TRATOS®

CABLES FOR A MOVING WORLD

TRATOS HIGH TEMPERATURE®

Nov **2011**

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TRATOS HIGH TEMPERATURE®

HIGH TEMPERATURE CABLES

HIGH TEMPERATURE CABLES

Tratos supply a wide range cables suitable for applications where resistance to extreme temperatures are required.
Our Silicone range of cables are able to withstand temperatures ranging from -60 ºC up to +180 ºC. Silicone cables are ideal for uses in internal wiring of appliances, power supplies and electronics where no mechanical protection is required. In instances where a small amount of mechanical is needed, the range is available with a fibreglass braid outer.

FEP insulated cables offer the same high temperature properties as silicones, but are also resistant to aggressive chemicals, making these cables suitable for automotive uses, electrical appliances and medical equipment.

The EN 50143 range of cables are used primarily in high voltage neon sign installations and in the internal wiring of ignition equipment. The cables are designed to provide high voltage ratings of up to 10KV whilst retaining the high temperature characteristics of silicone cables.

STANDARDS AND QUALITY SYSTEM

STANDARDS

Cables manufactured to standards including the following:

BS EN 50143:2009 . . . . . Cables for signs and luminous-discharge-tube installations operating from a no-load rated output voltage exceeding 1000V but not exceeding 10000V

DIN VDE 0207-Part 6 1989-02 . . Insulating and sheathing compounds for cables and insulated cables - Fluorinated Polymers

DIN VDE 0282-Part 15 2000-05 . Rubber insulated cables of rated voltages up to 450/750V - Part 15: Heat-resistant multi-conductor

CENELEC HD 22.15 S2:2007 . . . . Cables of rated voltages up to and including 450/750V and having cross-linked insulation - Part 15: Multicore cables insulated and sheathed with heat resistant silicone rubber

BS 6500:2000 . . . . . Electric cables. Flexible cords rated up to 300/500V, for use with appliances and equipment intended for domestic, office and similar environments

BS 6007:2006 . . . . . Electric cables. Single core unsheathed heat resisting cables for voltages up to and including 450/750V for internal wiring

Quality System

Our Quality System management includes two certificates: Basec (UK) and AENOR-IQNET (E), in accordance to ISO 9001:2000 covering the production, purchasing of raw materials design and final test including various document types. Tratos Quality System management is under constant control by inspector working for the certification bodies.

SILICONE CABLES 300/500 V

TRATOS® SIA

Internal wiring of appliances, lighting, power supplies and electronics where no mechanical protection is required.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Solid tinned copper
- **Insulation:** Silicone rubber

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 300/500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

TRATOS SIA - 300/500 V - Silicone

Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.50	1 x 0.8	0.6	2.0	9.1	36.7
0.75	1 x 0.98	0.6	2.2	12.0	24.8
1.0	1 x 1.13	0.6	2.3	14.9	18.2
1.5	1 x 1.38	0.6	2.6	20.4	12.2
2.5	1 x 1.78	0.7	3.2	32.8	7.56
4.0	1 x 2.26	0.8	3.9	50.9	4.70
6.0	1 x 2.76	0.8	4.4	72.1	3.11
10.0	1 x 3.57	1.0	5.6	119.3	1.84

SILICONE CABLES 500 V

TRATOS® SIAF

Internal wiring of appliances, lighting, power supplies and electronics where no mechanical protection is required
.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Flexible tinned copper [1]
- **Insulation:** Silicone rubber

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Also available in plain or nickel plated conductors*

TRATOS SIAF - 500 V - Silicone

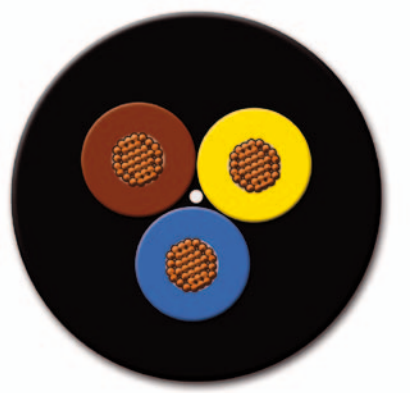
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	0.21	0.6	2.1	9.6	40.1
0.75	0.21	0.6	2.4	13.3	26.7
1.0	0.21	0.6	2.5	15.9	20.0
1.5	0.26	0.6	2.8	21.9	13.7
2.5	0.26	0.7	3.4	34.7	8.21
4.0	0.31	0.8	4.2	54.4	5.09
6.0	0.31	0.8	5.2	82.3	3.39
10	0.41	1.0	6.4	131.9	1.95
16	0.41	1.2	8.0	209.1	1.24
25	0.41	1.4	10.0	326.7	0.795
35	0.41	1.4	11.2	438.8	0.565
50	0.41	1.6	13.3	624.0	0.393
70	0.51	1.6	15.4	860.0	0.277
95	0.51	1.8	17.8	1161.0	0.210
120	0.51	1.8	19.8	1456.2	0.164
150	0.51	2.0	21.5	1784.8	0.132
185	0.51	2.2	24.4	2233.4	0.108
240	0.51	2.4	26.8	2828.6	0.0817
300	0.51	2.6	29.6	3508.2	0.0654

SILICONE CABLES 300/500 V

TRATOS® SIHF

For use in lighting, electrical appliances, ovens and electro mechanics under light mechanical stress.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper
- **Insulation:** Silicone rubber
- **Sheath:** Silicone rubber

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 300/500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

TRATOS SIHF - 300/500 V - Silicone

Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	mm	mm	50	40.1
0.5 x 3	0.21	0.8	5.8	59	40.1
0.5 x 4	0.21	0.8	6.1	72	40.1
0.5 x 5	0.21	0.8	6.7	94	40.1
0.5 x 6	0.21	1.0	7.7	111	40.1
0.5 x 7	0.21	1.0	8.3	115	40.1
0.75 x 2	0.21	0.8	6.4	63	26.7
0.75 x 3	0.21	0.8	6.8	76	26.7
0.75 x 4	0.21	1.0	7.8	101	26.7
0.75 x 5	0.21	1.0	8.5	120	26.7
0.75 x 6	0.21	1.0	9.2	142	26.7
0.75 x 7	0.21	1.0	9.2	148	26.7

SILICONE CABLES 300/500 V

TRATOS SIHF - 300/500 V - Silicone

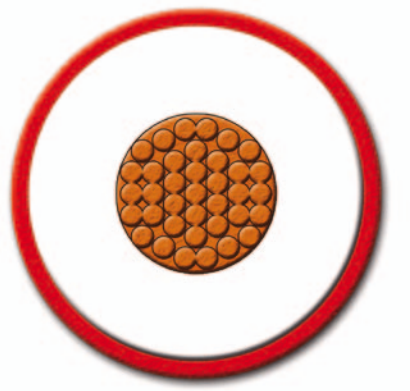
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0 x 2	0.21	0.8	6.6	71	20.0
1.0 x 3	0.21	1.0	7.4	93	20.0
1.0 x 4	0.21	1.0	8.1	113	20.0
1.0 x 5	0.21	1.0	8.8	136	20.0
1.0 x 6	0.21	1.0	9.5	161	20.0
1.0 x 7	0.21	1.0	9.5	169	20.0
1.5 x 2	0.26	1.0	7.6	97	13.7
1.5 x 3	0.26	1.0	8.0	117	13.7
1.5 x 4	0.26	1.0	8.8	145	13.7
1.5 x 5	0.26	1.0	9.6	175	13.7
1.5 x 6	0.26	1.0	10.4	208	13.7
1.5 x 7	0.26	1.0	10.4	220	13.7
1.5 x 10	0.26	1.5	14.2	373	13.7
1.5 x 12	0.26	1.5	14.6	413	13.7
1.5 x 18	0.26	1.5	17.0	579	13.7
1.5 x 20	0.26	1.8	18.6	676	13.7
1.5 x 24	0.26	1.8	20.4	811	13.7
2.5 x 2	0.26	1.2	9.2	146	8.21
2.5 x 3	0.26	1.2	9.7	179	8.21
2.5 x 4	0.26	1.2	10.6	222	8.21
2.5 x 5	0.26	1.2	11.6	268	8.21
2.5 x 6	0.26	1.2	12.6	319	8.21
2.5 x 7	0.26	1.2	12.6	339	8.21
2.5 x 10	0.26	1.5	16.6	546	8.21
2.5 x 12	0.26	1.5	17.1	609	8.21
4.0 x 2	0.31	1.2	10.8	210	5.09
4.0 x 3	0.31	1.2	11.5	261	5.09
4.0 x 4	0.31	1.5	13.2	346	5.09
4.0 x 5	0.31	1.5	14.3	418	5.09
4.0 x 6	0.31	1.5	15.6	498	5.09
4.0 x 7	0.31	1.5	15.6	530	5.09
6.0 x 2	0.31	1.5	13.4	322	3.39
6.0 x 3	0.31	1.5	14.2	398	3.39
6.0 x 4	0.31	1.5	15.6	497	3.39
6.0 x 5	0.31	1.8	17.6	631	3.39
6.0 x 6	0.31	1.8	19.2	751	3.39
6.0 x 7	0.31	1.8	19.3	799	3.39
10.0 x 2	0.41	1.5	15.8	474	1.95
10.0 x 3	0.41	1.5	16.8	596	1.95
10.0 x 4	0.41	1.8	19.1	778	1.95
16.0 x 2	0.41	1.8	19.6	739	1.24
16.0 x 3	0.41	1.8	20.9	932	1.24
16.0 x 4	0.41	2	23.4	1197	1.24
25 x 2	0.41	2	24.0	1123	0.795
25 x 3	0.41	2	25.6	1423	0.795
25 x 4	0.41	2.2	28.6	1827	0.795

SILICONE CABLES 500 V

TRATOS® SIAF/GL

Internal wiring of appliances, lighting, power supplies and electronics where no mechanical protection is required.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper [1]
- **Insulation:** Silicone rubber
- **Braid:** Fibreglass

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Conductor also available in plain or nickel plated copper*

TRATOS SIA - 500 V - Silicone

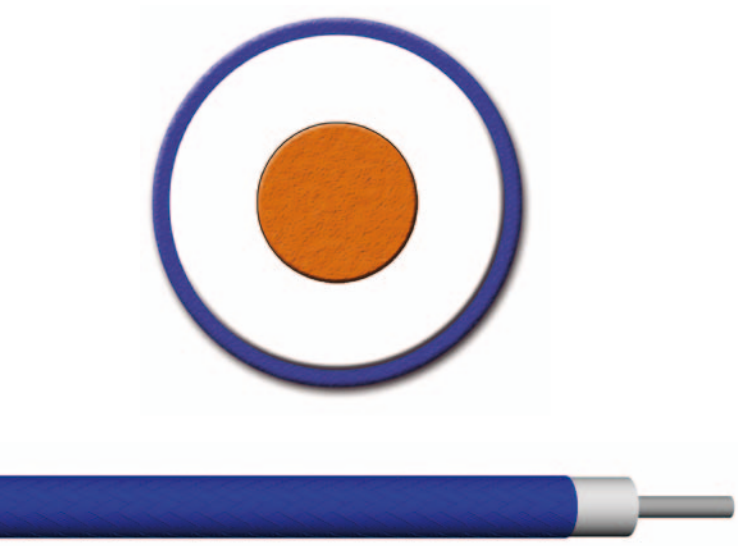
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	0.21	0.55	2.4	10.8	40.1
0.75	0.21	0.55	2.7	14.5	26.7
1.0	0.21	0.55	2.8	17.1	20.0
1.5	0.26	0.55	3.1	23.1	13.7
2.5	0.26	0.65	3.7	26.1	8.21
4.0	0.31	0.8	4.6	57.2	5.09
6.0	0.31	0.8	5.6	85.7	3.39
10	0.41	1.0	7.2	140.6	1.95
16	0.41	1.2	8.8	220.0	1.24
25	0.41	1.4	10.8	339.8	0.795
35	0.41	1.4	12.0	453.3	0.565
50	0.41	1.6	14.1	642.2	0.393
70	0.51	1.6	16.2	881.0	0.277
95	0.51	1.8	18.6	1184.8	0.210
120	0.51	1.8	20.6	1483.1	0.164
150	0.51	2.0	22.3	1814.9	0.132
185	0.51	2.2	25.2	2267.9	0.108
240	0.51	2.4	27.6	2867.9	0.0817
300	0.51	2.6	30.4	3552.5	0.0654

SILICONE CABLES 500 V

TRATOS® SIA/GL

Internal wiring of appliances, lighting, power supplies and electronics where no mechanical protection is required.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Solid tinned copper [1]
- **Insulation:** Silicone rubber
- **Braid:** Fibreglass

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Conductor also available in plain or nickel plated copper*

TRATOS SIAF - 500 V - Silicone

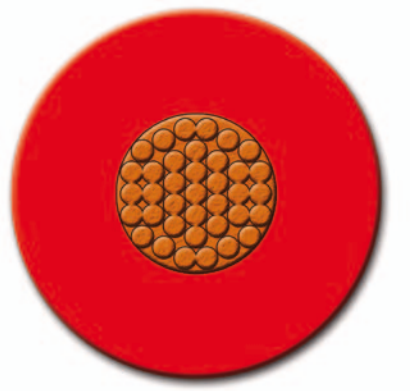
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	1 x 0.80	0.6	2.0	9.1	36.7
0.75	1 x 0.98	0.6	2.2	12.0	24.8
1.0	1 x 1.13	0.6	2.3	14.9	18.2
1.5	1 x 1.38	0.6	2.6	20.4	12.2
2.5	1 x 1.78	0.7	3.2	32.8	7.56
4.0	1 x 2.26	0.8	3.9	50.9	4.70
6.0	1 x 2.76	0.8	4.4	72.1	3.11
10	1 x 3.57	1.0	5.6	119.3	1.84

SILICONE CABLES 500 V

TRATOS® H05S-K

Good resistance to heat and cold, this cable is recommended for use in demanding thermal conditions.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper[1]
- **Insulation:** Silicone rubber

STANDARDS

- IMQ CE

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Also available in plain or nickel plated conductors*

TRATOS H05S-K - 500 V - Silicone

Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	16 x 0.20	0.70	2.65	11.5	39.4
0.75	24 x 0.20	0.70	2.75	15.5	26.3
1.0	32 x 0.20	0.70	2.95	18.0	19.8
1.5	30 x 0.25	0.80	3.35	26.0	13.6
2.5	50 x 0.25	0.90	4.00	39.0	7.11

SILICONE CABLES 500 V

TRATOS® H05S-U

Good resistance to heat and cold, this cable is recommended for use in demanding thermal conditions.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Solid tinned copper[1]
- **Insulation:** Silicone rubber

STANDARDS

- IMQ CE

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Also available in plain or nickel plated conductors*

TRATOS H05S-U - 500 V - Silicone

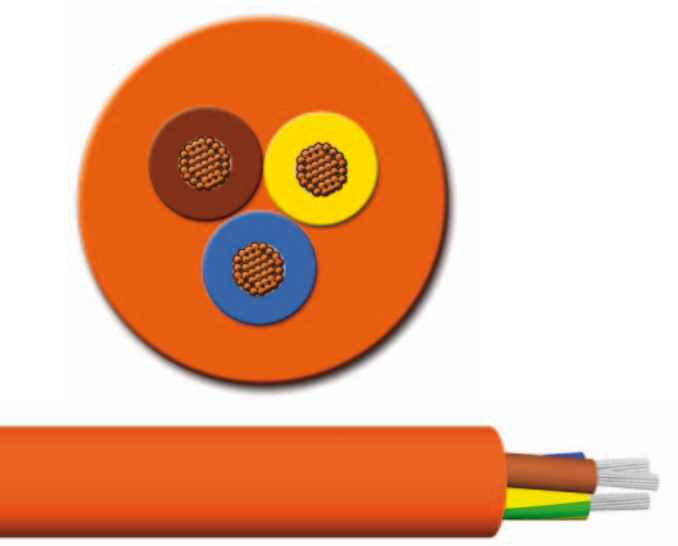
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.50	16 x 0.20	0.70	2.45	11.5	36.3
0.75	24 x 0.20	0.70	2.65	15.5	27.1
1.00	32 x 0.20	0.70	2.75	18.0	18.1
1.50	30 x 0.25	0.80	3.20	26.0	12.2
2.50	50 x 0.25	0.90	3.80	39.0	7.49

SILICONE CABLES 500 V

TRATOS® H05SS-F

For internal wiring of appliances and lighting equipment where they are enclosed and protected against mechanical abuse.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper[1]
- **Insulation:** Silicone rubber
- **Sheath:** Silicone rubber

STANDARDS

- HD 22.15.S1

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Also available in plain or nickel plated conductors*

TRATOS H05SS-F - 500 V - Silicone

Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.75 x 2	0.21	0.8	6.4	60	26.7
0.75 x 3	0.21	0.9	7.0	75	26.7
0.75 x 4	0.21	0.9	7.6	92	26.7
0.75 x 5	0.21	1.0	8.5	114	26.7
1.0 x 2	0.21	0.9	6.8	71	20.0
1.0 x 3	0.21	0.9	7.2	86	20.0
1.0 x 4	0.21	0.9	7.9	106	20.0
1.0 x 5	0.21	1.0	8.8	131	20.0
1.5 x 2	0.21	1.0	8.4	109	13.7
1.5 x 3	0.21	1.0	8.9	132	13.7
1.5 x 4	0.21	1.0	9.9	168	13.7
1.5 x 5	0.21	1.1	10.8	203	13.7
2.5 x 2	0.26	1.1	9.8	157	8.21
2.5 x 3	0.26	1.1	10.4	195	8.21
2.5 x 4	0.26	1.2	11.6	248	8.21
2.5 x 5	0.26	1.3	12.9	307	8.21
4.0 x 3	0.31	1.2	12.3	289	5.09
4.0 x 4	0.31	1.3	13.9	375	5.09
6.0 x 3	0.31	1.4	14.9	427	3.39
6.0 x 4	0.31	1.5	16.6	544	3.39

SILICONE CABLES 300/500 V

TRATOS® H05SJ-K

Internal wiring of appliances, lighting, power supplies and electronics where no mechanical protection is required.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Flexible tinned copper[1]
- **Insulation:** Silicone rubber
- **Braid:** Fibreglass

STANDARDS

- IMQ CE

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 300/500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Also available in plain or nickel plated conductors*

TRATOS H05SJ-K - 300/500 V - Silicone

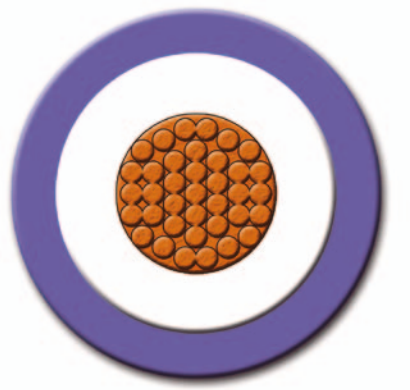
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.50	16 x 0.20	0.6	2.70	12.0	39.2
0.75	24 x 0.20	0.6	2.90	16.0	26.3
1.0	32 x 0.20	0.6	3.10	18.5	19.8
1.5	30 x 0.25	0.7	3.50	26.5	13.5
2.5	50 x 0.25	0.8	4.20	40.0	8.12
4.0	56 x 0.30	0.8	4.60	56.0	5.02
6.0	84 x 0.30	0.8	5.50	84.0	3.36

SILICONE CABLES 300/500 V

TRATOS® H05SS-K

Recommended for wiring class 2 appliances where the cable must be non-flammable.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper(1)
- **Insulation:** Silicone rubber
- **Sheath:** Silicone rubber

STANDARDS

- IMQ CE

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 300/500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 5 kV

(1) *Also available in plain or nickel plated conductors*

TRATOS H05SS-K - 300/500 V - Silicone

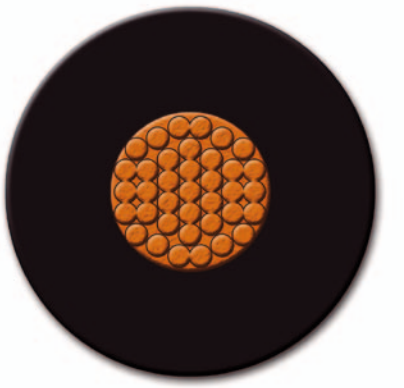
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Average Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.75	24 x 0.20	0.6	0.8	4.00	15.5	26.3
1.0	32 x 0.20	0.6	0.9	4.30	20.0	19.9
1.5	30 x 0.20	0.8	1.0	5.20	27.5	13.5
2.5	50 x 0.20	0.9	1.1	6.00	42.5	8.02

SILICONE CABLES 10 kV

TRATOS® EN 50143-B

Internal wiring of ignition equipment, electrical sign and high voltage neon sign installations.

FEATURES AND PERFORMANCES



CONSTRUCTION
- **Conductor:** Flexible tinned copper
- **Insulation:** Silicone rubber

STANDARDS
EN 50143-B

ELECTRICAL CHARACTERISTICS
- **Voltage rating:** 10 kV
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 15 kV

TRATOS EN 50143-B - 10 kV - Silicone

Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0	0.21	2.5	6.3	54.8	20

SILICONE CABLES 10 kV

TRATOS® EN 50143-C1

Internal wiring of ignition equipment, electrical sign and high voltage neon sign installations.

FEATURES AND PERFORMANCES

CONSTRUCTION
- **Conductor:** Flexible tinned copper
- **Insulation:** Silicone rubber
- **Outer sheath:** PVC

STANDARDS
EN 50143-C1

ELECTRICAL CHARACTERISTICS
- **Voltage rating:** 10 kV
- **Temperature range:** -20 °C to +90 °C
- **Test voltage:** 15 kV

TRATOS EN 50143-C1 - 10 kV - Silicone

Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Average Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0	0.21	2.5	0.9	8.1	85.4	20

SILICONE CABLES 10 kV

TRATOS® EN 50143-C2

Internal wiring of ignition equipment, electrical sign and high voltage neon sign installations.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Flexible tinned copper
- **Insulation:** Silicone rubber
- **Outer sheath:** Halogen free compound

STANDARDS

EN 50143-C2

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 10 kV
- **Temperature range:** -20 °C to +90 °C
- **Test voltage:** 15 kV

TRATOS EN 50143-C2 - 10 kV - Silicone

Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Average Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0	0.21	2.5	0.9	8.1	85.4	20

SILICONE CABLES 10 kV

TRATOS® EN 50143-D1

Internal wiring of ignition equipment, electrical sign and high voltage neon sign installations.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Flexible tinned copper
- **Insulation:** Silicone rubber
- **Braid:** Copper screen
- **Outer sheath:** PVC

STANDARDS

EN 50143-D1

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 10 kV
- **Temperature range:** -20 °C to +90 °C
- **Test voltage:** 15 kV

TRATOS EN 50143-D1 - 10 kV - Silicone

Nominal Cross-sectional Area	Max Diameter of Wires	Average Insulation Thickness	Average Sheath Thickness	Nominal Overall Diameter	Nominal Cable Weight	Max Conductor Resistance at +20°C
mm²	mm	mm	mm	mm	kg/km	Ω/km
1.0	0.21	2.5	0.9	8.9	98.7	20.0

SILICONE CABLES 10 kV

TRATOS® EN 50143-D2

Internal wiring of ignition equipment, electrical sign and high voltage neon sign installations.

FEATURES AND PERFORMANCES

CONSTRUCTION

- **Conductor:** Flexible tinned copper
- **Insulation:** Silicone rubber
- **Braid:** Copper screen
- **Outer sheath:** Halogen free compound

STANDARDS

EN 50143-D2

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 10 kV
- **Temperature range:** -20 °C to +90 °C
- **Test voltage:** 15 kV

TRATOS EN 50143-D2 - 10 kV - Silicone

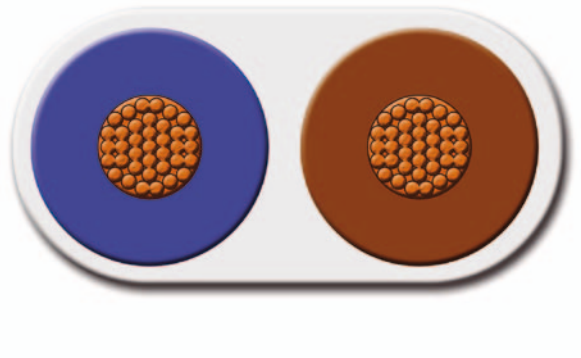
Nominal Cross-sectional Area	Max Diameter of Wires	Average Insulation Thickness	Average Sheath Thickness	Nominal Overall Diameter	Nominal Cable Weight	Max Conductor Resistance at +20°C
mm²	mm	mm	mm	mm	kg/km	Ω/km
1.0	0.21	2.5	0.9	8.9	98.7	20.0

SILICONE CABLES 500 V

TRATOS® SIFL

Internal wiring of appliances and lighting equipment where they are enclosed and protected against mechanical abuse.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper [1]
- **Insulation:** Silicone rubber
- **Sheath:** Silicone

STANDARDS

- CE

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -60 °C to +180 °C
- **Test voltage:** 2000 V

[1] *Conductor available in plain or nickel plated copper*

TRATOS SIFL - 500 V - Silicone

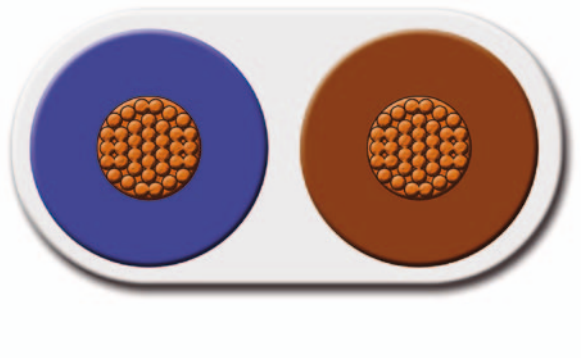
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	0.6	5.4 x 3.3	34	40.1
0.75 x 2	0.21	0.6	6.0 x 3.6	43	26.7
1.0 x 2	0.21	0.6	6.2 x 3.7	49	20.0
1.5 x 2	0.26	0.7	7.0 x 4.2	67	13.7
2.5 x 2	0.26	0.8	8.4 x 5.0	100	8.21
4.0 x 2	0.31	0.8	10.0 x 5.8	146	5.09

SILICONE CABLES 500 V

TRATOS® SIFL/PVC

For use in lighting, electrical appliances, furnaces, medical equipment and electro mechanics.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper [1]
- **Insulation:** Silicone rubber
- **Sheath:** PVC

STANDARDS

- CE

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 500 V
- **Temperature range:** -30 °C to +90 °C
- **Test voltage:** 2000 V

[1] *Conductor available in plain or nickel plated copper*

TRATOS SIFL/PVC - 500 V - Silicone

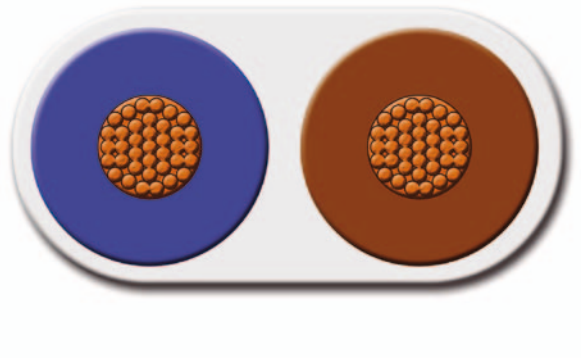
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	0.6	5.4 x 3.3	33	40.1
0.75 x 2	0.21	0.6	6.0 x 3.6	42	26.7
1.0 x 2	0.21	0.6	6.2 x 3.7	48	20.0
1.5 x 2	0.26	0.7	7.0 x 4.2	65	13.7
2.5 x 2	0.26	0.8	8.4 x 5.0	98	8.21
4.0 x 2	0.31	0.8	10.0 x 5.8	143	5.09

SILICONE CABLES 500 V

TRATOS® SIFL/PVC/VDE

For use in lighting, electrical appliances, furnaces, medical equipment and electro mechanics.

FEATURES AND PERFORMANCES



CONSTRUCTION
- **Conductor:** Flexible tinned copper [1]
- **Insulation:** Silicone rubber
- **Sheath:** PVC

STANDARDS
- CE VDE

ELECTRICAL CHARACTERISTICS
- **Voltage rating:** 500 V
- **Temperature range:** -30 °C to +90 °C
- **Test voltage:** 2000 V

[1] *Conductor available in plain or nickel plated copper*

TRATOS SIFL/PVC/VDE - 500 V - Silicone

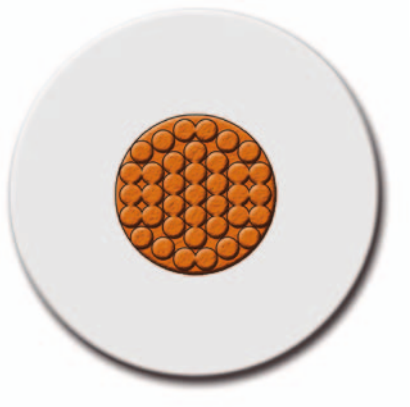
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	0.6	5.4 x 3.3	41.7	40.1
0.75 x 2	0.21	0.6	6.0 x 3.6	53.8	26.7
1.0 x 2	0.21	0.6	6.2 x 3.7	58.9	20.0
1.5 x 2	0.26	0.8	7.6 x 4.6	69.5	13.7

FEP CABLES 300/500 V

TRATOS® FEP (F6Y)

For use in lighting, automotive, electrical appliances, electronics and medical equipment

FEATURES AND PERFORMANCES



CONSTRUCTION
- **Conductor:** Flexible tinned copper
- **Insulation:** Fluorinated polymer FEP

STANDARDS
- VDE 0250

ELECTRICAL CHARACTERISTICS
- **Voltage rating:** 300/500 V
- **Temperature range:** -100 °C to +180 °C
- **Test voltage:** 2500 V

TRATOS FEP (F6Y) - 300/500 V - FEP

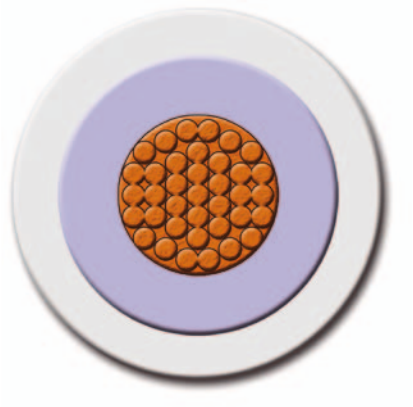
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	16 x 0.20	0.30	1.60	6.5	40.1
0.75	24 x 0.20	0.30	1.75	9.7	26.7
1.0	32 x 0.20	0.30	2.00	12.0	20.0
1.5	30 x 0.25	0.40	2.45	17.5	13.7
2.5	50 x 0.25	0.50	3.10	27.5	8.21
4.0	56 x 0.30	0.50	3.65	43.0	5.09
6.0	84 x 0.30	0.50	4.20	59.0	3.39

FEP CABLES 300/500 V

TRATOS® DOUBLE INSULATED FEP

For use in wiring class 2 appliances, where exposed to hot or cold environments or aggressive chemicals.

FEATURES AND PERFORMANCES



CONSTRUCTION

- **Conductor:** Flexible tinned copper
- **First insulation:** Fluorinated polymer FEP
- **Second insulation:** Fluorinated polymer FEP

STANDARDS

- VDE 0250

ELECTRICAL CHARACTERISTICS

- **Voltage rating:** 300/500 V
- **Temperature range:** -90 °C to +180 °C
- **Test voltage:** 2000 V

TRATOS DOUBLE INSULATED FEP - 300/500 V - FEP

Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Average Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	16 x 0.20	0.30	0.30	2.13	10.8	40.1
0.75	24 x 0.20	0.30	0.30	2.26	13.7	26.7
1.0	32 x 0.20	0.30	0.30	2.39	16.5	20.0
1.5	30 x 0.25	0.30	0.30	2.61	22.5	13.7

www.tratos.eu

Tratos Cavi Spa
Via Stadio, 2
52036 – Pieve Santo Stefano
Arezzo - ITALY
Tel: +39-0575-7941
Fax: +39-0575-794246
e-mail: info@tratos.it

Tratos Ltd - United Kingdom
Park Road . Holmewood Industrial Park
Holmewood . Chesterfield . S42 5UW
United Kingdom
Tel: 01246 858000 - Fax: 01246 858001
e-mail: info@tratos.co.uk
web: www.tratos.co.uk

Tratos Ltd - Germany
Alter Bentheimer Weg 4
48465 Schüttorf - Germany
Tel: 0049-5923-96 99 66
Fax: 0049-5923-96 99 67
e-mail: info@tratoscavi.de

Tratos Cavi Iberica S.L
Bloque 6, 1°D. - Alcobendas
28109 Madrid - Spain
Tel: + 34 9162 55887
e-mail: info@tratos.com.es

Tratos Cavi SpA - China Office
Unit 3, No.879, Shenfu Road
Xinzhuang Industrial Zone
Shanghai, China (201108)
e-mail info.china@tratos.it

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