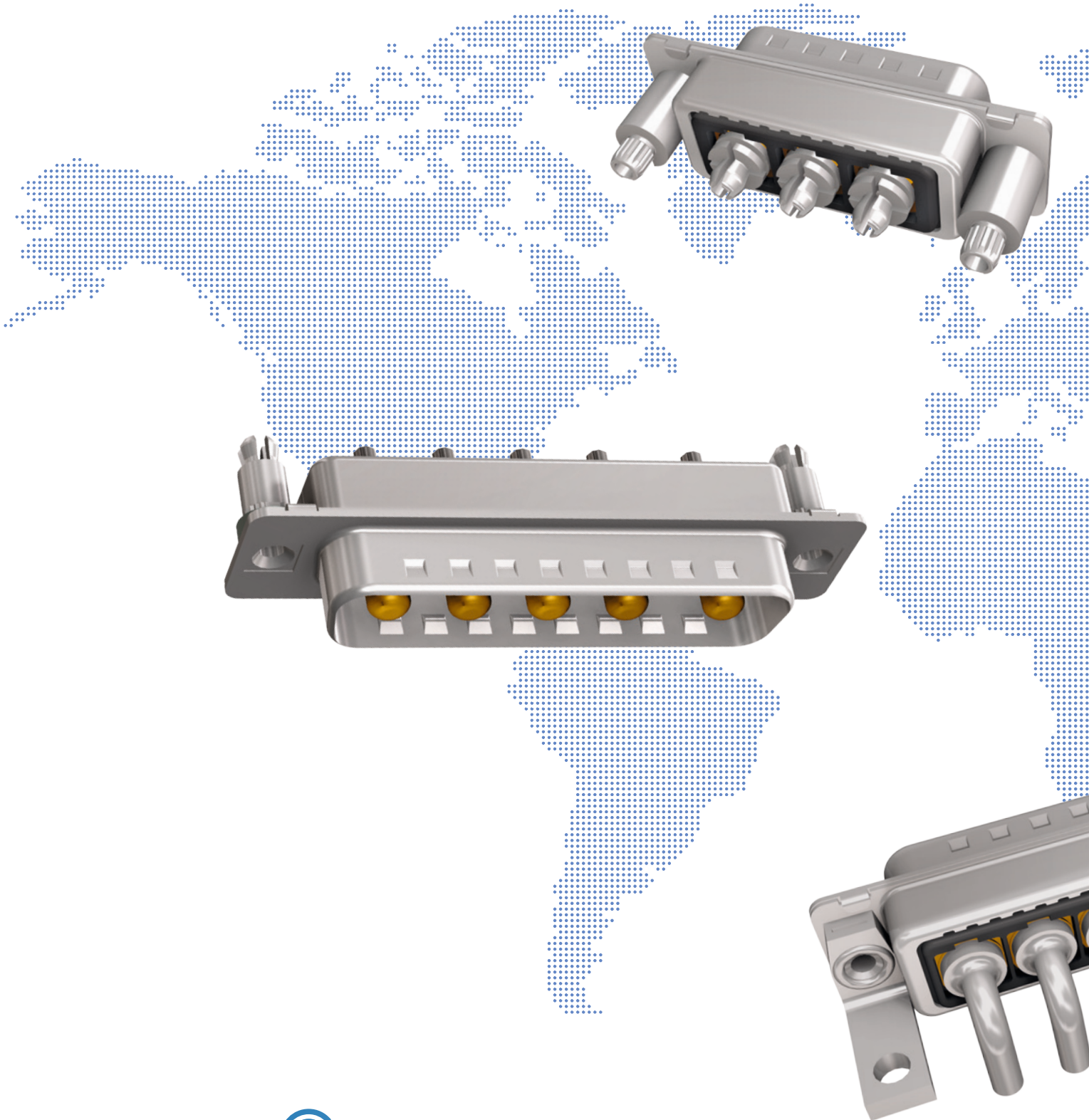
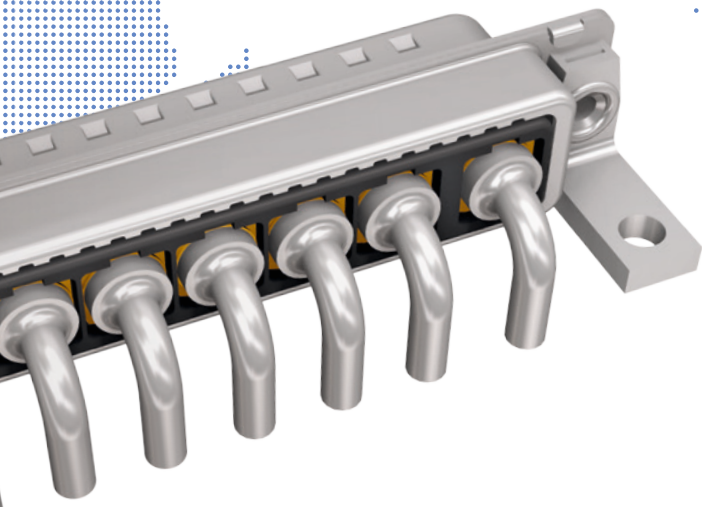
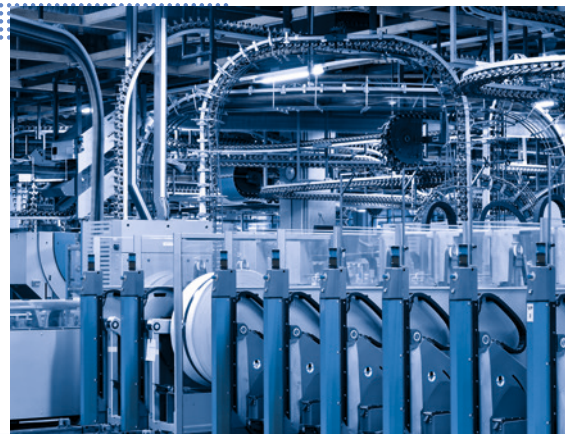
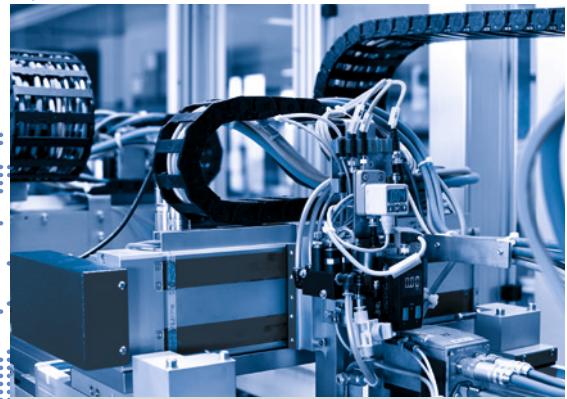
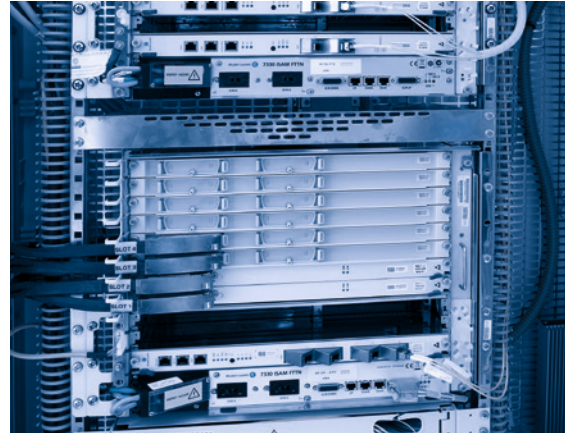
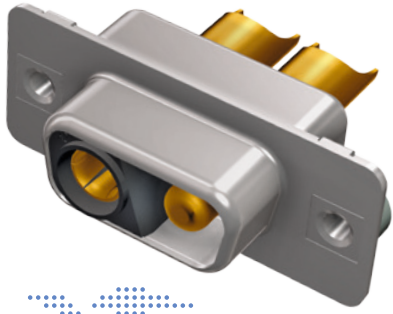


FILTER COMBINATION D-SUB CONNECTORS





FILTER COMBINATION D-SUB CONNECTORS

Part Number Creator

3 F 3 S P A 0 8 S 4 1 A 1 O X

Shell size and design

1	= 2F2C (2W2C)*	= Coded
2	= 3F3S (3W3S)*	= Standard
2	= 3F3C (3W3C)*	= Coded
3	= 5F5S (5W5S)*	= Standard
4	= 8F8S (8W8S)*	= Standard

*F = filtered

Contact type

P	= Plug connector
S	= Socket connector

Plaiting code/Quality class for contacts

A	= Quality class 3	= 50 mating cycles
C	= Quality class 1	= 500 mating cycles* *on request

Capacitance

05	= 1.3 nF	14	= 12 nF
08	= 5.0 nF	22	= 47 nF
12	= 10 nF	28	= 100 nF

Dielectric with standing voltage

S	= 707 VDC standard DWV	U	= 1500 VDC ultra high DWV
H	= 1020 VDC high DWV		

Termination for high current contacts

41	= Solder cup 10 A	51	= Solder pin, straight 30 A, D= .125"/3.18 mm
42	= Solder cup 20 A	52	= Solder pin, straight 40 A, D= .148"/3.75 mm
43	= Solder cup 30 A	53	= Solder pin, straight 50 A, D= .148"/3.75 mm
44	= Solder cup 40 A	56	= Solder pin, angled 20 A
45	= Solder cup 50 A	57	= Solder pin, angled 30 A
46	= Solder cup 65 A*	58	= Solder pin, angled 40 A
48	= Solder pin, straight 20 A, D= .077"/1.95 mm	P1	= Press fit 30 A
49	= Solder pin, straight 20 A, D= .102"/2.60 mm	P2	= Press fit 30 A
50	= Solder pin, straight 20 A, D= .112"/2.85 mm	P4	= Press fit 30 A
			*3W3: Pos. A1 + A3; 5W5: Pos. A1 + A3 + A5

Mounting style

A1	= Riveted	E4	= 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm
A3	= 4-40 UNC threaded insert	E6	= 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm
A5	= 4-40 UNC threaded rear spacer	F2	= 4-40 UNC front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm
AA	= Threaded rear spacer with 4-40 UNC press fit	F4	= 4-40 UNC front/threaded rear spacer with PCB clip, PCB .091"/2.30 mm
C2	= 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm	F6	= 4-40 UNC front/threaded rear spacer with PCB clip, PCB .126"/3.20 mm
C4	= 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm	K2	= Metal bracket, 4-40 UNC threaded insert
C6	= 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm	K4	= Metal bracket, 4-40 UNC threaded insert /PCB clip
D2	= 4-40 UNC front/threaded rear spacer with PCB clip, PCB .063"/1.60 mm	L2	= Metal bracket, 4-40 UNC threaded lock
D4	= 4-40 UNC front/threaded rear spacer with PCB clip .091"/2.30 mm	L4	= Metal bracket, 4-40 UNC threaded lock /PCB clip
D6	= 4-40 UNC front/threaded rear spacer with PCB clip, PCB .126"/3.20 mm	W4	= Press-fit spacer with 4-40 UNC push in pin
E2	= 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm		

OX = Standard

FILTER COMBINATION D-SUB CONNECTORS

Product specification

Basic Material	Variations 2W2C – 3W3C – 3W3 – 5W5 – 8W8			
Contacts	CU alloy			
Contact plating	Mating area gold plated over nickel / termination area tin or gold plated			
Insulator	PBT GF UL 94 V-0			
Shell	Steel tin plated			
Technical Data				
Dielectric with standing voltage		Standard DWV	707 VDC	
		High DWV	1020 VDC	
		Ultra High DWV	1500 VDC	
Working voltage	100 VDC Depending on isolation coordination refer to DIN VDE 0110/IEC 664-1			
Current rating	up to 65 A (20 °C)			
Contact resistance	Max. 2 mΩ prior to stressing, ΔR max. 2 mΩ after stressing refer to IEC 60807-2			
Insulation resistance	≥1 GΩ			
Capacitor values For other capacitance values please contact the factory.	1.3 nF ± 20 % tolerance	12 nF ± 20 % tolerance		
	5 nF ± 20 % tolerance	47 nF ± 20 % tolerance		
	10 nF ± 20 % tolerance	100 nF ± 20 % tolerance		
	other capacitor values on request			
Operating temperature	-55 °C to + 125 °C			
Humidity	40 °C / 85 % relative humidity / RH			
Insertion force per contact	7 N			
Extraction force per contact	approx 5 N			
Quality class	A = Quality class 3 = 50 mating cycles C = Quality class 1 = 500 mating cycles			
Solder parameter	Preheating		Solder terminal dipping parameters	
	max. Temperature	Duration	max. solder bath Temperature	max. Terminal Immersion Time
Recommended wave-solder parameters	120 °C	120 s	260 °C	5 s

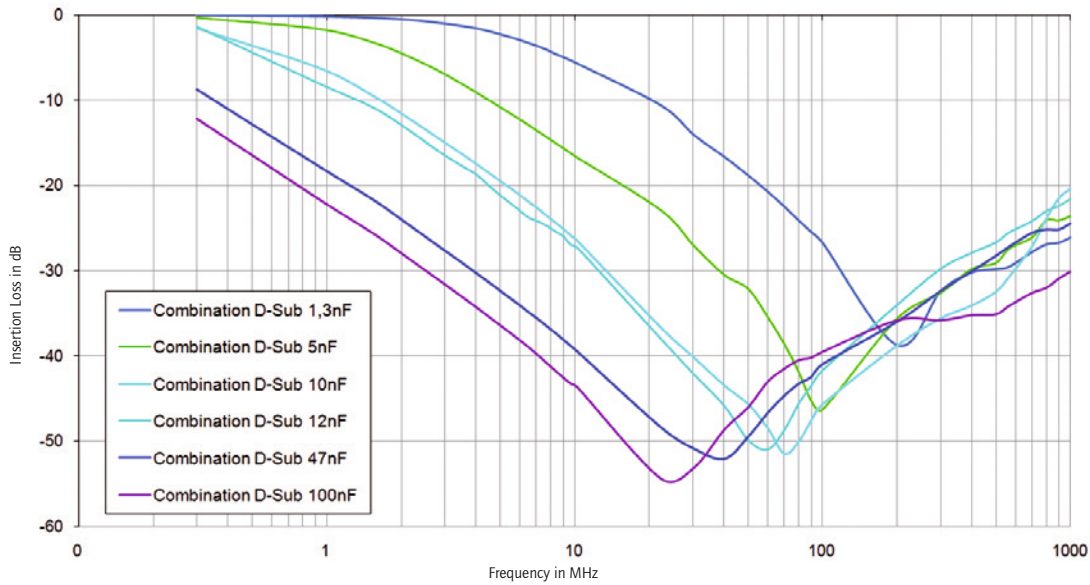
Technical specifications are subject to change without notice.

FILTER COMBINATION D-SUB CONNECTORS

Insertion loss

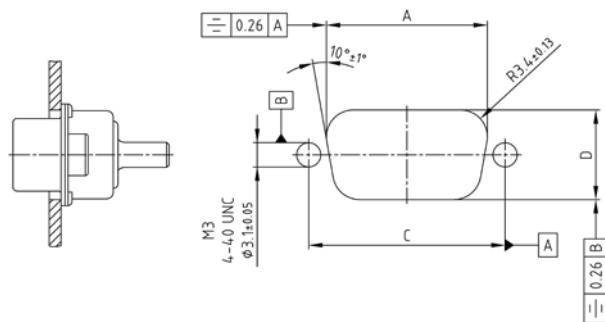
C-Filter

Typical Insertion Loss

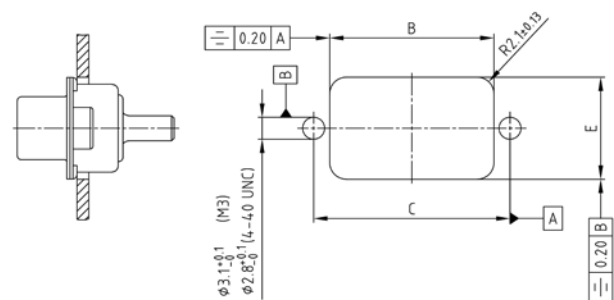


Panel cut-out

Back panel mounting



Front panel mounting



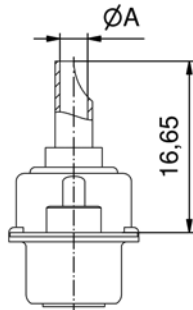
Shell size	Layout	A ± 0.1	B ± 0.1	C ± 0.1	D ± 0.1	E ± 0.1
1	2W2C	20.50	20.90	25.00	11.40	13.00
2	3W3S, 3W3C	28.80	29.20	33.30	11.40	13.00
3	5W5S	42.50	42.90	47.04	11.40	13.00
4	8W8S	59.10	59.40	63.50	11.40	13.00

Technical specifications are subject to change without notice.

FILTER COMBINATION D-SUB CONNECTORS

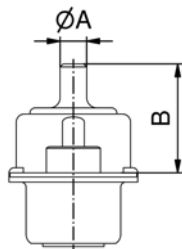
Termination code high power contacts

Solder cup



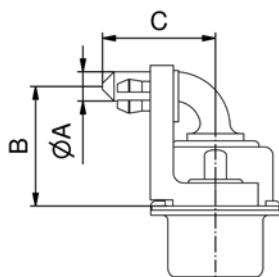
Termination Code	Current rating	AWG	Ø A [mm]
41	10 A	16-20	1.80
42	20 A	12-14	2.70
43	30 A	10-12	3.50
44	40 A	8-10	4.80

Solder pin straight



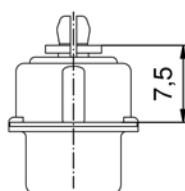
Termination Code	Current rating	Ø A [mm]	B ± 0.3 [mm]	PCB thickness [mm]	Hole diameter in PCB [mm]
48	20 A	1.95	9.65	1.6	2.30 ± 0.1
49	20 A	2.60	10.65	1.6	3.00 ± 0.1
50	20 A	2.85	10.05	1.6	3.20 ± 0.1
51	30 A	3.18	12.85	1.6/2.3/3.2	3.60 ± 0.1
52	40 A	3.75	11.10	1.6/2.3/3.2	4.10 ± 0.1

Solder pin angled

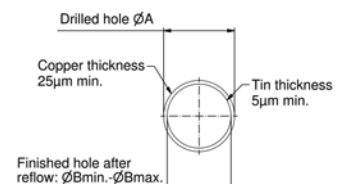


Termination Code	Current rating	Ø A [mm]	B ± 0.3 [mm]	C ± 0.3 [mm]	Hole diameter in PCB [mm]
56	20 A	2.85	11.65	11.00	3.20 ± 0.1
57	30 A	3.18	20.35	9.50	3.60 ± 0.1
58	40 A	3.75	11.65	11.00	4.10 ± 0.1

Press-fit contact



Termination Code	Current rating	Ø A ± 0.03 [mm]	Ø B min. [mm]	Ø B max. [mm]
P1	30 A	3.13	2.96	3.11
P2	30 A	3.27	3.10	3.25
P4	30 A	3.22	3.02	3.20

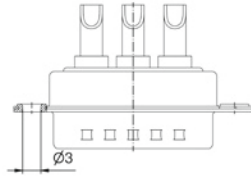
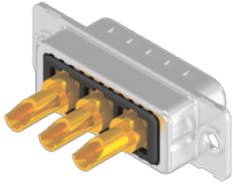


Technical specifications are subject to change without notice.

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder cup
Precision machined contacts, AWG 8-20

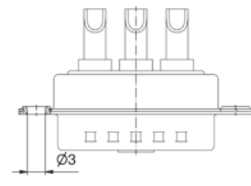
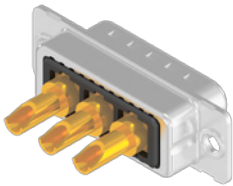
Through-hole Ø 3 mm



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

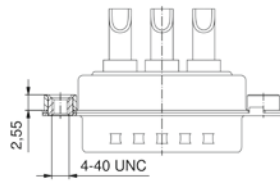
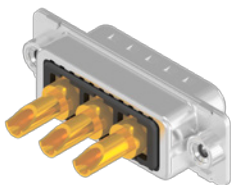
Through-hole Ø 3 mm, coded version



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

4-40 UNC threaded insert



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

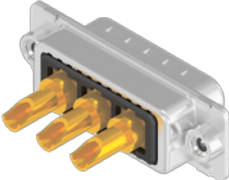
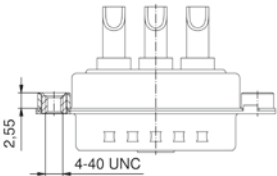
No. of poles	Current rating [A]	Working voltage [VDC]	AWG	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
3WB	10	100	16-20	47	E228329	3	3F3SSA22S41A10X	3F3SPA22S41A10X
	20		12-14				3F3SSA22S42A10X	3F3SPA22S42A10X
	30		10-12				3F3SSA22S43A10X	3F3SPA22S43A10X
	40		8-10				3F3SSA22S44A10X	3F3SPA22S44A10X
5W5	10	100	16-20	47	E228329	3	5F5SSA22S41A10X	5F5SPA22S41A10X
	20		12-14				5F5SSA22S42A10X	5F5SPA22S42A10X
	30		10-12				5F5SSA22S43A10X	5F5SPA22S43A10X
	40		8-10				5F5SSA22S44A10X	5F5SPA22S44A10X
8W8	10	100	16-20	47	E228329	3	8F8SSA22S41A10X	8F8SPA22S41A10X
	20		12-14				8F8SSA22S42A10X	8F8SPA22S42A10X
	30		10-12				8F8SSA22S43A10X	8F8SPA22S43A10X
	40		8-10				8F8SSA22S44A10X	8F8SPA22S44A10X
2W2C	10	100	16-20	47	E228329	3	2F2CSA22S41A10X	2F2CPA22S41A10X
	20		12-14				2F2CSA22S42A10X	2F2CPA22S42A10X
	30		10-12				2F2CSA22S43A10X	2F2CPA22S43A10X
	40		8-10				2F2CSA22S44A10X	2F2CPA22S44A10X
3WB3C	10	100	16-20	47	E228329	3	3F3CSA22S41A10X	3F3CPA22S41A10X
	20		12-14				3F3CSA22S42A10X	3F3CPA22S42A10X
	30		10-12				3F3CSA22S43A10X	3F3CPA22S43A10X
	40		8-10				3F3CSA22S44A10X	3F3CPA22S44A10X
3WB	10	100	16-20	47	E228329	3	3F3SSA22S41A30X	3F3SPA22S41A30X
	20		12-14				3F3SSA22S42A30X	3F3SPA22S42A30X
	30		10-12				3F3SSA22S43A30X	3F3SPA22S43A30X
	40		8-10				3F3SSA22S44A30X	3F3SPA22S44A30X
5W5	10	100	16-20	47	E228329	3	5F5SSA22S41A30X	5F5SPA22S41A30X
	20		12-14				5F5SSA22S42A30X	5F5SPA22S42A30X
	30		10-12				5F5SSA22S43A30X	5F5SPA22S43A30X
	40		8-10				5F5SSA22S44A30X	5F5SPA22S44A30X
8W8	10	100	16-20	47	E228329	3	8F8SSA22S41A30X	8F8SPA22S41A30X
	20		12-14				8F8SSA22S42A30X	8F8SPA22S42A30X
	30		10-12				8F8SSA22S43A30X	8F8SPA22S43A30X
	40		8-10				8F8SSA22S44A30X	8F8SPA22S44A30X

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder cup
Precision machined contacts, AWG 8-20

4-40 UNC threaded insert, coded version

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

		No. of poles	Current rating [A]	Working voltage [VDC]	AWG	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
 	2W2C	10	100	16-20	47	E228329	3	2F2CSA22S41A30X	2F2CPA22S41A30X	
		20		12-14				2F2CSA22S42A30X	2F2CPA22S42A30X	
		30		10-12				2F2CSA22S43A30X	2F2CPA22S43A30X	
		40		8-10				2F2CSA22S44A30X	2F2CPA22S44A30X	
	3W3C	10	100	16-20	47	E228329	3	3F3CSA22S41A30X	3F3CPA22S41A30X	
		20		12-14				3F3CSA22S42A30X	3F3CPA22S42A30X	
		30		10-12				3F3CSA22S43A30X	3F3CPA22S43A30X	
		40		8-10				3F3CSA22S44A30X	3F3CPA22S44A30X	

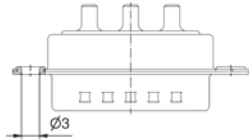
For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder pin straight
Precision machined contacts

Through-hole Ø 3 mm



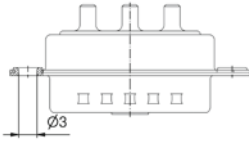
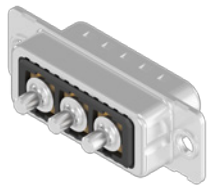
For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact	
3W3	20	100	1.95	47	E228329	3	3F3SSA22S48A10X	3F3SPA22S48A10X	
			2.60				3F3SSA22S49A10X	3F3SPA22S49A10X	
	30	40	2.85	3F3SSA22S50A10X			3F3SPA22S50A10X		
			3.18	3F3SSA22S51A10X			3F3SPA22S51A10X		
	40	40	3.75	3F3SSA22S52A10X			3F3SPA22S52A10X		
			20	100			1.95	E228329	3
	30	40					2.60		
			40	40			2.85		
30	40	3.18			5F5SSA22S51A10X	5F5SPA22S51A10X			
		40	40	3.75	5F5SSA22S52A10X	5F5SPA22S52A10X			
8W8	20			100	1.95	E228329	3		
		30	40		2.60				
	40			40	2.85				
		30	40		3.18			8F8SSA22S51A10X	8F8SPA22S51A10X
	40			40	3.75			8F8SSA22S52A10X	8F8SPA22S52A10X

Through-hole Ø 3 mm, coded version



For other capacitance values refer to the part number creator.

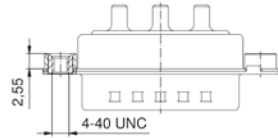
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact		
2W2C	20	100	1.95	47	E228329	3	2F2CSA22S48A10X	2F2CPA22S48A10X		
			30				40	2.60	2F2CSA22S49A10X	2F2CPA22S49A10X
	40	40		2.85				2F2CSA22S50A10X	2F2CPA22S50A10X	
			30	40			3.18	2F2CSA22S51A10X	2F2CPA22S51A10X	
	40	40					3.75	2F2CSA22S52A10X	2F2CPA22S52A10X	
			3W3C	20			100	1.95	E228329	3
	30	40						2.60		
				40			40	2.85		
30	40	3.18			3F3CSA22S51A10X	3F3CPA22S51A10X				
		40		40	3.75	3F3CSA22S52A10X	3F3CPA22S52A10X			

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder pin straight
Precision machined contacts

4-40 UNC threaded insert



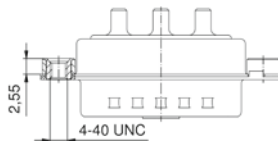
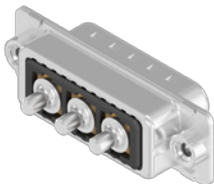
For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
3W3	20	100	1.95	47	E228329	3	3F3SSA22S48A30X	3F3SPA22S48A30X
			2.60				3F3SSA22S49A30X	3F3SPA22S49A30X
	2.85	3F3SSA22S50A30X	3F3SPA22S50A30X					
	3.18	3F3SSA22S51A30X	3F3SPA22S51A30X					
40	3.75	3F3SSA22S52A30X	3F3SPA22S52A30X					
5W5	20	100	1.95	47	E228329	3	5F5SSA22S48A30X	5F5SPA22S48A30X
			2.60				5F5SSA22S49A30X	5F5SPA22S49A30X
	2.85	5F5SSA22S50A30X	5F5SPA22S50A30X					
	3.18	5F5SSA22S51A30X	5F5SPA22S51A30X					
40	3.75	5F5SSA22S52A30X	5F5SPA22S52A30X					
8W8	20	100	1.95	47	E228329	3	8F8SSA22S48A30X	8F8SPA22S48A30X
			2.60				8F8SSA22S49A30X	8F8SPA22S49A30X
	2.85	8F8SSA22S50A30X	8F8SPA22S50A30X					
	3.18	8F8SSA22S51A30X	8F8SPA22S51A30X					
40	3.75	8F8SSA22S52A30X	8F8SPA22S52A30X					

4-40 UNC threaded insert, coded version



For other capacitance values refer to the part number creator.

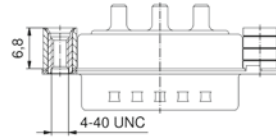
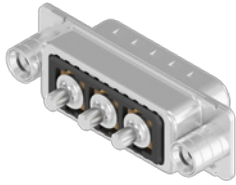
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	20	100	1.95	47	E228329	3	2F2CSA22S48A30X	2F2CPA22S48A30X
			2.60				2F2CSA22S49A30X	2F2CPA22S49A30X
	2.85	2F2CSA22S50A30X	2F2CPA22S50A30X					
	3.18	2F2CSA22S51A30X	2F2CPA22S51A30X					
40	3.75	2F2CSA22S52A30X	2F2CPA22S52A30X					
3W3C	20	100	1.95	47	E228329	3	3F3CSA22S48A30X	3F3CPA22S48A30X
			2.60				3F3CSA22S49A30X	3F3CPA22S49A30X
	2.85	3F3CSA22S50A30X	3F3CPA22S50A30X					
	3.18	3F3CSA22S51A30X	3F3CPA22S51A30X					
40	3.75	3F3CSA22S52A30X	3F3CPA22S52A30X					

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder pin straight
Precision machined contacts

4-40 UNC threaded rear spacer



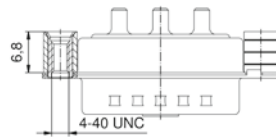
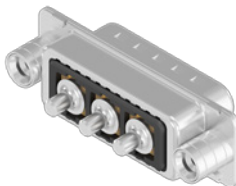
For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
3W3	20	100	1.95	47	E228329	3	3F3SSA22S48A50X	3F3SPA22S48A50X
			2.60				3F3SSA22S49A50X	3F3SPA22S49A50X
	2.85	3F3SSA22S50A50X	3F3SPA22S50A50X					
	3.18	3F3SSA22S51A50X	3F3SPA22S51A50X					
40	3.75	3F3SSA22S52A50X	3F3SPA22S52A50X					
5W5	20	100	1.95	47	E228329	3	5F5SSA22S48A50X	5F5SPA22S48A50X
			2.60				5F5SSA22S49A50X	5F5SPA22S49A50X
	2.85	5F5SSA22S50A50X	5F5SPA22S50A50X					
	3.18	5F5SSA22S51A50X	5F5SPA22S51A50X					
40	3.75	5F5SSA22S52A50X	5F5SPA22S52A50X					
8W8	20	100	1.95	47	E228329	3	8F8SSA22S48A50X	8F8SPA22S48A50X
			2.60				8F8SSA22S49A50X	8F8SPA22S49A50X
	2.85	8F8SSA22S50A50X	8F8SPA22S50A50X					
	3.18	8F8SSA22S51A50X	8F8SPA22S51A50X					
40	3.75	8F8SSA22S52A50X	8F8SPA22S52A50X					

4-40 UNC threaded rear spacer, coded version



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	20	100	1.95	47	E228329	3	2F2CSA22S48A50X	2F2CPA22S48A50X
			2.60				2F2CSA22S49A50X	2F2CPA22S49A50X
	2.85	2F2CSA22S50A50X	2F2CPA22S50A50X					
	3.18	2F2CSA22S51A50X	2F2CPA22S51A50X					
40	3.75	2F2CSA22S52A50X	2F2CPA22S52A50X					
3W3C	20	100	1.95	47	E228329	3	3F3CSA22S48A50X	3F3CPA22S48A50X
			2.60				3F3CSA22S49A50X	3F3CPA22S49A50X
	2.85	3F3CSA22S50A50X	3F3CPA22S50A50X					
	3.18	3F3CSA22S51A50X	3F3CPA22S51A50X					
40	3.75	3F3CSA22S52A50X	3F3CPA22S52A50X					

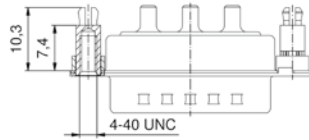
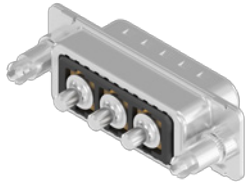
FILTER COMBINATION D-SUB CONNECTORS

C-Filter

Solder pin straight
Precision machined contacts

4-40 UNC threaded rear spacer clip for PCB 1.6 mm

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

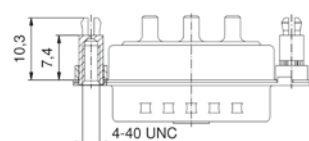
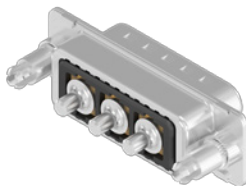


For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
3W3	20	100	1.95	47	E228329	3	3F3SSA22S48E20X	3F3SPA22S48E20X
			2.60				3F3SSA22S49E20X	3F3SPA22S49E20X
	2.85	3F3SSA22S50E20X	3F3SPA22S50E20X					
	3.18	3F3SSA22S51E20X	3F3SPA22S51E20X					
40	3.75	3F3SSA22S52E20X	3F3SPA22S52E20X					
5W5	20	100	1.95	47	E228329	3	5F5SSA22S48E20X	5F5SPA22S48E20X
			2.60				5F5SSA22S49E20X	5F5SPA22S49E20X
	2.85	5F5SSA22S50E20X	5F5SPA22S50E20X					
	3.18	5F5SSA22S51E20X	5F5SPA22S51E20X					
40	3.75	5F5SSA22S52E20X	5F5SPA22S52E20X					
8W8	20	100	1.95	47	E228329	3	8F8SSA22S48E20X	8F8SPA22S48E20X
			2.60				8F8SSA22S49E20X	8F8SPA22S49E20X
	2.85	8F8SSA22S50E20X	8F8SPA22S50E20X					
	3.18	8F8SSA22S51E20X	8F8SPA22S51E20X					
40	3.75	8F8SSA22S52E20X	8F8SPA22S52E20X					

4-40 UNC threaded rear spacer clip for PCB 1.6 mm, coded version

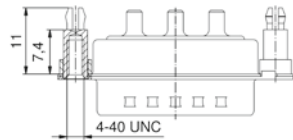
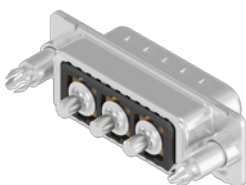


For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	20	100	1.95	47	E228329	3	2F2CSA22S48E20X	2F2CPA22S48E20X
			2.60				2F2CSA22S49E20X	2F2CPA22S49E20X
	2.85	2F2CSA22S50E20X	2F2CPA22S50E20X					
	3.18	2F2CSA22S51E20X	2F2CPA22S51E20X					
40	3.75	2F2CSA22S52E20X	2F2CPA22S52E20X					
3W3C	20	100	1.95	47	E228329	3	3F3CSA22S48E20X	3F3CPA22S48E20X
			2.60				3F3CSA22S49E20X	3F3CPA22S49E20X
	2.85	3F3CSA22S50E20X	3F3CPA22S50E20X					
	3.18	3F3CSA22S51E20X	3F3CPA22S51E20X					
40	3.75	3F3CSA22S52E20X	3F3CPA22S52E20X					

4-40 UNC threaded rear spacer clip for PCB 2.3 mm



For other capacitance values refer to the part number creator.

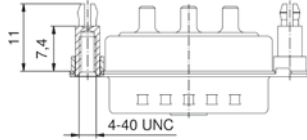
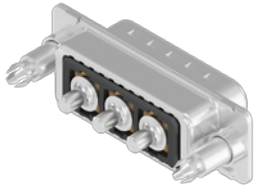
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
3W3	30	100	3.18	47	E228329	3	3F3SSA22S51E40X	3F3SPA22S51E40X
	40		3.75				3F3SSA22S52E40X	3F3SPA22S52E40X
5W5	30	100	3.18	47	E228329	3	5F5SSA22S51E40X	5F5SPA22S51E40X
	40		3.75				5F5SSA22S52E40X	5F5SPA22S52E40X
8W8	30	100	3.18	47	E228329	3	8F8SSA22S51E40X	8F8SPA22S51E40X
	40		3.75				8F8SSA22S52E40X	8F8SPA22S52E40X

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder pin straight
Precision machined contacts

4-40 UNC threaded rear spacer clip for PCB 2.3 mm, coded version



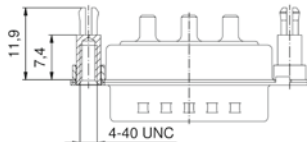
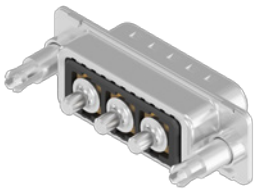
For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	30	3.18	47	E228329	3	3	2F2CSA22S51E40X	2F2CPA22S51E40X
	100	47					2F2CSA22S52E40X	2F2CPA22S52E40X
	40	3.75					2F2CSA22S52E40X	2F2CPA22S52E40X
3W3C	30	3.18	47	E228329	3	3	3F3CSA22S51E40X	3F3CPA22S51E40X
	100	47					3F3CSA22S52E40X	3F3CPA22S52E40X
	40	3.75					3F3CSA22S52E40X	3F3CPA22S52E40X

4-40 UNC threaded rear spacer clip for PCB 3.2 mm

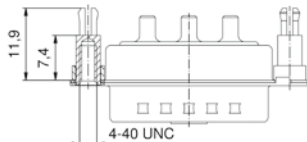
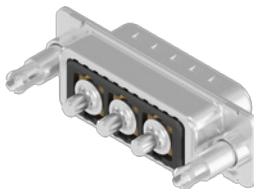


For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

3W3	30	3.18	47	E228329	3	3	3F3SSA22S51E60X	3F3SPA22S51E60X
	100	47					3F3SSA22S52E60X	3F3SPA22S52E60X
	40	3.75					3F3SSA22S52E60X	3F3SPA22S52E60X
5W5	30	3.18	47	E228329	3	3	5F5SSA22S51E60X	5F5SPA22S51E60X
	100	47					5F5SSA22S52E60X	5F5SPA22S52E60X
	40	3.75					5F5SSA22S52E60X	5F5SPA22S52E60X
8W8	30	3.18	47	E228329	3	3	8F8SSA22S51E60X	8F8SPA22S51E60X
	100	47					8F8SSA22S52E60X	8F8SPA22S52E60X
	40	3.75					8F8SSA22S52E60X	8F8SPA22S52E60X

4-40 UNC threaded rear spacer clip for PCB 3.2 mm, coded version



For other capacitance values refer to the part number creator.

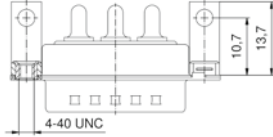
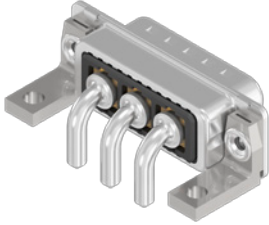
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

2W2C	30	3.18	47	E228329	3	3	2F2CSA22S51E60X	2F2CPA22S51E60X
	100	47					2F2CSA22S52E60X	2F2CPA22S52E60X
	40	3.75					2F2CSA22S52E60X	2F2CPA22S52E60X
3W3C	30	3.18	47	E228329	3	3	3F3CSA22S51E60X	3F3CPA22S51E60X
	100	47					3F3CSA22S52E60X	3F3CPA22S52E60X
	40	3.75					3F3CSA22S52E60X	3F3CPA22S52E60X

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder pin angled
Precision machined contacts, metal bracket

4-40 UNC threaded insert



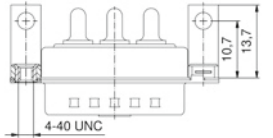
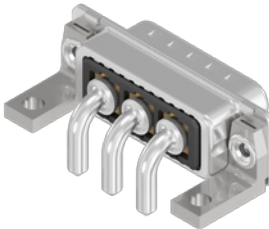
For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
3W3	20	285			E228329	3	3F3SSA22S56K20X	3F3SPA22S56K20X
	30	100	3.20	47			3F3SSA22S57K20X	3F3SPA22S57K20X
	40	3.75					3F3SSA22S58K20X	3F3SPA22S58K20X
5W5	20	285			E228329	3	5F5SSA22S56K20X	5F5SPA22S56K20X
	30	100	3.20	47			5F5SSA22S57K20X	5F5SPA22S57K20X
	40	3.75					5F5SSA22S58K20X	5F5SPA22S58K20X
8W8	20	285			E228329	3	8F8SSA22S56K20X	8F8SPA22S56K20X
	30	100	3.20	47			8F8SSA22S57K20X	8F8SPA22S57K20X
	40	3.75					8F8SSA22S58K20X	8F8SPA22S58K20X

4-40 UNC threaded insert, coded version

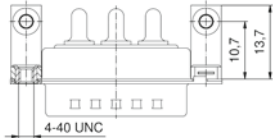
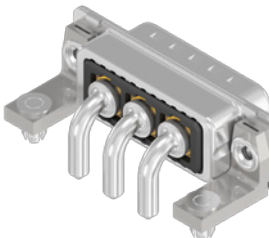


For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

2W2C	20	285			E228329	3	2F2CSA22S56K20X	2F2CPA22S56K20X
	30	100	3.20	47			2F2CSA22S57K20X	2F2CPA22S57K20X
	40	3.75					2F2CSA22S58K20X	2F2CPA22S58K20X
3W3C	20	285			E228329	3	3F3CSA22S56K20X	3F3CPA22S56K20X
	30	100	3.20	47			3F3CSA22S57K20X	3F3CPA22S57K20X
	40	3.75					3F3CSA22S58K20X	3F3CPA22S58K20X

Clip for PCB 1.6 mm, 4-40 UNC threaded insert



For other capacitance values refer to the part number creator.

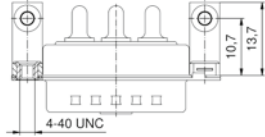
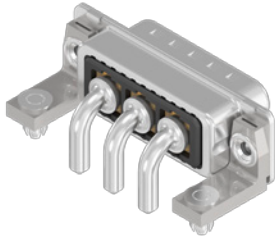
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

3W3	20	285			E228329	3	3F3SSA22S56K40X	3F3SPA22S56K40X
	30	100	3.20	47			3F3SSA22S57K40X	3F3SPA22S57K40X
	40	3.75					3F3SSA22S58K40X	3F3SPA22S58K40X
5W5	20	285			E228329	3	5F5SSA22S56K40X	5F5SPA22S56K40X
	30	100	3.20	47			5F5SSA22S57K40X	5F5SPA22S57K40X
	40	3.75					5F5SSA22S58K40X	5F5SPA22S58K40X
8W8	20	285			E228329	3	8F8SSA22S56K40X	8F8SPA22S56K40X
	30	100	3.20	47			8F8SSA22S57K40X	8F8SPA22S57K40X
	40	3.75					8F8SSA22S58K40X	8F8SPA22S58K40X

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Solder pin angled
Precision machined contacts, metal bracket

Clip for PCB 1.6 mm, 4-40 UNC threaded insert, coded version



For other capacitance values refer to the part number creator.

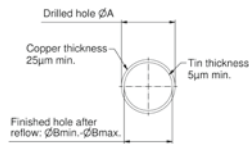
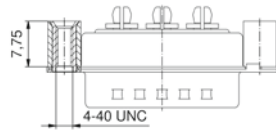
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Outer Ø contact [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	100	285	3.20	47	E228329	3	2F2CSA22S56K40X	2F2CPA22S56K40X
							2F2CSA22S57K40X	2F2CPA22S57K40X
							2F2CSA22S58K40X	2F2CPA22S58K40X
3W3C	100	285	3.20	47	E228329	3	3F3CSA22S56K40X	3F3CPA22S56K40X
							3F3CSA22S57K40X	3F3CPA22S57K40X
							3F3CSA22S58K40X	3F3CPA22S58K40X

Press-fit contact straight
Precision machined contacts

4-40 UNC threaded rear spacer



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

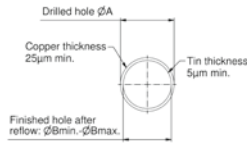
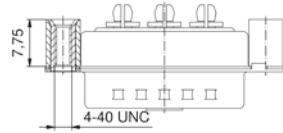
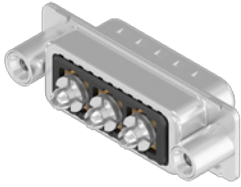
3W3	100	311	3.25	47	E228329	3	3F3SSA22SP1AA0X	3F3SPA22SP1AA0X
							3F3SSA22SP2AA0X	3F3SPA22SP2AA0X
							3F3SSA22SP4AA0X	3F3SPA22SP4AA0X
5W5	100	311	3.25	47	E228329	3	5F5SSA22SP1AA0X	5F5SPA22SP1AA0X
							5F5SSA22SP2AA0X	5F5SPA22SP2AA0X
							5F5SSA22SP4AA0X	5F5SPA22SP4AA0X
8W8	100	311	3.25	47	E228329	3	8F8SSA22SP1AA0X	8F8SPA22SP1AA0X
							8F8SSA22SP2AA0X	8F8SPA22SP2AA0X
							8F8SSA22SP4AA0X	8F8SPA22SP4AA0X

Termination Code	ø A	ø B min.	ø B max.
P1	3.13	2.96	3.11
P2	3.27	3.10	3.25
P4	3.22	3.02	3.20

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Press-fit contact straight
Precision machined contacts

4-40 UNC threaded rear spacer, coded version



For other capacitance values refer to the part number creator.

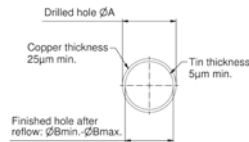
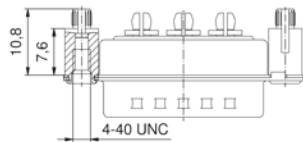
Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Hole diameter PCB [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	30	100	3.25	3.11	E228329	3	2F2CSA22SP1AA0X	2F2CPA22SP1AA0X
				47			2F2CSA22SP2AA0X	2F2CPA22SP2AA0X
				3.20			2F2CSA22SP4AA0X	2F2CPA22SP4AA0X
3W3C	30	100	3.25	3.11	E228329	3	3F3CSA22SP1AA0X	3F3CPA22SP1AA0X
				47			3F3CSA22SP2AA0X	3F3CPA22SP2AA0X
				3.20			3F3CSA22SP4AA0X	3F3CPA22SP4AA0X

Termination Code	ø A	ø B min.	ø B max.
P1	3.13	2.96	3.11
P2	3.27	3.10	3.25
P4	3.22	3.02	3.20

4-40 UNC rear press-fit spacer



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

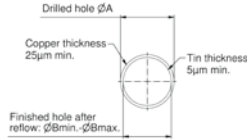
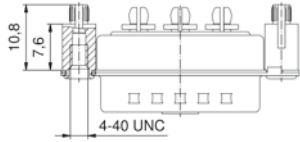
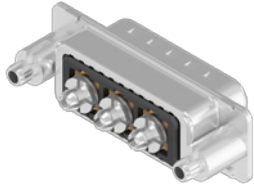
3W3	30	100	3.25	3.11	E228329	3	3F3SSA22SP1W40X	3F3SPA22SP1W40X
				47			3F3SSA22SP2W40X	3F3SPA22SP2W40X
				3.20			3F3SSA22SP4W40X	3F3SPA22SP4W40X
5W5	30	100	3.25	3.11	E228329	3	5F5SSA22SP1W40X	5F5SPA22SP1W40X
				47			5F5SSA22SP2W40X	5F5SPA22SP2W40X
				3.20			5F5SSA22SP4W40X	5F5SPA22SP4W40X
8W8	30	100	3.25	3.11	E228329	3	8F8SSA22SP1W40X	8F8SPA22SP1W40X
				47			8F8SSA22SP2W40X	8F8SPA22SP2W40X
				3.20			8F8SSA22SP4W40X	8F8SPA22SP4W40X

Termination Code	ø A	ø B min.	ø B max.
P1	3.13	2.96	3.11
P2	3.27	3.10	3.25
P4	3.22	3.02	3.20

FILTER COMBINATION D-SUB CONNECTORS C-Filter

Press-fit contact straight
Precision machined contacts

4-40 UNC rear press-fit spacer, coded version



For other capacitance values refer to the part number creator.

Capacitance value	Code
100 nF	28
47 nF	22
12 nF	14
10 nF	12
5 nF	08
1.3 nF	05

Shell: Steel tin plated
Quality class: 3 (A) = 50 mating cycles
On request:
• higher DWV
• Quality class: 1 (C) = 500 mating cycles
• M3 thread

No. of poles	Current rating [A]	Working voltage [VDC]	Hole diameter PCB [mm]	Capacitance [nF]	UL-File	Quality class	Part No. Socket contact	Part No. Plug contact
2W2C	30	100	3.11	47	E228329	3	2F2CSA22SP1W40X	2F2CPA22SP1W40X
			3.25				2F2CSA22SP2W40X	2F2CPA22SP2W40X
			3.20				2F2CSA22SP4W40X	2F2CPA22SP4W40X
3W3C	30	100	3.11	47	E228329	3	3F3CSA22SP1W40X	3F3CPA22SP1W40X
			3.25				3F3CSA22SP2W40X	3F3CPA22SP2W40X
			3.20				3F3CSA22SP4W40X	3F3CPA22SP4W40X

Termination Code	ø A	ø B min.	ø B max.
P1	3.13	2.96	3.11
P2	3.27	3.10	3.25
P4	3.22	3.02	3.20