

# SIF Silicone Insulated Heat Resistant Single Core Cable

180°C, 300/500V



## Application

Silicone cables are recommended for installations where for short periods of time the temperature can fluctuate from high to low. This would cause standard type cables to become inflexible and brittle.

- Steel mills.
- Consumer white goods.
- Ceramic and glass factories.
- High temperature applications.

## Specifications

- In accordance with VDE 0250.
- **Conductors:** Tinned copper conductors.
- **Insulation:** Silicone rubber insulation.
- **Temperature Range:** -60°C to +180°C maximum conductor operating temperature.
- **Voltage Rating:** 300/500V.

## SIF Silicone Insulated Heat Resistant Single-Core Cable

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Anixter Number	Conductor Area mm <sup>2</sup>	Nominal Conductor Stranding #/mm	Overall Diameter Nominal mm	Approx Weight kg/km
SIF-0005-##	0.5	16/0.20	2.1	4.8
SIF-0007-##	0.75	24/0.20	2.4	7.2
SIF-0010-##	1	32/0.20	2.5	9.6
SIF-0015-##	1.5	30/0.25	2.8	14.4
SIF-0025-##	2.5	50/0.25	3.4	24
SIF-0040-##	4	56/0.30	4.2	38
SIF-0060-##	6	84/0.30	5.2	58
SIF-0100-##	10	80/0.40	7.0	96
SIF-0160-##	16	126/0.40	8.4	154
SIF-0250-##	25	196/0.40	10.3	240

## Please use the following suffix for required insulation colour.

01 White

02 Black

03 Red

05 Yellow

06 Blue

07 Brown

12 Pink

Other colours available to order.

Cables with solid conductors (Type SID) are also available. Details upon request.

For current ratings refer to Section 2, Flexible Cables & Cords page 2:42.

# Technical Specifications for Flexible Cords

Applicable to: 2491X, 218\*Y, 318\*Y, 309\*Y, 318\*B, 318\*P, 318\*TQ, 398\*P  
H05V-K, H03VV-F, H05VV-F, H05V2V2-F, H05ZZ-F, H05RN-F, H05BN4-F, H07RN-F

## CORRECTION FACTOR FOR AMBIENT TEMPERATURE

### 60°C rubber and PVC cords:

Ambient air temp °C	35	40	45	50	55
Rating factor	0.91	0.82	0.71	0.58	0.41

### 90°C rubber cords having a HOFR sheath or a heat-resisting PVC sheath and for 90°C heat-resisting PVC cords:

Ambient air temp °C	35 - 50	55	60	65	70
Rating factor	1.0	0.96	0.83	0.67	0.47

### 180°C rubber cords:

Ambient air temp °C	35 - 150	155	160	165	170	175
Rating factor	1.0	0.92	0.82	0.71	0.57	0.40

### For cables where four or more cores or loaded, the following factors should be applied:

No. of cores loaded	4	5	6	7	10	12	14	19	24
Rating factor	0.78	0.72	0.67	0.63	0.56	0.53	0.51	0.45	0.42
No. of cores loaded	27	30	37	-	-	-	-	-	-
Rating factor	0.40	0.39	0.36	-	-	-	-	-	-

These factors need not be applied if the number of cores loaded does not exceed the square root of the total number of cores in the cable.

# Technical Specifications for Flexible Cords

BS6500, H05V-K, H03VV-F, H05VV-F, H05V2V2-F, H05ZZ-F, H05RN-F, H05BN4-F, H07RN-F

## CURRENT CARRYING CAPACITY (Amperes):

Conductor Cross Sectional Area 1	Current Carrying Capacity	
	Single Phase a.c. 2	Three Phase a.c. 3
mm <sup>2</sup>	A	A
0.5	3	3
0.75	6	6
1	10	10
1.25	13	-
1.5	16	16
2.5	25	20
4	32	25

## VOLTAGE DROP (per Ampere per metre):

Conductor operating temperature: 60°C\*

Conductor Cross Sectional Area 1	d.c. or Single Phase a.c. 2	Three Phase a.c. 3
mm <sup>2</sup>	mV	mV
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

\*NOTE: The tabulated values above are for 60°C rubber insulated and PVC-insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:  
For 90 °C rubber or PVC insulated 1.09.  
180°C rubber insulated 1.31.