

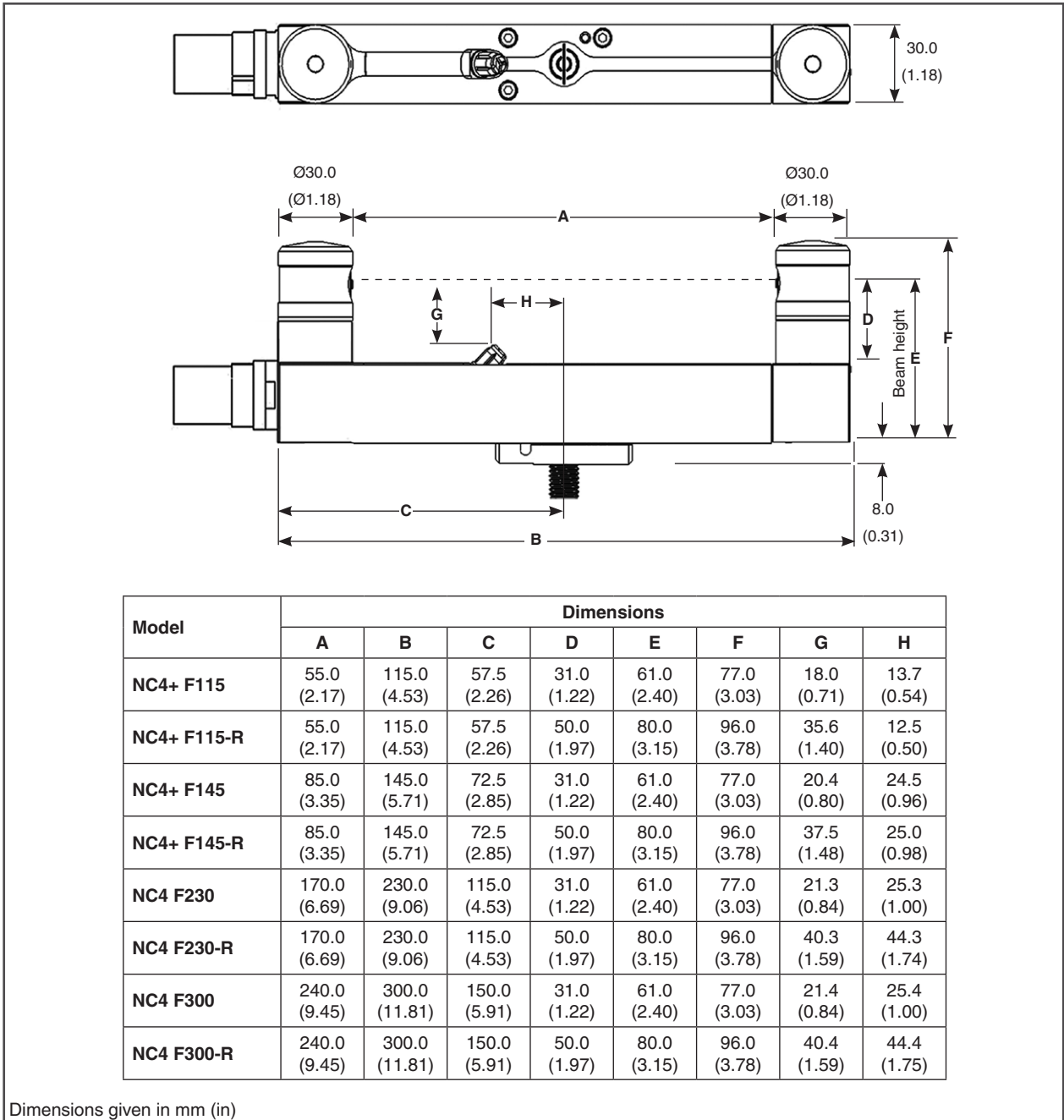
# NC4 non-contact tool setting range



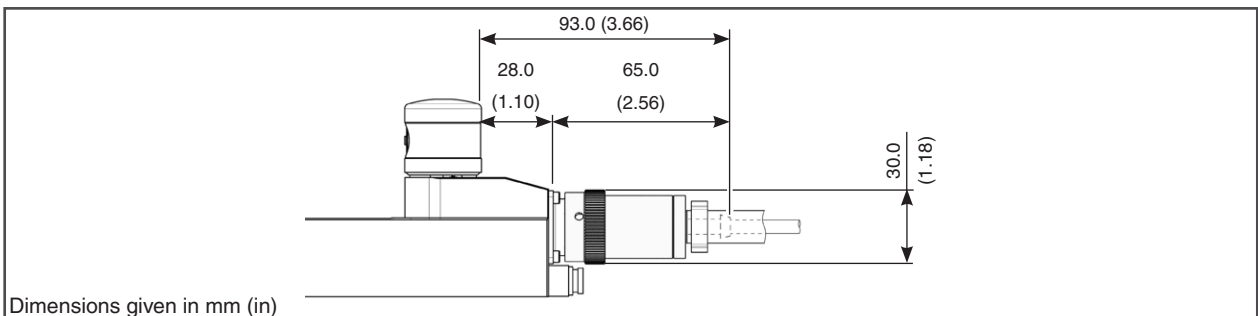
## Specification

<b>Principal application</b>	High-precision, high-speed non-contact tool setting and tool breakage detection on all sizes of vertical and horizontal machining centres, multi-tasking machines and gantry machining centres.	
<b>Transmission type</b>	Hard-wired transmission	
<b>Compatible interfaces</b>	NCi-6	
<b>Repeatability</b>	±1.0 µm (39.37 µin) 2σ	
<b>Output signal</b> (from interface unit)	Two voltage-free, solid-state relays (SSR). Each can be either normally open or normally closed (selectable via a switch). Current (maximum) 50 mA, voltage (maximum) ±50 V. The interface contains an auxiliary relay which can be used for switching the output between the NC4 and a spindle probe. This relay can also be used to control an air blast solenoid (optional).	
<b>Supply voltage</b> (to interface)	11 Vdc to 30 Vdc	
<b>Supply current</b> (to interface)	120 mA @ 12 Vdc, 70 mA @ 24 Vdc	
<b>Supply protection</b>	Resettable fuses in interface. Reset by removing power and cause of fault.	
<b>Electrical connection arrangement</b>	<b>Systems with connector:</b> Connector socket. <b>Hard-wired systems:</b> Cable on the end of the unit. Other configurations are available on request.	
<b>Cable</b> (to interface)	<b>Specification</b>	Ø6.0 mm (0.24 in), two twisted pairs, two individual cores plus screen, each core 18 × 0.1 mm insulated.
	<b>Length</b>	12.5 m (41.01 ft)
	<b>Electrical connection</b>	<b>Systems with connector:</b> cable with bayonet-type plug, connector socket on the end of the unit <b>Hard-wired systems:</b> cable on the end of the unit. Other configurations are available on request
<b>NC4 barrier air pneumatic supply</b>	Air supply to the NC4 must conform to BS ISO 8573-1: 2010 Class 1.4.2. 6.0 bar (87.02 psi) maximum. <b>Systems with connector:</b> Ø4.0 mm (0.16 in) × 5.0 m (16.40 ft). <b>Hard-wired systems:</b> Ø3.0 mm (0.12 in) × 5.0 m (16.40 ft).	
<b>Air blast pneumatic supply</b>	Air supply to the air blast must conform to BS ISO 8573-1: 2010 Class 2.9.4. Ø6.0 mm (0.24 in) air pipe × 5.0 m (16.40 ft), 6.0 bar (87.02 psi) maximum.	
<b>Laser type</b>	Class 2 laser product: 1 mW maximum output emitted wavelength 670 nm.  <b>WARNING:</b> Laser radiation. Do not stare into beam.	
<b>Laser beam alignment</b>	The unit is supplied with an adjustable mounting plate on the underside.	
<b>Weight</b> (including 12.5 m (41.01 ft) of cable)	1080 g (2.38 lb) to 2000 g (4.4 lb) depending on configuration.	
<b>Mounting</b>	M4 (× 3), M10 (3/8 in) or M12 (½ in) bolts for mounting via adjuster plate (not supplied). Other fixing arrangements are available on request.	
<b>Environment</b>	<b>IP rating</b>	IPX6 and IPX8, BS EN 60529:1992+A2:2013 (IEC 60529:1989+A1:1999+A2:2013)
	<b>Storage temperature</b>	-25 °C to +70 °C (-13 °F to +158 °F)
	<b>Operating temperature</b>	+5 °C to +55 °C (+41 °F to +131 °F)

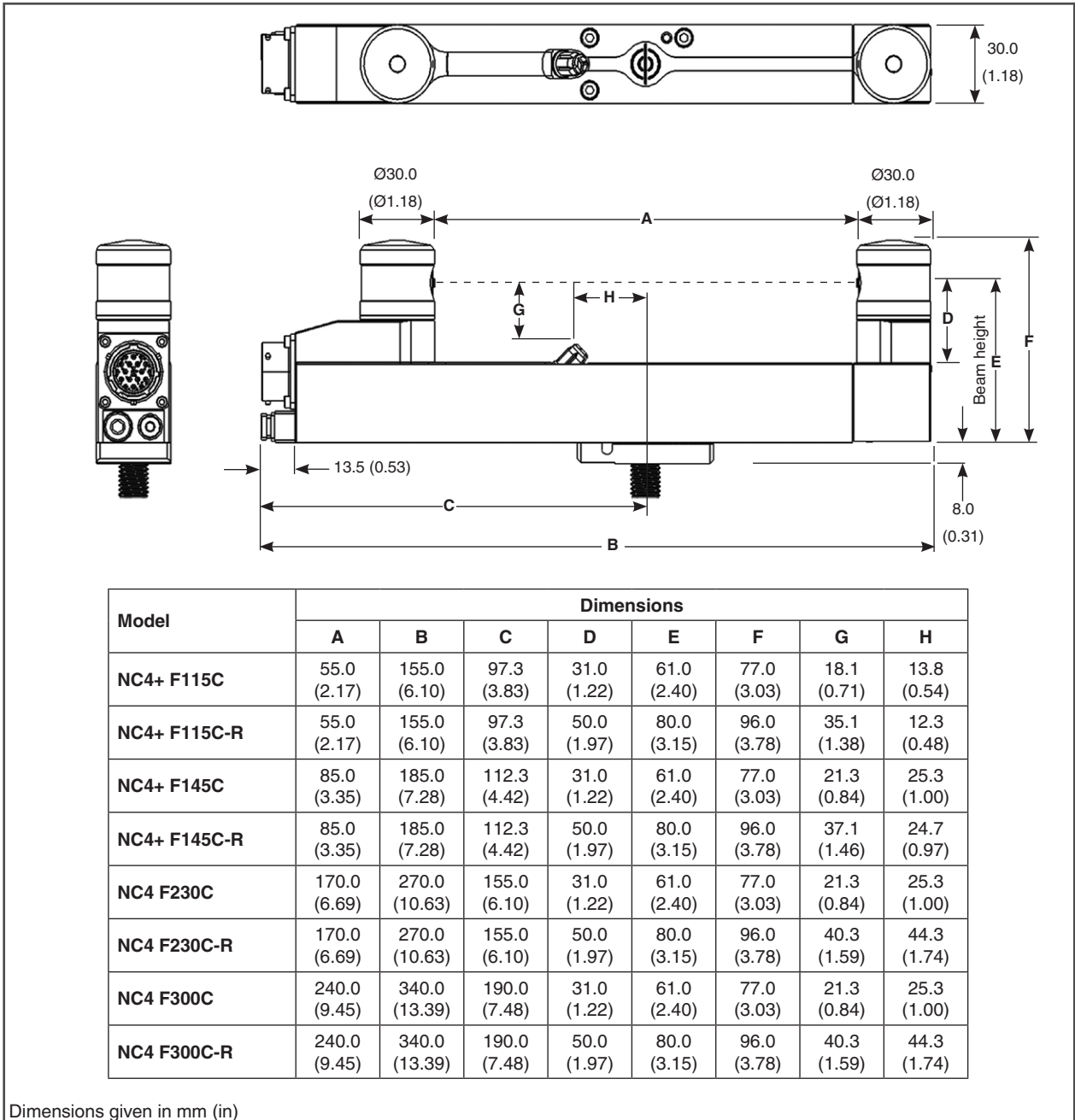
## NC4 hard-wired system dimensions



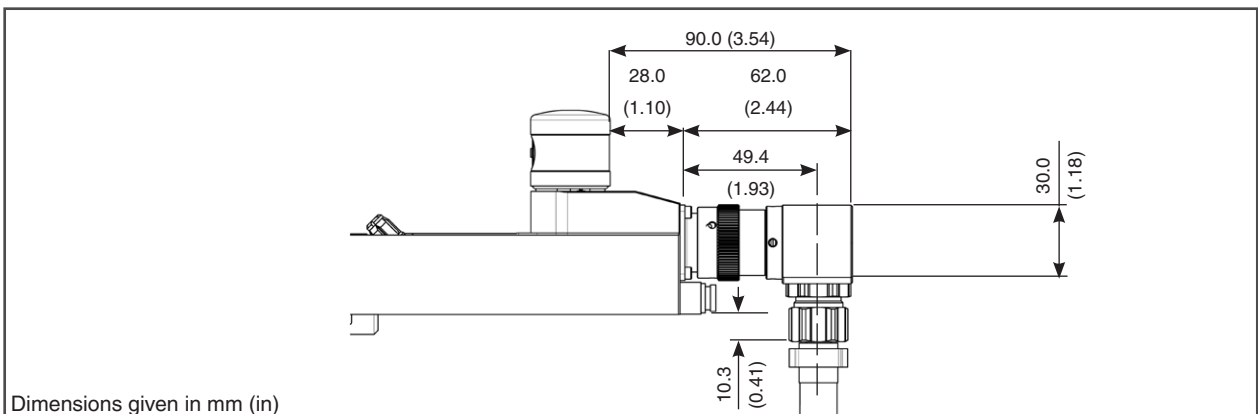
## NC4 straight connector dimensions



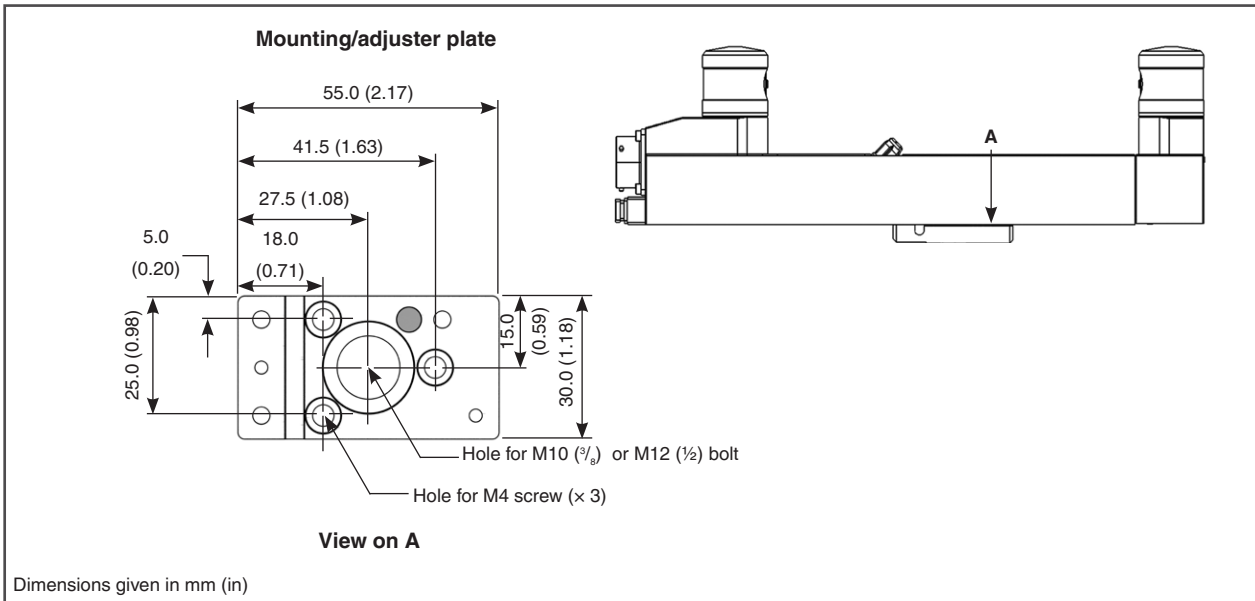
## NC4 system with connector dimensions



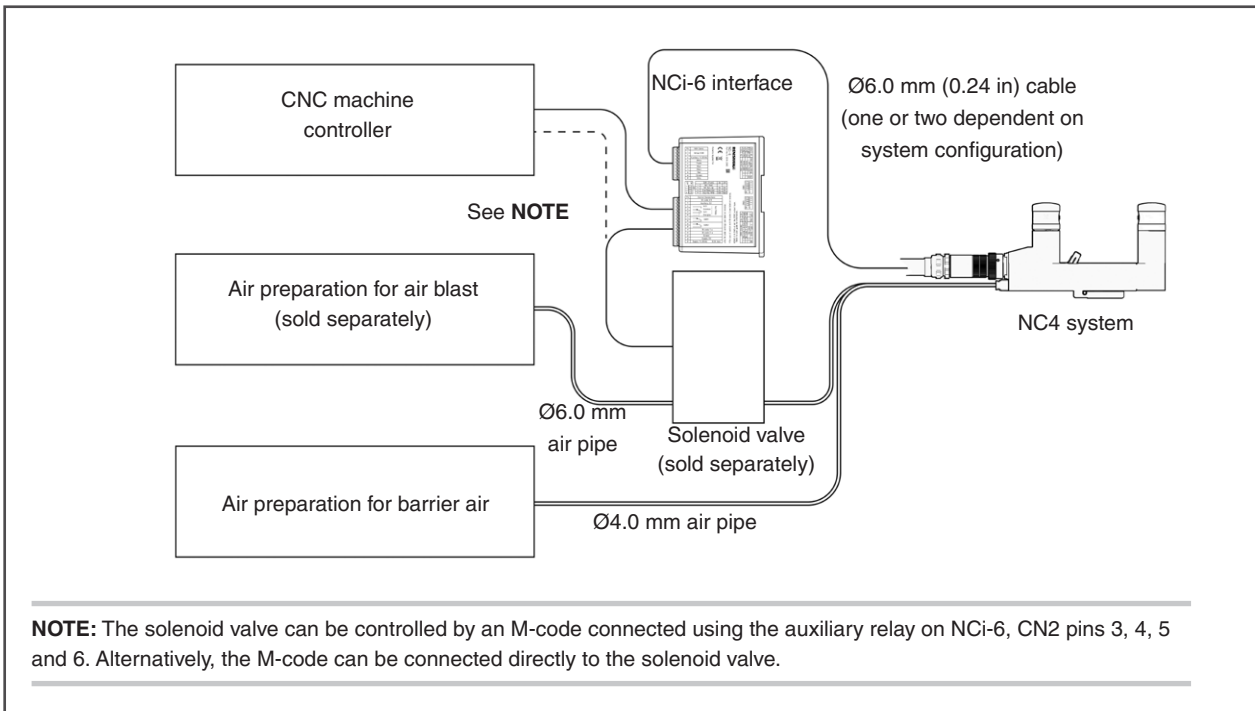
## NC4 90° connector dimensions



## NC4 adjuster plate mounting and dimensions



## Electro-pneumatic integration



## Spare parts and accessories

A full range of spare parts and accessories is available. Contact Renishaw for a full list.

[www.renishaw.com/nc4](http://www.renishaw.com/nc4)

#renishaw

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