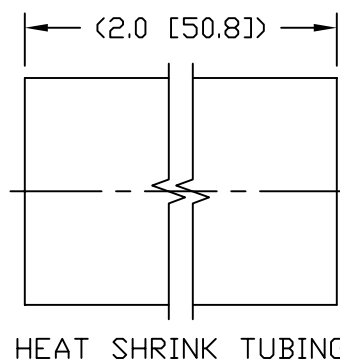
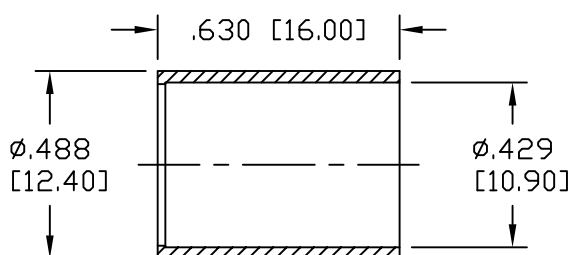
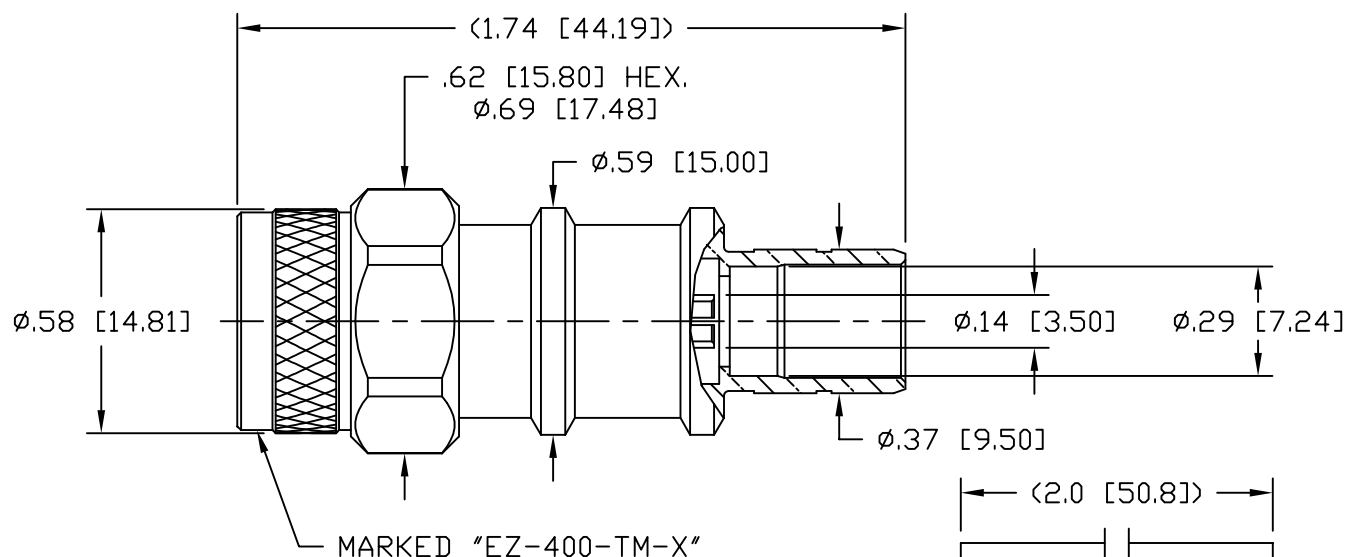
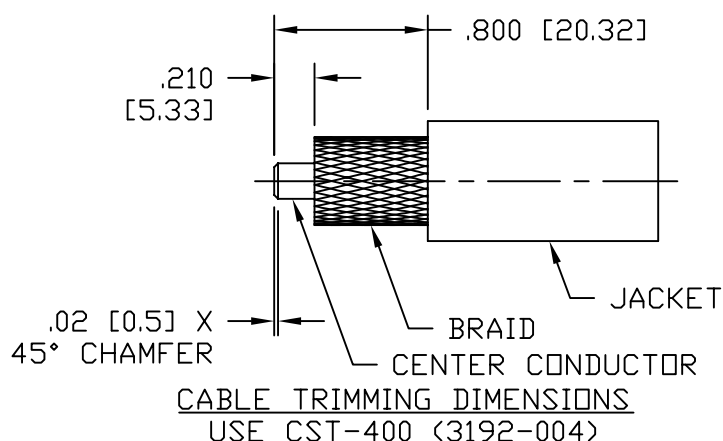


NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	K.A.M.	2/25/10	J.D.B.	3/11/10
B	CHANGED PER CDC #34322	D.J.H.	10/12/11	J.D.B.	10/27/11
C	CHANGED PER CDC #36607	D.J.H.	11/16/12	J.D.B.	11/19/12



HEAT SHRINK TUBING



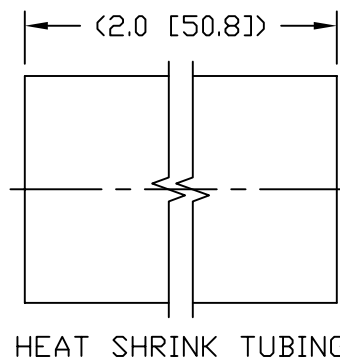
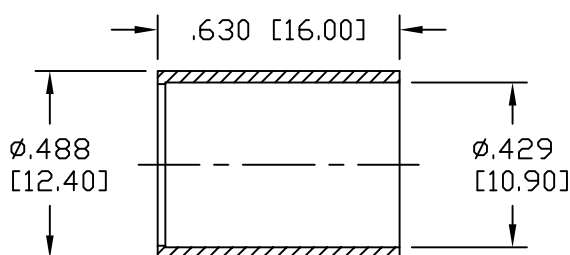
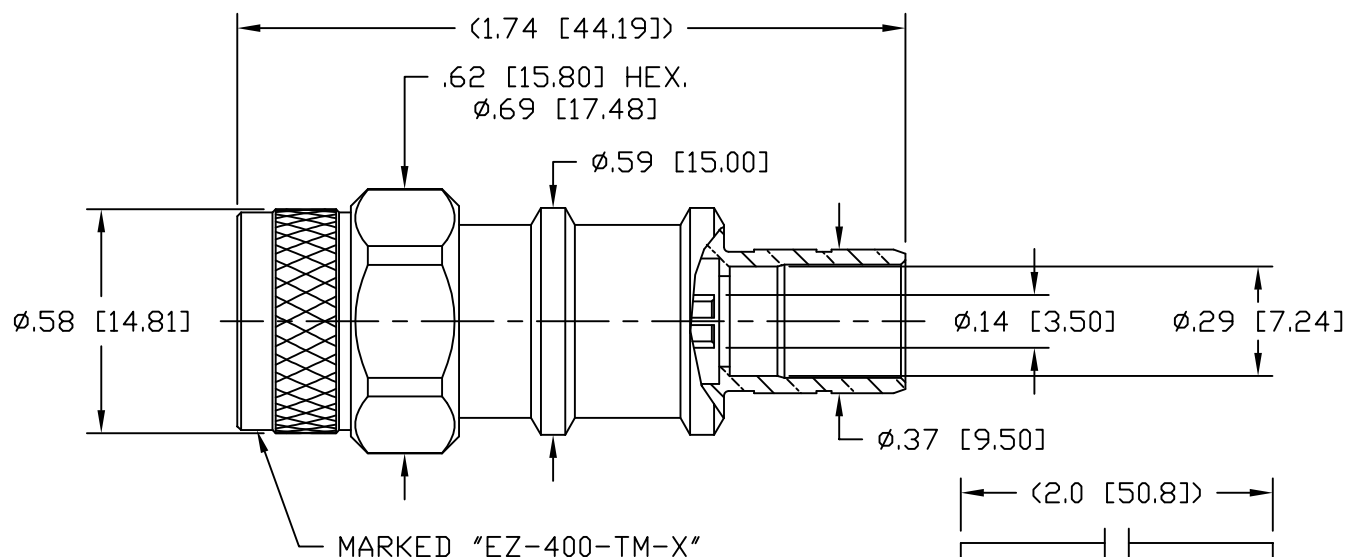
NOTES:

- MATERIALS AND FINISHES:**
BODY: BRASS, ALBALOY PLATING
COUPLING NUT: BRASS, ALBALOY PLATING
CENTER CONTACT: BERYLLIUM COPPER, GOLD PLATING
FERRULE: COPPER, ALBALOY PLATING
- ELECTRICAL:**
IMPEDANCE: 50 OHMS NOMINAL
FREQUENCY: DC-6 GHz
VSWR: 1.2 DC-6 GHz
DIELECTRIC WITHSTANDING VOLTAGE: 1,000 VOLTS RMS
- MECHANICAL:**
DURABILITY: 500 CYCLES MIN.
TEMPERATURE RANGE: -65°C TO +165°C
- CABLING INSTRUCTIONS:**
A. SLIDE FERRULE OVER CABLE JACKET
B. TRIM CABLE TO DIMENSIONS SHOWN. MAKE SURE CUTS ARE SHARP AND SQUARE. DO NOT NICK BRAID OR CENTER CONDUCTOR.
C. FLAIR BRAID SLIGHTLY AND INSERT CABLE INTO BODY UNTIL BOTTOMED. SLIDE THE FERRULE UP THE CABLE AND OVER THE BRAID UNTIL BOTTOMED ON BODY. CRIMP FERRULE USING A .429 HEX.
5. RECOMMENDED COUPLING NUT TORQUE: 4-6 IN-LBS.

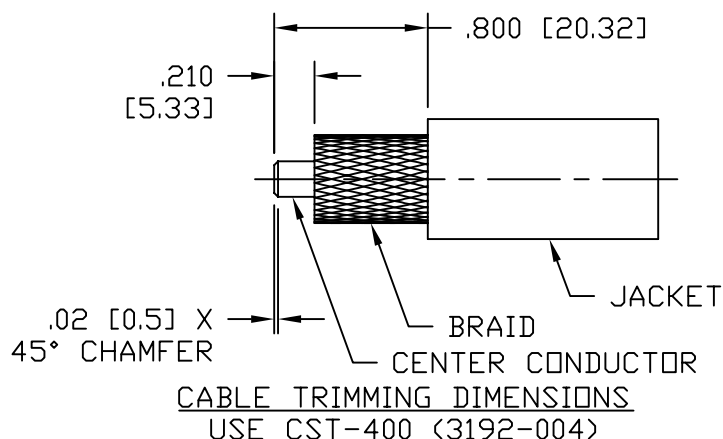
MATL:		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH 32 RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS .XX ± .01 .XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/64		DFTM. K. A. M.	TIMES MICROWAVE SYSTEMS				
				DATE 2/25/10					
USED ON: B				CHKD. J. D. B.	EZ-400-TM-X PLUG, TNC, EZ FOR LMR-400				
				DATE 3/11/10					
SCALE: ~		DWG. SIZE A		DO NOT SCALE DRAWING	CODE IDENT 68999	DATE 3/11/10	SHEET 1 of 1	SD3190-2533	REV C
						APPD. J. D. B.			

NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	K.A.M.	2/25/10	J.D.B.	3/11/10
B	CHANGED PER CDC #34322	D.J.H.	10/12/11	J.D.B.	10/27/11
C	CHANGED PER CDC #36607	D.J.H.	11/16/12	J.D.B.	11/19/12



HEAT SHRINK TUBING

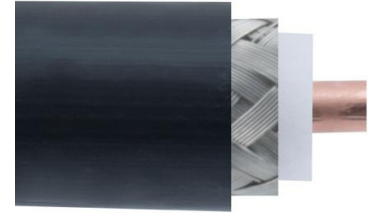


NOTES:

- MATERIALS AND FINISHES:
BODY: BRASS, ALBALOY PLATING
COUPLING NUT: BRASS, ALBALOY PLATING
CENTER CONTACT: BERYLLIUM COPPER, GOLD PLATING
FERRULE: COPPER, ALBALOY PLATING
- ELECTRICAL:
IMPEDANCE: 50 OHMS NOMINAL
FREQUENCY: DC-6 GHz
VSWR: 1.2 DC-6 GHz
DIELECTRIC WITHSTANDING VOLTAGE: 1,000 VOLTS RMS
- MECHANICAL:
DURABILITY: 500 CYCLES MIN.
TEMPERATURE RANGE: -65°C TO +165°C
- CABLING INSTRUCTIONS:
A. SLIDE FERRULE OVER CABLE JACKET
B. TRIM CABLE TO DIMENSIONS SHOWN. MAKE SURE CUTS ARE SHARP AND SQUARE. DO NOT NICK BRAID OR CENTER CONDUCTOR.
C. FLAIR BRAID SLIGHTLY AND INSERT CABLE INTO BODY UNTIL BOTTOMED. SLIDE THE FERRULE UP THE CABLE AND OVER THE BRAID UNTIL BOTTOMED ON BODY. CRIMP FERRULE USING A .429 HEX.
5. RECOMMENDED COUPLING NUT TORQUE: 4-6 IN-LBS.

MATL:		UNLESS OTHERWISE SPECIFIED			DFTM. K. A. M.		TIMES MICROWAVE SYSTEMS		
		ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH 32 RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS .XX ± .01 .XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/64			DATE 2/25/10				
USED ON: B					CHKD. J. D. B.		EZ-400-TM-X PLUG, TNC, EZ FOR LMR-400		
					DATE 3/11/10				
					APPD. J. D. B.				
SCALE: ~		DWG. SIZE: A	DO NOT SCALE DRAWING	CODE IDENT	68999	DATE 3/11/10	SHT 1 of 1	SD3190-2533	REV C

Low PIM Flexible TCOM-400-FR Fire Rated Coax Cable Triple Shielded with Black FRPE Jacket



TCOM-400-FR

Configuration

- Low PIM, Fire Rated Flexible Cable
- 3 Shield(s)

Features

- Lightweight and Extremely Flexible
- PIM < -155 dBc
- RF Shielding >100 dB
- Low Loss Dielectric 85% VoP
- Fire Rated Jacket
- Non-Halogen (Non-Toxic)

Applications

- Wireless Base Station Interconnect
- Distributed Antenna Systems (DAS)
- Antenna Jumpers
- UL/NEC & CSA rating of 'CMR' and 'FT4'
- Low Smoke Requirements
- Small Cell
- Indoor-Riser CMR

Description

The TCOM-400-FR part number from Pasternack is a TCOM-400 low PIM coax cable that is flexible. Pasternack flexible coax RF cable has an impedance of 50 Ohm and a foam polyethylene dielectric. Our TCOM-400 coax cable is constructed with a 0.405-inch jacket made of polyethylene. This coaxial cable has a dielectric withstanding voltage of 2500 Vdc. This black low PIM coax cable has a nominal capacitance of 23.90 pF/Ft.

This TCOM-400 flexible RF cable has a shield count of 3. Our coax cable from Pasternack has a maximum frequency of 10 GHz. The maximum passive intermodulation of this low PIM cable is -155 dBc. Additional specifications for this TCOM-400-FR RF coaxial cable are on our downloadable PDF datasheet above. This low PIM RF cable has a one-time minimum bend radius of 1.0 inches and a repeat minimum bend radius of 4.0 inches. Our flexible 50 Ohm coax cable has a peak power rating of 16000 watts.

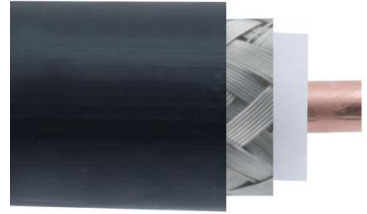
Our TCOM-400 coax cable can operate at temperatures ranging from -40 to 85 deg C. The black-colored coax RF cable has a typical insertion loss/attenuation of 1.6, 2.9, 4.2, 6.4, 10.5 and 15.7 dB/100ft at frequencies of 150 MHz, 450 MHz, 900 MHz, 2000 MHz, 5000 MHz, and 10000 MHz respectively. Our TCOM-400-FR flexible RF cable has a solid copper center conductor. This coaxial cable features a dual shield of tinned copper braid over the silver plated copper braid.

Pasternack TCOM-400 low PIM coax cables are part of our RF, microwave, and millimeter wave components. These flexible cables and our other RF parts are available for same-day shipping worldwide. Custom RF cable assemblies using TCOM-400, or other coax can be built and shipped the same business day as well.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
Impedance		50		Ohms
Velocity of Propagation		85		%
Time Delay		1.2 [3.94]		ns/ft [ns/m]
Shielding Effectiveness	100			dB
Passive Intermodulation			-155	dBc

Low PIM Flexible TCOM-400-FR Fire Rated Coax Cable Triple Shielded with Black FRPE Jacket



TCOM-400-FR

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			1.39	Ohms/1000ft
Outer Conductor DC Resistance			1.47	Ohms/1000ft
Nominal Capacitance		23.9 [78.41]		pF/ft [pF/m]
Nominal Inductance		0.06 [0.2]		uH/ft [uH/m]
Input Power (Peak)			16	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.15	0.45	0.9	2	5	GHz
Attenuation, Typ	1.6	2.9	4.2	6.4	10.5	dB/100ft
	5.25	9.51	13.78	21	34.45	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	10					GHz
Attenuation, Typ	15.7					dB/100ft
	51.51					dB/100m

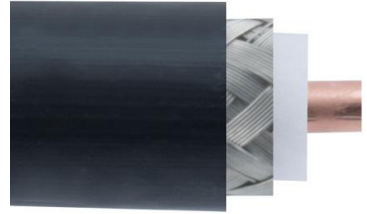
Mechanical Specifications

Diameter	0.405 in [10.29 mm]
Weight	0.08 lbs/ft [0.12 kg/m]
Min. Bend Radius (Installation)	1 in [25.4 mm]
Min. Bend Radius (Repeated)	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Tensile Strength	160 lbs [72.57 kg]
Flat Plate Crush	40 lbs/in [0.71 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum, 1 Strand	0.108 in [2.74 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.285 in [7.24 mm]
First Shield	Silver Plated Copper Braid	0.295 in [7.49 mm]
Second Shield	Tinned Copper Braid	0.33 in [8.38 mm]
Jacket	FRPE, Black	0.405 in [10.29 mm]

Low PIM Flexible TCOM-400-FR Fire Rated Coax Cable Triple Shielded with Black FRPE Jacket



TCOM-400-FR

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Low PIM Flexible TCOM-400-FR Fire Rated Coax Cable Triple Shielded with Black FRPE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TCOM-400-FR Fire Rated Coax Cable Triple Shielded with Black FRPE Jacket TCOM-400-FR](#)

URL: <https://www.pasternack.com/low-pim-flexible-tcom400-pe-jacket-silver-plated-copper-braid-over-tinned-copper-braid-outer-conductor-double-shielded-tcom-400-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

TCOM-400-FR CAD Drawing
Low PIM Flexible TCOM-400-FR Fire Rated Coax Cable Triple Shielded with Black FRPE Jacket

