



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB H05SJ-U / H05SJ-K SC Silicon Rubber insulated and glass fibre braided Power and Control cable, confirming to BS EN 50525-2-41 are suitable to use in fixed installations within high temperature zone.

## CHARACTERISTICS

### Voltage Rating

300/500 V

### Operation Temperature

Fixed: -40°C to 180°C

## CONSTRUCTION

- Annealed solid or bunched tinned copper conductor as per IEC 60228, class 1 or class 5
- Insulated with cross-linked elastomeric compound type EI 2 (Silicon Rubber) to EN 50363-1
- Braided by glass fibre complying with EN 50525-1

### Core Identification

Black/Blue/Brown/Grey/Orange/Pink/Red/Turquoise/Violet/White/Green/Yellow

### Bending Radius

Fixed installation – 8 x Overall Dia.

### Test Voltage

2000V AC at (20±5) °C

## OUTSTANDING FEATURES

- Flexible
- Flame Retardant
- Good Insulation Resistance

## STANDARD FOLLOWS

IEC 60228  
BS EN 50363-1  
BS EN 50525-2-41  
IEC 60332-1-2

## COMPLIANCE

Conductor resistance test - IEC 60228  
Insulation resistance - EN 50525-2-41  
Flammability test - EN 60332-1-2

## OUR ACCREDITATIONS



## APPROVAL



**Weight & Dimension Data**

**Dimension and maximum DC conductor resistance of H05SJ-U**

Nominal cross sectional area	Insulation thickness	Minimum Overall diameter	Maximum Overall diameter	Weight (Approx.)
mm <sup>2</sup>	mm	mm	mm	kg/km
1	0.6	2.8	3.5	18
1.5	0.7	3.2	4	24
2.5	0.8	3.8	4.7	37
4	0.8	4.2	5.3	54
6	0.8	4.7	5.9	74
10	1	6	7.4	119

**Dimension and maximum DC conductor resistance of H05SJ-K**

Nominal cross sectional area	Insulation thickness	Minimum Overall diameter	Maximum Overall diameter	Weight (Approx.)
mm <sup>2</sup>	mm	mm	mm	kg/km
0.5	0.6	2.6	3.3	13
0.75	0.6	2.8	3.5	15
1	0.6	2.9	3.7	18
1.5	0.7	3.4	4.2	25
2.5	0.8	4	5	38
4	0.8	4.5	5.6	54
6	0.8	5	6.2	75
10	1	6.2	7.8	122
16	1	7.3	9.1	181
25	1.2	9	11.3	275
35	1.2	10.3	12.8	374
50	1.4	11.7	14.6	531
70	1.4	13.8	17.3	726
95	1.6	15.6	19.6	981

**Electrical characteristics**

**H05SJ-U current carrying capacity and maximum DC conductor resistance.**

Nominal cross sectional area mm <sup>2</sup>	Current rating in Air Amp.						Maximum DC conductor resistance 20°C Ω/km
	30°C	60°C	90°C	120°C	150°C		
1	36	31	26	20	13		18.2
1.5	45	39	33	26	17		12.2
2.5	61	53	45	55	23		7.56
4	81	71	60	47	31		4.7
6	105	92	77	60	39		3.11
10	146	128	107	84	55		1.84

Conductor operating temperature 180°C

**H05SJ-K current carrying capacity and maximum DC conductor resistance.**

Nominal cross sectional area mm <sup>2</sup>	Current rating in air Amp.						Maximum DC conductor resistance 20°C Ω/km
	30°C	60°C	90°C	120°C	150°C	170°C	
0.5	23	20	17	13	9	5	40.1
0.75	30	26	22	17	11	6	26.7
1	35	31	26	20	13	7	20
1.5	44	38	52	25	17	8	13.7
2.5	61	53	45	35	23	12	8.21
4	82	71	60	47	31	16	5.09
6	104	91	77	60	39	20	3.39
10	148	129	108	85	56	28	1.95
16	197	173	145	114	75	58	1.24
25	263	230	193	151	99	51	0.795
35	327	286	240	188	124	63	0.565
50	413	362	304	238	157	80	0.393
70	531	465	391	306	201	103	0.277
95	623	545	458	359	236	121	0.21

Conductor maximum operating temperature 180°C

**De-rating factor**

**De-rating factor for 180°C insulated cable**

Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41