


KJA/KJB 38999-Style Series III: Our customizable product solutions proves our continued focus on customers demand.

Our KJA/KJB 38999-Style Series III connectors are ideally suited for harsh environments They feature high density layouts with up to 128 data connections and power contacts rated up to 23A, as well as triple-start coupling with anti-decoupling ratchet for high vibration applications, grounded plug for superior EMI shielding and 100% scoop-proof contacts for blind-mate coupling.

ITT Cannon has manufactured its KJA/KJB 38999-Style Series III connectors since the mid 1970s. Throughout the years, we have made many advances in the design and engineering of this product line. These changes have allowed us to make significant improvements in the manufacturing of this offering. These improvements allow ITT Cannon to continue providing high quality and reliable 38999-Style products at market competitive prices.


- Applications
- Military communication systems
 - Hand held and vehicle platforms
 - Military ground support systems
 - Military computer systems
 - Harsh environment platforms
 - Blind mate applications
 - Aerospace launch vehicles
 - Aircraft engines
 - General electric testing equipment
 - Commercial business aviation
 - High density, low signal platforms

Our products do what we say they will do



Laser Marking of Cavity Identification

White background improves clarity which provides for assembly accuracy and reduces assembly re-work.




Coupling Ratchet System

Provides greater ease of coupling while maintaining the reliability of KJA/KJB D38999-Style Series III

Why customers benefit from choosing Cannon's KJA/KJB 38999-Style Series III interconnects:


- Improved coupling ratchet system provides robust performance and meets vibration and shock requirements
- Broad distribution network with a full line offering by authorized value added and stocking distributors
- Global manufacturing locations provides specific regional design requirements and optimizes procurement resources

- Technical overview
- 3- to 128-way layouts
 - Wire range: Size 12-28
 - 1000-2300 VAC rms at sea level
 - Up to 200° C / 392° F



Elastomers Technologies

A durable sealing membrane to provide environmental protection through the connector system.



Redesigned Rear Grommet

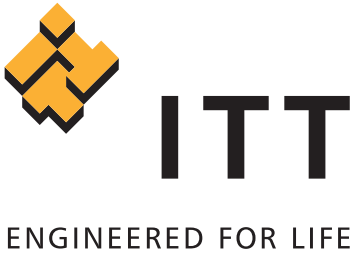
Elimination of rear peripheral potting compound provides greater reliability.



ITT Cannon
Visit www.ittcannon.com

- Global Design & Manufacturing
- Customer Support

North America		Europe & Middle East		Asia	
	MEXICO - Cannon, VEAM Av. Libre Comercio s/n-entre Calzada Industrial Nuevo Nogales y Calzada del Raquet Club, Parque Industrial Nuevo Nogales phone: +52.631.3110050 fax: +52.631.3110060		FRANCE - Cannon, VEAM 15, Boulevard Robert Thiboust Serris, France 77700 phone: +33.1.60.04.93.93 fax: +33.1.60.04.93.90		CHINA - Cannon, VEAM Tuopandun Industrial Area, Jinda Cheng, Xiner Village, Shajing Town, Boan District, Shenzhen City, Guangdong Province, China 518125 phone: +86.755.2726.7238 fax: +86.755.2726.7515
	USA - Cannon 56 Technology Drive Irvine, CA 92618 toll free: +1.800.854.3028 fax: +1.714.628.2142		GERMANY - Cannon, VEAM Cannonstrasse 1 Weinstadt, 71384 phone: +49.7151.699.0 fax: +49.7151.699.217		HONG KONG - Cannon, VEAM Units 2405-6, 24/F, ING Tower 308 Des Voeux Road Central Hong Kong phone: +852.2732.2720 fax: +852.2732.2919
	USA - BIW Connector Systems 500 Tesconi Circle Santa Rosa, CA 95401 phone: +1.707.523.2300 fax: +1.707.523.3567		ITALY - VEAM Corso Europa 41/43 Lainate (MI), Italy 20020 phone: +39.02938721 fax: +39.0293872300		INDIA - Cannon, VEAM ITT Corporation India Pvt Ltd Money Chamber, Unit No. 202 #6, KH Road, Bangalore 560027 phone: +91.22.67843000 fax: +91.22.26783033
	USA - VEAM 100 New Wood Road Watertown, CT 06795 phone: +1.860.274.9681 fax: +1.860.274.4963		LEBANON - BIW Connector Systems P.O. Box 199 Jounieh Lebanon phone: +961.9.911.560 fax: +961.9.912.126		JAPAN - Cannon, VEAM 5-11-3, Hibarigaoka, Zama-shi, Kanagawa, Japan 252-0003 phone: +81.462.57.2010 fax: +81.462.57.1680
			UK - Cannon, VEAM Jays Close, Viabes Estate Basingstoke, RG22 4BA phone: +44.1256.311200 fax: +44.1256.323356		SINGAPORE - Cannon, VEAM 10 Jalan Kilang #06-01 Singapore 159410 phone: +65.62763693 ext 232 fax: +65.62763685



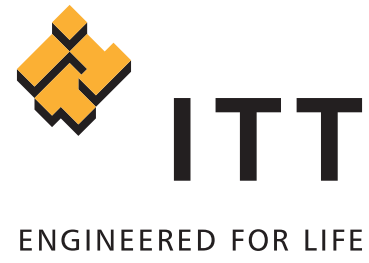
The “ITT Engineered Blocks” symbol, “Engineered for life,” “ITT” and “Cannon” are registered trademarks of ITT Inc. Specification and other data are based on information available at the time of printing, and are subject to change without notice. Our facility is not currently certified by the DLA and this product is not covered by the QPL/QML. | ITT Cannon KJA/KJB Brochure | 20170728

Cannon

KJA/KJB 38999-Style Series III

High perfomance and reliability with exceptional versatility in the harshest environments

Features and Benefits



High density interconnect solutions designed to perform in the harshest environments.



Designed to be comparable to **38999-Style Series III** & **REACH** compliant.



Utilizes **data transmission** in military ground vehicle systems.



Provides **sealed protection** in harsh environmental applications.



Delivers **signal transmission** in military communication systems.

Product Performance

MIL-DTL-38999	Coupling System	Hardware	Finish	Contact Type	Contact Size	Shell Size	Mating
KJA/KJB	Threaded	Aluminum	Cadmium/Nickel/ Green Zinc Cobalt/ Black Zinc Cobalt/ Black Electroless Nickel	Signal/Coax/ Twinax/Quadrx	Size 8-22	Size 9-25	500 Cycles

KJA/KJB D38999-Style Series III: Highly engineered customized & off-the-shelf solutions.

The wide range of plating options available for the 38999-Style allow compatible connectors for the harsh environments of military and aerospace.



Plating Finish	Cadmium	Electroless Nickel	Black Electroless Nickel	Black Zinc Cobalt	Green Zinc Cobalt
Finish Modification Code	Class ‘W’	Class ‘F’	-A297	-A296	-T69
Color	Olive Drab	Reflective	Non-Reflective Black	Non-Reflective Black	Dark Green
Durability	500 cycles mating & unmating	500 cycles mating & unmating	500 cycles mating & unmating	500 cycles mating & unmating	500 cycles mating & unmating
Temperature Range	-65°c to +175°c	-65°c to +200°c	-65°c to +175°c	-55°c to +125°c	-55°c to +125°c
EMI Shielding	>90dB at 100 MHz> >50dB at 10GHz	>90dB at 100 MHz> >65dB at 10GHz	>90dB at 100 MHz> >50dB at 10GHz	>80dB at 100 MHz> >45dB at 10GHz	>80dB at 100 MHz> >45dB at 10GHz
Shell-Shell Conductivity	2.5mV max	1mV max	2.5mV max	5mV max	5mV max
Corrosion Resistance	500hrs salt spray	48hrs salt spray	192hrs salt spray	48hrs salt spray	96hrs salt spray
RoHS Status	Not RoHS compliant	Not RoHS compliant	RoHS compliant	RoHS compliant	Not RoHS compliant

Reference the ITT Cannon D38999-Style Connectors catalog for product range data.

Insert Availability & Identification

Series III Layout	Service Rating	Contact Size				
		22D	20	16	12	8
9-35	M	6				
9-98	I		3			
11-5	I		5			
11-35	M	13				
11-98	I		6			
13-8	I		8			
13-35	M	22				
13-98	I		10			
15-5	II			5		
15-15	I		14	1		
15-18	I		18			
15-19	I		19			
15-35	M	37				
15-97	I		8	4		
17-6	I					6
17-8	II			8		
17-26	I		26			
17-35	M	55				
19-11	II			11		
19-32	I		32			
19-35	M	66				

Series III Layout	Service Rating	Contact Size				
		22D	20	16	12	8
21-11	I				11	
21-16	II			16		
21-35	M	79				
21-39	I		37	2		
21-41	I		41			
21-75	M					4
23-21	II			21		
23-35	M	100				
23-53	I		53			
23-55	I		55			
25-4	I		48	8		
25-19	I				19	
25-24	I			12	12	
25-29	I			29		
25-35	M	128				
25-37	I			37		
25-43	I		23	20		
25-46	I, Twinax		40	4		2
25-8	Twinax					8
25-20	N, Coax, Twinax		10	13	4	3
25-42	I, Coax			38		4
25-61	I			61		
25-64	I	40	8	10	6	

DISCLAIMER: Our facility is not currently certified by the DLA and this product is not covered by the QPL/QML. Mil-Spec part numbers are only for cross-reference to the Commercial Equivalent.

How-To Order Guide

CONNECTOR TYPE
D38999-Style Series III

SHELL STYLE
20 - Wall mount receptacle
24 - Jam nut receptacle
26 - Straight Plug, Grounded

SERVICE CLASS (HARDWARE FINISH)
F - Electroless nickel
-85°F to +392°F
(-65°C to +200°C)
G - Electroless nickel plated. Space Grade.
W - Olive drab cadmium over electroless nickel plate.
-85°F to +347°F (-65°C to +175°C)

SHELL SIZE									Military Designation
A	B	C	D	E	F	G	H	J	
9	11	13	15	17	19	21	23	25	Cannon Designation

CONTACT ARRANGEMENT
Refer to Insert Availability Identification Chart

**Used only when other than power contacts are to be installed (i.e., shielded, thermocouple, etc.)
Note: To order MS connectors less standard power contact, Purchase order must state “Less Contacts”*

Cannon Nomenclature

SERIES PREFIX
KJA/KJB - Series III - scoop proof, threaded coupling

SHELL STYLE
0 - Wall mount receptacle
6 - Straight plug
7 - Jam nut receptacle

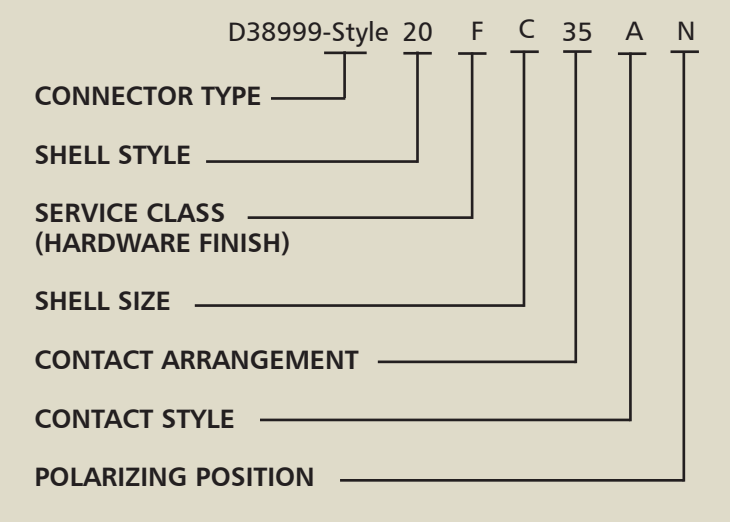
CLASS
T - Environment-resistant (without rear accessory)

SHELL SIZE									Cannon Designation
9	11	13	15	17	19	21	23	25	
A	B	C	D	E	F	G	H	J	Military Designation

HARDWARE FINISH
F - Electroless nickel, -85°F to +329°F (-65°C to +200°C)
G - Electroless nickel plated. Space Grade.
W - Olive drab cadmium over electroless nickel plate,
-85°F to +347°F (-65°C to +175°C)
- - (Dash) When using a finish modification code

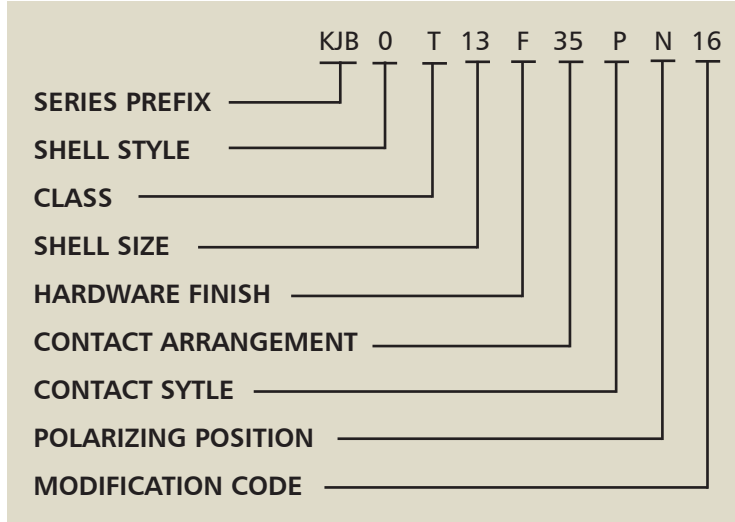
CONTACT ARRANGEMENT
Refer to Insert Availability Identification Chart

CONTACT STYLE
P - Pin contact
S - Socket Contact



CONTACT STYLE
P - Pin contact
S - Socket Contact
A - Less pin contacts*
B - Less socket contacts*

POLARIZING POSITION
N, A, B, C, D, E



POLARIZING POSITION
N, A, B, C, D, E

MODIFICATION CODE
L - Less contacts, not stamped on connector
16 - Outgassed, NASA space graded connector
27 - Outgassed, standard connector

A296 - Black zinc cobalt, RoHS Compliant
A297 - Black Electroless Nickel, RoHS Compliant
T69 - Olive Drab (Green) Zinc Cobalt