EN 50525-2-21
Design features	
Conductor	Round stranded, tinned copper wires acc. to. class 5 of IEC 60228.
Insulation	Cross-linked, EPR based rubber compound.
Core identification	According to EN50525-1.
Core arrangement	Cores round stranded, 7 core versions with central filler, 12 & 18 core versions in two layers.
Inner sheath (When applicable)	Cross-linked, EPR based rubber compound, colour: black.
Outer sheath	Cross-linked, CPE based rubber compound, colour: black.
Electrical parameters	
Rated voltage	450/750 V

H07RN-F 450/750 V		
Max. permissible operating voltage	AC	0.476/0.825 kV
	DC	0.619/1.238
AC test voltage	2.5 kV	
Current carrying capacity description	According to VG 95218-5, values are valid for one cable free in air at 30 °C ambient temperature.	
Chemical parameters		
Flame propagation	IEC 60332-1-2	
Resistance to oil	EN 60811-404	
Thermal parameters		
Max. operating temperature of the conductor	60 °C	
Ambient temperature for fix installation min.	-40 °C	
Laying temperature min.	-25 °C	
Mechanical parameters		
Max. tensile load on the conductor	15 N/mm <sup>2</sup>	

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.

## VG 95218 part 13 C

### NSSH0EU 0.6/1 kV



Rubber insulated cables and insulated wires, part 13 C.

#### Application

For flexible use and fixed installation open-cast mining applications, in quarries, on construction sites and similar applications, with heavy mechanical stresses.

The cables can be used indoors as well as outdoors, in explosion-hazard areas, in industry and in agriculture. They can be used permanently in waste water up to 40 °C at a depth of max. 2000 m and in industrial water, cooling water, surface water, rainwater and mixed water

– and in groundwater and seawater to a more limited extent. The requirements for accessibility and inspection depend on the consistency of the water. In aggressive water or composed of special substances, the cable's resistance properties should be tested. In other respects the specifications of DIN VDE 0298 part 3 applies.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

NSSH0EU 0.6/1 kV	
Global data	
Brand	PROTOMONT
Type designation	NSSH0EU
Standard	VG 95218 part 13
Design features	
Conductor	Round stranded, tinned copper wires acc. to. class 5 of IEC 60228.
Insulation	Cross-linked, EPR based rubber compound.
Core identification	According to VG 95218 part 13.
Core arrangement	Round stranded, tinned copper wires acc. to. class 5 of IEC 60228.
Inner sheath	Cross-linked, EPR based rubber compound.
Outer sheath	Cross-linked, CPE based rubber compound, colour: yellow.
Electrical parameters	
Rated voltage	0.6/1 kV
Max. permissible operating voltage	AC 0.7/1.2 kV
	DC 0.9/1.8

NSSH0EU 0.6/1 kV	
AC test voltage	3 kV
Current carrying capacity description	According to VG 95218-5, values are valid for one cable free in air at 30 °C ambient temperature.
Chemical parameters	
Flame propagation	IEC 60332-1-2
Resistance to oil	EN 60811-404
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-40 °C
Laying temperature min.	-25 °C
Mechanical parameters	
Max. tensile load on the conductor	15 N/mm <sup>2</sup>

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.



## VG 95218 part 10 A

### GI-LTG 450/750 V



Heavy tough-rubber sheathed flexible cables, part 10 A.

#### Application

These cables are intended for use in heavy current installations and for connection of equipment. They are intended for high-duty service in dry and damp rooms, in open air and explosion hazardous areas.

These cables are approved for application in road traffic within the limits of GGVS (Gefahrgutverordnung Straße). In other respects the specifications of DIN VDE 0298 part 300 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

GI-LTG 450/750 V	
Global data	
Type designation	GI-LTG
Standard	VG 95218 part 10
Design features	
Conductor	Round stranded, tinned copper wires acc. to. class 5 of IEC 60228.
Insulation	Cross-linked, EPR based rubber compound.
Core identification	According to VG 95218 part 10.
Core arrangement	Cores round stranded, 7 core version with central filler, 12 core versions in two layers.
Inner sheath	Cross-linked, EPR based rubber compound, colour: black.
Outer sheath	Cross-linked, CR based rubber compound, colour: black.
Electrical parameters	
Rated voltage	450/750 V
Max. permissible operating voltage	AC 0.476/0.825 kV
	DC 0.619/1.238
AC test voltage	2.5 kV
Current carrying capacity description	According to VG 95218-5, values are valid for one cable free in air at 30 °C ambient temperature.

GI-LTG 450/750 V	
Chemical parameters	
Smoke emission	According to VG 95218-2
Flame propagation	IEC 60332-1-2
Resistance to oil	According to VG 95218-2
Ozone resistance	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Ambient temperature for fix installation min.	-40 °C
Laying temperature min.	-15 °C
Mechanical parameters	
Max. tensile load on the conductor	15 N/mm <sup>2</sup>

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.

## VG 95218 part 1008

### S05ZZH2-F 300/500 V



Rubber insulated cables for illumination chains, halogen free, low fire hazard, part 1008.

#### Application

These cables are intended for indoor or outdoor use as decorative/lighting chains and with designated lamp-holders in the Bundeswehr, also on board of ships.

In other respects the specifications of DIN VDE 0298 part 300 apply.

The cables are certified from the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw).

S05ZZH2-F 300/500 V	
Global data	
Type designation	S05ZZH2-F
Standard	VG 95218 part 1008 A
Design features	
Conductor	Round stranded, tinned copper wires acc. to. class 5 of IEC 60228.
Insulation	Cross-linked, EPR based rubber compound.
Core identification	Blue and brown
Core arrangement	2 parallel cores
Outer sheath	Cross-linked, EVA based rubber compound, colour: yellow.
Electrical parameters	
Rated voltage	300/500 V
Max. permissible operating voltage	AC 0.318/0.55 kV
	DC 0.413/0.825
AC test voltage	2 kV

S05ZZH2-F 300/500 V	
Chemical parameters	
Flame propagation	IEC 60332-1-2
Resistance to oil	According to VG 95218-2
Ozone resistance	According to VG 95218-2
Thermal parameters	
Max. operating temperature of the conductor	90 °C
Max. short circuit temperature of the conductor	250 °C
Laying temperature min.	-30 °C
Mechanical parameters	
Max. tensile load on the conductor	15 N/mm <sup>2</sup>

Available cross sections are part of the standard.  
Single datasheets with more information are available upon request.

# Linking the future

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