

ESC10 connectors

upgraded performance Rolls Royce / SBAC
specification vs. MIL-DTL-83723 Series III



NYK Component Solutions are a franchised distributor of selected mil-specification connectors for leading QPL manufacturers. We offer a comprehensive inventory of backshells, contacts and connector accessories.

Improved medium-sized environmentally resistant circular connectors based on the MIL-DTL-83723 Series III form factor, but complies with the more stringent Rolls Royce / Society of British Aerospace Companies ESC10 standards.



Product Features

- σ As per MIL-DTL-83723 Series III but additionally meets more stringent Rolls Royce, SBAC, ESC10 demands
- σ Metal to metal grounding between receptacles and plugs, improved RFI continuity
- σ -65degC to +260degC cyclic operating temperature
- σ Ability to withstand an extended range of fluids in an aerospace environment

Product Benefits

- σ Designed to deliver higher performance capability for application in severe environmental applications such as aircraft engines, pressure and temperature sensors
- σ Meets Rolls Royce / SBAC requirements

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Product technical description

- σ **General:** Medium density contact arrangements with fine thread secure coupling in corrosion resistant shells.
- σ **Temperature:** -65degC (-85degF) to +125degC (+500degF)
- σ **Durability:** 500 mating cycles min.
- σ **Corrosion Resistance:** 48 hours per EN2997
- σ **Shell to shell conductivity:** max potential drop not exceeding 10mV
- σ **Contact Current Ratings:** #20 5A, #16 10A, #12 17A

Technical description is typical and varies per class.

How to order

ESC10 Series (example)

ESC10	SE	6	16	24	P	N	A
Prefix	Class	Shell Style	Shell Size	Contact Arrangement	Contact Style	Alternative Keying	Variation

ESC10 ORDERING INFORMATION

Class	KE	Stainless steel, firewall (+260 degC)
	SE	Stainless steel, firewall (+260 degC) with grounding spring
	YE	Stainless steel hermetic (+260 deg C)
Shell Style	0	Square flange receptacle with accessory teeth per MS3155
	1	Hermetic, solder mount
	2	Hermetic, jam nut
	6	Plug, non-decoupling with accessory teeth per MS3155
Contact Arrangement	See MIL-C-83723 specification or NYK Component Solutions product page	
Contact Style	P	Pin
	S	Socket
Alternative Keying	N	Normal
	6	Variant
	7	Variant
	8	Variant
	9	Variant
Variation	O	Basic connector
	A	Lockwire holes on plug

All connectors supplied without contacts except Shell Style 1 and 2

These connectors are fully interchangeable and intermateable with MIL-DTL-83723 Series III threaded and EN2997 connectors.

ESC10 connectors are compatible with MIL-DTL-83723 Series III contact arrangements, there are also special arrangements not shown on the table below. Please contact NYK Component Solutions for availability.

FOR REFERENCE

INSERT CONFIGURATION BY SHELL SIZE

Shell Size	NUMBER OF CONTACTS			
	Total	20	16	12
8-2	2	2		
8-3	3	3		
8-98	3	3		
10-2	2	2		
10-5	5	5		
10-6	6	6		
10-20	2		2	
12-3	3		3	
12-12	12	12		
14-4	4			4
14-7	7		7	
14-12	12	9	3	
14-15	15	15		
16-10	10		10	
16-24	24	24		
18-8	8			8
18-14	14		14	
18-31	31	31		
20-16	16		16	
20-25	25	19		6
20-28	28	24		4
20-39	39	37	2	
20-41	41	41		
22-12	12			12
22-19	19			19
22-32	32	26		6
22-39	39	27	12	
22-55	55	55		
24-19	19			19
24-43	43	23	20	
24-57	57	55		2
24-61	61	61		

<https://www.nykcs.com/mil-dtl-83723-en2997-esc10-connectors/>