# **Tubular Power Wire Wound Resistors**

# ... with the exclusive PYROSIL D-Coat or SILICONE C-Coat for the ultimate in protection against high humidity.

A complete range of Power Wire Wound Resistors from 3 watts to 350 watts is available with the exclusive PYROSIL D Coating. Proven after extensive field testing to provide long, trouble-free performance under most operating conditions, PYROSIL coating offers the following features:

- Low temperature cured no limitations on wire specification.
- Repels moisture minimises the effect of high humidity conditions.
- Resists chipping for mechanical robustness.
- Unaffected by most common solvents for resistance to environmental attack.
- Withstands temperatures over 1000°C—resistor can absorb a short time overload of 5 times rated load.
  COATINGS

PYROSIL D-COAT is a unique combination of silicone resins and refactory oxidation barriers designed particularly for high temperature operation. It is capable of withstanding temperatures corresponding to five times rated load.

TROPICAL C-COAT is a specially developed silicone coat for the worst conditions encountered, such as on shipboard, in tropical countries and humid climates. Power rating in watts shown in the table should not be exceeded for full protection against moisture over the lifetime of the resistor.

## TOLERANCES

Standard tolerance  $\pm 5\%$  50 ohms and above, 10% below. Tolerances as low as 1.0% can be supplied. Further details on application.

## ADJUSTABLE RESISTORS

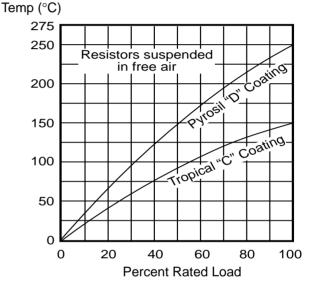
Adjustable resistors are available within the maximum resistance range for each type, as shown in the table.

## TAPPED RESISTORS

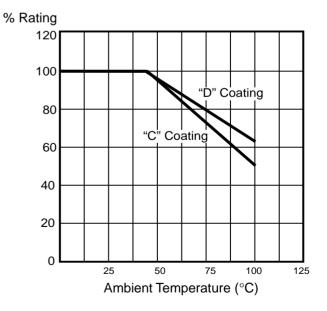
Tapped resistors may be supplied within the limitations of the resistor size used. The use of a tap results in a small reduction in power rating and resistance available, since winding space is lost.



#### Average Temperature Rise Curve for resistor suspended in free air



Derating curve for Ambient Temperatures above 40°C



# TYPE NUMBERS, DIMENSIONS AND RESISTANCE RANGES

	RATING (W)		Ceramic	Ceramic	Approx O.D.		Standard Range( $\Omega$ )			
TYPE	Pyrosil	Tropical	Length	Outside	when coated	Feet Hole	Min.	Max.	Adju	ustable
	D-Coat	C-Coat		Diameter	(inc Band)	Centres			Min.	Max.
AA	5	3	22	8	10	N/A	0R1	5K0	N/A	N/A
AB	10	5	44	8	10	N/A	0R1	12K0	0R75	2K0
DG	20	10	51	14	17	71	0R1	25K0	1	5K0
DH	25	12	64	14	17	81	0R1	30K0	1	6K0
DJ	30	15	76	14	17	97	0R1	40K0	1R5	7K5
EN	40	20	89	19	23	114	0R27	60K0	3	12K5
EP	50	25	114	19	23	140	0R27	88K0	3	20K0
ES	75	36	165	19	23	191	0R27	130K0	5	25K0
НХ	51	25	81	29	33	106	0R5	80K0	4	16K0
HY	65	32	114	29	33	139	0R5	120K0	4	22K5
HA	100	50	165	29	33	191	0R5	200K0	5	37K0
HE	150	75	216	29	33	241	0R5	270K0	5	51K0
но	200	100	267	29	33	292	0R5	340K0	5	62K0
XA	350	175	340	54	59	312	1R0	400K0	N/A	N/A

All dimensions in mm

# **POWER RATINGS**

The power ratings for Pyrosil "D" and Tropical "C" coatings are based on the ability of the resistor to give long service at full rated load, at the nominated ambients. At higher ambients, the resistor should be derated in accordance with the de-rating curve.

Full rated load for a Pyrosil "D" coated resistor is based on a temperature rise of 250°C from an ambient of 40°C. Full rated load for Tropical "C" coated resistor is based on a temperature rise of 150°C, from an ambient of 40°C.

# HIGH VOLTAGE OPERATION

Wire wound resistors may be supplied on special request for operation at 2 kV or higher, by special positioning of end terminals (where some reduction in wattage may be tolerated) or the addition of mica or ceramic insulators. Consult your local sales office for further details.

# **RESISTANCE RANGE**

Although maximum and minimum resistance values have been tabulated against each type, these are intended to indicate standard ranges only. Higher and lower values may be available on request.

# TERMINAL SPECIFICATIONS

	MINAL SPECIFICATIONS		
No	Description	Applicable Types	Ν
1.	Radial 38.1 mm (11/2") Wire Leads	A	7.
3.	Mounting Lugs (supplied as Stan	dard) D, E & H	
	Type     A     B     C       D     14.29     5.56     3.81       E     15.08     7.94     4.83       H     15.88     9.53     4.83		8.
4.	As Above but complete with Nut & Bolt through terminal	D, E & H	9.
5.	Ferrule D : 14 29mm L : 14.29mm Add 33.34mm to ceramic length	D ¥ L L L D D	10
6.	Quick Connect Terminal 6.3mm (0.25") Quick Connect T	⊤ D, E & H	
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	No	Description	Applicable Types
	7.	Ferrule D: 20.64mm L: 12.7mm Add 30.16mm to ceramic length	E & H
	8.	Ferrule D: 28.58mm L: 12.7mm Add 30.16mm to ceramic length	H ↓ ↓ ↓ ↓ ↓
	9.	Medium Edison Base D: 25.4mm approx. L: 23.81mm	
	10.	Flexible Leads Length: 38.1 to 152.4mm (specif	A, D, E & H
	11.	Ferrule D: 26.99mm L: 15.88mm Add 36.51mm to ceramic length	H L L T
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