



# 2x2 Mechanical Fiberoptic Switch

AC Photonics' MS Series switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using patent pending opto-mechanical proprietary configurations and activated via an electrical control signal. The mechanical operation offers ultra-high reliability and fast switching speed as well as bi-directional performance. The MS fiberoptic switches are true switching solutions for optical networking applications.



## Features

- Unmatched Low Cost
- Low Insertion Loss
- Latching or Non Latching
- High Channel Isolation
- High Stable and Reliable
- Epoxy-Free Optical Path

## Applications

- Optical Signal Routing
- Optical Network Protection/Restoration
- Configurable Optical Add/Drop
- Transmitter and Receiver Protection
- Network Test Systems
- Instrumentation

## Performance Specifications

Parameter	Specification	
	Operating Wavelength (nm)	1310±40 or 1550±40
Insertion Loss (dB)	0.6(Typ.), 1.0(Max.)	0.8(Typ.), 1.2(Max)
Wavelength Dependent Loss(WDL)(dB)	≤0.20	≤0.30
PDL (dB)	≤0.15 (Max.)	
Repeatability (dB)	±0.02	
Cross Talk (dB)	≥60	
Return Loss (dB)	≥55	
Switching Speed(ms)	≤10.0	
Drive Voltage(V)	4.5 ~ 5.5	
Power Handling(mW)	500	
Durability (Cycles)	10 Million (Min.)	
Operating Temperature (°C)	0 ~ +70	
Storage Temperature(°C)	-40 ~ +85	
Size (mm) (LxWxH)	29x15x10	

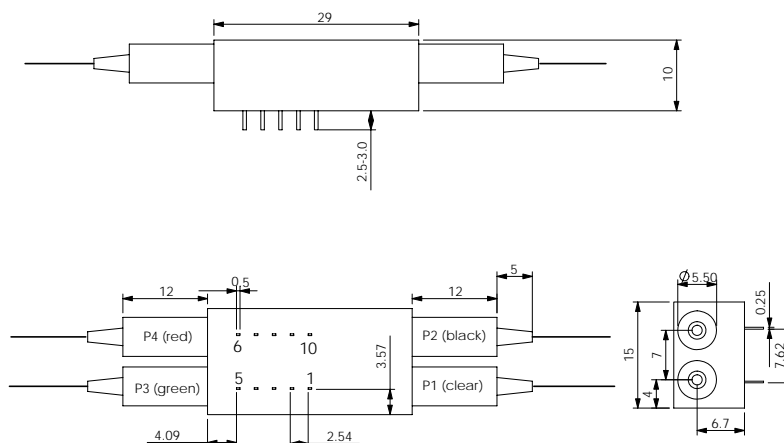
Preliminary specifications. Subject to change without notice.

## Ordering Information

MS	□ □	□ □ □ □		□	□	□ □
Option	Operating Wavelength	Port	Grade	Fiber Type	Fiber Length	In/Out Connector
L=Latching N=Non Latching	13=1310nm 15=1550nm 35=1310/1550nm	0202=2x2	P=P grade A=A grade	1=Bare Fiber 2=900um Jacket	1=1 m 2=2 m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC



## Dimensions (mm)



Bottom View

## Electric Configuration

Optical Path		Port1-Port3 and Port2-Port4		Port1-Port4 and Port2-Port3	
Electric Drive	Non-Latching			Pin1	Pin10
	Latching	Pin10	Pin6	Pin1	Pin5
		V+	GND	V+	GND
Sensor Status	Non-Latching and Latching	Pin2-3, Pin8-9 Close		Pin2-3, Pin8-9 Open	
		Pin3-4, Pin7-8 Open		Pin3-4, Pin7-8 Close	

Parameter	Typical	Min	Max	Unit
Switch Voltage	5	4.5	5.5	V
Switch Current		>40		mA
Pulse Duration		>25		ms

