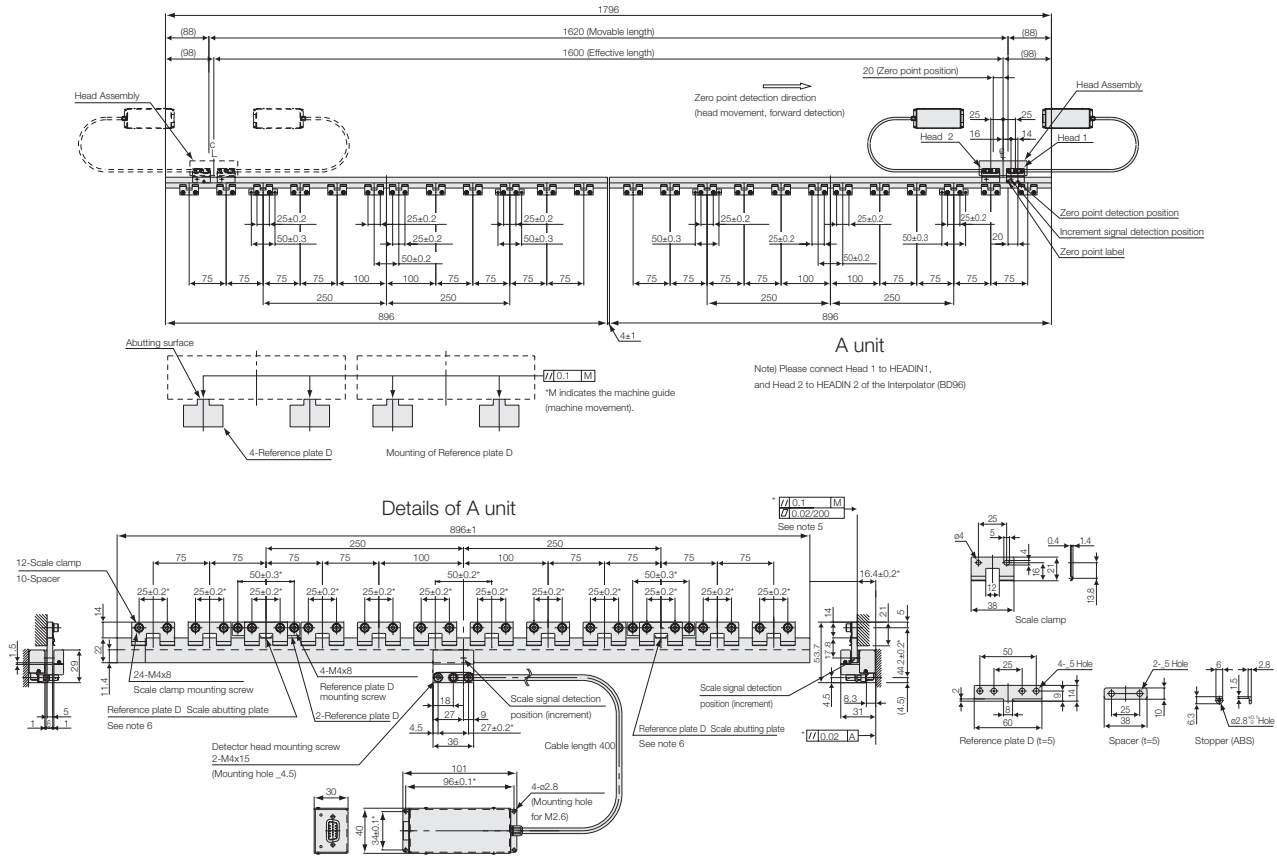


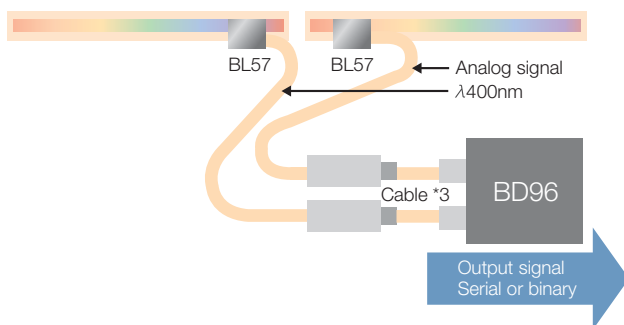
● BL57-162REDBT02



Main specifications

Model		D
Output signal form		BD connection type
Detection system		Diffraction grating scanning system
Scale length (Low expansion glass)	Measuring length(mm)	Max 3,400mm (In combination of five(5) pieces)
	Entire scale length	410,460,510,560,610
	Maximum movable length	May vary depending on the conditions of combination.
Scale length (Blue plate glass)	Measuring length(mm)	Max 6,400mm (In combination of five(5) pieces)
	Entire scale length	560,660,760,860,960, 1,060, 1,260
	Maximum movable length	May vary depending on the conditions of combination.
Accuracy (at 20°C)		±1.5µm (1060mm)
Grating pitch		1.6µm
Signal pitch		400nm
Output signal		serial or binary (according to BD96)
Resolution		0.001µm (binary output)
Zero point accuracy (at 20°C)		±0.4µm (depending on machine movement accuracy)
Zero point position		User definable (within the range of effective length)
Direction of starting point detection		For one
Thermal expansion coefficient		Blue plate glass: -8 x 10 <sup>-6</sup> /°C
Light source		Semiconductor laser with power of 6mW and wavelength of 790 nm
Radiation power		JIS Class 1 equivalent, DHHS Class 1 equivalent
Operating temperature range		0 to +40°C (No condensation)
Storage temperature range		-10 to +50°C
Maximum response speed		1000mm/s
Alarm		Depending on BD96
Head cable	Cable length	9m (Note 4)
	Bending radius	When stationary: 10mm
Output cable length		15m Max (Note 1) (Note 2)
Power consumption (Note 3)		Supplied from BD96
Vibration resistance		100m/s <sup>2</sup> (50 to 2000Hz)
Impact resistance		200m/s <sup>2</sup>

When using two scales or more (Measuring length: up to 6.4mm)



- Note 1: The items marked by an asterisk indicate the machining dimensions on the mounting surface.
- Note 2: The surface roughness of the scale mounting surface is Rmax = 6.3 S(250\_inch)
- Note 3: The surface roughness of the detector head mounting surface is Rmax = 12.5 S(500\_inch).
- Note 4: M refers to the machine guide (machine movement).
- Note 5: The parallelism within the 200 mm of scale mounting surface (longitudinal direction) deviates by 0.02 or less
- Note 6: When mounting the reference plate D, adjust the plate so that the parallelism between the corresponding scale abutting surface and the machine guide deviates by 0.01mm or less.

Note 1: There is a correlation between the maximum response speed and output cable length (the part beyond the interface box).  
 Note 2: A power supply line longer than 10m is incompatible with EN61000-6-2. Take surge protection on measures up on use.  
 Note 3: Satisfy the required specifications at the connector input section.  
 Note 4: Special models can support up to 3m. However, the maximum response speed is limited depending on the cable length.