Amphenol

Photo: Amphe-dB Industrial filter and chip capacitor board within the 5015 high performance series.

Amphenol® Amphe-dB Industrial Filter Connectors

Amphenol Industrial Filter Connector Solutions

AIO, Amphenol Industrial Operations offers the rugged and environmental filter interconnect solutions the Industrial Market requires. By combining proven connector series with modern filter technology, Amphenol can provide a completely environmental filtered connector that is able to survive the most challenging applications. This combination provides a clean signal prior to entering a device, eliminating the need to redesign either the box or the printed circuit board.
"Pi", "C", and chip capacitor board technology can be incorporated into many of the Amphenol Industrial connector series. Specific combinations of connectors and filters can be tailored to meet customer requirements.

Common Applications for Industrial Filters:

• Welding Equipment manufacturers are turning to Amphenol Industrial to filter the data signals from remote sensing equipment. Sensor leads that extend from the welder control panel are filtered in 5015 connectors at the entry to the control box.
• GPS Equipment that is being installed on earth moving equipment requires filtering. EMI interference from engine operation and control devices is being removed with customer specific filters.
• Heavy Equipment - Platform hoists and scissor lifts require filters to meet EC requirements. Operation control wires emit EMI interference that could cause faulty scale readings. MIL-C-26482 type filters provide a solution.

Industrial Applications Requiring Filter Protection

Electronic devices are being installed on equipment that emit electro-magnetic interference (EMI). The proper operation of these devices is dependant upon a clean signal to be processed. As more equipment is entering the industrial work environment, EMI interference is becoming more prevalent.
EMI interference is compromising the reliability of electronic devices. Redesign of PCB boards to incorporate filtering requires major board changes and the boards are difficult to retrofit on existing equipment. Board filtering does not clean the signal prior to entering the device.

Industrial Filters can also be incorporated into PT Miniature series (MIL-C-26482, series 1 Industrial types), Amphe-Lite series, GT Reverse Bayonet series and Amphe-TVS connectors.

Amphe-dB Part Numbering

AdB	4	7	F	24	–	2	P		3	–	F103	

AdB designates Amphenol Industrial Filter Connectors

Product Family:
1 designates 5015
2 designates PT
3 designates Amphe-Lite
4 designates Amphe-TVS
5 designates GT

Shell Style:
0 designates Wall Mt. Receptacle
2 designates Box Mt. Receptacle
7 designates Jam Nut Receptacle

Shell Finish:
F designates Electroless Nickel

Shell Size:
Amphe-TVS & PT (Sizes 8–24)

5015 & GT (Sizes 8–40)

8S = 8	10S = 10
10SL = 11	12S = 12
12 = 13	14S = 14
16s = 16	16 = 17

Amphe-Lite (Sizes 9–25)

Insert Availability (See specific product catalog for insert availability lists and drawings):

Amphe-TVS –	Consult Amphenol Industrial Operations
5015 –	See catalog 12-020, MIL-DTL-5015 and MIL-5015 Type Standard Cylindrical Connectors, or see catalog 12-025, AC Threaded Series Industrial Cylindrical Connectors
PT –	See catalog 12-070, Miniature Cylindrical Connectors
Amphe-Lite –	See catalog 12-094, Amphe-Lite Subminiature Cylindrical Connectors
GT –	See catalog 12-024, GT Series Reverse Bayonet Coupling Connectors

Contact Type:
P designates Pin
S designates Socket

Alternate Rotation / Keying:
Omit for normal, or W, X, Y or Z
Amphe-Lite only:
Omit for normal, or A, B, C, D or E

Contact Termination:
1 designates Solder
2 designates Crimp
3 designates Pressure

Filter Capacitance (pF):

Common Filtering (F - first digit)
2nd and 3rd digits are significant figures of capacitance value
4th digit is the number of zeros following
Example: F103 = 10,000 pF

Special Filtering (X - first digit)
Remaining digits represent the next available 3 digit number
Example: X001 = Special 001

RoHS Compliance:
Omit for Compliant part
NC designates Non-compliant part

For further information on your individual application requirements, contact: Amphenol Corporation

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