

RAPTOR FEEDTHROUGH

RAPTOR Feedthrough is Amphenol LTD’s solution for semi-permanent installations where frequent disconnection is not required and when space and weight saving is important. The Feedthrough is two shell sizes smaller than the equivalent RAPTOR Connector for the same cable gauge.

Feedthroughs are offered in Jam Nut or Square Flange styles, with a double o-ring internal sealing arrangement making them ideal for liquid cooled e-machines, batteries or inverters.

The Feedthrough termination system for screened cables uses a crimped lug bolted to the feedthrough conductor. The screen cone insulator is designed to manage the high voltages in the termination area between the conductor and screen then a heatshrink boot provides external environmental protection. At the rear, the through hole flat terminal is ideal for internal busbar or cable crimp lug style connection. Alternate designs are available for screened cable termination both sides.

Currently the Feedthrough is available in a size 17 shell for 2/0 AWG cable, however solutions for other cable sizes can be developed.



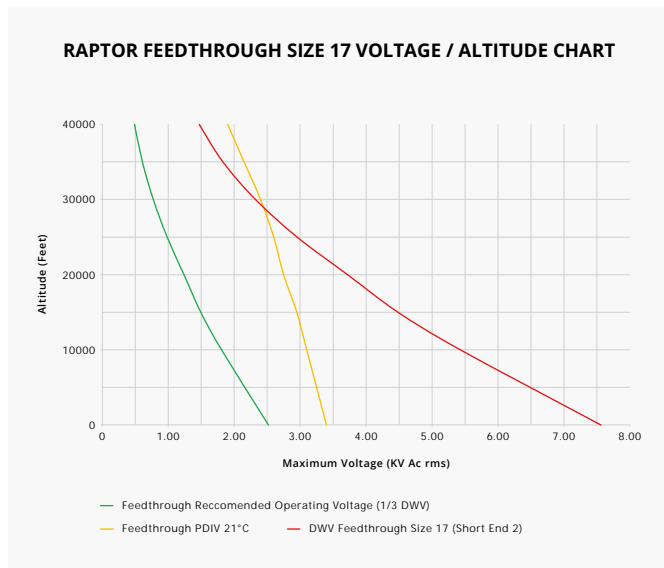
PARAMETER	DETAILS
AC (rms) DWV (sea level)	7.5KV ^{*1}
AC (rms) Recommended Max Operating Voltage (sea level)	2.5KV ^{*1}
DC Recommended Max Operating Voltage (sea level)	3.5KV ^{*1}
AC (rms) DWV (35,000ft)	1.75KV ^{*1}
AC (rms) Recommended Max Operating Voltage (35,000ft)	625V ^{*1}
DC Recommended Max Operating Voltage (35,000ft)	880V
AC (rms) Partial Discharge Free Voltage (35,000ft, 21°C)	2.0KV PDIV
Insulation Resistance	>5000 Megohms
RoHs	Yes
Fluid Resistance	MIL-DTL-38999 Series III
Shock and Vibration	MIL-DTL-38999 Series III
Salt Spray	Shell Material and Plating Type Dependant e.g. Aluminium, Nickel plated (RF) 48Hrs, Stainless steel 500 Hrs
Sealing (Mated)	IP68
Sealing (Unit Mounted Receptacle)	4 Bar fluid sealing
Operating Temperature Range	-65 +150°C

*1 Values stated, based on lowest performance unit mount receptacles. Refer to Voltage Derating chart on page 8.

PART NUMBERING

SERIES	SHELL STYLE	FINISH	SHELL SIZE	CONTACT TERMINATION END 1	CONTACT TERMINATION END 2	LENGTH	CONTACT MATERIAL	COLOUR BAND
RAP	07FT	XX	XX-	X	X	X	X	X
RAP	07FT - Feed Thru	RF - Electroless Nickel Plated Aluminium	17	1 - Crimp	3 - Flat Tail	2 - Short	1 - Copper 2 - Aluminium 3 - Brass	0 - None

VOLTAGE DERATING



CURRENT DERATING

