

## BOSSWELD POWERFLEX V90HT DOUBLE INSULATED WELDING FLEX

**AS/NZS 5000.1 0.6/1kv AS/NZS 1995:2003**



Bossweld's Powerflex double insulated welding cable is made in Australia from 100% oxygen free copper. Its unique softness and flexibility, featured with double insulated NBR/NBR to V90HT (105C rated) outer shell, makes it the perfect cable for all welding applications. Powerflex cable is made using extra fine copper conductors for excellent voltage conductivity and cable flexibility. Rohs compliant.

**Conductor:** Plain Copper Conductor to AS1125 wire stranding to class 6  
**Insulation:** HIGHFLEX V90HT PVC to AS/NZS 3808:2000 UV Stabilized  
**Sheath:** HIGHFLEX V90HT PVC to AS/NZS 3808:2000 UV Stabilized  
**Maximum Conductor Operating Temp:** 90°C  
**Pulling Strength:** The maximum static pulling strength may not exceed 15N/mm<sup>2</sup>  
**Minimum Bending Radius:** 6 x D ; D - overall diameter of cable  
**Flame Vertical Propagation:** To AS/NZS IEC 60332.1.2:2017  
**Rohs Compliant:** Yes  
**Colours:** Orange, UV stabilized, High Visibility, Abrasion Resistant  
**Pack Size:** 20, 50 & 100 metre reels (500m available on request)

Part Number	Nominal Area mm <sup>2</sup>	Stranding	Average insulation thickness (mm)	Average sheath thickness (mm)	OFHC* Max D.C Resistance at 20°C m/mt	Nominal O.D. (mm)	Mass kg/100mt
500018	16	504/0.20	1.00	1.25	1.210	9.90	22.20
500019	25	791/0.20	1.20	1.30	0.780	11.70	33.50
500020	35	1113/0.20	1.20	1.35	0.554	13.00	43.50
500021	50	1568/0.20	1.40	1.40	0.386	15.00	62.50
500022	70	2210/0.20	1.40	1.50	0.272	17.10	86.30
500023	95	3021/0.20	1.60	1.60	0.206	20.10	113.80

\*OFHC (oxygen free high conductivity copper) is employed in audio and industrial electronic units.

Nominal Area mm <sup>2</sup>	Welding Current Rating (Amps) based on BS 638-4 10 MINUTE period duty cycle to AS/NZS 1995			
	100%	60%	30%	25%
16	125	137	169	181
25	165	188	239	257
35	205	238	309	334
50	260	308	407	440
70	325	391	523	567
95	390	476	644	700

Rating factors for other ambient temperatures					
20	25	30	35	40	45
1.22	1.17	1.11	1.05	1	0.94

### High electric and thermal conductivity

Since OFHC contains oxygen and impurities in very small quantities only, it shows excellent electric conductivity and thermal conductivity (Oxygen and impurities reduce the conductivity)

### Excellent hydrogen embrittlement resistance

(TPC) Tough pitch copper becomes very brittle when it is heated at higher than 6000 C under a reducing gas atmosphere including hydrogen gas. Since OFHC contains a very low oxygen content only, it does not show any brittleness

(The current ratings are based on a conductor temperature of 90°C and in ambient air temperature of 40°C)

### Please Note:

Dynaweld takes every precaution to ensure that the information in this publication is correct but accepts no liability of any kind and reserves the right to change any detail without notification.