



# FORGE DRAWER CONNECTORS

# Modular Power Interconnects

TE Connectivity's (TE) new FORGE drawer connectors are modular power interconnects for designers of power systems and electrical hardware, including data communications applications.

Engineers often have difficulty finding exactly the right housing and contact type for power connect applications. The FORGE drawer line's modular tooling platform provides a wide variety of different configuration possibilities. A single housing can have up to 10 modules with the flexibility to use one of five different contact types in each module. This flexibility enables customers to get a perfect fit for their application every time, without having to compromise by using housings that are not a match, and without the cost and lead-times associated with tooling new housings every time a new configuration is needed.

### **Applications:**

- Data centers
- Industrial
- Energy
- Medical

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#### Mechanical

- Insertion force (max): 16.8N
- Extraction force (max): 10.6N
- Operating temperature: -40°C to 105°C
- Durability: 250 cycles minimum

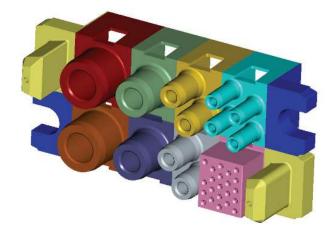
### **Electrical**

- Current rating: refer to Figure 1 of Product Specification
- Temperature rise vs current: 30°C and 50°C maximum T-rise at specified current
- Voltage rating, size #22 signal contacts: 50V AC
- Voltage rating, power contacts: 250V AC
- Higher voltage configurations available contact TE for details
- Insulation Resistance: 5000 MΩ minimum

### **Specifications**

Application Specification # 114-13299 Product Specification # 108-2323

### Product example with all five module types







### **Key Features**

# Greater modularity supports evolving design trends

- TE offers the broadest portfolio
- Available configurations include 2x2 through 2x5, as well as a 1x5 configuration
- In each module, any one of the five different contact types can be used, ranging from very high power (size #0) to signal contacts (size #22)

# Cost efficient design saves time and money

- New size #0 and size #4 touch-proof pin contact designs
- No need to waste time and money on new tooling or lead time for new parts

# Ability to use existing tooling and contacts makes it easy to use

- Leverage existing infrastructure of application tooling that is widely deployed throughout the market
- Compatible -- used with existing and commonly used contacts

### **FORGE Drawer Assembly Configurations**

CONFIGURATION	MODULAR ASSIGNMENT	ТҮРЕ	PART NUMBER
		Pin Housing	2212282-1
1x5	single row = 0,0,0,0,0	Socket Housing	2212284-1
	lower row = 4,4	Pin Housing	2212243-1
2x2		Socket Housing	2212245-1
	lower row = 0,0,0 upper row = 0,0,0	Pin Housing	2212254-1
2x3		Socket Housing	2212256-1
	lower row = 4,12,22 upper row = 4,12,12	Pin Housing	2212174-1
2x3		Socket Housing	2212173-1
0.7	lower row = 0,0,22	Pin Housing	2212305-1
2x3	upper row = 0,0,22	Socket Housing	2212307-1
0.7	lower row = 4,4,4	Pin Housing	2212309-1
2x3	upper row = 4,4,4	Socket Housing	2212311-1
	lower row = 0,4,4,22 upper row = 0,4,4,12	Pin Housing	2212320-1
2x4		Socket Housing	2212327-1
	lower row = 4,22,4,4 upper row = 4,22,4,4	Pin Housing	2212290-1
2x4		Socket Housing	2212292-1
2x4	lower row = 4,4,4,12 upper row = 4,4,4,12	Pin Housing	2212367-1
		Socket Housing	2212369-1
0.5	lower row = 0,0,0,4,8	Pin Housing	2212172-1
2x5	upper row = 0,0,0,4,4	Socket Housing	2212171-1
0.5	lower row = 0,0,0,4,12	Socket Housing Pin Housing Pin Housing Pin Housing	2212329-1
2x5	upper row = 0,0,0,4,4		2212331-1
0.5	lower row = 0,4,4,8,12	Pin Housing	2212250-1
2x5	upper row = 0.4.4.8.12	Socket Housing	2212252-1
27.5	lower row = 0,4,8,12,22 upper row = 0,4,8,12,22	Pin Housing	2212339-1
2x5		Socket Housing	2212341-1
2x5	lower row = 0,0,0,4,4 upper row = 0,0,0,4,4	Pin Housing	2212170-1
		Socket Housing	2212169-1
2x5	lower row = 0,0,22,4,4 upper row = 0,0,22,4,4	Pin Housing	2212293-1
		Socket Housing	2212295-1
25	lower row = 0,0,8,8,22	Pin Housing	2212301-1
2x5	upper row = 0,0,8,8,22	Socket Housing	2212303-1

#### **Contacts**

- Contacts				
SIZE	ТҮРЕ	DESCRIPTION	PART NUMBER	
Size O	Pin	Standard, Crimp Termination	1766811-1	
Size O	Pin	Probe-proof, Crimp Termination	2212374-1	
Size O	Socket	Standard, Crimp Termination	6648405-1	
Size 4	Pin	Standard, Crimp Termination	1766232-1	
Size 4	Pin	Post-Mate, Crimp Termination	2212216-1	
Size 4	Pin	Probe-proof, Crimp Termination	2212372-1	
Size 4	Socket	Standard, Crimp Termination	6648434-1	
Size 8	Pin	.125 POWERBAND Pin, Standard	213840-8	
Size 8	Pin	.125 POWERBAND Pin, Pre-Mate	1-213840-0	
Size 8	Socket	.125 POWERBAND Socket	213843-7	
Size 12	Pin	Crimp, Standard	1766193-1	
Size 12	Pin	Crimp, Pre-Mate	1766195-1	
Size 12	Pin	Crimp, Post-Mate	1766196-1	
Size 12	Socket	Crimp	6648318-1	
Size 12	Socket	Hot-Plug Crimp	1648384-1	
Size 22	Pin	HDP-22 crimp-snap pin	1658670-2	
Size 22	Socket	HDP-22 crimp-snap socket	1658686-2	

Contact TE with requests for other housing configurations.

# **Associated Content**

2-Piece Power Connectors Quick Reference Guide (Doc # 4-17773458-1)

Bus Bar Connectivity Quick Reference Guide (<u>Doc # 1-1773701-9</u>)

## For More Information

### **TE Technical Support Center**

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