



## **Properties of Compounds**

Feature	Normal PVC Wire	Heat Resistant HR PVC	Fire Resistant FR PVC	Flame Resistant Low Smoke FRLS	zero Halogen Low Smoke
Insulation Material	PVC	PVC	Spl. PVC	Spl. PVC	Spl. Polymer
Insulation Property	Normal	Good Good		Good	Very Good
Temperature Rating	70°C	85°C	70°C	70°C	85°C
Thermal Stability	Normal	Very Good	Good	Good	Very Good
Flame Retardant	Good	Good	Very Good	Very Good	Excellent
Safety during burning	Average	Average	Good	Good	Excellent
Requirement of oxygen to catch fire (% in air)	>21	>21	>30	>30	>35
Temperature required to catch fire (with 21% oxygen)	Room Temp.	Room Temp.	>250°C	>250°C	>300°C
Visibility during cable burning (%)	<20	<20	<35	>40	>80
Release of halogen gas during burning (% by weight)	<20	<20	<20	<20	zero
Abrasion resistance during installation	Good	Good	Good	Good	Good

## **3 Core Flat Cables**

Area (Nom.) sq. (mm)	Number / Size of wire (No. / mm)	Insulation Thickness (Nom.) (mm)	Sheath Thickness (Nom.) (mm)	Width 'W' (Approx) (mm)	Width 'T' (Approx) (mm)	Resistance at 20°C (Max.) (Ohm/Km)	Current carrying capacity at 40°C (Amps)
1.5	22/0.3	0.6	0.90	11.0	5.0	12.10	14
2.5	36/0.3	0.7	1.00	13.0	6.0	7.40	18
4.0	56/0.3	0.8	1.00	15.3	6.7	4.95	26
6.0	84/0.3	1.0	1.15	18.7	7.9	3.30	31
10.0	140/0.3	1.0	1.40	23.7	9.9	1.91	42
16.0	226/0.3	1.0	1.40	28.0	11.4	1.21	57
25.0	354/0.3	1.2	2.00	35.5	14.7	0.780	72
35.0	495/0.3	1.2	2.00	39.5	16.2	0.554	90
50.0	703/0.3	1.4	2.20	45.5	18.3	0.386	115
70.0	360/0.5	1.4	2.20	51.0	20.0	0.272	143
95.0	475/0.5	1.6	2.40	60.0	23.5	0.206	165



