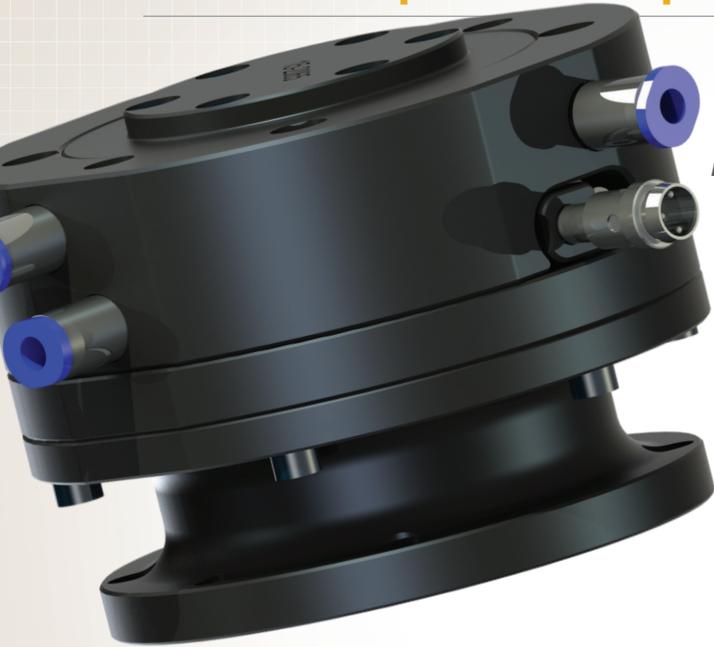


LCC L1-063

Lateral Compliance Compensator



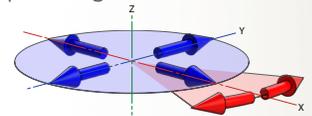
L1-063 Lateral Compliance Compensator
features X-Y Lateral and Z Rotation

Product Description

The L1-063 Lateral Compliance Compensator (LCC) is for use in automated assembly, loading and unloading machines, and more. This unique compensation device allows pieces to be gripped or routed reliably even if the workpiece is severely misaligned. The LCC is designed for high endurance and high repeatability.

Product Features

Unique Compliance: Patent pending mechanism allows for X-Y lateral compliance and Z rotational compliance.



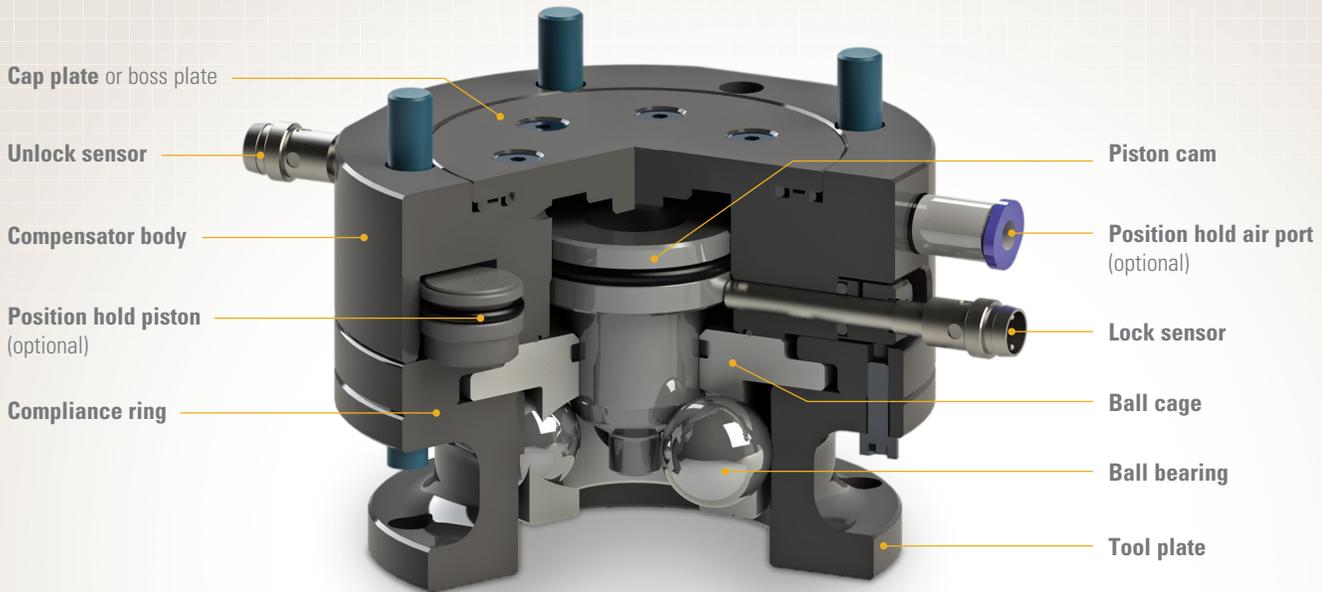
Direct Mounting: Compact body with ISO robot flange pattern directly mounts to most robot wrists.

Positional Lock Option: Apply air pressure to lock the device in centered or offset positions.

Robust Performance: When locked, the unit allows for high moment loads in a compact work envelope.

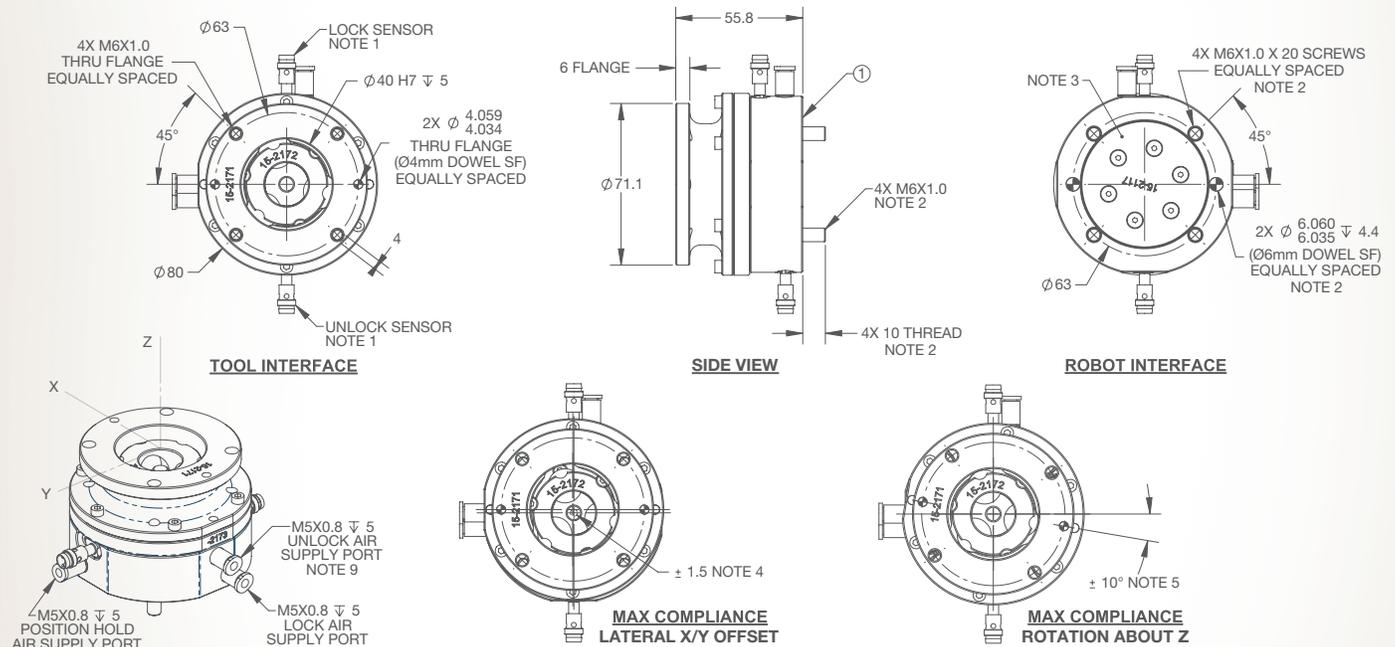
Specifications	Values	Comments
Lateral Compliance	± 0.06 in (1.5 mm)	The unit complies laterally about the X-Y plane and rotationally about the Z axis simultaneously.
Rotational Compliance	±10 degrees	
Re-Center, Max Vertical Payload	66 lb (30 kg)	Maximum weight the unit can re-center vertically.
Re-Center, Max Horizontal Payload	20 lb (9 kg) offset 4 in (100 mm)	Maximum weight the unit can re-center horizontally.
Re-Center, Max Moment (X-Y)	54 lbf-in (6.1 Nm)	The maximum torque the unit can re-center.
Re-Center, Max Moment (Z)	9 lbf-in (1 Nm)	The maximum torque the unit can re-center.
Locked Stiffness at Max Static Moment (X-Y)	± 0.1 degrees at ± 1000 lbf-in (110 Nm)	The stiffness accounts for the freeplay and additional linear (elastic) deflection under the maximum rating.
Locked Stiffness at Max Static Moment (Z)	± 0.1 degrees at ± 75 lbf-in (8.5 Nm)	
Position Hold, Max Lateral Force	10 lbf (44 N)	Maximum lateral force the unit can withstand in a Position Hold state (if equipped).
Weight	2 lb (0.9 kg)	The mass of the unit without the sensors.
Nominal Operating Pressure	80 psi (5.5 bar)	The recommended supply pressure.
Positional Repeatability at Tool Interface	± 0.001 in (0.025 mm)	Measured in the unloaded condition after one million cycles at the rated load.
Rated Life	One million cycles	The life value assigned to a serviceable part, refer to Manual 9610-15-1005.
Sensing Option	PNP or NPN Lock and Unlock	

ATI reserves the right to change these specifications.



L1-063 Lateral Compliance Compensator

Drawing # 9630-15-L1A-063-2070-02



NOTES:

1. CONFIGURED WITH OPTIONAL PNP LOCK & UNLOCK SENSORS WITH PICO M8 LED QUICK CONNECTORS. OTHER SENSOR OPTIONS AVAILABLE.
2. MOUNTING SCREWS FOR ROBOT INTERFACE ARE PROVIDED. DOWEL PINS ARE NOT PROVIDED. MOUNTING SCREWS ARE CLASS 8.8 LOW-HEAD SOCKET CAP SCREWS AND REMAIN CAPTIVE IN THE ASSEMBLY. ACCESS WITH 4mm HEX TOOL THROUGH TAPPED HOLES ON TOOL PLATE INTERFACE.
3. OPTIONAL BOSS PLATES AVAILABLE.



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