

Air Actuator Insert– interchangeable actuation



TGC-AIM-XX

Designed with an eye for flexible actuation

- The Air Actuator Insert carries fast compressed air operated actuator.
- Features numerous combinatoric assemblies accomplishments.
- Hand-only – no tools required to mount/remove of the actuator insert
- POKEJOKE – meaning it simply clicks in-place

Light weight – though robust and resistant

- The careful material selection features an extraordinary light weight, servicing high dynamic of pick and place operations not affected by heavy dead-weight of the gripper nor gripper attachment elements. Still the design and materials are selectively chosen to accommodate the required mechanical durability and resistance to environment impact in terms of temperature, humidity UV light and chemical hostility.

Future expansion ready – combinatoric freedom

- The Actuator Insert element is locked down from an interface design perspective so you can earn on the benefits of our future expansion of the portfolio of both grippers and actuator options.

Compact – featuring tight fit requirements

- The four-bladed Mounting Rig inherits a universal mechanical interface that secures the actuator insert in correct assembly position, and has a vertical enclosed cylindrical cavity space the surround the insert. The connections of the air-hose are openly exposed for easy access.

Stream cleaning option

- The Quick-connect fittings (that includes contra valve balls in the two connectors fixed to the cylinder) lets you avoid dust and moist getting into the cylinder during cleaning, even stream / autoclaving cleaning.

Features



Optional Quick-m/f connectors with contra-valve sealing while dismantled.



The insert is topologically optimized for durability of repetitive dynamic load from actuations and static stiffness while obtaining minimum mass.



Actuator Insert element fixing structure has self-alignment and click-lock interface. Note the insert has an extended knob that matches the gob/slid interface. This serves to give an easy (poke joke) assembly process, so when the blades are spread by pushing the insert in from below, the guides leads the way while pushing it further up until the tensioned blades will clamp-in and the insert reaches the interfacing structure. [LINK VIDEO](#)



Slim-fit design to serve tight-fit pick and place operations.



Resist highly aggressive cleaning agents. Including chloride solution. For further information [LINK](#)



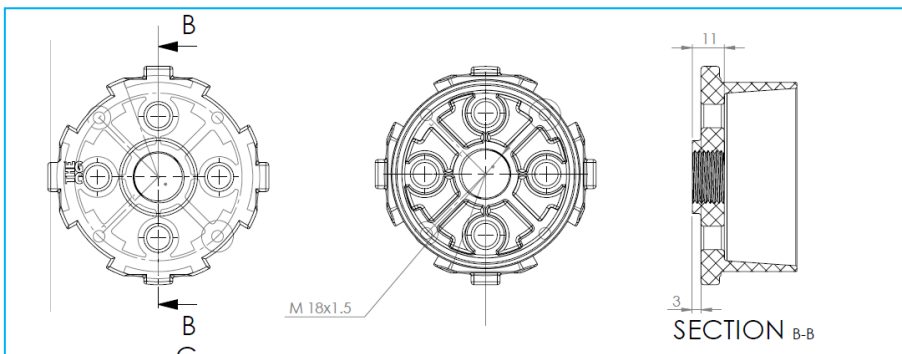
TGC-AIM-XX

SKU	color	Weight	Material (See table)	Chemical resistance	Actuator spec	recyclable	Food Grade
TGC-AIM- AIR-S30	Light beige	143g 38g + actuator	Reinforce PU	yes ¹⁾	See TGC-AIR-S30	Yes	Yes ²⁾

Accessories

SKU	Items	Performance	Material	Weight	Quantity Per Pack	Drive system	Release
TGC-AIR-S25	Compressed Cylinder	Air Air Cylinder Stroke 25mm Max. force 120N ³⁾ Pull/push time <30ms Air consumption ⁴⁾ 0.002 NI/operation	Anodized ANSI 316 Silicone sealed contra valve push-in connectors	Alu-SS 110g	1	Solenoid Valve for compressed air	aug. 2020

- 1) [Chemical Resistance Table](#)
- 2) [Food Compliance US](#) , [Food compliance EU](#) , Wash Down IP65/IP69K, for futher info on the attached cylinder by [SMC pneumatics](#)
- 3) @6 bar
- 4) Link air consumption calc.
- 5) Longitunal /cross axial



Material technical overview (PU actuator insert adaptor)

Shore D Hardness	70
Ultimate Tensile,	35.8 MPa
Tensile Modulus	1006 MPa
Elongation @ Break	4%
Flexural Strength,	42.7 MPa
Flexural Modulus	1258 MPa
Compressive Strength	38.4 MPa
Heat Deflection Temp	72 °C
Compressive Modulus	44.8 MPa