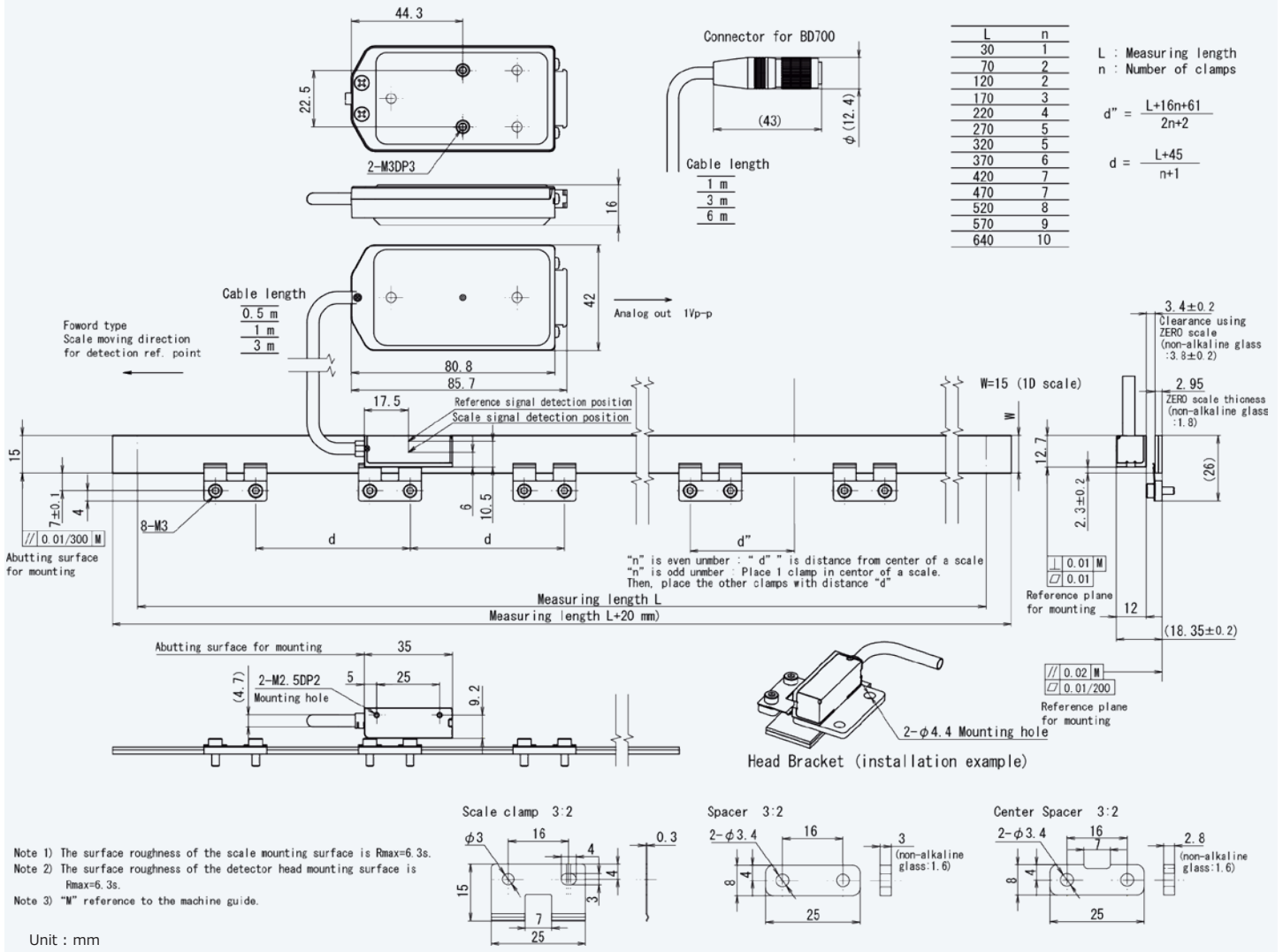


Dimensions



Specifications

Scale unit

Model name	BL50H-SZ * * * * *	BL50H-SA * * * * *
Scale material	ZERO glass $0.1 \times 10^{-6} / ^\circ C$	Alkali-free glass $3.7 \times 10^{-6} / ^\circ C$
Measuring length	30 to 640mm	
Grating pitch	1.6μm	
Reference mark	Without or with a reference point in the center	
Accuracy (at 20°C)	$\pm 0.5\mu m / 30$ to $120mm$, $\pm 1\mu m / 170$ to $270mm$, $\pm 1.5\mu m / 320$ to $370mm$, $\pm 3\mu m / 420$ to $670mm$ ($\pm 1.5\mu m$ with special specification), $\pm 5\mu m / 770$ to $970mm$ ($\pm 3\mu m$ with special specification), $\pm 5\mu m / 1070mm$, $\pm 0.2\mu m / 1070mm$ or less (with BD700 compensation)	
Interpolation accuracy	$\pm 50pm$ (with interpolator BD700)	

Head unit

Model name	BL50H-FS * * * D	BL50H-FS * * * H
Output signal	Interpolator BD700 connection (*)	Analog 1Vp-p
Signal pitch	400nm	
Maximum resolution	6.1pm	-
Maximum response speed	3m/s (5m/s with special handling)	5m/s
Clearance	ZERO glass : $3.4 \pm 0.2mm$ Alkali-free glass : $3.8 \pm 0.2mm$	
Angle tolerance	Yaw : $\pm 8.7mrad$ Pitch : $\pm 8.7mrad$ Rolling : $\pm 8.7mrad$	
Head cable length	1m, 3m, 6m	0.5m, 1m, 3m
Operating temperature	+10 to +40°C (No condensation)	

(*) : Converted to A/B phase, serial interface of various companies, and analog output by BD700 interpolator

● Magnescale reserves the right to change products and specifications without prior notice.

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