

# medi | mate INTERCONNECT

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**Amphenol**  
**Alden**

*Better interconnect solutions  
for better patient care*

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## MEDICAL PUSH-PULL CONNECTORS

At Amphenol Alden Products Company our goal is to help our OEM partner's deliver better patient care.

We achieve this goal by providing cable assemblies and connectors that are efficient, effective and dependable. Our products help reduce costs, increase reliability and ensure patient and clinician safety.

When your application requires a disposable or reusable medical interconnect solution (or both), Amphenol Alden's medi | mate series of connectors and cable assemblies combine the familiarity of circular push-pull interconnects with our unparalleled commitment to quality products. Sterilizable, reliable, and industry-compatible, medi | mate is available in multiple keying and color options making for fast and safe product identification wherever multiple interconnects are used. When provided as part of a cable assembly our expertise in design and manufacturing extracts even more value from medi | mate for new applications requiring innovation and legacy applications requiring backwards compatibility.

## FEATURES & BENEFITS

### ► Push-pull actuation – Familiar, instinctive & effective

- Self-latching
- Secure
- Tactile mating confirmation
- Smooth low-insertion force

### ► Versatile Product Offering

- Standard contact configurations from two (2) to 14 poles
- Cable-mount and panel-mount receptacles standard
- Seven (7) standard color combinations
- Six (6) standard keying options
- Available as an overmolded cable assembly

### ► Environmental Resilience

- Safe, recessed contacts endure repeated, high frequency mating
- Impact resistant circular housings
- Flex, strain, & impulse resistant cable protection
- IP50 rated\* (when mated)
- Reprocess via steam or gas

\* IP64 rated optional (contact manufacturer)



## APPLICATIONS

### ► Electrosurgical Devices

- Single-use soft tissue cutting tools
- Ablation needles for tumor termination

### ► Electrophysiology

- Mapping catheters
- Diagnostic catheters

### ► Patient Monitoring

- SpO2
- Electrocardiography (ECG)

### ► Therapy

- Infusion pump
- Gastrointestinal ablation

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## SPECIFICATIONS

### Material

- Connector Housing:
  - Polysulfon (PSU)
  - Polyetherimide (PEI)
- Molded Core Insulator:
  - Polyetheretherketon (PEEK)
- Contacts:
  - Pins—Brass, 20µ" Gold over 50µ" Nickel
  - Sockets—Phosphor Bronze, 20µ" Gold over 50µ" Nickel
- Flammability Rating: UL94 V-0

### Environmental

- Operating Temp.:
  - PSU: -50 °C to +150 °C
  - PEI: -50 °C to +170 °C
- IP-rating: IP-50 (when mated)\*
- Sterilizable\*\*:
  - Autoclave
  - EtO
- Chemical Resistance: common or cleaning solvents

### Mechanical

- Mating cycles: 2,000
- Mating Force (without contacts):
  - Mate: 8N (avg.)
  - Un-mate: 8N (avg.)
  - Unintended extraction: 90N (min.)

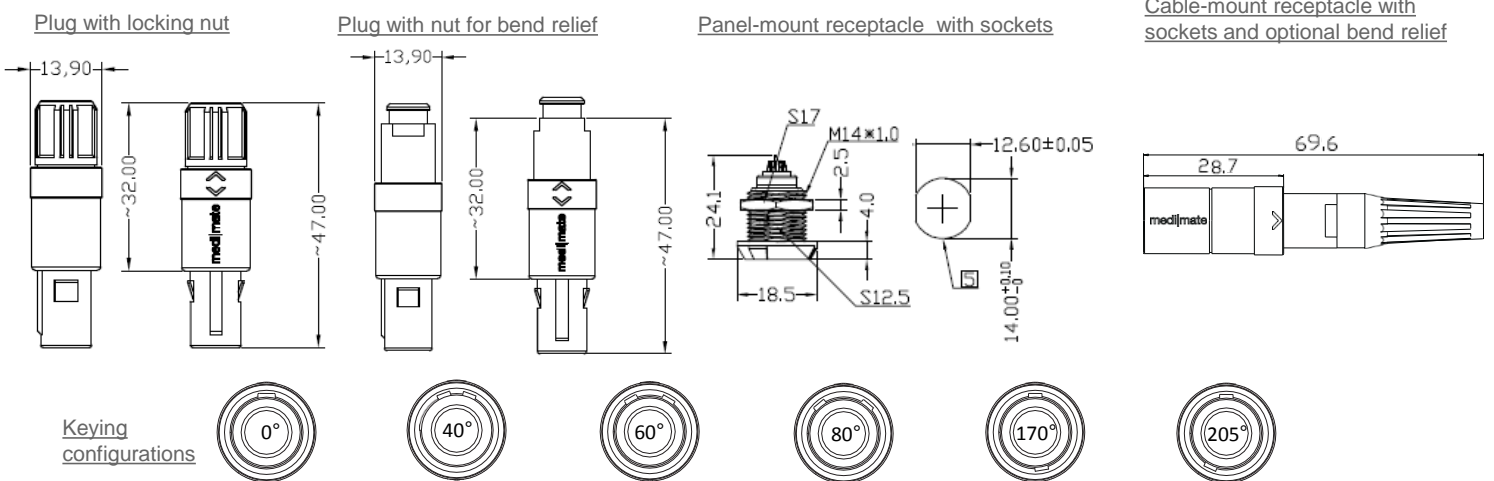
\* IP64 rated optional...contact manufacturer  
 \*\* Dependent on housing and over-mold materials

## ELECTRICAL CHARACTERISTICS

Number of Poles	Contact Size Pin φ (mm)	Wire Gauge, max.	Test Voltage	Operating Current, max. (A)*	Mated Contact Resistance (mΩ)
14	0.5	28	600 V RMS	2.0	<8.5
10	0.5	28	850 V RMS	3.0	<8.5
9	0.5	28	850 V RMS	3.0	<8.5
8	0.7	26	1,050 V RMS	5.0	<6.5
7	0.7	26	1,050 V RMS	5.0	<6.5
6	0.7	26	1,050 V RMS	6.0	<6.5
5	0.9	22	1,050 V RMS	7.0	<4.5
4	0.9	22	1,200 V RMS	8.0	<4.5
2	1.3	20	1,200 V RMS	10.0	<3.5

\*30C Heat Rise Limit

## BASIC DIMENSIONS



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## HOW TO ORDER

Configurable by design, medi | mate connectors utilize an intelligent part numbering system to streamline the product identification and ordering process. Simply pick the options you need and the table below will guide you to the correct part number.

Having trouble? Let us help configure the right product for your application. Call or email us at +1 (508) 427-7000 or Info@AmphenolAlden.com.

PRODUCT	NUMBER OF CONTACTS	BODY STYLE	KEYING	CONTACT TYPE	COLOR CODE	COLLET TYPE	COLLET SIZE – CABLE OD	HOUSING MATERIAL
MPP = medi   mate connector	02	P = Plug – cable mount	0 = 0°	M = Pin – solder cup	40 = Grey	A = Locking nut	1 = 2.7 - 3.9 mm	0 = PSU – Grey
	04	C = Receptacle – cable mount	1 = 40°	F = Socket – solder cup	41 = Black	B = Collet for bend relief <sup>2</sup>	2 = 4.0 - 5.2 mm	1 = PEI – Grey
	05	R = Receptacle – front panel mount <sup>1</sup>	2 = 60°	S = Socket – 90° PCB	42 = Blue	0 = No collet <sup>3</sup>	3 = 5.3 - 6.5 mm	2 = PSU – Black
	06	U = Receptacle – front or back panel mount <sup>1</sup>	3 = 80°	P = Socket – Straight PCB	43 = Red		0 = No collet <sup>3</sup>	3 = PEI – Black
	07	Y = Disposable receptacle – cable mount	4 = 170°		44 = Green			
	08		5 = 205°		45 = Yellow			
	09				46 = White			
	10							
	14							
<b>MPP</b>	<b>02</b>	<b>C</b>	<b>0</b>	<b>F</b>	<b>40</b>	<b>A</b>	<b>1</b>	<b>0</b>

### Configured part number example:

medi | mate 2-pole cable-mount receptacle, Key 0°, solder-cup socket contacts, Grey locking nut, cable collet: max. cable OD 3.9mm, Grey PSU material

1- Solder-cup socket standard  
2- Color codes '40' (standard) & '41' (optional) only; Bend relief sold separately  
3- Panel-mount receptacles only



PRODUCT	CABLE BUNDLE OD (mm)	COLOR
MPS = medi   mate strain relief	25 = > 2.5 – 3.0	GY = Grey
	30 = > 3.0 – 3.5	BK = Black
	35 = > 3.5 – 4.0	BL = Blue
	40 = > 4.0 – 4.5	RD = Red
	45 = > 4.5 – 5.0	GR = Green
	50 = > 5.0 – 5.5	YW = Yellow
	55 = > 5.5 – 6.0	WH = White
	60 = > 6.0 – 6.5	
<b>MPS</b>	<b>60</b>	<b>GY</b>

### Configured strain relief example:

medi | mate strain relief, max. cable bundle OD 6.5mm, Grey