



## THRU-DOOR “CLEAN PANEL” INTERFACE UL TYPE 1

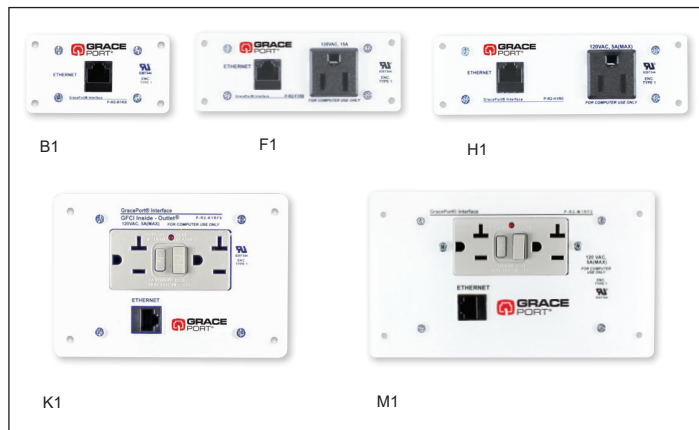
GracePort® UL Type 1 interfaces bring connections, complete with cables or bulkhead connectors, to the outside of panels. Customers can choose from our standard sizes and interfaces or a custom interface to fit their precise application and include all the necessary components and power options they need. Custom text and company logos can also be added to the front of the interface.

As defined by UL, Type 1 is intended for: “Indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment and to provide a degree of protection against falling dirt. Most Popular Applications for GracePort® UL Type 1:

- Production Equipment
- Laboratory Equipment
- Medical Equipment
- Test Benches
- Test Verification Equipment

As standard on all of our fully customizable GracePort® orders, we offer quick assembly and delivery within 2-3 business days. In addition to the protection offered by UL Type 1, our units can be built with gasketing to offer an extra measure of protection against dust and other contaminants.

### UL Type 1 Specifications



HOUSING ENVIRONMENT	SIZE: (H x W, INCHES)
B1	1.72 x 3.15
F1	1.72 x 4.45
H1	1.72 x 5.51
K1	3.54 x 5.08
M1	3.79 x 6.50
S1	Custom panel

Sample Part No.:

P - R 2 - \* \* R F 0

B1, F1, H1, K1, M1 or S1

### Clarification on NEMA vs. UL

We offer GracePort® housings with many different environmental ratings, so it is important to distinguish the difference between two of the leading organizations for safety standards. Enclosures and cabinets are often listed with National Electrical Manufacturers Association (NEMA) and/or Underwriters Laboratory (UL) ratings. These ratings are based on similar application descriptions and guidelines, however, the primary difference is that NEMA does not require independent testing, leaving compliance entirely up to the manufacturer. NEMA and UL work closely to develop standards and while the UL standard uses the same Type numbers, they require enclosures to be tested by qualified evaluators while NEMA does not. As these are the two main organizations that set standards for electrical safety, Our GracePort® housings that have been independently verified by UL also meet compliance with NEMA by our own compliance standards. If you’re looking for a programming port on a cabinet or enclosure with a NEMA or UL rating, we’ve got you covered. Both standards are widely used in North, Central and South America.

**Warning:** Verify an electrical conductor has been de-energized using an adequately rated test instrument before working on it. Follow appropriate Energy Control (Lockout/Tagout) procedures as per OSHA Subpart S.
















© Grace Engineered Products, Inc. All rights reserved. Specifications are subject to change with/without notice.



Certification based on final product.

GP-TY1-DS-EN 2007

## UL Classifications

		Non- Hazardous Locations				
		Indoor		Indoor/Outdoor		
						
		UL Type 1	UL Type 12	UL Type 3R	UL Type 4	UL Type 4X
S O L I D S	 <b>Incidental Contact</b>	✓	✓	✓	✓	✓
	 <b>Falling Dirt</b>	✓	✓	✓	✓	✓
	 <b>Circulating Dust</b>		✓		✓	✓
	 <b>Settling Airborne Dust</b>		✓		✓	✓
	 <b>Windblown Dust</b>				✓	✓
L I Q U I D S	 <b>Light Splash</b>	✓	✓	✓	✓	✓
	 <b>Hosedown and Splash</b>				✓	✓
	 <b>Rain, Snow and Sleet</b>			✓	✓	✓
C H E M I C A L S	 <b>Oil and Coolant Seepage</b>		✓			
	 <b>Corrosion</b>					✓