

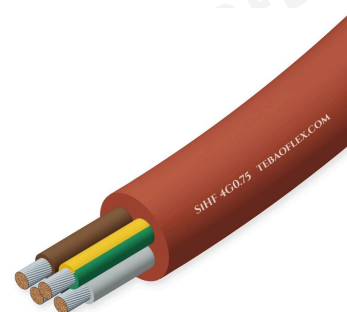


High-temperature wires & cables

H05SS-F & H05SST-F (SiHF)

Silicone Rubber Multicore High-Temperature Cable (H05SS-F / H05SST-F)

300/500 V -60 to +180 °C EN 50525-2-83 E12/EM9 flexible multicore silicone cable



EN 50525-2-83 (H05SS-F / H05SST-F)

300/500 V · -60 to +180 °C

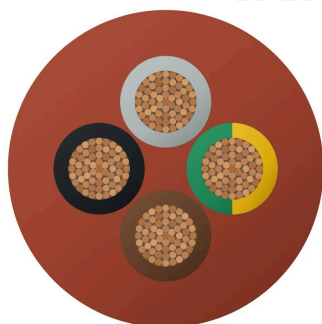
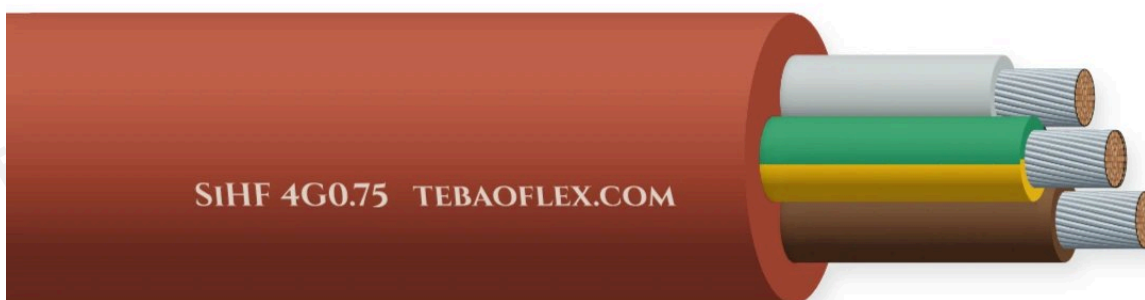
E12 / EM9 Silicone + Braid

Application

Harmonized EN 50525-2-83 multi-core high-temperature cable (300/500 V, -60 °C to +180 °C) with Class 5 tinned copper conductors, E12 cross-linked silicone core insulation and an EM9 silicone outer sheath—unbraided (H05SS-F) or braided (H05SST-F).

Typical uses: Steelworks, foundries & rolling mills, Glassworks & ceramic kiln plants, Commercial baking ovens & food processing, Sauna, HVAC & climate test chambers, High-bay floodlights & stage lighting, Plastics extrusion & moulding lines

Construction



Cross-section, not to scale

1	Class 5 tinned/bare copper conductors	EN 60228
2	E12 cross-linked silicone core insulation	EN 50363-1 / HD 308 S2
3	EM9 cross-linked silicone outer sheath	EN 50363-2-1
4	Protective outer braid (H05SST-F)	EN 50525-2-83

Technical data

Typical values

Rated voltage (U0/U)	U0/U = 300/500 V AC across H05SS-F (unbraided) and H05SST-F (braided)	AC test voltage & IR	2.0 kV Vac AC dielectric test voltage · min. insulation resistance ≥ 200 MΩ·km at 20 °C
Conductor stranding & finish	Fine-stranded tinned or bare annealed copper per EN 60228 Class 5	Operating & short-circuit temperature	–60 °C to +180 °C continuous conductor temperature (+200 °C short-term peak; +350 °C max 5 s short-circuit)
Cryogenic to furnace span	Retains full elastomeric flexibility from –60 °C blast freezers up to +180 °C radiant heat zones	Core, sheath & braid options	EI2 cross-linked silicone cores + EM9 tear-resistant silicone outer sheath (H05SS-F), plus overall treated glass/textile or galvanized steel braid on H05SST-F
Minimum bending radius	8 × overall diameter (fixed routing) · 10 × overall diameter (free flexing)	Flame, smoke & halogen-free	IEC 60332-1-2 flame retardant; halogen-free per IEC 60754-1/2; low smoke density per IEC 61034-2
Oils, fats, steam & ozone	Resistant to humid steam, ozone, UV, vegetable/animal fats, alcohols and dilute acids	Standards	EN 50525-2-83:2011 (DIN VDE 0285-525-2-83 / HD 22.15); EN 60228; HD 308 S2

Sizes

17 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Type · Configuration	Cores × CSA mm ²	Core wall mm	Sheath mm	Nominal OD mm	Cu mass kg/km	Total mass kg/km	Max. DC res. (20 °C) Ω/km
EN 50525-2-83 H05SS-F (SIHF) · 300/500 V · 180 °C · Unbraided Smooth EM9 Silicone Sheath 13 sizes							
☐ H05SS-F · 2×0.75 mm ²	2×0.75	0.6	0.8	6.4	14.4	54.0	26.00
☐ H05SS-F · 3G0.75 mm ²	3G0.75	0.6	0.8	6.8	21.6	66.0	26.00
☐ H05SS-F · 3G1.0 mm ²	3G1.0	0.6	0.9	7.4	28.8	79.0	19.50
☐ H05SS-F · 3G1.5 mm ²	3G1.5	0.8	0.9	8.4	43.2	108.0	13.30
☐ H05SS-F · 4G1.5 mm ²	4G1.5	0.8	1.0	9.3	57.6	135.0	13.30
☐ H05SS-F · 5G1.5 mm ²	5G1.5	0.8	1.1	10.3	72.0	165.0	13.30
☐ H05SS-F · 7G1.5 mm ²	7G1.5	0.8	1.1	11.2	100.8	208.0	13.30
☐ H05SS-F · 12G1.5 mm ²	12G1.5	0.8	1.3	14.8	172.8	345.0	13.30
☐ H05SS-F · 3G2.5 mm ²	3G2.5	0.9	1.1	10.2	72.0	162.0	7.98
☐ H05SS-F · 4G2.5 mm ²	4G2.5	0.9	1.1	11.2	96.0	202.0	7.98
☐ H05SS-F · 5G2.5 mm ²	5G2.5	0.9	1.2	12.4	120.0	248.0	7.98
☐ H05SS-F · 4G4.0 mm ²	4G4.0	1.0	1.2	13.0	153.6	292.0	4.95
☐ H05SS-F · 5G6.0 mm ²	5G6.0	1.0	1.4	16.4	288.0	485.0	3.30
EN 50525-2-83 H05SST-F · 300/500 V · 180 °C · EM9 Silicone Sheath + Protective Outer Braid 4 sizes							
☐ H05SST-F · 3G1.5 mm ²	3G1.5	0.8	0.9	9.0	43.2	132.0	13.30
☐ H05SST-F · 4G1.5 mm ²	4G1.5	0.8	1.0	9.9	57.6	162.0	13.30
☐ H05SST-F · 4G2.5 mm ²	4G2.5	0.9	1.1	11.8	96.0	238.0	7.98
☐ H05SST-F · 4G4.0 mm ²	4G4.0	1.0	1.2	13.7	153.6	335.0	4.95

– 'G' denotes constructions including a Green/Yellow protective earth core; 'x' denotes constructions without Green/Yellow.

Standards and approvals

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/silicone-rubber-multicore-high-temperature-cable



Typical values for this cable type, based on EN 50525-2-83 (H05SS-F & H05SST-F). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.