

## FMSGSGO 250 V

Communication cables for marine with double screen according to VG 95218 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).

### Global data

Type designation	FMSGSGO
Standard	VG 95218 Part 63

### Design features

Conductor	Copper, round stranded, in accordance with VG 95218 part 63
Insulation	Crosslinked polyalkene compound
Core identification	2 paired cable: 1st pair: black, blue; 2nd pair: black, brown; 4 to 24 paired cable, in each layer: 1st pair: black, blue (pilot pair); 2nd pair: black, brown (direction pair); 3rd 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 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. 250nF/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	MLFB Number	Designation acc. to VG 95218-63 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
2x2x0,75	20026296	5BG5 575	001	1.2	11.1	12.5	63	220	150	8
4x2x0,75	20001774	5BG5 576	002	1.2	12.9	14.5	73	330	300	6
7x2x0,75	20026298	5BG5 577	003	1.2	14.9	16.4	82	450	525	5
11x2x0,75	20026299	5BG5 578	004	1.2	19.6	21.4	107	710	825	4
14x2x0,75	20026300	5BG5 580	005	1.2	20.8	22.8	114	850	1050	3
19x2x0,75	20026301	5BG5 581	006	1.2	23.4	25.4	127	1100	1425	3
24x2x0,75	20154153	5BG5 582	007	1.2	26.4	28.4	142	1310	1800	2