

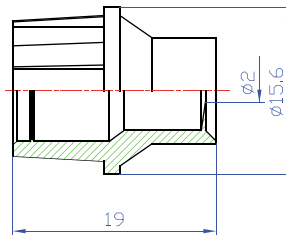


## PRODUCT DATASHEET

**CaP**  
 Connettore a Pressione  
 CaP System  
 UNIVERSAL F MALE CONNECTOR

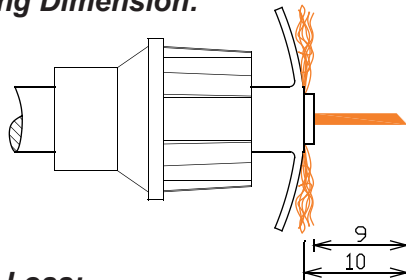


\*\*\*\*\* NEW \*\*\*\*\*  
**UL 94 V0 (FIRE RATING)**  
 Version available upon request  
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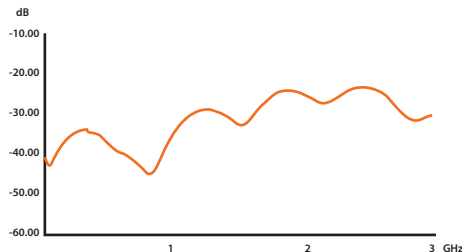


**Use these Tools**

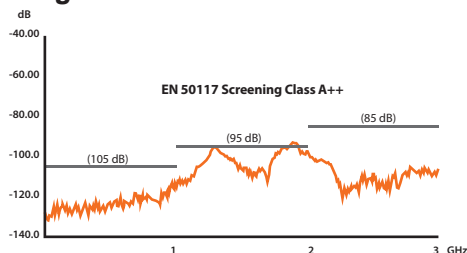
### Stripping Dimension:



### Return Loss:



### Screening Attenuation:



### Suitable for Cables:

RG6 Quad, RG6, RG59, RG178, ... suitable for all cable with outer diameter up to  $\varnothing 7,7$  mm (0,303 in).

### Electrical Specification

Impedance:	50-75 Ohm (same of cable*)
Frequency:	0-6 GHz (same of cable*)
Dielectric W/V:	1500 Veff
Insulation res:	5000 M-Ohm
Insertion Loss:	<0,015 dB @ 3 GHz
Return Loss:	> 24 dB @ 3 GHz
Screening Immunity:	Class A+

### Mechanical Specification

Body Material:	Patented Plastic Compound
Tensile Strength:	17 MPa
Elongation at Break:	650 %
Tear Strength:	80 N/mm
Weight:	1,0 g

### Environmental Specification

UV rays protection:	YES
Flammability test:	UL 94/HB
Halogen Free:	VDE 0472
Operating Temp:	- 40° ÷ + 120°

(same of cable\*): These parameters are the same of cable used in the connection, as the CaP is totally plastic and therefore transparent to RF signals. All measures are in millimeters.

# TECHNICAL FEATURES

## MECHANICAL PROPERTIES





Propeties	Initial properties		Properties after ageing in Oil - Solution - Air - UNCON (*)									
	Values	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9	Unità
Service Temperature	-40 ÷ +120	C										
Tensile Strength	17	Mpa	-2	-7	-7	-18	-2	-7	+1	-4	+3	%
Elongation at Break	650	%	-6	-12	-10	-24	-8	-16	+1	-14	-3	%
Modulus 100%	8,5	Mpa								+12	+6	%
Modulus 300%	10	Mpa										
Tear Strength	80	N/mm										
Density	0,97	Kg/dm3										
Weight			+1	+8	+7	+31	+1	+11	+0,1			%

#1 ASTM D 471 Ageing in Oil ASTM 1 (7days @ 23°C)  
 #2 ASTM D 471 Ageing in Oil ASTM 1 (7days @ 100°C)  
 #3 ASTM D 471 Ageing in Oil ASTM 3 (7days @ 23°C)  
 #4 ASTM D 471 Ageing in Oil ASTM 3 (7days @ 100°C)  
 #5 ASTM D 471 Ageing in Oil Hydrus 68 (7days @ 23°C)

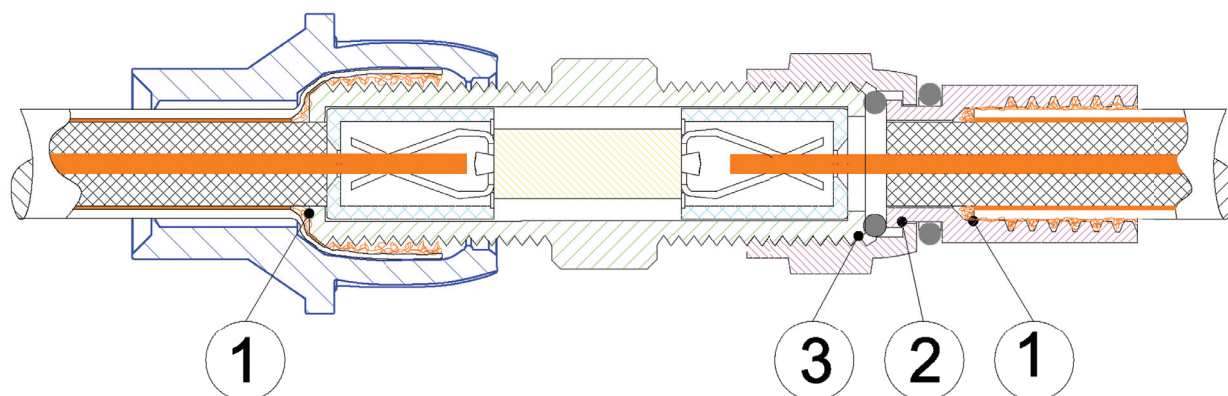
#6 ASTM D 471 Ageing in Oil Hydrus 68 (7days @ 100°C)  
 #7 ASTM D 471 Ageing in Aqueous Solution - 2,5% Detergent neutral ph (7days @ 23°C)  
 #8 ASTM D 573 Heat Ageing in Air (7days @ 125°C)  
 #9 ASTM D 4329 UVCON Resistance for 7 days with alternate: UV 4h @ 60°C;  
 Condensation 4 h @ 40°C

Data of this bulletin are average values of laboratory tests, provided only for general guidance without any liability.

## DIFFERENCES BETWEEN CAP SYSTEM AND STANDARD F METALLIC

Connectors / Features	CaP 	Screw On 	Crimp 	Compression 
Material	Plastic - no real element in the connection	Metal - one more element present in the coaxial connection, beyond cable and device		
Construction	1 piece	2 pcs assembly	2/3 pcs assembly	2/3/4 pcs assembly
Inner Contact	Central conductor of coaxial cable	Central conductor of coaxial cable (in professional connectors is used a specific inner pin)		
Braid Contact	Only 1 direct contact from cable to device	3 points of contacts from braid of coaxial cable to outer shield of device (see drawing on back page)		
Cable Compatibility	1 size fits all cables up to 7 mm diameter	You need a specific connector size for each cable having different diameter size		
Price	Low cost	Low cost	Medium cost	High cost
Global Quality	High	Low	Medium	High
Performances	Operational to 3 GHz Insertion loss: < 0.08 dB Return loss: > 20 dB Shielding Effectiveness: class A+ No impedance of its own (50, 75, 92 Ohm)	Insertion loss, Return loss and Shielding Effectiveness depend on quality of connector and on quality of the installation on cable and device. Every connector has its own impedance		
Installation time	Fast	Slow	Medium - Slow	
Installation steps	1 step only - connects directly on device	2 steps - has to be installed first on cable and then connected to device		
Installation quality	Easy - Independent from installer skills	Medium - Depends on the installer	Easy/Medium - a proper (expensive) tool is needed	
Pull Force	High	Low	Medium	High
Reutilization	Completely reusable	Reusable	Not reusable after first installation	
Colour coding	Available in 9 different colours	Another object (colour ring, label, ...) is needed to colour code the application		

## NUMBER OF CONTACTS FROM THE BRAID OF THE COAXIAL CABLE TO F FEMALE CONNECTOR



CaP connection: 1 contact

F metal connection: 3 contacts