POLYCAB HOFR AL Welding cable, IS 9857 Welding Cable with Aluminium conductor







Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HOFR Welding cable, IS 9857, is designed to use in machine welding & hand welding at dry and wet locations as well as outdoor use wherever light weight is essential. This is also suitable for automatic welding.

CHARACTERISTICS

Operation Temperature

Fixed: -20°C to 90°C

Bending Radius

10 x Overall Diameter

CONSTRUCTION

- Flexible Aluminium conductor to IS 8130
- Covered by SE3 (HOFR) to IS 6380

Colour of covering

Black

Orange (without ISI mark)

Test Voltage

1000 V AC

STANDARD FOLLOWS

IS 8130:2013

IS 6380:1984*

IS 9857:1990*

COMPLIANCE

Conductor resistance test IS 8130 Covering resistance test IS 6380:1984* Flammability IEC 60332-1-2

OUR ACCREDITATIONS



APPROVAL



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WEIGHT & DIMENSION DATA

Product Code	Nominal cross sectional area	Nominal thickness of covering	Overall diameter (Approx.)	Weight (Approx.)
	mm²	mm	mm	kg/km
WCIS00ARUARE001C025S	25	2	10.5	144
WCIS00ARUARE001C035S	35	2	11.7	182
WCIS00ARUARE001C050S	50	2.2	13.6	247
WCIS00ARUARE001C070S	70	2.4	15.6	331
WCIS00ARUARE001C095S	95	2.6	17.8	433
WCIS00ARUARE001C120S	120	2.8	19.7	534

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross	Curr	Current carrying capacity at different duty cycle			
sectional area	100%	85%	60%	30%	conductor resistance at 20°C
mm	Amp.	Amp.	Amp.	Amp.	Ω/km
25	144	156	186	263	1.23
35	176	191	227	321	0.901
50	222	241	287	405	0.634
70	280	304	361	511	0.445
95	339	368	438	619	0.334
120	404	438	522	738	0.256

Air temperature: 30°C

Maximum Conductor temperature: 90°C The above in accordance with the IS 9857

De-Rating Factor

De-rating factor at various ambient temperature

Air temperature	25°C	30°C	35°C	40°C	45°C	50°C
De-rating factor	1.04	1	0.96	0.91	0.87	0.82

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