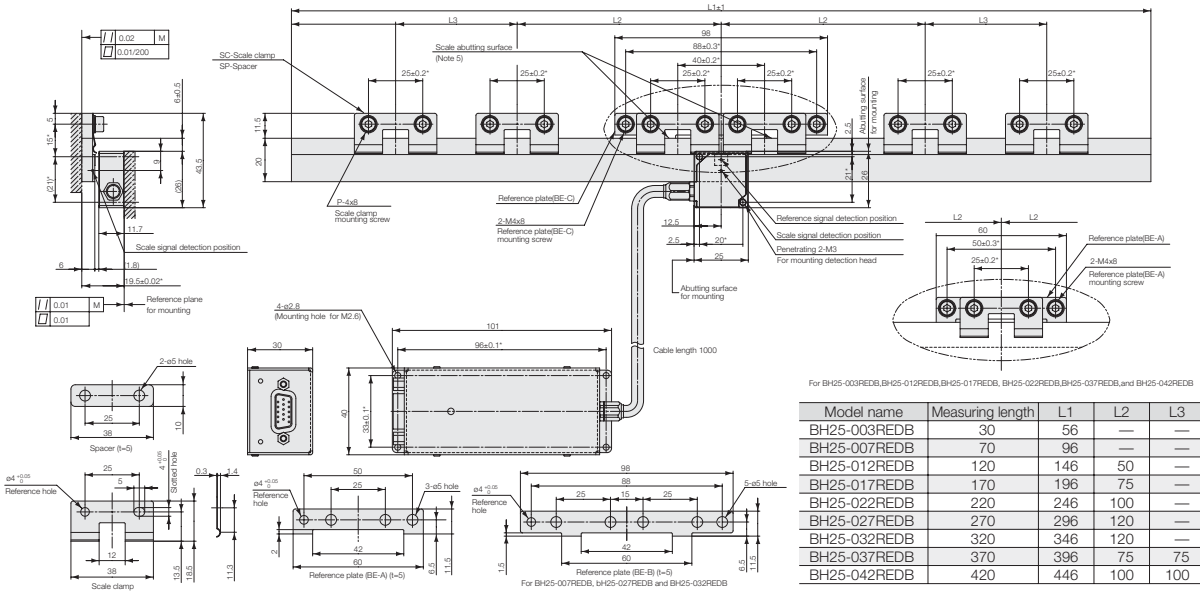
External Dimensions

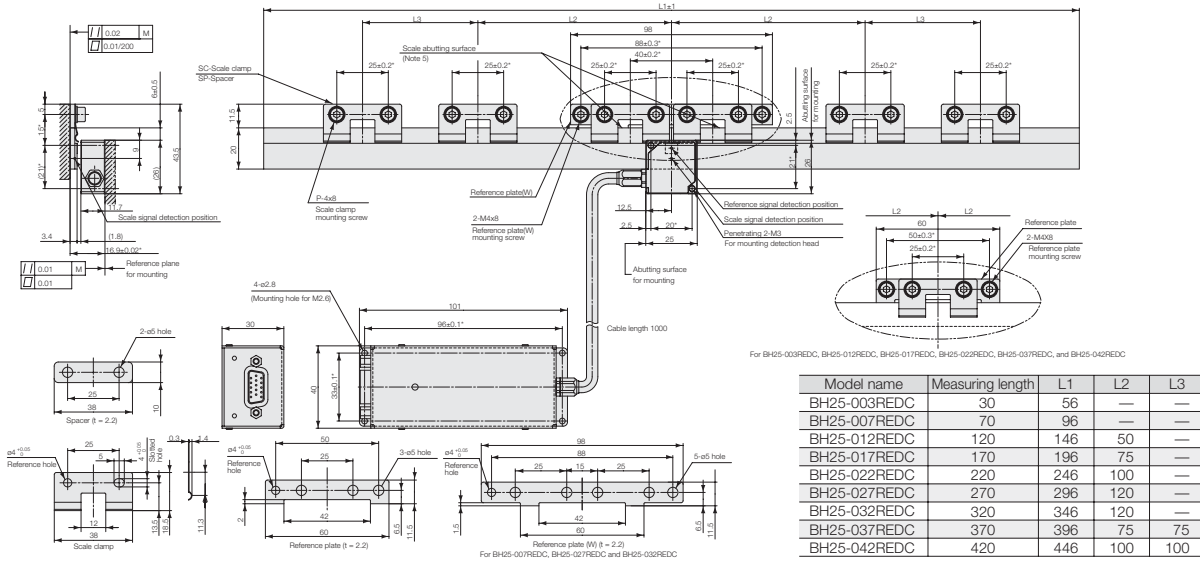
● BH25-RED BH25-***REDB



Model name	Measuring length	L1	L2	L3	SC	SP	P
BH25-003REDB	30	56	—	—	1	—	2
BH25-007REDB	70	96	—	—	2	—	4
BH25-012REDB	120	146	50	—	3	2	6
BH25-017REDB	170	196	75	—	3	2	6
BH25-022REDB	220	246	100	—	3	2	6
BH25-027REDB	270	296	120	—	4	2	8
BH25-032REDB	320	346	120	—	4	2	8
BH25-037REDB	370	396	75	75	5	4	10
BH25-042REDB	420	446	100	100	5	4	10

Notes: 1. The items marked by an asterisk indicate the machining dimensions on the mounting surface. 2. The surface roughness of the scale mounting surface is Rmax = 6.3S(250μinch).
3. The surface roughness of the detector head mounting surface is Rmax = 6.3S(250μinch). 4. "M"refers to the machine guide.
5. Mount and sdjust the paired reference plates so that their reference surfaces have a parallelism of 0.01 or less with respect to the machine guide.

● BH25-RED BH25-***REDC



Model name	Measuring length	L1	L2	L3	SC	SP	P
BH25-003REDC	30	56	—	—	1	—	2
BH25-007REDC	70	96	—	—	2	—	4
BH25-012REDC	120	146	50	—	3	2	6
BH25-017REDC	170	196	75	—	3	2	6
BH25-022REDC	220	246	100	—	3	2	6
BH25-027REDC	270	296	120	—	4	2	8
BH25-032REDC	320	346	120	—	4	2	8
BH25-037REDC	370	396	75	75	5	4	10
BH25-042REDC	420	446	100	100	5	4	10

Notes: 1. The items marked by an asterisk indicate the machining dimensions on the mounting surface. 2. The surface roughness of the scale mounting surface is Rmax = 6.3S (250μinch).
3. The surface roughness of the detector head mounting surface is Rmax = 6.3S (250μinch). 4. "M"refers to the machine guide.
5. Mount and sdjust the paired reference plates so that their reference surfaces have a parallelism of 0.01 or less with respect to the machine guide.

Unit: mm

Main specifications

Model	BH25-RED	BH25-NED
Measuring length (mm)	30/70/120/170/220/270/320/370/420 (Low expansion glass/Blue plate glass)	
Entire scale length	Measuring length +26mm	
Maximum travel length	Measuring length +10mm	
Accuracy (at 20℃)	±0.5μm (30 to 170mm) ±1.0μm (220 to 420mm)	
Grating pitch	1.0μm	
Signal pitch	250nm	
Zero point	With zero point	None
Direction of starting point detection	For one	None
Output signal	A/B aspect (EIA-422 conforming) and analog output (1Vp-p) and Intarporata BD connection	
Output resolution	A/B aspect (12.5,6.25nm), analog output (250nm), and BD connection(Depend on the number of partitions.)	
Temperature coefficient	-0.7 x 10^{-6}/℃ (Low expansion glass) 8 x 10^{-6}/℃ (Blue plate glass)	
Light source	Semiconductor laser Wavelength, 780nm, Maximum output 10nw	
Detection system	Diffraction grating scanning system	
Operating temperature range	+10℃ to +30℃ (No condensation)	
Storage temperature range	-10℃ to +50℃ (Humidity less than 60%)	
Maximum response speed	700mm/s (When connected with BD96)	