

High Temperature & Electrical Fasteners

VELCRO® Brand High Temperature & Electrical Fasteners Comparison Matrix

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PRODUCT NAME		High Temperature & Fire Resistance				Electrical Features	
		VELCRO® Brand HI-GARDE® Hook 46 & Loop 8000	VELCRO® Brand HI-AIR™ Hook 66 & Loop 3000	VELCRO® Brand HI-TEMP™ Hook & Loop	VELCRO® Brand FR Hook 088 & FR Loop 1000	VELCRO® Brand Hook Anti Static Loop Anti Static	VELCRO® Brand Hook Conductive Loop Conductive
COMPOSITION & COMMERCIAL INFO.	Base Material	Stainless steel	Nylon, NOMEX® Fibers¹	Polyphenylene sulfide	Nylon FR treatment	Carbon nylon	Nylon, silver
	Key Benefits*	→ Extreme temperature resistant → Flame resistant → Corrosion resistant	→ High temperature resistant → Flame resistant → Thermal insulation	→ High temperature resistant → Chemical resistant → Electrical insulator	→ FR treatment → Soft & durable → High cycle life	→ Electrostatic dissipative → Low electrical conductivity	→ Electrical conductivity → Washing at 140 °F
	Special Features*	FR, Electrical conductivity, Weather resistant, Chemical resistant, Sew on	FR, Sew on, Abrasion resistant, Chemical resistant	FR, Electrical insulator, Chemical resistant, Sew on	FR, PSA, Weldable, Sew on, Printing	FR, Conductive, Antistatic, Washing 104 °F, Color fastness & shrinkage, Sew on, Printing	Conductive, Shrinkage, Washing 140 °F, Sew on
PERFORMANCE INDICATORS	Recommended Temperature of Use*	-40 °F (-40 °C) to 806 °F (430 °C)	Hook: -40 °F (-40 °C) to 230 °F (110 °C) Loop: -70 °F (-57 °C) to 350 °F (177 °C)	-40 °F (-40 °C) to 374 °F (190 °C)	-40 °F (-40 °C) to 284 °F (110 °C)	-30 °F (-30 °C) to 284 °F (110 °C)	-30 °F (-30 °C) to 284 °F (110 °C)
	Maximum Temperature*	Spikes up to 1472 °F (800 °C) for 10 minutes	Upon request	Spikes up to 500 °F (260 °C) for 5 minutes ISO 17493	Spikes up to 356 °F (180 °C) for 5 minutes ISO 17493	-	-
	Melting Point*	2,150 °F (1,177 °C)	Hook: 518 °F (270 °C) Loop: 660 °F (350 °C)	540 °F (282 °C)	420 °F (215 °C)	420 °F (215 °C)	420 °F (215 °C)
	Ageing Performance*	Excellent ageing done at 800 °F (426 °C) for 1,000 hours	-	Excellent ageing done at 320 °F (160 °C) for 45 days	-	-	-
	FR Resistance	FAR 25.853 FMVSS 302 DIN4102	DMS 1982 Type 2 & 3 FAR 25.853 NFPA 2112	UL94/ EN 60695-11-10: UL 94 V-0 Material Flame Rating**	FAR 25.853 FMVSS 302 ABD0031: Smoke Density & Toxicity Test, UL94/ EN 60695-11-10: UL 94 V-2 Material Flame Rating**	FAR 25.853 FMVSS 302	-
	Electrical Conductivity	✓	✗	✗ (EN1149)	✗	✓ (EN1149)	✓ (EN1149)
	Resistivity*	Upon request	Upon request	Upon request	Upon request	10 ⁴ Ω/cm ~ 10 ⁵ Ω/cm	1 - 3 Ω/m
	Outdoor Environment*	Excellent	Upon request	Upon request	Not recommended	Not recommended	Not recommended
	Peel Strength* (Avg.)	0.57 PIW (1 N/cm)	0.93 PIW (10.51 N/cm)	0.91 PIW (1.6 N/cm)	1.61 PIW (2.81 N/cm)	0.74 PIW (1.3 N/cm)	0.86 PIW (1.5 N/cm)
	Shear Strength* (Avg.)	22.5 PSI (15.5 N/cm²)	19.2 PSI (13.24 N/cm²)	16.5 PSI (11.4 N/cm²)	14.7 PSI (10.12 N/cm²)	11.6 PSI (8 N/cm²)	14.5 PSI (10 N/cm²)
Cycle Life*	Low (30 to 500 cycles)	Medium (500 to 2,000 cycles)	Medium (500 to 2,000 cycles)	High (2,000 to 5,000 cycles)	Very High (over 5,000 cycles)	Medium (500 to 2,000 cycles)	
CAPABILITIES / OPTIONS	Standard Colors	Steel grey	Natural	Pearl	VELCRO® Brand Color Chart	Black	Silver
	Standard Widths	1in (25mm)	1in (25mm), 2in (50mm)	1in (25mm), 2in (50mm)	5/8in (16mm), 3/4in (20mm), 1in (25mm), 1.18in (30mm), 1 1/2in (38mm), 2in (50mm), 4in (100mm), 4.21in (107mm), 6in (150mm)	3/4in (20mm), 1in (25mm), 2in (50mm)	1in (25mm)
	Standard Put-ups (Rolls)	25 yd (23m)	50 yd (45.7m)	54 yd (50m)	50 yd (46m)	27 yd (25m)	27 yd (25m)

* All data in this matrix are for reference only. For proper use please contact us for the product specific Technical Data Sheet.

** Testing per UL-94:2006; UNE-EN 60695-11-10:2000/A1:2004 equivalent to EN 60695-11-10:1999/A1:2003 included as a reference. This product is not currently certified.