

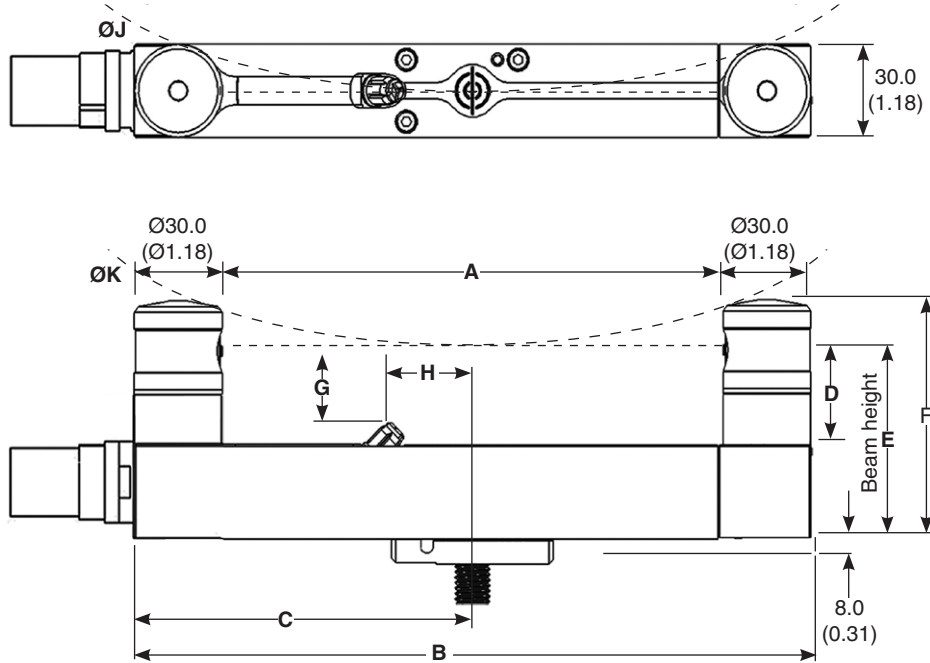
NC4 non-contact tool setting range



Specification

Principal application	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.	
Transmission type	Hard-wired transmission	
Compatible interfaces	NCi-6	
Repeatability	±1.0 µm (39.37 µin) 2σ	
Output signal (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).	
Supply voltage (to interface)	11 Vdc to 30 Vdc	
Supply current (to interface)	120 mA @ 12 Vdc, 70 mA @ 24 Vdc	
Supply protection	Resettable fuses in interface. Reset by removing power and cause of fault.	
Electrical connection arrangement	Cable on the end of the unit. Other configurations are available on request.	
Cable (to interface)	Specification	Ø6.0 mm (0.24 in), two twisted pairs, two individual cores plus screen, each core 18 × 0.1 mm insulated.
	Length	12.5 m (41.01 ft)
	Electrical connection	Cable on the end of the unit. Other configurations are available on request.
NC4 barrier air pneumatic supply	Air supply to the NC4 must conform to BS ISO 8573-1: 2010 Class 1.4.2. 6.0 bar (87.02 psi) maximum. Ø3.0 mm (0.12 in) × 5.0 m (16.40 ft).	
Air blast pneumatic supply	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.	
Laser type	Class 2 laser product: 1 mW maximum output emitted wavelength 670 nm. WARNING: Laser radiation. Do not stare into beam.	
Laser beam alignment	The unit is supplied with an adjustable mounting plate on the underside.	
Weight (including 12.5 m (41.01 ft) of cable)	1080 g (2.38 lb) to 2000 g (4.4 lb) depending on configuration.	
Mounting	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.	
Environment	IP rating	IPX6 and IPX8, BS EN 60529:1992+A2:2013 (IEC 60529:1989+A1:1999+A2:2013)
	Storage temperature	-25 °C to +70 °C (-13 °F to +158 °F)
	Operating temperature	+5 °C to +55 °C (+41 °F to +131 °F)

NC4 unit dimensions

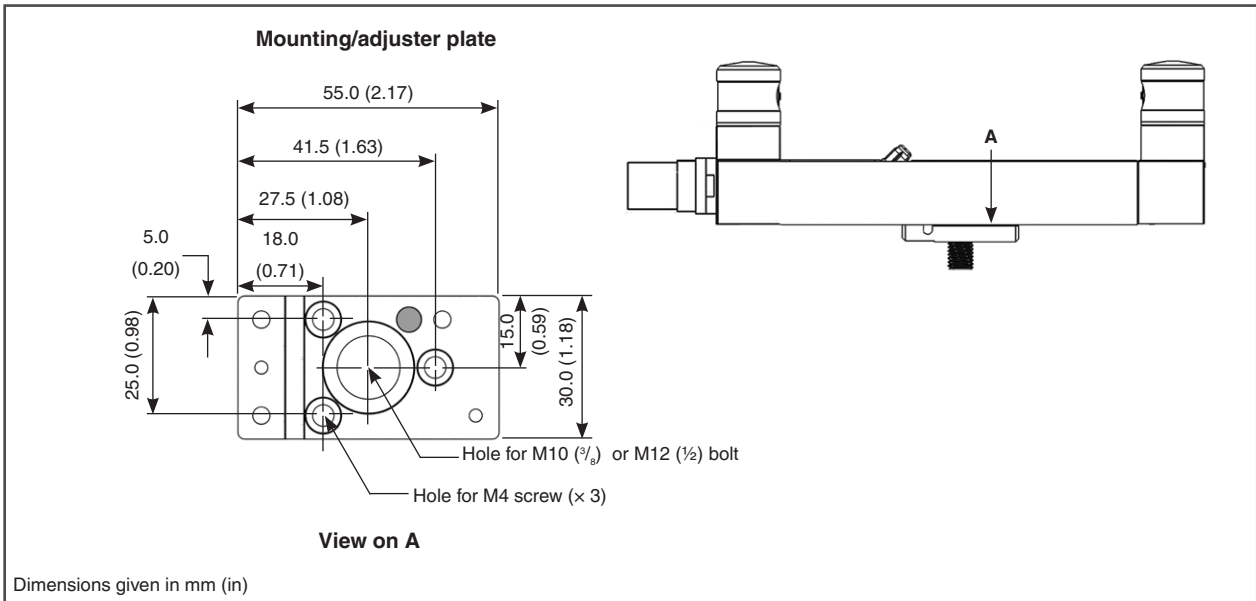


Dimensions given in mm (in)

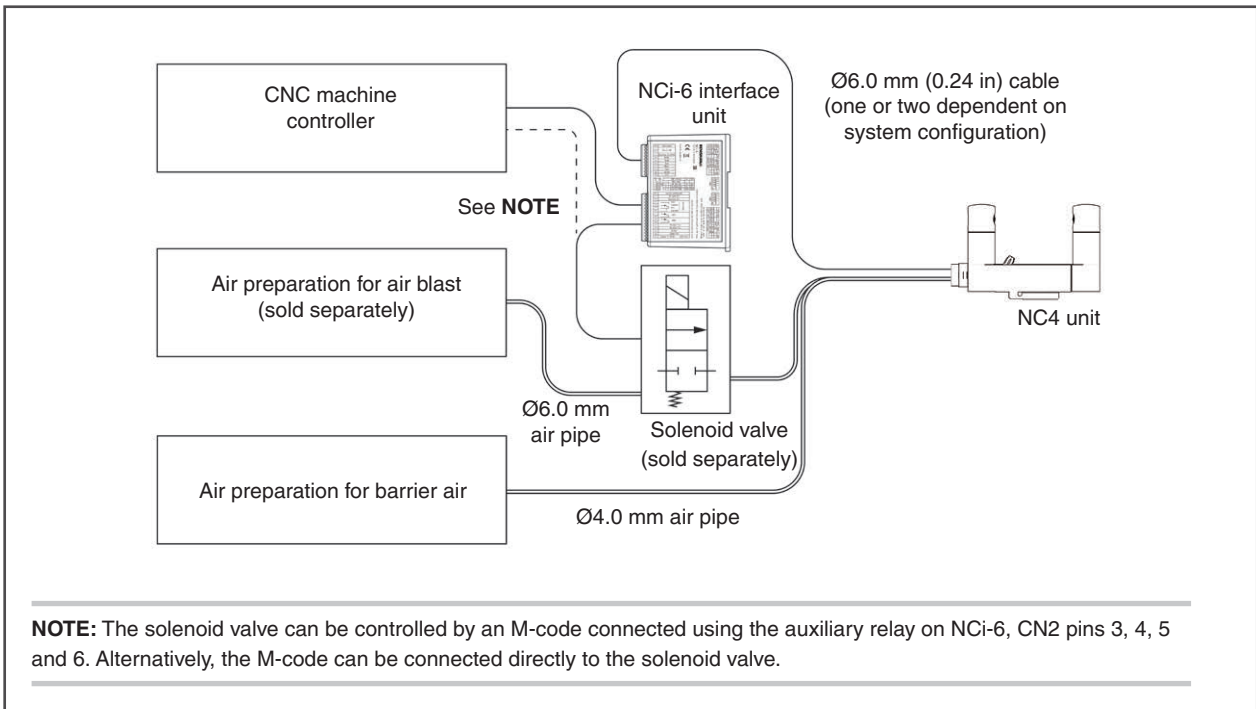
Model	Dimensions									
	A	B	C	D	E	F	G	H	ØJ	ØK
NC4+ F115	55.0 (2.17)	115.0 (4.53)	57.5 (2.26)	31.0 (1.22)	61.0 (2.40)	77.0 (3.03)	18.0 (0.71)	13.7 (0.54)	105.0 (4.13)	70.0 (2.76)
NC4+ F115-R	55.0 (2.17)	115.0 (4.53)	57.5 (2.26)	50.0 (1.97)	80.0 (3.15)	96.0 (3.78)	35.6 (1.40)	12.5 (0.50)	105.0 (4.13)	70.0 (2.76)
NC4+ F145	85.0 (3.35)	145.0 (5.71)	72.5 (2.85)	31.0 (1.22)	61.0 (2.40)	77.0 (3.03)	20.4 (0.80)	24.5 (0.96)	205.0 (8.07)	147.0 (5.79)
NC4+ F145-R	85.0 (3.35)	145.0 (5.71)	72.5 (2.85)	50.0 (1.97)	80.0 (3.15)	96.0 (3.78)	37.5 (1.48)	25.0 (0.98)	205.0 (8.07)	147.0 (5.79)
NC4 F230	170.0 (6.69)	230.0 (9.06)	115.0 (4.53)	31.0 (1.22)	61.0 (2.40)	77.0 (3.03)	21.3 (0.84)	25.3 (1.00)	652.0 (25.67)	535.0 (21.06)
NC4 F230-R	170.0 (6.69)	230.0 (9.06)	115.0 (4.53)	50.0 (1.97)	80.0 (3.15)	96.0 (3.78)	40.3 (1.59)	44.3 (1.74)	652.0 (25.67)	535.0 (21.06)
NC4 F300	240.0 (9.45)	300.0 (11.81)	150.0 (5.91)	31.0 (1.22)	61.0 (2.40)	77.0 (3.03)	21.4 (0.84)	25.4 (1.00)	1200.0 (47.24)	1043.0 (41.06)
NC4 F300-R	240.0 (9.45)	300.0 (11.81)	150.0 (5.91)	50.0 (1.97)	80.0 (3.15)	96.0 (3.78)	40.4 (1.59)	44.4 (1.75)	1200.0 (47.24)	1043.0 (41.06)

Dimensions given in mm (in)

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/contact

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