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

te.com/products/FORGEdrawer

Mechanical

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

Electrical

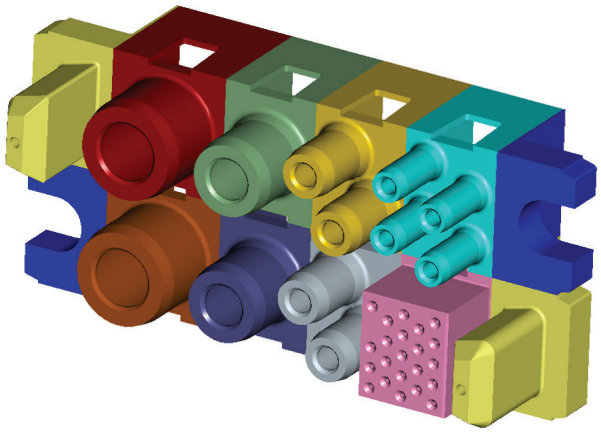
- Current rating: refer to Figure 1 of Product Specification
- Temperature rise vs current: 30°C and 50°C maximum T-rise at specified current
- Voltage rating, size #22 signal contacts: 50V AC
- Voltage rating, power contacts: 250V AC
- Higher voltage configurations available - contact TE for details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

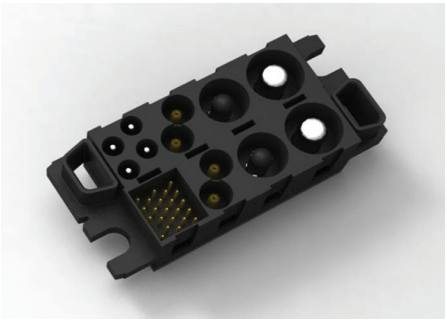
Specifications

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	TYPE	PART NUMBER
1x5	single row = 0,0,0,0,0	Pin Housing	2212282-1
		Socket Housing	2212284-1
2x2	lower row = 4,4 upper row = 4,4	Pin Housing	2212243-1
		Socket Housing	2212245-1
2x3	lower row = 0,0,0 upper row = 0,0,0	Pin Housing	2212254-1
		Socket Housing	2212256-1
2x3	lower row = 4,12,22 upper row = 4,12,12	Pin Housing	2212174-1
		Socket Housing	2212173-1
2x3	lower row = 0,0,22 upper row = 0,0,22	Pin Housing	2212305-1
		Socket Housing	2212307-1
2x3	lower row = 4,4,4 upper row = 4,4,4	Pin Housing	2212309-1
		Socket Housing	2212311-1
2x4	lower row = 0,4,4,22 upper row = 0,4,4,12	Pin Housing	2212320-1
		Socket Housing	2212327-1
2x4	lower row = 4,22,4,4 upper row = 4,22,4,4	Pin Housing	2212290-1
		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
2x5	lower row = 0,0,0,4,8 upper row = 0,0,0,4,4	Pin Housing	2212172-1
		Socket Housing	2212171-1
2x5	lower row = 0,0,0,4,12 upper row = 0,0,0,4,4	Pin Housing	2212329-1
		Socket Housing	2212331-1
2x5	lower row = 0,4,4,8,12 upper row = 0,4,4,8,12	Pin Housing	2212250-1
		Socket Housing	2212252-1
2x5	lower row = 0,4,8,12,22 upper row = 0,4,8,12,22	Pin Housing	2212339-1
		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
2x5	lower row = 0,0,8,8,22 upper row = 0,0,8,8,22	Pin Housing	2212301-1
		Socket Housing	2212303-1

Contacts

SIZE	TYPE	DESCRIPTION	PART NUMBER
Size 0	Pin	Standard, Crimp Termination	1766811-1
Size 0	Pin	Probe-proof, Crimp Termination	2212374-1
Size 0	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 (Doc # 1-1773701-9)

For More Information

TE Technical Support Center

USA:	1.800.522.6752
Canada:	1 .905.475.6222
Mexico:	52.0.55.1106.0800
Latin/S. America:	54.0.11.4733.2200
Germany:	49.0.6251.133.1999
UK:	44.0.800.267666
France:	33.0.1.3420.8686
Netherlands:	31.0.73.6246.999
China:	86.0.400.820.6015

te.com/products/FORGEdrawer

3-1773463-3 01/16 DND