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Frequencies up to 11 GHz can be used for 50Ω connectors while 75Ω connectors can use up to 1GHz.

Cable connectors are divided by clamp or crimp according to their usage and every 75Ω and 50Ω TNC connectors can be used compatibly.

Series TNC-50Ω



Microminiature Coaxial Connector

Technical Data

Material Data

Cable Connectors

Receptacles with Solder End

PCB Connectors

Adaptor within-Series

Protective Cap

Terminations

Microminiature Coaxial Connector

● Description

Since TNC Series have a screw type design using the BNC series combining system, they can be used appropriately for mechanics having especially strong vibrations. They have 50Ω and 75Ω Impedences.

Frequencies up to 11 GHz can be used for 50Ω connectors while 75Ω connectors can use up to 1GHz.

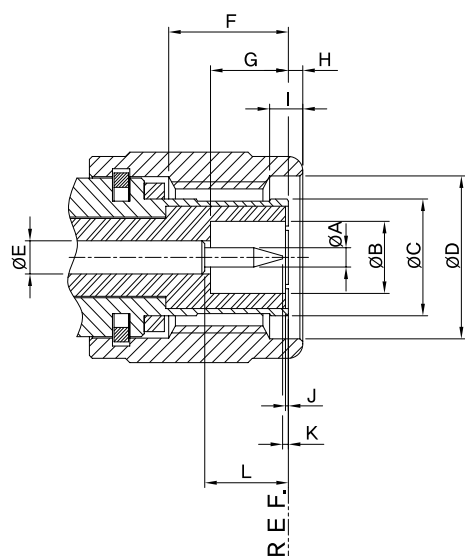
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● Contents

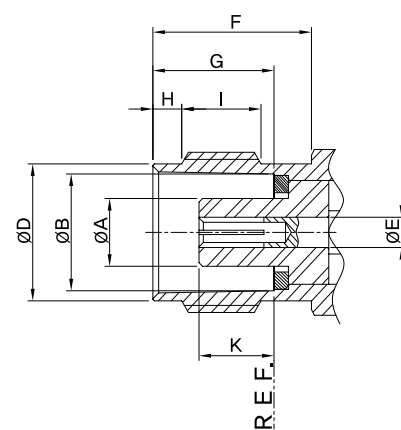
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● Interface Dimensions

Plug (Male)



Jack (Female)



● Interface Dimensions in mm/inch

	Pulg (male)		Jack (Female)	
	Min.	Max.	Min.	Max.
A	1.32 / 0.052	1.37 / 0.054	-	4.72 / 0.186
B	4.83 / 0.190	-	8.10 / 0.319	8.15 / 0.321
C	8.06 / 0.317	8.09 / 0.319	-	-
D	11.18 / 0.440	-	9.60 / 0.378	9.68 / 0.381
E	2.06 / 0.081	2.20 / 0.087	2.06 / 0.081	2.20 / 0.087
F	3.96 / 0.156	-	10.52 / 0.414	-
G	5.28 / 0.208	-	8.31 / 0.327	8.51 / 0.335
H	-	1.98 / 0.078	1.73 / 0.068	2.24 / 0.088
I	1.60 / 0.063	-	4.75 / 0.187	-
J	0.15 / 0.006	-	-	-
K	0.08 / 0.003	1.02 / 0.040	4.72 / 0.186	5.23 / 0.206
L	5.33 / 0.210	5.84 / 0.230	-	-

Technical Data

Requirement

● ELECTRICAL DATA

Impedance	50Ω
Frequency range	DC ~ 11GHz
RF leakage (between 2 ÷ 3 GHz)	≥ 60 dB
Dielectric withstanding voltage (at sea level)	1.5 KV rms, 50 Hz
Working voltage (at sea level)	≤ 500 V rms, 50 Hz
Insulation resistance	≥ 5 · 10 ⁹ MΩ
Contact resistance	
- Center contacts	≤ 1.5 mΩ
- Outer contacts	≤ 1.0 mΩ

Specification

● TEST REQUIREMENTS

● MECHANICAL DATA

Coupling nut torque	
- recommended	46Ncm ~ 69Ncm / 4.1 in. lbs ~ 6.1 in. lbs
- proof torque	170 Ncm / 15.0 in. lbs
Contact captivation	≥ 27 N / 6.1 lbs
Durability (matings)	≥ 500

● TEST REQUIREMENTS

Material Data

Connector Part	Material		Plating
	Male	Female	
PIN	Brass	Beryllium-Copper	Gold
INSULATOR	PTFE	PTFE	-
BODIES	Brass	Brass	-
SPRING RING	Brass	-	Nickel
GASKET	Silicone-Rubber	-	-
COUPLING	Brass	-	Nickel
INSERT	Brass	Brass	Gold
BACK NUT	Brass	Brass	Nickel
CRIMP FEMALE	Brass	Brass	Gold
NUT	-	Brass	Nickel
WASHER	-	Brass	Nickel



Cable Connectors

● Straight Cable Plug(male)

For semi-rigid cable
Cable entry soldered
Centre contact soldered

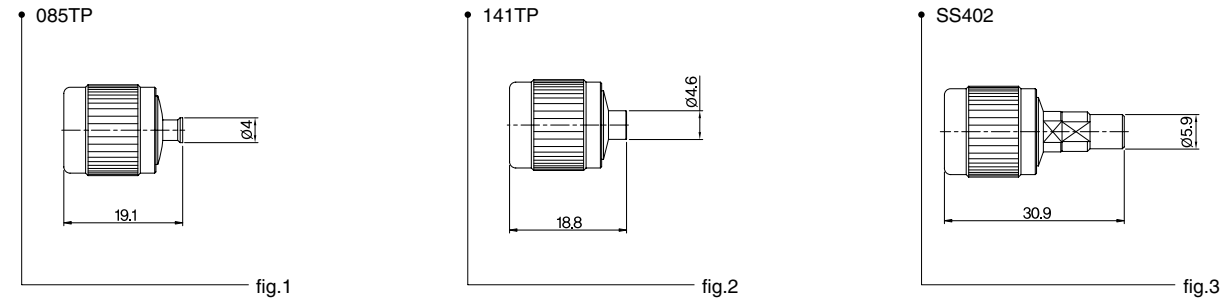


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Coupling		
1	TNC50-PS-085	K335-041-000	CN3011S03-001-1/1	S03 085TP	Gold	Nickel	Nickel		
2	TNC50-PS-141	K335-040-000	CN3011S04-001-1/1	S04 141TP	Gold	Nickel	Nickel		
3	TNC50-PSS-SS402	K335-042-000	CN3011S08-001-1/1	SS402	Gold	Nickel	Nickel		

For flexible cable (Short Type)
Cable entry clamp
Centre contact soldered

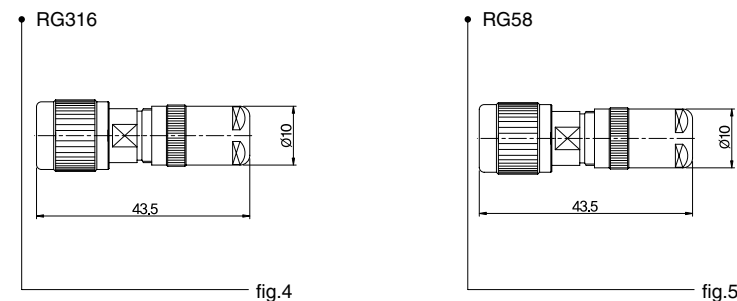
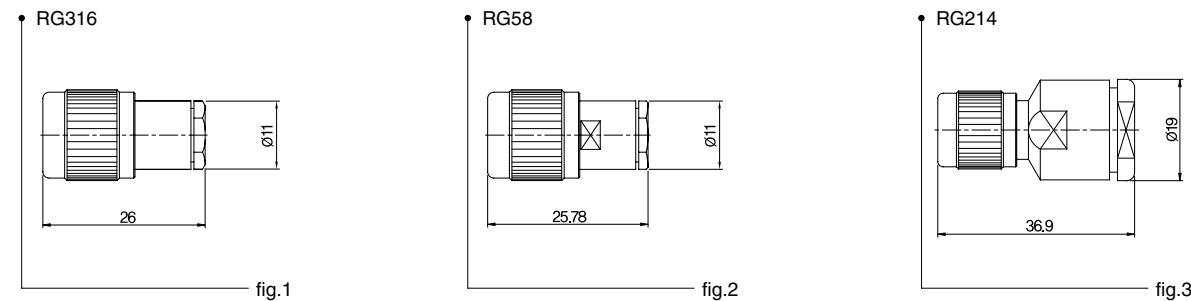


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Coupling		
1	TNC50-P3-316	K335-010-000	CN3011X02-001-1/1	X02 RG316	Gold	Nickel	Nickel		
2	TNC50-P3-58	K335-011-000	CN3011X08-001-1/1	X08 RG58	Gold	Nickel	Nickel		
3	TNC50-P3-214	K335-012-000	CN3011X15-001-1/1	X15 RG214	Gold	Nickel	Nickel		
4	TNC50-P5-316	K335-030-000	CN3011X02-003-1/1	X02 RG316	Gold	Nickel	Nickel		
5	TNC50-P5-58	K335-031-000	CN3011X08-002-1/1	X08 RG58	Gold	Nickel	Nickel		

For flexible cable
Cable entry crimp

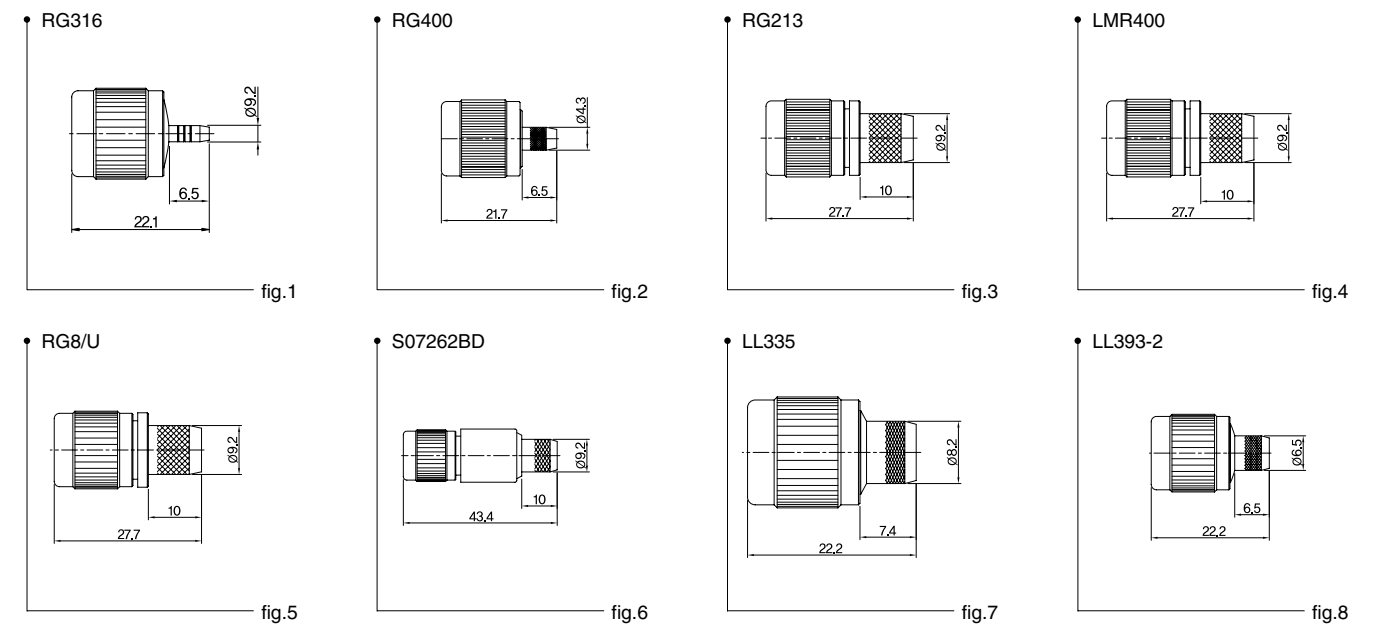


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Coupling		
1	TNC50-PC-316	K335-020-000	CN3011X02-002-1/1	X02 RG316	Gold	Nickel	Nickel		
2	TNC50-PC-400	K335-045-000	CN3011X08-003-1/1	X08 RG400	Gold	Nickel	Nickel		
3	TNC50-PC-213	K335-022-000	CN3011X15-002-1/1	X15 RG213	Gold	Nickel	Nickel		
4	TNC50-PC-LMR400	K335-022-100	CN3011X16-001-1/1	X16 LMR400	Gold	Nickel	Nickel		
5	TNC50-PC-RG8/U	K335-025-000	CN3011X14-001-1/1	X33 RG8/U	Gold	Nickel	Nickel		
6	TNC50-PC-S07262BD	K335-024-000	CN3011X13-001-1/1	X13 S07262BD	Gold	Nickel	Nickel		
7	TNC50-PC-LL335	K335-044-000	CN3011X24-001-1/1	X24 LL335	Gold	Nickel	Nickel		
8	TNC50-PCLL393-2	K335-043-000	CN3011X23-001-1/1	X23 LL393-2	Gold	Nickel	Nickel		

● Right Angle Cable Plug(male)

For flexible cable
Cable entry clamp
Centre contact soldered

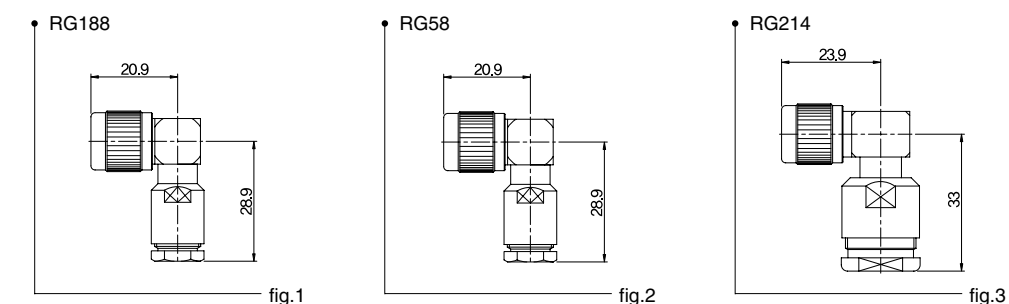


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Coupling		
1	TNC50-LP3-188	K335-156-000	CN3031X02-001-1/1	X02 RG188	Gold	Nickel	Nickel		
2	TNC50-LP3-58	K335-157-000	CN3031X08-001-1/1	X08 RG58	Gold	Nickel	Nickel		
3	TNC50-LP3-214	K335-158-000	CN3031X15-001-1/1	X15 RG214	Gold	Nickel	Nickel		



For flexible cable
Cable entry crimp
Centre contact soldered

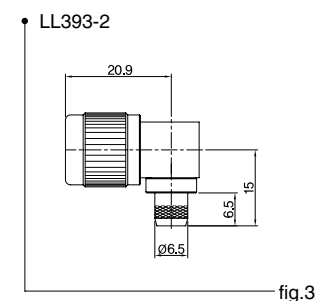
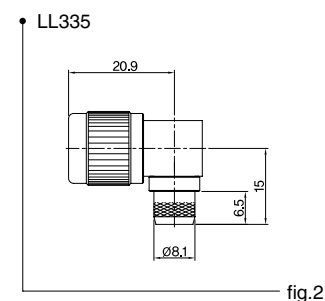
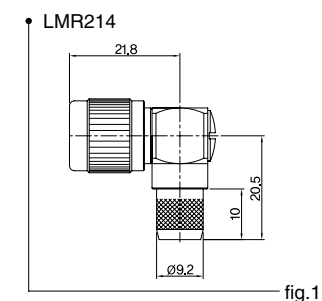


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Coupling		
1	TNC50-LPC-214	K335-149-000	CN3031X15-001-1/1	X07 LMR214	Gold	Nickel	Nickel		
2	TNC50-LPC-LL335	K335-160-000	CN3031X24-001-1/1	X24 LL335	Gold	Nickel	Nickel		
3	TNC50-LPC-LL393-2	K335-159-000	CN3031X23-001-1/1	X23 LL393-2	Gold	Nickel	Nickel		

● Straight Cable Jack(female)

For flexible cable
Cable entry clamp
Centre contact soldered

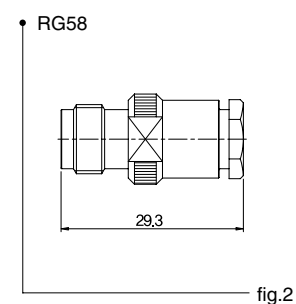
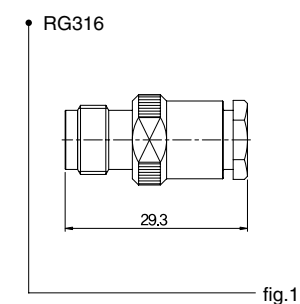


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Back Nut		
1	TNC50-J3-316	K335-207-000	CN3012X02-001-1/1	X02 RG316	Gold	Nickel	Nickel		
2	TNC50-J3-58	K335-208-000	CN3012X08-001-1/1	X08 RG58	Gold	Nickel	Nickel		

For flexible cable
Cable entry crimp

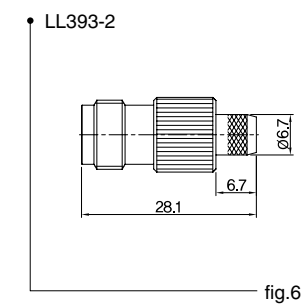
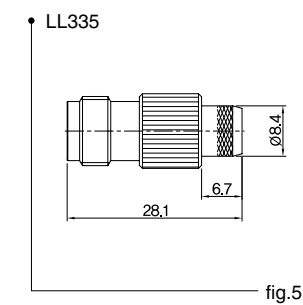
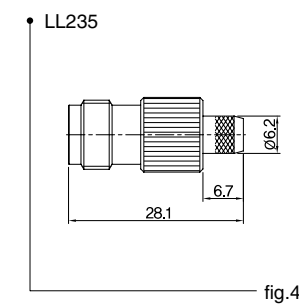
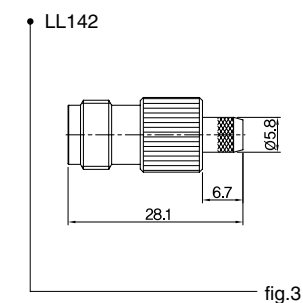
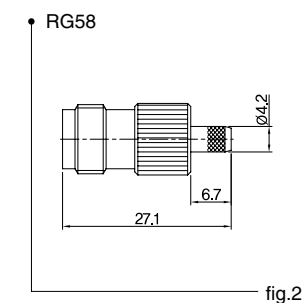
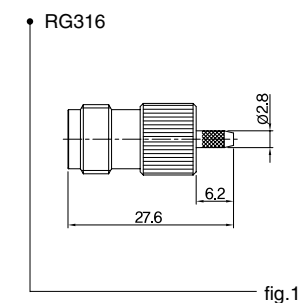


Fig	Type	Code		Cable Goup (example)	Plating		AS-In	Note
		Old Code	New Code		Pin	Body		
1	TNC50-JC-316	K335-213-000	CN3012X02-002-1/1	X02 RG316	Gold	Nickel		
2	TNC50-JC-58	K335-212-000	CN3012X08-002-1/1	X08 RG58	Gold	Nickel		
3	TNC50-JC-LL142	K335-219-000	CN3012X32-001-1/1	X32 LL142	Gold	Nickel		
4	TNC50-JC-LL235	K335-218-000	CN3012X31-001-1/1	X31 LL235	Gold	Nickel		
5	TNC50-JC-LL335	K335-217-000	CN3012X24-001-1/1	X24 LL335	Gold	Nickel		
6	TNC50-JC-LL393-2	K335-216-000	CN3012X23-001-1/1	X23 LL393-2	Gold	Nickel		



● Straight Bulkhead Jack(female)

For semi-rigid cable
Cable entry soldered

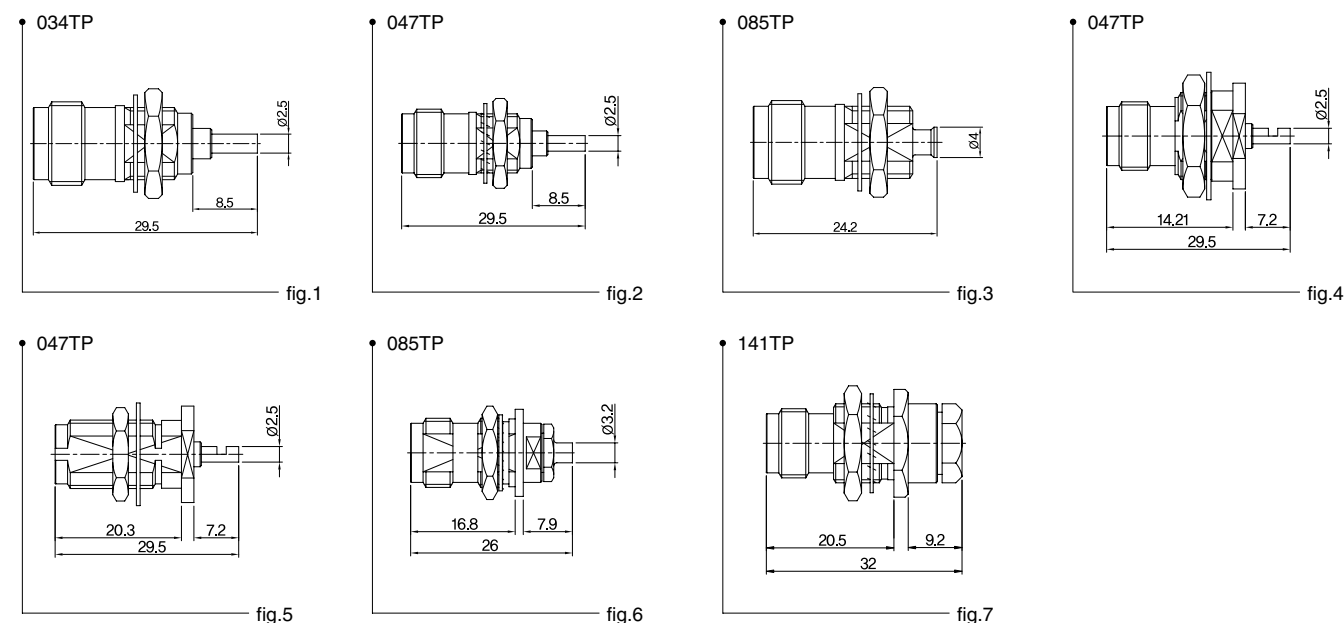


Fig	Type	Code		Cable Goup (example)	Plating		AS-In	Note
		Old Code	New Code		Pin	Body		
1	TNC50-J-BS-034	K335-342-001	CN3026S01-001-1/1	S01 034TP	Gold	Nickel		
2	TNC50-J-BS-047	K335-342-000	CN3026S02-001-1/1	S02 047TP	Gold	Nickel		
3	TNC50-J-BS-085	K335-345-000	CN3026S03-001-1/1	S03 085TP	Gold	Nickel		
4	TNC50-BJ-S-047	K335-343-000	CN3022S02-002-1/1	S02 047TP	Gold	Nickel		
5	TNC50-BJ-S-047	K335-327-001	CN3022S02-001-1/1	S02 047TP	Gold	Nickel		
6	TNC50-BJ-S-085	K335-322-000	CN3022S03-001-1/1	S03 085TP	Gold	Nickel		
7	TNC50-BJ-S-141	K335-323-000	CN3022S04-001-1/1	S04 141TP	Gold	Nickel		

For flexible cable
Cable entry clamp
Centre contact soldered
With panel seal

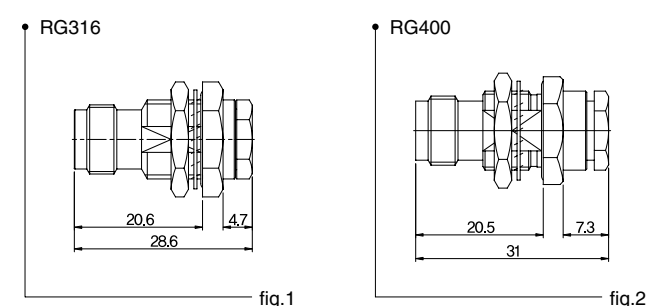


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Back Nut		
1	TNC50-BJ-3-316	K335-324-000	CN3022X02-001-1/1	X02 RG316	Gold	Nickel	Nickel		
2	TNC50-BJ-3-400	K335-325-000	CN3022X08-001-1/1	X03 RG400	Gold	Nickel	Nickel		

For flexible cable
Cable entry crimp

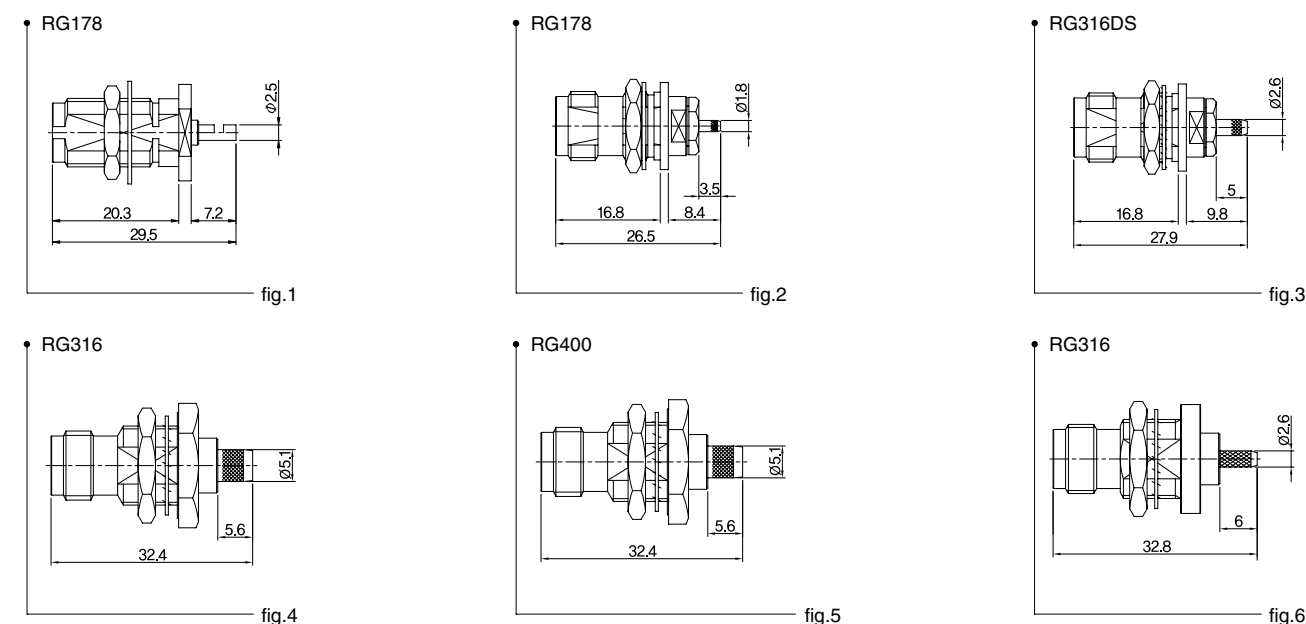


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Back Nut		
1	TNC50-BJ-C-178	K335-327-002	CN3022X01-002-1/1	X01 RG178	Gold	Nickel	-		
2	TNC50-BJ-3C-178	K335-327-000	CN3022X01-001-1/1	X01 RG178	Gold	Nickel	Nickel		
3	TNC50-BJ-3C-316DS	K335-326-000	CN3022X03-001-1/1	X03 RG316DS	Gold	Nickel	Nickel		
4	TNC50-BJ-3C-316	K335-328-000	CN3022X02-002-1/1	X02 RG316	Gold	Nickel	-		
5	TNC50-BJ-C-400	K335-329-000	CN3022X08-002-1/1	X08 RG400	Gold	Nickel	-		
6	TNC50-BJ-C-316	K335-330-001	CN3022X02-003-1/1	X02 RG316	Gold	Nickel	-		

● Straight Panel Cable Jacks(female)

For flexible cable
Cable entry clamp
Centre contact soldered

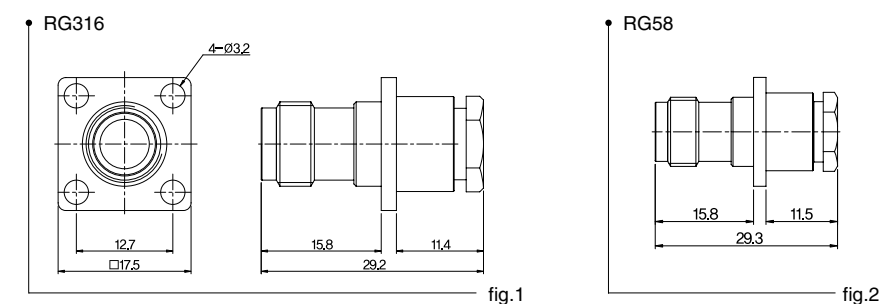


Fig	Type	Code		Cable Goup (example)	Plating			AS-In	Note
		Old Code	New Code		Pin	Body	Back Nut		
1	TNC50-J-H4-3-316	K335-209-000	CN3044X02-001-1/1	X02 RG316	Gold	Nickel	Nickel		
2	TNC50-J-H4-3-58	K335-210-000	CN3044X08-001-1/1	X08 RG58	Gold	Nickel	Nickel		



For flexible cable
Cable entry crimp

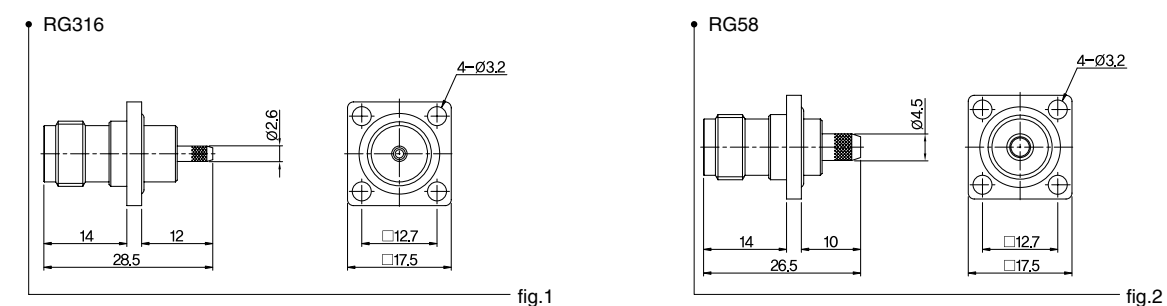


Fig	Type	Code		Cable Goup (example)	Plating		AS-In	Note
		Old Code	New Code		Pin	Body		
1	TNC50-J-H4-C-316	K335-352-000	CN3044X02-002-1/1	X02 RG316	Gold	Nickel		
2	TNC50-J-H4-C-58	K335-352-001	CN3044X08-002-1/1	X08 RG58	Gold	Nickel		

Receptacles with Solder End

Recaptacle Jack(female)

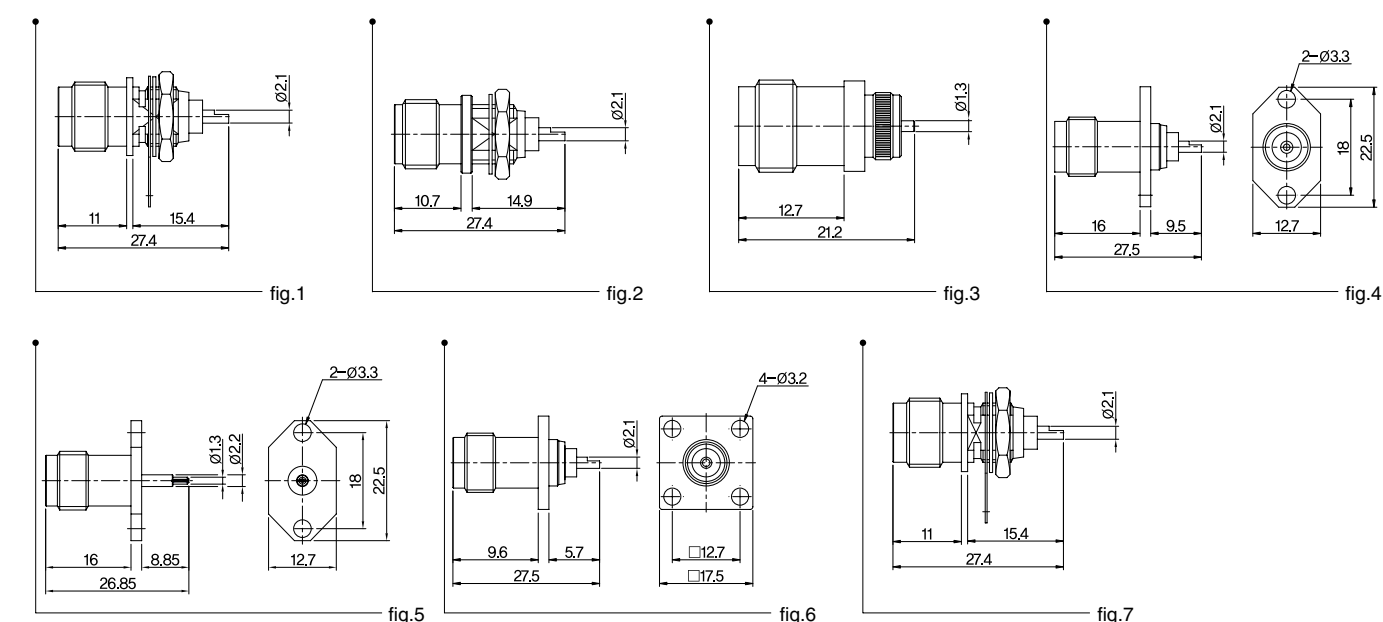


Fig	Type	Code		Plating		Mounting Hole	AS-In	Note
		Old Code	New Code	Pin	Body			
1	TNC50-J-BR	K335-560-000	CN3026000-001-1/1	Gold	Nickel	ML47		
2	TNC50-J-BR	K335-563-000	CN3026000-003-1/1	Gold	Nickel	ML44		
3	TNC50-J-BR	K335-567-000	CN3027000-001-1/1	Gold	Nickel	ML61		
4	TNC50-J-H2-R	K335-453-000	CN3042000-001-1/1	Gold	Nickel	ML62		
5	TNC50-J-H2-R	K335-456-001	CN3042000-002-1/1	Gold	Nickel	ML63		
6	TNC50-J-H4-R	K335-452-000	CN3044000-001-1/1	Gold	Nickel	ML64		
7	TNC50-J-BR	K335-560-001	CN3026000-002-1/1	Gold	Nickel	ML65		

PCB Connectors

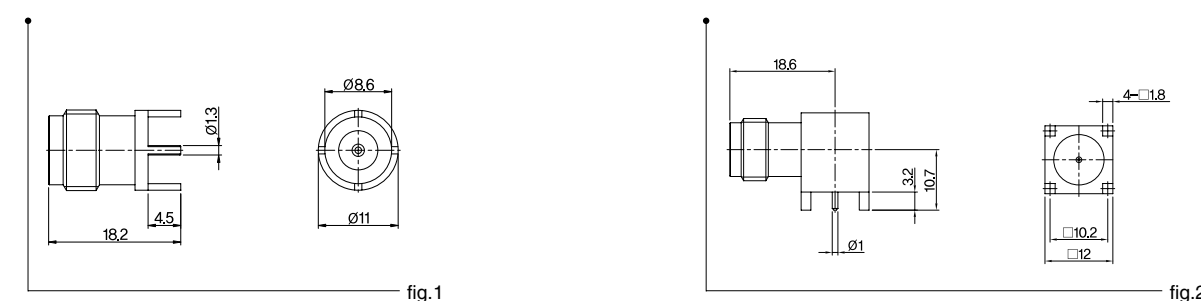
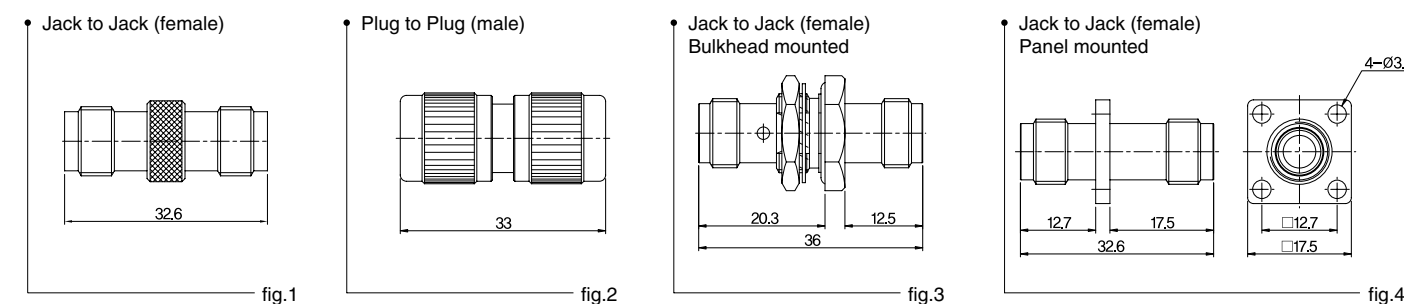


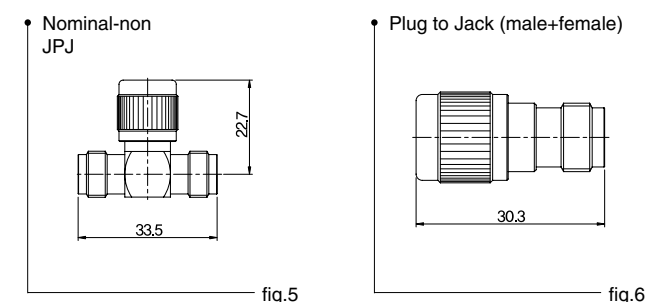
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		Old Code	New Code	Pin	Body			
1	TNC50-J-4R-R	K335-455-001	CN3051000-001-1/1	Gold	Nickel	ML56		
2	TNC50-LJ-4R-R	K335-674-000	CN3053000-001-1/1	Gold	Nickel	ML66		

Adaptor within-Series

Straight Adaptors



T-Adaptors



Right Angle Adaptor

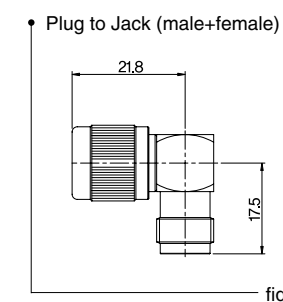


Fig	Type	Code		Plating			Note
		Old Code	New Code	Pin	Body	Coupling	
1	TNC50-A-JJ	K335-701-000	AD3012-001-1/1	Gold	Nickel	Nickel	
2	TNC50-A-PP	K335-702-000	AD3011-001-1/1	Gold	Nickel	Nickel	
3	TNC50-BA-JJ	K335-720-000	AD3022-001-1/1	Gold	Nickel	Nickel	
4	TNC50-PA-JJ	K335-710-000	AD3046-001-1/1	Gold	Nickel	Nickel	
5	TNC50-TA-JPJ	K335-773-000	AD3052-001-1/1	Gold	Nickel	Nickel	
6	TNC50-A-JP	K335-704-000	AD3013-001-1/1	Gold	Nickel	Nickel	
7	TNC50-LA-JP	K335-772-000	AD3033-001-1/1	Gold	Nickel	Nickel	



Protective Cap

For Plig (female)

fig.1

For Plig (female)

fig.2

For Jack (male)

fig.3

Fig	Type	Code		Plating		Note
		Old Code	New Code	Cap	Body	
1	TNC50-P-DUST CAP	K335-810-000	CN3080-001-1/1	Nickel	-	
2	TNC50-P-DUST CAP	K335-810-001	CN3081-001-1/1	Nickel	-	
3	TNC50-J-DUST CAP	K335-812-000	CN3082-001-1/1	-	Nickel	

Terminations

For Plug (male)

fig.1

Fig	Type	Code		Plating			Note
		Old Code	New Code	Pin	Body	Coupling	
1	TNC50-P-TERM	K335-911-000	CN3091-001-1/1	Gold	Nickel	Nickel	NO Chain

