



MID-RANGE FOCUS OPTIMIZER 3 (MFO-3)
FOCUS RANGE TO 0-150CM WITH FULL FRAME NIKON 105MM

	CAMERA LENS	GEAR	PORT ADAPTOR / EXTENSION RING	EXTENSION RING / PORT CONVERTER	PORT	MOUNT CONVERTER	WET LENS	OPTICAL PERFORMANCE
N120 CINEMA SYSTEM FOR EF & RF-MOUNT (RED, CANON, PANASONIC, Z-CAM, BLACKMAGIC)	Canon EF 100mm f/2.8L Macro IS USM	19523 C100IS-F			18703 Macro Port 94	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	On Full Frame Sensor Max. Magnification Working Distance Lens FOV Converted FOV
	Canon RF 100mm f/2.8L Macro IS USM	19575 CRF100-F <i>* please contact us if SA control is needed</i>			18703 Macro Port 94	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		On Full Frame Sensor Max. Magnification Working Distance Lens FOV Converted FOV
N120 CINEMA SYSTEM Z-MOUNT (RED KOMODOX / V-MARTON(X))	Nikon AF-S Micro NIKKOR 60mm f/2.8G ED with Nikon FTZII mount adaptor	TBD <i>Focus Gear</i>			18701 Macro Port 60	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	On DX Sensor Max. Magnification Working Distance Lens FOV Converted FOV
	Nikkor Z MC 105mm f/2.8 VR S Macro	TBD <i>Focus Gear</i>			18708 Macro Port 80	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		On Full Frame Sensor Max. Magnification Working Distance Lens FOV Converted FOV
N120 NIKON F-MOUNT	Nikon AF-S Micro NIKKOR 60mm f/2.8G ED	19121 N60G-F			18701 Macro Port 60	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	On DX Sensor Max. Magnification Working Distance Lens FOV Converted FOV
	Nikon AF-S VR Micro-NIKKOR 105mm f/2.8G IF-ED	19122 N105VR-F			18702 Macro Port 87	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		Max. Magnification Working Distance Lens FOV Converted FOV
N120 NIKON Z-MOUNT (Z7II / Z8 / Z9)	Nikkor Z MC 105mm f/2.8 VR S Macro	19161 NZ105VR-F			18708 Macro Port 80	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
N120 NIKON Z-MOUNT (Z6)	Nikkor Z MC 105mm f/2.8 VR S Macro	19231 Z105-FII			18711 N120 Macro port 105	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		Max. Magnification Working Distance Lens FOV Converted FOV
N120 NIKON Z-MOUNT (Z6III / Z5II)	Nikkor Z MC 105mm f/2.8 VR S Macro	19231 Z105-FII			18711 N120 Macro port 105	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
N120 CANON EF-MOUNT	Canon EF 100mm f/2.8L Macro IS USM	19523 C100IS-F			18703 Macro Port 94	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		Max. Magnification Working Distance Lens FOV Converted FOV
N120 CANON RF-MOUNT	Canon RF 100mm f/2.8L Macro IS USM	19575 + 19576 CRF100-F + SA Control Ring			18703 Macro Port 94	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
N120 CANON RF-MOUNT (C50 / R6III / R6V)	Canon RF 100mm f/2.8L Macro IS USM	19630 + 19640 RF100-F + SA Control Ring II <i>* 19640 is not compatible with R6III housing</i>			18712 Macro Port 115	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		Max. Magnification Working Distance Lens FOV Converted FOV
N120 PANASONIC L-MOUNT	Panasonic Lumix S 100mm f2.8 Macro Lens	19732 PL100-F			18709 Macro Port 27	83214 Bayonet Mount Adaptor for SMC/CMC	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
N120 FUJIFILM G-MOUNT	Fujifilm GF 120mm f/4 Macro R LM OIS WR	19823 GF120-F		21160 / 22160 N120 Extension Ring 60 I / II	18701 Macro Port 60	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>		Max. Magnification Working Distance Lens FOV Converted FOV
N100 CANON RF-MOUNT APSC	Canon RF 100mm f/2.8L Macro IS USM			37430 N100 Extension Ring 30 II	37126 N100 Macro Port 105	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
		19575 CRF100-F	37305 N100 to N120 35.5mm Port Adaptor II		18703 Macro Port 94	SMC/CMC Option 2 - Bayonet Mount 83250 + 83214 M67 to Bayonet Mount Converter II + Bayonet Mount Adaptor for SMC/CMC		
N100 SONY E-MOUNT	Sony FE 90mm f/2.8 Macro G OSS	37147 SE90-F			37126 N100 Macro Port 105	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
	Sony FE 100mm F2.8 Macro GM	37182 SE100-F			37180 N100 Macro Port 125	SMC/CMC Option 2 - Bayonet Mount 83250 + 83214 M67 to Bayonet Mount Converter II + Bayonet Mount Adaptor for SMC/CMC		Max. Magnification Working Distance Lens FOV Converted FOV
N85 MICRO FOUR THIRDS SYSTEM	Olympus M.Zuiko Digital ED 60mm f2.8 Macro	36149 O60-F			36163 N85 Macro Port 65	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
	Panasonic LEICA DG MACRO-ELMARIT 45mm F2.8 ASPH. MEGA O.I.S.	36145 P45-F		36620 N85 Extension Ring 20	36135 N85 Macro Port 45	SMC/CMC Option 2 - Bayonet Mount 83250 + 83214 M67 to Bayonet Mount Converter II + Bayonet Mount Adaptor for SMC/CMC		
TELEPHOTO MACRO FOUR THIRDS	OM System M.Zuiko Digital ED 90mm f/3.5 Macro IS PRO	36072 O90-F <i>* Focus Knob is included in packaging</i>			36169 N85 Macro Port 120 with Focus Limit Switch Selector <i>* optical performance at Normal Macro mode</i>	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
						SMC/CMC Option 2 - Bayonet Mount 83250 + 83214 M67 to Bayonet Mount Converter II + Bayonet Mount Adaptor for SMC/CMC		
N85 SONY E-MOUNT	Sony FE 90mm f/2.8 Macro G OSS			36204 N85 to N120 60mm Port Adaptor II <i>* This setup is only compatible with 37305 SN-A544975 onwards, older versions of 37305 can be upgraded using lock mechanism #95851</i>	18701 Macro Port 60	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	On APS-C Sensor Max. Magnification Working Distance Lens FOV Converted FOV
		36175 SE90-F	36205 N85 to N120 65mm Port Adaptor		37123 N100 Macro Port 55 <i>* This setup is only compatible with 37123 SN-A175724 onwards</i>	SMC/CMC Option 2 - Bayonet Mount 83250 + 83214 M67 to Bayonet Mount Converter II + Bayonet Mount Adaptor for SMC/CMC		
	Sony FE 100mm f/2.8 GM	36178 SE100-F	36207 N85 to N120 50mm Port Adaptor II with Knob		18703 Macro Port 94	SMC/CMC Option 1 - M67 Thread 81228 M67 Spacer Ring for SMC/CMC <i>(included in all SMC/CMC packaging)</i>	81503 MFO-3	Max. Magnification Working Distance Lens FOV Converted FOV
						SMC/CMC Option 2 - Bayonet Mount 83250 + 83214 M67 to Bayonet Mount Converter II + Bayonet Mount Adaptor for SMC/CMC		

81503
Mid-range Focus Optimizer 3

Specifications

Dimension (mm)	:	OD 84mm x 114.2mm
Weight in Air	:	602g
Buoyancy in Water	:	Negative 120g
Body Construction	:	Hard-anodized aluminum alloy
Lens Construction	:	4 elements in 3 groups
Lens Coating	:	Anti-reflection Coating
Working Distance	:	0-150cm
Magnification	:	0.9x
Mount Thread Diameter	:	M67
Depth Rating	:	100m

Package includes

- MFO-3
- Front hard lens cap
- Rear lens caps
- Neoprene Bag
- Cleaning Cloth
- M67 Spacer ring

Last Updated : 2026-07-24

* This port chart is subject to updating as new information becomes available