

medi | mate INTERCONNECT



Amphenol
Alden

*Better interconnect solutions
for better patient care*

E-mail: Info@AmphenolAlden.com | Phone: 1(508) 427-7000 | www.AmphenolAlden.com

medi | mate INTERCONNECT

MEDICAL PUSH-PULL CONNECTORS

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

We achieve this by providing cable assemblies and connectors that are efficient, effective and reliable. For our partners this means lower costs, greater reliability and shortened development cycles due to the unmatched value and service we provide.

Whether your application requires disposable or reusable medical interconnect (or both), Amphenol Alden's medi | **mate** series of connectors and cable assemblies combine the familiarity of a circular push-pull interconnect with our unparalleled commitment to quality products. Sterilizable, reliable, and robust, medi | **mate** is available in multiple keying and color options making for fast and safe product identification wherever multiple interconnects are used. Leverage our expertise in design and manufacturing to turn your connector into a finished cable assembly.

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

medi | mate INTERCONNECT

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.)

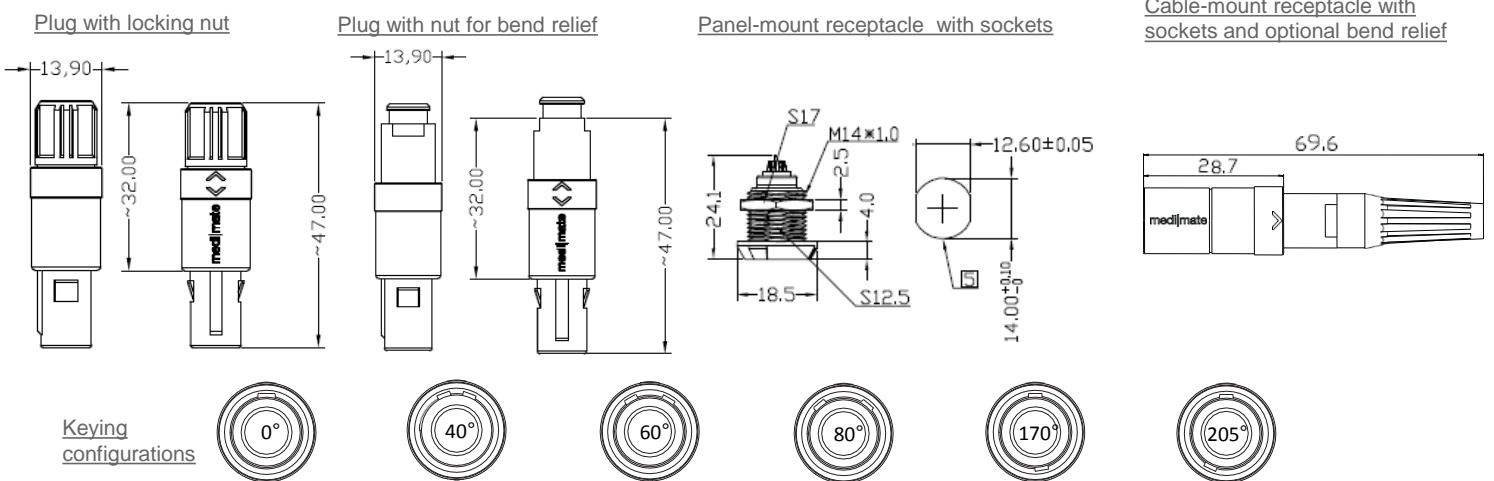
* IP64 rated optional...contact manufacturer
 ** Dependent on housing and over-mold materials

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



medi | mate INTERCONNECT

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 to the right 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 *	2 = 4.0 - 5.2 mm	1 = PEI – Grey
	05	R = Receptacle – front panel mount	2 = 60°	S = Socket – 90° PCB	42 = Blue	0 = No collet**	3 = 5.3 - 6.5 mm	2 = PSU – Black
	06	U = Receptacle – front or back panel mount	3 = 80°	P = Socket – Straight PCB	43 = Red		0 = no collet	3 = PEI – Black
	07	Y = Disposable receptacle – cable mount	4 = 170°		44 = Green			
	08		5 = 205°		45 = Yellow			
	09				46 = White			
	10							
	14							
MPP	02	C	0	F	40	A	1	0

Configured part number example:

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

*Bend relief sold separately
** Panel-mount receptacles only



PRODUCT	CABLE BUNDLE OD (mm)	COLOR
MPS = medi mate strain relief	1 = 2.7 – 3.9	40 = Grey
	2 = 4.0 – 5.2	41 = Black
	3 = 5.3 – 6.5	42 = Blue
		43 = Red
		44 = Green
		45 = Yellow
		46 = White
MPS	1	40

Configured strain relief example:

medi | **mate** strain relief, max. cable bundle OD 3.9mm, Grey