

## 387TV - Size 7 connector

Derived from MIL-DTL-38999 Series III











### Video, Ethernet, Data transmission...

*...a solution to every need.*

Size 7 connectors dedicated to size 8 high speed contacts (Coax, Twinax, Quadrax, 1Gb Octomax, 10Gb coming soon) and fiber optic.

Copper contacts insert arrangement with a unique size 8 cavity available with:

75Ω Coax	Concentric Twinax	Quadrax contacts	Octomax 1G26
  <p>HD-SDI / 3G-SDI Protocoles</p>	  <p>Data bus BUS1553</p>	  <p>Ethernet contact Cat.5E ISO11801 Channel class D</p>	  <p>1Gb Ethernet contact</p>

**COMING SOON** Fiber optic Size 7 MT, TVOP size 7 and Double Luxbeam Q8D.

### Main features

#### Available shells:

- Plugs (always delivered with integrated backshells).
- Crimp receptacles (always delivered with integrated backshell).
  - Jam nut receptacle (Standard and reduced flange F312 available)
  - Oval receptacle
- PC Tail receptacles
  - Jam nut receptacle (Standard, reduced flange F312, Stand-off reduced flange F059)
  - Oval receptacle

Plugs always delivered with socket contacts and receptacles with pin contacts.

- IP68: 48hours under 2 meters of water for jam nut receptacle and mated plug. Use a heat shrink boot and adhesive between the plug and the cable.

### Markets & Applications



C4ISR



Military Aerospace



Navy




Commercial Aerospace



Missile

# 387TV - Size 7 connector

## Technical Characteristics

Available arrangement	
	
Arrangement (TV-CTV)	07-05
MIL-DTL-38999 Series III	/
Total contact	1
Contact size	8

ⓐ Grounded plane connector

Matches the performances of MIL-DTL-38999 Series III connector type (EN3645) in terms of:

Temperature	Refer to the "Materials and platings" section for all details
Salt Spray resistance	
Shocks and vibrations	

Differs from standard MIL-DTL-38999 serie III

Thread coupling	Double start instead of triple start
Shell style for crimp versions (plug and receptacle)	Always with integrated backshell
Lightning strike	Composite 38999 level (MIL-DTL-38999 class M)
EMI performances	82dB min at 100MHz (vs 90dB min for 38999 standard) 65dB min at 1000MHz (vs 85dB for 38999 standard)

## Contacts

As a reminder, pin contacts are always for receptacles and socket contacts for plugs.

	Pin contacts		Socket contacts	Piggy back grommet for crimp contacts
	Crimp	PC tail	Crimp only	
Coax 75Ω (PIC V75268 cable type)*	603578	-	603748	900472
Coax 75Ω (RG 179 cable type)	603838	-	603828	
Coax 75Ω (PC Tail)	-	612008	-	
Twinax	077517	600797	077516	900471
Quadrax 100Ω	603330	900210	603338	
Octomax	603072	603471	603069	

\* Also compatible with PIC V76261, PIC73263 and EMTQ TFLX 125-075-01 cable types.

## Materials and platings

	Shell materials	Shell finishes	Temperature (max)	Salt spray (hours)
W	Aluminium	Olive drab cadmium	+175°C	500
F		Nickel ✓	+200°C*	48
ZN		Black zinc nickel ✓	+175°C	300
K	Stainless steel	Passivation ✓	+200°C*	500
S		Nickel ✓	+200°C*	500
B	Marine Bronze* ✓	-	+200°C*	500

\*Copper aluminum alloy

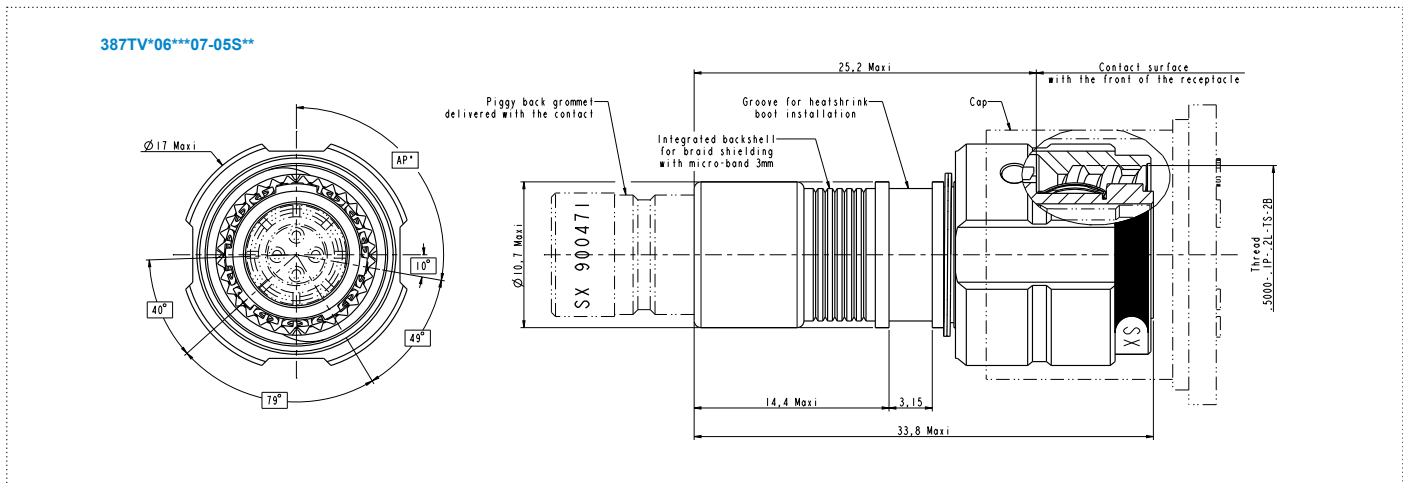
✓ RoHS compliant

\* For connectors with Quadrax and differential Twinax contacts please omit the 'S' corresponding to 200°C compatibility. Quadrax contacts and differential Twinax contacts are +175°C maxi compatible.

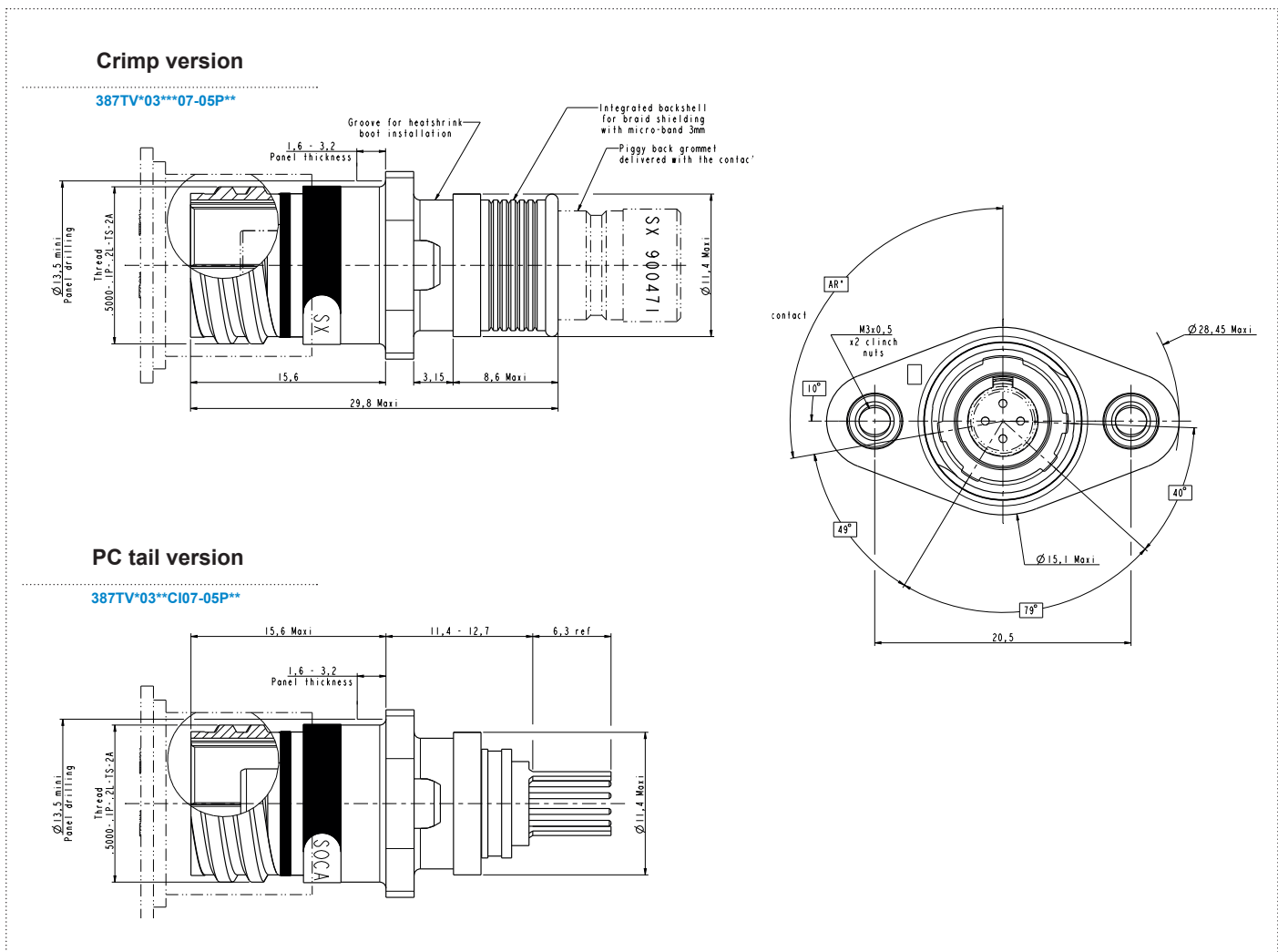
# 387TV - Size 7 connector

## Overall dimensions

### Plug (socket contact only)



### Oval receptacle (pin contact only)

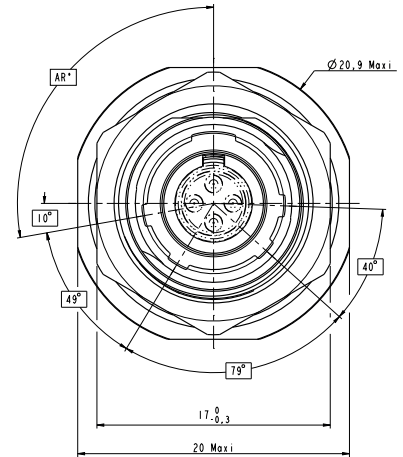
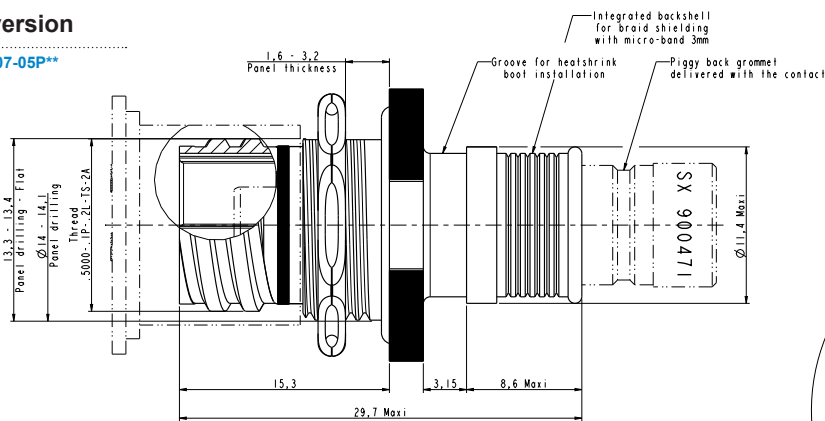


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## Jam nut receptacle (pin contact only)

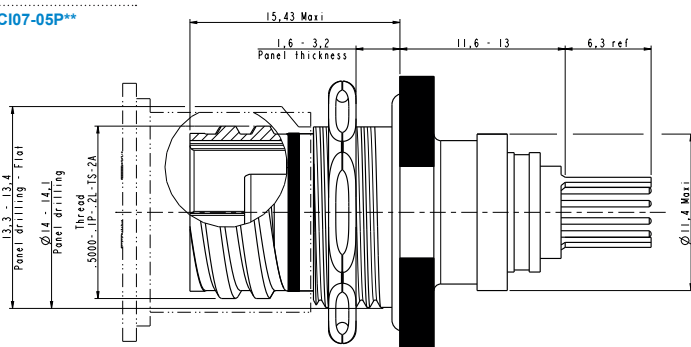
### Crimp version

387TV\*07\*\*07-05P\*\*



### Pc tail version

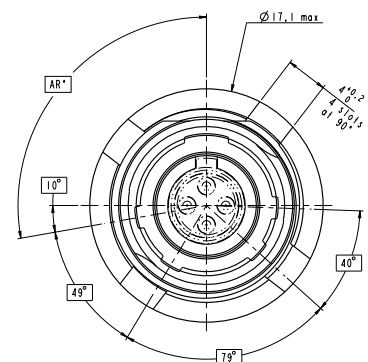
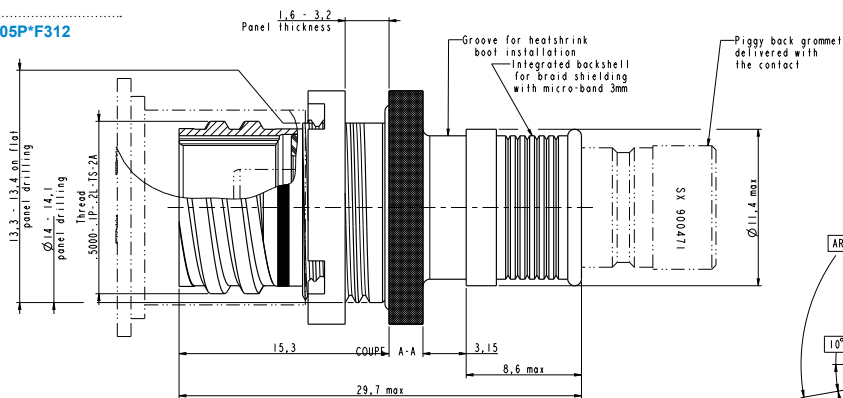
387TV\*07\*\*C107-05P\*\*



## Reduced flange jam nut receptacle (pin contact only)

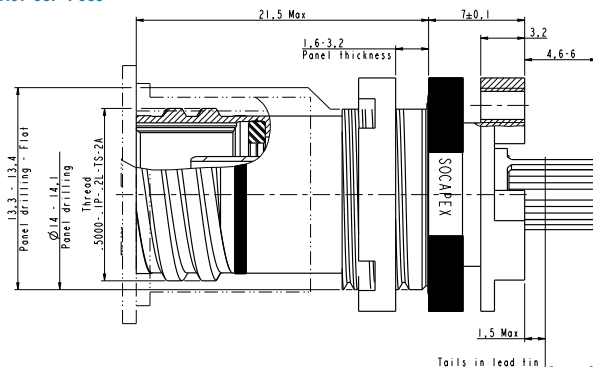
### Crimp version

387TV\*07\*\*\*07-05P\*F312



### Stand off, Pc tail version

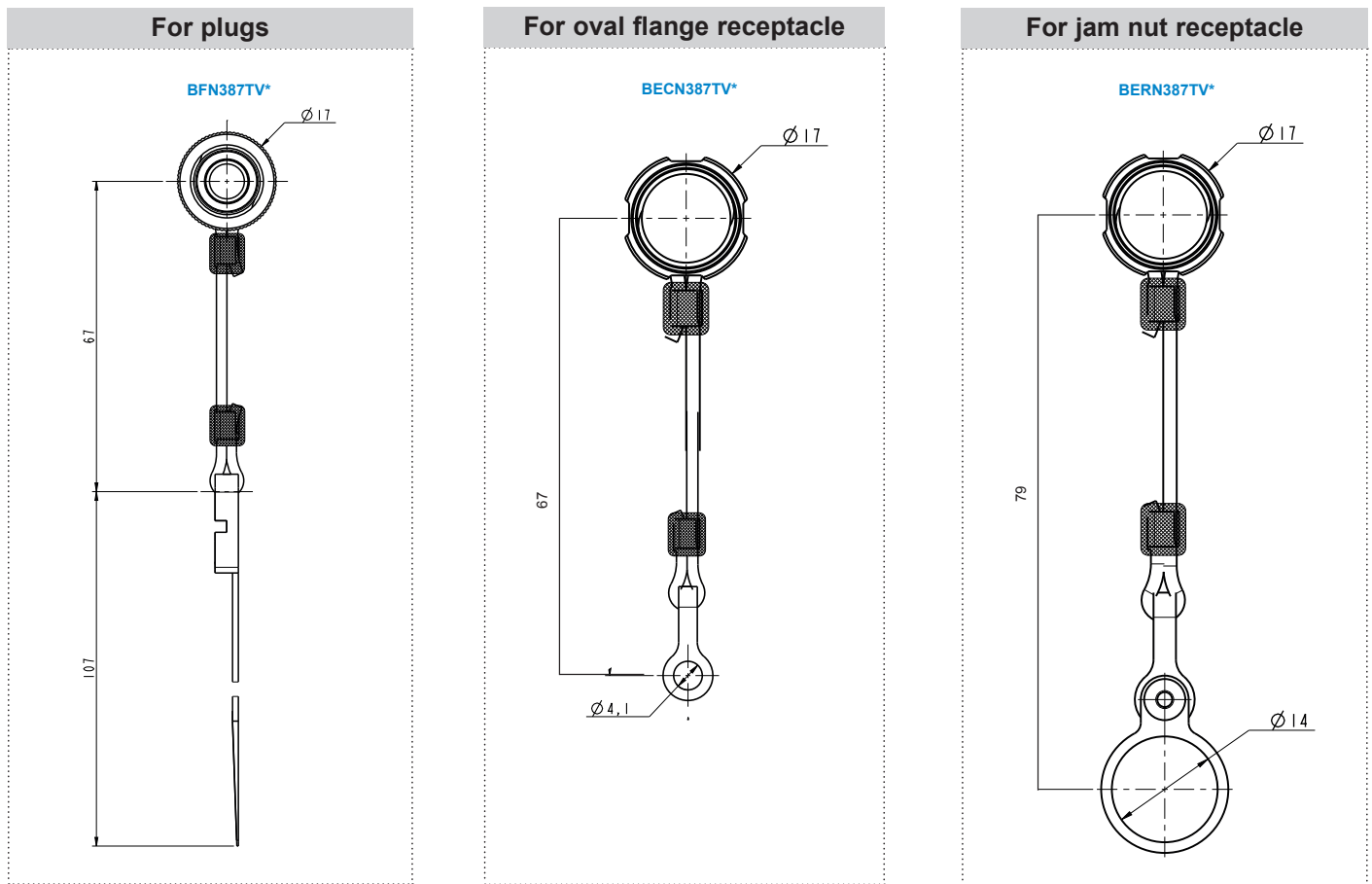
387TV\*07\*\*C107-05P\*F059



# 387TV - Size 7 connector

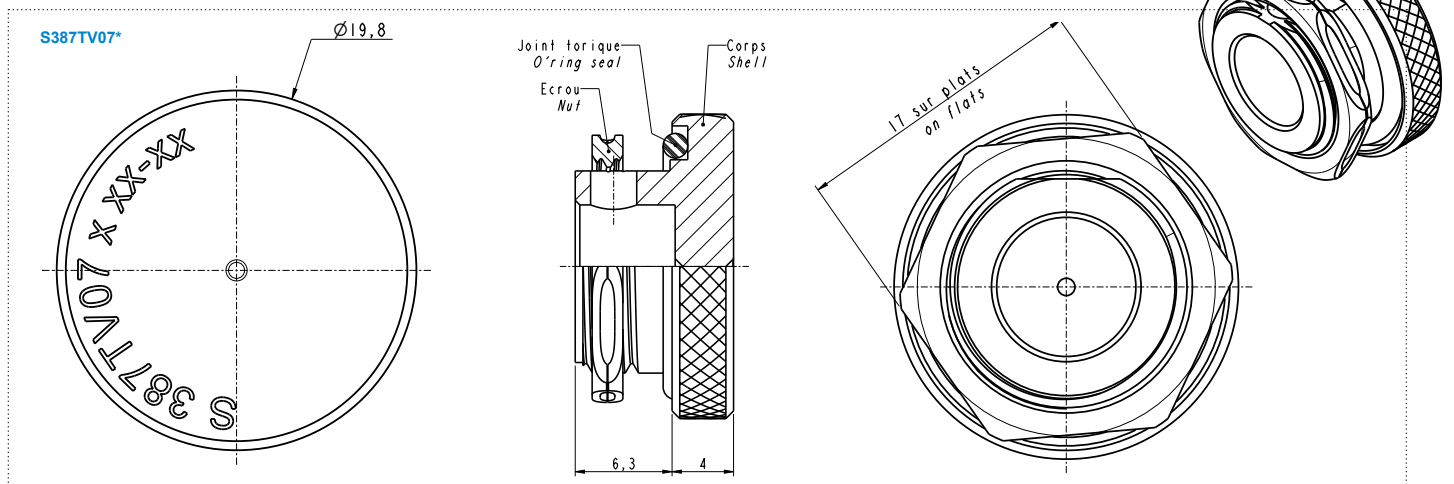
## Accessories

### Metal Caps Size 7 for 387TV Series



**COMING SOON** Size 7 silicon cap

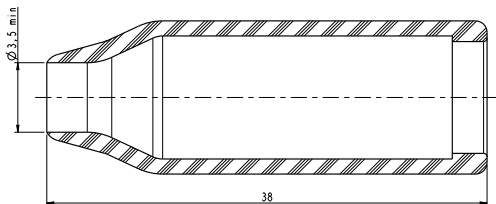
### Panel stopper (jam nut receptacle) for 387TV Series



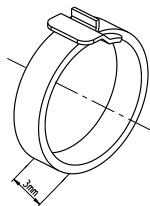
# 387TV - Size 7 connector

## Other accessories

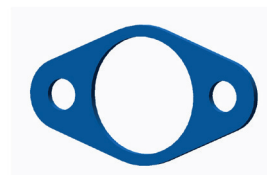
**Optional Heatshrink boot**  
(Fluoroelastomer - without any adhesive)  
**804190**



**Optional micro-band**  
**895693**

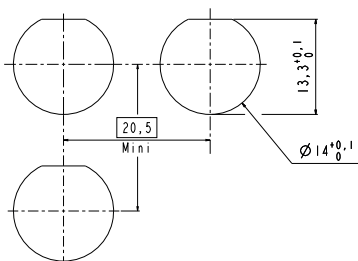


**Panel gasket for oval flange receptacle**  
**621755**

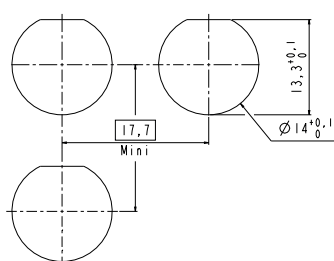


## Panel Drilling

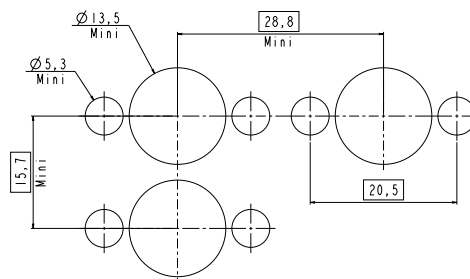
**Jam-nut Receptacle**  
**387TVx07xxx**



**Reduced flange Receptacle**  
**387TVx07xxxF312 / 387TVx07xxxF059**

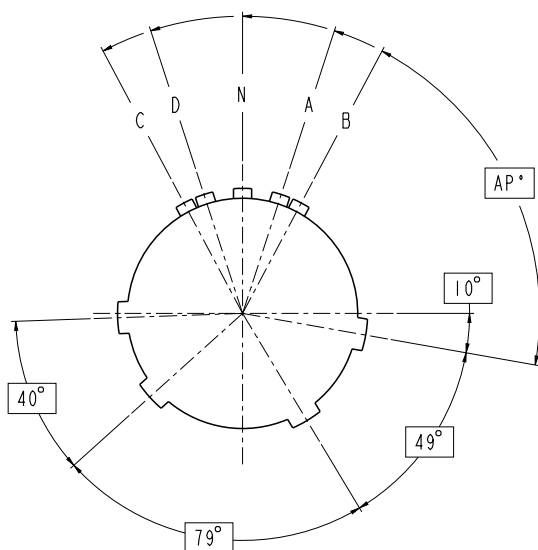


**Oval flange Receptacle**  
**387TVx03xxx**



## Coding

**Front view of plug**



**Polarization**

**AP°**

<b>N</b>	100°
<b>A</b>	82°
<b>B</b>	72°
<b>C</b>	128°
<b>D</b>	118°

✓ RoHS compliant



# NOTES

A series of horizontal dotted lines for taking notes, spanning the width of the page.





# HOW TO ORDER SIZE 7 WITH CRIMP CONTACTS - AMPHENOL DESIGNATION

	1.	2.	3.	4.	5.	6.	7.	8.	9.
Series	Shell type	Crimp contacts	Contact type	Material and platings	Contact arrangement	Contact gender	Keying	With or without contact	Deviation
387TV	07	R	GQ	W	07-05	P	-	-	F312

## 1. Shell type

	Shell type	Associated materials and plating	Temperature
06	Plugs with integrated backshells	W, ZN	+175°C
S06*		F, K, S, B	+200°C *
07	Jam nut receptacles with integrated backshells	W, ZN	+175°C
S07*		F, K, S, B	+200°C *
03	Oval flange receptacles with integrated backshells	W	+175°C
S03*		F, K, S, B	+200°C *

\* For connectors with Quadrax and differential Twinax contacts please omit the 'S' corresponding to 200°C compatibility. Quadrax contacts and differential Twinax contacts are +175°C maxi compatible.

## 2. Crimp contacts

R	For W, F, K, S and B platings
Blank	For ZN plating

## 3. Contact type

GC	Coax 75Ω
GT	Twinax
GQ	Quadrax 100Ω
GO	Octomax

## 4. Material and platings

	Shell material	Shell finish
W		Olive drab cadmium
F	Aluminum	Nickel ✓
ZN		Black zinc nickel ✓
K	Stainless steel	Passivated ✓
S		Nickel ✓
B	Marine bronze* ✓	-

\* Copper aluminum alloy

## 5. Contact arrangement

07-05	A unique arrangement available with a monocavity size 8 for high speed contacts or fiber optic (for fiber optic how to order, please consult us).
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## 6. Contact gender

P	Pin (500 cycles) for receptacles only
S	Socket (500 cycles) for plugs only

## 7. Keying

Blank (for normal)	A	B	C	D
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## 8. With contact

Blank	Connector delivered with contacts
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## 9. Deviation

Deviation	Description	Shell type compatibility
F312	Reduced flange receptacles with a standard nut	07/S07

For other deviations, please consult us

✓ RoHS compliant

# HOW TO ORDER SIZE 7 WITHOUT CRIMP CONTACTS - AMPHENOL DESIGNATION

1.	2.	3.	4.	5.	6.	7.	8.	
Series	Shell type	Crimp contacts	Material and platings	Contact arrangement	Contact gender	Keying	Without contact	Deviation
387TV	07	RG	W	07-05	P	-	LC	F312

## 1. Shell type

	Shell type	Associated materials and plating	Temperature
06	Plugs with integrated backshells	W, ZN	+175°C
S06*		F, K, S, B	+200°C *
07	Jam nut receptacles with integrated backshells	W, ZN	+175°C
S07*		F, K, S, B	+200°C *
03	Oval flange receptacles with integrated backshells	W	+175°C
S03*		F, K, S, B	+200°C *

\* For connectors with Quadrax and differential Twinax contacts please omit the 'S' corresponding to 200°C compatibility. Quadrax contacts and differential Twinax contacts are +175°C maxi compatible.

## 2. Crimp contacts

RG	For W, F, K, S and B platings
G	For ZN plating

## 3. Material and platings

	Shell material	Shell finish
W		Olive drab cadmium
F	Aluminum	Nickel ✓
ZN		Black zinc nickel ✓
K		Passivated ✓
S	Stainless steel	Nickel ✓
B	Marine bronze* ✓	-

\* Copper aluminum alloy

## 4. Contact arrangement

07-05	A unique arrangement available with a monocavity size 8 for high speed contacts or fiber optic (for fiber optic how to order, please consult us).
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## 5. Contact gender

P	Pin (500 cycles) for receptacles only
S	Socket (500 cycles) for plugs only

## 6. Keying

Blank (for normal)	A	B	C	D
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## 7. Without contact

LC	Connector delivered without contacts
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## 8. Deviation

Deviation	Description	Shell type compatibility
F312	Reduced flange receptacles with a standard nut	07/S07

For other deviations, please consult us

# HOW TO ORDER SIZE 7 WITH PC TAIL CONTACTS - AMPHENOL DESIGNATION

1.	2.	3.	4.	5.	6.	7.	8.	
Series	Shell type	Contact type	Material and platings	PC Tail contacts	Contact arrangement	Contact gender	Keying	Deviation
387TV	07	GQ	W	CI	07-05	P	-	F059

## 1. Shell type (receptacles only)

Shell type	Associated materials and plating	Temperature
07	W, ZN	+175°C
S07*	F, K, S, B	+200°C *
03	W	+175°C
S03*	F, K, S, B	+200°C *

\* For connectors with Quadrax and differential Twinax contacts please omit the 'S' corresponding to 200°C compatibility. Quadrax contacts and differential Twinax contacts are +175°C maxi compatible.

## 2. Contact type

GC	Coax 75Ω
GT	Twinax
GQ	Quadrax 100Ω
GO	Octomax

## 3. Material and platings

Shell material	Shell finish
W	Olive drab cadmium
F	Aluminum
ZN	Nickel ✓
K	Black zinc nickel ✓
S	Passivated ✓
B	Nickel ✓
B	Marine bronze* ✓

\* Copper aluminum alloy

## 4. PC Tail contacts

CI Standard length  
For other length, please consult us

## 5. Contact arrangement

07-05 A unique arrangement available with a monocavity size 8 for high speed contacts or fiber optic (for fiber optic how to order, please consult us)

## 6. Contact gender

P Pin (500 cycles) - always delivered with a pin contact

## 7. Keying

Blank (for normal) A B C D

## 8. Deviation

Shell style	PC Tail plating				Shell type compatibility
	Tin lead	Silver tin	Silver tin copper	Gold	
Standard	F404	F404LF ✓	F404LFC ✓	Blank ✓	All
Reduced flange	F312	F312LF ✓	F312LFC ✓	F312H ✓	
Stand-off Reduced flange	F059	F059LF ✓	F059LFC ✓	F059H ✓	07 / S07

For other deviation, please consult us

# HOW TO ORDER METAL CAP FOR 387TV SERIES (SIZE 7 CONNECTORS)

1.	2.	3.	4.
Cap type	Cap style	Wire type	Material and platings
B	EC	N	W

## 1. Cap style

EC	For oval flange receptacles
ER	For jam nut receptacles
F	For plug

## 2. Wire type

N	Nylon cord
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## 3. Series

387TV	387TV Series for size 7 connectors
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## 4. Material and platings

	Shell material	Shell finish
W		Olive drab cadmium
F	Aluminum	Nickel ✓
ZN		Black zinc nickel ✓
B	Marine bronze ✓	-

# HOW TO ORDER PANEL STOPPER (JAM NUT RECEPTACLE) FOR 387TV SERIES

1.	2.	3.
Cap type	Series	Material and platings
S	387TV	W

## 1. Series

387TV	387TV Series for size 7 connectors
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## 2. Cap style

07	For jam nut receptacles
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## 3. Material and platings

	Shell material	Shell finish
W		Olive drab cadmium
F	Aluminum	Nickel ✓
ZN		Black zinc nickel ✓

✓ RoHS compliant

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