

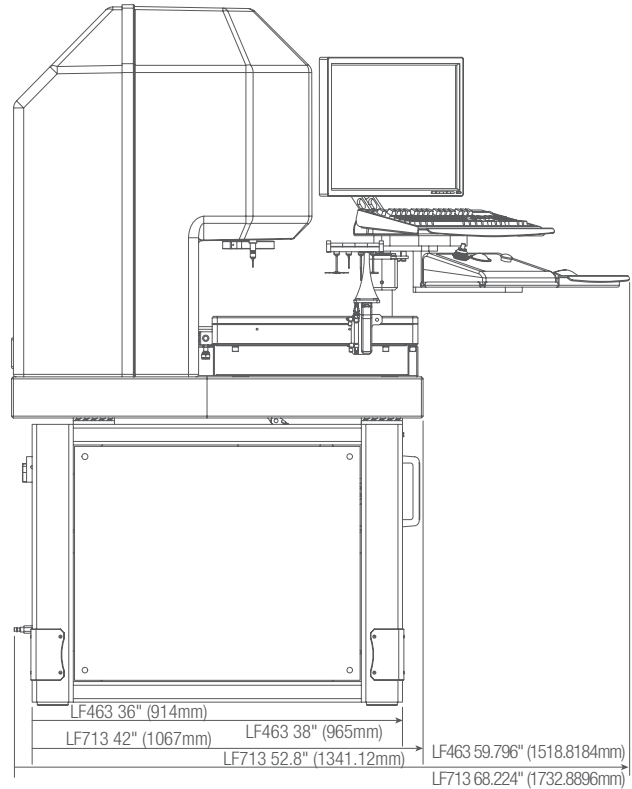
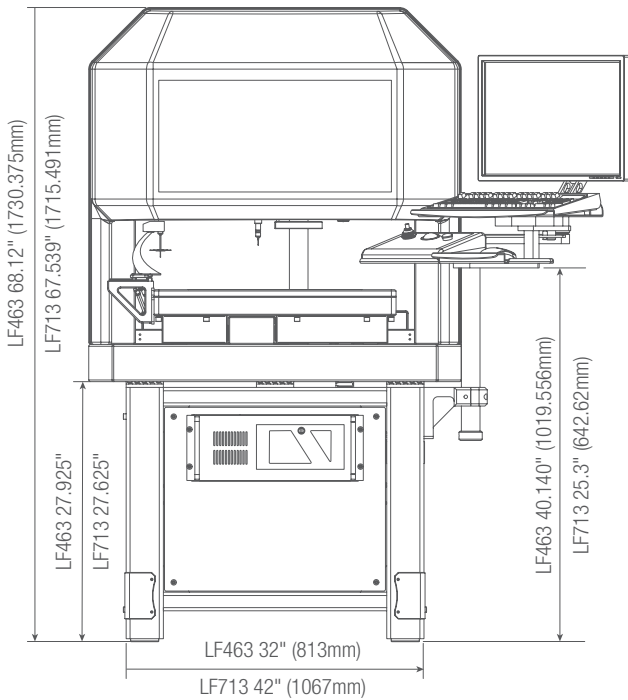
FEATURES AND SPECIFICATIONS

- Transports are driven on air bearings by hi-speed (up to 30" per second), zero maintenance, balanced linear motors, or precision mechanical linear bearings, which are close-looped to precision hi-resolution scales in all three axes
- Adjustable ergonomic workstation including a compact control panel and standard keyboard
- Massive granite base, bridge and mechanical or air-bearing ways for superior machine stability and precision
- Choice of QC5300 or MetLogix™ M3 Software or QC5000
- 21.5" monitor with QC5300 or M3 software
- LED Surface Ring Illumination
- LED Transmitted Illumination
- LED Coaxial Illumination
- Digital Video Color Camera: 1.2 MP, 1/3" SXVGA sensor

OPTIONS

- Dedicated 6.5:1 or 12:1 CNC zoom optics
- 0.5x, 1.5x and 2.0x auxiliary lenses for zoom optics
- Quadrant LED surface illumination
- DXF/FOV option for automatic comparison to CAD designs
- 24" (60cm) touch-screen monitor for M3
- CNC rotary axis fixture
- Renishaw touch probe kit
- Touch probe spotter camera for viewing critical placement of touch probe points as well as a touch probe changing rack (with QC5300)
- Calibration standards
- Part fixtures and work holding devices

LF DIMENSIONS



SPECIFICATIONS

Model	LF463†	LF713†	LFM463*	LFM713*
Dimensions (W x D x H)	40 x 40 x 68" (102 x 102 x 173cm)	50 x 64 x 68" (127 x 163 x 173cm)	40 x 40 x 68" (102 x 102 x 173cm)	50 x 64 x 68" (127 x 163 x 173cm)
Net Weight	1500lb (726kg)	2700lb (1225kg)	1500lb (726kg)	2700lb (1225kg)
Shipping Weight	2300lb (1043kg)	3600lb (1630kg)	2300lb (1043kg)	3600lb (1630kg)
Accuracy Stage X and Y	E2=2.5 + 5L/1000	E2=2.5 + 5L/1000	E2=3.5 + 5L/1000	E2=3.5 + 5L/1000
Accuracy Stage Z	E1=2.5 + 5L/1000	E1=2.5 + 5L/1000	E1=2.5 + 5L/1000	E1=2.5 + 5L/1000

† Air Bearing

* Mechanical bearing



HORIZONTAL DIGITAL VIDEO COMPARATORS

HDV

HDV300 AND HDV400

HDV300 CNC, HDV400 CNC AND HDV500 CNC

The HDV Horizontal Digital Video Comparators combine the best features of a horizontal optical comparator and a vision metrology system. With a rigid steel design, they are configured like a traditional horizontal comparator. The workstage is the same as the Starrett field-proven comparators. The heart of the HDV system centers on a uniquely designed interchangeable lens mounting system coupled to a hi-resolution 5 mega-pixel digital video camera. The system is available with a choice of seven telecentric lenses for micron-level resolution and optical distortion as low as 0.001% for accurate field-of-view (FOV) measurements. With MetLogix™ M3 software DXF CAD files can be imported and 2D Go/No-Go digital overlays can be developed directly from the CAD files. Video edge detection (VED) allows real-time interaction of the imported file with the video image of the part being inspected. Productivity, speed and accuracy are all enhanced. Systems are available in manual or CNC control.

HDV300/400 OPTICS

System Parameter	Telecentric Lenses							6.5:1 Zoom Lens	
	0.14x	0.30x	0.50x	0.80x	1.0x	2.0x	4.0x	0.7x	4.5x
Optical magnification	0.14x	0.30x	0.50x	0.80x	1.0x	2.0x	4.0x	0.7x	4.5x
Magnification on 24" monitor	8.6x	18.5x	21x	49x	62x	124x	247x	58x	363x
Field of view width	2.36" (63mm)	1.14" (29mm)	.59" (15mm)	.43" (11mm)	.35" (9mm)	.18" (4.3mm)	.09" (2.3mm)	.4" (11mm)	.05" (1.5mm)
Field of view height	2.0" (51mm)	0.94" (24mm)	0.56" (14mm)	0.35" (8.9mm)	0.28" (7.1mm)	0.14" (3.7mm)	0.07" (1.8mm)	0.40" (10.1mm)	0.62" (15.6mm)
Working distance	4.3" (110mm)	4.3" (110mm)	4.3" (110mm)	4.3" (110mm)	4.3" (110mm)	4.3" (110mm)	4.3" (110mm)	3.4" (88mm)	3.4" (88mm)
Optical Distortion, %	0.001	0.001	0.002	0.002	0.005	0.005	0.006	N/A	N/A

OPERATOR INTERFACE

Feature	MetLogix™ M3
PC installed in main housing	x
24" color graphics touch screen	x
Windows®-based operating system	x
X-Y-Q (angle) measurements	x
2D geometry software with skew	x
Video edge detection	x
CAD file import and export	x
FOV measurements	x
Elimination of overlays	x
64-bit Intel® processor	x
Software developer	MetLogix™

