Smart Card Connectors
Series C700

www.industrial-amphenol.com
Note from the CEO

Ladies and Gentlemen,

For over 75 years Amphenol has enjoyed success as the interconnection technology provider of choice to industry-leading companies around the world. One of our key strategic areas of focus has been and is the Industrial market. Our organization works with leading manufacturers across a wide range of applications - including Energy Generation & Distribution, Transportation, Heavy Equipment, Factory Automation, Wireless Outdoor, ChipCard Readers - enabling smarter, faster and better technologies to connect products to customer solutions.

The Industrial market footprint of Amphenol covers over facilities in more than 12 different European countries and more than 30 countries worldwide. Our successful expansion into new regions as well as new industrial applications is a direct reflection of our agile, entrepreneurial management team and our unwavering commitment to execute Amphenol’s strategies for the benefit of our customers, shareholders and employees.

Thank you for partnering with Amphenol. Our entire organization is at your service.

R. Adam Norwitt  
President and CEO, Amphenol Corporation
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### Mating Cycles

- **100 000**
- **300 000**
- **500 000**

### Free Assembly

### PCB Assembly

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**INDUSTRIAL® AMPHENOL**

**TRUSTED GLOBALLY**
Applications for Smart Card Connectors

Payment

- Smart Card Connector for payment terminals
- EMV (Europay Mastercard Visa) and PCI (Payment Card Industry) compliant
- Small form factor

Vending and Metering

- Smart Card Connectors for vending machines and gas, water, and electricity meters
- Vandalism resistant solutions
- Highly reliable
Digital Tachograph
- Smart Card Connectors for digital tachograph
- According to automotive specification

Digital Satellite Receivers
- Smart Card Connectors for digital satellite receivers and settop box (STB)
- High volume production
**General Information  Card Handling Systems**

**Push-Only**

The card is inserted manually and held in the active position by hand. The card is ejected immediately after the user releases it. The Push-Only is ideally suited for applications with short transaction cycles, i.e. door access control.

**Push-Pull**

The card is inserted manually and held in the active position by a card brake. After completion of the transaction, the card is simply pulled out of the Smart Card Connector.

This is the most common manual card handling system.

**Push-Push**

The card is inserted manually and held in the active position by the Smart Card Connector. When pushed again the card is returned to the user (principle of a ballpointpen).

**PUSHMATIC®**

This semi-automatic system combines a manual card insertion with an automatic card ejection. The card is manually pushed into the Smart Card Connector until it is flush (or nearly flush) with the bezel. Upon completion of the transaction, software triggers a solenoid and the card is ejected back to the user.
General Information  Contact Methods

Landing Contacts
With this contact method a moveable contact set will connect with the pads of the chip card upon insertion of the card. The card plastic surface is not scratched and high-mating cycles can be achieved.

Wiping Contacts
The contact set is fixed. When the card is inserted, it wipes over the data contacts until they arrive at the card pads. Depending upon the card surface, wiping traces which do not influence the card function can occur after some insertion cycles. The advantage of wiping contacts is that they clean the contact point with every mating cycle.
C703A Hybrid

C703A Hybrid Push-Pull

- 500,000 mating cycles for both chip and magnetic stripe
- landing, self-cleaning contacts
- gimballed magnetic head
- card presence switch
- compact design for space critical applications
- card guiding for secure card reading
- Europay Mastercard VISA compliant

PART NO.:
C703 10M008 600 5 standard magnetic head, with card break
C703 10M008 601 5 standard magnetic head, no card break
C703 10M008 609 5 superflat magnetic head, no card break

C703A Hybrid PUSHMATIC®

- 500,000 mating cycles for both chip and magnetic stripe
- landing, self-cleaning contacts
- gimballed magnetic head
- card presence and locking switch
- card locking in active position
- compact design for space critical applications
- card guiding for secure card reading
- Europay Mastercard VISA compliant

PART NO.:
C703 10M008 607 5 12V solenoid
C702A Vario

- 500,000 mating cycles
- landing, self-cleaning contacts
- card presence switch
- accessories available

PART NO.:
- C702 10M008 015 2  Push-Push
- C702 10M008 018 2  Push-Only
- C702 10M008 514 2  Push-Pull

C702A PUSHMATIC®

- 500,000 mating cycles
- landing, self-cleaning contacts
- card presence switch
- accessories available

PART NO.:
- C702 10M008 701 2  5V, flat cable termination
- C702 10M008 700 2  12V, flat cable termination
- C702 10M008 702 2  24V, flat cable termination
- C702 10M008 732 2  5V, flat cable, locking detector
- C702 10M008 716 2  12V, flat cable, locking detector
C702B PUSHMATIC® II

C702B PUSHMATIC® II without card locking

- robust design, suitable for vending machines
- card accessible during power failure
- card presence switch, also can be used for system wake up
- card end position switch acts as card locking sensor
- additional sensor for card active position detects abnormal termination of the transaction
- self retracting and self cleaning data contacts provide protection against vandalism
- housing bottom features a large debris slot allowing the egress of coins, paper, as well as cut in half cards
- 16 way interface header allows for custom cabling
- 300,000 mating cycles

PART NO.:
- C702 10M008 906 2 5V solenoid voltage
- C702 10M008 904 2 12V solenoid voltage
- C702 10M008 909 2 24V solenoid voltage

C702B PUSHMATIC® II with card locking

- card locked in active position
- robust design, suitable for vending machines
- card end position switch acts as card locking sensor
- additional sensor for card active position detects abnormal termination of the transaction
- self retracting and self cleaning data contacts provide protection against vandalism
- housing bottom features a large debris slot allowing the egress of coins, paper, as well as cut in half cards
- 16 way interface header allows for custom cabling
- 300,000 mating cycles
- as an option feature to release card in locked position (SCR)

PART NO.:
- C702 10M008 907 2 5V solenoid voltage
- C702 10M008 905 2 12V solenoid voltage
- C702 10M008 910 2 24V solenoid voltage
Accessories

C702A Accessories

- customized bezels on request

**PART NO.:**
- C702 N13 030 E2 (for PUSHMATIC) metal bezel, silver coloured
- C702 N13 031 E2 (for PUSHMATIC) metal bezel, black coloured
- C702 N14 030 E2 (for PUSHMATIC) metal bezel with coin spacer, silver coloured
- C702 N15 100 G2 mounting plate
- C702 N11 141 E2 plastic bezel, black
- C702 N14 000 G2 Shutter

C702B Accessories

- Amphenol’s original guarantees well function

**PART NO.:**
- C702 G46 100 G2 metal bezel with “coin spacer” silver coloured
- C702 G46 201 G2 metal bezel with “coin spacer” and rain refusing, silver coloured
- C702 G51 112 E2 mounting plate, tin plated
- C702 N25 040 E2 plastic adapter for common standard bezels
C702D Flex

C702D Flex Basis

- miniaturized style, ideally suited for mobile devices like POS terminals
- 300,000 mating cycles
- with flexprint termination to save boardspace

PART NO.:
C702 10M008 065 4

C702D Flex Snap in

- snap in mounting, chip side up card insertion
- debris slot to provide egress of coins, paper
- miniaturized style, ideally suited for mobile devices like POS terminals
- 300,000 mating cycles
- with flexprint termination and as an option dip solder version

PART NO.:
C702 10M008 063 4 Dip Solder
C702 10M008 066 4 Flexprint
C702C PUSHMATIC® Slim

- designed for digital tachograph
- card locking
- ejection over solenoid
- integrated dust protection
- working temperature -40 °C – +85 °C
- shock resistance min. 20 G (in direction of solenoid axis)
- min. 25,000 mating cycles

PART NO.:
C702 10M008 925 4

C702C Automotive Connector

- 300,000 mating cycles
- landing, self-cleaning contacts
- card locking in active position
- automatic card ejection after transaction
- manual unlocking after power failure possible
- card presence and locking switch

PART NO.:
C702 10M008 901 4  5V
C702 10M008 902 4  12V

PART NO.:
C702 10M008 925 4
C702E Wiping

C702E Wiping XXS

- self cleaning card present switch
- normally open or normally closed switch
- boardlocks for mechanical fixation
- special shape of contacts minimizes card scratching
- PCB mounting, dip solder pins
- dimensions 62x40x7.2 mm
- 100,000 mating cycles

PART NO.:
C702 10M008 230 40  XXS Standard, normally closed switch
C702 10M008 231 40  XXS Standard, normally open switch
C702 10M008 232 40  XXS 3mm stand-off, normally closed switch
C702 10M008 234 40  XXS 5mm stand-off, normally closed switch

C702G Wiping

C702G PCB-Slimline

- extremely compact dimensions (56 x 30 x 3 mm)
- metal cover for high mechanical stability
  (only one card in slot)
- protected switch
- for pick & place assembly
- reflow compliant
- 100,000 mating cycles

PART NO.:
C702 10M008 252 40 with position pins
C702F Card|mate®

- 300,000 mating cycles
- landing, self-cleaning contacts
- card presence switch
- flat cable and flexprint termination

PART NO.:
C702 10M008 071 3 integrated bezel, flat cable termination
C702 10M008 006 3 without bezel, flat cable termination

C702Y Landing EZ

- 500,000 mating cycles
- landing contacts
- very smooth card insertion
- reduced signs of wear on the smart card
- metal cover, low profile, high mechanical strength
- designed according to the Payment Card Industry requirements

PART NO.:
C702 10M008 320 4

- 300,000 mating cycles
- landing, self-cleaning contacts
- card presence switch
- flat cable and flexprint termination

PART NO.:
C702 10M008 071 3 integrated bezel, flat cable termination
C702 10M008 006 3 without bezel, flat cable termination
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