



element¹⁴

EN - For pricing and availability in your local country please visit one of the below links:

DE - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

FR - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

[PC4D0018-19N-1-B](#)

[PC4F0002-C-19N-1-C](#)

[PC4F0020-19NX-1-B](#)

EN

This Datasheet is presented by
the manufacturer

DE

Dieses Datenblatt wird vom
Hersteller bereitgestellt

FR

Cette fiche technique est
présentée par le fabricant

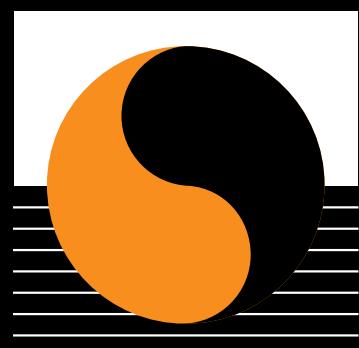
RJ45 Connectors

Interconnect Solutions Worldwide



RJ45 Connectors

D38999 Derived Cat5e / Cat6 & Cat6a RJ45
Connector Assemblies for Harsh Environments



NCAGE Code U5792 www.polamco.com

Polamco

RJ45 Connectors

D38999 Derived Cat5e / Cat6 & Cat6a RJ45 Connector Assemblies for Harsh Environments

[PC4B0002](#)

- [Cat 5e Box Mount Feedthrough Receptacle](#)

[PC4F0002](#)

- [Cat 5e Jam Nut Feedthrough Receptacle](#)

[PC4D0002](#)

- [Cat 5e Free Plug](#)

[PC4D000291](#)

- [Cat 5e Free Plug \(91 Series with Spring Screen Termination\)](#)

[PC4B0029](#)

- [Cat6 Jam Nut Feedthrough Receptacle](#)

[PC4F0020](#)

- [Cat6 Jam Nut Feedthrough Receptacle](#)

[PC4D0024](#)

- [Cat6 Plug Connector Assembly](#)

[PC4B0022](#)

- [Cat6a Box Mount Feedthrough Receptacle](#)

[PC4F0014](#)

- [Cat6a Jam Nut Feedthrough Receptacle](#)

[PC4D0018 & PC4D0018**](#)

- [Cat6a Free Plug](#)

[PC4D0023](#)

- [Cat6a Field Plug Connector Assembly](#)

[RJ45 Cat5 Tooling Options](#)

[RJ45 Cat6 & Cat6a Tooling Options](#)

[Connector Modifications](#)

Performance

- Cat 5e per ISO/IEC 11801
- Cat 6 1Gb with enhanced grounding option
- Cat 6a 10Gb with enhanced grounding option
- D38999 shell size 19
- Sealed to IP68 for fluid and dust laden environments
- High levels of shock, vibration and mechanical impact protection
- Fully enclosed Aluminium, Marine Bronze and Stainless Steel shells for superior mechanical strength
- Positive cordset retention >100N axial force
- Optional external screen termination features on cable plug
- Isolated RJ-to-shell grounding option



The Polamco high speed RJ45 connector system incorporates a MIL-DTL-38999 series III derived metal shell with full 360 degree EMC and mechanical protection and has been designed to meet the requirements of high speed data connections where reliability through environmental sealing and enhanced mechanical protection and EMC performance are required.

Material & Plating



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MATERIAL DESCRIPTION

1	ALUMINIUM ALLOY 6262 / 6082
2	NICKEL ALUMINIUM BRONZE DGS 1043/NES 833
3	BRASS CZ 121
4	STAINLESS STEEL 303 S31
44	STAINLESS STEEL 304
46	STAINLESS STEEL 316
5	H.D.H.C COPPER CA 104
6	STAINLESS STEEL NUT / ALUMINIUM BODY
7	BLACK ACETAL
73	PEEK GL30
74	ULTEM 2300 (30% GLASS FILLED)

NOTE: PLEASE CONTACT SALES OFFICE FOR MATERIALS NOT LISTED ABOVE

PLATING CODE	PLATING DESCRIPTION	ROHS COMPLIANT	ENVIRONMENT PROTECTION/ CONDUCTIVITY
A	CADMIUM, OLIVE DRAB (5-10 MICRONS) QQ-P-416, TYPE II, CLASS 3 OVER ELECTROLESS NICKEL	YES (SUBJECT TO EXEMPTION)	CONDUCTIVE 500 HRS SALT SPRAY. EXEMPTION APPLICABLE FOR AEROSPACE / MILITARY APPLICATIONS. SEE ROHS WEBSITES FOR MORE INFORMATION.
AB	ANODISE BLUE TO DEF 03-25	YES	NON CONDUCTIVE
AR	ANODISE RED TO DEF 03-25	YES	NON CONDUCTIVE
B	CADMIUM, OLIVE DRAB (5-10 MICRONS) QQ-P-416, TYPE II, CLASS 3 OVER ELECTROLESS NICKEL	YES (SUBJECT TO EXEMPTION)	CONDUCTIVE 500 HRS SALT SPRAY. EXEMPTION APPLICABLE FOR AEROSPACE / MILITARY APPLICATIONS. SEE ROHS WEBSITES FOR MORE INFORMATION.
C	ELECTROLESS NICKEL, AMS-C-26074, CLASS 4, GRADE B	YES	CONDUCTIVE
CHP	ELECTROLESS NICKEL, HIGH PHOSPHOR (9% - 14%), 22 MICRONS MINIMUM, BSEN ISO 4527:2003	YES	CONDUCTIVE
D	BLACK ANODISE HARD PER MIL-A-8625, TYPE III, CLASS 2	YES	NON CONDUCTIVE
F	30-50 MICRONS BRIGHT ELECTROLESS NICKEL TO MIL-C-26074D, CLASS 4, GRADE C	YES	CONDUCTIVE 500 HRS SALT SPRAY
G	BLACK ANODISE, SULPHURIC, PER MIL-A-8625, TYPE II, CLASS 2	YES	NON CONDUCTIVE
H	CADMIUM GOLD, PER QQ-P-416, TYPE II, CLASS 3	YES (SUBJECT TO EXEMPTION)	CONDUCTIVE. EXEMPTION APPLICABLE FOR AEROSPACE / MILITARY APPLICATIONS. SEE ROHS WEBSITES FOR MORE INFORMATION.
HA	HARD ANODISE, GREY, 30-50 MICRONS	YES	NON CONDUCTIVE
J	PASSIVATE, PER QQ-P-35 OR MI-S-5002	YES	ROHS COMPLIANT
K	CHROMIC ANODISING, DEF 151, TYPE II	NO	NON CONDUCTIVE
L	ALOCROM 1200	NO	CONDUCTIVE
LR	IRIDITE CONVERSION ROHS COMPLIANT VERSION OF ALOCROM 1200, CLEAR/ IRIDESCENT, ALUMINIUM ONLY	YES	CONDUCTIVE

Material & Plating



Interconnect Solutions Worldwide

PLATING CODE	PLATING DESCRIPTION	ROHS COMPLIANT	ENVIRONMENT PROTECTION/ CONDUCTIVITY
LV	5 MICRONS SILVER AND BLACKEN TO DEF 03-9	YES	CONDUCTIVE
M	BRIGHT CADMIUM OVER NICKEL QQ-P-416, TYPE II, CLASS 3	YES (SUBJECT TO EXEMPTION)	CONDUCTIVE 500 HRS SALT SPRAY. EXEMPTION APPLICABLE FOR AEROSPACE / MILITARY APPLICATIONS. SEE ROHS WEBSITES FOR MORE INFORMATION.
P	HEAVY NICKEL TO PLATING SPECIFICATION CP07 (500 HOUR SALT SPRAY FINISH)	YES	CONDUCTIVE 500 HRS SALT SPRAY
R	CADMIUM, OLIVE DRAB (5-10 MICRONS) QQ-P-416, TYPE II, CLASS 3 OVER ELECTROLESS NICKEL (2.5 - 7.5 MICRONS) REAR OF BACKSHELL TO HAVE SELECTIVE ELECTROLESS PLATING C-PLATE	YES (SUBJECT TO EXEMPTION)	CONDUCTIVE 500 HRS SALT SPRAY. EXEMPTION APPLICABLE FOR AEROSPACE / MILITARY APPLICATIONS. SEE ROHS WEBSITES FOR MORE INFORMATION.
T	TIN PLATE (COPPER) TO DEF 03-8	YES	CONDUCTIVE
TN	NICKEL/PTFE	YES	CONDUCTIVE 500 HRS SALT SPRAY
U	UNPLATED CLEAN FINISH NOT SHOT BLASTED	YES	
V	SILVER PLATE 5 MICRONS TO DEF 03-9	YES	CONDUCTIVE
Y	YELLOW CHROMATE OVER CADMIUM QQ-P-416, TYPE II, CLASS 2	NO	CONDUCTIVE
Z	SHOT BLAST FOR NON-REFLECTIVE FINISH	YES	
ZB	ZINC COBALT, OLIVE DRAB (5-10 MICRONS) OVER ELECTROLESS NICKEL (2.5 - 7.5 MICRONS)	YES	CONDUCTIVE 350 HRS SALT SPRAY.
ZBC	ZB-NUT (ZINC COBALT OLIVE DRAB OVER ELECTROLESS NICKEL) C-FOLLOWER (ELECTROLESS NICKEL) - 91 SERIES ONLY	YES	CONDUCTIVE 350 HRS SALT SPRAY. ZB.
ZBBC	ZB-NUT (ZINC COBALT OLIVE DRAB OVER ELECTROLESS NICKEL) ZB-FOLLOWER (ZINC COBALT OLIVE DRAB OVER ELECTROLESS NICKEL) WITH C MASKED AREA (ELECTROLESS NICKEL - SEE ABOVE) - 91 SERIES ONLY	YES	CONDUCTIVE 350 HRS SALT SPRAY.
ZK	ZINC COBALT BLACK PASSIVATE (5 - 10 MICRONS) OVER ELECTROLESS NICKEL (2.5 - 7.5 MICRONS)	YES	CONDUCTIVE 350 HRS SALT SPRAY.
ZN	ZINC NICKEL BLACK PASSIVATE (5-12 MICRONS) OVER ELECTROLESS NICKEL (8-12 MICRONS), ASTM B 841 CLASS 1	NO	ROHS COMPLIANT VARIANT UNDER DEVELOPMENT, SUBJECT TO TESTING SHOULD BE AVAILABLE FIRST QUARTER 2011
ZNB	ELECTROLESS NICKEL 8-12 MICRONS/ ZINC NICKEL 5-12/PURE ZINC/OLIVE DRAB PASSIVATION, ASTM B 841 CLASS 1	NO	CONDUCTIVE (NOT ROHS COMPLIANT, UNTESTED 500 HRS SALT SPRAY FINISH)
ZNY	ELECTROLESS NICKEL 8-12 MICRONS/ ZINC NICKEL 5-12 MICRONS/YELLOW PASSIVATION, ASTM B 841 CLASS 1	NO	CONDUCTIVE (NOT ROHS COMPLIANT, UNTESTED 500 HRS SALT SPRAY FINISH)
ZY	ZINC COBALT YELLOW CHROMATE (7.5 - 12.5 MICRONS) OVER ELECTROLESS NICKEL (2.5 - 7.5 MICRONS)	NO	CONDUCTIVE 500 HRS SALT SPRAY

RJ45 Cat5 Connectors

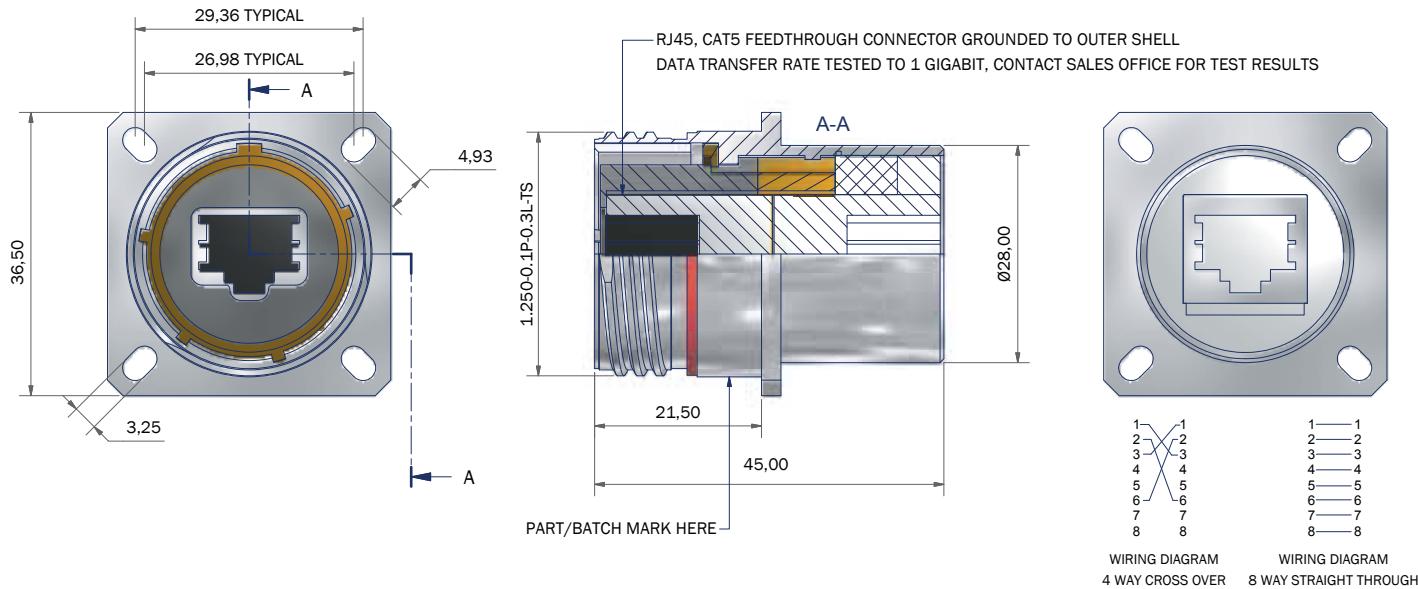
PC4B0002 - Box Mount Feedthrough Receptacle

Connector Modifications: See Page 19



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NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

SEAL - SILICONE MS749ECR TO BS6853 CAT 1

INSULATOR - PPS GL40 UL94

POTTING - QSIL 550 UL94V-0

MATERIALS

RJ45
CONTACTS 30µ Au/Ni
SHIELDING - NICKEL PLATED BRASS
BODY - PA, UL94V-0
PCB - FR4, UL94V-0

PERFORMANCE

CURRENT RATING FOR POWER CONTACTS 2.1

AMPS @ 70°C

VOLTAGE RATING 50V DC / 35V AC

TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4B0002-C-19N-1-C

PC4B0002 =	POLAMCO SERIES
C =	RJ45 STYLE
	A = 4 WAY
	B = 4 WAY + 2 POWER CONTACTS
	C = 8 WAY (STANDARD)
	D = 8 WAY + 2 POWER CONTACTS
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	<u>MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3</u>
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4B0002-C-U-19N-1-C

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

Tel: +44 (0)845 017 1545

DRAWING NOT TO SCALE
DIMENSIONS IN MM

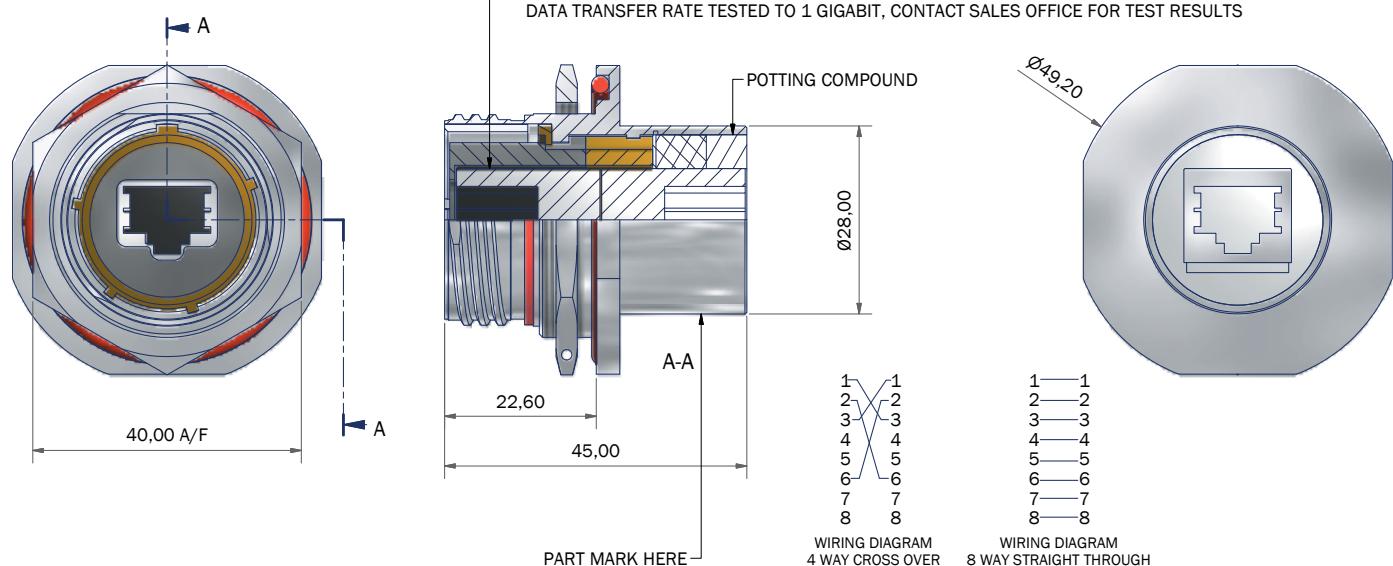
RJ45 Cat5 Connectors

PC4F0002 - Feedthrough Jam Nut Receptacle

Connector Modifications: See Page 19



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NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

SEAL - SILICONE MS749ECR TO BS6853 CAT 1

INSULATOR - PPS GL40 UL94

POTTING - QSIL 550 UL94V-0

MATERIALS

RJ45
CONTACTS 30µ Au/Ni
SHIELDING - NICKEL PLATED BRASS
BODY - PA, UL94V-0
PCB - FR4, UL94V-0

PERFORMANCE

CURRENT RATING FOR POWER CONTACTS 2.1
AMPS @ 70°C
VOLTAGE RATING 50V DC / 35V AC
TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4F0002-C-19N-1-C

PC4F0002 =	POLAMCO SERIES
C =	RJ45 STYLE
	A = 4 WAY
	B = 4 WAY + 2 POWER CONTACTS
	C = 8 WAY (STANDARD)
	D = 8 WAY + 2 POWER CONTACTS
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4F0002-C-U-19N-1-C

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

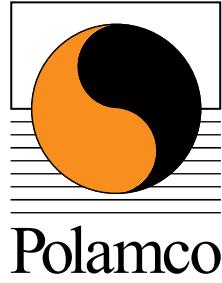
DRAWING NOT TO SCALE
DIMENSIONS IN MM

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RJ45 Cat5 Connectors

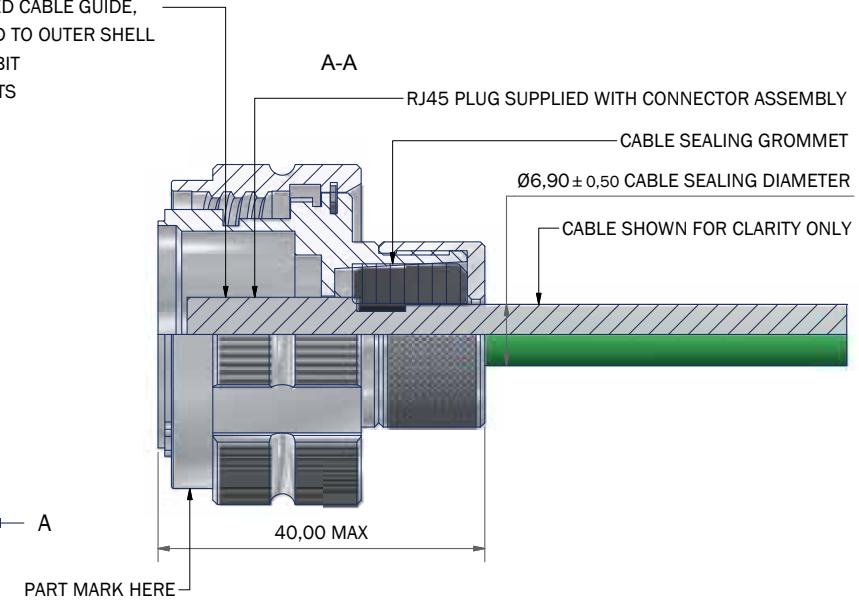
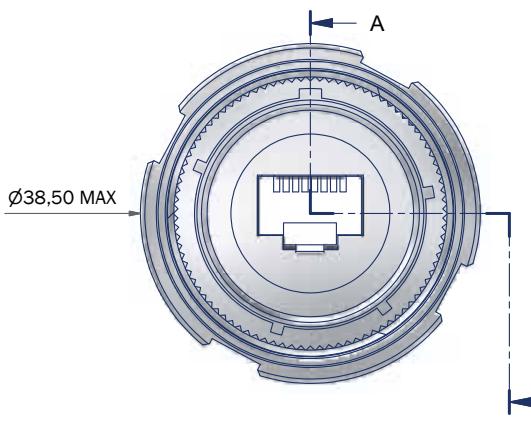
PC4D0002 - Plug Connector Assembly

RJ45 Cat5 Tooling Options: See Page 17
Connector Modifications: See Page 19



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RJ45, CAT5 CABLE PLUG WITH INTEGRATED CABLE GUIDE,
SHIELDING AND CABLE CRIMP GROUNDED TO OUTER SHELL
DATA TRANSFER RATE TESTED TO 1 GIGABIT
CONTACT SALES OFFICE FOR TEST RESULTS



NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

SEAL - SILICONE MS749ECR TO BS6853 CAT 1

MATERIALS

RJ45
CONTACTS 30µ Au/Ni
SHIELDING - NICKEL PLATED BRASS
BODY - PA, UL94V-0

PERFORMANCE

CURRENT RATING FOR POWER CONTACTS 2.1
AMPS @ 70°C
VOLTAGE RATING 50V DC / 35V AC
TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4D0002-C-19N-1-C

PC4D0002 =	POLAMCO SERIES
C =	RJ45 STYLE
	A = 4 WAY 4 x 24AWG
	B = 4 + 2 WAY 4 x 24AWG + 2 x 22AWG
	C = 8 WAY 8 x 26 AWG (STANDARD)
	D = 8 + 2 WAY 8 x 26AWG + 2 x 23AWG
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4D0002-C-U-19N-1-C

RJ45 Cat5 Connectors

PC4D000291

Plug Connector Assembly for Double Screened Applications

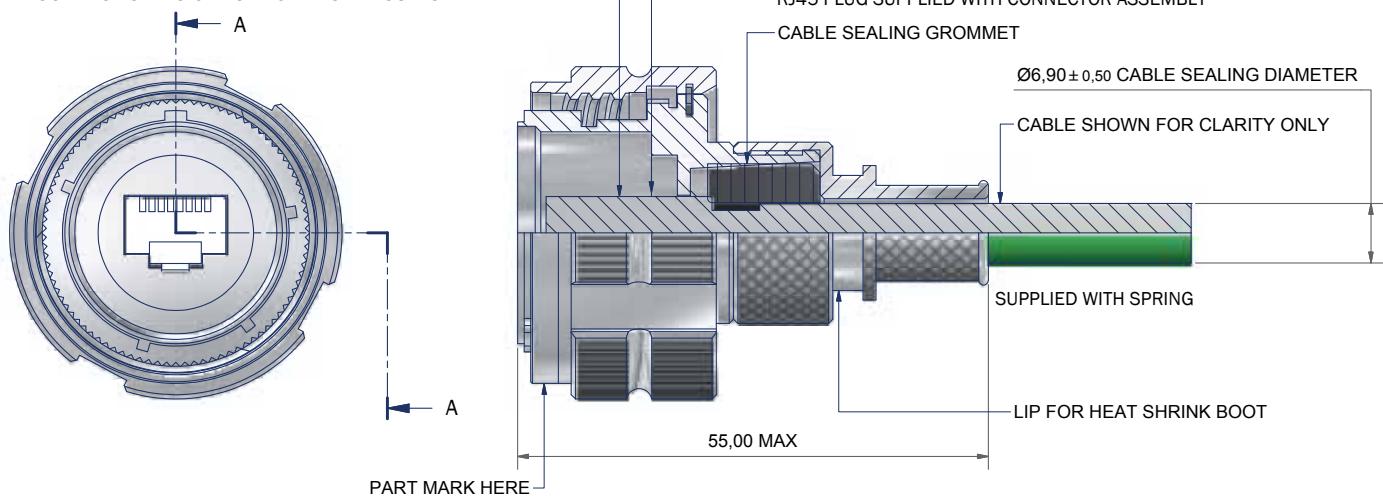
RJ45 Cat5 Tooling Options: See Page 17

Connector Modifications: See Page 19



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RJ45, CAT5 CABLE PLUG WITH INTEGRATED CABLE GUIDE,
SHIELDING AND CABLE CRIMP GROUNDED TO OUTER SHELL
DATA TRANSFER RATE TESTED TO 1 GIGABIT
CONTACT SALES OFFICE FOR TEST RESULTS



NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

SEAL - SILICONE MS749ECR TO BS6853 CAT 1

MATERIALS

RJ45
CONTACTS 30 μ Au/Ni
SHIELDING - NICKEL PLATED BRASS
BODY - PBT, UL94V-0

PERFORMANCE

CURRENT RATING FOR POWER CONTACTS 2.1
AMPS @ 70°C
VOLTAGE RATING 50V DC / 35V AC
TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4D000291-C-19N-1-C

PC4D000291 =	POLAMCO SERIES
C =	RJ45 STYLE
	A = 4 DATA CONTACTS (4 x 24AWG)
	B = 4 DATA + 2 POWER CONTACTS (4 x 24AWG + 2 x 22AWG)
	C = 8 DATA CONTACTS (8 x 26 AWG + 2x23AWG)
	D = 8 + 2 WAY 8 x 26AWG + 2 x 23AWG
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4D000291-C-U-19N-1-C

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

DRAWING NOT TO SCALE
DIMENSIONS IN MM

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RJ45 Cat6 Connectors

PC4B0029 - Feedthrough Jam Nut Receptacle

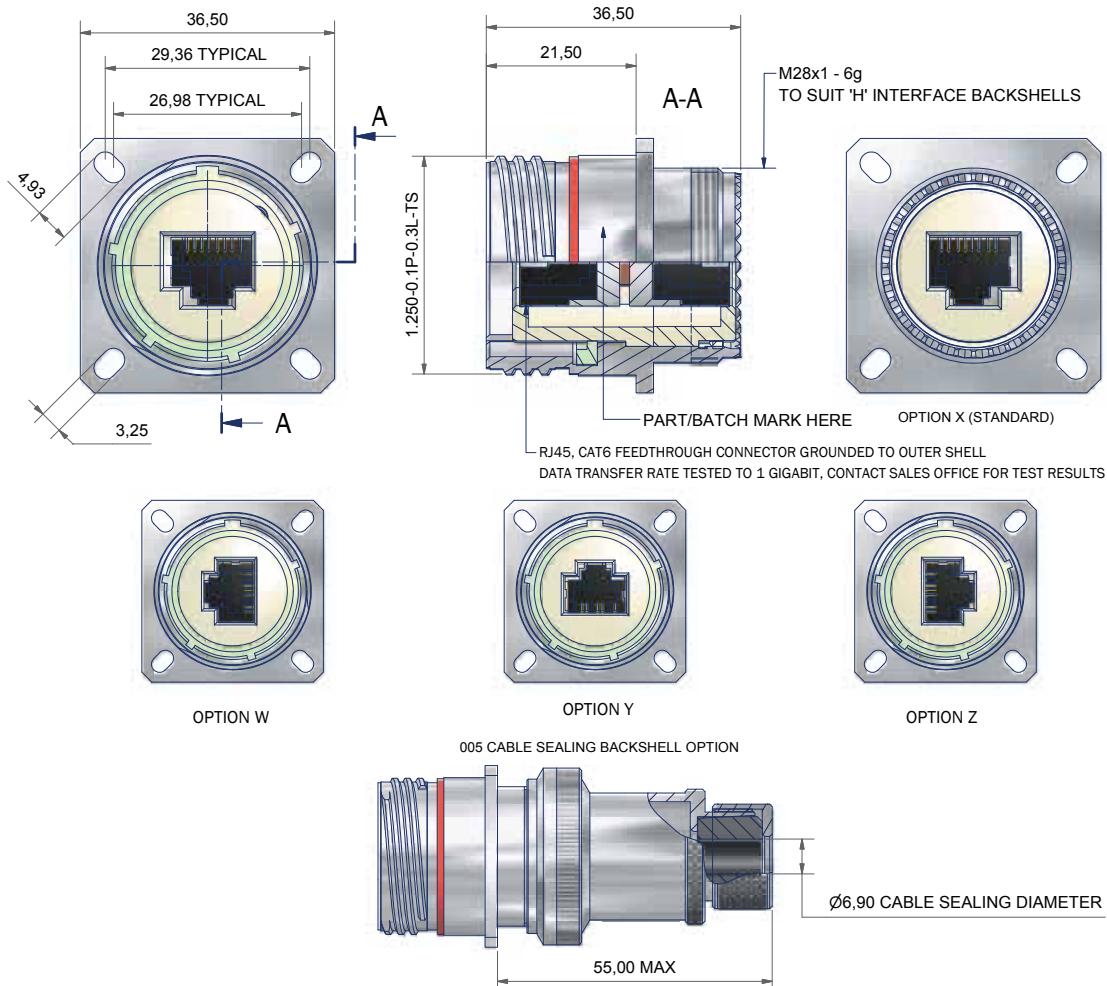


Connector Modifications: See Page 19

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GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999 MATES WITH AMPHENOL RJFTV
FINISH
SEE PAGES 15 - 16
MATERIALS
RJ45
CONTACTS COPPER WITH

SELECTIVE GOLD PLATE

SHIELDING - NICKEL PLATED BRASS
BODY - PA, UL94V-OPCB - FR4, UL94V-0
SEAL - SILICONE ELASTOMER
INSULATOR - PPS GL40 UL94V-0
COLOUR BLACK
POTTING - QSIL 550 UL94V-0

PERFORMANCE

CURRENT RATING FOR POWER CONTACTS 2.1 AMPS @ 70 °C
VOLTAGE RATING 50V DC / 35V AC
TEMPERATURE -40 °C TO +120 °C

EXAMPLE PART NUMBER: PC4B0029-19NX-1-C-005

PC4B0029 =	POLAMCO SERIES
19 =	SHELL SIZE
N =	ALTERNATE KEYING
X =	INSERT ROTATION (w, x, y, z)
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4
005 =	CABLE SEALING BACKSHELL

PART NUMBER FOR UNGROUNDED VERSION: PC4B0029-19NX-1-C-U

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

Tel: +44 (0)845 017 1545

DRAWING NOT TO SCALE
DIMENSIONS IN MM

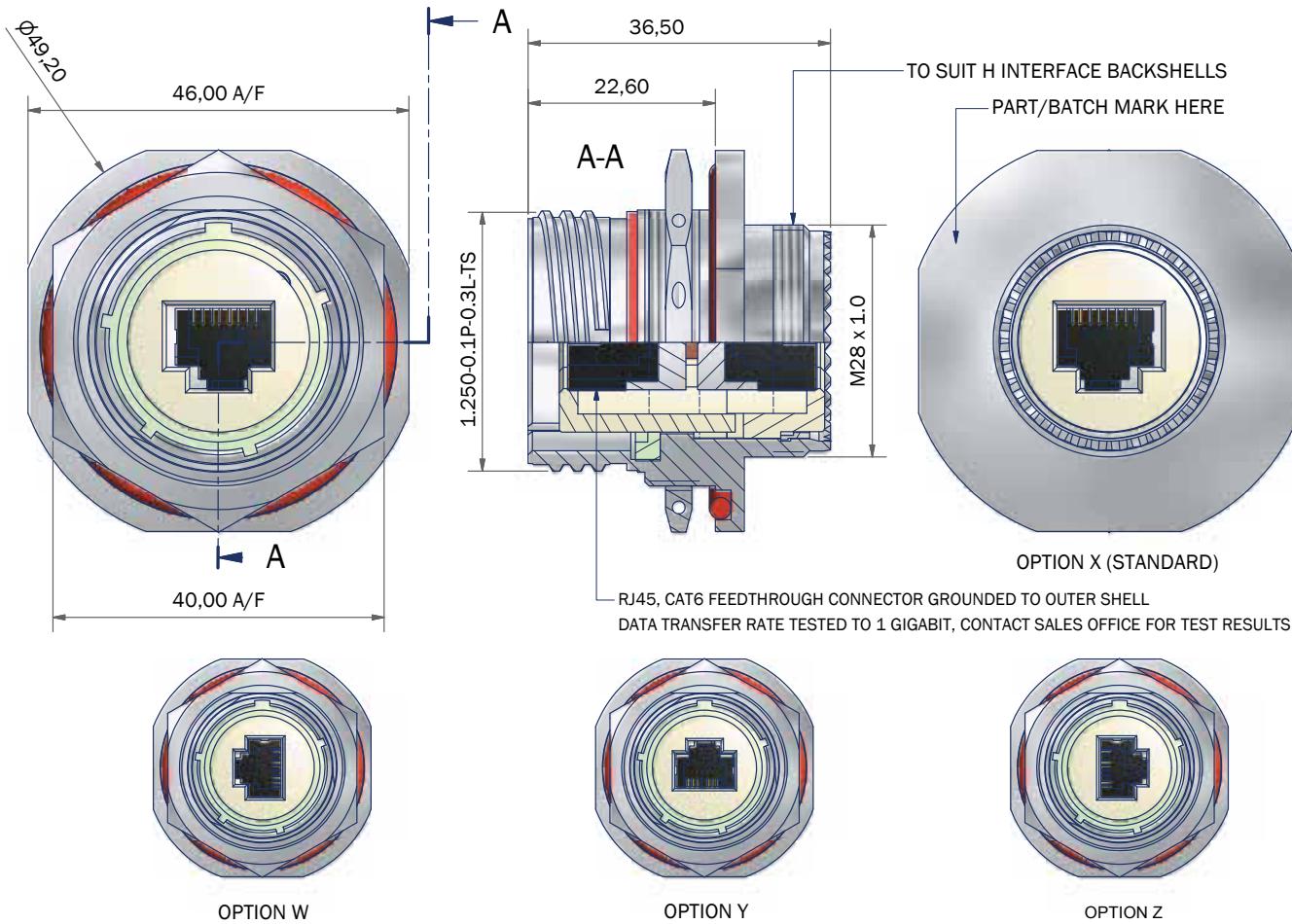
RJ45 Cat6 Connectors

PC4F0020 - Feedthrough Jam Nut Receptacle



Connector Modifications: See Page 19

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NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999 MATES WITH AMPHENOL RJFTV

FINISH

SEE PAGES 15 - 16

MATERIALS

RJ45

CONTACTS COPPER WITH SELECTIVE GOLD PLATE

SHIELDING - NICKEL PLATED BRASS

BODY - PA, UL94V-0

PCB - FR4, UL94V-0

SEAL - SILICONE ELASTOMER

INSULATOR - PPS GL40 UL94, COLOUR BLACK

POTTING - QSIL 550 UL94V-0

PERFORMANCE

VOLTAGE RATING 50V DC / 35V AC

TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4F0020-19NX-1-C

PC4F0020 =	POLAMCO SERIES
19 =	SHELL SIZE
N=	ALTERNATE KEYING
X=	INSERT ROTATION (w, x, y, z)
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4F0020-19NX-1-C-U

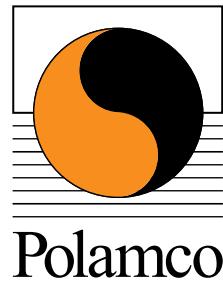
PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

DRAWING NOT TO SCALE
DIMENSIONS IN MM

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RJ45 Cat6 Connectors

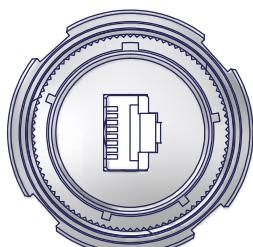
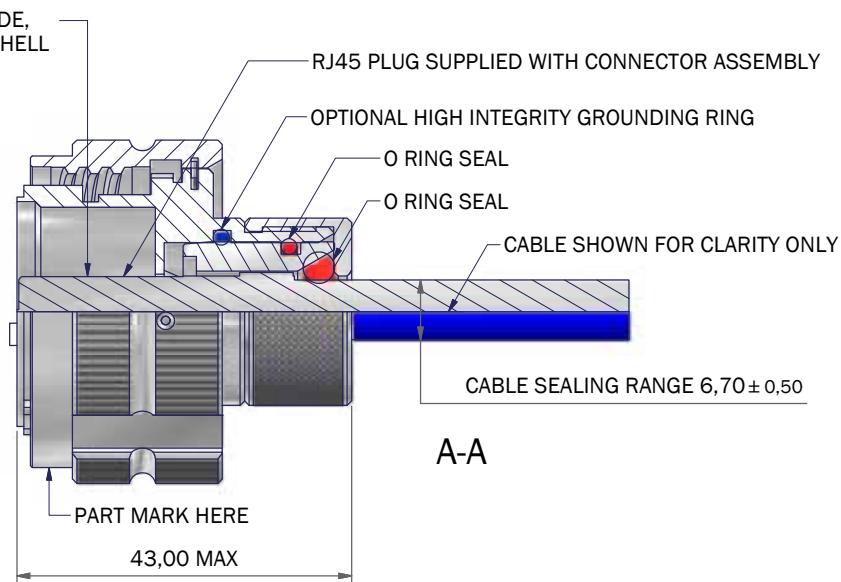
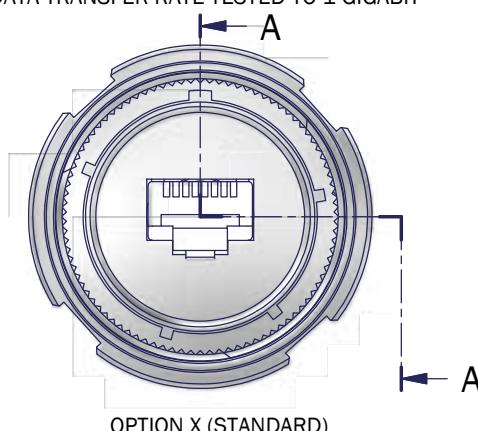
PC4D0024 - Plug Connector Assembly



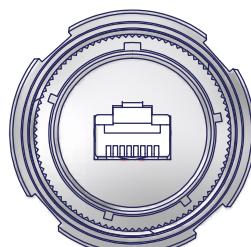
Connector Modifications: See Page 19

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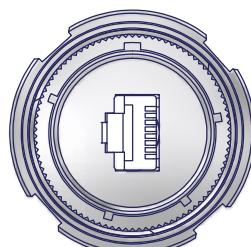
RJ45, CAT6 CABLE PLUG WITH INTEGRATED CABLE GUIDE,
SHIELDING AND CABLE CRIMP GROUNDED TO OUTER SHELL
FOR USE WITH AWG24/26 CABLE
DATA TRANSFER RATE TESTED TO 1 GIGABIT



OPTION W



OPTION Y



OPTION Z

NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999 MATES WITH AMPHENOL RJFTV

FINISH

SEE PAGES 15 - 16

MATERIALS

RJ45

CONTACTS COPPER WITH SELECTIVE GOLD PLATE

SHIELDING - NICKEL PLATED BRASS

BODY - PA, UL94V-0

SEAL - SILICONE ELASTOMER

PERFORMANCE

VOLTAGE RATING 50V DC / 35V AC
TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4D0024-19NX-1-C-H

PC4D0024 =	POLAMCO SERIES
19 =	SHELL SIZE
N =	ALTERNATE KEYING
X =	INSERT ROTATION (w, x, y, z)
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4
H =	HIGH INTEGRITY GROUNDING (OMIT FOR STANDARD)

PART NUMBER FOR UNGROUNDED VERSION: PC4D0024-19NX-1-C-U

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

RJ45 Cat6a Connectors

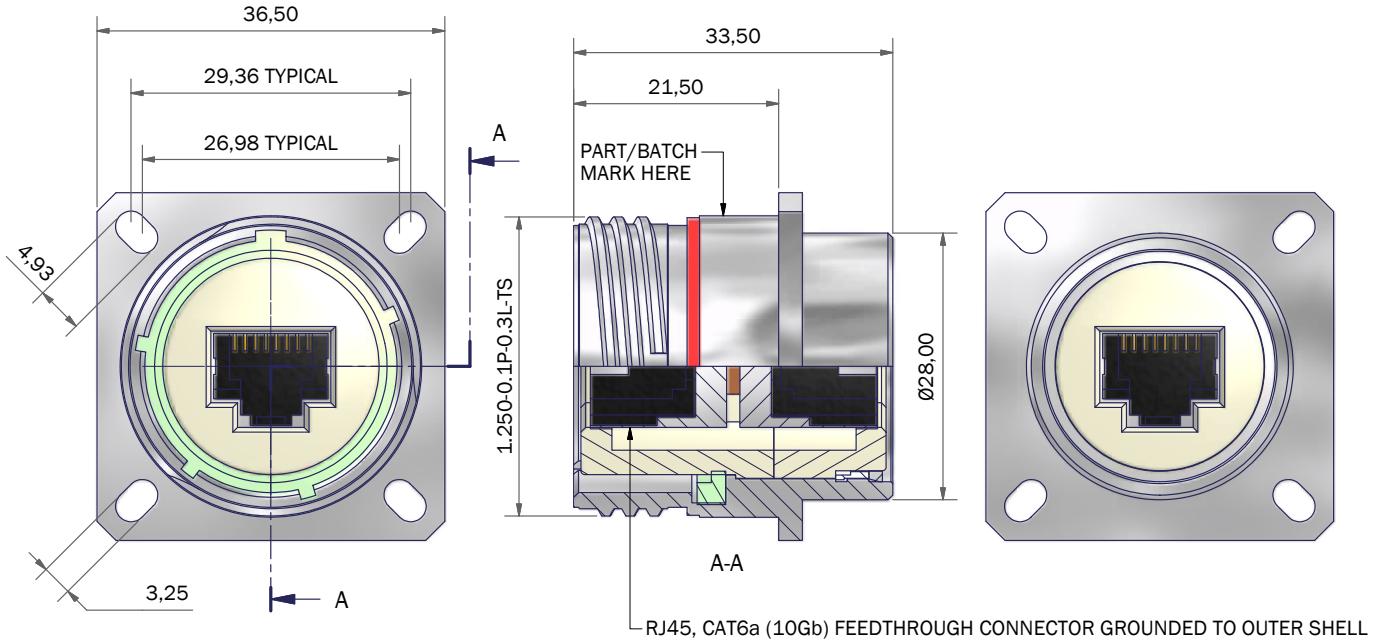
PC4B0022 - Feedthrough Receptacle Assembly



Connector Modifications: See Page 19

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NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

SEAL - SILICONE ELASTOMER

INSULATOR - PPS GL40 UL94, COLOUR BLACK

POTTING - QSIL 550 UL94V-0

MATERIALS

RJ45

CONTACTS COPPER WITH SELECTIVE GOLD PLATE

SHIELDING - NICKEL PLATED BRASS

BODY - PBT, UL94V-0

PCB - FR4, UL94V-0

PERFORMANCE

VOLTAGE RATING 50V DC / 35V AC

TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4B0022-19N-1-C

PC4B0022 =	POLAMCO SERIES
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4B0022-19N-1-C-U

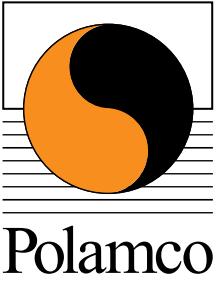
PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

DRAWING NOT TO SCALE
DIMENSIONS IN MM

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RJ45 Cat6a Connectors

PC4F0014 - Feedthrough Jam Nut Receptacle

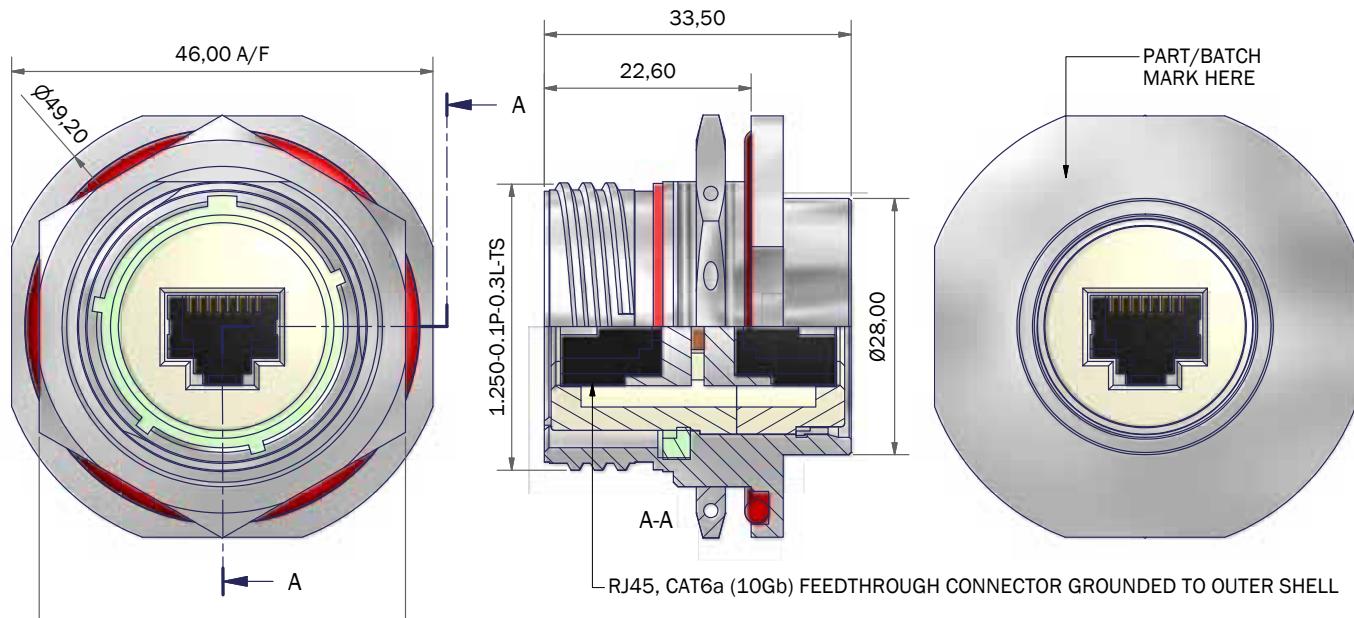


Connector Modifications: See Page 19

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NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

SEAL - SILICONE ELASTOMER

INSULATOR - PPS GL40 UL94, COLOUR BLACK

POTTING - QSIL 550 UL94V-0

MATERIALS

RJ45

CONTACTS COPPER WITH SELECTIVE GOLD PLATE

SHIELDING - NICKEL PLATED BRASS

BODY - PBT, UL94V-0

PCB - FR4, UL94V-0

PERFORMANCE

VOLTAGE RATING 50V DC / 35V AC

TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4F0014-19N-1-C

PC4F0014 =	POLAMCO SERIES
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4

PART NUMBER FOR UNGROUNDED VERSION: PC4F0014-19N-1-C-U

RJ45 Cat6a Connectors

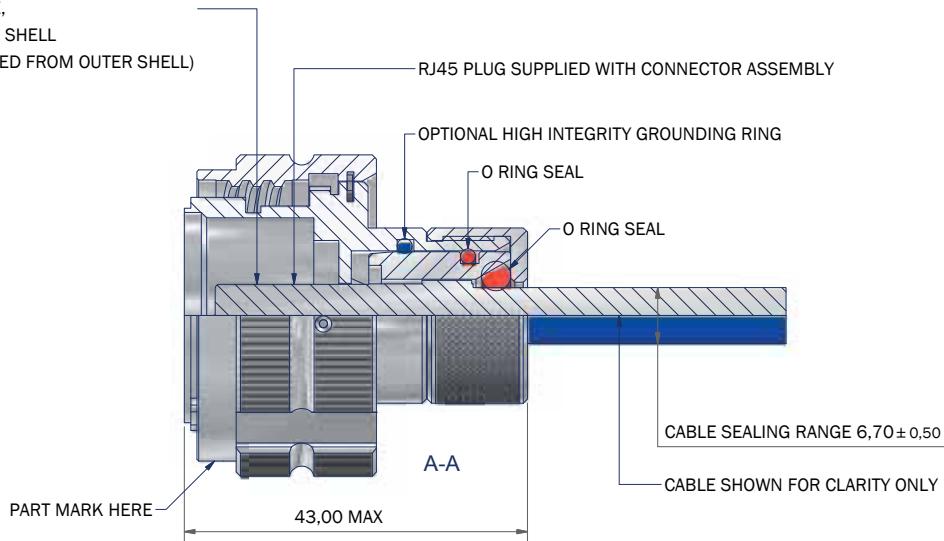
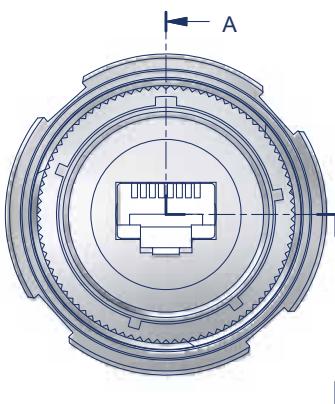
PC4D0018 - Plug Connector Assembly

RJ45 Cat6 & Cat6a Tooling Options: See Page 18
Connector Modifications: See Page 19



Interconnect Solutions Worldwide

RJ45, CAT6a (10Gb) WITH INTEGRATED CABLE GUIDE,
SHIELDING AND CABLE CRIMP GROUNDED TO OUTER SHELL
UNLESS OPTION "U" IS SPECIFIED (FEEDTHRU ISOLATED FROM OUTER SHELL)
FOR USE WITH AWG24/26 CABLE



NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

MATERIALS

RJ45
CONTACTS COPPER WITH SELECTIVE GOLD PLATE
SHIELDING - NICKEL PLATED BRASS
BODY - PBT, UL94V-0
SEAL - SILICONE

PERFORMANCE

VOLTAGE RATING 50V DC / 35V AC
TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER: PC4D0018-19N-1-C-H

PC4D0018 =	POLAMCO SERIES
19 =	SHELL SIZE
N =	KEY ARRANGEMENT
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4
H =	HIGH INTEGRITY GROUNDING (OMIT FOR STANDARD)

PART NUMBER FOR UNGROUNDED VERSION: PC4D0018-19N-1-C-U

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

DRAWING NOT TO SCALE
DIMENSIONS IN MM

www.polamco.com

RJ45 Cat6a Connectors

PC4D0018**

Plug Connector Assembly for Double Screened Applications

RJ45 Cat6 & Cat6a Tooling Options: See Page 18

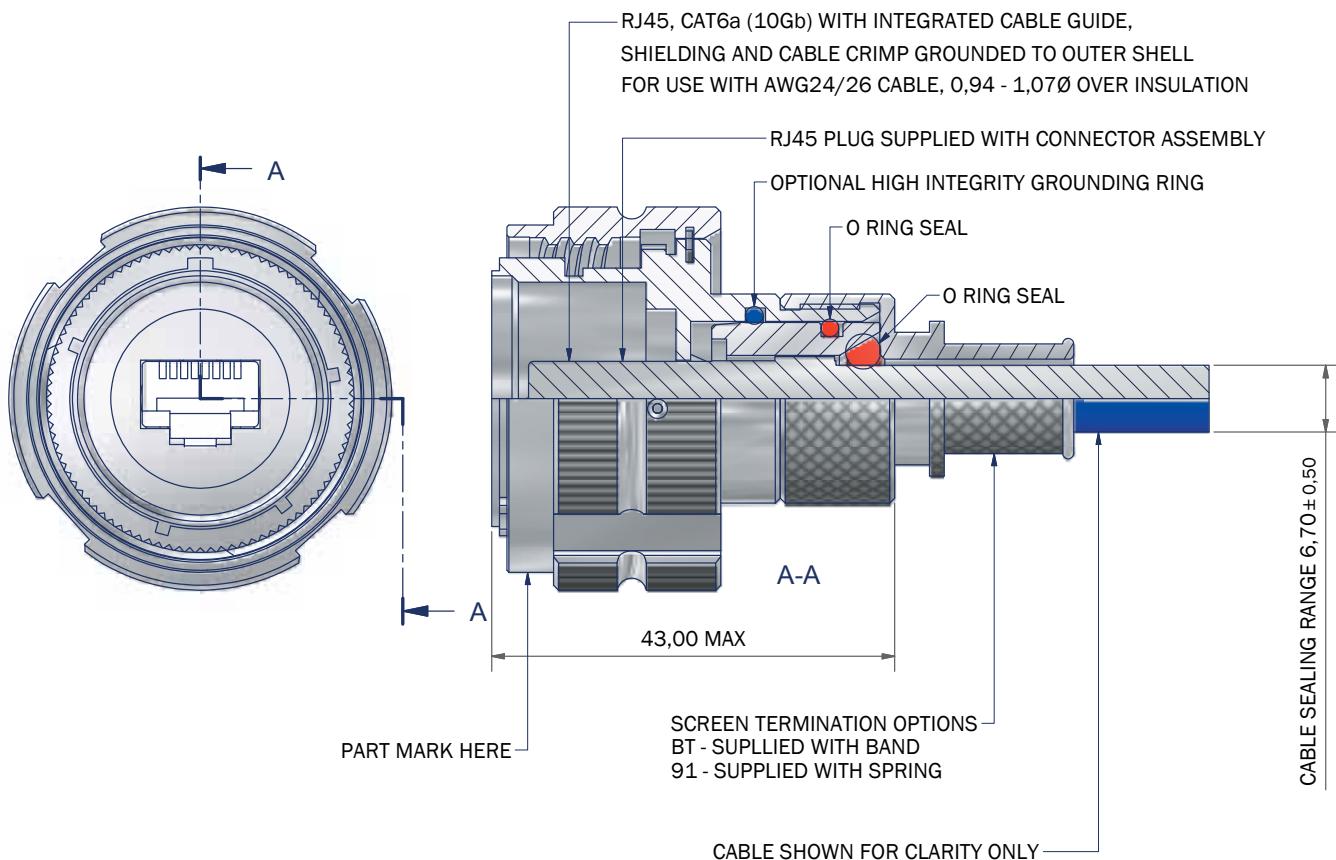
Connector Modifications: See Page 19



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Contents ▶



NOTES

GENERALLY TO THE REQUIREMENTS OF MIL-DTL-38999

PLATING: SEE PAGES 15 - 16

MATERIALS: SEE PAGE 15

RJ45

CONTACTS SELECTIVE GOLD PLATING

SHIELDING - NICKEL PLATED BRASS

BODY - PBT, UL94V-0

SEAL - SILICONE

PERFORMANCE

VOLTAGE RATING 50V DC / 35V AC

TEMPERATURE -40°C TO +120°C

EXAMPLE PART NUMBER PC4D0018BT-19N-1-C-H

PC4D0018	POLAMCO SERIES
BT =	BT - SUPPLIED WITH BAND, 91 SUPPLIED WITH SPRING
19 =	SHELL SIZE
N =	KEY ARRANGEMENT, OPTIONS N, A, B, C, D, E
1 =	MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3
C =	PLATING: SEE PAGES 3 - 4
H =	HIGH INTEGRITY GROUNDING (OMIT FOR STANDARD)

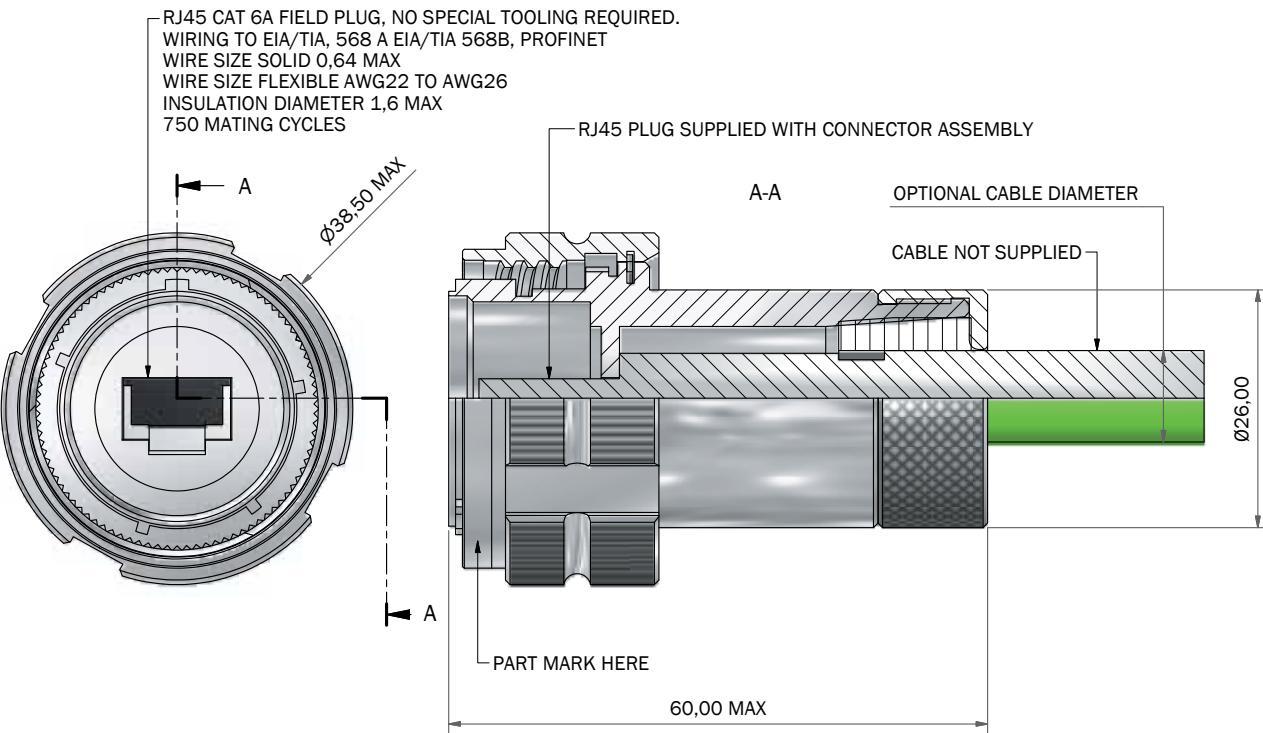
RJ45 Cat6a Connectors

PC4D0023 - Field Plug Connector Assembly (No Tooling Required)



Connector Modifications: See Page 19

Interconnect Solutions Worldwide



NOTES

GENERALLY TO THE REQUIREMENTS OF
MIL-DTL-38999

FINISH
SEE PAGES 15 - 16

MATERIALS

RJ45 PLUG
CONTACTS COPPER WITH
SELECTIVE GOLD PLATING
HOUSING - ZINC DIECAST
SEAL - SILICONE

PERFORMANCE

TEMPERATURE -40 °C TO +70 °C

EXAMPLE PART NUMBER PC4D0023-19N-1-C

PC4D0023 =	POLAMCO SERIES
19 =	SHELL SIZE
10 =	CABLE DIAMETER IN MM +/-0,5 OPTIONS 06, 08 AND 10
N =	KEY ARRANGEMENT, OPTIONS N, A, B, C, D, E
1 =	<u>MATERIAL (ALUMINIUM ALLOY) SEE PAGE 3</u>
C =	<u>PLATING: SEE PAGES 3 - 4</u>

PART NUMBER FOR UNGROUNDED VERSION: PC4D0023-19N-1-C-U

PART NUMBER AND BATCH CODE WILL BE MARKED ON THE ASSEMBLY UNLESS OTHERWISE SPECIFIED

DRAWING NOT TO SCALE
DIMENSIONS IN MM

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RJ45 Cat5 Connectors

Plug Assembly Tooling



Polamco

Interconnect Solutions Worldwide

Crimp Tool

Features

1-step crimp tool crimps all contacts and fixes the square crimp in one action



Part Number

Y-ConTool-11

Cable Stripping Tool

Features

Cable stripping tool with adjustable blades



Part Number

Y-ConTool-20

Cable-to-Plug Assembly Tool

Features

Enables easy assembly when inserting the cable and insert into the plug

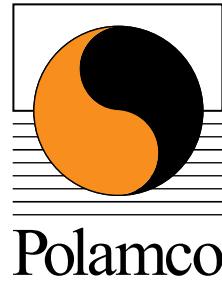


Part Number

Y-ConTool-30

RJ45 Cat6 & Cat6a Connectors

Plug Assembly Tooling



Interconnect Solutions Worldwide



2980070-01 & 2980075-01

Professional Handtool for the assembly
of shielded Cat 6 plugs.

This is a real One-Step tool: contacts
and shield is crimped at the same time.

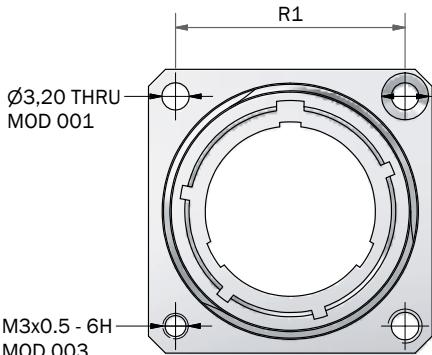


PLUG	PART NUMBER	OUTER CABLE Ø
SS-39200-010 / 011	2980075-01	MORE THAN 6MM

Connector Modifications



Interconnect Solutions Worldwide

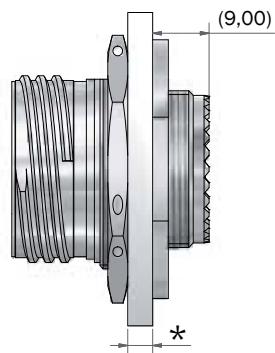


Flange Mount Options for PC420 Series

Ø3,20 THRU
MOD 001

Ø3,20 THRU
 $\sqrt{\text{Ø}5,50 \times 90^\circ}$
MOD 002

001 = Ø 3,2
002 = Countersunk
003 = Tapped M3

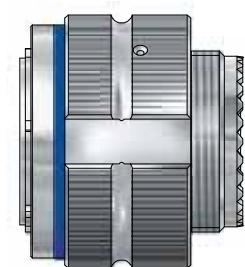


Optional Panel Thickness for PC424 Series

Jam nut thread length increased to suit various panels wall section.

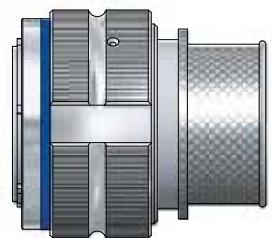
* 1,58 - 3,20 STANDARD PANEL THICKNESS

L = OPTIONAL PANEL THICKNESS



Torque Differential Option for PC426 Series

The plug coupling nut incorporates a 2:1 torque differential for high vibration applications.



Integral Backshells For PC420 / 24 / 26

Integral backshell options utilised where there is insufficient room to install a separate backshell options include, 91 & BT series.



element¹⁴

EN - For pricing and availability in your local country please visit one of the below links:

DE - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

FR - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

[PC4D0018-19N-1-B](#)

[PC4F0002-C-19N-1-C](#)

[PC4F0020-19NX-1-B](#)

EN

This Datasheet is presented by
the manufacturer

DE

Dieses Datenblatt wird vom
Hersteller bereitgestellt

FR

Cette fiche technique est
présentée par le fabricant