

## FMGSGO 250 V

Communication cables for marine according to VG 95218 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).

### Global data

Type designation	FMGSGO
Standard	VG 95218 Part 62

### Design features

Conductor	Copper, round stranded, in accordance with VG 95218 part 62
Insulation	Crosslinked 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. Colour code: 2 paired cable (1 quad): black, blue, grey, brown; 4 paired cable (4 pairs): 1st pair: black, blue; 2nd pair: black, brown; 3rd pair: black, grey; 4th pair: black, grey;
Core arrangement	6 to 16 paires cables (3 to 8 quads): each quad: black, blue, grey, brown; 4 cores shall be cabled together as quad. The quads shall be cabled together in concentric layers. Only variations the four 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 crosslinked olefine compound, colour: black

### Electrical parameters

Rated voltage	250/250 V
Max. permissible operating voltage AC	0.355 kV
AC test voltage	2 kV
Insulation resistance at 20°C	800 MΩxkm
Mutual capacitance	max. 200nF/km (at 800 Hz)
Near-end crosstalk attenuation (NEXT)	min. 90 dB (at 10 kHz)
Transfer impedance	max. 30 mΩ/m (at 10 MHz)
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. permissible temperature at 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>
Min. bending radius	5 x D

Number of cores x cross section	Part number	Designation acc. to VG 95218-62 Dash No.	Conductor diameter max. mm	Outer diameter min. mm	Outer diameter max. mm	Bending radius fixed min. mm	Weight (ca.) kg/km	Permissible tensile force max. N	Current carrying capacity (1) A
1x2x0,75	20016551	008	1.2	6	7.2	36	70	75	8
2x2x0,75	20016548	001	1.2	6.7	8	40	95	150	8
4x2x0,75	20016398	002	1.2	9.6	11.2	56	185	300	6
6x2x0,75	20024446	003	1.2	10.8	12.5	63	245	450	5
8x2x0,75	20026293	004	1.2	11.9	13.6	68	300	600	4
10x2x0,75	20016547	005	1.2	13.7	15.4	77	370	750	4
14x2x0,75	20026294	006	1.2	14.9	16.7	84	450	1050	3
16x2x0,75	20026295	007	1.2	16.1	18.1	91	530	1200	3