# DATA SHEET



# **MPO<sup>-PLUS®</sup> STANDARD CONNECTOR** 702 and 712 Series

MPO-PLUS® Standard Connector

Transform your network infrastructure with the SENKO's MPO-PLUS® solution, a cutting-edge optical fiber connectivity system tailored for the dynamic demands of data centers, telecommunications, and high-speed applications. Embrace unparalleled efficiency with SENKO's high-density MPO-PLUS® connectors, capable of integrating up to 32 fibers in a single, space-saving housing. Benefit from low insertion loss for superior signal integrity, complemented by both single-mode and multimode options to cover every application requirement.

Backed by rigorous testing and quality assurance, SENKO guarantees reliability and excellence, making it the perfect choice for future-proofing your optical connectivity and propelling your network into the next generation.

#### **FEATURES**

- Lowest insertion loss on the market
- High Density and compact size
- 12/24 Fiber center key
- 16/32 Fiber Offset key
- Multiple variants available for your application needs
- Removeable free floating ferrule

#### APPLICATIONS

- Artificial intelligence (AI)
- Data center
- FTTx
- Cloud computing
- Broadcasting
- Medical imaging
- High Performance Computing (HPC)

#### **KEY BENEFITS**

- Lowest Insertion loss on the market
- Durability
- Easy installation bayonet mechanism
- Precision metal guide pins
- Improved spring design

## **Mechanical Data**

	Value
Durability	500 matings per TIA-568.3
Fiber Count	Up to 32 fibers
Cable Suitability	2.0 mm - 5.5 mm round or bare / jacketed ribbon fiber

## **Optical Data**

	Singl	emode	Multimode			
	A	PC	M	М		
	Low Loss	Standard	Low Loss	Standard		
Typical Insertion Loss (dB) <sup>*</sup> 12-fiber	0.10	0.20	0.08	0.10		
Max. Insertion Loss (dB)* 12-fiber	0.25	0.70	0.25	0.50		
Typical Insertion Loss (dB) <sup>*</sup> 24-fiber	0.15	0.25	0.15	0.20		
Max. Insertion Loss (dB) <sup>*</sup> 24-fiber	0.35	1.00	0.35	0.50		
Typical Insertion Loss (dB) <sup>*</sup> 16-fiber	0.15	N/A	0.15	0.20		
Max. Insertion Loss (dB) <sup>*</sup> 16-fiber	0.35	N/A	0.35	0.60		
Typical Insertion Loss (dB) <sup>*</sup> 32-fiber	N/A	N/A	N/A	0.25		
Max. Insertion Loss (dB) <sup>*</sup> 32-fiber	N/A	N/A	N/A	0.60		
Typical Return Loss (dB)*	2	.60	≥25			

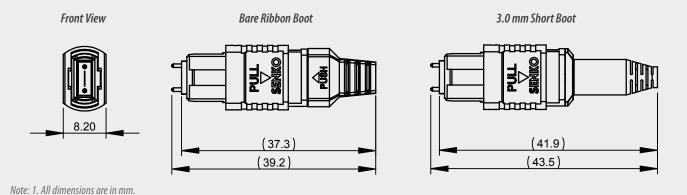
\* Based on master grade jumper to low loss random mating test

## **Environmental Data**

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	Yes
REACH Compliance	Yes

702 series

## **Connector Drawing - 702 Series**



2. Other variations are available upon request.

*3. Specifications subject to change without notice.* 

4. Ferrule not included

#### ORDERING

CONNECTOR		GENDER/PIN		FERRULE TYPE		FIBER COUNT		HOUSING COLOR		BOOT/CABLE			BOOT LENGTH
702F	MPO-PLUS®	F	Female	SS	SM Standard	04	4F	γ	SM Low Loss Yellow	01	Dava Dibban Fibar	Bare Ribbon Boot	13mm
	Standard	Μ	Male	SL	SM Low Loss	08	8F	G	APC Green	02	Bare Ribbon Fiber	Bare Ribbon Short Boot	6mm
	Connector			MS	MM Standard	12	12F	V	MM 0M4 Heather Violet	11	Flat Ribbon Cable	Flat Ribbon Cable Boot	21mm
	12F/24F with			ML	MM Low Loss	24	24F	Α	MM OM3 Aqua	21	2 One and Decound	2.0mm Boot with Crimp	27mm
	MT Ferrule							Т	MM Beige	22	2.0mm Round	2.0mm Boot without Crimp	23mm
								В	MM Black	31	3.0mm Round	3.0mm Boot	23mm
								Μ	MM 0M5 Lime Green	32	5.0mm Nound	3.0mm Flex Angle Boot	43.9mm
										41		3.6mm Boot	16mm
										42	3.6mm Round	3.6mm Flex Angle Boot	31mm
										<b>46</b>		3.6mm Short Boot	43.9mm
										51		4.5mm Round Boot	31mm
										52	Other Round	5.0mm Round Boot	31mm
										53		5.5mm Round Boot	31mm
													12 - A31 ORDER CO

Note: 1. Custom configurations available upon request.

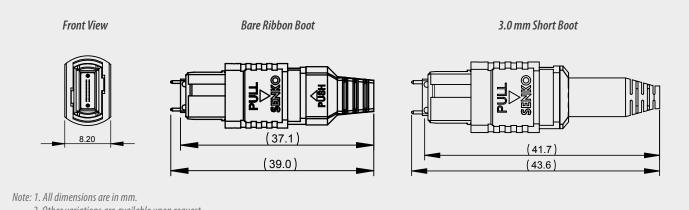
2. Please visit Senko.com/mposelect for other combinations.

3. 3.8mm and 4.0mm boot option available.



712 series

## **Connector Drawing - 712 Series**



2. Other variations are available upon request.

*3. Specifications subject to change without notice.* 

4. Ferrule not included

#### ORDERING

CONNECTOR		GENDER/PIN		FERRULE TYPE		FIBER COUNT		HOUSING COLOR		BOOT/CABLE			BOOT LENGTH
712F N	APO-PLUS®	F	Female	SS	SM Standard	16	16F	Y	SM Low Loss Yellow	01	Bare Ribbon Fiber	Bare Ribbon Boot	13mm
St	itandard	Μ	Male	SL	SM Low Loss	32	32F	G	APC Green	02	Dare KINDOII FIDEI	Bare Ribbon Short Boot	6mm
C	Connector			MS	MM Standard			V	MM OM4 Heather Violet	31		3.0mm Boot	27mm
	6F/32F with			ML	MM Low Loss			Α	MM OM3 Aqua	32	3.0mm Round	3.0mm Flex Angle Boot	43.9mm
N	AT Ferrule							Т	MM Beige	33		3.0mm Short Boot	16mm
								В	MM Black	41		3.6mm Boot	31mm
								М	MM 0M5 Lime Green	42	3.6mm Round	3.6mm Flex Angle Boot	31mm
										46		3.6mm Short Boot	12.5mm
										51		4.5mm Round Boot	31mm
										52	Other Round	5.0mm Round Boot	31mm
										53		5.5mm Round Boot	31mm
												702F - F - M	512 - A31 ORDER CO

*Note: 1. Custom configurations available upon request.* 

2. Please visit Senko.com/mposelect for other combinations.

3. 3.8mm and 4.0mm boot option available.



### MPO<sup>-PLUS<sup>-</sup></sup> STANDARD CONNECTOR Accessories

**MPO-PLUS® CONNECTOR DATA SHEET** 

### Accessories

MPO<sup>*PLUS*<sup>\*</sup></sup>

MPO<sup>+LUS®</sup>

PN: RMT-609

Loopback



**Polarity Changeable Adapter Extraction Tool** 





**MPO<sup>-PLUS®</sup> Ribbonizer** PN: RBN-601



**MPO<sup>+LUS°</sup>** Quality Master Jumper



## **Accessories - Cleaning**



## MPO<sup>+LUS<sup>•</sup></sup> STANDARD CONNECTOR

Accessories

#### MPO-PLUS® CONNECTOR DATA SHEET

## **Accessories - Interferometry**

#### **SUMIX Manta W+ Inspection Scope** PN: SMX-Manta-W+



- Inspects 12 fiber in 2.6 seconds, 24 fiber in 4.5 seconds
- 0.5µm defect detection
- Inspection tips for MPO, CS, SN, LC available

SUMIX Max QM+ Inspection Scope PN: MAX-Quantum



• Inspects 12 fiber in 2.6 seconds, 24 fiber in 4.5 seconds

SMX Manta W+ Benchtop Holder

• 0.5µm defect detection

**PN: MNT-W-Stand** 

#### SMX Manta W+ MPO Polarity and Continuity Module PN: MPO Verifier



• Works for 8, 12, 24, 48 and 16, 32 fiber MPO

Auto test and analysis



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## senko.com/contact

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