DuraSeal Data Sheet

Trading in top quality

Applications

DuraSeal products insulate and protect electrical connections from mechanical abuse, wire pull-out, and abrasion while resisting water, salt, and other contaminants.

DuraSeal devices provide a tough, environmentally sealed wire connection. Their crimp barrel or terminal, encased in rugged, heat-shrinkable nylon tubing lined with a special hot-melt adhesive, resists damage from abrasions and cuts.

DuraSeal devices retain flexibility and impact-resistance long after similar products have become brittle.

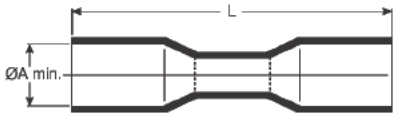
DuraSeal devices accommodate wire gauge sizes 22 to 10. They are color-coded for easy identification of gauge sizes, yet transparent for inspection of the finished splice.

Approvals and reference documents

Agency approvals	UL listed component, file E87681, butt splices and terminals except quick connect terminals; file E157833, quick connect terminals
Reference documents	Raychem specification RB-107, DuraSeal crimp splices
	Raychem specification RB-108, DuraSeal crimp terminals
	DuraSeal selection guide (H54153)
	DuraSeal installation guidelines (H54154)

Product Dimensions

Butt Splices



Part No.	Butt Splice Dimensions		Color	Conductor	Wire Dimensions	
	A Min.	L Nom.			Insulation O.D. (Max.)	Insulation O.D. (Min.)
D-406-0001	3.68 [.145]	31.75 [1.25]	Red	22–18	3.56 [.140]	1.40 [.055]
D-406-0002	4.57 [.180]	31.75 [1.25]	Blue	16–14	4.45 [.175]	2.03 [.080]
D-406-0003	6.35 [.250]	38.10 [1.50]	Yellow	12–10	6.22 [.245]	2.79 [.110]

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Product characteristics

	Property	Unit	Requirement	Method of test
Physical	Dimensions	Inches	None	See product dimensions.
	Tensile strength	Pounds	8 to 40 depending on AWG	UL486C, IEC512-8
	Property	**Unit**	**Typical value**	**Method of test**
Electrical	Voltage drop	Millivolts	Less than equal length of wire	MIL-S-81824, IEC512-2
	Insulation resistance	Megohms	10^3 min.	MIL-STD-202 method 302
	Dielectric withstand voltage	Kilovolts	2.5	MIL-STD-202F method 301, IEC512-2
	Property	**Unit**	**Requirement**	**Method of test**
Chemical	Diesel fuel		Meet electrical test listed above after conditioning.	ASTM D 3032, ESA-603D
	Brake fluid			
	Antifreeze			
	5% salt water			
	Motor oil			
Environmental (Fluid resistance)	Humidity		Meet electrical test listed above after conditioning.	MIL-STD-202F method 106, IEC68-2-30
	Immersion			MIL-STD-202F condition C, IEC68-2-14 test NC
	Vibration			MIL-STD-202F method 201, IEC68-2-6
	Bending			UL486C, IEC512-8
	Thermal shock			MIL-STD-202F method 107, IEC68-2-14 test N
	Heat aging (168 hr @ 85°C)			MIL-STD-202F, IEC68-2-2
	Salt spray			MIL-STD-202F method 101, IEC68-2-11
Operating conditions	Temperature rating		–55°C to 125°C	None
	Minimum shrink temperature		180°C	None
	Voltage rating		600 Volts max.	None