

power fast



TURCK
works.

***power
fast***[™]
CONNECTIVITY

....Sense It!....Connect It!....Bus It!....Solve It!™

www.turck.us

QUICK DISCONNECT **POWER** DISTRIBUTION

WHY CHOOSE *powerfast*™ CONNECTIVITY SOLUTIONS?

COST SAVINGS

- Decrease labor costs by up to 40% over traditional conduit installations
- Reduce the time it takes to install and commission the system

QUALITY PRODUCTS AND SERVICE

- High quality design and materials
- UL approved products
- Robust and reliable environmentally protected connectors
- Superior customer service and product support

ANYONE CAN INSTALL THE SYSTEM

- Professional installations are not required
- Connectors are keyed to avoid installation errors
- Eliminate concerns for mis-wiring

EASY TO RETROFIT

- Modular cordset system
- Easy to maintain and modify on the plant floor
- Cordsets, receptacles and tees provide design flexibility
- Easy customization and expandability

WHERE CAN YOU USE *powerfast*™ CONNECTIVITY SOLUTIONS?

- Motor, heaters, lights and many other electrical devices
- Ideal for conveyor and material handling industries
- New system installations
- Retrofitting existing conduit installations



COMMAND YOUR **POWER** CONNECTION



IP67, IP68 and IP69K robust and reliable overmolded connectors are capable of holding up to the harshest environments.

BLident RFID transceivers read and write data on-the-fly and are available with a variety of ranges.

Non-contact **proximity sensors** are available in a variety of housing styles.

powerfast connectors are not intended for disconnection while under load. Use TURCK's tool removable **powerlok** guards to prevent any accidental disconnection. These locking guards are not required but offer reliable protection.



RFID controllers are machine-mountable and available for many network protocols.

Receptacles are ideal for supplying power from a panel or supplying power to a device.



Quick disconnect connectors are keyed for quick installations while providing easy maintenance and rapid change out.

Multiple power connector sizes are available.



D-Size 1 3/8" Power Up to 30 Amps	A-Size 7/8" Power Up to 15 Amps	M16 Power Up to 15 Amps
--------------------------------------	------------------------------------	----------------------------

Closure caps may be used to protect unused connectors from damage or dirt.



Standard tees are ideal for splitting main power trunk.



Reducer tees are ideal for drops to devices with reduced electrical demands.



Tray-rated exposed-run cable meets code requirements and replaces hard wiring and conduit.

TURCK's **powerfast** will easily adapt to your design requirements

Closure caps may be used to protect unused connectors from damage or dirt.



Reducer tees are ideal for drops to devices with reduced electrical demands.



Power reducers are ideal for drop to the last motor.

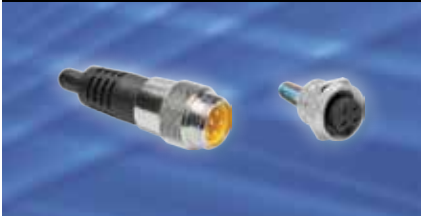


**Need to keep up with
your application demands?**



POWER QUICK REFERENCE

A-Size 7/8" powerfast



- 3- and 4-pin
- **14 AWG** conductors
- Tray rated-exposed run PVC cable
- STOOW cable available
- Up to **15 Amp**, 600 Volt rated
- NEMA 1,3,4,6P protection
- IEC IP67 protection

D-Size 1 3/8" powerfast



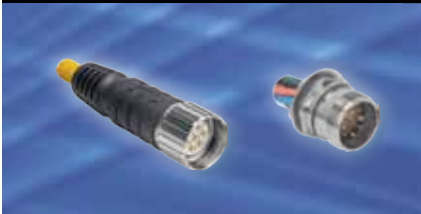
- 3- and 4-pin
- **10 to 14 AWG** conductors
- Tray rated-exposed run PVC cable
- STOOW cable available
- Up to **30 Amp**, 600 Volt rated
- NEMA 1,3,4,6P protection
- IEC IP67, IP68, IP69K protection

M16 powerfast



- 2- and 4-pin
- **12 and 14 AWG** conductors
- Shielded versions available
- Tray rated-exposed run PVC cable
- Up to **18 Amp**, 600 Volt rated
- IEC IP67 protection

M23 powerfast



- 6- to 9-pin
- **12 to 14 AWG** conductors for power, **18 AWG** conductors for signal
- Shielded versions available
- AWM or tray rated-exposed run PVC cable
- Up to **30 Amp**, 300 and 600 Volt rated
- IEC IP67 protection

A-Size 7/8" *powerfast*

3

D-Size 1 3/8" *powerfast*

9

M16 *powerfast*

25

M23 *powerfast*

41

Index

47

APPLICATION CONSIDERATIONS

Installation Guidelines

TURCK's powerfast™ products are easy to install by following a few simple guidelines:

- It is important to know the electrical requirements of the application and to select a cordset that has the proper amperage and voltage ratings for the application.
- Cables must be supported to prevent movement on the equipment. Per NFPA 79, the cable must be supported every 12 inches in a non-vertical run, every 36 inches in a vertical run and every 18 inches when suspended in air. The cable should also be supported at any connection points or terminations.

Note: Consult NFPA 79 (Electrical Standard for Industrial Machinery) for required over current protection of conductors and other selection and installation guidelines for industrial machine applications.

- The cordsets are not intended for disconnection under load. TURCK offers **powerlok** fittings that prevent the possibility of disconnection. These fittings are not required for use, but can be used as a precautionary measure.
- Power should never be supplied from the male connector. The source of power should always be supplied from the female connector.
- Use TURCK closure caps to protect connectors from damage or dirt when not connected.

Cable Options

TURCK offers multiple cable options for the **powerfast** products. The majority of TURCK's **powerfast** products use cables that carry a tray rated, exposed run (TC-ER) approval. Select TURCK **powerfast** products may carry an additional STOOW cable approval, although versions that carry the STOOW and TC-ER approval are also available as TC-ER only.

Both the STOOW/TC-ER cable and the TC-ER only cable version are premium cable offerings, however, the TC-ER only version has a slightly reduced cable outer diameter. This feature offers more flexibility and is a more cost effective solution. This cable option can be designated by adding a "/S4000" to the end of the part description where applicable.

Estimated hp ratings for D-Size powerfast

(Based on 85% motor efficiency and 90% power factor.)

Single Phase (2 Current Carrying Conductors)				
Pin Count	AWG	Current (amps)	Voltage (volts)	Power (hp)
3-pin	10 AWG	30	230	7
			460	14
			575	17
	12 AWG	25	230	5
			460	11
			575	14
	14 AWG	18	230	4
			460	8
			575	10

Three Phase (3 Current Carrying Conductors)				
Pin Count	AWG	Current (amps)	Voltage (volts)	Power (hp)
4-pin	10 AWG	25	230	10
			460	20
			575	25
	12 AWG	20	230	8
			460	16
			575	20
	14 AWG	15	230	6
			460	12
			575	15

Note: These tables are theoretical values and are for reference only. Values will vary based on load conditions, as well as condition, age and type of motor. Please consult a qualified electrician for specific product sizing requirements. Current limits for conductor gauge size taken from NFPA 79 2007 edition.

A-SIZE 7/8" *powerfast*™ CONNECTIVITY

Part Number Keys	4
Cordset and Receptacle Specifications	5
Cordset and Receptacle Selection Matrix	5
Cordset and Receptacle Dimensions	6
Cordset and Receptacle Pinouts	6
Closure Caps	7
<i>powerlok</i> Accessories	8

Features

- Ideal for small motor applications
- 3 and 4-pin
- 14 AWG conductors
- Up to 15 Amp, 600 Volt rated
- Dual rated TC-ER and STOOV PVC cable
- "/S4000" TC-ER only PVC cable option available
- NEMA 1,3,4,6P protection
- IEC IP67 protection

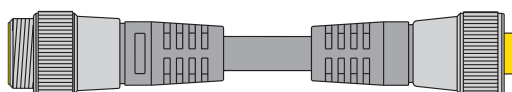


A-Size 7/8" powerfast Cordset Part Number Key

Part Number Keys are to assist in IDENTIFICATION ONLY. Consult factory for catalog items not identified.

R	K	M	34	-	*M	/S..
A-Size 7/8" powerfast Cordset R = straight W = right angle			Varieties (blank) = TC-ER STOOW PVC cable jacket /S4000 = TC-ER PVC cable jacket /S.. = consult factory, special /CS.. = consult factory, special			
Gender K = female connector, female threads S = male connector, male threads Y = male connector, female threads			Length in Meters			
Coupling Nut Material (blank) = nylon M = nickel plated brass V = 316 stainless steel (hex)			Number of Wires / AWG / Color Codes 34 = 3x14 AWG GN, BK, WH 44 = 4x14 AWG BK, WH, RD, GN			
Insertion Point of Extension Cable 2nd Prefix* * Male connector listed 1st, female connector 2nd Example: RSM RKM 44-2M						

Extension Example:



R S M **R K M** **44** - ***M**

A-Size 7/8" powerfast Receptacle Part Number Key

R	K	F	V	34	-	*M	/NPT	/S..
A-Size 7/8" powerfast Receptacle				Varieties /S.. = consult factory, special /CS.. = consult factory, special				
Gender K = female connector, female threads S = male connector, male threads X = female connector, male threads				Connection Thread /NPT = 1/2-14 NPT threads				
Designator for Receptacle				Length in Meters				
Housing Material (blank) = nickel plated brass K = nylon V = 316 stainless steel				Number of Wires / AWG / Color Codes 34 = 3x14 AWG GN, BK, WH 44 = 4x14 AWG BK, WH, RD, GN				

A-Size 7/8" powerfast Cordset Specifications

Mechanical

Mold material/Color:	PUR/Black
Contact carrier material:	PUR
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Nylon 316 stainless steel
Environmental protection:	NEMA 1, 3, 4, 6P and IEC IP67
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Cable jacket material/Color:	
Standard:	TC-ER STOOW PVC/Black
Additional options:	TC-ER PVC/Black (/S4000 version)
Ratings:	15 Amps, 600 VAC



A-Size 7/8" powerfast Receptacle Specifications

Mechanical

Contact carrier material:	PUR
Housing material/Plating:	
Standard:	Nickel plated brass
Additional options:	Nylon 316 stainless steel
Environmental protection:	NEMA 1, 3, 4, 6P and IEC IP67
Temperature rating:	-40 to +105°C (-40 to +221°F)

Electrical

Contact material:	Brass or copper with gold plating
Conductor insulation:	PVC
Ratings:	15 Amps, 600 VAC



A-Size 7/8" powerfast Cordset Selection Matrix

			1 	2 	3 	4 
			Straight Female	Straight Male	Right Angle Female	Right Angle Male
Pins	AWG	Current Rating	TC-ER STOOW	TC-ER STOOW	TC-ER STOOW	TC-ER STOOW
3	14	15	RKM 34-*M	RSM 34-*M		
4	14	15	RKM 44-*M	RSM 44-*M		

Pins	AWG	Current Rating	TC-ER	TC-ER	TC-ER	TC-ER
3	14	15	RKM 34-*M/S4000	RSM 34-*M/S4000	WKM 34-*M/S4000	WSM 34-*M/S4000
4	14	15	RKM 44-*M/S4000	RSM 44-*M/S4000	WKM 44-*M/S4000	WSM 44-*M/S4000

A-Size 7/8" powerfast Receptacle Selection Matrix

Front Mount			5 	6 
			Female	Male
Pins	AWG	Current Rating	1/2-14NPT Mounting Thread	1/2-14NPT Mounting Thread
3	14	15	RKF 34-*M/NPT	RSF 34-*M/NPT
4	14	15	RKF 44-*M/NPT	RSF 44-*M/NPT

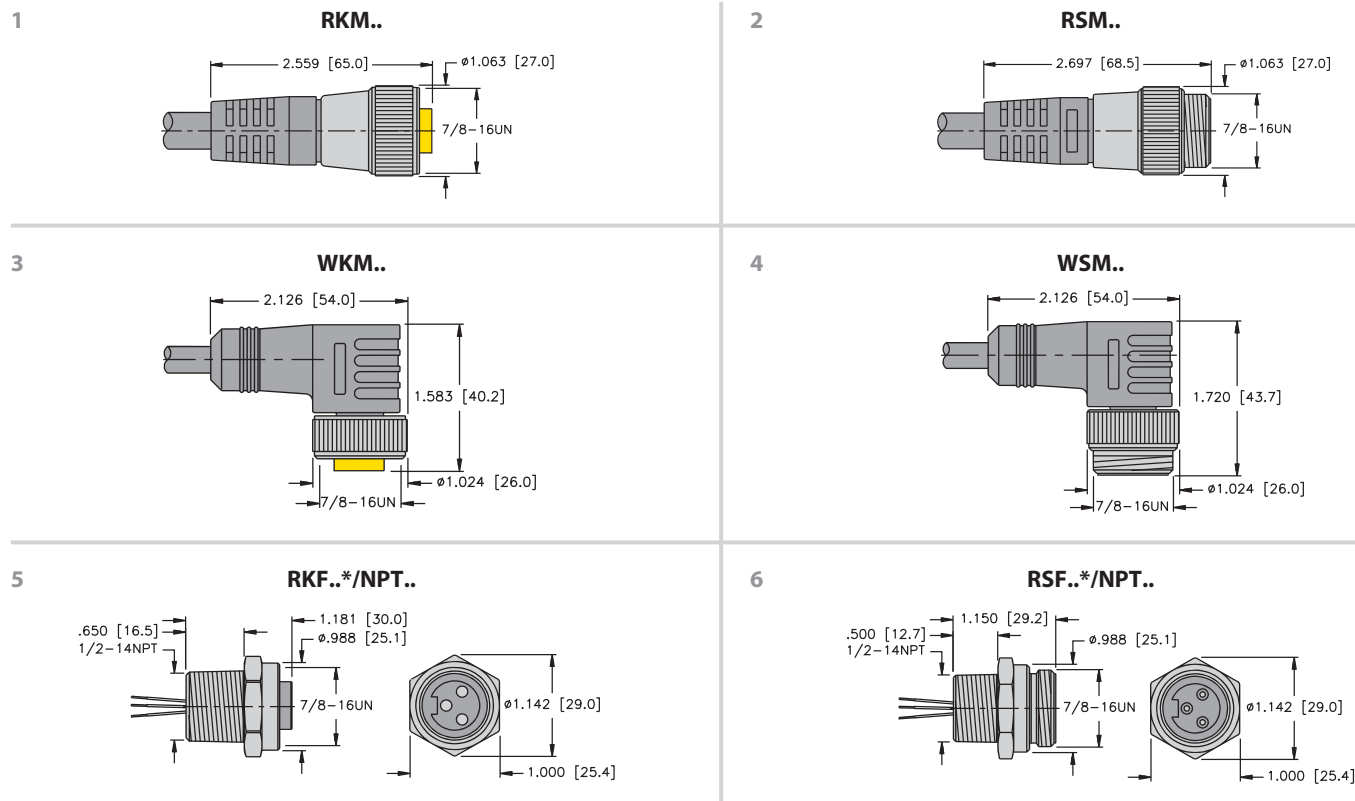
See page 6 for dimensional drawings.

* Length in meters. Standard cable lengths are 2, 5 and 10 meters. Standard lead length is 0.5 meters. Consult factory for other lengths.

Note: Extension cables are available, please consult Part Number Key (page 4).

Standard coupling nut material is nickel plated brass. Consult Part Number Key (page 4) for nylon and 316 stainless steel options.

A-Size 7/8" powerfast Cordset and Receptacle Dimensions



A-Size 7/8" powerfast Cordset and Receptacle Pinouts

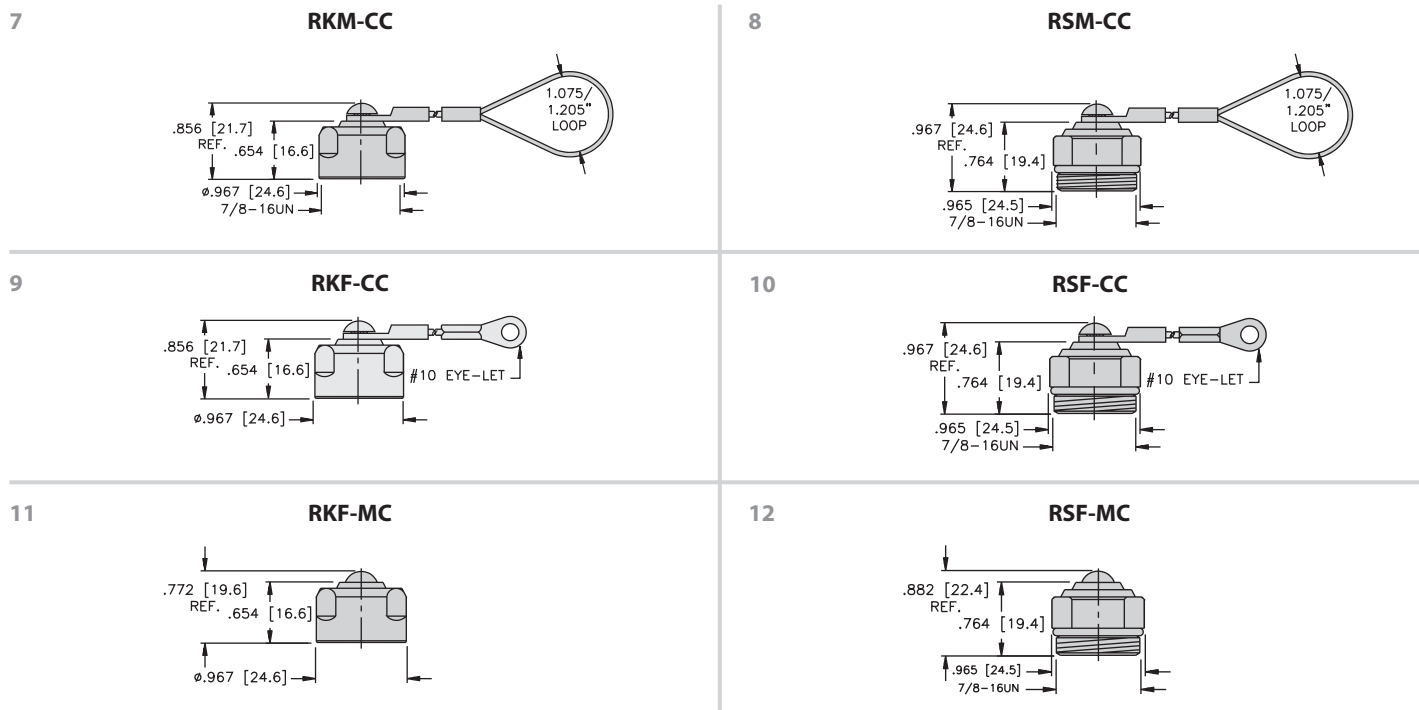
3-Pin		Pinouts	4-Pin		Pinouts
Female	Male		Female	Male	
		1. GN 2. BK 3. WH			1. BK 2. WH 3. RD 4. GN

A-Size 7/8" powerfast Closure Cap Selection Matrix

		7	8	9	10	11	12
		Mates to male cordsets and receptacles	Mates to female cordsets and receptacles	Mates to male receptacles	Mates to female receptacles	Mates to male cordsets and receptacles	Mates to female cordsets and receptacles
Material	Thread	6" SS Loop Lanyard	6" SS Loop Lanyard	6" SS Lanyard with Eyelet	6" SS Lanyard with Eyelet	No Lanyard	No Lanyard
Nickel Plated Brass	7/8-16UN	RKM-CC	RSM-CC	RKF-CC	RSF-CC	RKF-MC	RSF-MC
Stainless Steel	7/8-16UN	RKMV-CC	RSMV-CC	RKFV-CC	RSFV-CC	RKFV-MC	RSFV-MC

See table below for dimensional drawings.

A-Size 7/8" powerfast Closure Cap Dimensions



A-Size 7/8" powerlok

Part Number	Application
LOCK-A POWER	Nylon locking guard for straight A-Size <i>powerfast</i> connectors



A-Size powerlok Open



A-Size powerlok Closed

D-SIZE 1 3/8" *powerfast*™ CONNECTIVITY

Part Number Keys	10
Cordset, Receptacle and Field Wireable Specifications	12
Cordset, Receptacle and Field Wireable Selection Matrix	13
Cordset, Receptacle and Field Wireable Dimensions	15
Cordset, Receptacle and Field Wireable Pinouts	16
Tee Specifications	17
Tee Selection Matrix	17
Power Reducer Specifications	18
Power Reducer Selection Matrix	18
Tee and Power Reducer Dimensions	19
Tee and Power Reducer Wiring Diagrams	21
Tee and Power Reducer Pinouts	22
Closure Caps	23
<i>powerlok</i> Accessories	24

Features

- Ideal for a complete power distribution system
- Tee configurations utilize other *powerfast* family connectors
- 3 and 4-pin
- 10-14 AWG conductors
- Up to 30 Amp, 600 Volt rated
- Dual rated TC-ER and STOOV PVC cable
- "/S4000" TC-ER only PVC cable option available
- NEMA 1,3,4,6P protection
- IEC IP67, IP68, IP69K protection

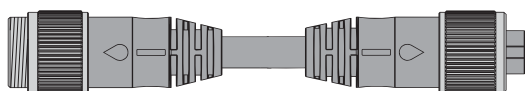


D-Size 1 3/8" powerfast Cordset Part Number Key

Part Number Keys are to assist in IDENTIFICATION ONLY. Consult factory for catalog items not identified.

D-Size 1 3/8" powerfast Cordset	G	S	D	M	30	-	*M	
Gender								
K = female connector, female threads S = male connector, male threads								
D-Size Power								
Configuration								
(blank) = straight W = right angle								
Coupling Nut Material								
A = anodized aluminum M = nickel plated brass V = 316 stainless steel								
					Varieties			
					(blank) = TC-ER STOOW PVC cable jacket /S4000 = TC-ER PVC cable jacket			
					Length in Meters			
					Number of Wires / AWG / Color Codes			
					30 = 3x10 AWG BK, GN, WH 32 = 3x12 AWG BK, GN, WH 34 = 3x14 AWG BK, GN, WH 40 = 4x10 AWG BK, GN, RD, WH 42 = 4x12 AWG BK, GN, RD, WH 44 = 4x14 AWG BK, GN, RD, WH			
Insertion Point of Extension Cable 2nd Prefix*								
* Male connector listed 1st, female connector 2nd Example: GSDM GKDM 30-1M								

Extension Example:



G S D M **G K D M** **30** - ***M**

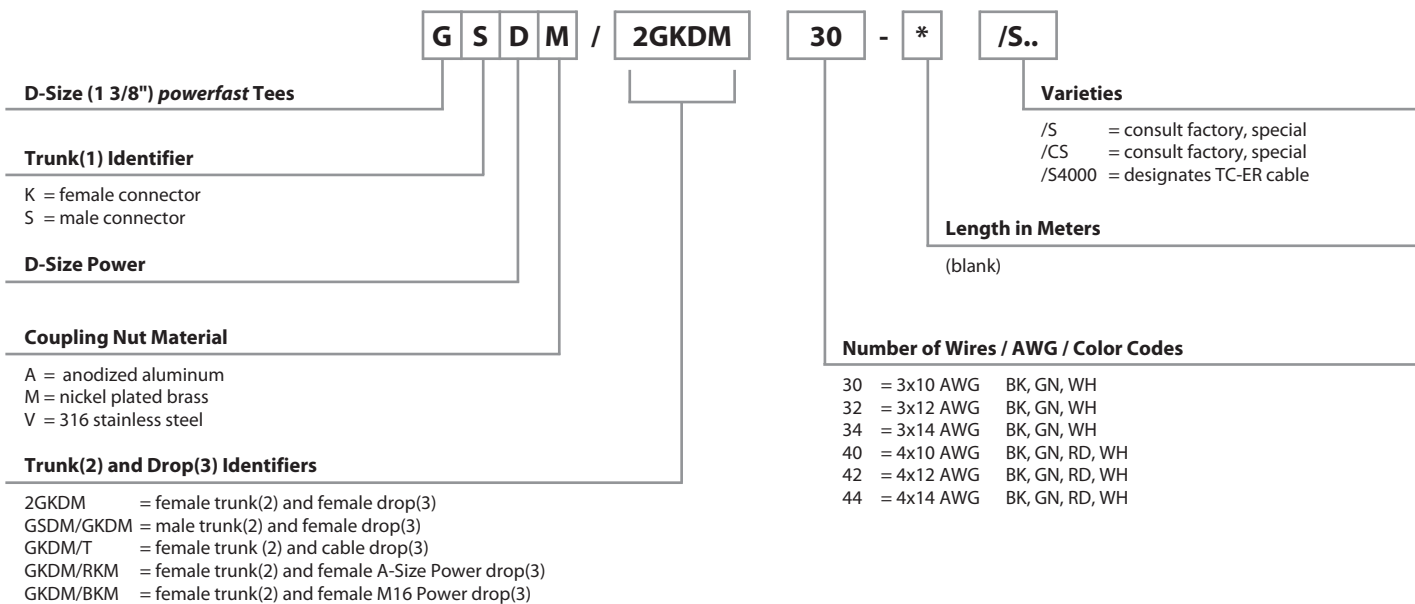
D-Size 1 3/8" powerfast Receptacle Part Number Key

D-Size 1 3/8" powerfast Receptacle	G	K	D	F	30	-	*M	/14.5/NPT
Gender								
K = female connector, female threads S = male connector, male threads								
D-Size Power								
Designator for Receptacle								
Housing Material								
(blank) = nickel plated brass A = anodized aluminum V = 316 stainless steel								
					Thread Type			
					/14.5/NPT = 1/2-14 NPT /14.75/NPT = 3/4-14 NPT			
					Length in Meters			
					Number of Wires / AWG / Color Codes			
					30 = 3x10 AWG BK, GN, WH 32 = 3x12 AWG BK, GN, WH 34 = 3x14 AWG BK, GN, WH 40 = 4x10 AWG BK, GN, RD, WH 42 = 4x12 AWG BK, GN, RD, WH 44 = 4x14 AWG BK, GN, RD, WH			

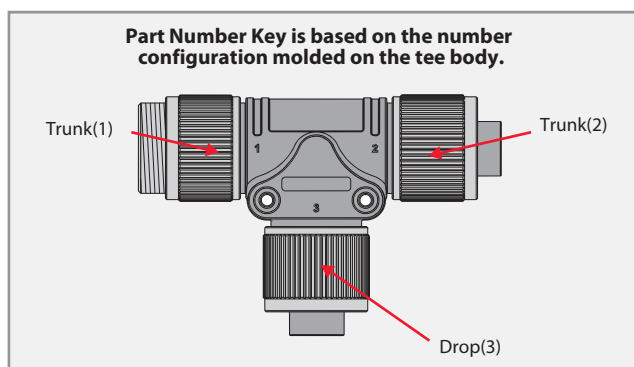
D-Size 1 3/8" powerfast™ Connectivity

D-Size 1 3/8" powerfast Tee Part Number Key

Part Number Keys are to assist in IDENTIFICATION ONLY. Consult factory for catalog items not identified.



Note: Only one male connector per tee available.
 Standard female coupling nut material for A-Size Power drop and M16 Power drop is nickel plated brass.



Tee Examples:

G S D M / 2 G K D M 30

G S D M / G K D M / R K M 44 - *

D-Size 1 3/8" powerfast Cordset Specifications

Mechanical

Mold material/Color:	PVC/Black
Contact carrier material:	PVC
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Anodized aluminum 316 stainless steel
Environmental protection:	NEMA 1, 3, 4, 6P and IEC IP67, IP68, IP69K
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Cable jacket material/Color:	
Standard:	TC-ER STOOW PVC/Black
Additional options:	TC-ER PVC/Black (/S4000 version)
Ratings:	15-30 Amps, 600 VAC



D-Size 1 3/8" powerfast Receptacle Specifications

Mechanical

Contact carrier material:	PVC
Housing material/Plating:	
Standard:	Nickel plated brass
Additional options:	Anodized aluminum 316 stainless steel
Environmental protection:	NEMA 1, 3, 4, 6P and IEC IP67, IP68, IP69K
Temperature rating:	-40 to +105°C (-40 to +221°F)

Electrical

Contact material:	Brass or copper with gold plating
Conductor insulation:	PVC
Ratings:	15-30 Amps, 600 VAC



D-Size 1 3/8" powerfast Field Wireable Specifications

Mechanical

Housing material/Color:	Nylon/Black
Contact carrier material:	PVC
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Anodized aluminum 316 stainless steel
Environmental protection:	NEMA 6P and IEC IP67
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Ratings:	Up to 30 Amps, 600 VAC

D-Size 1 3/8" powerfast Cordset Selection Matrix

			1 	2 	3 	4 
			Straight Female	Straight Male	Right Angle Female	Right Angle Male
Pins	AWG	Current Rating	TC-ER STOOW	TC-ER STOOW	TC-ER STOOW	TC-ER STOOW
3	10	30 Amps	GKDM 30-*M	GSDM 30-*M	GKDWM 30-*M	GSDWM 30-*M
	12	25 Amps	GKDM 32-*M	GSDM 32-*M	GKDWM 32-*M	GSDWM 32-*M
	14	18 Amps	GKDM 34-*M	GSDM 34-*M	GKDWM 34-*M	GSDWM 34-*M
4	10	25 Amps	GKDM 40-*M	GSDM 40-*M	GKDWM 40-*M	GSDWM 40-*M
	12	20 Amps	GKDM 42-*M	GSDM 42-*M	GKDWM 42-*M	GSDWM 42-*M
	14	15 Amps	GKDM 44-*M	GSDM 44-*M	GKDWM 44-*M	GSDWM 44-*M

Pins	AWG	Current Rating	TC-ER	TC-ER	TC-ER	TC-ER
3	10	30 Amps	GKDM 30-*M/S4000	GSDM 30-*M/S4000	GKDWM 30-*M/S4000	GSDWM 30-*M/S4000
	12	25 Amps	GKDM 32-*M/S4000	GSDM 32-*M/S4000	GKDWM 32-*M/S4000	GSDWM 32-*M/S4000
	14	18 Amps	GKDM 34-*M/S4000	GSDM 34-*M/S4000	GKDWM 34-*M/S4000	GSDWM 34-*M/S4000
4	10	25 Amps	GKDM 40-*M/S4000	GSDM 40-*M/S4000	GKDWM 40-*M/S4000	GSDWM 40-*M/S4000
	12	20 Amps	GKDM 42-*M/S4000	GSDM 42-*M/S4000	GKDWM 42-*M/S4000	GSDWM 42-*M/S4000
	14	15 Amps	GKDM 44-*M/S4000	GSDM 44-*M/S4000	GKDWM 44-*M/S4000	GSDWM 44-*M/S4000

See page 15 for dimensional drawings.

* Length in meters. Standard cable lengths are 2, 5 and 10 meters. Consult factory for other lengths.

Note: Extension cables are available, please consult Part Number Key (page 10).

Standard coupling nut material is nickel plated brass. Consult Part Number Key (page 10) for anodized aluminum and 316 stainless steel options.

D-Size 1 3/8" powerfast Receptacle Selection Matrix

Front Mount			5 	6 	7 	8 
			Female	Male	Female	Male
Pins	AWG	Current Rating	1/2-14 NPT Mounting Thread	1/2-14 NPT Mounting Thread	3/4-14 NPT Mounting Thread	3/4-14 NPT Mounting Thread
3	10	30 Amps	GKDF 30-*M/14.5/NPT	GSDF 30-*M/14.5/NPT	GKDF 30-*M/14.75/NPT	GSDF 30-*M/14.75/NPT
	12	25 Amps	GKDF 32-*M/14.5/NPT	GSDF 32-*M/14.5/NPT	GKDF 32-*M/14.75/NPT	GSDF 32-*M/14.75/NPT
	14	18 Amps	GKDF 34-*M/14.5/NPT	GSDF 34-*M/14.5/NPT	GKDF 34-*M/14.75/NPT	GSDF 34-*M/14.75/NPT
4	10	25 Amps	GKDF 40-*M/14.5/NPT	GSDF 40-*M/14.5/NPT	GKDF 40-*M/14.75/NPT	GSDF 40-*M/14.75/NPT
	12	20 Amps	GKDF 42-*M/14.5/NPT	GSDF 42-*M/14.5/NPT	GKDF 42-*M/14.75/NPT	GSDF 42-*M/14.75/NPT
	14	15 Amps	GKDF 44-*M/14.5/NPT	GSDF 44-*M/14.5/NPT	GKDF 44-*M/14.75/NPT	GSDF 44-*M/14.75/NPT

See page 16 for dimensional drawings.

* Length in meters. Standard lead length is 0.5 meters. Consult factory for other lengths.

Note: Standard housing material is nickel plated brass. Consult Part Number Key (page 10) for anodized aluminum and 316 stainless steel options.

D-Size 1 3/8" powerfast Field Wireable Selection Matrix

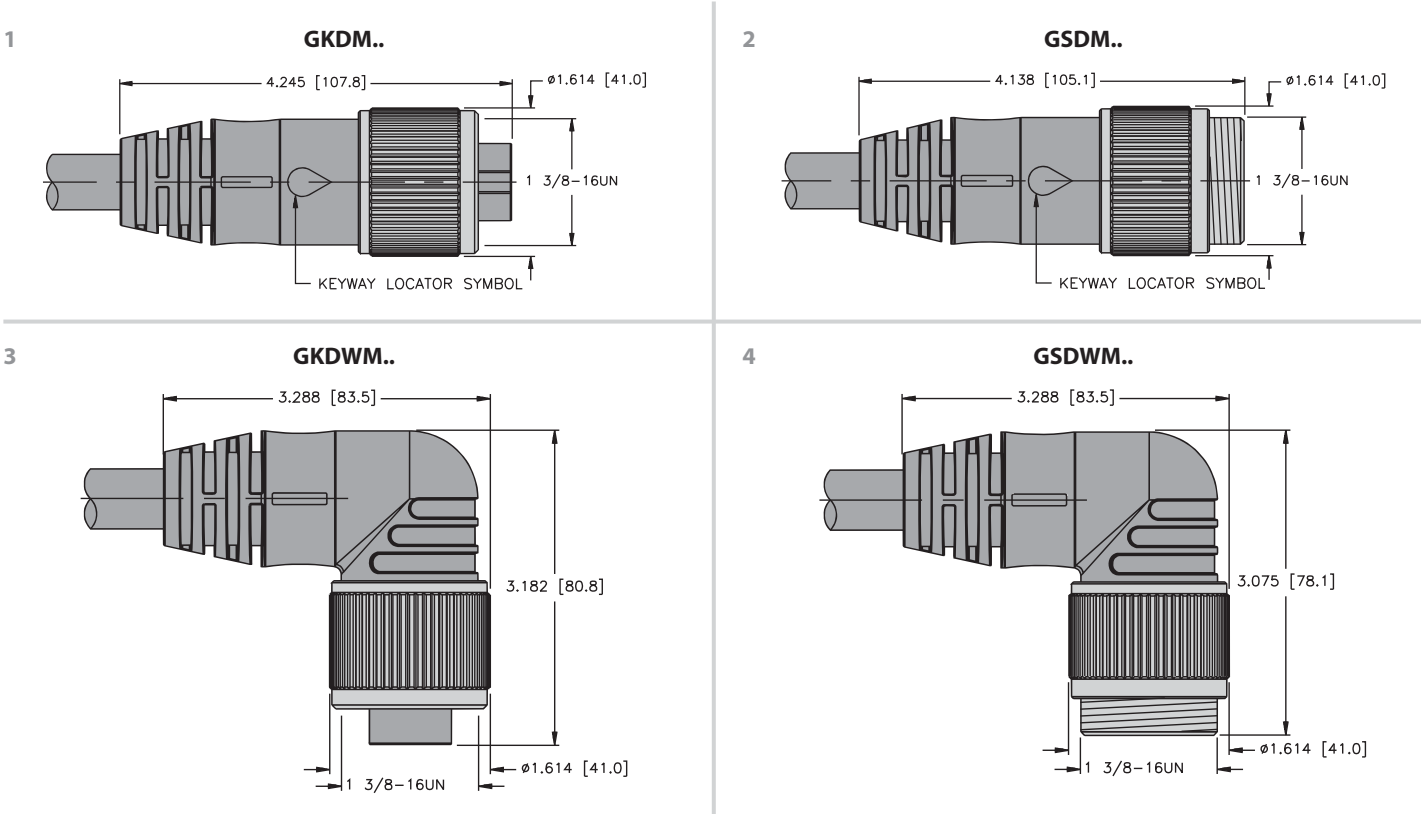
Front Mount			9 	10 
			Female	Male
Pins	AWG	Current Rating	Screw Terminal	Screw Terminal
3	8-14	Up to 30 Amps	GKDM 30-0	GSDM 30-0
4	8-14	Up to 25 Amps	GKDM 40-0	GSDM 40-0

See page 16 for dimensional drawings.

Note: Standard coupling nut material is nickel plated brass. Consult factory for anodized aluminum and 316 stainless steel options.



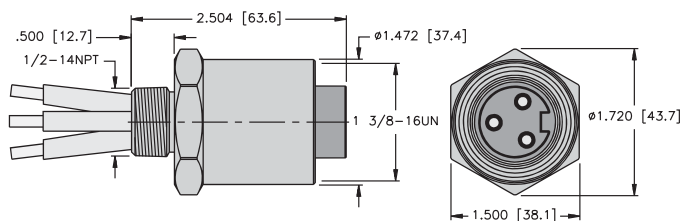
D-Size 1 3/8" powerfast Cordset Dimensions



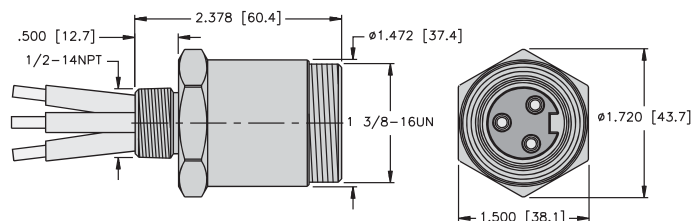
D-Size 1 3/8" powerfast

D-Size 1 3/8" powerfast Receptacle and Field Wireable Dimensions

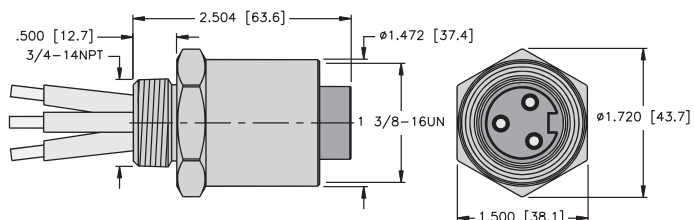
5 GKDF../14.5/NPT



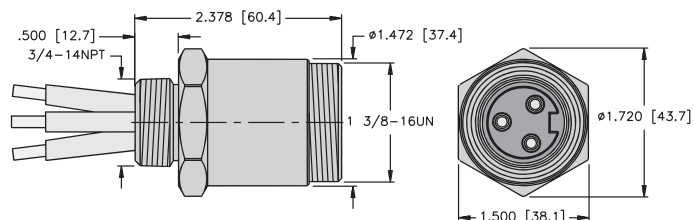
6 GSDF../14.5/NPT



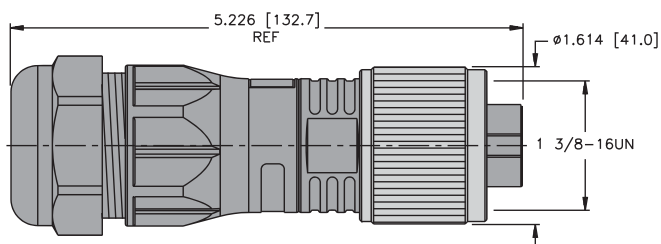
7 GKDF../14.75/NPT



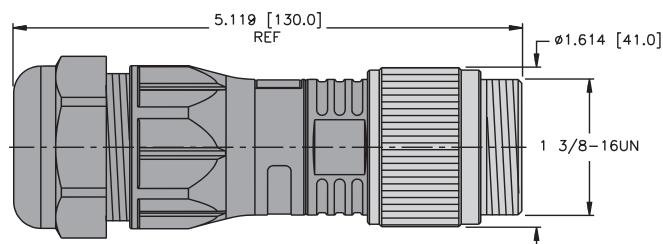
8 GSDF../14.75/NPT



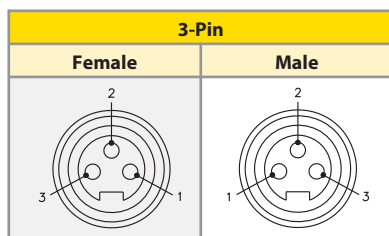
9 GKDM../-0



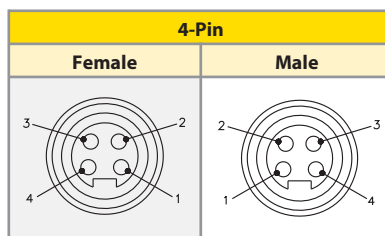
10 GSDM../-0



D-Size 1 3/8" powerfast Cordset, Receptacle and Field Wireable Pinouts



Pinouts
1. BK 2. GN 3. WH



Pinouts
1. BK 2. GN 3. RD 4. WH

D-Size 1 3/8" powerfast Tee Specifications

Mechanical

Mold material/Color:	PVC/Black
Contact carrier material:	PVC
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Anodized aluminum 316 stainless steel
Environmental protection:	NEMA 1, 3, 4, 6P and IEC IP67, IP68, IP69K
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Cable jacket material/Color:	
Standard:	TC-ER STOOW PVC/Black
Additional options:	TC-ER PVC/Black (/S4000 version)
Ratings:	15-30 Amps, 600 VAC

D-Size 1 3/8" powerfast Tee Selection Matrix

				11 	12 	13 	14 	15 
				Integral D-Size Power Connector Drop	Cable Drop	Cable Drop With D-Size Power Connector	Cable Drop With A-Size Power Connector	Cable Drop With M16 Power Connector
Pins	Drop AWG	Trunk Current Rating	Drop Current Rating		TC-ER STOOW	TC-ER STOOW	TC-ER STOOW	TC-ER STOOW
3	10	30 Amps	30 Amps	GSDM/2GKDM 30	GSDM/GKDM/T30-*	GSDM/2GKDM 30-*		
	12	30 Amps	25 Amps		GSDM/GKDM/T32-*	GSDM/2GKDM 32-*		
	14	30 Amps	18 Amps		GSDM/GKDM/T34-*	GSDM/2GKDM 34-*	GSDM/GKDM/RKM 34-*	
4	10	25 Amps	25 Amps	GSDM/2GKDM 40	GSDM/GKDM/T40-*	GSDM/2GKDM 40-*		
	12	25 Amps	20 Amps		GSDM/GKDM/T42-*	GSDM/2GKDM 42-*		
	14	25 Amps	15 Amps		GSDM/GKDM/T44-*	GSDM/2GKDM 44-*	GSDM/GKDM/RKM 44-*	

Pins	Drop AWG	Trunk Current Rating	Drop Current Rating		TC-ER	TC-ER	TC-ER	TC-ER
3	10	30 Amps	30 Amps	GSDM/2GKDM 30	GSDM/GKDM/T30-*/S4000	GSDM/2GKDM 30-*/S4000		
	12	30 Amps	25 Amps		GSDM/GKDM/T32-*/S4000	GSDM/2GKDM 32-*/S4000		
	14	30 Amps	18 Amps		GSDM/GKDM/T34-*/S4000	GSDM/2GKDM 34-*/S4000	GSDM/GKDM/RKM 34-*/S4000	GSDM/GKDM/BKM 34-*/S4000
4	10	25 Amps	25 Amps	GSDM/2GKDM 40	GSDM/GKDM/T40-*/S4000	GSDM/2GKDM 40-*/S4000		
	12	25 Amps	20 Amps		GSDM/GKDM/T42-*/S4000	GSDM/2GKDM 42-*/S4000		
	14	25 Amps	15 Amps		GSDM/GKDM/T44-*/S4000	GSDM/2GKDM 44-*/S4000	GSDM/GKDM/RKM 44-*/S4000	GSDM/GKDM/BKM 44-*/S4000

See page 19 for dimensional drawings.

* Length in meters. Standard cable lengths are 2, 5 and 10 meters. Consult factory for other lengths.

Note: Extension cables are available, please consult Part Number Key (page 11).

Standard coupling nut material is nickel plated brass. Consult Part Number Key (page 11) for anodized aluminum and 316 stainless steel options.

D-Size 1 3/8" powerfast Power Reducer Specifications

Mechanical

Mold material/Color:	PVC/Black
Contact carrier material:	PVC
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Anodized aluminum 316 stainless steel
Environmental protection:	NEMA 1, 3, 4, 6P and IEC IP67, IP68, IP69K
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Ratings:	15 Amps, 600 VAC

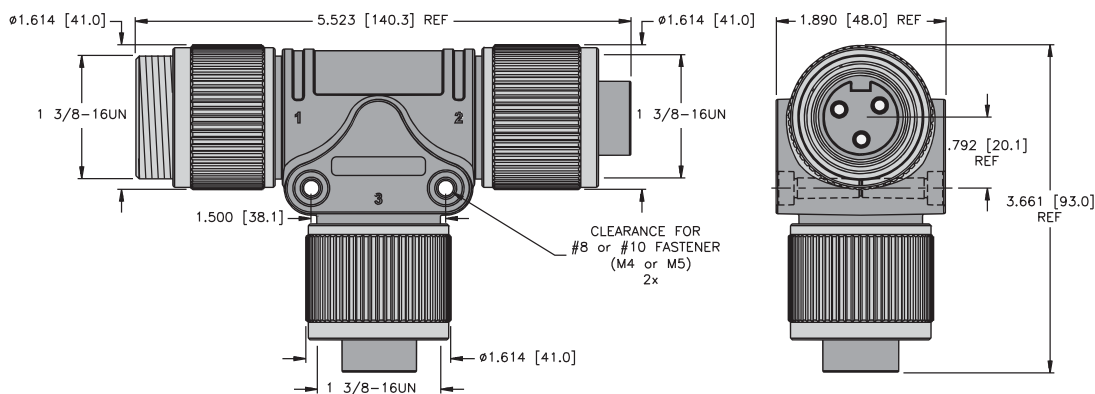
D-Size 1 3/8" powerfast Power Reducer Selection Matrix

			16		17	
Pins	Drop AWG	Current Rating	D-Size Power to A-Size Power Reducer		D-Size Power to M16 Power Reducer	
3	14	Up to 15 Amps	GSDM RKM 34-0		GSDM BKM 34-0	
4	14	Up to 15 Amps	GSDM RKM 44-0		GSDM BKM 44-0	

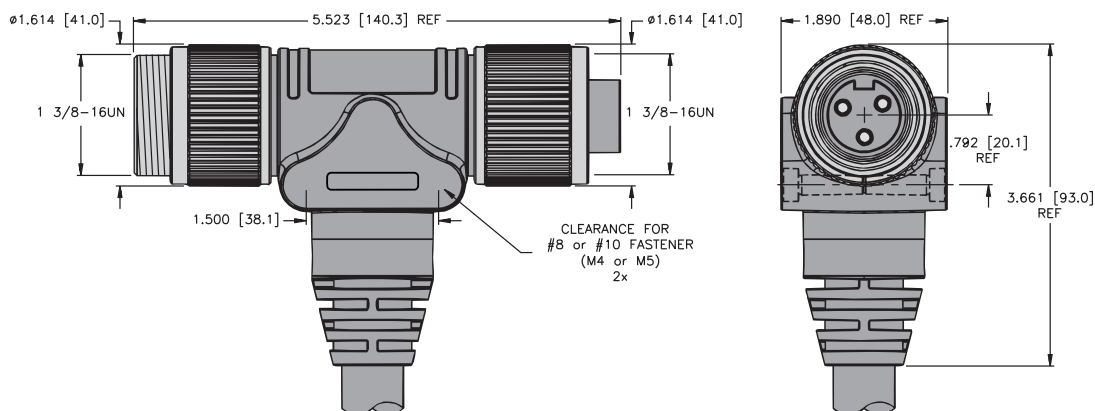
See page 20 for dimensional drawings.

Note: Standard coupling nut material is nickel plated brass. Consult factory for anodized aluminum and 316 stainless steel options.

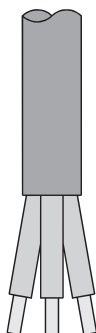
Integral D-Size Power Connector Drop GSDM/2GKDM..



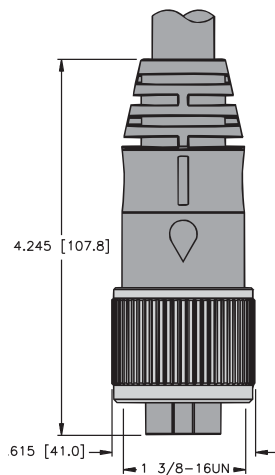
Tee with Cable Drop and Connector Options



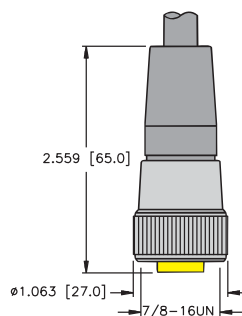
12 Cable Drop GSDM/GKDM/T..



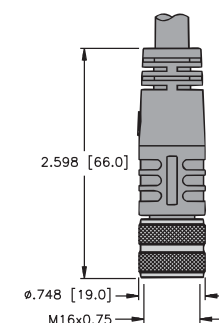
13 D-Size Power Connector GSDM/2GKDM..



14 A-Size Power Connector GSDM/GKDM/RKM..

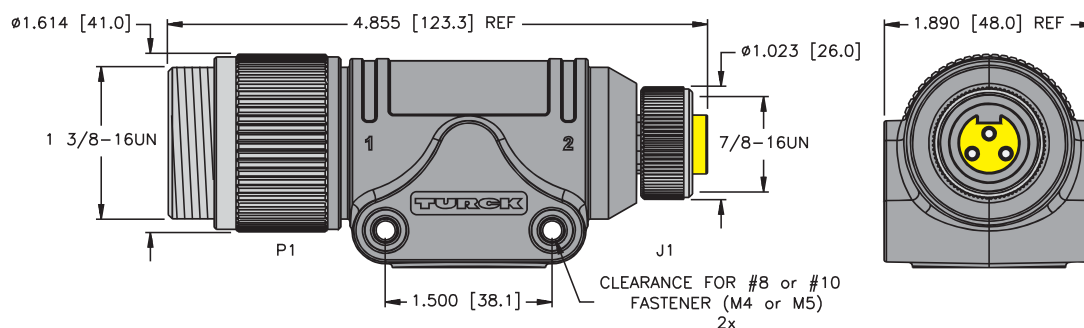


15 M16 Power Connector GSDM/GKDM/BKM..

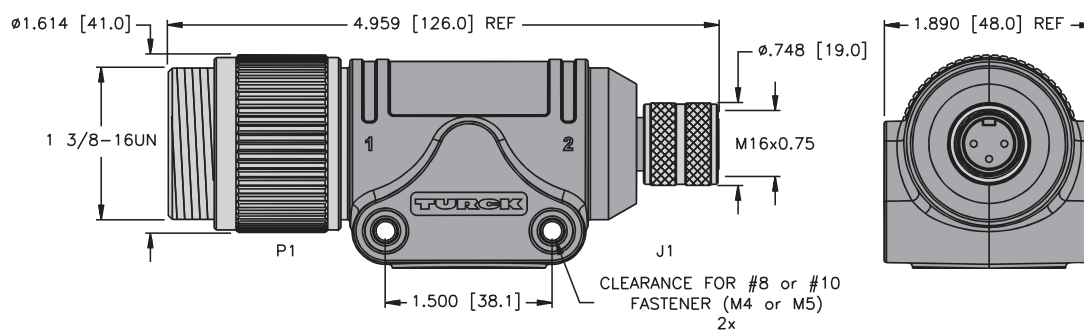


D-Size 1 3/8" *powerfast* Power Reducer Dimensions

D-Size Power to A-Size Power Reducer GSDM RKM..



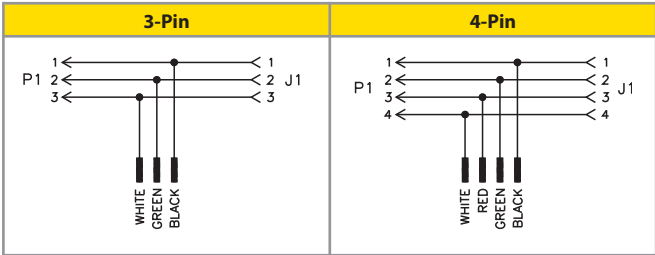
D-Size Power to M16 Power Reducer GSDM BKM..



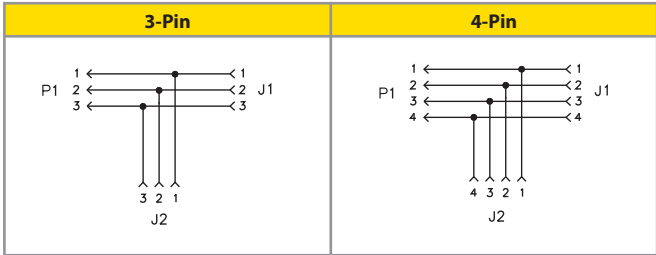


D-Size 1 3/8" powerfast Tee Wiring Diagrams

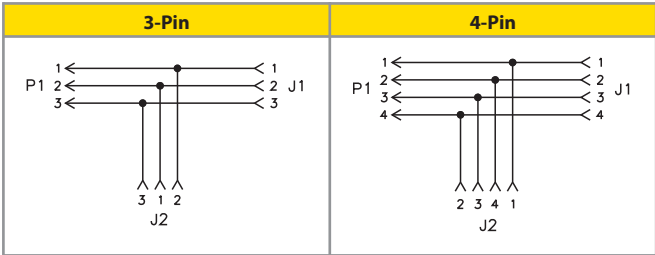
Cable Drop



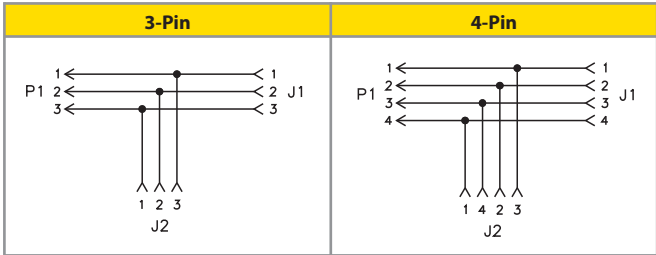
D-Size Power Drop



A-Size Power Drop



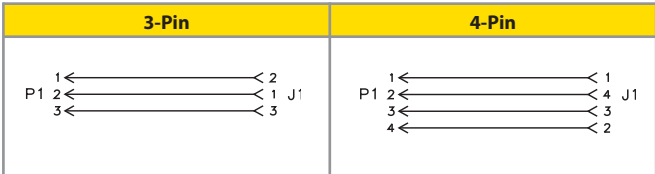
M16 Power Drop



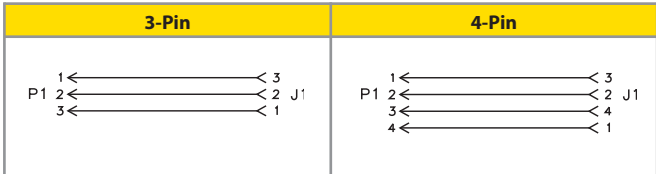
D-Size 1 3/8" powerfast

D-Size 1 3/8" powerfast Power Reducer Wiring Diagrams

D-Size Power to A-Size Power

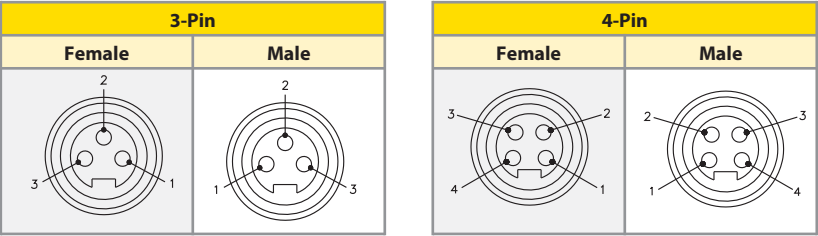


D-Size Power to M16 Power

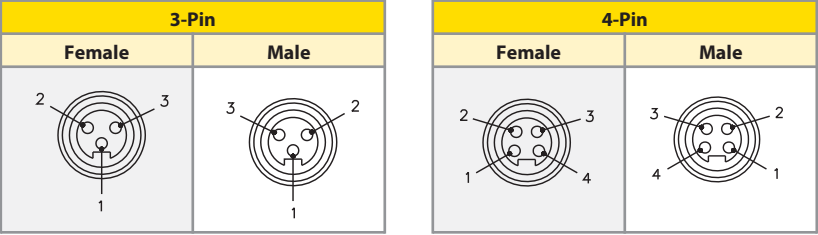


D-Size 1 3/8" powerfast Tee and Power Reducer Pinouts

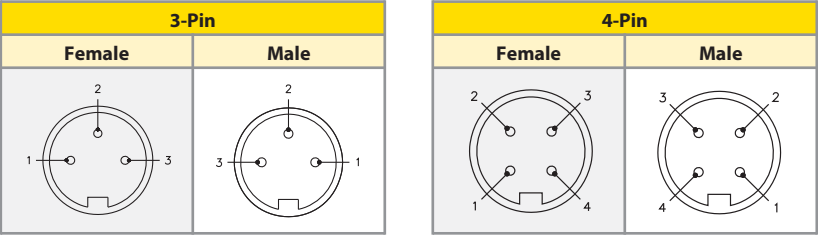
D-Size Power



A-Size Power



M16 Power



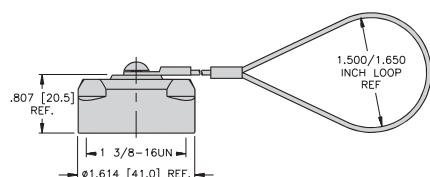
D-Size 1 3/8" powerfast Closure Cap Selection Matrix

		18	19	20	21	22	23
		Mates to male cordsets and receptacles	Mates to female cordsets and receptacles	Mates to male receptacles	Mates to female receptacles	Mates to male cordsets and receptacles	Mates to female cordsets and receptacles
Material	Thread	6" SS Loop Lanyard	6" SS Loop Lanyard	7" SS Lanyard with Eyelet	7" SS Lanyard with Eyelet	No Lanyard	No Lanyard
Nickel Plated Brass	1 3/8-16UN	GKDM-CC	GSDM-CC	GKDF-CC	GSDF-CC	GKDM-MC	GSDM-MC

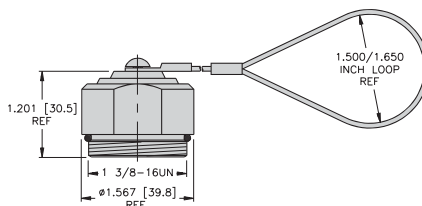
See table below for dimensional drawings.

D-Size 1 3/8" powerfast Closure Cap Dimensions

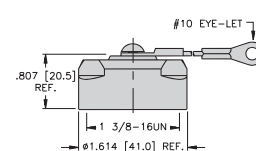
18 GKDM-CC



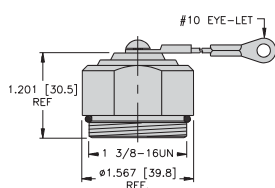
19 GSDM-CC



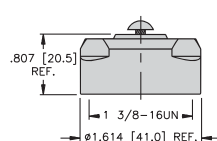
20 GKDF-CC



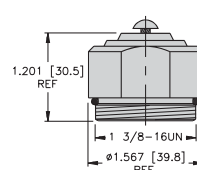
21 GSDF-CC



22 GKDM-MC

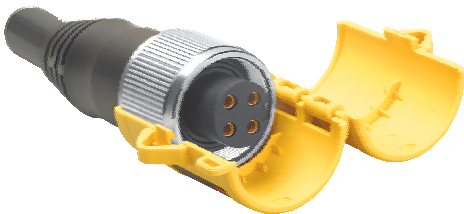


23 GSDM-MC



D-Size 1 3/8" *powerlok*

Part Number	Application
LOCK-D POWER	Nylon locking guard for straight or right angle D-Size <i>powerfast</i> connectors



D-Size *powerlok* Open



D-Size *powerlok* Closed

M16 powerfast™ CONNECTIVITY

Part Number Keys	26
Cordset, Receptacle and Field Wireable Specifications	28
Cordset, Receptacle and Field Wireable Selection Matrix	28
Cordset, Receptacle and Field Wireable Dimensions	30
Cordset, Receptacle and Field Wireable Pinouts	31
Tee Specifications	32
Tee Selection Matrix	32
Tee Dimensions	33
Tee Wiring Diagrams	39
Tee Pinouts	39
Closure Caps	40
powerlok Accessories	40

Features

- Ideal for small motor applications
- Shielded versions available
- Multiple tee configurations
- 2 to 4-pin
- 12 and 14 AWG conductors
- Up to 18 Amp, 600 Volt rated
- Tray rated-exposed run PVC cable
- IEC IP67 protection



M16 powerfast Cordset Part Number Key

Part Number Keys are to assist in IDENTIFICATION ONLY. Consult factory for catalog items not identified.

M16 (16 mm) powerfast Cordset	B S M	34-198	-	*	/S..
Gender					
K = female connector S = male connector					
Configuration					
M = straight WM = right angle					
Coupling Nut Material					
(blank) = nickel plated brass K = nylon V = 316 stainless steel					
				Varieties	
				/S = consult factory, special /CS = consult factory, special	
				Length in Meters	
				Number of Wires / AWG / Color Code	
				22-380 = 2x12 AWG WH, BK 34-198 = 3x14 AWG WH, GN, BK 44-193 = 4x14 AWG WH, GN, BK, RD	
				Insertion Point of Extension Cable 2nd Prefix*	
				* Male connector listed 1st, female connector 2nd Example: BSM BKM 34-198*	

Extension Example:

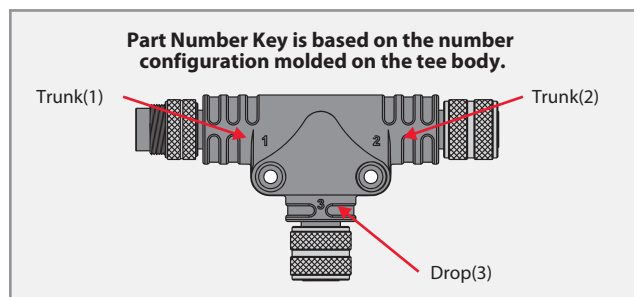


B S M	B K M	34-198	-	*
--------------	--------------	---------------	----------	----------

M16 powerfast Tee Part Number Key

M16 (16 mm) powerfast	B S M	/ 2BKM	34	-	198	-	*	-	/S..
Trunk(1) Identifier									
K = female connector S = male connector									
Configuration									
M = straight									
Coupling Nut Material									
(blank) = nickel plated brass K = nylon V = 316 stainless steel									
Trunk(2) and Drop(3) Identifiers									
2BKM = female trunk(2) and female drop(3) BSM/BKM = male trunk(2) and female drop(3) BKM/T = female trunk(2) and cable drop(3)									
								Varieties	
								/S = consult factory, special /CS = consult factory, special	
								Length in Meters	
								(blank) = connector only * = drop cable */*/ = trunk(1) cable / trunk(2) cable / drop(3) cable	
								AWG / Color Code	
								(blank) = connector only 380 = 2x12 AWG, WH, BK 198 = 3x14 AWG, WH, GN, BK 193 = 4x14 AWG, WH, GN, BK, RD	
								Number of Pins	
								22 = 2 34 = 3 44 = 4	

Note: Only one male connector per tee available.



Tee Examples:

B S M	/ 2 B K M	34	-	198	-	*
B S M	/ 2 B K M	44				

M16 powerfast Receptacle Part Number Key

Part Number Keys are to assist in IDENTIFICATION ONLY. Consult factory for catalog items not identified.

B K F					22 - * /14.5/NPT		
M16 (16 mm) powerfast Receptacle					Thread Type /14.5/NPT = 1/2-14NPT threads /18.375/NPT = 3/8-18NPT threads /M20 = M20 threads /M18 = M18 threads		
Gender K = female receptacle S = male receptacle					Length in Meters		
Designator for Receptacle					Number of Wires / AWG / Color Code 22 = 2x12 AWG WH, BK 34 = 3x14 AWG WH, GN, BK 44 = 4x14 AWG WH, GN, BK, RD		
Housing Style (blank) = front mount D = rear mount							
Housing Material (blank) = nickel plated brass V = 316 stainless steel							

M16 powerfast Cordset Specifications

Mechanical

Mold material/Color:	PUR/Black
Contact carrier material:	PUR
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Nylon 316 stainless steel
Environmental protection:	IEC IP67
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Cable jacket material/Color:	TC-ER PVC/Black
Ratings:	15-18 Amps, 600 V



M16 powerfast Receptacle Specifications

Mechanical

Contact carrier material:	PUR
Housing material/Plating:	
Standard:	Nickel plated brass
Additional options:	316 stainless steel
O-Ring material:	Nitrile (BUNA N)
Environmental protection:	IEC IP67
Temperature rating:	-40 to +105°C (-40 to +221°F)

Electrical

Contact material:	Brass or copper with gold plating
Conductor insulation:	PVC
Ratings:	15-18 Amps, 600 V



M16 powerfast Field Wireable Specifications

Mechanical

Housing material/Color:	Glass filled nylon or PVC/Black
Contact carrier material:	PUR
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Nylon 316 stainless steel
Environmental protection:	NEMA 6P and IEC IP67
Temperature rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Ratings:	15-18 Amps, 600 VAC

M16 powerfast Cordset Selection Matrix

			1 	2 	3 	4
			Straight Female	Straight Male	Right Angle Female	Right Angle Male
Pins	AWG	Current Rating	TC-ER	TC-ER	TC-ER	TC-ER
2	12	18 Amps	BKM 22-380-*	BSM 22-380-*	BKWM 22-380-*	BSWM 22-380-*
3	14	15 Amps	BKM 34-198-*	BSM 34-198-*	BKWM 34-198-*	BSWM 34-198-*
4	14	15 Amps	BKM 44-193-*	BSM 44-193-*	BKWM 44-193-*	BSWM 44-193-*

Pins	AWG	Current Rating	SHIELDED TC-ER	SHIELDED TC-ER	SHIELDED TC-ER	SHIELDED TC-ER
2	12	18 Amps	BKMS 22-1759-*	BSMS 22-1759-*	BKWMS 22-1759-*	BSWMS 22-1759-*
3	14	15 Amps	BKMS 34-1364-*	BSMS 34-1364-*	BKWMS 34-1364-*	BSWMS 34-1364-*
4	14	15 Amps	BKMS 44-1363-*	BSMS 44-1363-*	BKWMS 44-1363-*	BSWMS 44-1363-*

See pages 30-31 for dimensional drawings.

* Length in meters. Standard cable lengths are 2, 5 and 10 meters. Consult factory for other lengths.

Note: Extension cables are available, please consult Part Number Key (page 26).

Standard coupling nut material is nickel plated brass. Consult Part Number Key (page 26) for nylon and 316 stainless steel options.

M16 powerfast Receptacle Selection Matrix

Front Mount			5 	6 	7 	8 
			Female	Male	Female	Male
Pins	AWG	Current Rating	1/2-14NPT Mounting Thread	1/2-14NPT Mounting Thread	3/8-18NPT Mounting Thread	3/8-18NPT Mounting Thread
2	12	18 Amps	BKF 22-*/14.5/NPT	BSF 22-*/14.5/NPT	BKF 22-*/18.375/NPT	BSF 22-*/18.375/NPT
3	14	15 Amps	BKF 34-*/14.5/NPT	BSF 34-*/14.5/NPT	BKF 34-*/18.375/NPT	BSF 34-*/18.375/NPT
4	14	15 Amps	BKF 44-*/14.5/NPT	BSF 44-*/14.5/NPT	BKF 44-*/18.375/NPT	BSF 44-*/18.375/NPT

Front Mount			9 	10 	11 	12 
			Female	Male	Female	Male
Pins	AWG	Current Rating	M18 Mounting Thread	M18 Mounting Thread	M20 Mounting Thread	M20 Mounting Thread
2	12	18 Amps	BKF 22-*/M18	BSF 22-*/M18	BKF 22-*/M20	BSF 22-*/M20
3	14	15 Amps	BKF 34-*/M18	BSF 34-*/M18	BKF 34-*/M20	BSF 34-*/M20
4	14	15 Amps	BKF 44-*/M18	BSF 44-*/M18	BKF 44-*/M20	BSF 44-*/M20

Rear Mount			13 	14 
			Female	Male
Pins	AWG	Current Rating	M18 Mounting Thread	M18 Mounting Thread
2	12	18 Amps	BKFD 22-*/M18	BSFD 22-*/M18
3	14	15 Amps	BKFD 34-*/M18	BSFD 34-*/M18
4	14	15 Amps	BKFD 44-*/M18	BSFD 44-*/M18

See pages 30-31 for dimensional drawings.

* Length in meters. Standard lead length is 0.5 meters. Consult factory for other lengths.

Note: Standard housing material is nickel plated brass. Consult Part Number Key (page 27) for 316 stainless steel options.

M16 powerfast Field Wireable Selection Matrix

			15 	16 
			Straight Female, PG 11 Cable Gland Accepts 8-11 mm Cable Diameter	Straight Male, PG 11 Cable Gland Accepts 8-11 mm Cable Diameter
Pins	Acceptable Conductor AWG	Current Rating	Screw Terminal	Screw Terminal
2	12	18 Amps	BK 22-0	BS 22-0
3	14	15 Amps	BK 34-0	BS 34-0
4	14	15 Amps	BK 44-0	BS 44-0

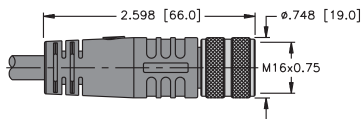
See pages 30-31 for dimensional drawings.

Note: Standard coupling nut material is nickel plated brass. Consult factory for nylon and 316 stainless steel options.

M16 powerfast Cordset, Receptacle and Field Wireable Dimensions

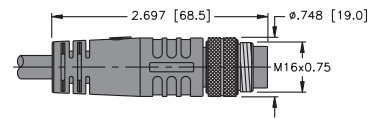
1

BKM..



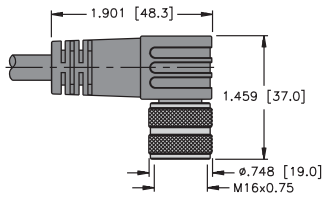
2

BSM..



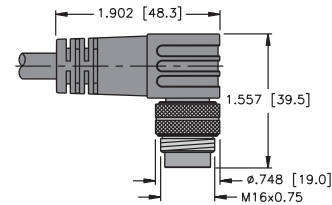
3

BKWM..



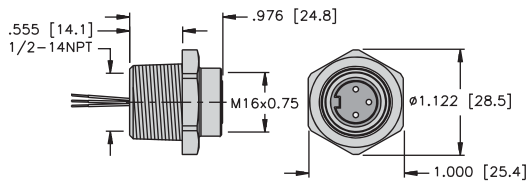
4

BSWM..



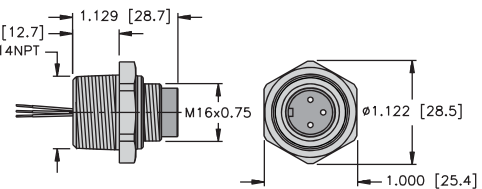
5

BKF../14.5/NPT



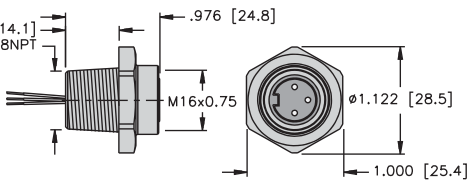
6

BSF../14.5/NPT



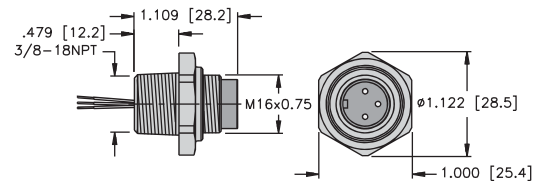
7

BKF../18.375/NPT



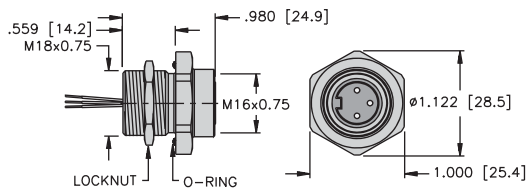
8

BSF../18.375/NPT



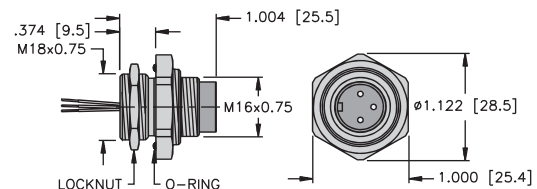
9

BKF../M18



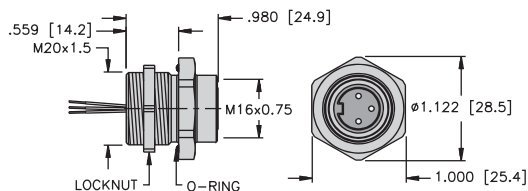
10

BSF../M18



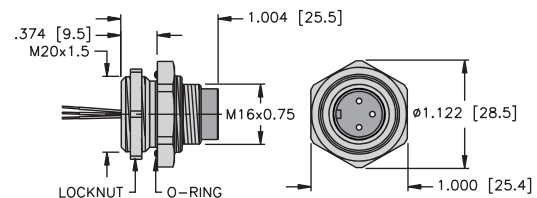
11

BKF../M20



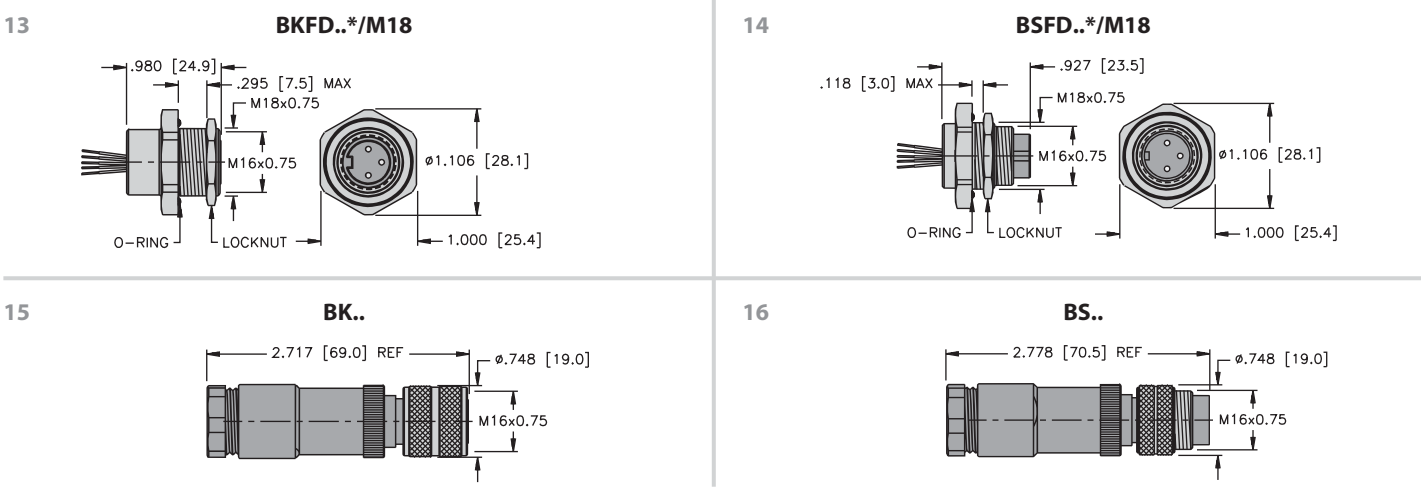
12

BSF../M20





M16 powerfast Cordset, Receptacle and Field Wireable Dimensions



M16 powerfast Cordset, Receptacle and Field Wireable Pinouts

2-Pin		Pinouts
Female	Male	
		1. WH 2. BK

3-Pin		Pinouts
Female	Male	
		1. WH 2. GN 3. BK

4-Pin		Pinouts
Female	Male	
		1. WH 2. GN 3. BK 4. RD

M16 powerfast

M16 powerfast Tee Specifications

Mechanical

Mold material/Color:	PUR/Black
Contact carrier material:	PUR
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	Nylon 316 stainless steel
Environmental Protection:	IEC IP67
Temperature Rating:	
Integral connector version:	-40 to +105°C (-40 to +221°F)
Cable version:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass or copper with gold plating
Cable jacket material/Color:	TC-ER PVC/Black
Ratings:	15-18 Amps, 600 V

M16 powerfast Tee Selection Matrix

			17 	18 	19 	20 
			Integral M16 Power Connector Drop	Cable Drop with M16 Power Connector	Cable Trunk and Cable Drop with M16 Power Connectors	Cable Drop
Pins	AWG	Current Rating		TC-ER	TC-ER	TC-ER
2	12	18 Amps	BSM/2BKM 22	BSM/2BKM 22-380-*	BSM/2BKM 22-380-*/*/	BSM/BKM/T22-380-*
3	14	15 Amps	BSM/2BKM 34	BSM/2BKM 34-198-*	BSM/2BKM 34-198-*/*/	BSM/BKM/T34-198-*
4	14	15 Amps	BSM/2BKM 44	BSM/2BKM 44-193-*	BSM/2BKM 44-193-*/*/	BSM/BKM/T44-193-*

M16 powerfast h-Style Tee Selection Matrix

			21 	22 	23 	24 
Trunk #1: Male Connector			Integral M16 Power Connector Drop	Cable Drop with M16 Power Connector	Cable Trunk and Cable Drop with M16 Power Connectors	Cable Drop
Pins	AWG	Current Rating		TC-ER	TC-ER	TC-ER
2	12	18 Amps	SH-BSM/2BKM 22	SH-BSM/2BKM 22-380-*	SH-BSM/2BKM 22-380-*/*/	SH-BSM/BKM/T22-380-*
3	14	15 Amps	SH-BSM/2BKM 34	SH-BSM/2BKM 34-198-*	SH-BSM/2BKM 34-198-*/*/	SH-BSM/BKM/T34-198-*
4	14	15 Amps	SH-BSM/2BKM 44	SH-BSM/2BKM 44-193-*	SH-BSM/2BKM 44-193-*/*/	SH-BSM/BKM/T44-193-*

			25 	26 	27 	28 
Trunk #2: Male Connector			Integral M16 Power Connector Drop	Cable Drop with M16 Power Connector	Cable Trunk and Cable Drop with M16 Power Connectors	Cable Drop
Pins	AWG	Current Rating		TC-ER	TC-ER	TC-ER
2	12	18 Amps	SH-BKM/BSM/BKM 22	SH-BKM/BSM/BKM 22-380-*	SH-BKM/BSM/BKM 22-380-*/*/	SH-BKM/BSM/T22-380-*
3	14	15 Amps	SH-BKM/BSM/BKM 34	SH-BKM/BSM/BKM 34-198-*	SH-BKM/BSM/BKM 34-198-*/*/	SH-BKM/BSM/T34-198-*
4	14	15 Amps	SH-BKM/BSM/BKM 44	SH-BKM/BSM/BKM 44-193-*	SH-BKM/BSM/BKM 44-193-*/*/	SH-BKM/BSM/T44-193-*

See pages 33-38 for dimensional drawings.

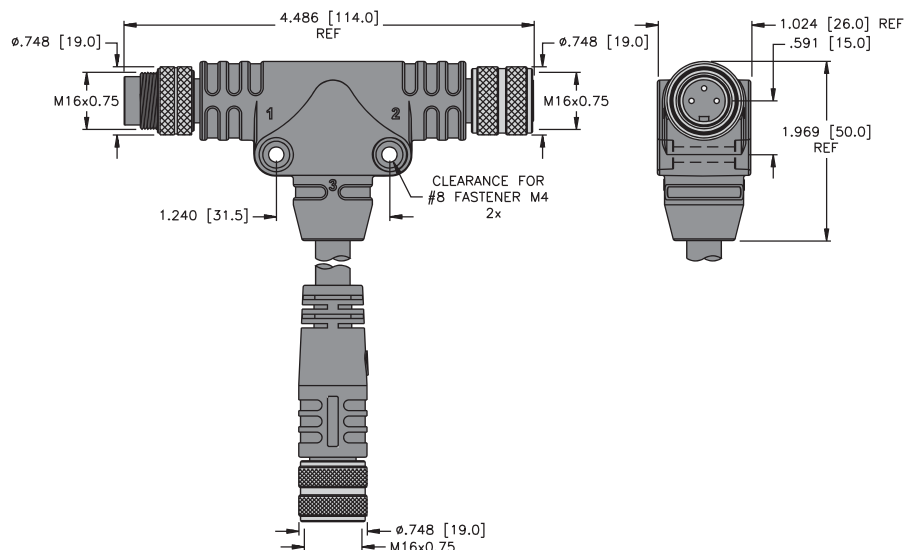
* Length in meters. Standard cable lengths are 2, 5 and 10 meters. Consult factory for other lengths.

Note: Standard coupling nut material is nickel plated brass. Consult Part Number Key (page 27) for nylon and 316 stainless steel options.

M16 powerfast Tee Dimensions

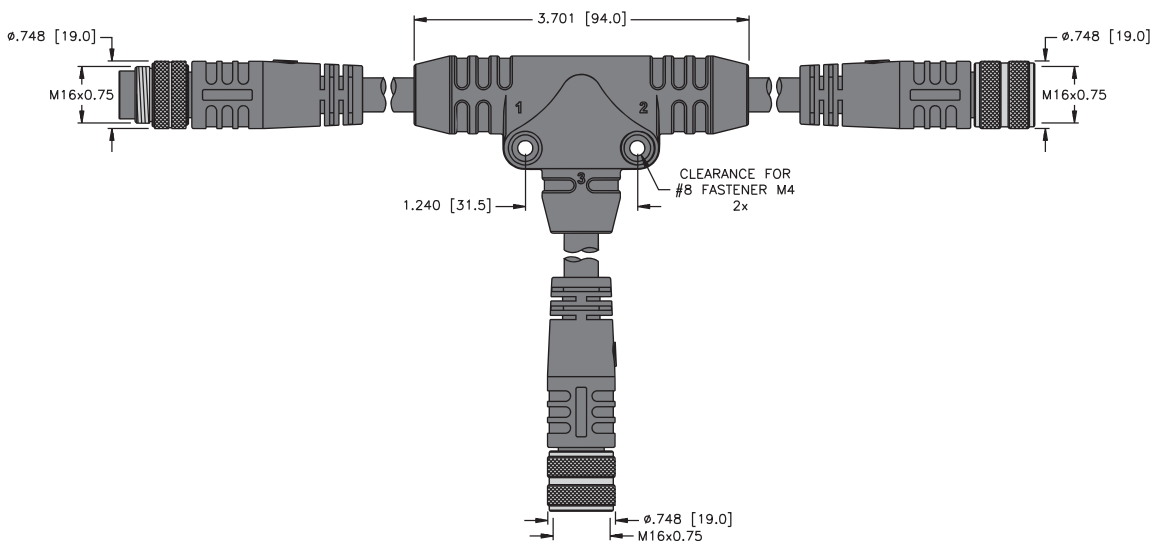
18

**Cable Drop with M16 Power Connector
BSM/2BKM..**



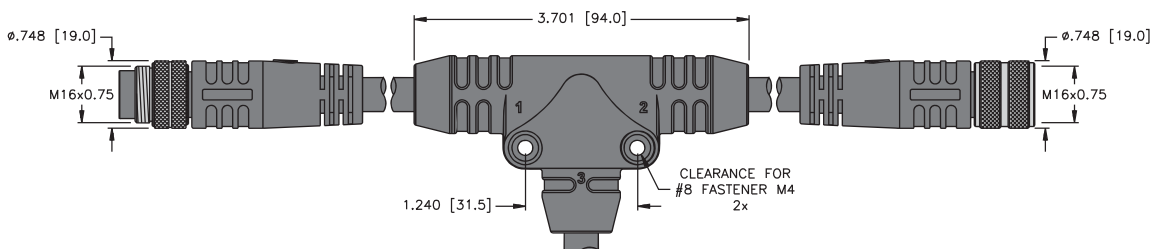
19

**Cable Trunk and Cable Drop with M16 Power Connectors
BSM/2BKM..**



20

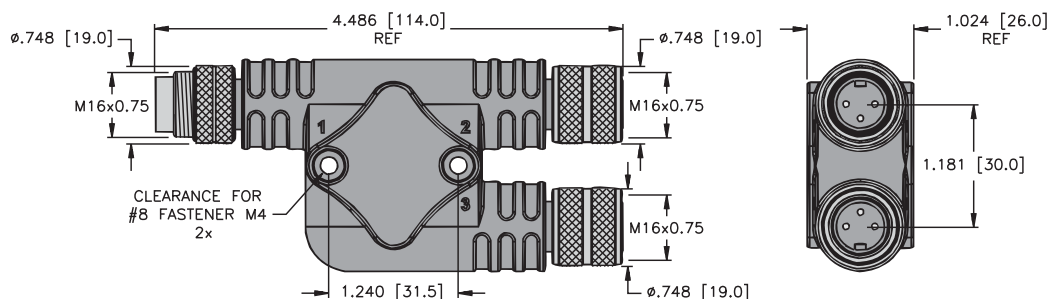
**Cable Drop
BSM/BKM/T..**



M16 powerfast h-Style Tee Dimensions

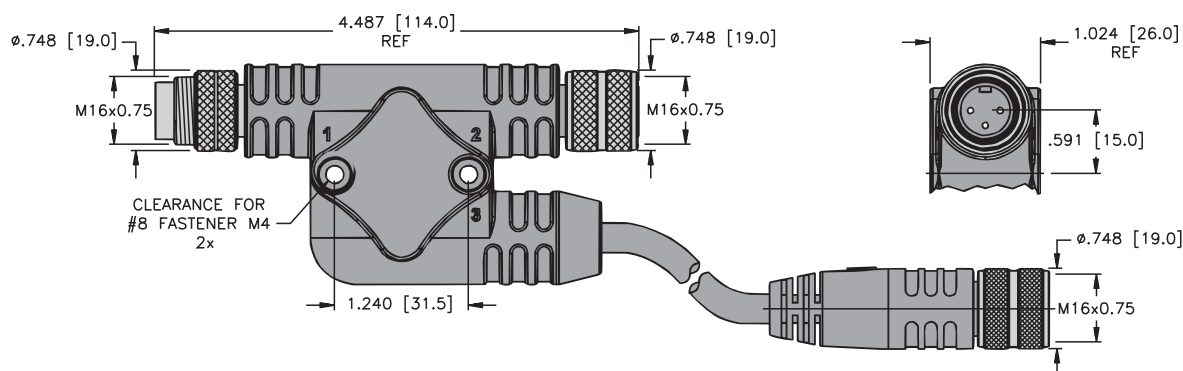
21

**Integral M16 Power Connector Drop, Trunk #1 Male
SH-BSM/2BKM..**



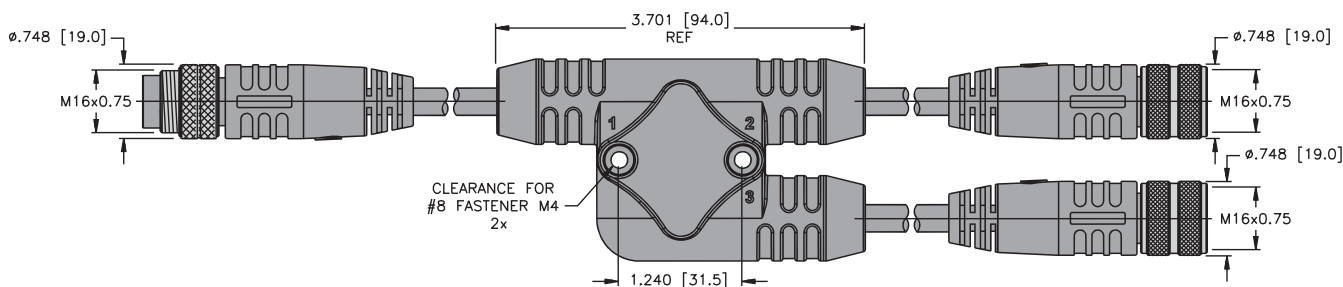
22

**Cable Drop with M16 Power Connector, Trunk #1 Male
SH-BSM/2BKM..**



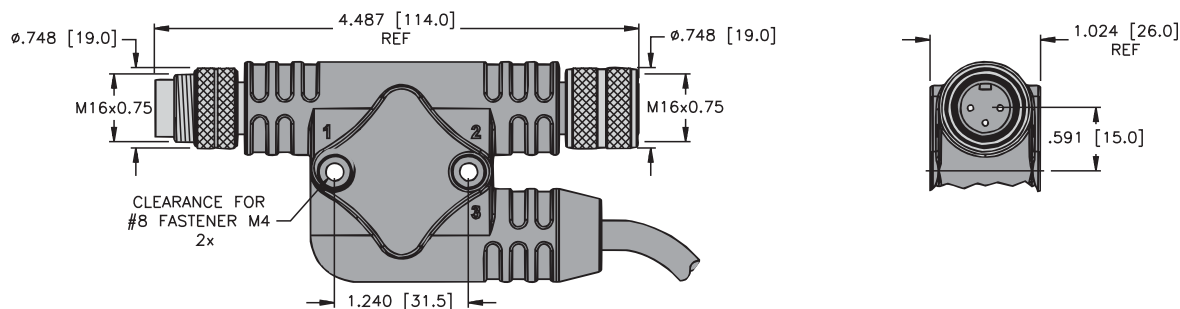
23

**Cable Trunk and Cable Drop with M16 Power Connectors, Trunk #1 Male
SH-BSM/2BKM..**



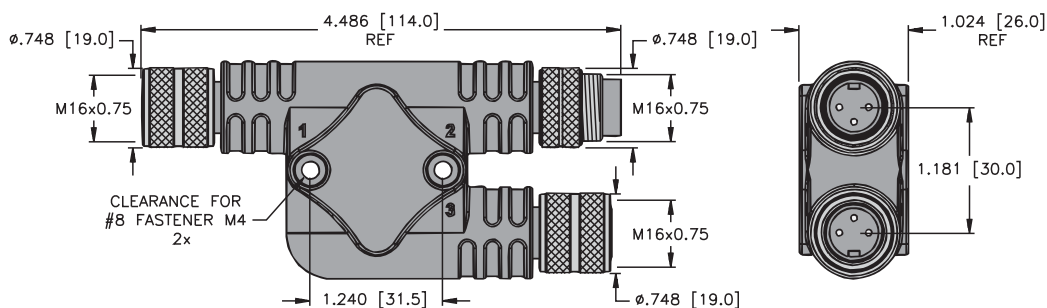
24

**Cable Drop, Trunk #1 Male
SH-BSM/BKM/T..**

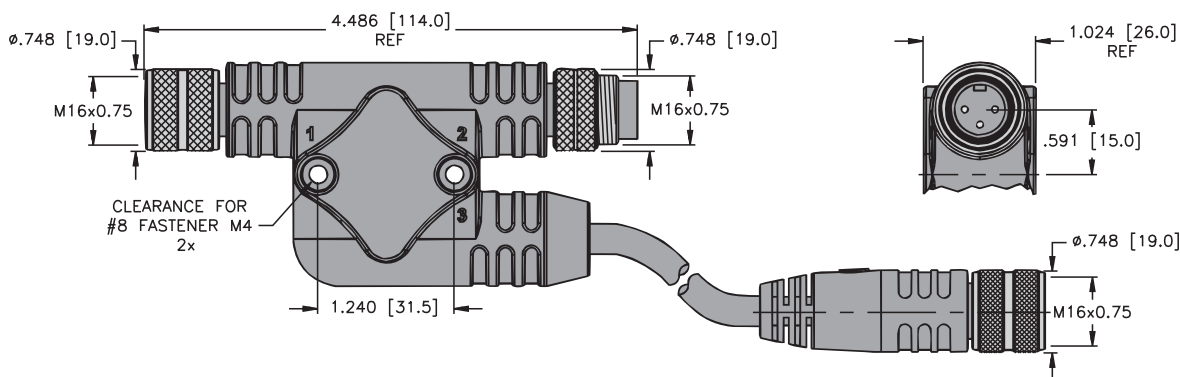


M16 powerfast h-Style Tee Dimensions

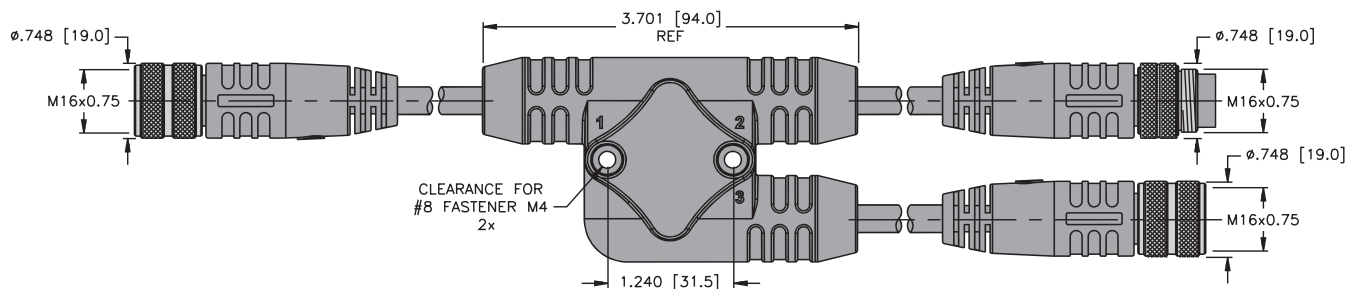
25

**Integral M16 Power Connector Drop, Trunk #2 Male
SH-BKM/BSM/BKM..**


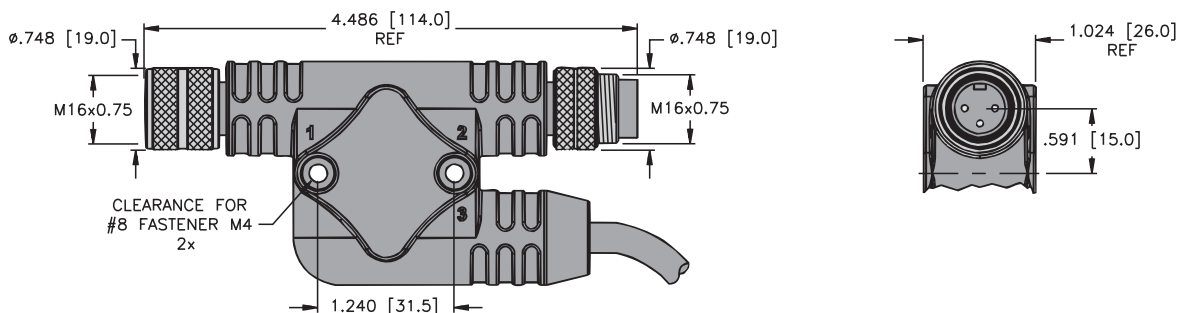
26

**Cable Drop with M16 Power Connector, Trunk #2 Male
SH-BKM/BSM/BKM..**


27

**Cable Trunk and Cable Drop with M16 Power Connectors, Trunk #2 Male
SH-BKM/BSM/BKM..**


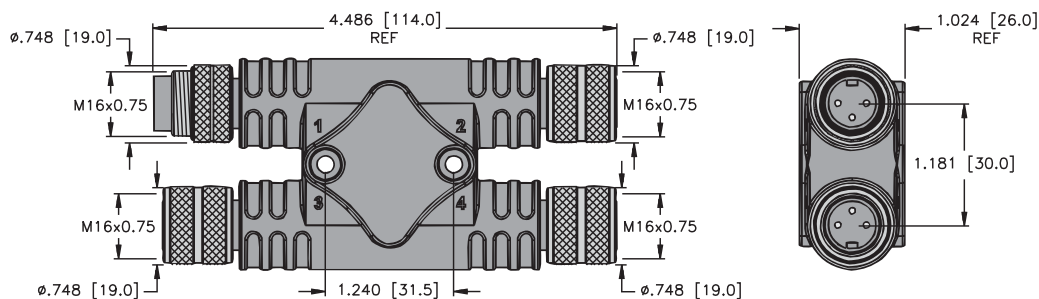
28

**Cable Drop, Trunk #2 Male
SH-BKM/BSM/T..**


M16 powerfast H-Style Tee Dimensions

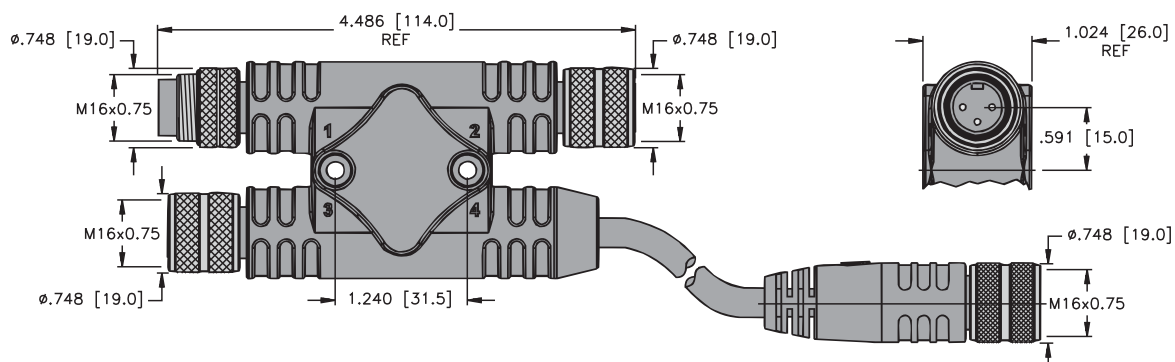
29

**Integral M16 Power Connector Drop, Trunk #1 Male
BH-BSM/3BKM..**



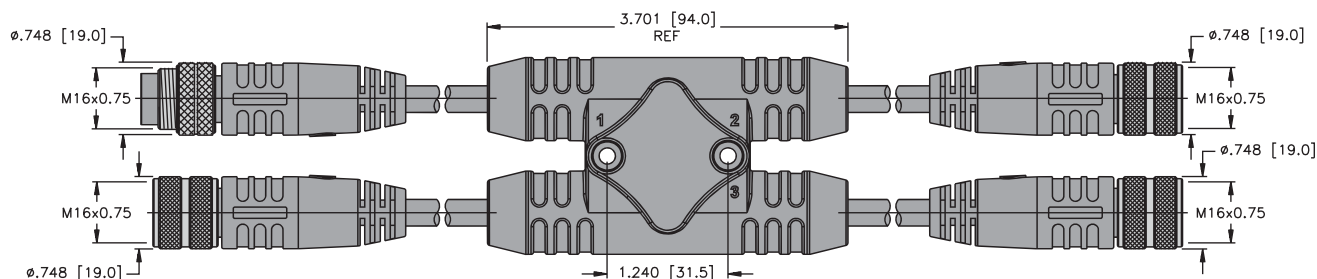
30

**Cable Drop with M16 Power Connector, Trunk #1 Male
BH-BSM/3BKM..**



31

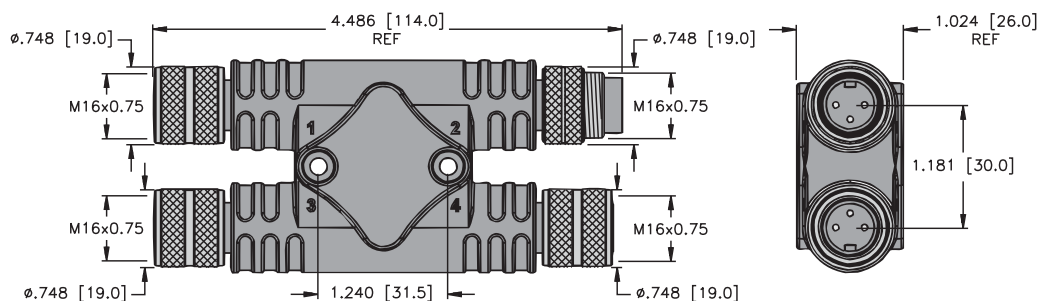
**Cable Trunk and Cable Drop with M16 Power Connectors, Trunk #1 Male
BH-BSM/3BKM..**



M16 powerfast H-Style Tee Dimensions

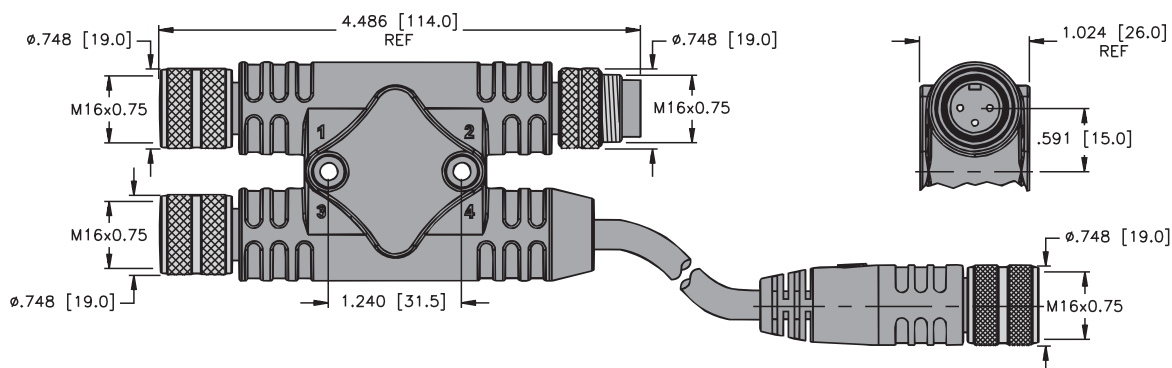
32

**Integral M16 Power Connector Drop, Trunk #2 Male
BH-BKM/BSM/2BKM..**



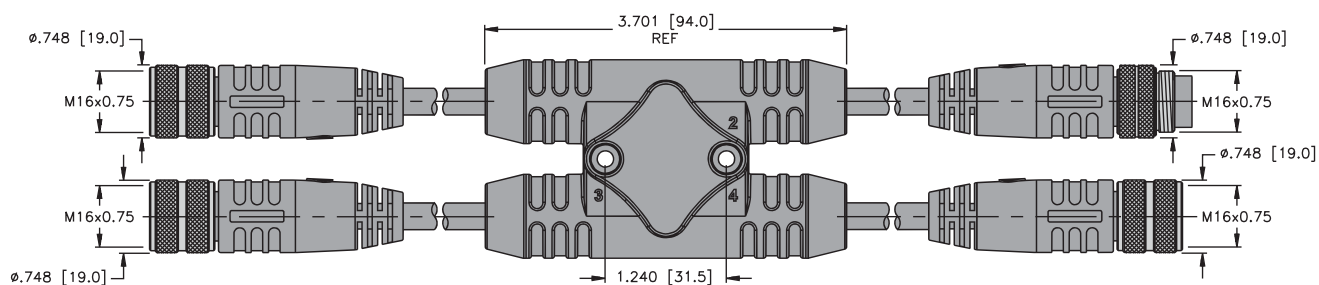
33

**Cable Drop with M16 Power Connector, Trunk #2 Male
BH-BKM/BSM/2BKM..**

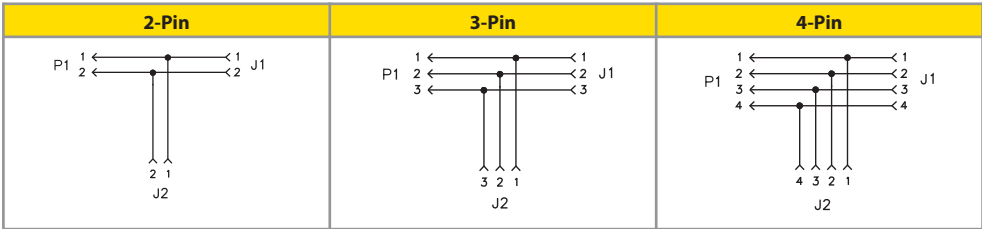


34

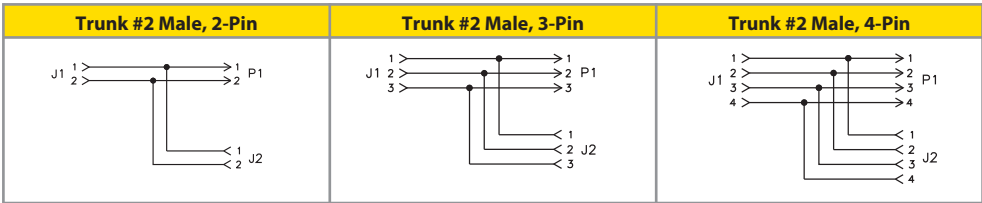
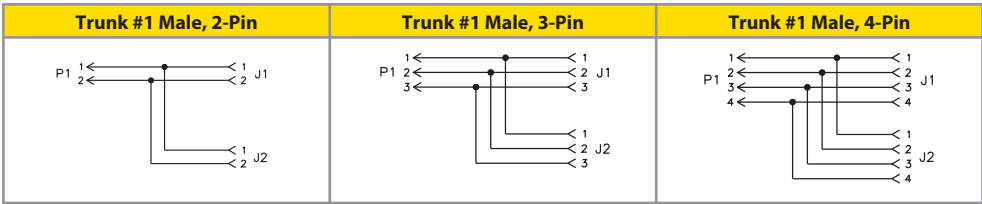
**Cable Trunk and Cable Drop with M16 Power Connectors, Trunk #2 Male
BH-BKM/BSM/2BKM..**



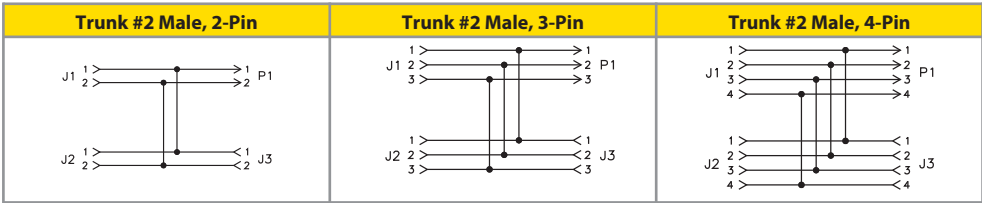
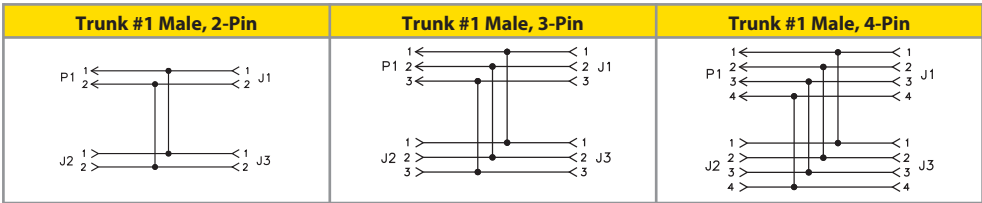
M16 powerfast Tee Wiring Diagrams



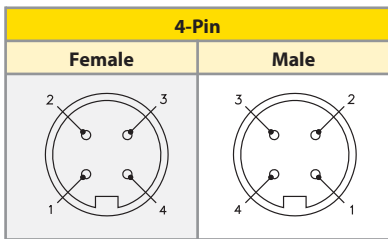
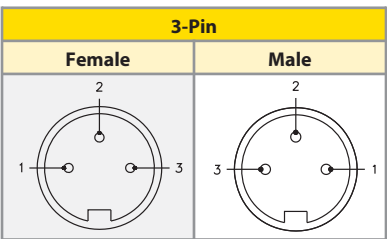
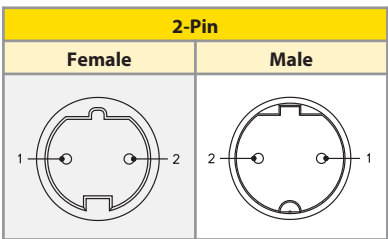
M16 powerfast h-Style Tee Wiring Diagrams



M16 powerfast H-Style Tee Wiring Diagrams



M16 powerfast Tee Pinouts

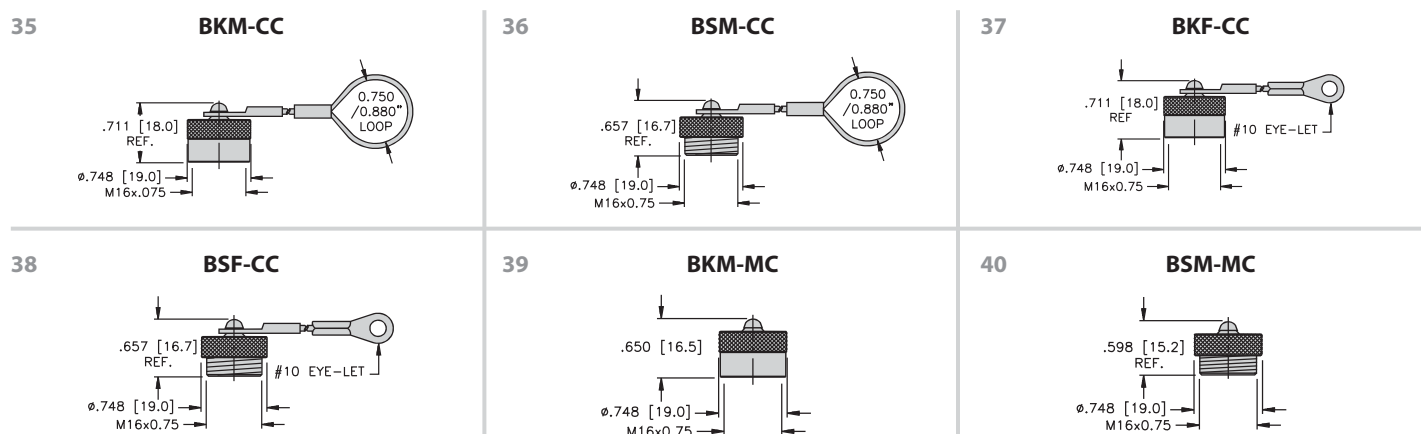


M16 powerfast Closure Cap Selection Matrix

		35	36	37	38	39	40
		Mates to male cordsets and receptacles	Mates to female cordsets and receptacles	Mates to male receptacles	Mates to female receptacles	Mates to male cordsets and receptacles	Mates to female cordsets and receptacles
Material	Thread	6" Loop Lanyard	6" Loop Lanyard	6" Lanyard with Eyelet	6" Lanyard with Eyelet	No Lanyard	No Lanyard
Nickel Plated Brass	M16	BKM-CC	BSM-CC	BKF-CC	BSK-CC	BKM-MC	BSM-MC

See table below for dimensional drawings.

M16 powerfast Closure Cap Dimensions



M16 powerlok

Part Number	Application
LOCK-M16	Nylon locking guard for straight M16 powerfast connectors
LOCK-M16-TEE	



M16 powerlok Open



M16 powerlok Closed

M23 powerfast™ CONNECTIVITY

Part Number Keys	42
Cordset and Receptacle Specifications	43
Cordset and Receptacle Selection Matrix	44
Cordset and Receptacle Dimensions	45
Cordset and Receptacle Pinouts	46

Features

- Options for combination of power and signal wires in one cable
- Shielded versions available
- 6 to 9-pin
- 12 to 14 AWG conductors for power, 18 AWG conductors for signal
- Up to 30 Amp, 600 Volt rated for power
- Up to 8 Amp, 300 Volt rated for signal
- AWM or tray rated-exposed run PVC cable
- IEC IP67 protection

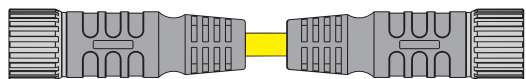


M23 powerfast Cordset Part Number Key

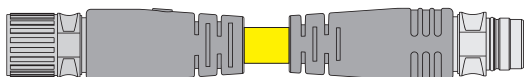
Part Number Keys are to assist in IDENTIFICATION ONLY. Consult factory for catalog items not identified.

M23 (23 mm) powerfast Cordset	C K M	64-078 - * /S..
Gender		Varieties (blank) = PVC jacket /S90 = PUR jacket
K = female contact holder, female threads S = male contact holder, female threads SS = male contact holder, male threads		Length in Meters
Configuration		Number of Wires / AWG / Color Codes 64-078 = 6x14 AWG WH, RD, GN, OG, BK, BU 74-079 = 7x14 AWG WH/BK, BK, WH, RD, OG, BU, GN 94-080 = 3x14 & 6X18 AWG RD, WH, WH/BK, BU, OG, BK, GN/BK, GN, RD/BK 622-059 = 6x12 AWG BU, RD, GN, BN, OG, YE 822-287 = 4x12 & 4X18 AWG BU, GN, WH, BK, OG, RD, WH/BK, RD/BK 622-286 = 6x12 AWG BU, RD, GN, BN, OG, YE 822-288 = 4x12 & 4X18 AWG BU, GN, WH, BK, OG, RD, WH/BK, RD/BK
Coupling Nut Material / Shielding		Insertion Point of Extension Cable 2nd Prefix*
(blank) = nickel plated brass V = stainless steel S = shielded		* Male connector listed 1st, female connector 2nd Example: CSM CKM 64-078-1

Extension Examples:



C **K** **M** **C** **K** **M** **74-079** - ***** **/S..**



C **SS** **M** **C** **K** **M** **622-059** - ***** **/S..**

M23 powerfast Receptacle Part Number Key

M23 (23 mm) powerfast Receptacle	C K F	64-6 - *
Gender		Length in Meters
K = female contact holder, male threads S = male contact holder, male threads		Number of Wires / AWG / Color Codes 64-6 = 6x14 AWG WH, RD, GN, OG, BK, BU 74-7 = 7x14 AWG WH/BK, BK, WH, RD, OG, BU, GN 94-9 = 3x14 & 6X18 AWG RD, WH, WH/BK, BU, OG, BK, GN/BK, GN, RD/BK 622-6 = 6x12 AWG BU, RD, GN, BN, OG, YE 822-8 = 4x12 & 4X18 AWG BU, GN, WH, BK, OG, RD, WH/BK, RD/BK
Designator for Receptacle		Mounting Style (blank) = front mount D = rear mount F = flange MF = flange, rotating coupling nut L = front mount, long threads

M23 powerfast Single Keyway Cordset Specifications

Mechanical

Mold material/Color:	PUR/Black
Contact carrier material:	Nylon or PBT
Coupling nut material:	
Standard:	Nickel plated brass
Additional options:	316 stainless steel
Environmental Protection:	IEC IP67
Temperature Rating:	-40 to +105°C (-40 to +221°F)

Electrical

Contact material:	Brass with gold plating
Cable jacket material/Color:	PVC/Yellow
Ratings:	
Power:	20 Amps, 300 V
Signal:	8 Amps, 150 V

M23 powerfast 3-Key Cordset Specifications

Mechanical

Mold material/Color:	PUR/Black
Contact carrier material:	Nylon or PBT
Coupling nut material:	
Standard:	Nickel plated brass
Environmental Protection:	IEC IP67
Temperature Rating:	-40 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass with gold plating
Cable jacket material/Color:	TC-ER PVC/Yellow
Ratings:	
Power:	30 Amps, 600 V
Signal:	9 Amps, 300 V

M23 powerfast Single Keyway Receptacle Specifications

Mechanical

Contact carrier material:	Nylon or PBT
Housing material/Plating:	
Standard:	Nickel plated brass
Additional options:	316 stainless steel
Environmental Protection:	IEC IP67
Temperature Rating:	-30 to +90°C (-40 to +194°F)

Electrical

Contact material:	Brass with gold plating
Conductor insulation:	PVC
Ratings:	
Power:	20 Amps, 300 V
Signal:	8 Amps, 150 V

M23 powerfast 3-Key Receptacle Specifications

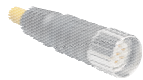
Mechanical

Contact carrier material:	Nylon or PBT
Housing material/Plating:	
Standard:	Nickel plated brass
Environmental Protection:	IEC IP67
Temperature Rating:	-30 to +80°C (-40 to +176°F)

Electrical

Contact material:	Brass with gold plating
Conductor insulation:	PVC
Ratings:	
Power:	30 Amps, 600 V
Signal:	9 Amps, 300 V

M23 powerfast Single Keyway Cordset Selection Matrix

			1 	1 	2 
			Straight Female	Straight Male	Straight Male
Pins	AWG	Current Rating	Single Keyway	Single Keyway	Single Keyway
6	14	20 Amps	CKM 64-078-*	CSM 64-078-*	CSSM 64-078-*
7	14	20 Amps	CKM 74-079-*	CSM 74-079-*	CSSM 74-079-*
9	3x14; 6x18	8 Amps (1-3,5,7,9), 20 Amps (4,6,8)	CKM 94-080-*	CSM 94-080-*	CSSM 94-080-*

M23 powerfast 3-Key Cordset Selection Matrix

			3 	4 	5 	6 
			Straight Female	Straight Male	Right Angle Female	Right Angle Male
Pins	AWG	Current Rating	3-Key	3-Key	3-Key	3-Key
6	12	30 Amps	CKM 622-059-*	CSSM 622-059-*	CKWM 622-059-*	CSSWM 622-059-*
8	4x12; 4x18	9 Amps (A-D), 30 Amps (1-4)	CKM 822-287-*	CSSM 822-287-*	CKWM 822-287-*	CSSWM 822-287-*

Pins	AWG	Current Rating	Shielded 3-Key	Shielded 3-Key	Shielded 3-Key	Shielded 3-Key
6	12	30 Amps	CKMS 622-286-*	CSSMS 622-286-*	CKWMS 622-286-*	CSSWMS 622-286-*
8	4x12; 4x18	9 Amps (A-D), 30 Amps (1-4)	CKMS 822-288-*	CSSMS 822-288-*	CKWMS 822-288-*	CSSWMS 822-288-*

M23 powerfast Single Keyway Receptacle Selection Matrix

Front Mount			7 	7 	8 	8 
			Female	Male	Female	Male
Pins	AWG	Current Rating	M20 Mount, Standard Thread	M20 Mounting, Standard Thread	M20 Mounting, Long Thread	M20 Mounting, Long Thread
6	14	20 Amps	CKF 64-6-*	CSF 64-6-*	CKFL 64-6-*	CSFL 64-6-*
7	14	20 Amps	CKF 74-7-*	CSF 74-7-*	CKFL 74-7-*	CSFL 74-7-*
9	3x14; 6x18	8 Amps (1-3,5,7,9), 20 Amps (4,6,8)	CKF 94-9-*	CSF 94-9-*	CKFL 94-9-*	CSFL 94-9-*

M23 powerfast 3-Key Receptacle Selection Matrix

Front Mount			9 	10 	11 
			Female	Male	Male
Pins	AWG	Current Rating	Flange Mount	Flange Mount	M20 Mounting Thread
6	12	30 Amps	CKFMF 622-6-*	CSFF 622-6-*	CSF 622-6-*
8	4x12; 4x18	9 Amps (A-D), 30 Amps (1-4)	CKFMF 822-8-*	CSFF 822-8-*	CSF 822-8-*

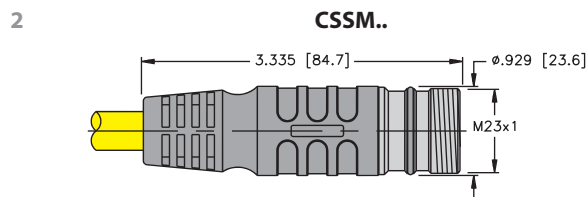
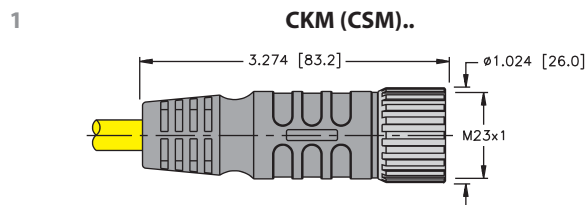
See pages 45-46 for dimensional drawings.

* Length in meters. Standard cable lengths are 2, 5 and 10 meters. Standard lead length is 0.5 meters. Consult factory for other lengths.

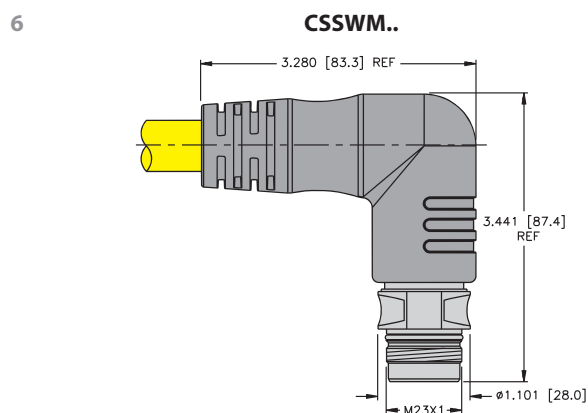
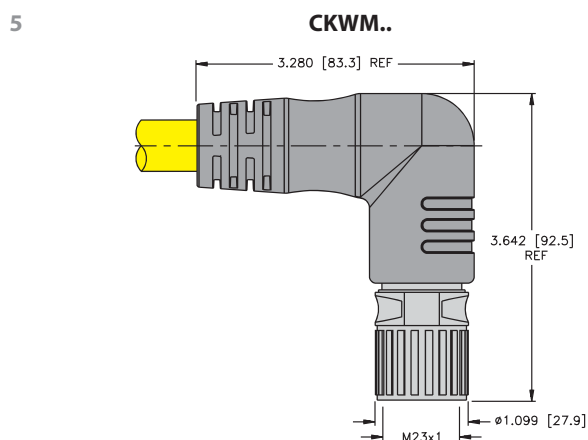
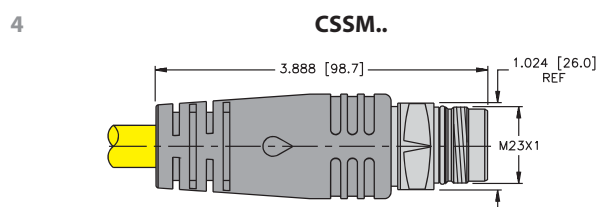
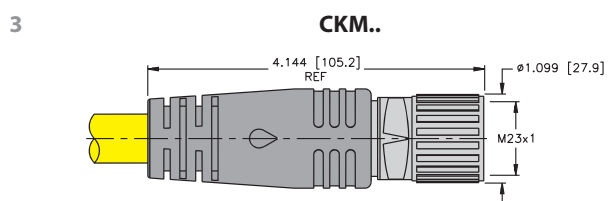
Note: Extension cables are available, please consult Part Number Key (page 42).

Standard coupling nut and housing material is nickel plated brass. Consult Part Number Key (page 42) for 316 stainless steel options.

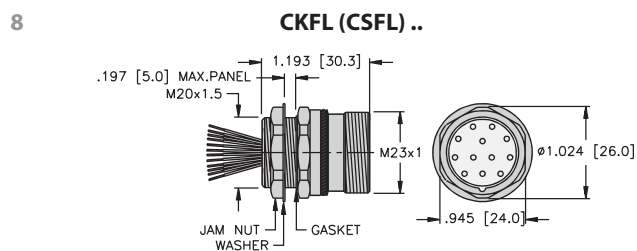
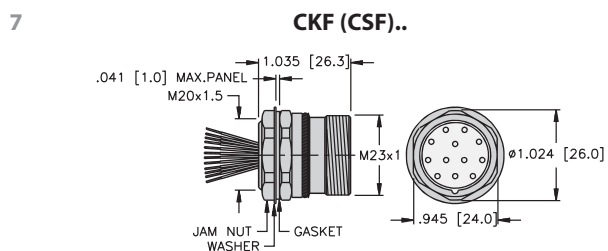
M23 powerfast Single Keyway Cordset Dimensions



M23 powerfast 3-Key Cordset Dimensions



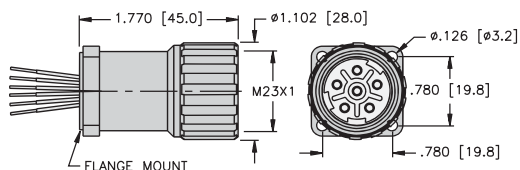
M23 powerfast Single Keyway Receptacle Dimensions



M23 powerfast 3-Key Receptacle Dimensions

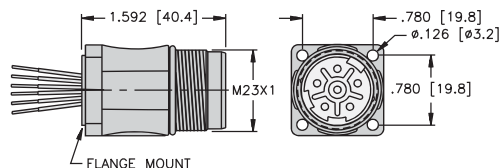
9

CKFMF..



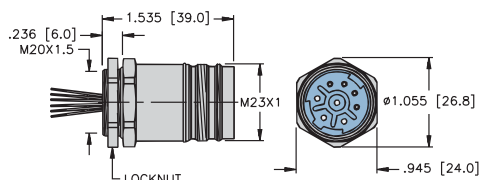
10

CSFF..



11

CSF..



M23 powerfast Single Keyway Cordset and Receptacle Pinouts

6-Pin	
Female	Male

Pinouts
1. WH 2. RD 3. GN 4. OG 5. BK 6. BU

7-Pin	
Female	Male

Pinouts
1. WH/BK 2. BK 3. WH 4. RD 5. OG 6. BU 7. GN

9-Pin	
Female	Male

Pinouts
1. RD 2. WH 3. WH/BK 4. BU 5. OG 6. BK 7. GN/BK 8. GN 9. RD/BK

M23 powerfast 3-Key Cordset and Receptacle Pinouts

6-Pin, 3-Key	
Female	Male

Pinouts
1. BU 2. RD 3. GN 4. BN 5. OG 6. YE

8-Pin, 3-Key	
Female	Male

Pinouts
1. BU 2. GN 3. WH 4. BK 5. OG 6. RD 7. WH/BK 8. RD/BK

Index

BH-BKM/BSM/2BKM 22	33	BSM/BKM/T44-193-*	32	GKDM 42-*M	13	GSDM/GKDM/T40-*S/4000	17
BH-BKM/BSM/2BKM 22-380-*	33	BSM-CC	40	GKDM 42-*M/S4000	13	GSDM/GKDM/T42-*	17
BH-BKM/BSM/2BKM 22-380-*/*/*/*	33	BSM-MC	40	GKDM 44-*M	13	GSDM/GKDM/T42-*S/4000	17
BH-BKM/BSM/2BKM 34	33	BSMS 22-1759-*	28	GKDM 44-*M/S4000	13	GSDM/GKDM/T44-*	17
BH-BKM/BSM/2BKM 34-198-*	33	BSMS 34-1364-*	28	GKDM-CC	23	GSDM/GKDM/T44-*S/4000	17
BH-BKM/BSM/2BKM 34-198-*/*/*/*	33	BSWM 22-380-*	28	GKDM-MC	23	GSDM-CC	23
BH-BKM/BSM/2BKM 44	33	BSWM 34-198-*	28	GKDWM 30-*M	13	GSDM-MC	23
BH-BKM/BSM/2BKM 44-193-*	33	BSWM 44-193-*	28	GKDWM 30-*M/S4000	13	GSDWM 30-*M	13
BH-BKM/BSM/2BKM 44-193-*/*/*/*	33	BSWMS 22-1759-*	28	GKDWM 32-*M	13	GSDWM 30-*M/S4000	13
BH-BSM/3BKM 22	33	BSWMS 34-1364-*	28	GKDWM 32-*M/S4000	13	GSDWM 32-*M	13
BH-BSM/3BKM 22-380-*	33	CKF 64-6-*	44	GKDWM 34-*M	13	GSDWM 32-*M/S4000	13
BH-BSM/3BKM 22-380-*/*/*/*	33	CKF 74-7-*	44	GKDWM 34-*M/S4000	13	GSDWM 34-*M	13
BH-BSM/3BKM 34	33	CKF 94-9-*	44	GKDWM 40-*M	13	GSDWM 34-*M/S4000	13
BH-BSM/3BKM 34-198-*	33	CKFL 64-6-*	44	GKDWM 40-*M/S4000	13	GSDWM 40-*M	13
BH-BSM/3BKM 34-198-*/*/*/*	33	CKFL 74-7-*	44	GKDWM 42-*M	13	GSDWM 40-*M/S4000	13
BH-BSM/3BKM 44	33	CKFL 94-9-*	44	GKDWM 42-*M/S4000	13	GSDWM 42-*M	13
BH-BSM/3BKM 44-193-*	33	CKFMF 622-6-*	44	GKDWM 44-*M	13	GSDWM 42-*M/S4000	13
BH-BSM/3BKM 44-193-*/*/*/*	33	CKFMF 822-8-*	44	GKDWM 44-*M/S4000	13	GSDWM 44-*M	13
BKF 22-*/*/14.5/NPT	29	CKM 622-059-*	44	GSDF 30-*M/14.5/NPT	14	GSDWM 44-*M/S4000	13
BKF 22-*/*/18.375/NPT	29	CKM 64-078-*	44	GSDF 30-*M/14.75/NPT	14	LOCK-A POWER	8
BKF 22-*/*/M18	29	CKM 74-079-*	44	GSDF 32-*M/14.5/NPT	14	LOCK-D POWER	24
BKF 22-*/*/M20	29	CKM 822-287-*	44	GSDF 32-*M/14.75/NPT	14	RKF 34-*M/NPT	5
BKF 34-*/*/14.5/NPT	29	CKM 94-080-*	44	GSDF 34-*M/14.5/NPT	14	RKF 44-*M/NPT	5
BKF 34-*/*/18.375/NPT	29	CKMS 622-059-*	44	GSDF 34-*M/14.75/NPT	14	RKF-CC	7
BKF 34-*/*/M18	29	CKMS 822-287-*	44	GSDF 40-*M/14.5/NPT	14	RKF-MC	7
BKF 34-*/*/M20	29	CKWM 622-059-*	44	GSDF 40-*M/14.75/NPT	14	RKFV-CC	7
BKF 44-*/*/14.5/NPT	29	CKWM 822-287-*	44	GSDF 42-*M/14.5/NPT	14	RKFV-MC	7
BKF 44-*/*/18.375/NPT	29	CKWMS 622-059-*	44	GSDF 42-*M/14.75/NPT	14	RKM 34-*M	5
BKF 44-*/*/M18	29	CKWMS 822-287-*	44	GSDF 44-*M/14.5/NPT	14	RKM 34-*M/S4000	5
BKF 44-*/*/M20	29	CSF 622-6-*	44	GSDF 44-*M/14.75/NPT	14	RKM 44-*M	5
BKF-CC	40	CSF 64-6-*	44	GSDF-CC	23	RKM 44-*M/S4000	5
BKFD 22-*/*/M18	29	CSF 74-7-*	44	GSDM 30-*M	13	RKM-CC	7
BKFD 34-*/*/M18	29	CSF 822-8-*	44	GSDM 30-*M/S4000	13	RKMV-CC	7
BKFD 44-*/*/M18	29	CSF 94-9-*	44	GSDM 30-0	14	RSF 34-*M/NPT	5
BKM 22-380-*	28	CSFF 622-6-*	44	GSDM 32-*M	13	RSF 44-*M/NPT	5
BKM 34-198-*	28	CSFF 822-8-*	44	GSDM 32-*M/S4000	13	RSF-CC	7
BKM 44-193-*	28	CSFL 64-6-*	44	GSDM 34-*M	13	RSF-MC	7
BKM-CC	40	CSFL 74-7-*	44	GSDM 34-*M/S4000	13	RSFV-CC	7
BKM-MC	40	CSFL 94-9-*	44	GSDM 40-*M	13	RSFV-MC	7
BKMS 22-1759-*	28	CSM 64-078-*	44	GSDM 40-*M/S4000	13	RSM 34-*M	5
BKMS 34-1364-*	28	CSM 74-079-*	44	GSDM 40-0	14	RSM 34-*M/S4000	5
BKWM 22-380-*	28	CSM 94-080-*	44	GSDM 42-*M	13	RSM 44-*M	5
BKWM 34-198-*	28	CSSM 622-059-*	44	GSDM 42-*M/S4000	13	RSM 44-*M/S4000	5
BKWM 44-193-*	28	CSSM 64-078-*	44	GSDM 44-*M	13	RSM-CC	7
BKWMS 22-1759-*	28	CSSM 74-079-*	44	GSDM 44-*M/S4000	13	RSMV-CC	7
BKWMS 34-1364-*	28	CSSM 822-287-*	44	GSDM BKM 34-0	18	SH-BKM/BSM/BKM 22	32
BSF 22-*/*/14.5/NPT	29	CSSM 94-080-*	44	GSDM BKM 44-0	18	SH-BKM/BSM/BKM 22-380-*	32
BSF 22-*/*/18.375/NPT	29	CSSMS 622-059-*	44	GSDM RKM 34-0	18	SH-BKM/BSM/BKM 22-380-*/*/*	32
BSF 22-*/*/M18	29	CSSMS 822-287-*	44	GSDM RKM 44-0	18	SH-BKM/BSM/BKM 34	32
BSF 22-*/*/M20	29	CSSWM 622-059-*	44	GSDM/2GKDM 30	17	SH-BKM/BSM/BKM 34-198-*	32
BSF 34-*/*/14.5/NPT	29	CSSWM 822-287-*	44	GSDM/2GKDM 30-*	17	SH-BKM/BSM/BKM 34-198-*/*/*	32
BSF 34-*/*/18.375/NPT	29	CSSWMS 622-059-*	44	GSDM/2GKDM 30-*S/4000	17	SH-BKM/BSM/BKM 44	32
BSF 34-*/*/M18	29	CSSWMS 822-287-*	44	GSDM/2GKDM 32-*	17	SH-BKM/BSM/BKM 44-193-*	32
BSF 34-*/*/M20	29	GKDF 30-*M/14.5/NPT	14	GSDM/2GKDM 32-*S/4000	17	SH-BKM/BSM/BKM 44-193-*/*/*	32
BSF 44-*/*/14.5/NPT	29	GKDF 30-*M/14.75/NPT	14	GSDM/2GKDM 34-*	17	SH-BKM/BSM/T22-380-*	32
BSF 44-*/*/18.375/NPT	29	GKDF 32-*M/14.5/NPT	14	GSDM/2GKDM 34-*S/4000	17	SH-BKM/BSM/T34-198-*	32
BSF 44-*/*/M18	29	GKDF 32-*M/14.75/NPT	14	GSDM/2GKDM 40	17	SH-BKM/BSM/T44-193-*	32
BSF 44-*/*/M20	29	GKDF 34-*M/14.5/NPT	14	GSDM/2GKDM 40-*	17	SH-BSM/2BKM 22	32
BSFD 22-*/*/M18	29	GKDF 34-*M/14.75/NPT	14	GSDM/2GKDM 40-*S/4000	17	SH-BSM/2BKM 22-380-*	32
BSFD 34-*/*/M18	29	GKDF 40-*M/14.5/NPT	14	GSDM/2GKDM 42-*	17	SH-BSM/2BKM 22-380-*/*/*	32
BSFD 44-*/*/M18	29	GKDF 40-*M/14.75/NPT	14	GSDM/2GKDM 42-*S/4000	17	SH-BSM/2BKM 34	32
BSK-CC	40	GKDF 42-*M/14.5/NPT	14	GSDM/2GKDM 44-*	17	SH-BSM/2BKM 34-198-*	32
BSM 22-380-*	28	GKDF 42-*M/14.75/NPT	14	GSDM/2GKDM 44-*S/4000	17	SH-BSM/2BKM 34-198-*/*/*	32
BSM 34-198-*	28	GKDF 44-*M/14.5/NPT	14	GSDM/GKDM/BKM 34-*S/4000	17	SH-BSM/2BKM 44	32
BSM 44-193-*	28	GKDF 44-*M/14.75/NPT	14	GSDM/GKDM/BKM 44-*S/4000	17	SH-BSM/2BKM 44-193-*	32
BSM/2BKM 22	32	GKDF-CC	23	GSDM/GKDM/RKM 34-*	17	SH-BSM/2BKM 44-193-*/*/*	32
BSM/2BKM 22-380-*	32	GKDM 30-*M	13	GSDM/GKDM/RKM 34-*S/4000	17	SH-BSM/BKM/T22-380-*	32
BSM/2BKM 22-380-*/*/*	32	GKDM 30-*M/S4000	13	GSDM/GKDM/RKM 44-*	17	SH-BSM/BKM/T34-198-*	32
BSM/2BKM 34	32	GKDM 30-0	14	GSDM/GKDM/RKM 44-*S/4000	17	SH-BSM/BKM/T44-193-*	32
BSM/2BKM 34-198-*	32	GKDM 32-*M	13	GSDM/GKDM/T30-*	17	WSM 34-*M/S4000	5
BSM/2BKM 34-198-*/*/*	32	GKDM 32-*M/S4000	13	GSDM/GKDM/T30-*S/4000	17	WSM 44-*M/S4000	5
BSM/2BKM 44	32	GKDM 34-*M	13	GSDM/GKDM/T32-*	17	WSM 34-*M/S4000	5
BSM/2BKM 44-193-*	32	GKDM 34-*M/S4000	13	GSDM/GKDM/T32-*S/4000	17	WSM 44-*M/S4000	5
BSM/2BKM 44-193-*/*/*	32	GKDM 40-*M	13	GSDM/GKDM/T34-*	17		
BSM/BKM/T22-380-*	32	GKDM 40-*M/S4000	13	GSDM/GKDM/T34-*S/4000	17		
BSM/BKM/T34-198-*	32	GKDM 40-0	14	GSDM/GKDM/T40-*	17		



USA

TURCK Inc.
3000 Campus Drive
Minneapolis, MN 55441
Phone: (763) 553-7300
Fax: (763) 553-0708
Application Support:
1-800-544-7769
E-mail: turckusa@turck.com
www.turck.us



MEXICO

TURCK MEXICO S. DE R.L. DE C.V.
Carr. Saltillo-Zacatecas km 4.5 s/n
Parque Industrial "La Angostura"
Saltillo, COAH. C.P. 25070
Mexico
Phone: +52 (844) 411-6650/46
Fax: +52 (844) 482-6926
Local Toll Free: 01-800-01-88725
E-mail: ventasmexico@turck.com



CANADA

Chartwell Automation Inc.
140 Duffield Drive
Markham, Ontario
Canada, L6G 1B5
Phone: (905) 513-7100
Fax: (905) 513-7101
Toll Free: 1-877-513-7769



AUSTRALIA

TURCK Australia Pty. Ltd.
Unit 5, 6-7 Gilda Court
Mulgrave, Victoria 3170
Australia
Phone: (+61) 3 9560 9066
Fax: (+61) 3 9560 1620
Local Toll Free: 1300 132566
E-mail: turckaustralia@turck.com



GERMANY

WORLD HEADQUARTERS

Hans TURCK GmbH & Co. KG
Witzlebenstrasse 7
D-45472 Muelheim an der Ruhr
Federal Republic of Germany
Phone: (+49) 208-49 52-0
Fax: (+49) 208-49 52 264

www.turck.com

....**Sense It!**....**Connect It!**....**Bus It!**....**Solve It!**™