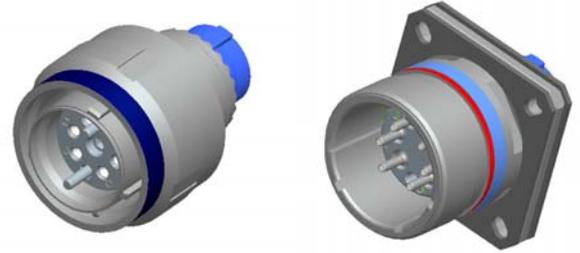


R255C3 Series expansion beam fiber connector

Product introduction

- Meets the R255(MIL-DTL-38999) III
- Shell can choose different materials and coatings to meet different environmental requirements
- Five-button positioning, a blind plug-in and wrong insertion function
- Threaded quick connect with anti-loosen mechanism
- A variety of tail variations are available
- Implementation of enterprise standards: Q/21EJ3966

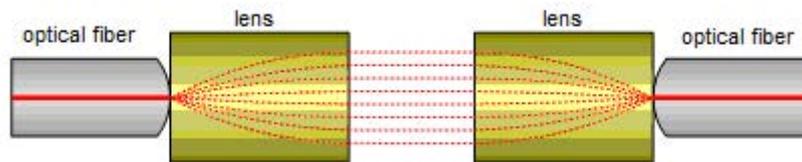


Use and use of the environment

- This product is more widely used, mainly used in high-intensity vibration impact, plug more times, more dust pollution, easy to dirty and other harsh conditions. For aviation, electronics, ships and other systems for multi-channel optical communications.

Fiber Expansion Beam Connector Functional Theory

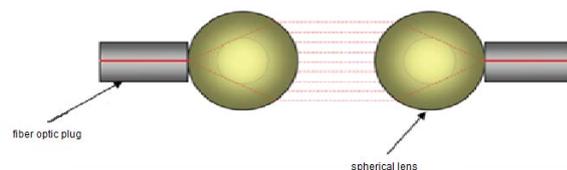
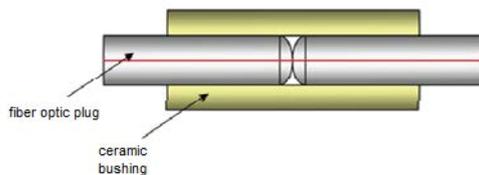
- The optical fiber expander connector is a non-physical contact connector. Its principle is that the optical fiber is coupled with a self-focusing collimating lens so that the light emitted from the optical fiber is diffused by the self-focusing collimating lens to be emitted in parallel light, Then into another connector with a self-focusing lens. Due to the beam diameter after beam expansion of several times the increase, it can greatly reduce the vibration, the impact of dust, easy to clean and maintain.



Non-contact expansion beam diagram

Optical expansion beam connector product advantages

- High life expectancy
Non-contact connection to avoid the fiber pin contact each other caused by wear and tear, improve plug connector life.



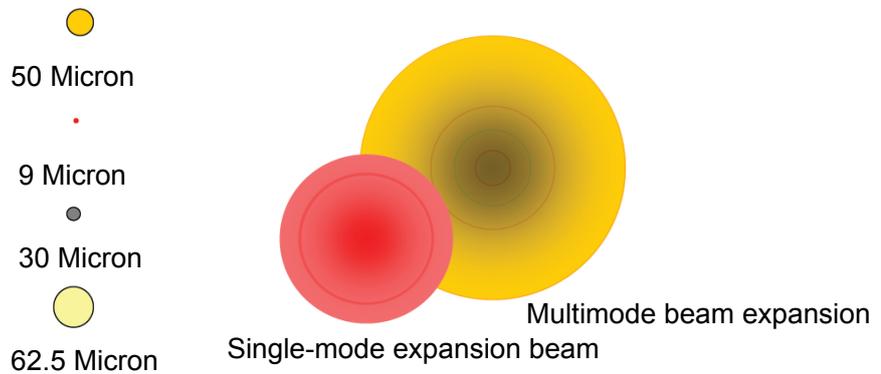
Physical docking fiber connector structure

Non-contact expansion beam fiber optic connector structure

- Anti-pollution, anti-vibration impact
Due to the expanded beam diameter of more than ten times, several times the increase, the impact of dust and vibration impact is extremely large

Degree of reduction.

Comparison of 30 µm Dust with Fiber Core and Expanded Beam Speckle



Main technical performance

[Mechanical behavior]

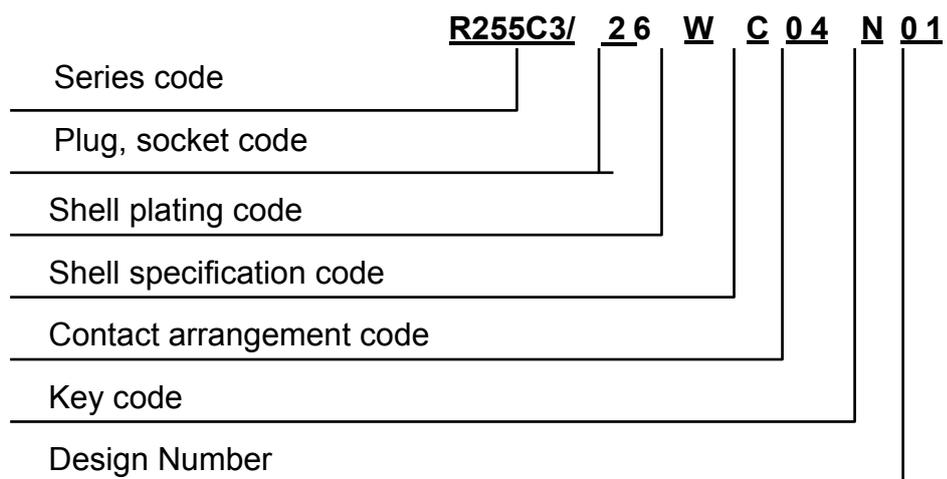
- Vibration: 10Hz ~ 2000Hz, power spectral density 0.4G² / Hz, acceleration rms 23.1
- Shock: Peak Acceleration 2940m / s², Duration 3ms, Speed Change 5.61m / s
- Mechanical life: 2000 times

[Environmental Performance]

- Operating temperature: -55 °C ~ +85 °C [Optical Properties]
- Insertion loss: ≤ 0.6dB

Model name

[Plug / seat model name]





sequence	Classification features	Category content	mark
1	Series Lord said	The main code	R255C3/
2	Plug, socket type	plug	26
		Square plate installation socket	20
3	Plating	Aluminum cadmium plated into the army green	W
		Electroless Nickel	F
		Stainless steel passivation	K
4	Shell number	11	B
		13	C
		15	D
		17	E
		19	F
		21	G
		23	H
		25	J
5	Number of contacts	Number of contacts	02, 04, 06, 08, 12, 16
6	Key bits	Key type	N, A, B, C, D, E
7	Modified code		No attachment, metal dust cover with chain
		01	Adapted bellows straight attachment
		03	Followed by the bellows adapter fitting
		04	Fit to the XCD attachment relatively large key water
		04B	Fit the XCD attachment to the relatively large key to the left
		04C	Fit XCD attachment to the right of the big key
		04A	Fit XCD attachment relative to the key vertical
		31	Socket adapter multi-core field cable
		41	Plug / seat adapter multi-core armor light
		51	Plug adapter multi-core field cable
		02, 05~30, 32~40, 42~50, 52~99	(Undefined)



Contact arrangement (socket)

11-02	13-04	15-06	17-08
19-12	21-16	23-24	25-32

○ Represents the position of the contact ● Representative pin hole location

Dimensions

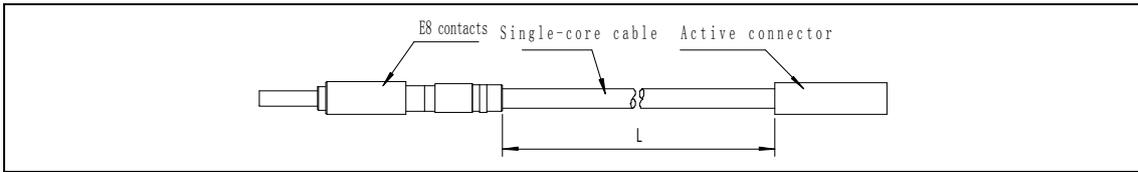
[Plug assembly]

	Shell number	MS Shell number	C maximum
	11	B	25.00
	13	C	29.40
	15	D	32.50
	17	E	35.70
	19	F	38.50
	21	G	41.70
	23	H	44.90
25	J	48.00	

[Square plate socket assembly]

		After loading	Pre-installed
		The maximum thickness of the panel 2.5mm	The maximum thickness of the panel 3.2mm

C3Y Beam Expansion Contacts Jumper [Outline Drawing]



Note: L is the cable length specified by the user. The contact jumper is used in the R255C3 expansion beam fiber connector. When loading, the ejector used is M81969 / 14-03. Refer to R255C3 Optical Connector Instruction Manual [Order Model Example]

(1) C3Y-LC-M2-L1.2

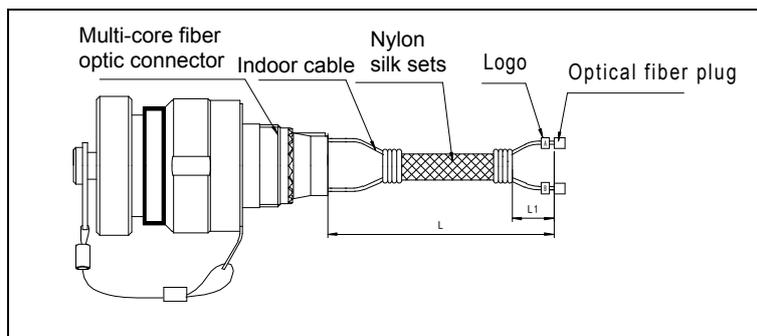
Said: Jumper E8T plug at one end, the two ends of the LC plug, the working wavelength of 850nm, single-core fiber optic cable 62.5 / 125 Φ2mm optical cable, a length of 1.2m.

(2) C3Y-LC-13-FM2-L5

Said: one end of the jumper E8T plug, two ends of the LC plug, the working wavelength of 1300nm, single core multimode fiber optic 62.5 / 125 Φ2mm ETFE high temperature cable, a length of 5m.

Cable Assembly I

[Outline]



Note: L is the user specified cable length.

[Order Model Description]

[Order model example]

(1) R255C3 / 20WE08N-8FC-M2-L1.5

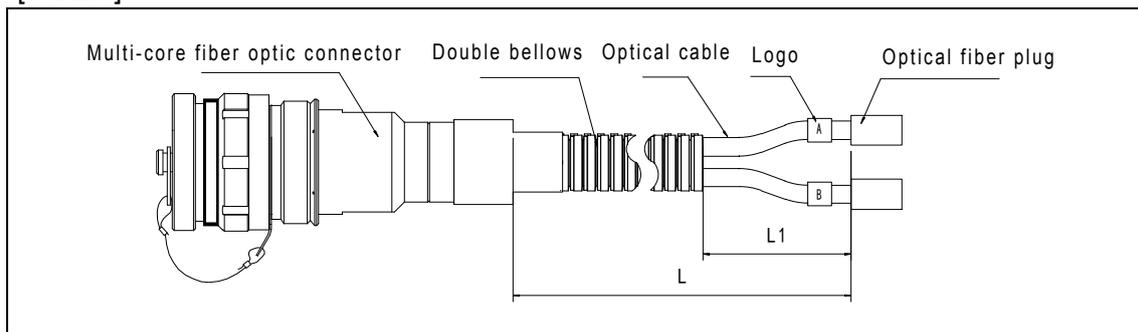
Said: 1 end R255C3 / 20WE08N socket, 2 ends of 8 FC plug, the working wavelength is 850nm, suitable for single core multimode 62.5 / 125 Φ2mm optical cable, length of 1.5m, no branch cable.

(2) R255C3 / 26WC04N-4LC-13-MI2-L2 / 0.5

Said: one end of the R255C3 / 26WC04N plug, 2 ends of the 4 LC plug, the working wavelength of 1300nm, single core multimode 50/125 Φ2mm fiber optic cable with a total length of 2 meters, sub-branch cable length of 0.5 meters.

Cable Assembly II

[Outline]



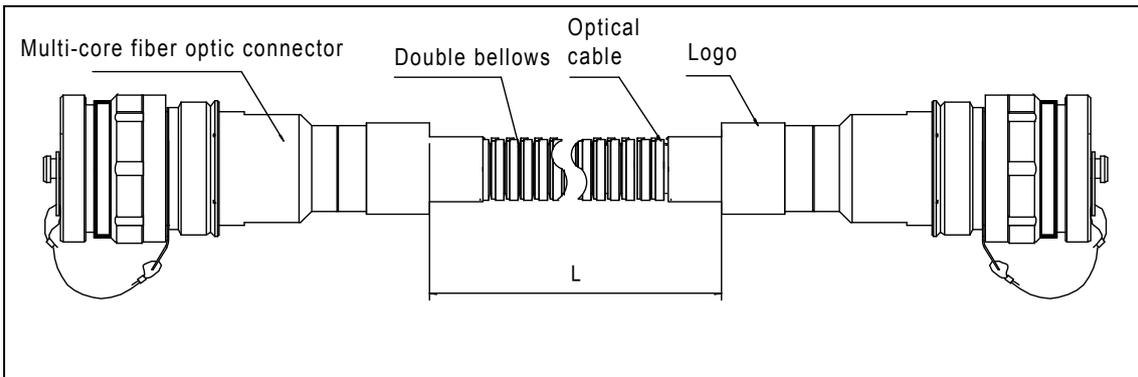
Features: One end of the optical cable for multi-core fiber optic cable connector, the other end of the ordinary fiber optic connectors, optical cable for the indoor cable, with double-layer bellows protection.
[Order model example]

(1) R255C3 / 26WB02N01-2FC-M2-L5 / 0.5

Said: 1 end R255C3 / 26WB02N01 plug (with straight tail annex), adapted double open bellows, 2 ends for two FC plug, the working wavelength of 850nm, suitable for $\Phi 2$ multimode 62.5 / 125 optical cable, length 5m, The branch length is 0.5m. (2) R255C3 / 20WC04N03-4LC-13-MI2-L2 / 0.2

Said: 1 end R255C3 / 20WC04N03 socket (with curved tail annex), adapted double open bellows, 2 ends of the four LC plug, the working wavelength of 1300nm, $\Phi 2$ multimode 50/125 cable, length 2m, branch length is 0.2m. Cable Assembly III

[Outline]



Features: Both ends of the optical cable are multi-core optical fiber cable connectors. The optical cable is an indoor optical cable and is protected by a double-layer corrugated pipe.

[Order model example]

(1) R255C3 / 26WB02N01- R255C3 / 26WB02N03-M2-L5

Means: R255C3 / 26WB02N01 connector (with straight tail attachment) on one end and R255C3 / 26WB02N03 (with bent tail attachment) on the two ends, operating wavelength is 850nm, suitable for double opening bellows, $\Phi 2$ multimode 62.5 / 125 Optical cable, length 5m.

(2) R255C3 / 20WC04N01- R255C3 / 26WC04N01-13-MI2-L5

Said: 1 end R255C3 / 20WC04N01 socket with straight tail attachment, 2 end R255C3 / 26WC04N01 plug with straight tail attachment working wavelength 1300nm, suitable for double opening bellows, $\Phi 2$ multimode 50/125 fiber optic cable , Length 5m.