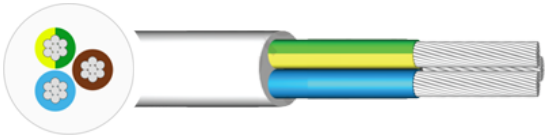
Silicone Flexible Cable SIHF VDE 0250 PT816 - 0.75mm² to 2.5mm²



Description

SIHF cables are multi core class class 5 flexible cables in a silicone outer sheath. They are designed for use in environments with sustained temperature extremes and fluctuations, making them suitable for a wide range of industrial applications such as power plants, ships and aircrafts, furnaces and ovens. As silicone rubbers don't support fungal or bacterial growth they are also used in food processing, refrigeration and medical industries. SIA and SIAF cables are also widely used in the Oil, Gas & Petrochemicals industries.

SIHF cables are rated to 300/500V. They are heat resistant up to 180°C and can also be employed at temperatures as low as -60°C. These silicon cables are low smoke zero halogen and are suitable for use in public buildings under CPR 2017.

Key Features

Voltage Rating
300/500 Volts

Minimum Bending Radius
Fixed: 6 x overall diameter
Flexing: 8 x overall diameter

Flame Retardancy
BS EN/IEC 60332-1-2

Temperature Limits
Temperature Range: -60°C to +180°C

Core Colours

2 core - Brown, Blue

3 core - Brown, Black, Grey

4 core - Brown, Black, Grey, Blue

5 core - Brown, Black, Grey, Green Yellow

6 core and above - Black cores with White numbers plus Green Yellow

Standards

- VDE 0250 PT816
- VDE 0482-332-2-1
- BS EN/IEC 60332-1-2
- BS EN/IEC 60228

Construction

- **Conductor**: Class 5 tinned copper
- **Insulation**: Silicone Rubber
- **Outer Sheath**: Silicone Rubber

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

Silicone Flexible Cable SIHF VDE 0250 PT816 - 0.75mm² to 2.5mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Minimum Bending Radius	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
BIHF2X/75	0.75	2	24/0.20	52	6.5	53.4	20/16
BIHF3X/75	0.75	3	24/0.20	56	6.9	63.7	20/16
BIHF4X/75	0.75	4	24/0.20	64	7.9	83.6	20/16
BIHF5X/75	0.75	5	24/0.20	66	8.5	105	20S
BIHF2X1	1	2	32/0.20	54	6.7	59.9	20/16
BIHF3X1	1	3	32/0.20	60	7.5	78.3	20/16
BIHF4X1	1	4	32/0.20	65	8.1	94.6	20S
BIHF5X1	1	5	32/0.20	72	9	120	20S
BIHF2X1/5	1.5	2	30/0.25	61	7.6	82	20/16
BIHF3X1/5	1.5	3	30/0.25	64	8	98	20/16
BIHF4X1/5	1.5	4	30/0.25	71	8.8	122	20S
BIHF5X1/5	1.5	5	30/0.25	77	9.6	148	20S
BIHF5X1/5	1.5	5	32/0.25	76	9.5	150	20S
BIHF2X2/5	2.5	2	50/0.25	72	8.9	135	20S
BIHF3X2/5	2.5	3	50/0.25	73	9.1	152	20S
BIHF4X2/5	2.5	4	50/0.25	81	10.1	188	20S
BIHF5X2/5	2.5	5	50/0.25	92	11.5	235	20S
SIHF3X4	4	3	56/0.30	92	11.5	250	20S
SIHF4X4	4	4	56/0.30	104	13	330	20S
SIHF5X4	4	5	56/0.30	120	15	245	20S
SIHF3X6	6	3	84/0.30	112	14	350	20S
SIHF4X6	6	4	84/0.30	128	16	430	20
SIHF5X6	6	5	84/0.30	144	18	560	20
SIHF4X10	10	4	90/0.40	172	21.5	720	25
SIHF5X10	10	5	90/0.40	184	23	920	25
SIHF4X16	16	4	126/0.40	192	24	1030	25
SIHF5X16	16	5	126/0.40	216	27	1220	32
SIHF4X25	25	4	196/0.40	236	29.5	1475	32
SIHF4X35	35	4	276/0.40	264	33	2060	40
SIHF4X50	50	4	396/0.40	272	34	3010	40

TABLE 4F2B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 90 °C

Conductor cross-sectional area	Two-core cable or 2 x Single core cables DC	2 core cable, single-phase AC			1 x 3 core, 4 core or 5 core cable, three-phase AC			2 single-core cables, touching Single-phase AC*		
(mm^2)	(mV/Nm)	(mV/Nm)			(mV/Nm)			(mV/Nm)		
4	13.20	13.20			11.10			-		
6	8.50	8.50			7.40			-		
10	5.10	5.10			4.40			-		
16	3.20	3.20			2.70			-		
		r	x	z	r	x	z	r	x	z
25	2.03	2.03	0.175	2.04	1.73	0.150	1.73	-	-	-
35	1.420	-	-	-	1.22	0.150	1.23	1.44	0.21	1.46
50	1.000	-	-	-	0.91	0.145	0.93	1.00	0.21	1.02
70	0.710	-	-	-	0.62	0.140	0.64	0.71	0.20	0.73
95	0.540	-	-	-	0.47	0.135	0.49	0.54	0.195	0.57
120	0.420	-	-	-	0.37	0.135	0.39	0.42	0.190	0.46
150	0.340	-	-	-	0.29	0.130	0.32	0.34	0.190	0.39
185	0.270	-	-	-	0.24	0.130	0.27	0.27	0.190	0.33
240	0.210	-	-	-	0.188	0.130	0.23	0.210	0.185	0.28
300	0.167	-	-	-	0.147	0.125	0.195	0.173	0.180	0.25
400	0.127	-	-	-	-	-	-	0.132	0.175	0.22
500	0.100	-	-	-	-	-	-	0.107	0.170	0.20
630	0.074	-	-	-	-	-	-	0.085	0.170	0.190

NOTES:

1 The voltage drop figures given above are based on a conductor operating temperature of 90 °C and are therefore not accurate when the operating temperature is in excess of 90 C. In the case of the 180 °C cables with a conductor temperature of 150 °C the above resistive values should be increased by a factor of 1.2.

2 *A larger voltage drop will result if the cables are spaced.