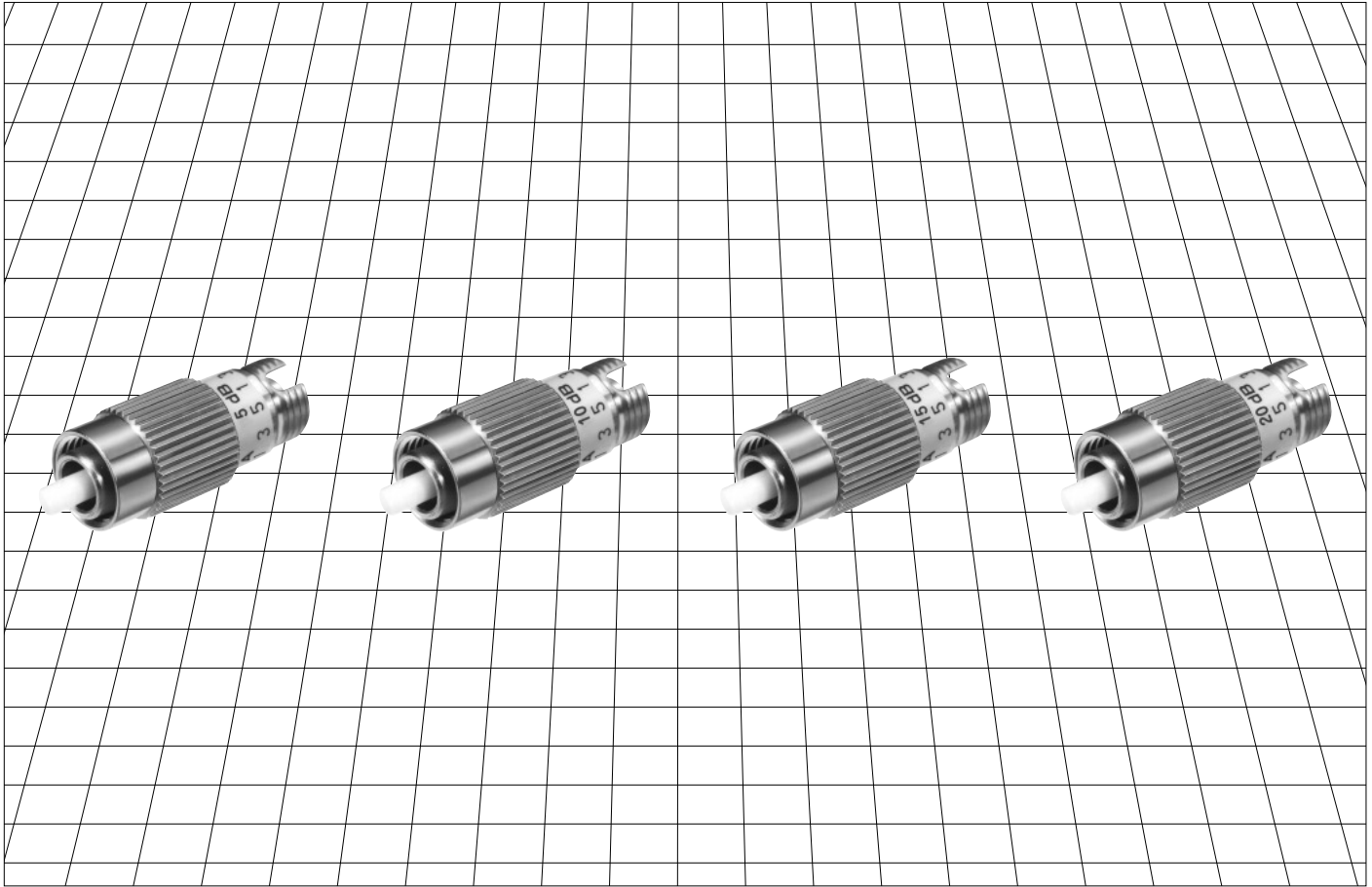


# FC Type Fixed Attenuators



## ■ Features

1. Excellent operational qualities
2. Maximum input power : 250mW
3. Please contact us if you have any requests. Hirose will offer excellent solutions to meet your requirements

### Important Notice

Plug key width : 2.1mm  
Adapter key width : 2.2mm

## ■ Applications

Power level adjustment of optical fiber communication networks.

## Product Specifications

### High Power FC-Type Fixed Attenuator (Max. input power : 250mW)

Ratings	Operating temperature range	-25°C to +70°C	Storage temperature range	-25°C to +85°C
	Max. Input Power	250mW	Fiber type	SM

Item		Test Method	Specifications
Optical Characteristics	Return Loss	Measurement at a point within the respective wavelength range of 1310 ± 30 nm and 1550 ± 30(DSF).	≥40dB
	Attenuation		See the attenuation table on the next page.
Mechanical Characteristics	Adapter gauge holding force	Zirconia gauge of 2.499 ±0.0005 mm diameter.	2.0N to 3.9N  1) Meets Attenuation/Return Loss requirements. 2) No visible dislocation of clamp or cable.
	Durability (cycles, mating/unmating)	500 times	
	Vibration	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, acceleration of 98.1m/s <sup>2</sup> , 3 hours in each of the 3 axis.	
	Shock	Acceleration of 981 m/s <sup>2</sup> , 6 ms duration, sine half-wave waveform, 3 cycles in each of the 3 axis.	
Environmental Characteristics	Composite temperature -Humidity cyclic test	Temperature : -10°C to 65°C, humidity : 90% to 96% Time : 240 hours(10cycles)	No significant corrosion.
	Change of temperature	Temperature: -25°C → +70°C Time: 60 → 60 → 60 → 60 (Minutes) Cycles :100 cycles	
	Dry heat	500 hours at 85°C	
	Cold	500 hours at -25°C	
	Salt Mist	48 hours in a 5% concentration of salt mist	

## Materials

Part	Material
Coupling	Copper alloy
Body	Stainless steel
Ferrule	Zirconia
Split sleeve	Zirconia

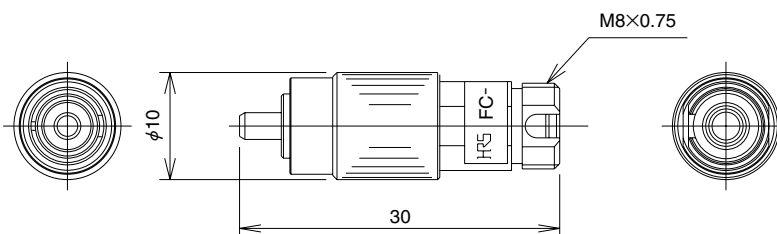
## Ordering Information

**HRFC - AT 11 K - A \*\***

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④
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⑥

① Series name : HRFC	④ Polishing code K: AdPC(≥40dB)
② Attenuator	⑤ Optical fiber type A: Single Mode
③ Specification series	⑥ Attenuation : 01,02,03,04,05,06, 07,08,09,10,15,20,25

## ●High Power SC-Type Fixed Attenuator (Max. input power : 250mW)



Part Number	CL No.	Attenuation	Attenuation Tolerance	Return Loss	Wavelength	Split sleeve	Fiber type
HRFC-AT11K-A01	820-8001-7	1dB	$\pm 0.5\text{dB}$	$\geq 40\text{dB}$	1310nm 1550nm	Zirconia	SM
HRFC-AT11K-A02	820-8002-0	2dB					
HRFC-AT11K-A03	820-8003-2	3dB	$\pm 0.6\text{dB}$				
HRFC-AT11K-A04	820-8004-5	4dB					
HRFC-AT11K-A05	820-8005-8	5dB					
HRFC-AT11K-A06	820-8006-0	6dB					
HRFC-AT11K-A07	820-8007-3	7dB	$\pm 0.7\text{dB}$				
HRFC-AT11K-A08	820-8008-6	8dB	$\pm 0.8\text{dB}$				
HRFC-AT11K-A09	820-8009-9	9dB	$\pm 0.9\text{dB}$				
HRFC-AT11K-A10	820-8010-8	10dB	$\pm 1.0\text{dB}$				
HRFC-AT11K-A15	820-8011-0	15dB	$\pm 1.5\text{dB}$				
HRFC-AT11K-A20	820-8012-3	20dB					
HRFC-AT11K-A25	820-8013-6	25dB					

Note : Please take utmost care when inserting a FC plug into a FC attenuator. When applying excessive force to the FC plug or inserting in an odd angle, the zirconia sleeve within the attenuator might be damaged.