

TV Breakaway Fail-Safe Lanyard Release

Military (D38999/31) Type 1 & 2 for MIL-STD-1760

Applications- Lanyard Release Plug

HOW TO ORDER - BY MILITARY PART NUMBER FAIL-SAFE D38999/31

Ordering procedure for example part number D38999/31WE20PN1 is shown below:

1.	2.	3.	4.	5.	6.	7.	8.
DOD Number Prefix	Spec Sheet Number	Service Class	Lanyard Length Code	Insert Arrangement	Contact Style	Alternate Keying Position	Type Number
D38999/	31	W	E	20	P	N	1

1. DOD NUMBER PREFIX

D38999/	MIL-DTL-38999, Series III Tri-Start Connectors
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2. SPECIFICATION SHEET NUMBER

31	Designates Lanyard Release Plug for MIL-STD-1760 with pin contacts
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3. SERVICE CLASS

F	Electroless nickel plated aluminum, optimum EMI shielding effectiveness -65dB @ 10 GHz specification min., 48 hour salt spray, 200°C
W	Corrosion resistant olive drab cadmium plate aluminum, 500 hour extended salt spray, EMI -50dB @ 10 GHz specification min., 175°C

4. LANYARD LENGTH CODE

Lanyard Length (in.) ±.236	Lanyard Length (mm.) ± 6.0	Lanyard Length Code for Part Number
6.024	153.0	E
6.535	166.0	F
7.008	178.0	G
7.520	191.0	H
7.992	203.0	I
8.504	216.0	J
9.016	229.0	K
9.528	242.0	L

5. INSERT ARRANGEMENT

11	25-11
20	25-20

6. CONTACT STYLE-P & A ARE VALID OPTIONS

P	Replaces the "no designation" option in the PIN on revision C and earlier revision of the Mil-Spec.
A	Designates supplied less contacts.

7. ALTERNATE KEYING POSITION

N	Is required for normal position.
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8. TYPE NUMBER

TYPE 1, 2 OR 6. SEE DRAWINGS ON PAGE 76.

For accessories for lanyard release plugs see Accessories section.

MILITARY

D38999/31

TYPE 6

88-555875/76

91-555875/76

TYPE 2

88-558518/19

91-558518/19

TYPE 1-Longer Shell

T3W-16B25-XXXX

38999

III

II

I

SJT

Access

Aquacon

Series III

A

TV Breakaway Fail-Safe Lanyard Release

Military (D38999/31) for MIL-STD-1760 Crimp, Metal

38999

III

II

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SJT

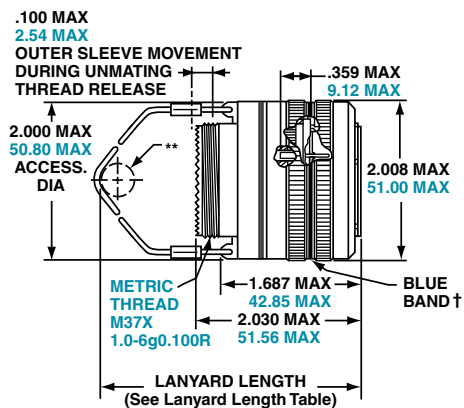
Access

Aquacon

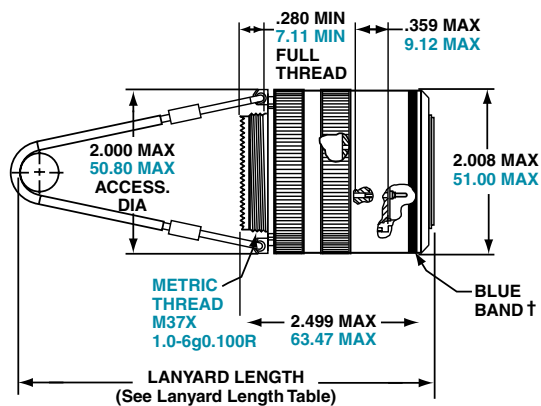
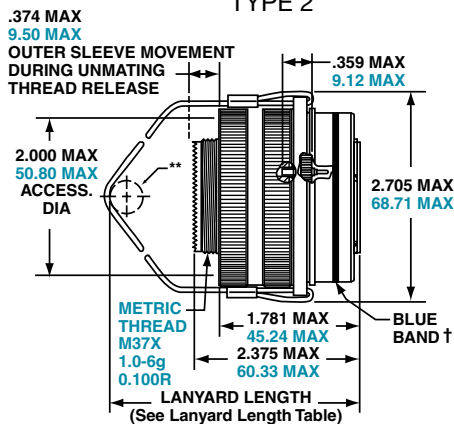
Series III

PIN CONTACTS ONLY, SHELL SIZE 25 ONLY

TYPE 6



TYPE 2



TYPE 1
(LONGER SHELL)

† Blue band indicates rear release contact retention system
** Lanyard pulled taut against a .500 ± .13 dia. Mandrel
All dimensions for reference only

TRI-START LANYARD SEPARATION FORCES

Shell Size	Straight Plug (lbs. max.)	15 Degree Pull (lbs. max.)
25	90	100

INSERT AVAILABILITY
FAIL SAFE D38999/31
FOR MIL-STD-1760

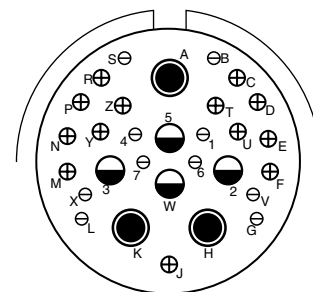
PIN CONTACT DATA FOR MIL-STD-1760

Insert Arrangement	Service Rating	Total Contacts	Contact			
			20	16	12 (Coax)	8 (Twinax)
25-20	N	30	10	13	4	3

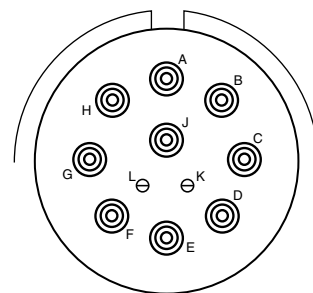
CONTACTS FOR 25-20 PATTERN

Shell Size	Arrg. Number	Number of Contacts	Size Contacts	Service Rating	Contact Location	Standard Contacts	
						Pin	Socket
25	-20	3	8	Twinax	A, H, K	M39029/90-529	M39029/91-530
		4	12	Coax	2, 3	M39029/28-211	M39029/75-416
					W, 5	M39029/102-558	M39029/103-559
		13	16	N	C, D, E, F, J, M, N, P, R, T, U, Y, Z	M39029/58-364	M39029/56-352
		10	20	N	B, G, L, S, V, X, 1, 4, 6, 7	M39029/58-363	M39029/56-351

Insert Arrangement	Service Rating	Total Contacts	Contact Size	
			20	10 (power)
25-11	N	11	2	9



25-20
PRIMARY INTERFACE
SIGNAL SET



25-11
AUXILIARY POWER
SIGNAL SET

Contact Legend



8 (twinax) 10 (power) 12 (coax) 16 20

TV Breakaway Fail-Safe Lanyard Release

Commercial version of D38999/31, Type 6

38999

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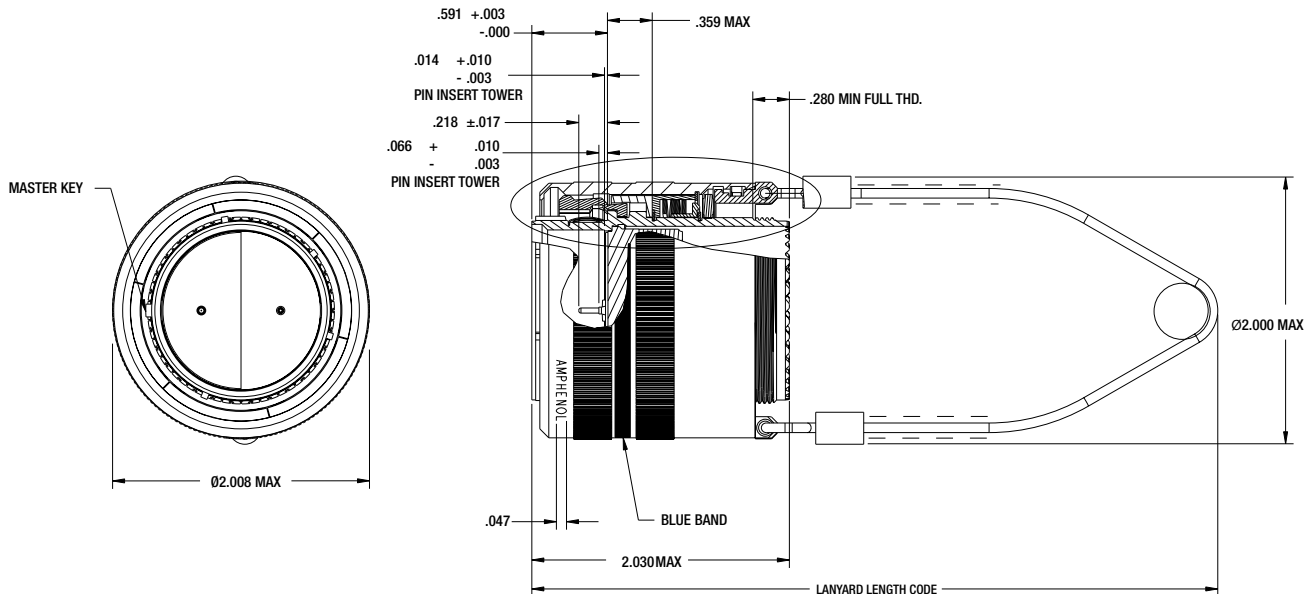
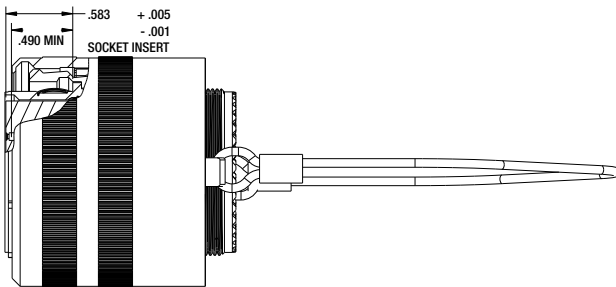
Series III

QUICK-DISCONNECT WITH AN AXIAL PULL OF LANYARD

Amphenol offers a commercial version of D38999/31 series III, type 6 connectors. Built from the same time-tested and quality components used in its Mil-Spec counterpart, Amphenol's commercial variant is designed to accept a wider variety of insert arrangements the Mil-Spec does not include. Available in shell size 25, these fail-safe connectors adopt an incredible amount of versatility without sacrificing performance or durability. Consult Amphenol Aerospace for more information.

FEATURES AND BENEFITS

- More versatile than the mil-spec
- 25 lanyards lengths
- Available in all size 25 arrangements
- Low force separation capabilities
- Compatible with all mil-spec backshells and accessories
- Mates to existing D38999 receptacles



TV Breakaway Fail-Safe Lanyard Release Connector

Commercial (88-725010, 88-725014, 88-725041) Version of D38999/31 Type 6

38999

HOW TO ORDER

1.	2.	3.	4.	5.
Service Class	Shell Style	Insert Arrg.	Alternate Keying Position (End A)	Lanyard Length Code
88	725010-	04	P	K

1. FINISH*	
88-	Olive Drab Cadmium
91-	Electroless Nickel

* Contact Amphenol for availability of other finishes.

2. SHELL STYLE	
725010-	D38999/31 Type 6
725014-	Extended Backskirt
725041-	Integrated Banding Platform

3. INSERT ARRANGEMENT	
04	25-4
07	25-7
11	25-11
17	25-17
20	25-20
24	25-24
26	25-26
29	25-29
35	25-35
37	25-37
41	25-41
43	25-43
46	25-46
61	25-61
62	25-62
90	25-90
F4	25-F4
187	25-187

4. KEYING		
Key Position	Pin	Socket
N	P	S
A	G	H
B	I	J
C	K	L
D	M	N
E	R	T

5. LANYARD LENGTH CODE		
Lanyard Length (in.) ± .236	Lanyard Length (mm) ± 6.0	Lanyard Length Code For Part Number
4.016	102	A
4.528	115	B
5.000	127	C
5.512	140	D
6.024	153	E
6.535	166	F
7.008	178	G
7.520	191	H
7.992	203	I
8.503	216	J
9.016	229	K
9.528	242	L
10.000	254	M
10.512	267	N
11.024	280	P
11.535	293	R
12.008	305	S
12.520	318	T
13.031	331	U
14.016	356	V
15.000	381	W
16.024	407	X
17.008	432	Y
18.031	458	Z

INSERT ARRANGEMENTS

Shell Size & Insert Arrg. for:

Series III TV	25-04	25-07	25-08	25-11***
Service Rating	I	M	Twinax	N
Number of Contacts	48 8	97 2	8	2 9
Contact Size	20 16	22D 8 Twinax	8 Twinax	20 10

Shell Size & Insert Arrg. for:

Series III TV	25-17	25-19	25-20***	25-24
Service Rating	M	I	N	I
Number of Contacts	36 6	19	10 13 3 4	12 12
Contact Size	22D 8 Twinax	12	20 16 8 Twinax 12 Coax	16 12

A

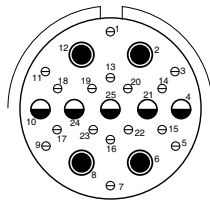
Insert Arrangements

Commercial (88-725010 & 88-725014) Version of D38999/31 Type 6

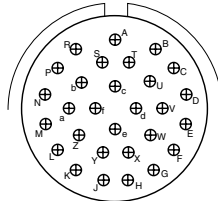
38999

III
II
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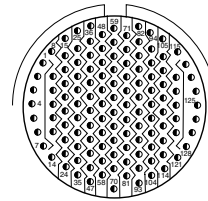
Series III



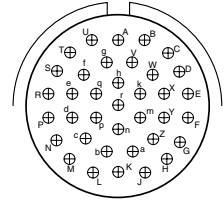
25-26



25-29



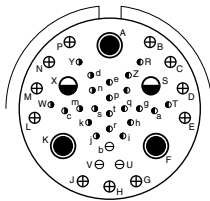
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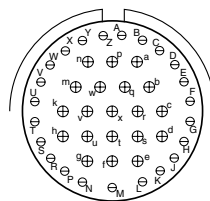
25-37

Shell Size &
Insert Arrg. for:

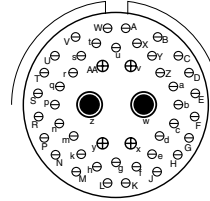
Series III TV	25-26			25-29		25-35			25-37	
Service Rating	I			I		M			I	
Number of Contacts	16	5	4	29		128			37	
Contact Size	20	12	8 Coax	16		22D			16	



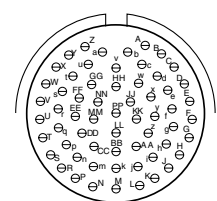
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25-43



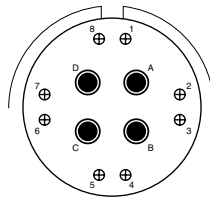
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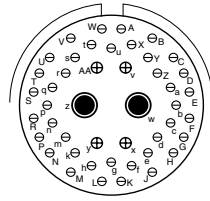
25-61

Shell Size &
Insert Arrg. for:

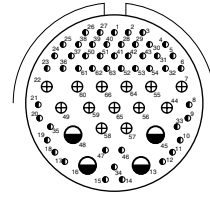
Series III TV	25-41				25-43		25-46			25-61	
Service Rating	N/Inst.				I		I			I	
Number of Contacts	22	3	11	2	3	23	20	40	4	2	61
Contact Size	22D	20	16	12 Coax	8 Twinax	20	16	20	16	8 Coax †	20



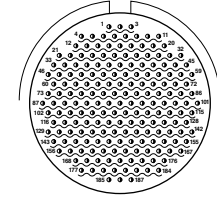
25-62



25-90



25-F4



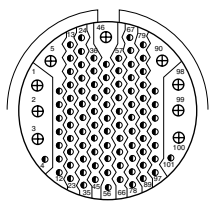
25-187 HD

Shell Size &
Insert Arrg. for:

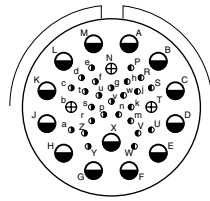
Series III TV	25-62		25-90		25-F4			25-187 HD	
Service Rating	I		I		Size 22D=M, Balance =I			N	
Number of Contacts	8	4	40	4	2	49	13	4	187
Contact Size	16	8	20	16	8 Twinax	22D	16	12	23

Ground Plane Only

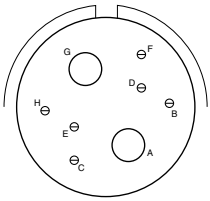
SPECIALS



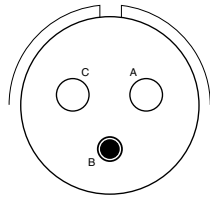
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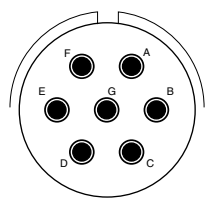
25-97



25-16



25L-3



25L-7

Shell Size &
Insert Arrg. for:

Series III TV	25-92		25-97		25-16		25L-3		25L-7	
Service Rating	M		M		M		II		II	
Number of Contacts	92	9	26	3	13	6	2	1	2	7
Contact Size	22D	16	22D	16	12	20	4	8	4	8

TV Breakaway Fail-Safe Lanyard Release Connector

Commercial (88-725014 & 88-725041) Version of D38999/31 Type 6

38999

III

II

I

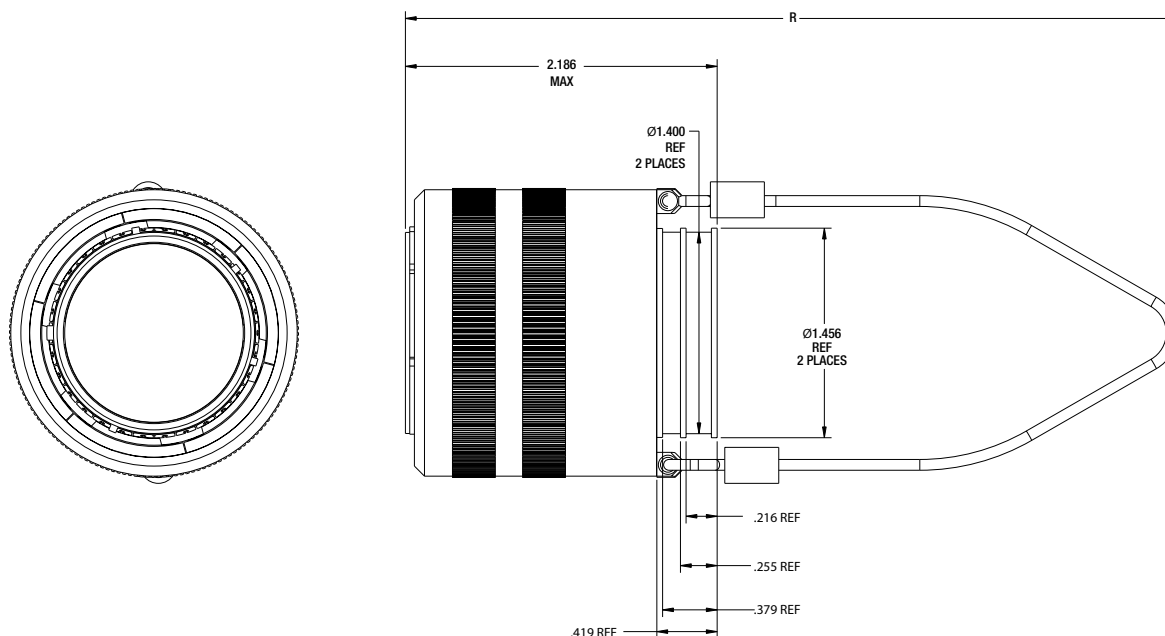
SJT

Access

Aquacon

Series III

88-725041 INTEGRATED BANDING PLATFORM



88-725014 EXTENDED BACKSKIRT

