

High-Performance, Cost-Effective C-Frame Solenoids

Jewell Instruments delivers proven levels of performance and high reliability with its new family of open-frame solenoids. Their coil systems are terminated with .025 inch square pins to accommodate commercially available mating terminals and connectors. The use of terminals inserted in a coil bobbin flange is far more cost effective than electrically terminating an open-frame solenoid with long leads. The materials used in the coil system are capable of withstanding a total temperature of 130°C (ambient plus heat rise)!

Benefits

Unique Frame Size — These powerful solenoids' compact .67" x .77" x .48" C-frame size make them ideal for many hard-to-fit applications.

High Power Efficiencies — Very magnetically-efficient open-frame design optimizes power consumption.

Proven Performance — Built for dependability and extremely reliable under rugged conditions.

Cost-Effective Design — Jewell Instruments' experience in high-volume production results in a design that is less labor-intensive to manufacture.

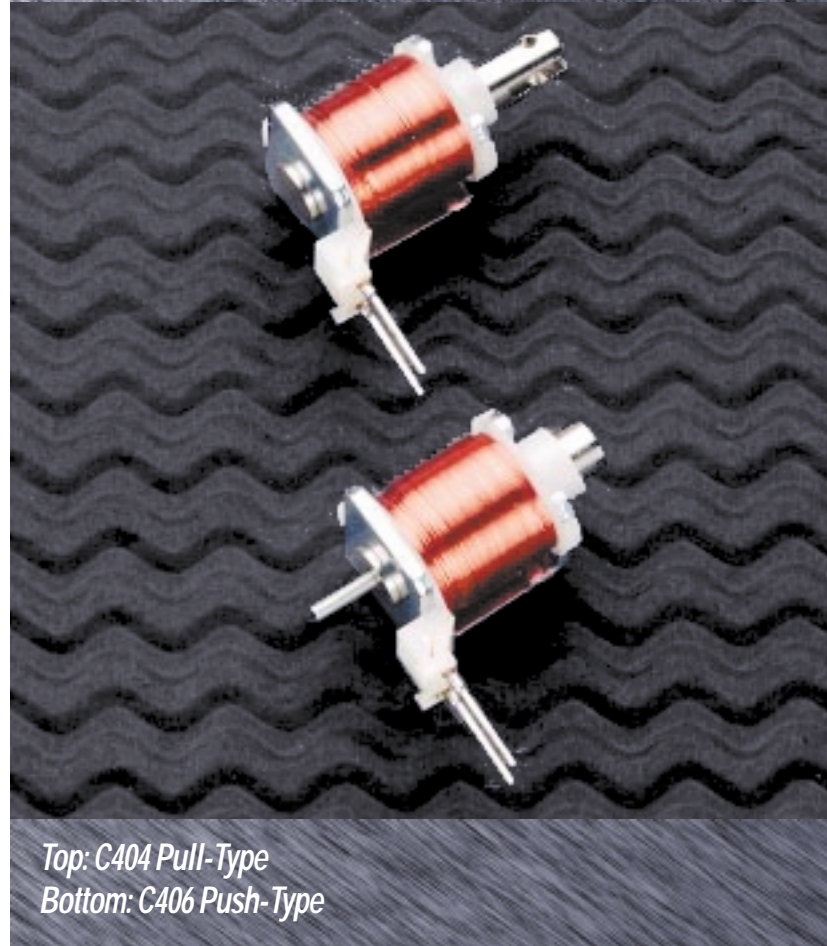
Typical Applications Include:

- ATM machines
- Copiers
- Gambling machines
- Tape drives
- Automotive
- Disk drives
- Printers
- Circuit Breakers
- Bill changers
- Fax machines
- Scanners

Solenoid Solutions That Fit Your Unique Needs

For over 25 years, Jewell Instruments has provided businesses with high-quality, standard and custom solenoids. We also offer next-level assembly support in addition to designing and manufacturing electronic modules that interface with solenoids and other electromechanical devices.

Superb product design sets us apart from the competition with our engineering expertise covering mechanical, electro-mechanical, magnetics and electronics. Add that to our broad applications understanding and our decades of solenoid sales experience. The result is a solid reputation for quality, reliability, innovative solutions, unmatched customer service and very flexible production scheduling.



Top: C404 Pull-Type
Bottom: C406 Push-Type

Technical Information

Insulation Material

Class B Rating (standard)

Maximum Operating Temperature

130°C (266°F)

Dielectric Strength

50 Volts and Under: 500 VRMS
Over 50 Volts: 1,000 VRMS

Standard Voltages and Duty Cycles

Voltage, DC – 6, 12, 24
Duty Cycles – 10%, 25%, 100%

Weight

Plunger – 0.1 oz.
Solenoid Total – 0.65 oz.

Plunger Cone Angle

60 Degrees (standard)
Others Available

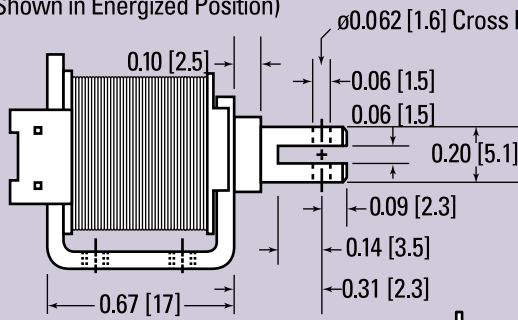
Termination

.025 Square, Phosphor Bronze
Pins, .30 Long

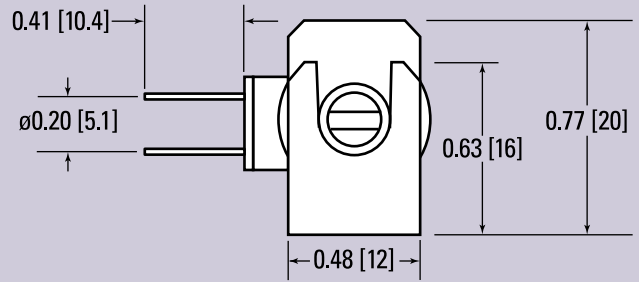
Dimensionals

Inches [mm]

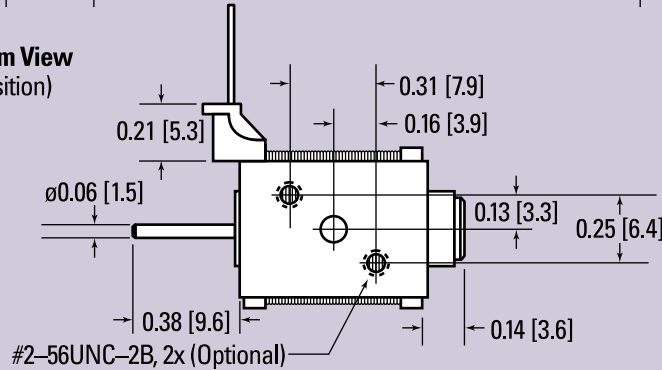
C4 Pull Version – Side View
(Shown in Energized Position)



End View



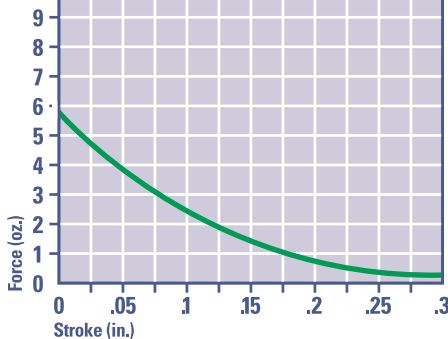
C4 Push Version – Bottom View
(Shown in Energized Position)



Unless Otherwise Specified
.x = .015[.4]
.xx = .010[.3]
.xxx = .005[.13]

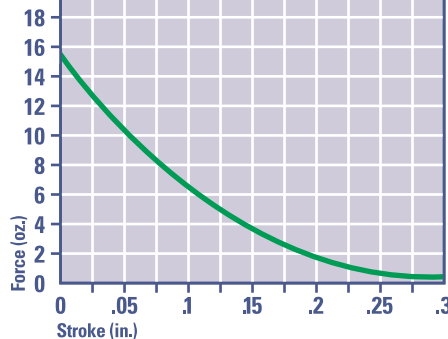
100% Duty
25°C – 3.0 Watts
Holding Force: 5.9 oz.
Maximum On Time: ∞

Stroke (in.)	0.0	0.1	0.2	0.3
Force (oz.)*	5.9	2.4	0.67	0.26



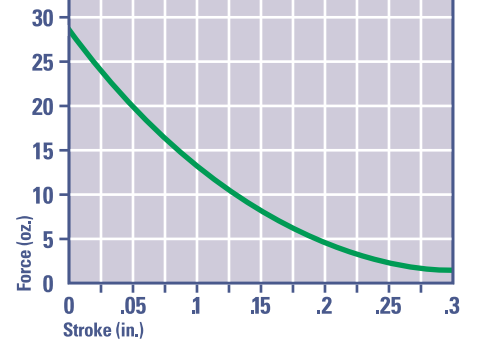
25% Duty
25°C – 8.0 Watts
Holding Force: 15.7 oz.
Maximum On Time: 17 sec.

Stroke (in.)	0.0	0.1	0.2	0.3
Force (oz.)*	15.7	6.3	1.8	0.79



10% Duty
25°C – 20.0 Watts
Holding Force: 28.6 oz.
Maximum On Time: 5 sec.

Stroke (in.)	0.0	0.1	0.2	0.3
Force (oz.)*	28.6	13.1	4.5	1.7



* Typical Force @ 25°C and Nominal Rated DC Voltage For Pull Type Solenoid

Pull Type	100% Duty – 3 Watts		25% Duty – 8 Watts		10% Duty – 20 Watts	
Voltage	Resistance	Part Number	Resistance	Part Number	Resistance	Part Number
6 VDC	12.0 OHMS	C4040600	4.5 OHMS	C4040625	1.8 OHMS	C4040610
12 VDC	48.0 OHMS	C4041200	18.0 OHMS	C4041225	7.2 OHMS	C4041210
24 VDC	192.0 OHMS	C4042400	72.0 OHMS	C4042425	28.8 OHMS	C4042410

Push Type	100% Duty – 3 Watts		25% Duty – 8 Watts		10% Duty – 20 Watts	
Voltage	Resistance	Part Number	Resistance	Part Number	Resistance	Part Number
6 VDC	12.0 OHMS	C4060600	4.5 OHMS	C4060625	1.8 OHMS	C4060610
12 VDC	48.0 OHMS	C4061200	18.0 OHMS	C4061225	7.2 OHMS	C4061210
24 VDC	192.0 OHMS	C4062400	72.0 OHMS	C4062425	28.8 OHMS	C4062410