

ChamberLink™



The
Vacuum
Servo
Actuator
That
Operates
With No
Shaft
Seals.

INTRODUCING the ChamberLink combination feedthrough and actuator. This new servo-powered, deep-vacuum rotary feedthrough delivers precise rotary motion into a vacuum chamber without any shaft seals – or leaks. The ChamberLink's servo motor and all input elements operate on the ambient side of the chamber wall, while the speed-reduced and torque-multiplied output shaft turns in the vacuum. This single unit, with its solid, direct connection, is built to last a long time.

It's the kind of innovation customers have come to expect from Harmonic Drive Technologies, the oldest and one of the world's leading manufacturers of harmonic drive gearheads, component gear sets, and complete harmonic drive actuators. Harmonic Drive supplies standard and custom harmonic drive motion control products designed to minimize space while offering both high load and long life. We are dedicated to developing and manufacturing products that are lighter, smaller and stronger.

In the near future, in order to meet the specific, unique needs of our customers, Harmonic Drive will be introducing a complete series of vacuum servo actuators. The ChamberLink is just the beginning!



ChamberLink™ Configurator

ChamberLink HHA-10

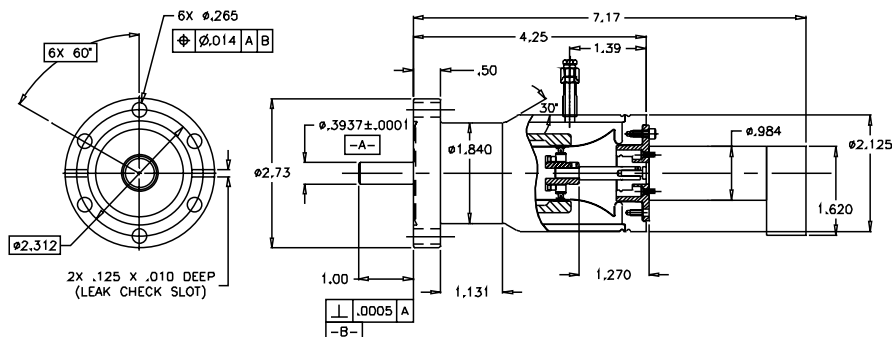
ChamberLink Performance Specifications



Peabody, MA
800-921-3332
www.harmonic-drive.com

CUSTOMER REQUESTED SPECIFICATIONS

FEED THROUGH DIAMETER:	
SEAL TYPE:	
EXTERIOR DIAMETER:	
TOTAL ACTUATOR LENGTH:	
GEAR BODY LENGTH:	
OUTPUT SHAFT LENGTH:	
OUTPUT SHAFT DIAMETER:	
KEYWAY TYPE:	
FLANGE OD:	
FLANGE HOLE PATTERN:	
MOTOR TYPE:	



	Units	Specifications
Rated Power	Watts	35
Rated Voltage	Volts	12
Rated Current	Amps	2
Rated Torque	in-lb/N-m	10 / 1.1
Rated Speed	RPM	22
Max. Continuous Stall Torque	in-lb / N-m	15 / 1.7
Max. Output Torque	in-lb / N-m	25 / 2.8
Max. Current	Amps	4
Max. Output Speed	RPM	60
Torsional stiffness	lb-in / rad	4500
Positional Accuracy	+/- arc min	4
Temperature range	Degrees F	-20 to 200
Vacuum pressure	torr	10 ⁻⁶
Leakage rate [He]	scc/sec	10 ⁻¹¹
Gas compatibility		Inert Gas
Housing material		304 SS
Max. Shaft runout	in.	0.0010
Connection		Conflat flange
Reduction Ratio	R:1	80:1
Inertia at Input Shaft	lb-in ²	0.0053
Max. Overhung Load @ dist.	lbs @ in.	10@3
Max. Axial Load	lbs @ in.	20
Shaft Diameter		10mm
Encoder		
Output Signal	Type	TTL Compatible
Resolution (Encoder Only)	CPR	500
Output Signal	#Channels	2+1 index channel
Supply Voltage	Volts	5V+10%
Operating Temperature	Degrees F	30 to 160
Line Driver Components		26LS31 Line Driver
Termination		10 conductor ribbon cable
Vibration, Shock	G	20g, 5 to 100hz
Lead Wire	mm	500