casmocable
CABLES FOR EXTREMES

NEMA HP 3 TYPE E

-65°C to +200°C, 600V



Construction
Conductor: Silver Plated Copper or Nickel Plated Copper
Insulation: Extruded · PTFE

Thermal Characteristics
Operating Temperature: -65°C to +200°C
Conductor Plating Temperature Rating: Silver-Plated Copper (SPC): -65°C to +200°C · Nickel-Plated Copper (NPC): -65°C to +260°C

Electrical Characteristics
Operating Voltage: 600V

Application
High-reliability equipment wiring: High-temperature equipment and appliance hook-up wiring where a medium-wall PTFE-insulated 600 V wire is required.

General Characteristics
Zero Solder Melt-Back: High-purity fluoropolymer insulation resists soldering iron heat without shrink-back or melting.
Fluid & Chemical Inertness: Resists fuels, lubricants, hydraulic fluids, oils, acids, alkalis, and industrial solvents.
Low Dielectric Loss: Stable low dielectric constant and dissipation factor support clean high-frequency and signal transmission.

Standards & Approvals
ANSI/NEMA HP 3: PTFE-insulated high-temperature hook-up wire, TYPE E (medium wall, 600 V).
MIL-W-16878/4 (Superseded): Former military specification superseded by NEMA HP 3 TYPE E.

RoHS COMPLIANT REACH COMPLIANT

CASMO Part No.	Conductor						Cable		Max. DCR @20°C (Ω/km)	Nom. Cable Weight (kg/km)
	Conductor Size (AWG)	No. Of Strands	Strand Size (AWG)	Nom. Strand Dia. (mm)	Nom. Conductor Dia. (mm)	Max. Conductor Dia. (mm)	Min. Overall O.D. (mm)	Max. Overall O.D. (mm)		
HP3E-XBAA*	32	1	32	0.203	0.203	0.211	0.635	0.838	544.62	1.19
HP3E-XBAB*	32	7	40	0.079	0.236	0.259	0.66	0.864	557.74	1.19
HP3E-XBAE*	32	19	44	0.051	0.239	0.292	0.66	0.864	515.09	1.19
HP3E-XBBA*	30	1	30	0.254	0.254	0.262	0.66	0.864	347.77	1.49
HP3E-XBBB*	30	7	38	0.102	0.305	0.328	0.711	0.914	328.08	1.49
HP3E-XBBE*	30	19	42	0.064	0.3	0.356	0.711	0.914	323.49	1.49

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HP3E-XBCA*	28	1	28	0.32	0.32	0.33	0.737	0.94	218.83	2.98
HP3E-XBCB*	28	7	36	0.127	0.381	0.404	0.787	0.991	208.66	2.98
HP3E-XBCE*	28	19	40	0.079	0.371	0.432	0.787	0.991	207.02	2.98
HP3E-XBDA*	26	1	26	0.404	0.404	0.417	0.813	1.016	137.47	2.98
HP3E-XBDB*	26	7	34	0.16	0.48	0.503	0.889	1.092	130.25	2.98
HP3E-XBDE*	26	19	38	0.102	0.478	0.546	0.889	1.118	122.38	2.98
HP3E-XBEA*	24	1	24	0.511	0.511	0.526	0.914	1.118	85.96	4.46
HP3E-XBEB*	24	7	32	0.203	0.61	0.632	1.016	1.219	80.38	4.46
HP3E-XBEE*	24	19	36	0.127	0.597	0.673	1.016	1.245	77.43	4.46
HP3E-XBFA*	22	1	22	0.643	0.643	0.663	1.041	1.245	54.13	5.95
HP3E-XBFB*	22	7	30	0.254	0.762	0.785	1.168	1.372	51.18	5.95
HP3E-XBFE*	22	19	34	0.16	0.752	0.838	1.168	1.422	48.56	5.95
HP3E-XBGA*	20	1	20	0.813	0.813	0.838	1.219	1.422	33.79	7.44
HP3E-XBGB*	20	7	28	0.32	0.96	0.988	1.372	1.575	32.19	7.44
HP3E-XBGE*	20	19	32	0.203	0.955	1.054	1.372	1.575	29.86	8.93
HP3E-XBHA*	18	1	18	1.024	1.024	1.054	1.422	1.676	21.39	11.9
HP3E-XBHB*	18	7	26	0.404	1.212	1.247	1.626	1.88	20.21	11.9
HP3E-XBHE*	18	19	30	0.254	1.194	1.308	1.626	1.88	19	11.9

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HP3E-XBJA*	16	1	16	1.29	1.29	1.328	1.702	2.057	13.45	14.88
HP3E-XBJE*	16	19	29	0.287	1.349	1.478	1.854	2.21	14.9	14.88
HP3E-XBKE*	14	19	27	0.361	1.694	1.857	2.235	2.591	9.42	22.32
HP3E-XBLE*	12	19	25	0.455	2.136	2.342	2.718	3.073	5.94	34.23
HP3E-XBLG*	12	37	28	0.32	2.179	2.306	2.667	3.023	6.2	34.23
HP3E-XBMG*	10	37	26	0.404	2.743	2.921	3.226	3.581	3.9	52.08

Table Notes

* Part numbers shown represent extruded PTFE (X) insulation and silver-plated copper conductor (B). Replace "*" with color digit 0–9 per the Color Code Chart below.

1. Conductor diameter and overall O.D. limits per ANSI/NEMA HP 3; Max. DCR is stated for silver-plated copper (SPC) at 20°C; cable weight is nominal reference value.

COLOR CODE CHART					
Cond. #	Color	Cond. #	Color	Cond. #	Color
0	Black	4	Yellow	8	Gray
1	Brown	5	Green	9	White
2	Red	6	Blue		
3	Orange	7	Violet		

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