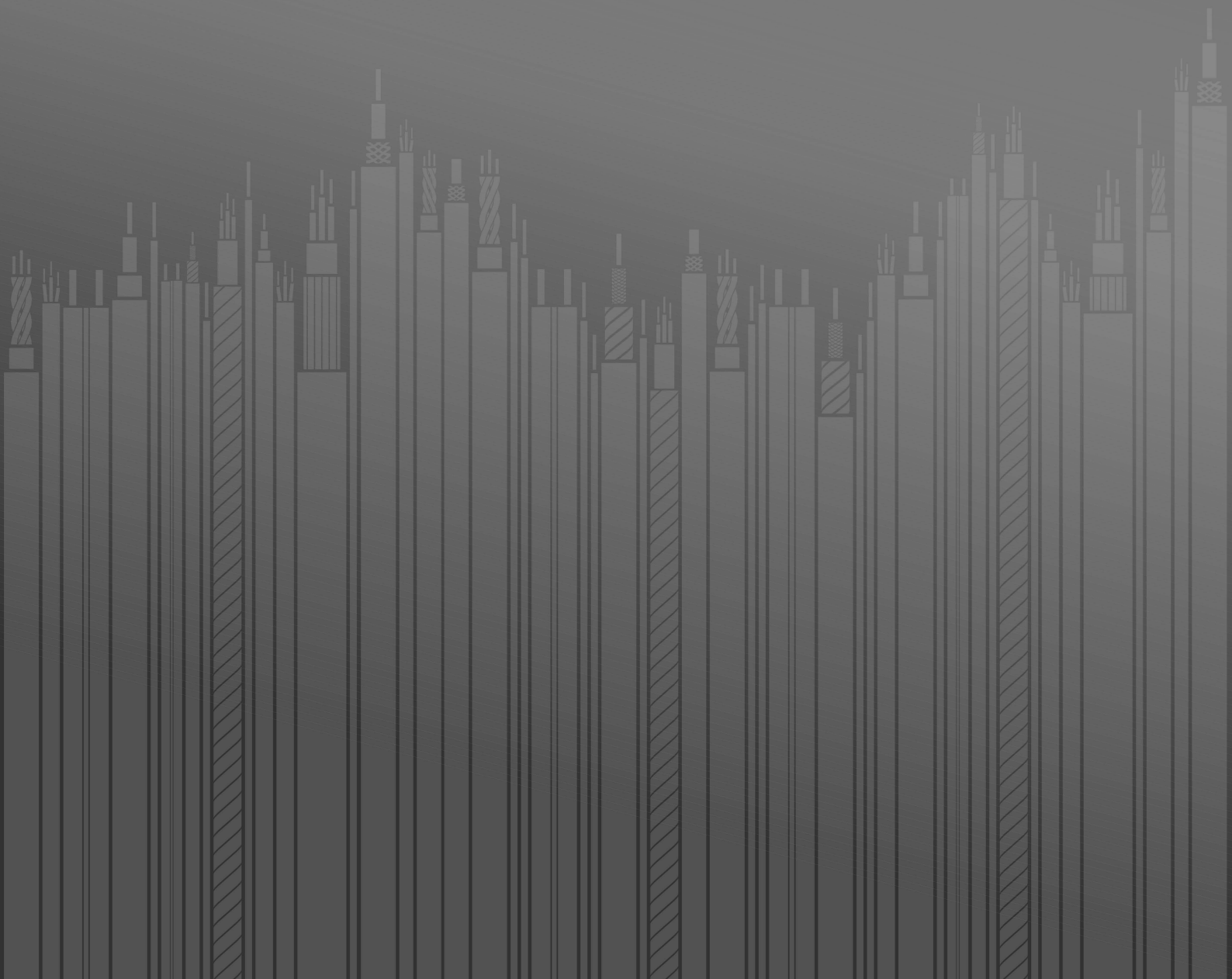


TECHNICAL SECTION



Product price calculation

Base price

- based on these prices are supply base price, which is calculated on a copper base 50 CZK / kg. At these prices we offer individual discounts and volume discounts. Copper surcharge is governed by equivalent to the London stock exchange price of raw material Exchange (LME) for the previous period.

Example: V05SS-F 3G1,50

bid price	39 207,00 Kč/km
discounts or volume rebates (e.g. 20%)	-7 814,40
copper surcharge $(155,9 - 50) \times 44 =$ (Cu notation acc. to LME* - base) x Cu number	4 659,60
sales price (without discount)	36 052,20
eventual discount (payment in advance) e.g. 1%	-360,50
final sales price without VAT	35 691,20

Up-to-dated copper DEL-Quotation acc. to LME for cable industry is regularly published in Hospodářské noviny.

Full price

- based on these prices are bid prices. At these prices we offer individual discounts and volume discounts.

Copper surcharge is already here not undertaken (the copper number at a particular product is zero).

Example: TBVS 3x0,34

bid price	85 474,00 Kč/km
discounts or volume rebates (e.g. 20%)	-16 894,80
sales price (without discount)	68 579,20
eventual discount (payment in advance) e.g. 1%	-685,80
final sales price without VAT	67 893,40

Cores of power wires and cables acc. to ČSN EN 60228

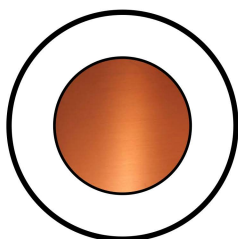
Cross-section (mm ²)	Class 1 Solid copper single-wire core			Class 5 Flexible stranded copper core			
	Wire diameter (mm ²)	Operative resistance at 20°C (max. Ω/km)		Cross-section (mm ²)	Construction (no. of wires × diameter) (n × mm) **)	Operative resistance at 20°C (max. Ω/km)	
		Bare	Plated			Bare	Plated
0,35*)	-	-	-	0,35*)	12x0,20	56,5	58,13
0,5	0,8	36	36,7	0,5	16x0,20	39	40,1
0,75	1	24,5	24,8	0,75	24x0,20	26	26,7
1	1,13	18,1	18,2	1	32x0,20	19,5	20
1,5	1,38	12,1	12,2	1,5	30x0,25	13,3	13,7
2,5	1,78	7,41	7,56	2,5	50x0,25	7,98	8,21
4	2,25	4,61	4,7	4	56x0,30	4,95	5,09
6	2,76	3,08	3,11	6	84x0,30	3,30	3,39
10	3,57	1,83	1,84	10	80x0,40	1,91	1,95
16	4,5	1,15	1,16	16	126x0,40	1,21	1,24
-	-	-	-	25	196x0,40	0,780	0,795
-	-	-	-	35	278x0,40	0,554	0,565
-	-	-	-	50	399x0,40	0,386	0,393
-	-	-	-	70	361x0,50	0,272	0,277
-	-	-	-	95	475x0,50	0,206	0,210
-	-	-	-	120	614x0,50	0,161	0,164
-	-	-	-	150	765x0,50	0,129	0,132

*) There is no cross-section 0,35 mm² in EN 60228 - when is to be used, is to be specified by company standards.

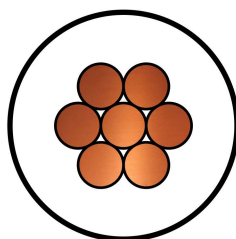
According EN 60228 conductor are to be defined by maximal permissible electrical resistance and maximal wires diameter. Number wires of conductor is to be chosen by producer to be meet prescribed parameters.

***) Stated construction for informational purposes only.

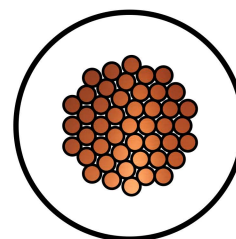
Used abbreviations of cable core construction



RE
round single wire



RM
round multi wire



RF
fine-stranded round multi wire

Silicone wires and cables

Construction

- Type SiF stranded copper tinned conductor acc. to IEC 60228 class 5, insulation made of silicone rubber corresponds to V0xS-K
- Type SiFF (upon request) as SiF, but conductor fine stranded class 6 corresponds to CSO
- Type SiF-GL as SiF, but braided insulation made of glass fiber corresponds to V0xSJ-K
- Type SiD (upon request) solid copper conductor, tinned, insulation made of silicone rubber corresponds to V0xS-U
- Type SiFZ stranded tinned copper conductor, insulation made of silicone rubber, high voltage cable corresponds to V36S-K, V72S-K
- Type SIHF stranded tinned copper conductor acc. to IEC 60228 class 5; insulation of conductor and sheath made of silicon rubber, corresponds to V03SS-F and V05SS-F

Technical data

- Special silicon cables with increased heat resistance
- Operating temperature from -55°C to +180°C; short-term +200°C
- Minimum bending radius 15 x cable diameter
- Radiation resistance up to 20 x 10⁶ cJ/kg (up to 20 Mrad)
- Halogen-free acc. to EN 60754-1,-2/IEC 60754/ČSN EN 60754-1, -2
- Flame retardancy acc. to EN 60332-1/IEC 60332-1/ČSN EN 60332-1, applies to cross-section from 4 qmm
- Gas corrosion acc. to EN 60754 / IEC 60754-1,-2/ČSN EN 60754-1, -2
- Smoke density acc. to IEC 61034/ČSN EN 61034-1, -2
- Environmentally friendly product meets the standard REACH, RoHS

APPLICATION

Silicone cables are used everywhere when exposed to constantly higher temperatures up to 180°C, for short periods up to 200°C, but also at lower temperatures to -55°C. Silicone cables are halogen-free and are used in power plants, steel mills, steel works, rolling mills, manufacturing aircraft and ships, cement works, ceramics factories etc. Resistant to high molecular oils, vegetable and animal fats, alcohols, softeners, dilute acids, saline and alkaline solutions, oxidants, tropical influences, oxygen and ozone.

Just in fixed installation in open ventilated pipe systems or channels. Otherwise silicone reduces its mechanical properties at temperatures above 90 °C at unventilated areas.



The Certification Authority, CERT-ACO, s.r.o. in compliance with the accreditation of the Czech Institute for Accreditation, issues the following

CERTIFICATE

Registration number:

1941-18-01

to the organization:

PRECON s.r.o.

Radotínská 41/14, Velká Chuchle
159 00 Praha 5
Czech Republic



Premises: Žižkova 507, 543 01 Vrchlabí

The organization has introduced and is using a quality management system for the following area:

Development and production of silicone cables, insulating tubes, knitted tubes and assembled cords.

The audit proved the requirements of the following standard have been met:

ISO 9001:2015

The certificate is valid up to 22. 12. 2020.

The organization has been certified since October 2012.

Date of issue of the certificate: 10. 01. 2018

The certified organization is subjected to regular controls by the certification authority. Any change in the organization which concerns the contents of the certificate is subjected to registration and approval by the certification authority. The validity of this certificate may be suspended or revoked in case of non-compliance with the standard on which basis it was issued.



Certification Authority No. 3027
CERT-ACO, s.r.o.
Huťská 229, 272 01 Kladno, CZ

