

Amphe-Coal EX

With the ever growing need in underground explosive mining areas for increased power and/or signal in a smaller package, Amphenol is pleased to introduce the Amphe-Coal EX circular connector series.

The Amphe-Coal EX series is designed, manufactured, and certified to one of the highest mining industry standards: IECEx Group 1. Amphe-Coal EX connectors are a miniature version of our Amphe-Mine EX. The design allows the use of smaller wire gauge, down to #26 AWG. These interconnects are comprised of a stainless steel bodied plug and receptacle to form an in-line cable or cable-to-panel connection. Each plug and receptacle shell is supplied with a certified cable gland that fits onto the main body of the device. Internally, the shell of each half contains an insert that houses solder or crimp type contacts, pin or socket. Numerous hybrid inserts are available that offer a combination of copper and Coax/Twinax.

Features:

- Underground mining explosion proof design
- Hazardous area, environmental connector IP68
- Rated up to 217 amps at 1250 V DC | 900 V AC
- Triple-lead threaded coupling system
- With EEx d Cable Glands
- Vast family of inserts, for power, signal and mixed applications
- 7 different shell sizes: 09, 11, 13, 15, 17, 19, and 21
- Insert configurations ranging from 2 #20 AWG, up to 79 #22D AWG.
- Numerous hybrid inserts available that offer a combination of copper and Coax/Twinax.



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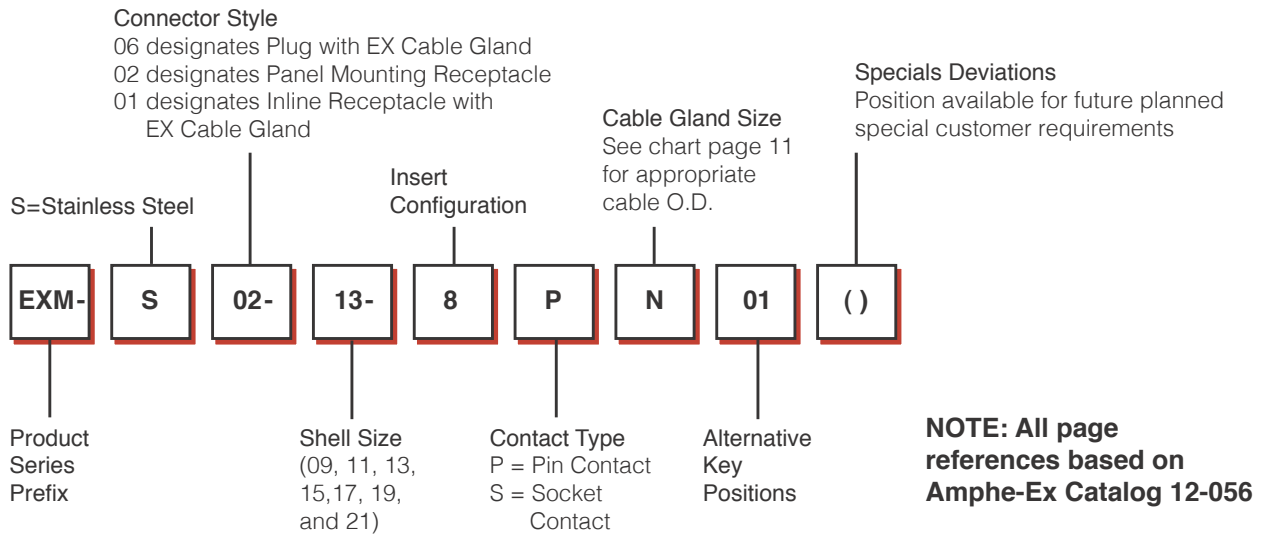
Thorne & Derrick
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Certificates and Technical Data

IECEX Certified for Group 1 Mining. Cert. # ITA 12.0009X

IECEX Certified for Group 2 Cert. # SIR 08.0029X

ATEX Certified for Zone 1-IIC hazardous environment. Cert. # SIRA 07ATEX122



Rating Tables

Maximum Voltage	Contact Patterns
500 Vrms	9-5, 17-22, 21-75
550 VDC / 400 VAC	9-35, 9-94, 11-35, 13-35, 15-35, 15-AC, 17-31, 17-35, 19-35, 21-35
500 VDC / 400 VAC 500 Vrms (8 Co-ax Contacts) 500 Vrms (Twin-ax Contacts)	17-2, 19-31
850 VDC / 600 VAC	9-98, 11-2, 11 -5, 11-98, 11 -99, 13-4, 13-8, 13-13, 13-98, 15-15, 15-18, 15-19, 15-97, 17-6, 17-26, 17-99, 19-32, 21-11, 21-39, 21-41
1250 VDC / 900 VAC	15-5, 17-8, 19-11 , 21 -16

Current Rating per Shell Size

Shell Size	Max. Total Current (A)
9	48
11	64
13	90
15	125
17	154
19	191
21	217

Current Rating per Pin Size

Pin Size	Max. Total Current (A)
22D AWG	5
20 AWG	7.5
16 AWG	13
12 AWG	16
12 Co-ax	1 (for inner and intermediate contacts) 12 (for outer contact)
8 Co-ax	
8 Twin-ax	

Applications: Underground Mining

- Lighting system
- Battery
- Communication system
- Engines
- Security system
- Motor
- Control system

Other Products for the Mining Market: MVC, Amphe-Mine EX, Amphe-CM, IECEX Cable Glands

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements of suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.



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