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# WELDING Cables



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THE QUALITY  
**RE**COLUTION

# WELDING CABLES

## APPLICATION

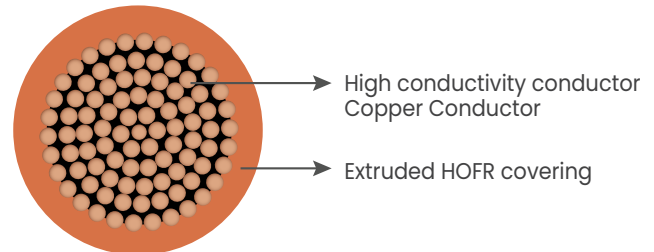
ORBIT HOFR Welding Cable, Conform the construction and performance as per IS 9857. These cables are designed to use in machine welding & hand welding to work at dry and wet locations as well as outdoor use.

## OPERATION TEMPERATURE

Fixed: -20°C to 90°C

## CONSTRUCTION

Annealed plain bunched electrolytic grade copper conductor to IS 8130, class 6.  
Covered by SE3 (HOFR) to IS 6380.



High conductivity conductor  
Copper Conductor

Extruded HOFR covering

## COLOUR OF COVERING

Black

Orange (without ISI mark)

## STANDARD AND REFERENCES

IS 8130:2013

IS 6380:1984\*

IS 9857:1990\*

## TEST VOLTAGE

1000 V AC

## COMPLIANCE

Conductor resistance test : IS 8130

Covering resistance test : IS 6380:1984\*

Flammability : IEC 60332-1-2

## BENDING RADIUS

Fixed installation 5 x Overall Diameter

## FEATURES OF WELDING CABLES

Light weight

Reliable and efficient

Safe and secure

These Cables can carry signals up to 40 volts

Chloroprene Cables are Easy to carry

Choice of Cables dimensions

Cables may be used in damp, dry, or wet Conditions

Easy to implement in the circuits

Widely used to distribute low voltage data signal

Cables are suitable for electrical installation industrial control circuits for sending electrical signals

Designed for stripping and overmolding.

Jacket material options to provide high flexibility and excellent mechanical protection.

## WELDING CABLE WITH COPPER CONDUCTOR IS, 9857

Nominal cross sectional area	Nominal thickness of covering	Overall diameter	Weight (Approx.)
mm <sup>2</sup>	mm	mm	kg/km
16	2	9.4	200
25	2	10.8	280
35	2	11.9	375
50	2.2	13.8	525
70	2.4	15.7	725
95	2.6	17.7	925

### ELECTRICAL CHARACTERISTICS

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area	Current carrying capacity at different duty cycle				Weight (Approx.)
	100%	85%	60%	30%	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	20°C Ω/km
16	135	146	174	426	1.21
25	177	192	228	343	0.780
35	221	240	285	403	0.554
50	279	303	360	509	0.386
70	352	382	454	643	0.272
95	424	460	547	774	0.206

Air temperature: 30°C

Maximum Conductor temperature: 90°C

The above table in accordance with the IS 9857

### DE-RATING FACTOR

De-rating factor at various ambient temperature

Ambient 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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