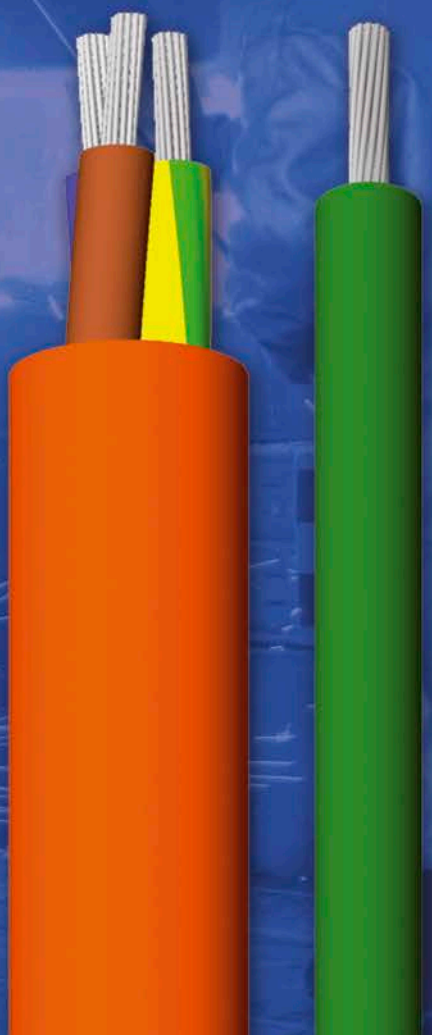
TRATOS

CABLES FOR A MOVING WORLD

TRATOS HIGH TEMPERATURE®



Nov **2011**
TCn15-Rev17

INDEX

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.

You won't realise...
but at this moment
you are using our 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 6500:2006 . . . . . 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

STANDARDS AND QUALITY SYSTEM

QUALITY SYSTEM

Tratos aim to work closely with customers to find better, more environmentally friendly solutions to their challenges.
We are committed to our vision and strategy to serve all our internal and external customers by providing high quality services and products. Tratos is an established industry leader in the design, manufacture and supply of cables and products and to maintain this leading position we are committed at every level to providing our customers with quality services and products at a competitive price. As a commercial enterprise we are aware of the importance of satisfying our customers and of the financial impact of which nonconformities may have on our profitability. For these reasons we are committed to complying with all customer requirements and specifications both legal and statutory requirements. Our Quality Management System has been audited and approved by two independent, Internationally recognized and accepted authorities: BSI and AENOR-IQNET (E), in accordance to BS EN ISO 9001:2015 covering the production, purchasing of raw materials design and final test including various document types. The Tratos Quality Management system is under frequent regular surveillance by inspectors working for the Certification Autorities.

ENVIRONMENTAL SYSTEM

Our Environmental Management System has been audited and approved by two independent, Internationally recognized and accepted authorities:
BSI and AENOR-IQNET (E), in accordance to BS EN ISO 14001:2015 covering the production, purchasing of raw materials design and final test including various document types. The Tratos Quality Management system is under frequent regular surveillance by inspectors working for the Certification Autorities.

ENERGY MANAGEMENT SYSTEMS

By complying with the BS EN ISO 50001:2018 Tratos follows a systematic approach in achieving continual improvement of energy performance and the Energy Management Systems (EnMS).
The BS EN ISO 50001:2018 is a standard issued by the International Standard Organization (ISO) which outlines the requirements for establishing, implementing, maintaining and improving an energy management system (EnMS).

CIRCULAR ECONOMY

The EU Eco-Management and Audit Scheme (EMAS) is a premium management instrument developed by the European Commission for companies and other organisations to evaluate, report, and improve their environmental performance. EMAS is open to every type of organisation eager to improve its environmental performance. It spans all economic and service sectors and is applicable worldwide.

AWARDS

Tratos cables are made with award winning Tratos-JBA® compound. Tratos UK Ltd has won a **Queen's Award for Enterprise - Innovation** for its technologically advanced Tratos-JBA® compound.

STANDARDS AND QUALITY SYSTEM

HEALTY & SAFETY SYSTEM

Oince its decision to create a board post dedicated to furthering best practice for Health and Safety, international cable manufacturer Tratos is celebrating receipt of ISO 45001.
ISO 45001 sets out the minimum requirements for occupational health and safety management best practice and helps companies achieve the maximum return for employees, operations and customers.

REACH, WEEE & ROHS

Tratos is fully compliant with the **REACH**. This is a European Union regulation concerning the **Registration, Evaluation, Authorisation and restriction of Chemicals**. It came into force on 1st June 2007 and replaced a number of European Directives and Regulations with a single system. REACH applies to substances manufactured or imported into the EU in quantities of 1 tonne or more per year. Generally, it applies to all individual chemical substances on their own, in preparations or in articles . To summarise, REACH makes the cable industry directly responsible for assessing and managing the risks posed by chemicals and providing safety information to their users.

Tratos fully subscribes to The **Waste Electrical and Electronic Equipment Directive (WEEE Directive)**, introduced into UK law in January 2007 by the Waste Electronic and Electrical Equipment Regulations 2006. The WEEE Directive aims to reduce the amount of electrical and electronic equipment being produced and to encourage everyone to reuse, recycle and recover it. The WEEE Directive also aims to improve the environmental performance of businesses that manufacture, supply, use, recycle and recover electrical and electronic equipment. TRATOS has enlisted the services of the UK's leading producer compliance scheme, Valpak, whom manage our recycling obligations and also ensure our compliance to the WEEE Regulations and the Waste Batteries and Accumulators Regulations.

Tratos is fully compliant with the **Restriction of Hazardous Substances (RoHS) Regulations**. These Regulations implement EU Directive 2011/65/EU which bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants. Tratos fully understands the requirements of the RoHS Directive and ensures that our products, and their components, comply.

CORPORATE SOCIAL RESPONSABILITY

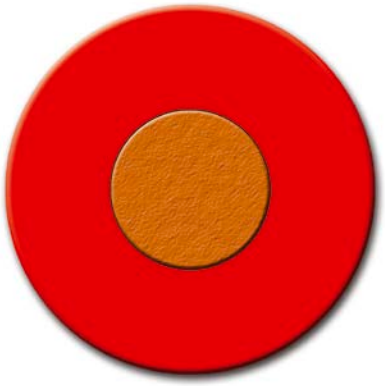
Tratos adoptes a Code of Ethics which adheres to the United Nations Global Compact on human rights, labour standards, protection of the environment and anti corruption measures.
Under this self regulatory code, Tratos will carry out initiatives in the environmental and social fields with special reference to environmental policies and social policies regarding child labour, compulsory labour, health and security, freedom of association and the right to collective bargaining, discrimination, disciplinary procedures, working hours and wages.

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
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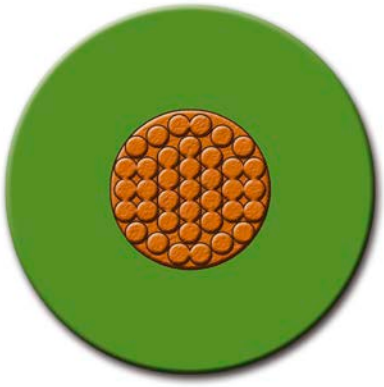
FEATURES AND PERFORMANCES



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

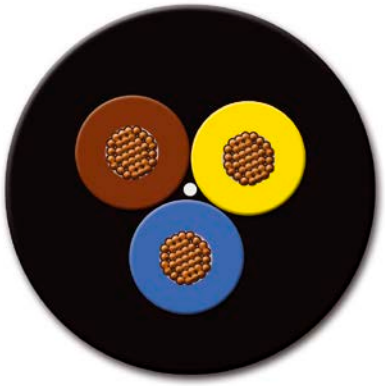
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	0.21	0.6	2.1	9.6	40.1
0.75	0.21	0.6	2.4	13.3	26.7
1.0	0.21	0.6	2.5	15.9	20.0
1.5	0.26	0.6	2.8	21.9	13.7
2.5	0.26	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

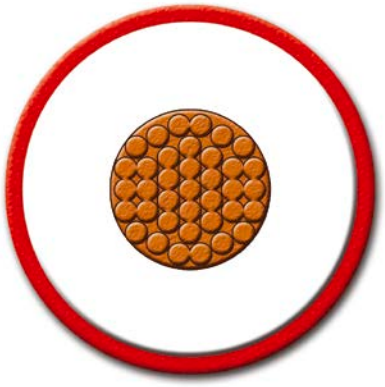
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0 x 2	0.21	0.8	6.6	71	20.0
1.0 x 3	0.21	1.0	7.4	93	20.0
1.0 x 4	0.21	1.0	8.1	113	20.0
1.0 x 5	0.21	1.0	8.8	136	20.0
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 SIAF/GL - 500 V - Silicone

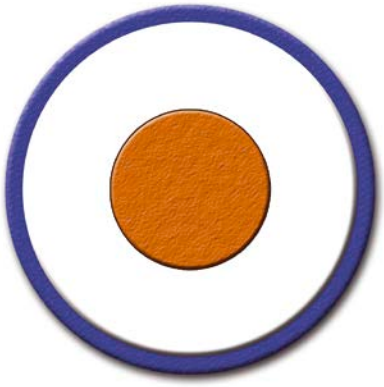
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	0.21	0.55	2.4	10.8	40.1
0.75	0.21	0.55	2.7	14.5	26.7
1.0	0.21	0.55	2.8	17.1	20.0
1.5	0.26	0.55	3.1	23.1	13.7
2.5	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 SIA/GL - 500 V - Silicone

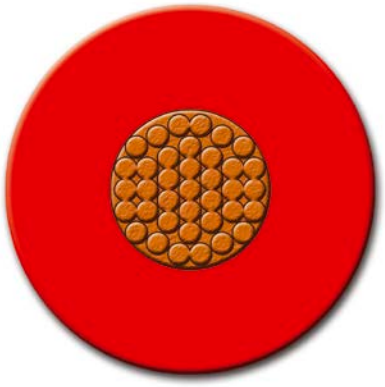
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	1 x 0.80	0.6	2.0	9.1	36.7
0.75	1 x 0.98	0.6	2.2	12.0	24.8
1.0	1 x 1.13	0.6	2.3	14.9	18.2
1.5	1 x 1.38	0.6	2.6	20.4	12.2
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

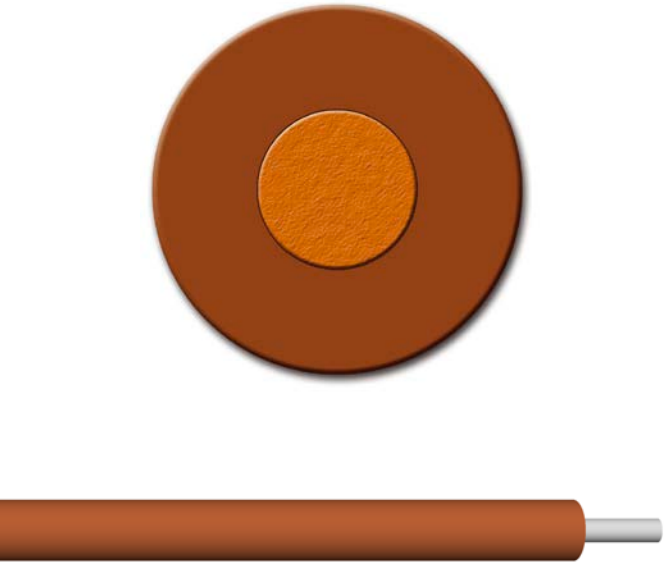
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	16 x 0.20	0.70	2.65	11.5	39.4
0.75	24 x 0.20	0.70	2.75	15.5	26.3
1.0	32 x 0.20	0.70	2.95	18.0	19.8
1.5	30 x 0.25	0.80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

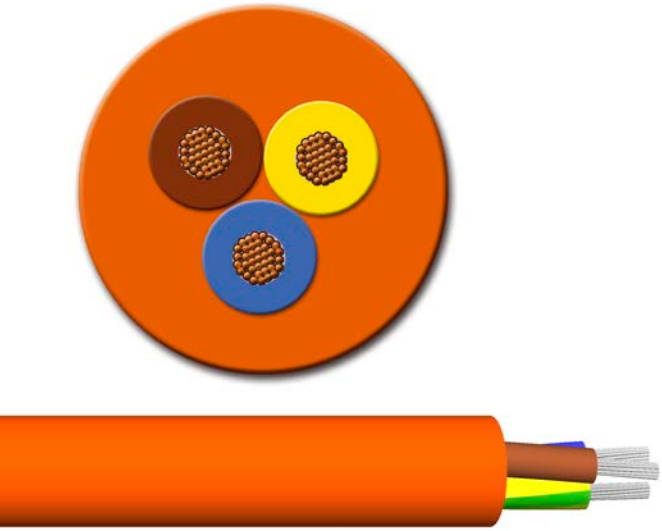
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.50	16 x 0.20	0.70	2.45	11.5	36.3
0.75	24 x 0.20	0.70	2.65	15.5	27.1
1.00	32 x 0.20	0.70	2.75	18.0	18.1
1.50	30 x 0.25	0.80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

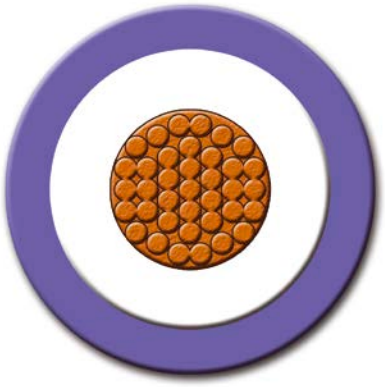
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.50	16 x 0.20	0.6	2.70	12.0	39.2
0.75	24 x 0.20	0.6	2.90	16.0	26.3
1.0	32 x 0.20	0.6	3.10	18.5	19.8
1.5	30 x 0.25	0.7	3.50	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

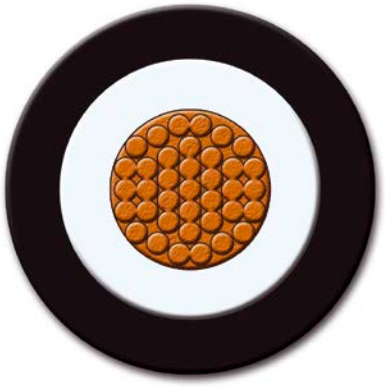
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0	0.21	2.5	6.3	54.8	20

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

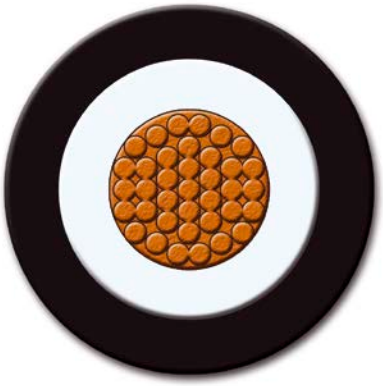
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Average Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
1.0	0.21	2.5	0.9	8.1	85.4	20

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

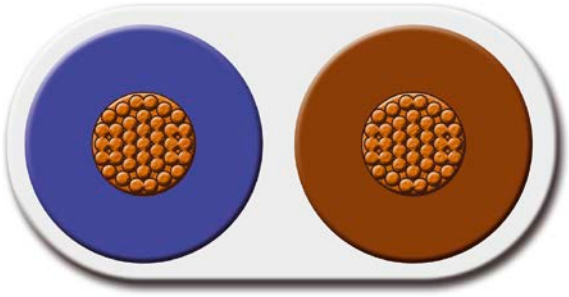
Nominal Cross-sectional Area	Max Diameter of Wires	Average Insulation Thickness	Average Sheath Thickness	Nominal Overall Diameter	Nominal Cable Weight	Max Conductor Resistance at +20°C
mm²	mm	mm	mm	mm	kg/km	Ω/km
1.0	0.21	2.5	0.9	8.9	98.7	20.0

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

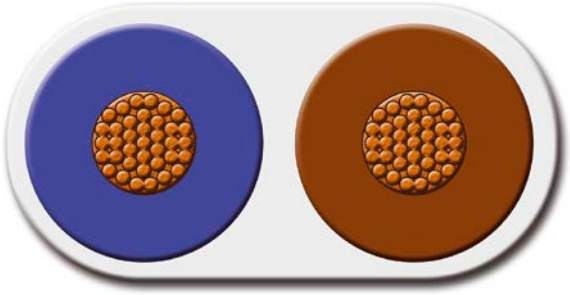
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	0.6	5.4 x 3.3	34	40.1
0.75 x 2	0.21	0.6	6.0 x 3.6	43	26.7
1.0 x 2	0.21	0.6	6.2 x 3.7	49	20.0
1.5 x 2	0.26	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

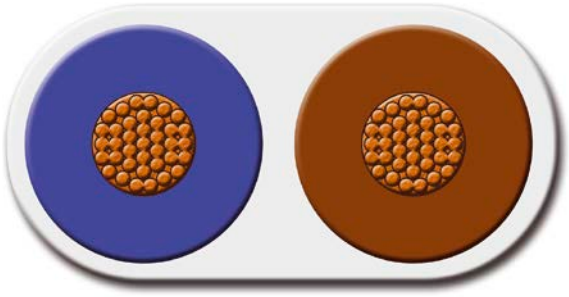
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	0.6	5.4 x 3.3	33	40.1
0.75 x 2	0.21	0.6	6.0 x 3.6	42	26.7
1.0 x 2	0.21	0.6	6.2 x 3.7	48	20.0
1.5 x 2	0.26	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

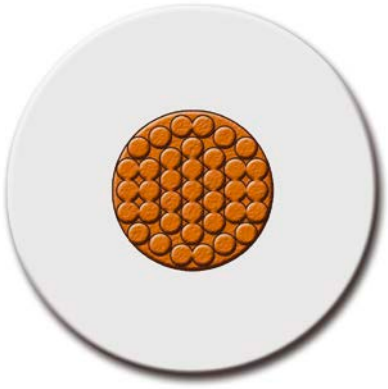
Nominal Cross-sectional Area mm²	Max Diameter of Wires mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5 x 2	0.21	0.6	5.4 x 3.3	41.7	40.1
0.75 x 2	0.21	0.6	6.0 x 3.6	53.8	26.7
1.0 x 2	0.21	0.6	6.2 x 3.7	58.9	20.0
1.5 x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

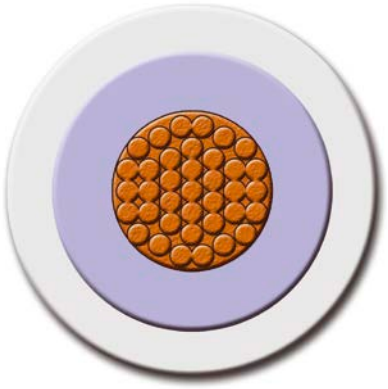
Nominal Cross-sectional Area mm²	Nominal Stranding mm	Average Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Cable Weight kg/km	Max Conductor Resistance at +20°C Ω/km
0.5	16 x 0.20	0.30	1.60	6.5	40.1
0.75	24 x 0.20	0.30	1.75	9.7	26.7
1.0	32 x 0.20	0.30	2.00	12.0	20.0
1.5	30 x 0.25	0.40	2.45	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

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