

APCA-45

APCS-45



Variant	APCA	Air extension and air retraction
	APCS	Air extension and spring retraction
Principal application	Tool setting probe with automatic protection cover for lathes and multi-tasking machines. Contamination management available with air bleed.	
Transmission type	Hard-wired transmission	
Compatible interfaces	HSI or HSI-C	
Weight	1200 g (42.33 oz) with 0.5 m (1.64 ft) cable and connector.	
Cable	0.5 m (1.6 ft) minimum, M12 connector IEC 61076-2-101. A-standard male (see note 1).	
Sense directions	±X, ±Y, +Z	
Unidirectional repeatability	1.50 µm (59 µin) 2σ (see note 2)	
Stylus trigger force (see note 3)	XY plane (low force)	0.49 N, 50.25 gf (1.77 ozf)
	XY plane (high force)	0.90 N, 92.21 gf (3.25 ozf)
	+Z direction	6.79 N, 692.88 gf (24.44 ozf)
Supply voltage	12 Vdc to 30 Vdc	
Supply current	HSI	40 mA @ 12 Vdc, 23 mA @ 24 Vdc
	HSI-C	110 mA @ 12 Vdc, 80 mA @ 24 Vdc
Pneumatic supply	Supply must conform to BS ISO 8573-1: Class 4.6.3. Maximum operating pressure 6.5 bar (94.27 psi), minimum operating pressure 4.5 bar (65.27 psi).	
Input pneumatic connections	Three push fit fittings for Ø4 mm (0.16 in) tubing (ISO/TS 11619:2014). Extend, Retract and Air blast stalk (see note 4).	
Output connection	Blanked DIN EN ISO 228-G 1/8 outlet for customer configurable "air blast stalk".	
Mounting	M4 × 50 mm (1.97 in) long (ISO 4762 grade 12.9) or equivalent × 4	
Retract confirm sensor	Operating voltage 12 Vdc to 30 Vdc, no load current 3 mA, rated operating current 150 mA, output resistance open collector, switching output PNP normally open (NO). When the cover is extended, the output is LOW. When the cover is retracted it is HIGH. (12 Vdc to 30 Vdc).	
Sealing	IPX6 and IPX8, BS EN 60529:1992+A2:2013 (IEC 60529:1989+A1:1999+A2:2013) Connector sealed to IP67 when mated	
Storage temperature	-25 °C to +70 °C (-13 °F to +158 °F)	
Operating temperature	+5 °C to +55 °C (+41 °F to +131 °F)	

Note 1 When wiring the APC to the machine control the installer should ensure the screen is connected.

Note 2 Performance specification is tested at a standard test velocity of 480 mm/min (18.9 in/min). Significantly higher velocity is possible depending on application requirements.

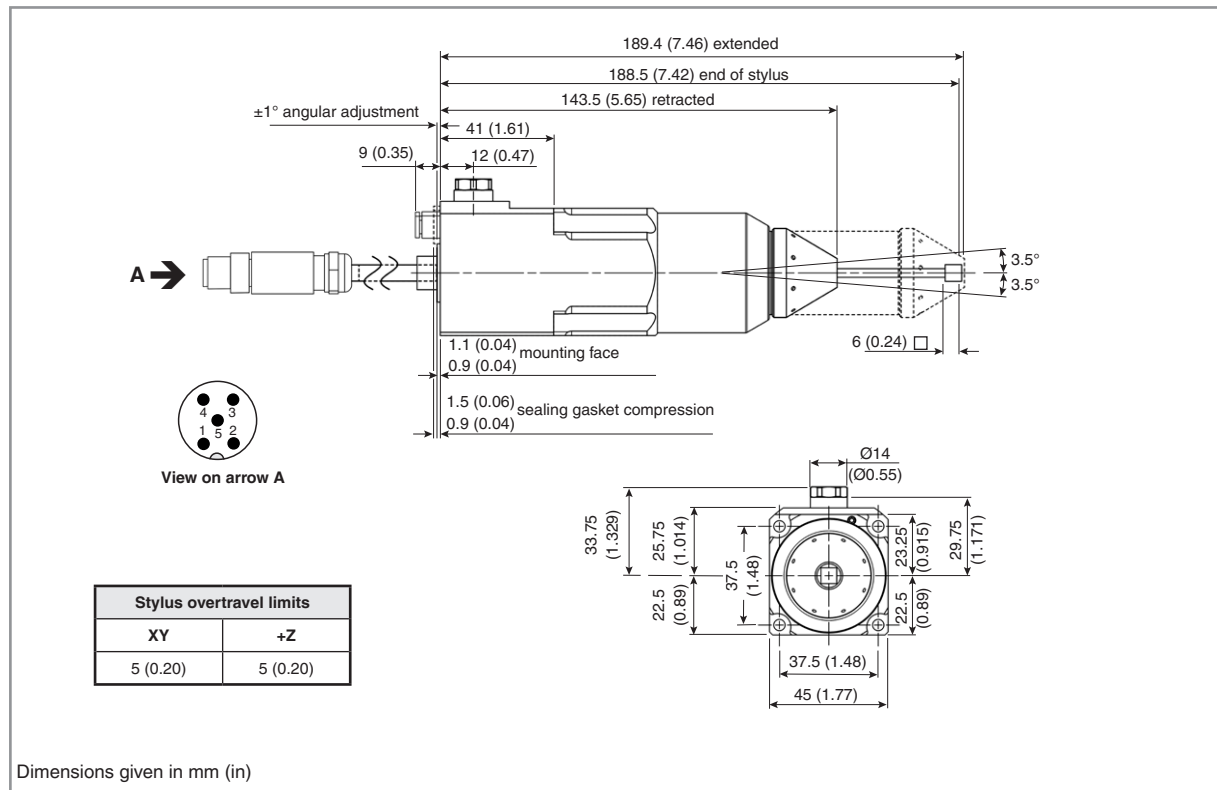
Note 3 Using a 60 mm stylus.

Note 4 Connections:

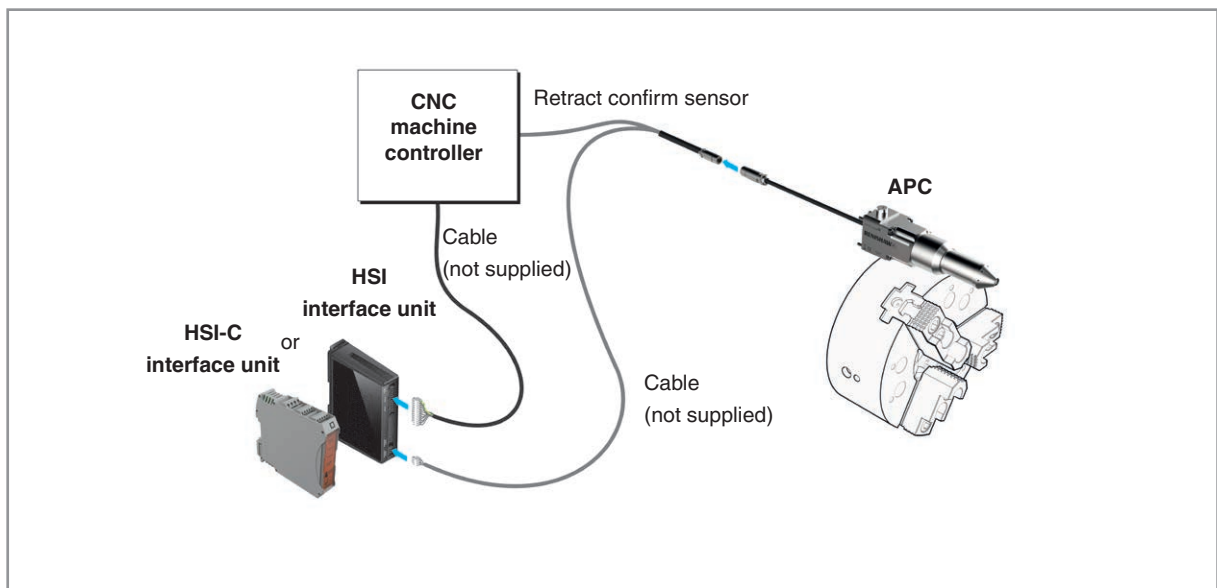
Product	Port 1	Port 2 (see note 5)	Port 3
APCA with or without "air bleed"	Retract and "air bleed"	Air blast	Extend
APCS	Exhaust	Air blast	Extend
APCS with "air bleed"	"Air bleed"	Air blast	Extend

Note 5 Can be configured by customer to provide air blast functionality.

APC dimensions



Typical installation



Spare parts and accessories

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

For worldwide contact details, please visit our main website at www.renishaw.com/contact

