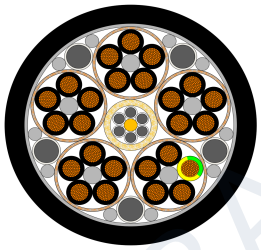
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

3GSLTOE SPREADER CABLE FOR BASKET OPERATION

Flexible low-voltage cable for gravity-fed collector baskets



APPLICATION

Feeder cable for load-lifting equipment such as spreaders, designed for high mechanical stress in gravity-fed collector basket operation. Suitable for cold environments and data transmission options.

KEY FEATURES

Parameter	Value
Application	Spreader cable for basket operation under high mechanical stress
Installation	Cable must be laid into the basket in a counter-clockwise direction
Support system	Central aramid support element with safety factor for vertical suspension
Data transmission	Bus elements and fiber-optic options available

DESIGN

Parameter	Value
Conductor	Bare electrolytic copper, extremely fine stranded, class FS
Insulation	Special EPR compound based on type 3GI3
Screen	Tinned copper braid screen on shielded cores and twisted pairs
Sheath	Special PUR compound, black

ELECTRICAL, THERMAL, MECHANICAL AND MATERIAL DATA

Parameter	Value
Rated voltage Uo/U	0.6 / 1 kV
Maximum AC operating voltage	0.7 / 1.2 kV
Maximum DC operating voltage	0.9 / 1.8 kV
AC test voltage	3.5 kV for 5 minutes
Ampacity	According to DIN VDE 0298 Part 4
Conductor temperature	90 deg C; short circuit 250 deg C
Ambient temperature, fixed	-50 deg C to +80 deg C
Ambient temperature, fully flexible	-40 deg C to +80 deg C
Minimum bending radius	According to DIN VDE 0298 Part 3
Travel speed	Hoist up to 160 m/min
Basket diameter	Recommended minimum 30 x D
Basket height	Recommended approximately 45 x D
Weather resistance	Ozone, UV and moisture resistant
Oil resistance	According to DIN EN 60811-404

TECHNICAL DATA

3GSLTOE-J CONTROL CABLES

Configuration	Conductor dia. max. mm	Outer diameter min.-max. mm	Bending radius mm	Weight kg/km	Resistance Ohm/km	Current A	Short circuit kA
48x1	1.3	31.1-34.1	171	2,340	19.5	18	0.14
24x2.5	2.0	29.1-32.1	161	1,780	7.98	30	0.36
30x2.5	2.0	31.1-34.1	171	2,260	7.98	30	0.36
36x2.5	2.0	34.5-37.5	188	2,780	7.98	30	0.36
42x2.5	2.0	36.8-39.8	199	3,490	7.98	30	0.36
48x2.5	2.0	41.3-44.3	222	4,040	7.98	30	0.36
54x2.5	2.0	45.5-48.5	243	3,890	7.98	30	0.36
24x3.5	2.4	32.0-35.0	175	2,350	5.55	39	0.50
30x3.5	2.4	34.3-37.3	187	2,970	5.55	39	0.50
36x3.5	2.4	37.9-40.9	205	3,750	5.55	39	0.50
42x3.5	2.4	42.4-45.4	227	4,510	5.55	39	0.50
7x4	3.0	18.1-20.1	101	670	4.95	41	0.57

3GSLTOE-J CONTROL CABLES WITH BUS ELEMENT

Configuration	Conductor dia. max. mm	Outer diameter min.-max. mm	Bending radius mm	Weight kg/km	Resistance Ohm/km	Current A	Short circuit kA
24x2.5+1x(2x1)C	2.0	31.1-34.1	171	2,200	7.98	30	0.36
24x2.5+4x(2x1)C	2.0	41.2-44.2	221	3,600	7.98	30	0.36
36x2.5+2x(2x1)C	2.0	41.3-44.3	222	3,830	7.98	30	0.36
42x2.5+2x(2x1)C	2.0	43.5-46.5	233	3,600	7.98	30	0.36

TECHNICAL DATA

3GSLTOE-J CONTROL CABLES WITH INTEGRATED FO

Configuration	Conductor dia. max. mm	Outer diameter min.-max. mm	Bending radius mm	Weight kg/km	Resistance Ohm/km	Current A	Short circuit kA
24x2.5+6x(1G62.5)	2.0	35.6-38.6	193	2,400	7.98	30	0.36
24x2.5+12x(1G62.5)	2.0	34.5-37.5	188	2,530	7.98	30	0.36
30x2.5+6x(1G62.5)	2.0	34.5-37.5	188	2,660	7.98	30	0.36
32x2.5+4x(3E9)	2.0	35.1-38.1	191	2,700	7.98	30	0.36
36x2.5+6x(1G62.5)	2.0	36.8-39.8	199	3,360	7.98	30	0.36
36x2.5+6x(2G62.5)	2.0	36.8-39.8	199	3,360	7.98	30	0.36
36x2.5+6x(2G50)	2.0	36.8-39.8	199	3,360	7.98	30	0.36
42x2.5+6x(1G62.5)	2.0	41.3-44.3	222	3,910	7.98	30	0.36
42x2.5+6x(2G62.5)	2.0	41.3-44.3	222	3,910	7.98	30	0.36
42x2.5+6x(2G50)	2.0	41.3-44.3	222	3,910	7.98	30	0.36
42x2.5+6x(2E9)	2.0	41.3-44.3	222	3,910	7.98	30	0.36
42x2.5+6x(3E9)	2.0	41.3-44.3	222	3,910	7.98	30	0.36

3GSLTOE-J CONTROL CABLES WITH INTEGRATED FO - CONTINUED

Configuration	Conductor dia. max. mm	Outer diameter min.-max. mm	Bending radius mm	Weight kg/km	Resistance Ohm/km	Current A	Short circuit kA
48x2.5+6x(2G62.5)	2.0	45.5-48.5	243	3,790	7.98	30	0.36
48x2.5+6x(2G50)	2.0	45.5-48.5	243	3,790	7.98	30	0.36
48x2.5+6x(2E9)	2.0	45.5-48.5	243	3,790	7.98	30	0.36
48x2.5+6x(3G62.5)	2.0	45.5-48.5	243	3,790	7.98	30	0.36
50x2.5+4x(3G50)	2.0	45.5-48.5	243	3,900	7.98	30	0.36
42x3.5+6x(1G62.5)	2.4	48.1-51.1	256	4,150	5.55	39	0.50

TECHNICAL DATA

3GSLTOE-O AWG CONTROL CABLES

Configuration	Conductor dia. max. mm	Outer diameter min.-max. mm	Bending radius mm	Weight kg/km	Resistance Ohm/km	Current A	Short circuit kA
20x12AWG	2.4	30.2-33.3	167	1,910	5.75	39	0.43
24x12AWG	2.4	31.6-34.6	173	2,360	5.75	39	0.43
30x12AWG	2.4	34.4-37.4	187	2,770	5.75	39	0.43
36x12AWG	2.4	38.1-41.1	206	3,730	5.75	39	0.43
42x12AWG	2.4	42.4-45.4	227	4,500	5.75	39	0.43

APPLICATION NOTES

Parameter	Value
Installation	Lay cable into the basket in a counter-clockwise direction
Support element	Aramide threads woven around lead ball cords, arranged centrally
Basket design	Recommended basket diameter minimum 30 x D; height approximately 45 x D
Travel speed	Hoist up to 160 m/min
Standard	Based on DIN VDE 0250

CERTIFICATIONS