



VITA 87 High Density Circular MT Connectors

ENABLES HIGH SPEED AND BANDWIDTH NEEDED IN A SMALLER SPACE FOR NEXT GENERATION RUGGEDIZED SYSTEMS



HIGH DENSITY

- Can accommodate most next-generation high density ports and mating card slots

EASY

- Standard interconnect system uses 38999 circular backshells

LOWER COST/MAXIMUM AVAILABILITY

- Advantages of VITA 87 and SOSA standardization efforts versus sole sourced products

FLEXIBLE

- Can be used with both standard MT and expanded beam / lensed MT

VERSATILE

- 12 and 24 fiber options available, resulting in potentially the highest density in the industry

MARKETS

- Aerospace
- Ground Based Systems
- Avionics Systems

Description

TE Connectivity (TE)'s VITA 87 Mil Circular 38999 Fiber Optic Interconnect product line offers a much higher density Mil Circular fiber optics option that is more aligned with industry architecture needs. These new architectures require considerably higher density to fit into industry standard card slots. These products will also be a part of global VITA and SOSA standards, ensuring supply and enabling customers to confidently design this product into their next generation systems. VITA 87 fills this need and is a significant improvement over previous offerings.

SPECIFICATIONS

- **Temperature Range:** -40°C to +85°C
- **Mating Durability:** 100 Cycles
- **Random Vibration:** TIA/EIA=455-11
- **Mechanical Shock:** TIA/EIA=455-14

MATERIALS

- **Retainer Plate:** Aluminum
- **Captive Screws:** Stainless Steel
- **Shell Body:** Aluminum
- **Fiber Insert:** Nickel Silver Copper
- **Insert Retaining Ring:** Stainless Steel
- **Interfacial Seal:** Rubber

FINISH

- **Retainer Plate:** Chromate Conversion
- **Captive Screws:** Passivated
- **Shell Body:** Chromate Conversion
- **Insert Retaining Ring:** Passivated

APPLICATIONS

- High density circular mil fiber optics cable assemblies
- High density optical add on / options cards
- High density ruggedized applications in general using Mil std 38999 interface

STANDARDS

- VITA 87
- SOSA

Size 11 Plug and Receptacle



Part Description	Size	Keying
11-1 Plug Connector (1 MT)	11-1	N, A, B
11-1 Wall Mount Receptacle	11-1	N, A, B
11-1 Jamnut Receptacle	11-1	N, A, B

Size 13 Plug and Receptacle



13-2 Plug Connector (2 MT)	13-2	N, A, B
13-2 Wall Mount Receptacle	13-2	N, A, B
13-2 Jamnut Receptacle	13-2	N, A, B

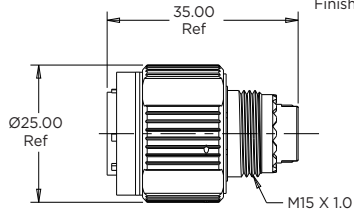
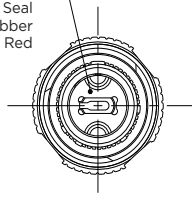
Size 15 Plug and Receptacle



15-4 Plug Connector (4 MT)	15-4	N, A, B
15-4 Wall Mount Receptacle	15-4	N, A, B
15-4 Jamnut Receptacle	15-4	N, A, B

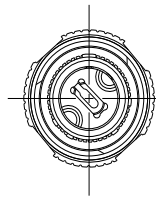
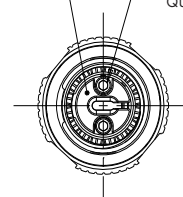
38999 Style Plug, Size 11, 1 Cavity

1 Position MT Fiber Insert
Material: Nickel Silver Copper
Insert Retaining Ring
Material: Stainless Steel
Finish: Passivated
Interfacial Seal
Material: Rubber
Color: Red

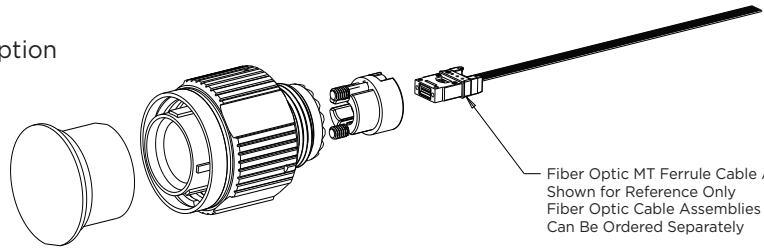


Retainer Plate
Material: Aluminum
Finish: Chromate Conversion

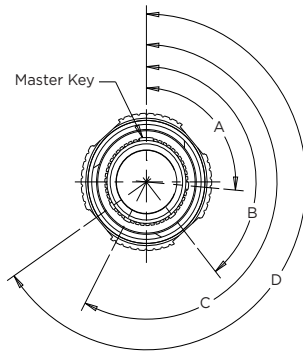
Captive Screws
Material: Stainless Steel
Finish: Passivated
Quantity: 2



45° Insert Option



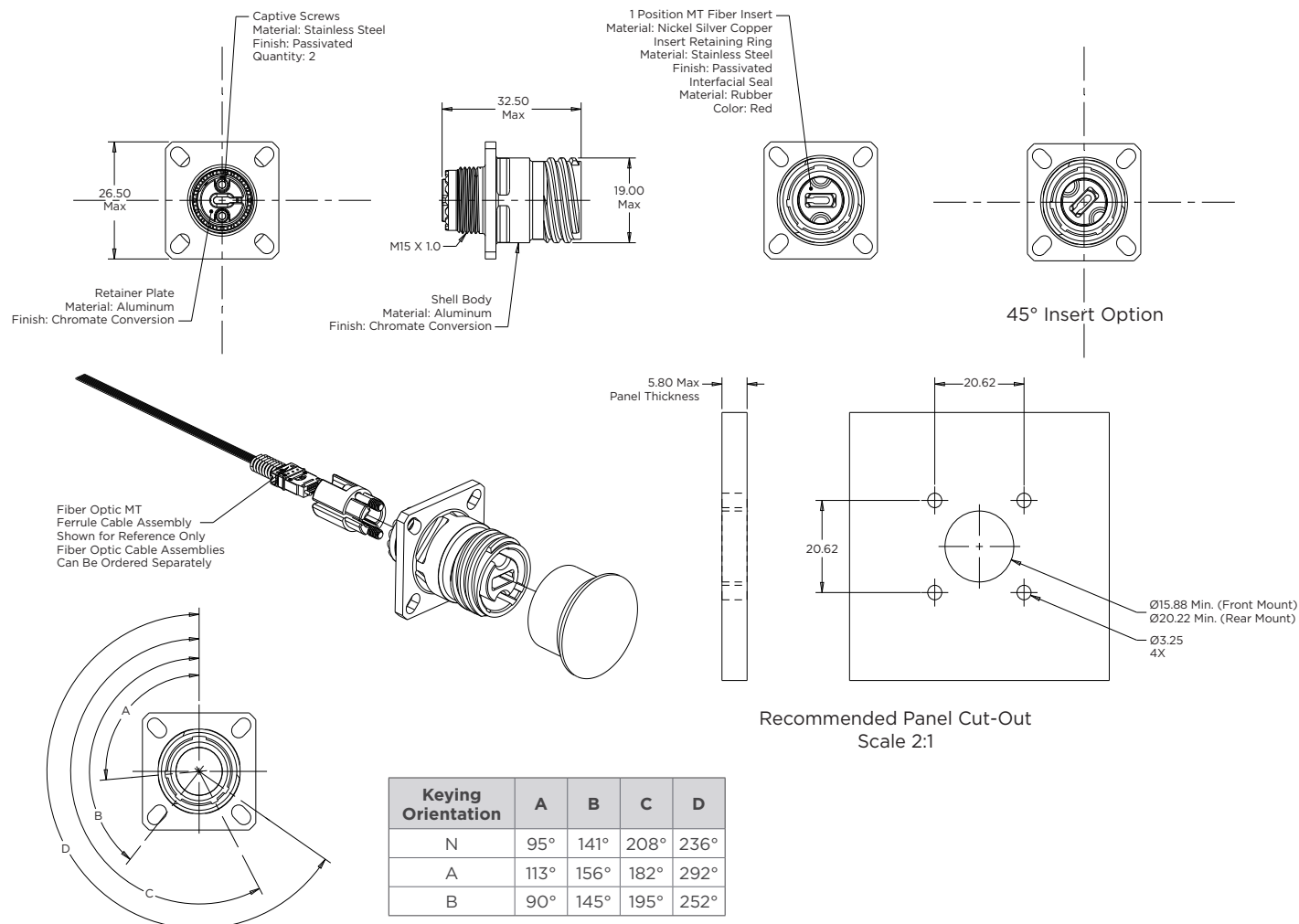
Fiber Optic MT Ferrule Cable Assembly
Shown for Reference Only
Fiber Optic Cable Assemblies
Can Be Ordered Separately



Keying Orientation	A	B	C	D
N	95°	141°	208°	236°
A	113°	156°	182°	292°
B	90°	145°	195°	252°

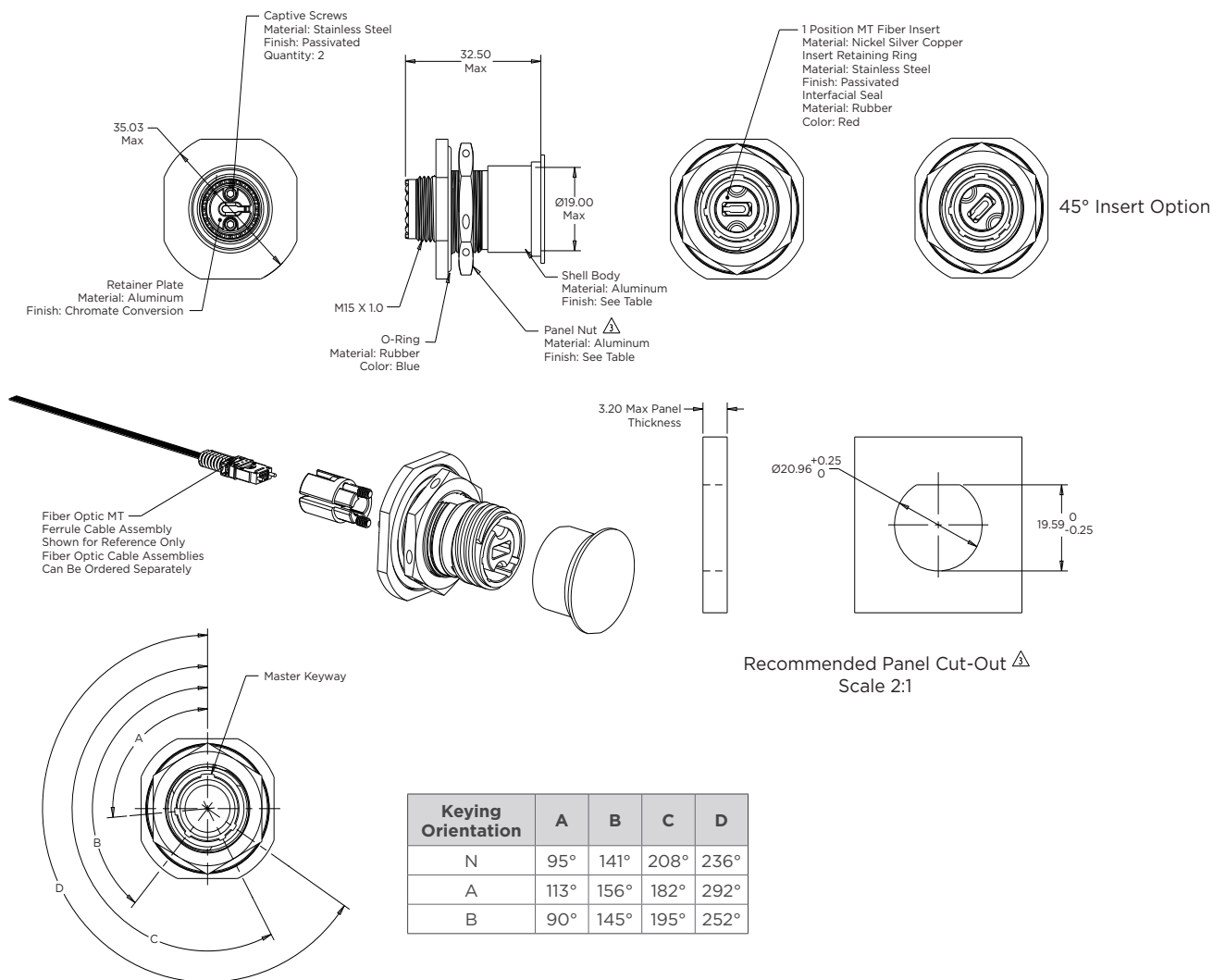
Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2358904-8	Plug Connector Assembly, Size 11	Nickel PTFE	B	45°
1-2358904-7	Plug Connector Assembly, Size 11	Nickel PTFE	B	—
1-2358904-6	Plug Connector Assembly, Size 11	Nickel PTFE	A	45°
1-2358904-5	Plug Connector Assembly, Size 11	Nickel PTFE	A	—
1-2358904-4	Plug Connector Assembly, Size 11	Nickel PTFE	N	45°
1-2358904-3	Plug Connector Assembly, Size 11	Nickel PTFE	N	—
1-2358904-2	Plug Connector Assembly, Size 11	Nickel	B	45°
1-2358904-1	Plug Connector Assembly, Size 11	Nickel	B	—
1-2358904-0	Plug Connector Assembly, Size 11	Olive Drab	B	45°
2358904-9	Plug Connector Assembly, Size 11	Olive Drab	B	—
2358904-8	Plug Connector Assembly, Size 11	Nickel	A	45°
2358904-7	Plug Connector Assembly, Size 11	Nickel	A	—
2358904-6	Plug Connector Assembly, Size 11	Olive Drab	A	45°
2358904-5	Plug Connector Assembly, Size 11	Olive Drab	A	—
2358904-4	Plug Connector Assembly, Size 11	Nickel	N	45°
2358904-3	Plug Connector Assembly, Size 11	Nickel	N	—
2358904-2	Plug Connector Assembly, Size 11	Olive Drab	N	45°
2358904-1	Plug Connector Assembly, Size 11	Olive Drab	N	—

38999 Style Flange Mount Receptacle, Size 11, 1 Cavity



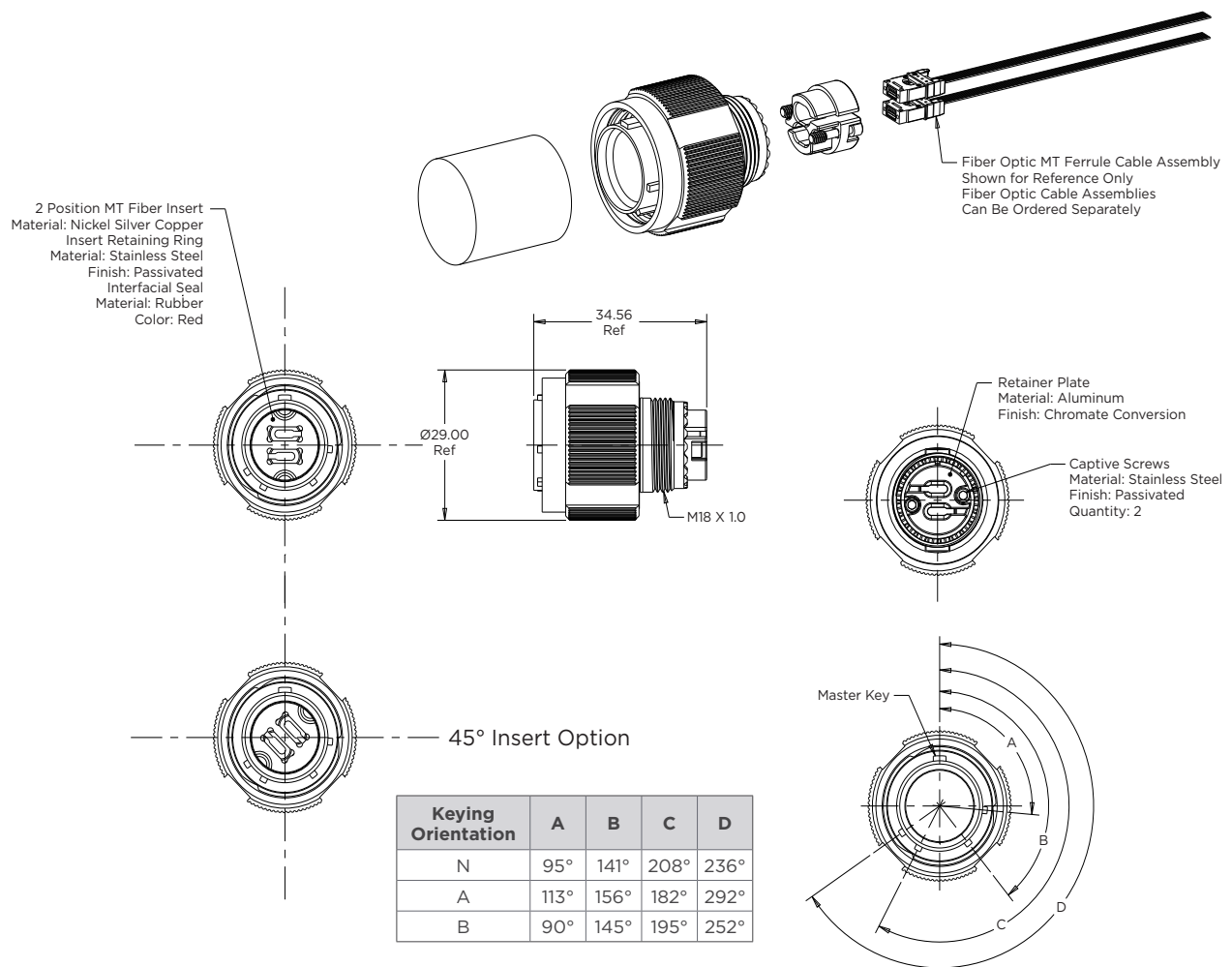
Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2358902-8	Receptacle Connector Assembly, Size 11	Nickel PTFE	B	45°
1-2358902-7	Receptacle Connector Assembly, Size 11	Nickel PTFE	B	—
1-2358902-6	Receptacle Connector Assembly, Size 11	Nickel PTFE	A	45°
1-2358902-5	Receptacle Connector Assembly, Size 11	Nickel PTFE	A	—
1-2358902-4	Receptacle Connector Assembly, Size 11	Nickel PTFE	N	45°
1-2358902-3	Receptacle Connector Assembly, Size 11	Nickel PTFE	N	—
1-2358902-2	Receptacle Connector Assembly, Size 11	Nickel	B	45°
1-2358902-1	Receptacle Connector Assembly, Size 11	Nickel	B	—
1-2358902-0	Receptacle Connector Assembly, Size 11	Olive Drab	B	45°
2358902-9	Receptacle Connector Assembly, Size 11	Olive Drab	B	—
2358902-8	Receptacle Connector Assembly, Size 11	Nickel	A	45°
2358902-7	Receptacle Connector Assembly, Size 11	Nickel	A	—
2358902-6	Receptacle Connector Assembly, Size 11	Olive Drab	A	45°
2358902-5	Receptacle Connector Assembly, Size 11	Olive Drab	A	—
2358902-4	Receptacle Connector Assembly, Size 11	Nickel	N	45°
2358902-3	Receptacle Connector Assembly, Size 11	Nickel	N	—
2358902-2	Receptacle Connector Assembly, Size 11	Olive Drab	N	45°
2358902-1	Receptacle Connector Assembly, Size 11	Olive Drab	N	—

38999 Panel Flange Mount Receptacle, Size 11, 1 Cavity



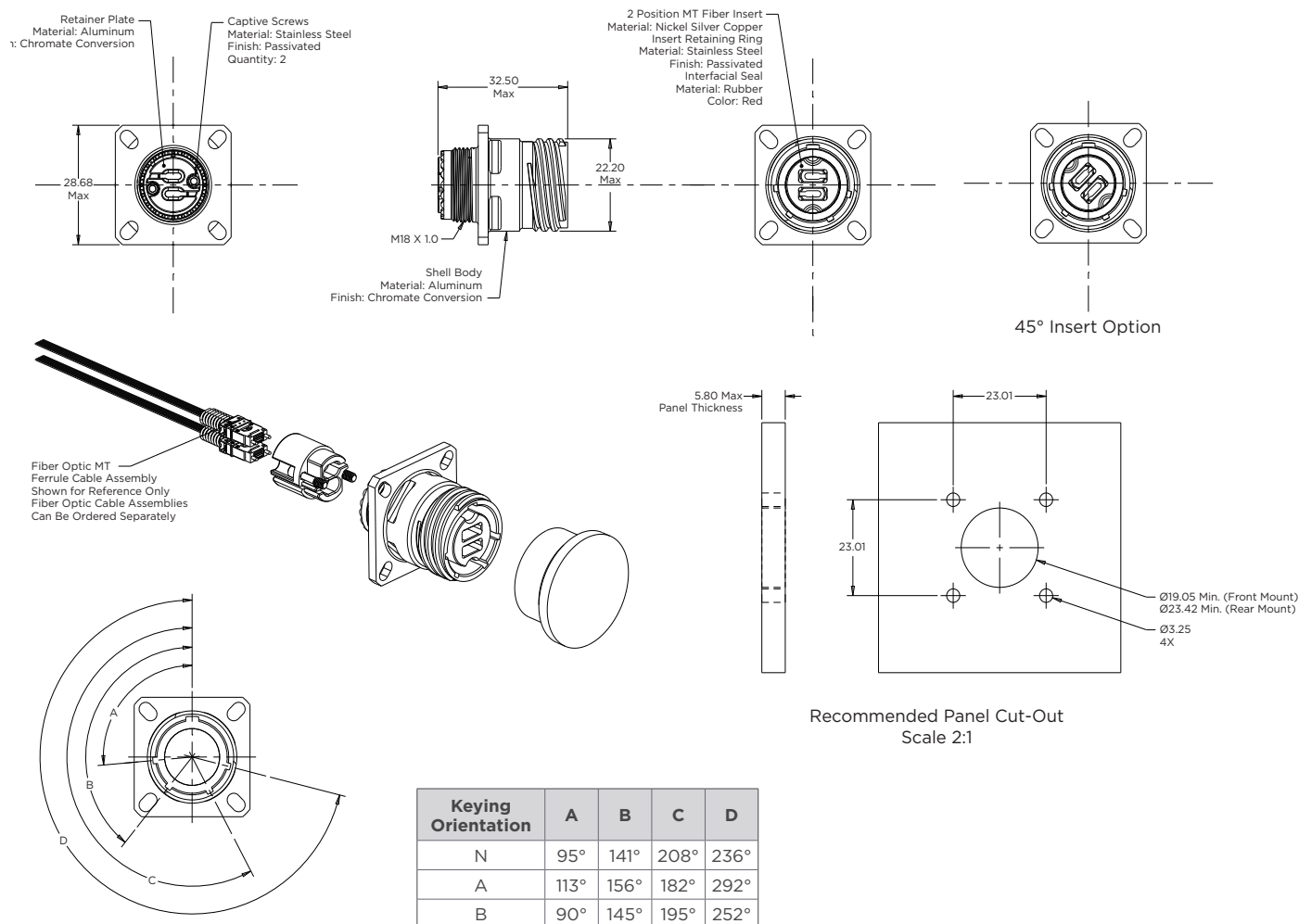
Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2379928-8	Receptacle Connector Assembly, Size 11	Nickel PTFE	B	45°
1-2379928-7	Receptacle Connector Assembly, Size 11	Nickel PTFE	B	—
1-2379928-6	Receptacle Connector Assembly, Size 11	Nickel PTFE	A	45°
1-2379928-5	Receptacle Connector Assembly, Size 11	Nickel PTFE	A	—
1-2379928-4	Receptacle Connector Assembly, Size 11	Nickel PTFE	N	45°
1-2379928-3	Receptacle Connector Assembly, Size 11	Nickel PTFE	N	—
1-2379928-2	Receptacle Connector Assembly, Size 11	Nickel	B	45°
1-2379928-1	Receptacle Connector Assembly, Size 11	Nickel	B	—
1-2379928-0	Receptacle Connector Assembly, Size 11	Olive Drab	B	45°
2379928-9	Receptacle Connector Assembly, Size 11	Olive Drab	B	—
2379928-8	Receptacle Connector Assembly, Size 11	Nickel	A	45°
2379928-7	Receptacle Connector Assembly, Size 11	Nickel	A	—
2379928-6	Receptacle Connector Assembly, Size 11	Olive Drab	A	45°
2379928-5	Receptacle Connector Assembly, Size 11	Olive Drab	A	—
2379928-4	Receptacle Connector Assembly, Size 11	Nickel	N	45°
2379928-3	Receptacle Connector Assembly, Size 11	Nickel	N	—
2379928-2	Receptacle Connector Assembly, Size 11	Olive Drab	N	45°
2379928-1	Receptacle Connector Assembly, Size 11	Olive Drab	N	—

38999 Style Plug, Size 13, 2 Cavity



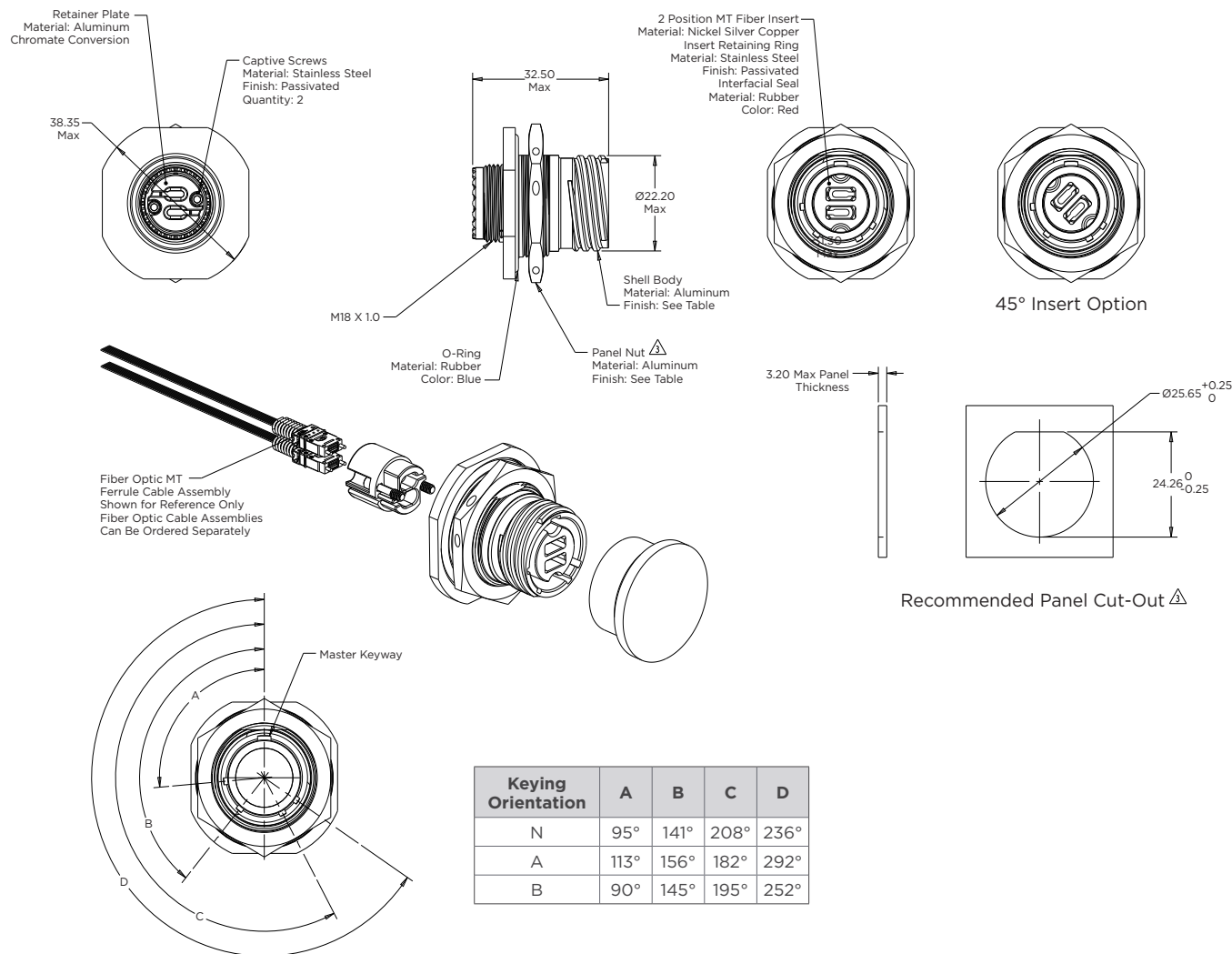
Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2358901-8	Plug Connector Assembly, Size 13	Nickel PTFE	B	45°
1-2358901-7	Plug Connector Assembly, Size 13	Nickel PTFE	B	—
1-2358901-6	Plug Connector Assembly, Size 13	Nickel PTFE	A	45°
1-2358901-5	Plug Connector Assembly, Size 13	Nickel PTFE	A	—
1-2358901-4	Plug Connector Assembly, Size 13	Nickel PTFE	N	45°
1-2358901-3	Plug Connector Assembly, Size 13	Nickel PTFE	N	—
1-2358901-2	Plug Connector Assembly, Size 13	Bright Zinc	B	45°
1-2358901-1	Plug Connector Assembly, Size 13	Bright Zinc	B	—
1-2358901-0	Plug Connector Assembly, Size 13	Olive Drab	B	45°
2358901-9	Plug Connector Assembly, Size 13	Olive Drab	B	—
2358901-8	Plug Connector Assembly, Size 13	Bright Zinc	A	45°
2358901-7	Plug Connector Assembly, Size 13	Bright Zinc	A	—
2358901-6	Plug Connector Assembly, Size 13	Olive Drab	A	45°
2358901-5	Plug Connector Assembly, Size 13	Olive Drab	A	—
2358901-4	Plug Connector Assembly, Size 13	Bright Zinc	N	45°
2358901-3	Plug Connector Assembly, Size 13	Bright Zinc	N	—
2358901-2	Plug Connector Assembly, Size 13	Olive Drab	N	45°
2358901-1	Plug Connector Assembly, Size 13	Olive Drab	N	—

38999 Style Flange Mount Receptacle, Size 13, 2 Cavity



Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2358900-8	Receptacle Connector Assembly, Size 13	Nickel PTFE	B	45°
1-2358900-7	Receptacle Connector Assembly , Size 13	Nickel PTFE	B	—
1-2358900-6	Receptacle Connector Assembly, Size 13	Nickel PTFE	A	45°
1-2358900-5	Receptacle Connector Assembly, Size 13	Nickel PTFE	A	—
1-2358900-4	Receptacle Connector Assembly , Size 13	Nickel PTFE	N	45°
1-2358900-3	Receptacle Connector Assembly, Size 13	Nickel PTFE	N	—
1-2358900-2	Receptacle Connector Assembly, Size 13	Nickel	B	45°
1-2358900-1	Receptacle Connector Assembly , Size 13	Nickel	B	—
1-2358900-0	Receptacle Connector Assembly, Size 13	Olive Drab	B	45°
2358900-9	Receptacle Connector Assembly, Size 13	Olive Drab	B	—
2358900-8	Receptacle Connector Assembly, Size 13	Nickel	A	45°
2358900-7	Receptacle Connector Assembly , Size 13	Nickel	A	—
2358900-6	Receptacle Connector Assembly, Size 13	Olive Drab	A	45°
2358900-5	Receptacle Connector Assembly, Size 13	Olive Drab	A	—
2358900-4	Receptacle Connector Assembly, Size 13	Nickel	N	45°
2358900-3	Receptacle Connector Assembly , Size 13	Nickel	N	—
2358900-2	Receptacle Connector Assembly, Size 13	Olive Drab	N	45°
2358900-1	Receptacle Connector Assembly, Size 13	Olive Drab	N	—

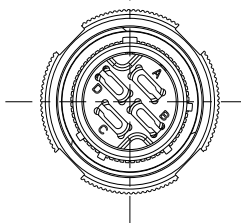
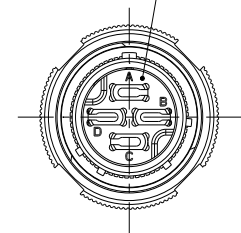
38999 Style Panel Mount Receptacle, Size 13, 2 Cavity



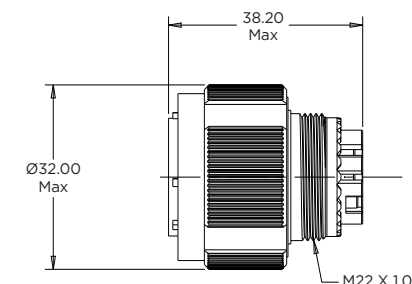
Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2379927-8	Plug Connector Assembly, Size 13	Nickel PTFE	B	45°
1-2379927-7	Plug Connector Assembly, Size 13	Nickel PTFE	B	—
1-2379927-6	Plug Connector Assembly, Size 13	Nickel PTFE	A	45°
1-2379927-5	Plug Connector Assembly, Size 13	Nickel PTFE	A	—
1-2379927-4	Plug Connector Assembly, Size 13	Nickel PTFE	N	45°
1-2379927-3	Plug Connector Assembly, Size 13	Nickel PTFE	N	—
1-2379927-2	Plug Connector Assembly, Size 13	Nickel	B	45°
1-2379927-1	Plug Connector Assembly, Size 13	Nickel	B	—
1-2379927-0	Plug Connector Assembly, Size 13	Olive Drab	B	45°
2379927-9	Plug Connector Assembly, Size 13	Olive Drab	B	—
2379927-8	Plug Connector Assembly, Size 13	Nickel	A	45°
2379927-7	Plug Connector Assembly, Size 13	Nickel	A	—
2379927-6	Plug Connector Assembly, Size 13	Olive Drab	A	45°
2379927-5	Plug Connector Assembly, Size 13	Olive Drab	A	—
2379927-4	Plug Connector Assembly, Size 13	Nickel	N	45°
2379927-3	Plug Connector Assembly, Size 13	Nickel	N	—
2379927-2	Plug Connector Assembly, Size 13	Olive Drab	N	45°
2379927-1	Plug Connector Assembly, Size 13	Olive Drab	N	—

38999 Style Plug, Size 15, 4 Cavity

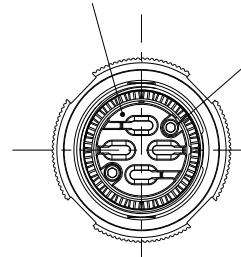
4 Position MT Fiber Insert
Material: Nickel Silver Copper
Insert Retaining Ring
Material: Stainless Steel
Finish: Passivated
Interfacial Seal
Material: Rubber
Color: Red



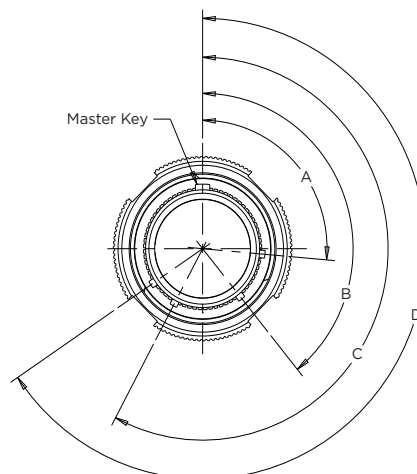
45° Insert Option



Retainer Plate
Material: Aluminum
Finish: Chromate Conversion



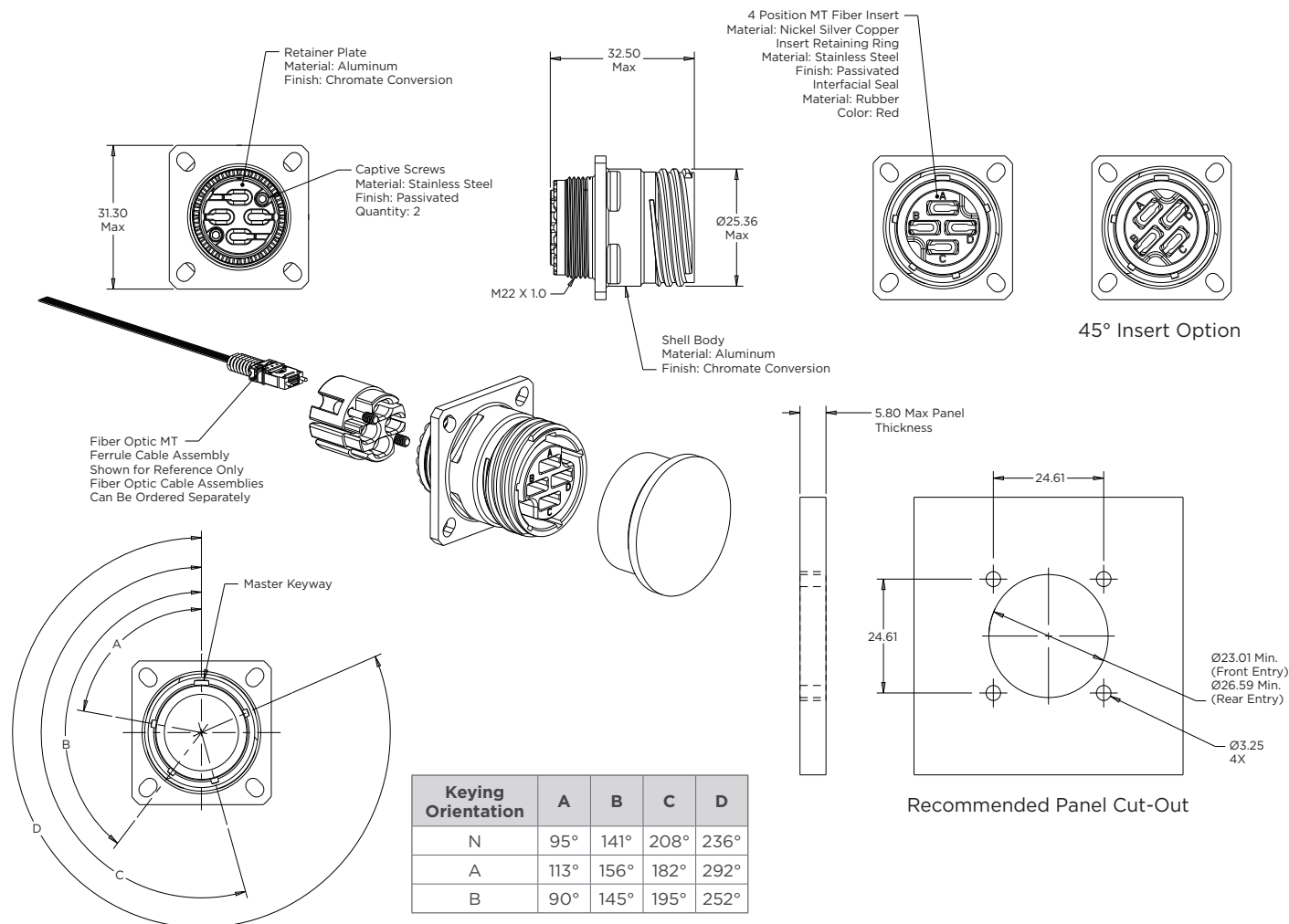
Captive Screws
Material: Stainless Steel
Finish: Passivated
Quantity: 2



Keying Orientation	A	B	C	D
N	95°	141°	208°	236°
A	113°	156°	182°	292°
B	90°	145°	195°	252°

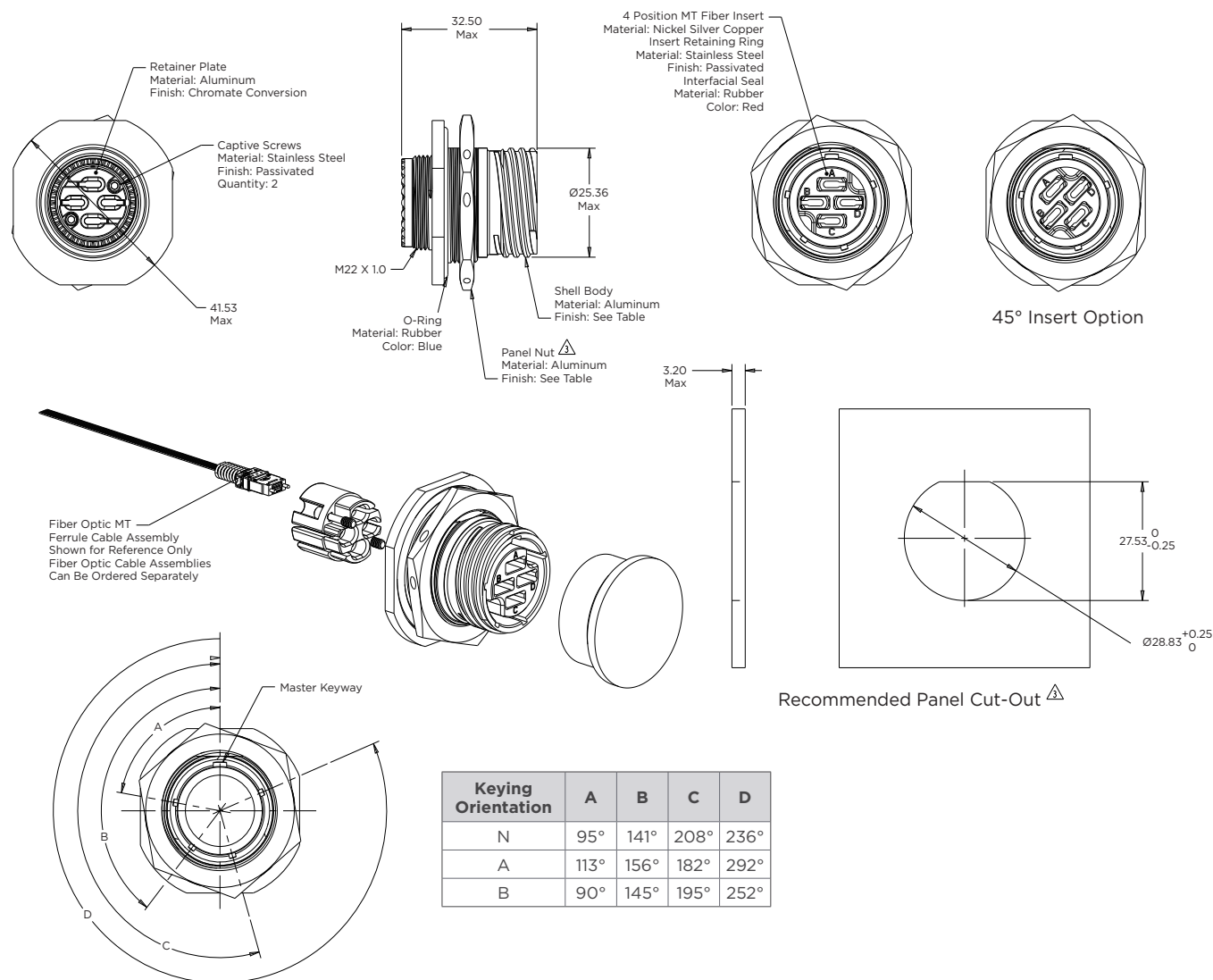
Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2358899-8	Plug Connector Assembly, Size 15	Nickel PTFE	B	45°
1-2358899-7	Plug Connector Assembly, Size 15	Nickel PTFE	B	—
1-2358899-6	Plug Connector Assembly, Size 15	Nickel PTFE	A	45°
1-2358899-5	Plug Connector Assembly, Size 15	Nickel PTFE	A	—
1-2358899-4	Plug Connector Assembly, Size 15	Nickel PTFE	N	45°
1-2358899-3	Plug Connector Assembly, Size 15	Nickel PTFE	N	—
1-2358899-2	Plug Connector Assembly, Size 15	Nickel	B	45°
1-2358899-1	Plug Connector Assembly, Size 15	Nickel	B	—
1-2358899-0	Plug Connector Assembly, Size 15	Olive Drab	B	45°
2358899-9	Plug Connector Assembly, Size 15	Olive Drab	B	—
2358899-8	Plug Connector Assembly, Size 15	Nickel	A	45°
2358899-7	Plug Connector Assembly, Size 15	Nickel	A	—
2358899-6	Plug Connector Assembly, Size 15	Olive Drab	A	45°
2358899-5	Plug Connector Assembly, Size 15	Olive Drab	A	—
2358899-4	Plug Connector Assembly, Size 15	Nickel	N	45°
2358899-3	Plug Connector Assembly, Size 15	Nickel	N	—
2358899-2	Plug Connector Assembly, Size 15	Olive Drab	N	45°
2358899-1	Plug Connector Assembly, Size 15	Olive Drab	N	—

38999 Style Flange Mount Receptacle, Size 15, 4 Cavity



Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2358897-8	Receptacle Connector Assembly, Size 15	Nickel PTFE	B	45°
1-2358897-7	Receptacle Connector Assembly, Size 15	Nickel PTFE	B	—
1-2358897-6	Receptacle Connector Assembly, Size 15	Nickel PTFE	A	45°
1-2358897-5	Receptacle Connector Assembly, Size 15	Nickel PTFE	A	—
1-2358897-4	Receptacle Connector Assembly, Size 15	Nickel PTFE	N	45°
1-2358897-3	Receptacle Connector Assembly, Size 15	Nickel PTFE	N	—
1-2358897-2	Receptacle Connector Assembly, Size 15	Nickel	B	45°
1-2358897-1	Receptacle Connector Assembly, Size 15	Nickel	B	—
1-2358897-0	Receptacle Connector Assembly, Size 15	Olive Drab	B	45°
2358897-9	Receptacle Connector Assembly, Size 15	Olive Drab	B	—
2358897-8	Receptacle Connector Assembly, Size 15	Nickel	A	45°
2358897-7	Receptacle Connector Assembly, Size 15	Nickel	A	—
2358897-6	Receptacle Connector Assembly, Size 15	Olive Drab	A	45°
2358897-5	Receptacle Connector Assembly, Size 15	Olive Drab	A	—
2358897-4	Receptacle Connector Assembly, Size 15	Nickel	N	45°
2358897-3	Receptacle Connector Assembly, Size 15	Nickel	N	—
2358897-2	Receptacle Connector Assembly, Size 15	Olive Drab	N	45°
2358897-1	Receptacle Connector Assembly, Size 15	Olive Drab	N	—

38999 Style Panel Mount Receptacle, Size 15, 4 Cavity



Assembly Part Number	Description	Finish (Shell and Nut)	Keying Orientation (See Detail)	Insert Orientation
1-2379812-8	Receptacle Connector Assembly, Size 15	Nickel PTFE	B	45°
1-2379812-7	Receptacle Connector Assembly, Size 15	Nickel PTFE	B	—
1-2379812-6	Receptacle Connector Assembly, Size 15	Nickel PTFE	A	45°
1-2379812-5	Receptacle Connector Assembly, Size 15	Nickel PTFE	A	—
1-2379812-4	Receptacle Connector Assembly, Size 15	Nickel PTFE	N	45°
1-2379812-3	Receptacle Connector Assembly, Size 15	Nickel PTFE	N	—
1-2379812-2	Receptacle Connector Assembly, Size 15	Nickel	B	45°
1-2379812-1	Receptacle Connector Assembly, Size 15	Nickel	B	—
1-2379812-0	Receptacle Connector Assembly, Size 15	Olive Drab	B	45°
2379812-9	Receptacle Connector Assembly, Size 15	Olive Drab	B	—
2379812-8	Receptacle Connector Assembly, Size 15	Nickel	A	45°
2379812-7	Receptacle Connector Assembly, Size 15	Nickel	A	—
2379812-6	Receptacle Connector Assembly, Size 15	Olive Drab	A	45°
2379812-5	Receptacle Connector Assembly, Size 15	Olive Drab	A	—
2379812-4	Receptacle Connector Assembly, Size 15	Nickel	N	45°
2379812-3	Receptacle Connector Assembly, Size 15	Nickel	N	—
2379812-2	Receptacle Connector Assembly, Size 15	Olive Drab	N	45°
2379812-1	Receptacle Connector Assembly, Size 15	Olive Drab	N	—

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CONNECT WITH US

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QUALITY STARTS WITH THE RIGHT APPLICATION TOOLING

Creating a quality crimp connection is essential to delivering high performance and reliability in extreme environments. From low to high volume wire processing, TE has you covered with a full range of application tooling and a global field service team.

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- [Connect with our experts to find the right tool for your application](#)

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VITA 87 High Density Circular MT Connectors

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