NEW MID-SIZE P612 SOLENOID ROUNDS OUT TROMBETTA'S 600 SERIES

P612 Features

Designed to satisfy mid-range force and stroke requirements, Trombetta's new P612 dual-coil, 3-wire solenoid complements the smaller 610 and larger 613 models.

- State of the art construction for problem-free operation... "3-wire" design for reliability.
- Heavy duty performance in a compact package.
- High pull-in force and continuous duty operation.
- No "mechanical" or "integral" switch problems.
- Misadjustment will not cause burn-out.
- Ideal for "on-to-run/fuel shut-down" applications.
- Easily replaces most competitive solenoids.
- Many options available; boot is standard.

P612 Applications

Trombetta's P612 is perfect for a variety of "pull" applications in generators, compressors, trucks/busses and off-highway equipment.

P612 General Specifications

RATED VOLTAGE	12 VOLTS DC	24 VOLTS DC
PULL CURRENT	60 AMPS	30 AMPS
HOLD CURRENT	0.9 AMPS	0.5 AMPS
PULL FORCE @ 1 INCH	23 POUNDS (102 NEWTONS)	23 POUNDS (102 NEWTONS)
HOLD FORCE @ RATED VOLTAGE & 25° C.	43 POUNDS (191 NEWTONS)	43 POUNDS (191 NEWTONS)
SHIPPING WEIGHT	1.7 POUNDS	1.7 POUNDS

P612 "3-Wire" Solenoid System Operation

The Trombetta P612 Solenoid Series is a state-of-the-art design for demanding engine applications. Dual coil construction delivers high pull-in force and continuous duty hold operation in the smallest possible package. The "3-Wire" solenoid system is highly reliable and puts an end to "mechanical switch" problems. Two systems are available for your specific application. Proper installation of either system will eliminate the possibility of solenoid burn out. Fouled or mis-adjusted linkage will result in the solenoid only dropping out, not burning out.

- System #1 – Typically used for "on-to-run" engine shut down applications.

  Operation: The solenoid is wired directly into the existing engine starter system eliminating the need for "internal" solenoid switches. At the engine starting phase, both coils are energized for the highest possible pull-in force. After the engine is started, the pull-in coil is de-energized, while the hold coil remains energized providing continuous duty operation.

- System #2 - Typically used for "RPM/Speed Control" applications.

  Operation: On applications other than "on-to-run/fuel shut down" applications, a Trombetta 8500 Series Electronic Control module is required to allow the solenoid to operate in a continuous duty mode. This remotely mounted electronic switching module will, when energized, power both the pull-in and hold-in coils long enough for the plunger to pull-in and hold. As the module "times out" the pull-in coil is disconnected, putting the solenoid in the "hold-in" mode.

Trombetta+− MOTION TECHNOLOGIES

Trombetta P612 SERIES Solenoids

Trombetta solenoid products have been designed and manufactured in the U.S.A. since 1932.

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Menomonee Falls, WI 53051
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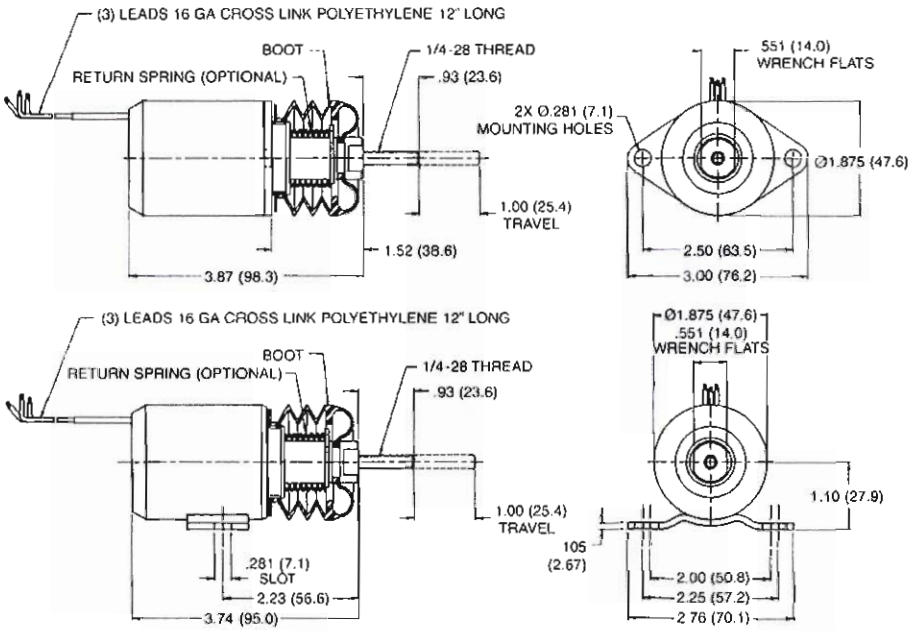
P612 Pull-Type Solenoid (Flange Mount: top; Side Mount: bottom... all dimensions in inches and millimeters)

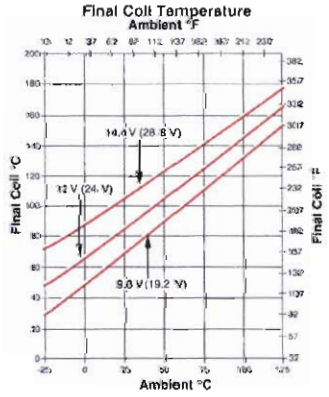


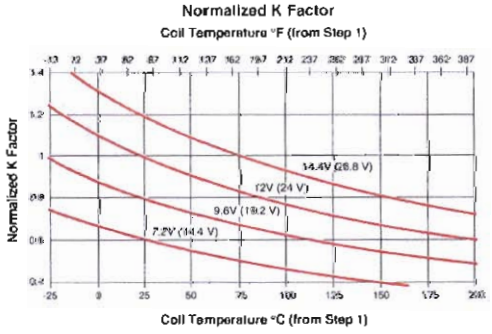
Determining Solenoid Performance

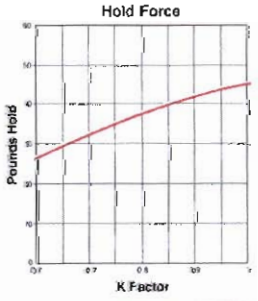
When a solenoid is operated in the continuous hold position, the coil temperature rises. The following steps will allow you to find the pull and hold force available at the elevated coil temperatures seen in this continuous-hold situation. K Factor is a derating constant used to find pull and hold forces at elevated temperatures. The nominal K Factor is 1.0.

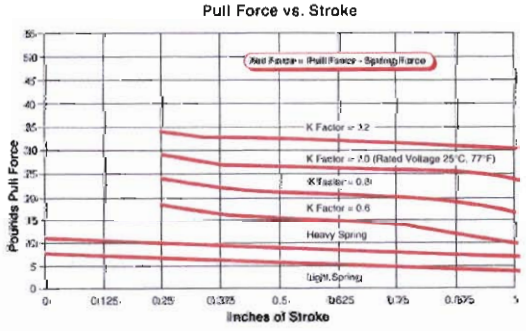
- **Step 1.** Use the Final Coil Temperature chart to find coil temperature using ambient temperature and applied voltage.
- **Step 2.** Use the Normalized K Factor chart to find normalized K Factor using the temperature found in Step 1 and the voltage applied to the coil. The Normalized K Factor can be read on the left of the chart.
- **Step 3.** Use the Pull Force vs. Stroke chart to find pounds of pull force available using the Normalized K Factor found in Step 2, and the stroke in inches.
- **Step 4.** Use the Hold Force chart to find hold force available using the Normalized K Factor found in Step 2.

For an application other than described above, consult Trombetta Corporation.









Trombetta P612 SERIES Solenoids

P612 Series Part Numbers

Catalog Number	Volts	Mounting Type	Spring
P612-A1V12	12	SIDE	NONE
P612-A1V24	24	SIDE	NONE
P612-A2V12	12	FLANGE	NONE
P612-A2V24	24	FLANGE	NONE
P612-B1V12	12	SIDE	LIGHT
P612-B1V24	24	SIDE	LIGHT
P612-B2V12	12	FLANGE	LIGHT
P612-B2V24	24	FLANGE	LIGHT
P612-C1V12	12	SIDE	HEAVY
P612-C1V24	24	SIDE	HEAVY
P612-C2V12	12	FLANGE	HEAVY
P612-C2V24	24	FLANGE	HEAVY

- All external threads – 1/4-28 ROD
- Additional models available

P612 Series Options

Trombetta P612 solenoids offer a variety of options for customized installations.

- Return Springs
- Electrical Connectors
- Custom Modification
- Additional Voltages

See Trombetta first for long-lasting tough-duty solenoids to fit the toughest – or easiest – applications.

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