

Aircraft manufacturers have been selecting Arkwin Industries for over 60 years to design and manufacture a wide variety of utility actuators for civil and military applications. Arkwin's expert engineering team works collaboratively with our customers to find solutions for challenging installations and performance requirements.

Arkwin has designed and manufactured over 125 unique hydraulic actuator designs, incorporating numerous customer options to fit customer specifications.

Applications Include:

- Thrust Reversers
- Ramp operation
- Landing gear and utility door operation
- Landing gear retraction
- Ram Air Turbine deployment
- Cowl/ C-Duct opening

Operational Characteristics:

- Multiple integrated control features for flow and directional control
- Extremely low leakage characteristics

Platforms

A320	HA-420	F-22
A330	C-141	F-35
717	CH-53K	H-92
777	F-16	S-76
CF6	B-2	V-22
A-10		



Design Characteristics:

- Wide range of operating fluids
- Operating pressures up to 5,000 psig
- Linear position sensing transducers
- 3"+ diameter bores and 24"+ strokes
- Multiple mounting options
- End of stroke velocity controls
- Advanced locking mechanisms
 - 3 unique locking mechanism designs are available
 - Visual and electrical lock indication
 - Position sensing and lock integration
 - Unlocking with loads up to 20,000 pounds

Who Is Arkwin?

Arkwin Industries is the technical expert in all things hydraulic for aerospace and defense. We design, test, manufacture, and support precision hydraulic and fuel system components for civil and military fixed-wing aircraft, helicopters, spacecraft, turbine engines, and other special applications.

Our reputation for quality and reliability, as well as our location, allow us to attract some of the best engineering, technical, and manufacturing talent available.

Sample Actuators

Part Number	Bore Diameter	Rod Diameter	Stroke	Operating Pressure (PSI)	Locks	Retracted Length	Mounting
1211495	0.864"	0.747"	12.80"	5000	Extend Slide/ Pawl	19.78"	Sph. Bearing
1211350	1.054"	0.811"	10.46"	3000	None	14.70"	Clevis
1211444	1.179"	0.747"	14.041"	3935	None	17.6333	Gimbal
1211243	1.492"	0.746"	1.72"	3000	Extended Roller/ Pawl	7.38"	Sph. Bearing
1211252	1.617"	.872"	8.04"	3000	None	16.65"	Sph. Bearing
1211180	1.679"	0.747"	6.80"	3000	Retract Roller/Pawl	12.92"	Sph. Bearing
1211647	1.806"	0.997"	5.635"	4000	Retract Pawl	12.07"	Clevis Head End Sph. Bearing
1211176	1.993"	0.999"	9.75"	3000	Retract Roller/ Pawl	16.25"	Sph. Bearing
1211538	2.494"	1.497"	8.607"	3000	Extend Slide/ Pawl	18.203"	Sph. Bearing

Other configurations available

Key Features

- All Arkwin locks feature multiple configurations manufactured from high strength materials
- Proven designs capable of >250,000 cycles with high external loads applied
- Low unlock pressures
- High durability with minimal material wear
- Lock hydraulic designs are insensitive to pressure spikes and transients



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