

GRACEPORT® FEATURES & BENEFITS

- ▶ GracePorts[®] are panel interface connectors that provide safe access to PLC control panels through closed doors, resulting in up to 90% increased productivity and offering an immediate return on investment.
- ▶ Thru-door access enabled by GracePorts® enhances compliance with OSHA, NEC, and NFPA 70E/CSA Z462.
- ► GracePorts[®] configured with ThruView[™], MagView[™], and stainless steel housings are typically UL Listed, ensuring compliance and seamless integration with existing UL-certified equipment. Note that final UL certification may vary, with some configurations being UL.
- ▶ Fully customizable with a variety of components, housings, and power options—including custom logos, text, or graphics on the faceplate—to match your specific needs. Quick assembly and delivery—we ship each **GracePort**[®] within 2-3 business days.



FOR MORE INFORMATION VISIT GRACEPORT.COM OR CALL 1.800.280.9517



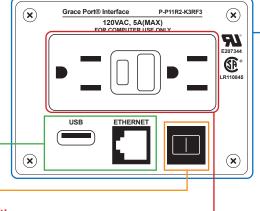


CUSTOMIZE YOUR GRACEPORT®

This is what sets a GracePort[®] apart from other communication ports. We can create a custom-built GracePort[®], including special text, cut-outs, cable lengths, and even adding your company logo, all in just a few days. Assembled in the USA by the original creators of panel interface connectors, tailored precisely to your specifications.

Components

There are various connectors available and are represented by a two to three digit code found in between the first two dashes of our GracePort[®] part number layout. Multiple connectors in a GracePort[®] are listed alpha-numerically and multiples of the same component are followed by # and the quantity. See the next page for some of our common components.



Housing Size & UL Rating

Several housing types are available to meet your needs. The size of your housing depends on several variables including the kinds of components you choose, the power option you want and, in some cases, the UL rating you need.

Circuit Breaker / Power Option -

Many power options for international and domestic use are available and are represented by a one to two or three letter code. Because circuit breakers offer the ability to limit what devices can be run through the GracePort[®], we offer different amperages as well.

Over 15,000 unique GracePorts[®] created and shipped in 2-3 business days! Shop Now

GRACEPORT® SPOTLIGHT

The **GracePort**[®] **ThruView**[™] **360** redefines secure through-door access by offering a streamlined solution for data ports, electrical outlets, programming, and troubleshooting—all without the need to open industrial control panel doors. Its circular design allows for installation in under 10 minutes with a standard knockout punch.

UL Listed and designed for seamless integration with existing UL-certified equipment, the ThruView[™] 360 preserves critical system certifications and adapts to a wide range of industrial applications, enhancing your operations with unmatched efficiency and safety.

P-R62-R4RF3



HOUSING OPTIONS



UL Type 1

Indoor use primarily to provide protection against contact with the enclosed equipment and against a limited amount of falling dirt. Choose from our standard sizes and interfaces or a custom interface to fit your exact requirements. Units can be built with gasketing to offer an extra measure of protection against dust and other contaminates.



ThruView[™] 360- IP66, IP69, IP69K, UL Listed (R4)

The ThruView[™] 360 housing features a circular design that allows for effortless installation with a standard knockout punch, significantly reducing setup time. This compact housing is UL Listed and meets a wide range of UL Type ratings: 1, 2, 3, 3X, 3R, 3RX, 4, 4X, 5, 12, 12K, 13.



MagView[™] - IP66, IP69, IP69K, UL Listed (M9)

The GracePort[®] MagView[™] housing is UL Listed and features a patented magnetic seal and a lid that magnetically attaches to the enclosure, providing a hands-free experience. This compact and durable housing is UV rated for outdoor use and meets a wide range of UL Type ratings: 1*, 2, 3, 3X, 3R, 3RX, 4, 4X, 5, 12, 12K, 13., ensuring superior convenience and protection. **Lid retention screws not required.*



ThruView[™] - UL Type 4, IP65, UL Listed

A housing designed for indoor or outdoor use, offering protection against splashing water, windblown dust, rain, hose-directed water, and ice formation.



ThruView[™] - UL Type 4X, IP65, UL Listed

Designed for indoor or outdoor use, this enclosure offers protection against rain, splashing and hose-directed water, remains unaffected by ice formation, and is corrosion-resistant.



ThruView[™] - UL Type 12, IP65, UL Listed

Suitable for indoor applications, this enclosure offers protection against dust, dirt, fiber flyings, dripping water, and external condensation of non-corrosive liquids.



ThruView[™] Extra-Duty Housing - UL Type 3R, UL Listed (M8)

The M8 ThruView[™] Housing offers robust, UL Listed protection for wet and damp locations with its extra-duty inuse cover, safeguarding devices plugged into 15-20 Amp/125-250 Volt receptacles. Compliant with NEC standards, its UL Type 3R rating ensures reliable protection against rain, sleet, and snow in outdoor environments.



Stainless Steel - UL Type 4X, IP69K, UL Listed (M6)

Keep stainless steel enclosures closed with the #316 stainless steel GracePort[®] interface. The 100% stainless steel GracePort[®] housing is designed to meet rigorous environments. Also available in a low-profile design.



Surface Mount Heavy Duty - IP65

Surface Mount Housings, crafted from a durable cast alloy base, offer robust protection for GracePort® components and power options against contaminants like dust and debris, as well as water ingress. Ideal for use in corrosive environments or settings requiring regular washdowns, such as food processing facilities.





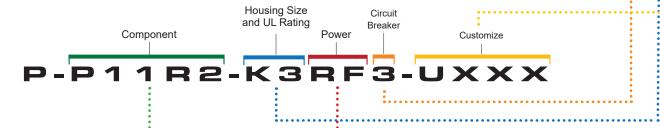
Hazardous Location (M7)

The Hazardous Location GracePort[®] is intended for environments where the user must perform a "sniff test" and typically obtain a "Hazardous Work Permit" before opening



BUILDING YOUR CUSTOM GRACEPORT®

Varieties of components are available and can be paired together in your fully customized GracePort®. Whether you need something as common as an RJ45 or as unique as a DVI female-to-female feed-thru bulkhead, Grace Technologies can design and create a GracePort[®] for you.



Components

DESCRIPTION	TYPE	GENDER FRONT	GENDER BACK	CODE		
Ethernet & Network Interfaces						
Category 5e Ethernet	Bulkhead	RJ45Female	RJ45Female	R2		
Category 5 with M/M patch cable	Bulk head	RJ45Female	RJ45Female	R13		
Category 5e Shielded	Bulkhead	RJ45Female	RJ45Female	R33		
Category 6 Ethernet	Bulkhead	RJ45Female	RJ45Female	R62		
Category 6 Shielded	Bulkhead	RJ45Female	RJ45Female	R31		
Ethernet Switch (5 ports)	Unmanaged	RJ45Female (1)	RJ45Female (4)	E5		
Antenna with Coaxial Coupler	Cable	SMA F/F	SMA F/F	Q43		

Keyboard, Mouse & Monitor

Keyboard (PS/2)	Cable	6MDINFemale	6MDINMale	P3
Keyboard (USB)	Cable	USBAFemale	USBAMale	P28
Modem	Bulkhead	RJ12Female	RJ12Female	P7
Mouse (PS/2)	Cable	6MDINFemale	6MDINMale	P5
Mouse (USB)	Cable	USBAFemale	USBAMale	P29
VGA Monitor	Cable	HDDB15Female	HDDB15Male	P6
HDMI	Bulkhead	HDMIFemale	HDMIFemale	P38
DisplayPort	Bulkhead	DisplayPort	DisplayPort	P39

Parallel Pin-to-Pin Extension Cables

8 Pin MiniDIN	Cable	8MDINFemale	8MDINMale	R8
8 Pin MiniDIN Locking	Cable	8MDINFemale	8MDINMale	R28
DB15 F/M	Cable	DB15Female	DB15Male	R11
DB15 M/F	Cable	DB15Male	DB15Female	R10
DB15HDM M/F (Not for VGA)	Cable	Male	Female	R44
DB25 F/M	Cable	DB25Female	DB25Male	P2
DB9 F/M	Cable	DB9Female	DB9Male	R3
DB9 M/F	Cable	DB9Male	DB9Female	P1

Serial, Parallel

DB25 Parallel	Cable	DB25Female	DB25Male	P2
DB9 Serial	Cable	DB9Male	DB9Female	P1

•••••	•••••	••••					
NDER RONT	GENDER BACK	CODE	DESCRIPTION	TYPE	GENDER FRONT	GENDER BACK	CODE
			Universal Serial Bus				
Female	RJ45Female	R2	USB 4 to 1 Hub	Bulkhead	USB-BFemale	USB-BFemale	P44
Female	RJ45Female	R13	USB Memory Stick	Cable	USB-AFemale	USB-AMale	P50
Female	RJ45Female	R33	USB Mini Type B 5 POS	Cable	USB-BFemale	USB-BMale	P42
Female	RJ45Female	R62	USB Type A/B F/F	Bulkhead	USB-AFemale	USB-BFemale	Q50
Female	RJ45Female	R31	USB Type A-A Cable	Cable	USB-AFemale	USB-AMale	P11
emale (1)	RJ45Female (4)	E5	USB Type A-A F/F	Bulkhead	USB-AFemale	USB-AFemale	P22
IA F/F	SMA F/F	Q43	USB Type B/A F/F	Bulkhead	USB-BFemale	USB-AFemale	Q51
			USB Type B/B F/F	Bulkhead	USB-BFemale	USB-BFemale	P27
			USB Type B/B M/M	Bulkhead	USB-BMale	USB-BMale	P31
VFemale	6MDINMale	P3	USB Type B/F to USB Type	Cable	USB-BFemale	USB-BMale	P15
Female	USBAMale	P28	B/M (6' integrated cable) USB-A (3.0)				
Female	RJ12Female	P7	with 1.5' cable	Cable	USB-AFemale	USB-BMale	P13
VFemale	6MDINMale	P5	Type A to B	Bulkhead	USB-AFemale	USB-BFemale	P19
Female	USBAMale	P29	USB-A (3.0)	Bulkhead	USB-AFemale	USB-AFemale	P33
15Female	HDDB15Male	P6	USB-C Charging Adapter	Cable	USB-C & A Female	24V Terminal	C1
IFemale	HDMIFemale	P38	USB-C Charging Adapter	Cable	USB-C & A	24V Terminal	C2
layPort	DisplayPort	P39			Female		

Banana Jacks

Black Banana Jack (sheathed)	Bulkhead	Female	Solder Terminal	Q85
Black Banana Jack (unsheathed)	Bulkhead	Female	Solder Terminal	Q75
Green Banana Jack (sheathed)	Bulkhead	Female	Solder Terminal	Q86
Green Banana Jack (unsheathed)	Bulkhead	Female	Solder Terminal	Q76
Red Banana Jack (sheathed)	Bulkhead	Female	Solder Terminal	Q84
Red Banana Jack (unsheathed)	Bulkhead	Female	Solder Terminal	Q74

Connector to Terminal Block PCB

DB9F (PCB Pins 1-9 to Terminal Block)	Term	DB9Female	Terminal Block	R1
DB9M (PCB Pins 1-9 to Terminal Block)	Term	D9Male	Terminal Block	R12
RJ-45 (PCB Pins 1-8 to Terminal Block)	Term	RJ45Female	Terminal Block	R15

The code in this area depends on whether you need a custom logo or text added. The GracePort® logo is the default.

	DESCRIPTION	TYPE	GENDER FRONT	GENDER BACK	С
•••	Data Switch				
	DB9F 2:1	Custom	Female	Female	F
	DB9F 4:1	Custom	Female	Female	F
	Crossover – Generic DB9F	Custom	Qty (2) DB9	-	F

Generic Bulkhead Interfaces

Generic Buikneau inte	Inaces			
4MDIN F/F	Bulkhead	Female	Female	Q26
50 ohm BNC	Bulkhead	Female	Female	Q42
Coaxial SMA Coupler	Bulkhead	Female	Female	Q43
6MDIN F/F	Bulkhead	Female	Female	Q28
75 ohm Bulkhd, Feed-Thru, Coaxial F/F (non BNC)	Bulkhead	Female	Female	Q40
8MDIN F/F	Bulkhead	Female	Female	Q29
DB-15 F/F	Bulkhead	Female	Female	Q35
DB-15 F/M	Bulkhead	Female	Male	Q37
DB-15 M/F	Bulkhead	Male	Female	Q38
DB-15 M/M	Bulkhead	Male	Male	Q36
DB-15HD F/F	Bulkhead	Female	Female	Q18
DB-15HD F/M	Bulkhead	Female	Male	Q11
DB-15HD M/F	Bulkhead	Male	Female	Q12
DB-15HD M/M	Bulkhead	Male	Male	Q19
DB-15HDVGA F/F	Bulkhead	Female	Female	Q22
DB-15HDVGA F/M	Bulkhead	Female	Male	Q24
DB-15HDVGA M/F	Bulkhead	Male	Female	Q23
DB-15HDVGA M/M	Bulkhead	Male	Male	Q25
DB-25 F/F	Bulkhead	Female	Female	Q4
DB-25 F/M	Bulkhead	Female	Male	Q8
DB-25 M/F	Bulkhead	Male	Female	Q10
DB-25 M/M	Bulkhead	Male	Male	Q16
DB-9 F/F	Bulkhead	Female	Female	Q3
DB-9 F/M	Bulkhead	Female	Male	Q7
DB-9 M/F	Bulkhead	Male	Female	Q9
DB-9 M/M	Bulkhead	Male	Male	Q15
RJ-11/12 F/F	Bulkhead	Female	Female	Q6
RJ-45 F/F	Bulkhead	Female	Female	Q17
HD DB-44 F/M	Bulkhead	Female	Male	Q14

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Circuit Breaker Codes No Breaker 0

No Breaker	0
1 AMP	1
2 AMP	2
3 AMP	3
5 AMP	5
6 AMP	6
8 AMP	8
10 AMP	10
15 AMP	15
	1 AMP 2 AMP 3 AMP 5 AMP 6 AMP 8 AMP 10 AMP

HOUSING CODE	ι	JL RATING			
A	1, 3R, 4, 4X, and 12 Not all housings are available				
В		in all UL Ratings			
F	Sample Housing Code:				
G		B2			
Н	First letter	Numeral refers to the			
JB7	depicts size only	environmental ratings below			
К	1 = Ul	TYPE 1			
L	2 = UL TYPE 4X/IP65 3 = UL TYPE 4/IP65 4 = UL TYPE 12/IP65				
М					
M6	M6= Sta	the exception of: inless Steel Housing			
M8		- In-Use Housing ∕lagView™ Housing			
M9	R4= Thr	uView™ 360 Housing			
P4					

38	
39	
R49	

DESCRIPTION	VAC	AMPS	POWER CODE
Simplex	120	15	R
Duplex Outlet	125	20	RD
GFCI Inside-Outlet Rear Outlet 15 AMP, (UL recognized for 15 AMPs)	125	15	RF
IEC 320 Male Power Entry Module	250	15	RM
IEC 320 Female Power Entry Module	250	10	RP
TWIST LOCK Receptacle	125	15	RN
Power AC Inlet with On/Off Switch, 2 Pole	250	10	RS
12-24V Vehicle Style Accessory Socket	12	5	RC
USB Charger Receptacle: 2 Port, 3 Amp, 5 VDC USB	125	15	RDC
USB Charger Receptacle: 2 Port (1-Type A and 1-Type C, 3.1 Amp, 5 VDC USB	125	15	RAC
Australia, New Zealand & People's Republic of China	250	10	RA
United Kingdom, Hong Kong, Ireland, Singapore & Malaysia	250	13	RB
United Kingdom with GFCI	250	16	RBF
Continental Europe "Schuko" (Germany, Finland, Netherlands, Norway, Sweden, Portugal, Spain, Greece, Soviet Republic & Eastern Bloc)	250	16	RE
France & Belgium	250	16	RH
la dia	250	15	RU
India	250	6/16	RIN
Thailand	250	15	RW
Brazil	250	10	RQB
Israel	250	16	RZ
Argentina	250	10	RAG
Continental Europe with GFCI	230	16	REF
Italy	250	16	RI
Switzerland	250	10	RSW
Universal International	250	20	RUV

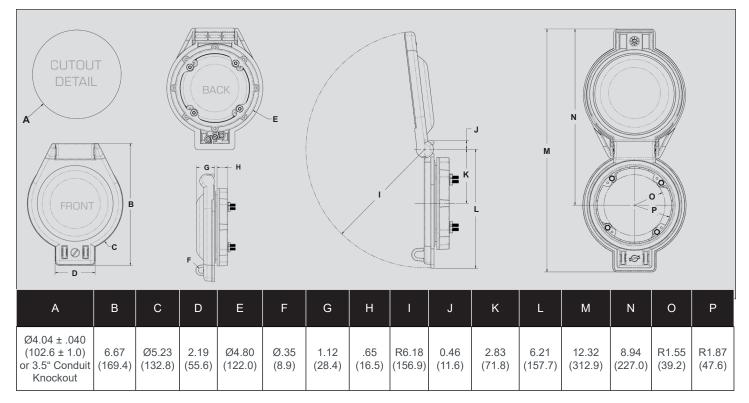


Need manufacturer specific components? See our complete listing of components at: www.graceport.com

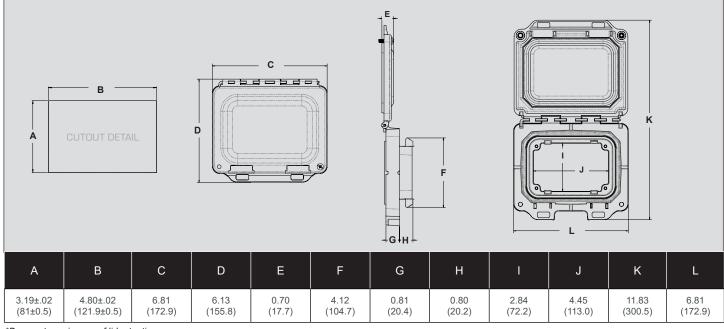


OVERALL HOUSING SPECIFICATIONS INCHES (MM)

ThruView[™] 360 Housing Type 1*, 2, 3, 3X, 3R, 3RX, 4, 4X, 5, 12, 12K, 13, IP66, IP69, IP69K



MagView[™] Housing Type 1*, 2, 3, 3X, 3R, 3RX, 4, 4X, 5, 12, 12K, 13, IP66, IP69, IP69K



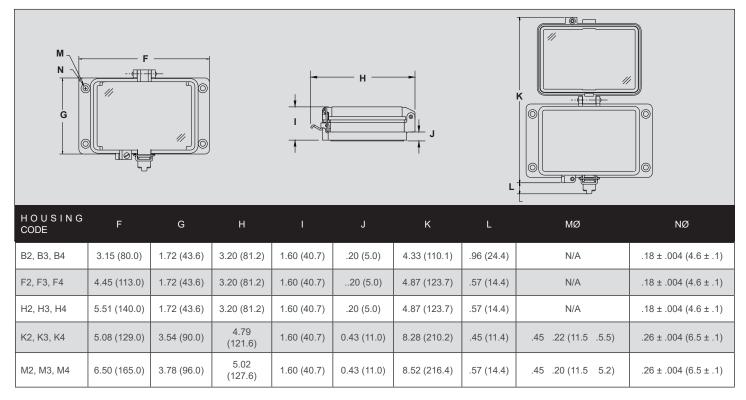
*Does not require use of lid retention screws.

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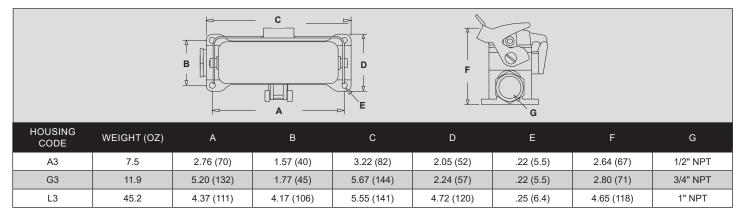
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Standard ThruView[™] Housings (Type 4, 4X, 3R, and 12)



Surface Mount UL Type 4

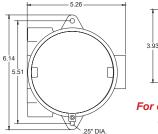


UL Type 1

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

GracePort® Hazardous Location Housing

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Class I, Div. 1 & 2, Groups A,B,C,D Class I, Zones 1 & 2, Groups IIB +H2, IIA Class II, Div. 1 & 2, Groups E,F,G Class III NEMA 3,4,7 (B,C,D), 9 (E,F,G) CENELEC - EEx D IIB IP66

For detail drawings of our Stainless Steel Housing or In-Use Housing please refer to that individual install guide.



FREQUENTLY ASKED QUESTIONS

Q: Do you have CAD drawings for GracePort[®] Housings?

- A: Absolutely! We have 2D PDF, 2D DWG, and 3D STP files available on our website at: www.graceport.com and ePlan or email: sales@gracetechnologies.com.
- Q: What is the SCCR rating for the accessory power outlets/ receptacles used with GracePorts®?
- A: Since GracePorts[®] are offered with variety of power outlet options, the default SCCR ratings as defined in the UL 508A Table SB4.1 apply to the power outlet offerings. OEMs are required to use current limiting fuses of Class CC type in the upstream to increase the SCCR rating for the accessory power outlets used in the GracePorts[®] to match with their panel SCCR ratings. Below is the Short Circuit Current Rating of the various receptacle outlets offered with GracePorts[®].
 - Any outlet with a Circuit Breaker: 0.2kA
 - Standard GFCI (RF): 2kA
 - Simplex (R): 10kA
 - Duplex (RD): 10kA
 - High Interrupt GFCI (RX-K10): 10kA
- Q: I work for a UL 508 panel shop, do I need to match the housing rating to my enclosure?
- A: For UL 508 panel shops, the UL rating of the housing must match the rating of the enclosure. It cannot exceed in order to pass (i.e. use UL 4X GracePort on UL 4 rated enclosure). If UL 508 is not needed or desired, a housing can exceed the rating of the enclosure with no problems.
- Q: Can GracePorts be used in food and beverage or pharmaceutical areas that are washed down as part of a clean-in-place process?
- A: Yes! The new MagView[™] housing option is IP69 & IP69K rated and fabricated from chemically resistant materials.

Q: Do you sell components separately?

A: Unfortunately no, we do not sell components separately.

- Q: What does it mean that GracePorts[®] are UL Listed, and which models are included?
- A: Most GracePorts[®] are UL Listed, ensuring they meet stringent safety and reliability standards. However, models for hazardous locations, the non-housing UL/NEMA Type 1 faceplate version, and final configurations involving components P43, P44, or international outlets may not be UL Listed. UL Listing and Recognition are crucial as they assure end users and installers that the products have been rigorously tested and comply with safety regulations. UL Listing is valuable for UL 508A panel shops, as it simplifies compliance and facilitates the integration process with other UL-certified or recognized equipment.
- Q: What is the GFCI rated for and does the GFCI protect all three outlets?
- A: The exterior duplex outlet and the inside is rated for 15A. All three outlets are protected by GFCI. For an exterior 15A option (F2 exception code) contact your local sales representative.
- Q: Do Grace Permanent Electrical Safety Devices (PESDs) work with these housings as well?
- A: The Voltage Test Station, which contain a Voltage Indicator and the Safe-Test Point[™], will fit within the MagView[™] or M Size ThruView housings. Individual PESD Products can be placed in smaller size housing depending on the application. For more information on PESDs, please go to www.PESD. com or contact your local sales representative to customize your GracePort[®].

Q: Can I get my company logo printed on the faceplate?

A: Absolutely! Custom faceplate images, logos, and text options are available on the GracePort® faceplate. The recommended file resolution is 600dpi .jpg for submitted text and logos. Contact your local sales representative for more details.

