

# 6491X H07V-R

## PVC Insulated Conduit wire

**multicomp** PRO

**RoHS  
Compliant**



### Application:

6491X H07V-R wire is suitable for power and lighting circuits and building wiring. This wire is intended for use in semi-flush exposed conduits and embedded conduits as well as in closed installation ducts, and is ideal for the internal wiring of appliances.

### Cable Standards:

BS EN 50525-2-31 (previously BS 6004) BASEC approved, BS EN/IEC 60332-1-2

### Construction:

Conductor : H07V-R: Class 2 stranded annealed copper conductor to BS EN 60228 (previously BS 6360)  
 Insulation : PVC (Polyvinyl Chloride) Type T11 according to BS EN 50363

### Characteristics:

Voltage Rating (Uo/U) : 450/750V  
 Temperature Rating : -15°C to +70°C  
 Min. Bending Radius : 3 × overall diameter  
 Insulation Colour : Black, Blue, Brown, Green/Yellow & Grey

### Electrical Characteristics:

Current Carrying Capacity

Nominal Cross Sectional Area mm <sup>2</sup>	Reference Method A (Enclosed in Conduit in Thermally Insulating Wall etc.)		Reference Method B (Enclosed in Conduit on a Wall Or in Trunking etc.)		Reference Method C (Clipped Direct)	
	2 Wires Single-Phase AC or DC Amps	3 or 4 Wires Three-Phase AC Amps	2 Wires Single-Phase AC or DC Amps	3 or 4 Wires Three-Phase AC Amps	2 Wires Single-Phase AC or DC flat or touching Amps	3 or 4 Wires Three-Phase AC flat and touching or trefoil Amps
1.5	14.5	13.5	17.5	15.5	20	18
2.5	20	18	24	21	27	25
4	26	24	32	28	37	33

Ambient temperature: 30°C

Conductor operating temperature: 70°C

The above table is in accordance with Table 4D1A of the 17th Edition of IEE Wiring Regulations.

Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 Element14.com/multicomp-pro

**multicomp** PRO

# 6491X H07V-R

## PVC Insulated Conduit wire

**multicomp** PRO

### Voltage Drop

Nominal Cross Sectional Area mm <sup>2</sup>	2 Wires DC mV/A/m	2 Wires Single-Phase AC mV/A/m			3 OR 4 Wires Three-Phase AC mV/A/m			
		Reference Methods A and B (enclosed in conduit or trunking)	Reference Methods C, F (clipped direct, on tray or in free air)		Reference Methods A and B (enclosed in conduit or trunking)	Reference Methods C, F (clipped direct, on tray or in free air)		
			Wires Touching	Wires Spaced		Wires Touching, Trefoil	Wires Touching, Flat	Wires Spaced*, Flat
1.5	28	29	29	29	25	25	25	25
2.5	18	18	18	18	15	15	15	15
4	11	11	11	11	9.5	9.5	9.5	9.5

Conductor operating temperature: 70°C

\*Spacings larger than one wire diameter will result in a larger voltage drop.

The above table is in accordance with Table 4E1B from the 17th Edition of IEE Wiring Regulations.

### Conductors

Class 2 Stranded Conductors for Single Core Wire

Nominal Cross Sectional Area mm <sup>2</sup>	Min. No. of Wires in Conductor	Max. Resistance of Conductor at 20°C
	Circular	Annealed Copper Conductor
	Cu	Plain Wires Ω/km
1.5	7	12.1
2.5	7	7.41
4	7	4.61

The above table is in accordance with BS EN 60228 (previously BS 6360)

### De-Rating Factors

For Ambient Air Temperatures other than 30°C

Air Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C
De-Rating Factor	1.03	1	0.94	0.87	0.79	0.71	0.61

### Dimensions

Part Number	Nominal Cross Sectional Area mm <sup>2</sup>	No. of Strands × Strand size	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491X-1.50MMLK	1.5	7 × 0.53mm	0.7	2.9	22
PP-6491X-1.50MMLU					

Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 Element14.com/multicomp-pro

**multicomp** PRO

# 6491X H07V-R

## PVC Insulated Conduit wire

**multicomp** PRO

Part Number	Nominal Cross Sectional Area mm <sup>2</sup>	No. of Strands × Strand size	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
PP-6491X-1.50MMBRN	1.5	7 × 0.53mm	0.7	2.9	22
PP-6491X-1.50MMG/Y					
PP-6491X-2.50MMBLK	2.5	7 × 0.67mm	0.8	3.6	32
PP-6491X-2.50MMBLU					
PP-6491X-2.50MMBRN					
PP-6491X-2.50MMG/Y					
PP-6491X-2.50MMGRY	4	7 × 0.85mm	0.8	4.1	50
PP-6491X-4.00MMBLK					
PP-6491X-4.00MMBLU					
PP-6491X-4.00MMBRN					
PP-6491X-4.00MMG/Y					

### Part Number Table

Description	Reel Length (m)	Part Number
Wire, 6491X, Black, 1.5mm <sup>2</sup>	100	PP-6491X-1.50MMBLK
Wire, 6491X, Blue, 1.5mm <sup>2</sup>		PP-6491X-1.50MMBLU
Wire, 6491X, Brown, 1.5mm <sup>2</sup>		PP-6491X-1.50MMBRN
Wire, 6491X, Green/Yellow, 1.5mm <sup>2</sup>		PP-6491X-1.50MMG/Y
Wire, 6491X, Black, 2.5mm <sup>2</sup>		PP-6491X-2.50MMBLK
Wire, 6491X, Blue, 2.5mm <sup>2</sup>		PP-6491X-2.50MMBLU
Wire, 6491X, Brown, 2.5mm <sup>2</sup>		PP-6491X-2.50MMBRN
Wire, 6491X, Green/Yellow, 2.5mm <sup>2</sup>		PP-6491X-2.50MMG/Y
Wire, 6491X, Grey, 2.5mm <sup>2</sup>		PP-6491X-2.50MMGRY
Wire, 6491X, Black, 4mm <sup>2</sup>		PP-6491X-4.00MMBLK
Wire, 6491X, Blue, 4mm <sup>2</sup>		PP-6491X-4.00MMBLU
Wire, 6491X, Brown, 4mm <sup>2</sup>		PP-6491X-4.00MMBRN
Wire, 6491X, Green/Yellow, 4mm <sup>2</sup>		PP-6491X-4.00MMG/Y

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 Element14.com/multicomp-pro

**multicomp** PRO