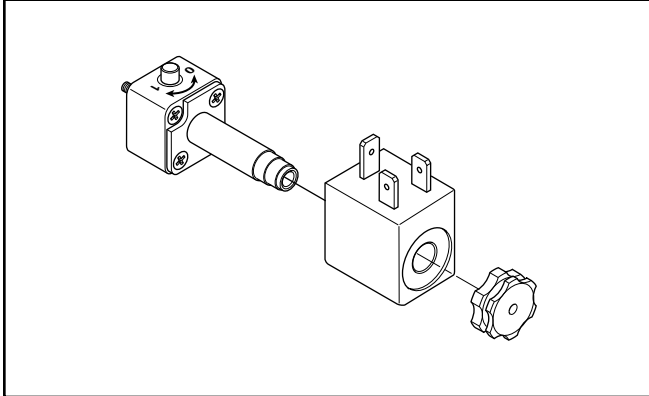




22mm Solenoid Pilot Operators & Coils



ATEX



ATEX is a European Directive (94/9/EC) valid for products to be used within an explosive atmosphere.

Both ATEX certified solenoid, remote pilot and manual operated valves, as well as complete solenoid pilot assemblies are available. See page B13 for a complete list of valves available. For specific information regarding ATEX certification please visit www.parker.com/pneumatics.



22mm Solenoid Pilot Options

The P2FP13*4* (NC) 3/2 solenoid pilot operators are designed for piloting pneumatic control valves with compressed air or other inert gases.

The P2FP operator is available for Normal operating pressures up to 10 bar or the Xtreme maximum operating pressure of 16 bar and wide band voltage tolerances required for mobile applications.

Corrosion Resistant Design

The pilot valve body is manufactured in thermoplastic PA6 material and the core tube brass / stainless steel. The plunger / core is made from stainless steel and the valve seats from FKM.

Solenoid Pilot Exhaust

These operators all exhaust out of the top of the core tube which is tapped M5. The standard solenoid nut fitted to the core tube is a diffuser nut which allows the exhaust to escape to atmosphere. This nut also minimizes ingress of dirt into the valve through this port. The alternative plastic knurled nut can be specified (refer to part number system) if the exhaust air needs captured and piped away using the M5 tapped port.

Mobile Applications

Viking Xtreme valves are tested to +5g shock and vibration. Solenoid operated valves are designed to operate with wide voltage tolerance bands within the ambient temperature ranges stated in the technical section.

Coils

Coils are wound with enameled copper wire, having a temperature index of 1800C with class F insulation (1550C) and are encapsulated in Thermoplastic resin. When fitted with suitable connector and correct gasket, they give protection to IP65.

Manual Override Options

The pilot operators can be supplied with locking or non-locking manual override. The standard manual override is the monostable (spring return) extended brass override. Alternatively the bistable (locking) override can be specified as an alternative for the Normal duty 10 bar option.

Spares

Solenoid operators are available as spares complete with mounting screws and seals. Coils and connectors should be ordered separately unless ATEX certified and intrinsically safe is needed. ATEX certified operators and coils must be ordered together.

Transients

Interrupting the current through the solenoid coil produces momentary voltage peaks which, under unfavorable conditions, can amount to several hundred times the rated operating voltage. Normally, these transients do not cause problems, but to achieve the maximum life of relays in the circuit (and particularly of transistors, thyristors and integrated circuits) it is desirable to provide protection by means of voltage-dependent resistors (varistors). All connectors / cable plugs with LEDs include this type of circuit protection.

Materials

Pilot Valve

Body Polyamide
 Armature Tube:
 Normal Pilot Operator..... Brass
 Extreme Pilot Operator..... Stainless Steel
 Plunger & Core..... Corrosion resistant Cr-Ni Steel
 Seals..... FKM (Viton™)
 Screws..... Stainless Steel

Coil

Encapsulation Material..... Thermoplastic



Pilot Operator Kits

P2F P 1 3 N 4 C

Type	
Pilot Operator Kit	P

Overrides	
C*	Locking (Bistable) Flush - Plastic
D	Non-Locking (Monostable) Extended - Brass

*Only Available with "N" Pressure / Temperature Option.

Pressure / Temperature	
145 PSIG (10 bar) 14°F to 122°F (-10°C to 50°C)	N
232 PSIG (16 bar) -40°F to 158°F (-40°C to 70°C)	H

B

Solenoid Kits

P2F C A 4 49

Type	
Solenoid Kit	C

Voltage / Frequency	
42	24VAC
45	12VDC
47*	12 VDC Mobile
48*	24 VDC Mobile
49	24VDC
53	120VAC
57	240VAC
Blank	Valve Less Coil

Enclosures / Lead Length	
30mm Square 3-Pin – ISO 4400 Form A (Male Only)	A
22mm Rectangular 3-Pin – Type B Industrial (Male Only)	B
Hazardous Duty, FM / CSA	F*
Grommet - 18" Leads	G
1/2" NPT Conduit - 18" Leads	H
Grommet 72" Leads	Q
1/2" Conduit 72" Leads	R

* Only Available with Voltage Codes "45", "49", "53" & "57". Not for use with the Xtreme Version (-40°C to 70°C).

* Only Available with Enclosures "A", "B" & "G". Additional voltages are available upon request. Contact Customer Support for more information.

Solenoid Enclosures



Option A
 30mm Square,
 3-Pin ISO 4400, DIN 43650A



Option B
 22mm Rectangular,
 3-Pin DIN, Type B Industrial



Option G & Q
 Grommet, 18" or 72" Leads



Option H & R
 1/2" Conduit, 18" or 72" Leads

Solenoid Information (Solenoids are rated for continuous duty.)

Code	Voltage			Enclosure "A"		Enclosure "B" to "R"	
	AC		DC	Power Consumption	Holding (Amps)	Power Consumption	Holding (Amps)
	60Hz	50Hz					
42	24	22		3.9VA	.14	7.3VA	.31
45	—	—	12	2.6W	.21	4.6W	.37
47*	—	—	12	6.2W	.52	5.5W	.46
48*	—	—	24	6.8W	.29	6.0W	.25
49	—	—	24	2.7W	.11	4.8W	.20
53	120	110	—	4.1VA	.04	6.3VA	.05
57	240	230	—	3.7VA	.02	6.4VA	.03

* Mobile voltages. Solenoid Voltage Characteristics for all coils located on page 19.

BOLD OPTIONS ARE MOST POPULAR

