

Amphenol® Amphe-EX™ Connectors for Hazardous Environment Ex Zones 1/2

12-056-3

High Performance
Connectors Designed
for use in:

- High temperatures
- Harsh chemicals
- Potentially explosive environments



Fiber Optics
Multimode Contacts

Signal Contacts
Size 20 and 22D



Power Coax
Contacts



RJ45 Insert

Smaller interface
than most heavy duty
hazardous rated
connectors.

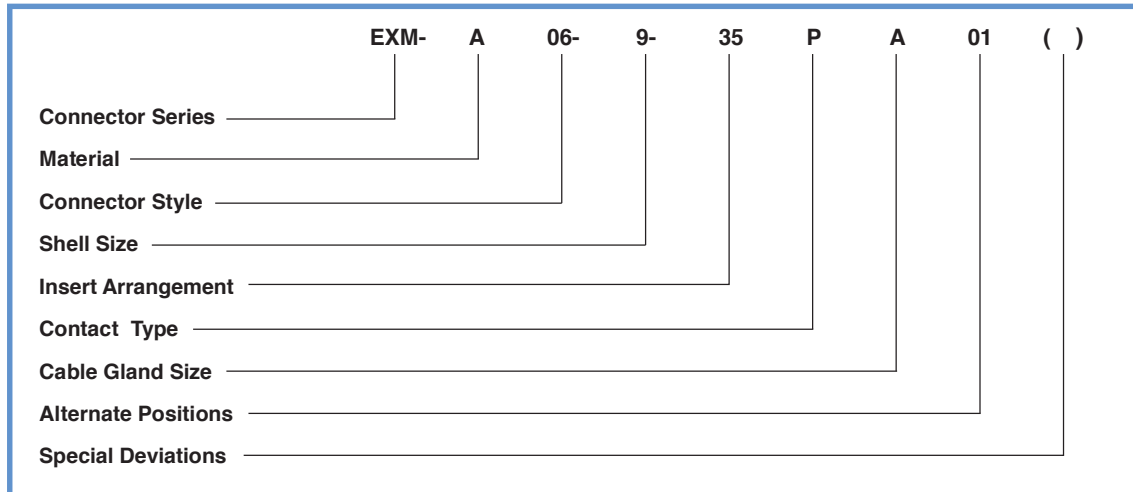
Contact options that
include signal, power, RF,
fiber optics and
Ethernet.

Amphenol

Amphe-EX™ Series

how to order

Amphenol® Amphe-EX series Connectors can be ordered by coded part number.
Ordering procedure is illustrated by part number EXM-A06-9-35PA01 as shown below:



Caps and cable glands come standard on all assemblies

Connector Series

EXM . . .designates Amphe-EX Series

Material

A. . . .designates Aluminum Alloy Black Hardcoat

S. . . .designates Stainless Steel 316L

Connector Style

00. . . . Flangeless Panel Mount Receptacle (Resin)

01Fix Inline Receptacle with EX Cable Gland

02Panel Mount Receptacle (Resin)

03. . . . Flangeless Inline Receptacle with EX cable Gland

06Plug with EX Cable Gland

Shell Size

9 thru 21 available

Insert Arrangement

See insert arrangement chart, page 9 and illustrated on pages 10-11

Copper Contacts included - FO termini are optionals and can replace AWG16 contacts

Contact Type

P. . . . Pin contacts (Standard 500 cycles)

S. . . . Socket contacts (Standard 500 cycles)

Cable Back End

IF 01, 03 or 06 See chart page 14 for appropriate cable O.D.

IF 00 or 02 Connector comes with Resin (Epoxy / Potting Compound)

Alternate Positions

Rotation of minor keys on page 12. Omit for standard Keyway "N"

Specials Deviations

Omit for cable gland for Unarmored cable

BS. . . . EX cable gland for universal armored cable

BSR . . EX reduced cable gland for universal armored cable



**RoHS COMPLIANT
PRODUCT AVAILABLE -**

Consult Amphenol Industrial Operations.

Amphe-EX™ Series

insert availability and identification, contacts, sealing plugs

Shell Size/Arrg.	Service Rating	Total Conatctcs	Contact Size							
			22D	20	16	12	12 (coax)	10 (power)	8 (coax)	8†† (Twinax)
9-35	M	6	6							
9-94	M	2		2						
9-98	I	3		3						
11-2	I	2			2					
11-5	I	5		5						
11-35	M	13	13							
11-98	I	6		6						
11-99	I	7		7						
13-4	I	4			4					
13-8	I	8		8						
13-13	I, Fiber Optic	4			2*	2				
13-35	M	22	22							
13-98	I	10		10						
13-71	I	2				2				
15-2	I	2						2		
15-5	II	5			5					
15-15	I	15		1						
15-18	I	18		18						
15-19	I	19		19						
15-35	M	37	37							
15-97	I	12		8						
15-AC	M	26	24		2					
17-2	M	39	3							
17-6	I	6				6				
17-8	II	8			8					
17-22	NA	4					2		2	
17-26	I	26		26						
17-31	M	19	4							
17-35	M	55	55							
17-99	I	23		21	2					
19-11	II	11			11					
19-31	M	15	12			1			2	
19-32	I	32		32						
19-35	M	66	66							
19-RJ	CAT 5/6									
21-11	I	11				11				
21-16	II	16			16					
21-35	M	79	79							
21-39	I	39		37	2					
21-41	I	41		41						
21-75	M	4							2	

STANDARD CONTACTS AND SEALING PLUGS FOR AMPHE-EX SERIES

CONTACTS			SEALING PLUGS	
Conatct Size	Pin Part Number	Socket Part Number	Contact Size	Proprietary No.
8 (Coax)	21-33102-21	21-33101-21	8 (Coax)	10-482099-8
8 (Twinax)	21-33190-529	21-33191-530	8 (Twinax)	T3-4008-59P
10 (Power)	10-597448-105	10-597449-105	10 (Power)	10-576225
12	10-597448-125	10-597449-125	12	10-405996-121
16	10-597448-165	10-597449-165	16	10-405996-161
20	10-597448-205	10-597449-205	20	10-405996-201
22D	10-597448-725	10-597449-452	22D	10-405996-221

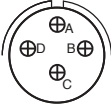
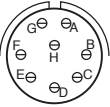
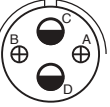
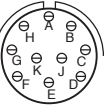
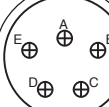
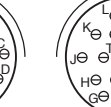
Above part numbers include standard 500 cycle finish designation - gold plating over suitable underplate in accordance with MIL-C-39029. For other contact options available for use in Amphe-EX connectors, (thermocouple) consult Amphenol, Sidney, NY.

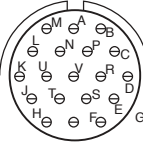
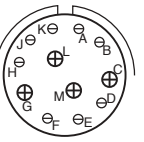
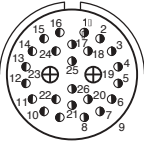
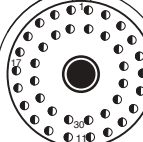
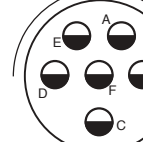
Amphe-EX™ Series

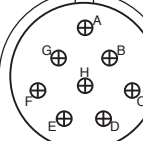
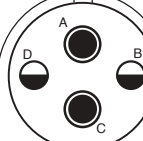
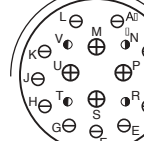
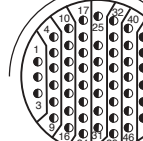
insert arrangements

front face of pin inserts illustrated

								
Insert Arrangement	9-35	9-94	9-98	11-2	11-5	11-35	11-98	11-99
Service Rating	M	M	I	I	I	M	I	I
Number of Contacts	6	2	3	2	5	13	6	7
Contact Size AWG	22D	20	20	16	20	22D	20	20

								
Insert Arrangement	13-4	13-8	13-13	13-35	13-98	15-5	15-15	15-18
Service Rating	I	I	I, Fiber Optic	M	I	II	I	I
Number of Contacts	4	8	2 2	22	10	5	14 1	18
Contact Size AWG	16	20	16 12	22D	20	16	20 16	20
Dedicated to Fiber Optics								

						
Insert Arrangement	15-19	15-35	15-97	15-AC	17-2	17-6
Service Rating	I	M	I	M	M	I
Number of Contacts	19	37	8 4	24 2	38 1	6
Contact Size AWG	20	22D	20 16	22D 16	22D 8 Twinax	12

						
Insert Arrangement	17-8	17-22	17-26	17-31	17-35	17-99
Service Rating	II	Coax	I	M	M	I
Number of Contacts	8	2 2	2	4 11 4	4	20 16
Contact Size AWG	16	12 Coax 8 Coax	20	22D 20 16	16	20 16

CONTACT LEGEND








8 10 12 16 20 22D

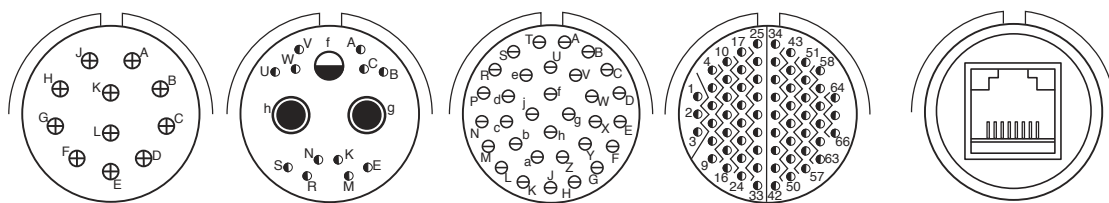
Note: Size 8 cavities can be supplied with either twinax or coax per customer requirement.

*please check crimp well diameter on page 2

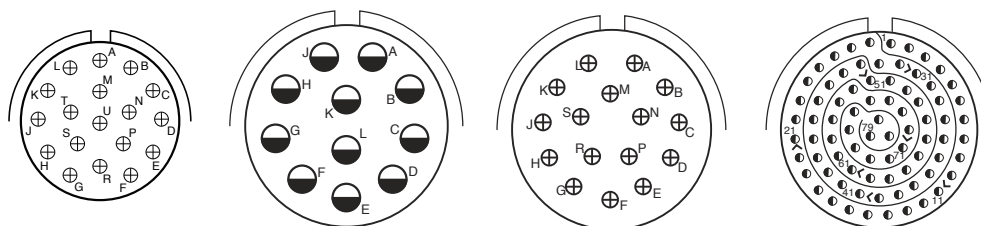
Amphe-EX™ Series

insert arrangements

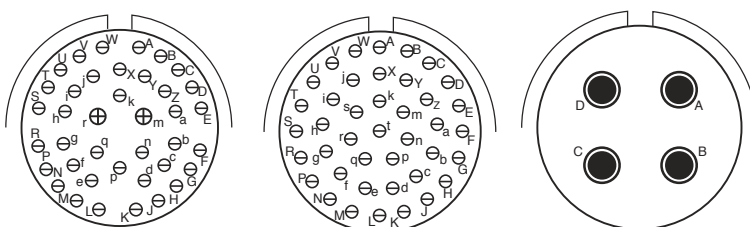
front face of pin inserts illustrated



Insert Arrangement	19-11	19-31	19-32	19-35	19-RJ
Service Rating	II	M	I	M	CAT5-CAT6
Number of Contacts	11	2 1 12	32	66	ETHERNET
Contact Size AWG	16	8 Coax 12 22D	20	22D	



Insert Arrangement	19-68	21-11	21-16	21-35
Service Rating	I	I	II	M
Number of Contacts	18	11	16	79
Contact Size AWG	16	12	16	22D



Insert Arrangement	21-39	21-41	21-75
Service Rating	I	I	M
Number of Contacts	37 2	41	4
Contact Size AWG	20 16	20	8 Coax

CONTACT LEGEND

8	10	12	16	20	22D

Note: Size 8 cavities can be supplied with either twinax or coax per customer requirement.

*please check crimp well diameter on page 2

Amphe-EX™ Series

standard insert alternate positioning

MASTER KEY/KEYWAY POSITION

Shell Size	Key & keyway arrangement identification letter	AR° or AP° BSC	BR° or BP° BSC	CR° or CP° BSC	DR° or DP° BSC
9	N	105	140	215	265
	01	102	132	248	320
	02	80	118	230	312
	03	35	140	205	275
	04	64	155	234	304
	05	91	131	197	240
11, 13, and 15	N	95	141	208	236
	01	113	156	182	292
	02	90	145	195	252
	03	53	156	220	255
	04	119	146	176	298
	05	51	141	184	242
17 and 19	N	80	142	196	293
	01	135	170	200	310
	02	49	169	200	244
	03	66	140	200	257
	04	62	145	180	280
	05	79	153	197	272
21, 23, and 25	N	80	142	196	293
	01	135	170	200	310
	02	49	169	200	244
	03	66	140	200	257
	04	62	145	180	280
	05	79	153	197	272

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The angles for a given connector are the same whether it contains pins or sockets. Inserts are not rotated in conjunction with the master key/keyway.

