

Type “D” Pilotair[®] 2, 3 & 4-Way Pneumatic Directional Control Valves

Catalog pages from SC-300

November 2002

(These valves are also duplicated in catalog SC-700)

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REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way 2 & 3 Position 1/4" & 1/2" NPT

TECHNICAL DATA:

Port Sizes: 1/4" & 1/2" NPT

Working Pressure: 250 psi maximum
Solenoid operated: 150 psi maximum

Pilot Pressure: 3 to 150 psi
See pages 78-80 for specific operator pressures.

Flow: 1/4" NPT PORTS:

C_v = 2.1 (open exhaust)
C_v = 1.5 (tapped exhaust)

1/2" NPT PORTS:

C_v = 5.1 (open exhaust)
C_v = 4.5 (tapped exhaust)

Temperature Range: -20°F to +160°F

Special Seals available for
-65°F to +300°F operation

Media: Air or Inert Gas (In service higher than 18 cycles per minute or with continuous airflow, a lubricator is recommended.)

Materials:

Valve bodies and operator housings: anodized aluminum
Spool: Stainless steel
Internal Parts: cadmium plated and/or bronze
Seals: Buna N

ELECTRICAL DATA:

Standard Voltages (all coils are rated for continuous duty)	Power Consumption	
	Inrush	Holding
24, 120 240 VAC (60 Hz)	33 VA	22 VA
12, 24 VDC	12 W	

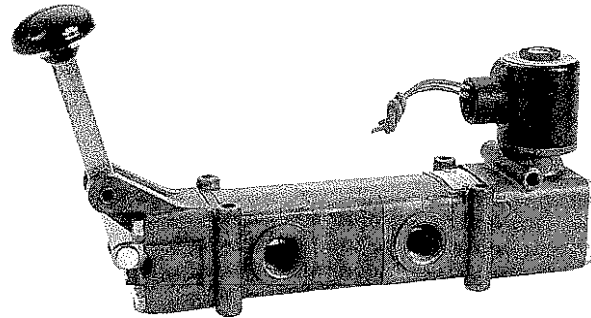
FEATURES:

- **Versatile.** There is no standard assembly of the Type "D" PILOTAIR Valve. Porting can be easily rotated in 90° increments. The directional valve you need is easily tailored to your installation, at standard model prices. Any of the nine basic valves may be operated by one or two of eight basic operators. The Type "D" PILOTAIR Valve may have an operator on either or both ends.
- **Various operator spring return and holding functions are available.** The valve operators, mounting bracket or any of the port segments may be rotated in 90° increments to fit most any installation problem.
- Most valves are made from common parts to simplify repair and stocking. No special tools are required to service or modify Type "D" PILOTAIR Valves.

Basic Valve Selection

The Type "D" PILOTAIR Valve line includes the following basic valves:

Two-way Valve	Page 75
Three-way Valve, open exhaust	Page 75
Three-way Valve, tapped exhaust, closed center	Page 75
Four-way Valve, open exhaust, closed center	Page 75
Four-way Valve, tapped exhaust, closed center	Page 75
Four-way Valve, open exhaust, exhaust center	Page 76
Four-way Valve, tapped exhaust, exhaust center	Page 76
Four-way Valve, open exhaust, supplied center	Page 76
Four-way Valve, tapped exhaust, supplied center	Page 76



OPERATORS:

Passages through the Type "D" PILOTAIR Valve are opened and closed by an operator or operators moving a spool to a fixed position at either end of its travel. Some valves have a third or center position midway between these two fixed positions. Any of the available operators may be used on either two or three-position valves. The spring return functions, however, will vary according to the number of positions. Operators can be furnished with No Spring Return, Full Return Springs or Centering Springs.

No Spring Return: Used on either two or three position valves. Operators with no spring return remain in position when the operating force is removed. Only manually-operated valves used singly can be used without return springs.

Remote-controlled or mechanically-operated valves used singly must have return springs to return the spool for the next operation. When two operators are used on one valve, the spool is returned by the opposite operator. Lever or Button Operators without spring return may also be used with a detent kit on the opposite end. **Full Return Spring:** Used on two-position valves. When the operating force is removed, the spool is returned to its normal extreme position. The spring may be a part of the operator or assembled on the opposite end of the valve, depending on whether the valve is normally-open or normally-closed. **Centering Springs:** Used on three-position valves. Centering springs hold the spool in its center position.

Versatile Operators

The basic valves can be operated by any of the following operators, all of which have several variations of spring return and holding functions; see page 81 for operator code numbers.

Lever	Solenoid
Button	Pedal
Button, panel mounting	Treadle
Cam	Low Pressure Pilot Cylinder
Air Pilot Cylinder	

Select the type of valve operation required and then determine the type or types of operators to be used. See "HOW TO ORDER VALVES" on page 83.

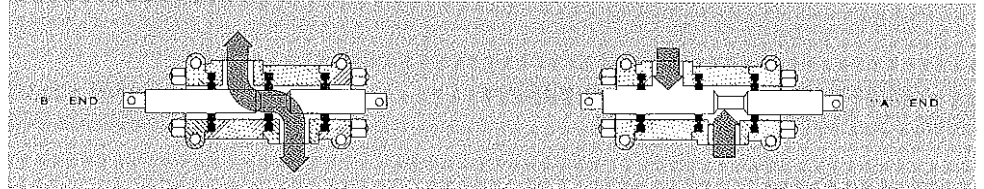
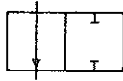
REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way / 2 & 3 Position

Basic Valve Selection (code numbers refer to page 83)

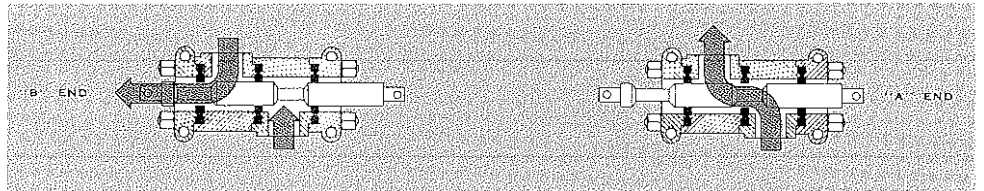
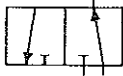
TWO-WAY VALVES

Code No. PD20020 or PD40020



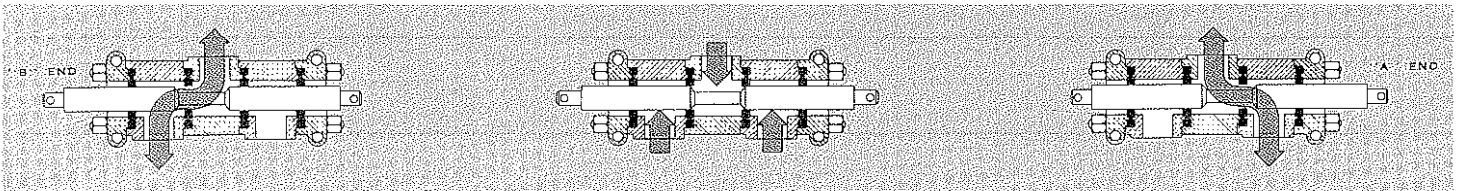
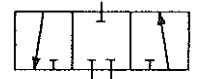
THREE-WAY VALVES - OPEN EXHAUST

Code No. PD20031 or PD40031



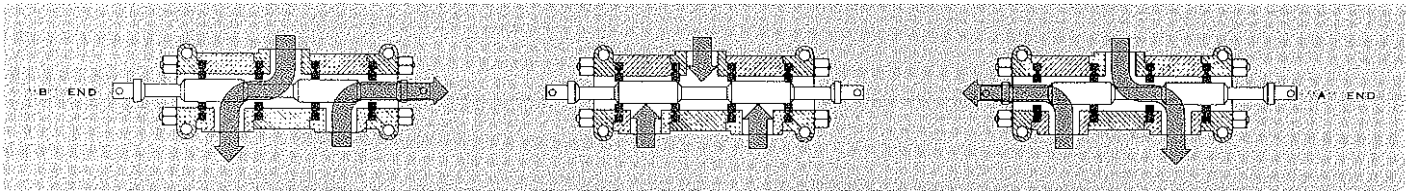
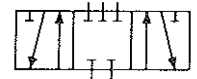
THREE-WAY VALVES - TAPPED EXHAUST - CLOSED CENTER

Code No. PD20032 or PD40032



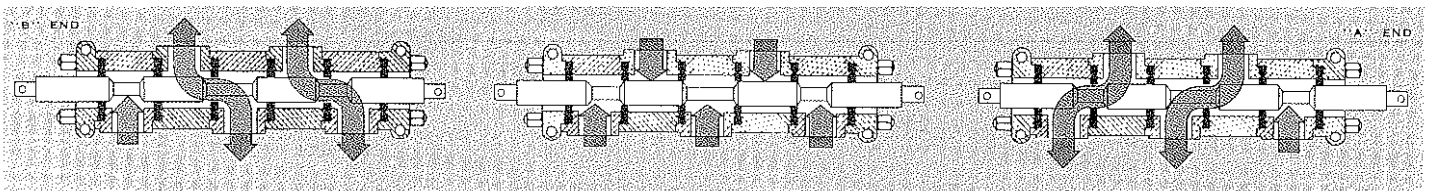
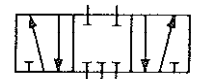
FOUR-WAY VALVES - OPEN EXHAUST - CLOSED CENTER

Code No. PD20041 or PD40041



FOUR-WAY VALVES - TAPPED EXHAUST - CLOSED CENTER

Code No. PD20042 or PD40042

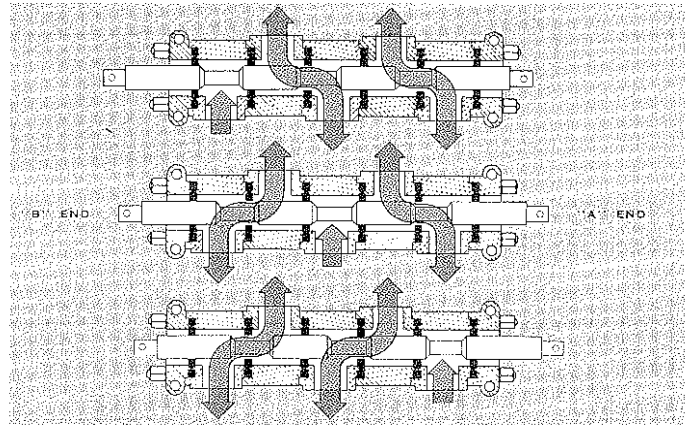
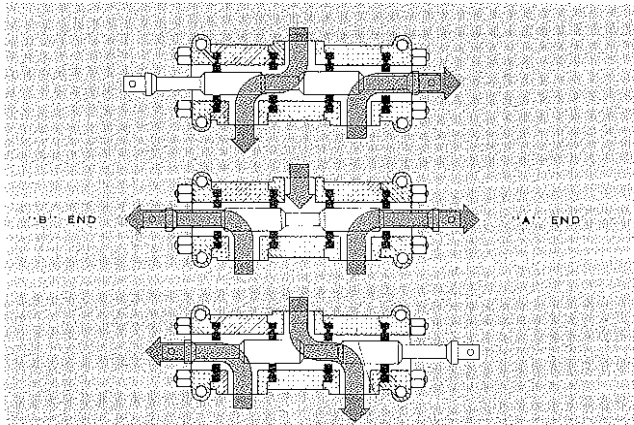
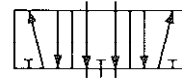
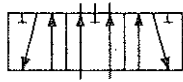


REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

4 Way / 2 & 3 Position Basic Valve Selection (code numbers refer to page 83)

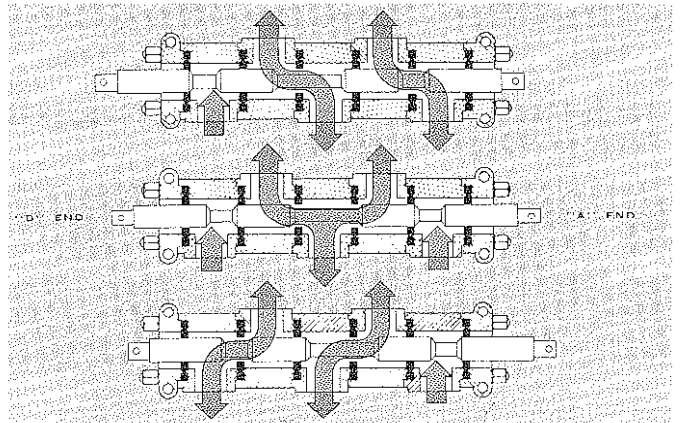
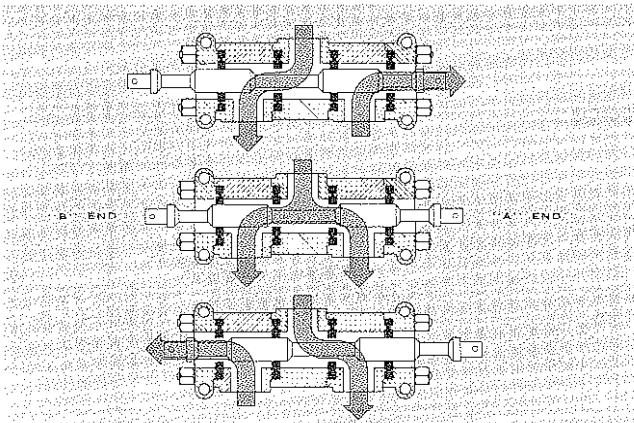
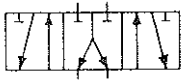
OPEN EXHAUST - EXHAUST CENTER
Code No. PD20043 or PD40043

TAPPED EXHAUST - EXHAUST CENTER
Code No. PD20044 or PD40044



OPEN EXHAUST - SUPPLIED CENTER
Code No. PD20045 or PD40045

TAPPED EXHAUST - SUPPLIED CENTER
Code No. PD20046 or PD40046



REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way / 2 & 3 Position Basic Valve Portions

(Code numbers are shown on page 82-83)

DIMENSIONS

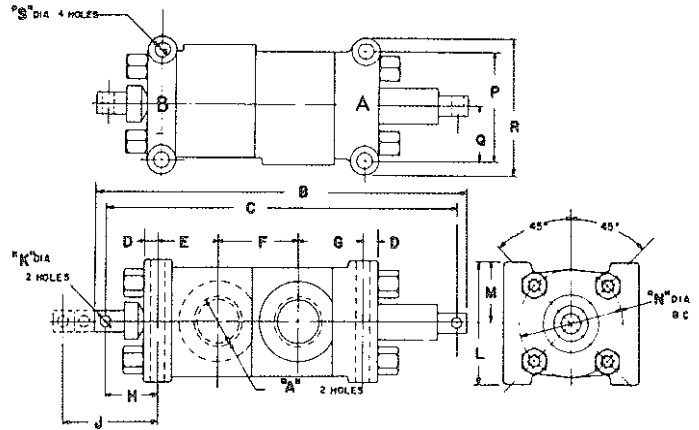
BASIC VALVE

(Two-way and Three-way, Open Exhaust)

A	B	C	D	E	F	G	H	J
1/4"	5-11/16	5-3/8	3/16	13/16	1	7/8	1	1-11/16
1/2"	6-11/16	6-9/16	1/4	1-1/16	1-7/16	1-3/16	15/16	1-11/16

K	L	M	N	P	Q	R	S
1/8	1-7/8	15/16	1-5/8	1-5/8	13/16	2	7/32
3/16	2-1/8	1-1/16	1-7/8	1-15/16	31/32	2-7/16	9/32

Net weight: 1/4"-15 oz; 1/2"-1 lb. 13 oz.



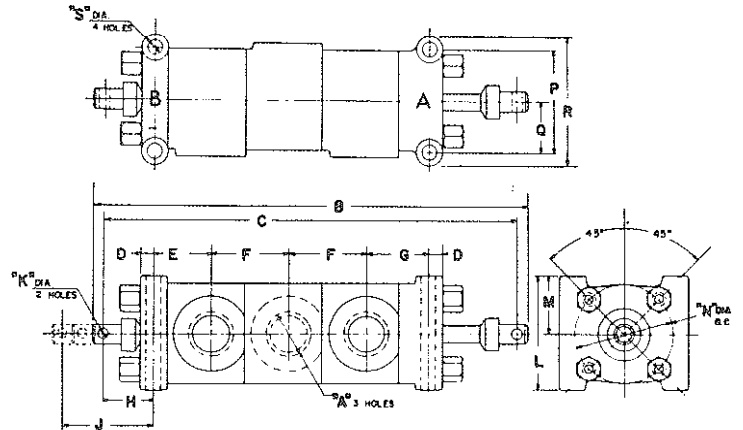
BASIC VALVE

(Three-way, Tapped Exhaust and
Four-way, Open Exhaust)

A	B	C	D	E	F	G	H	J
1/4"	6-11/16	6-3/8	3/16	13/16	1	7/8	1	1-11/16
1/2"	8-1/8	7-3/4	1/4	1-1/16	1-7/16	1-3/16	15/16	1-11/16

K	L	M	N	P	Q	R	S
1/8	1-7/8	15/16	1-5/8	1-5/8	13/16	2	7/32
3/16	2-1/8	1-1/16	1-7/8	1-15/16	31/32	2-7/16	9/32

Net weight: 1/4"-1 lb. 3 oz; 1/2"-2 lb. 5 oz.



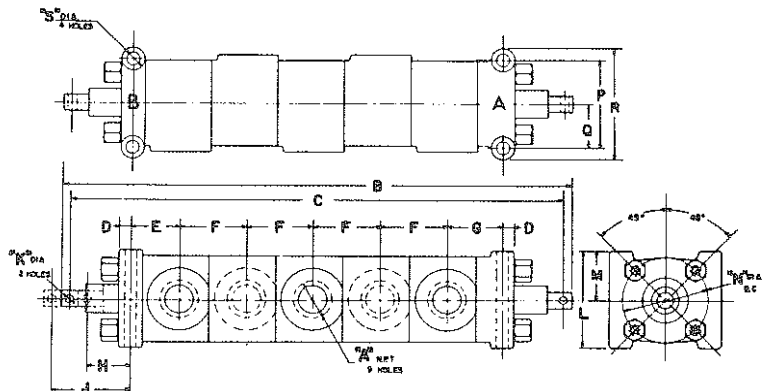
BASIC VALVE

(Four-way, Tapped Exhaust)

A	B	C	D	E	F	G	H	J
1/4"	8-11/16	8-3/8	3/16	13/16	1	7/8	1	1-11/16
1/2"	10-31/32	10-19/32	1/4	1-1/16	1-7/16	1-3/16	15/16	1-11/16

K	L	M	N	P	Q	R	S
1/8	1-7/8	15/16	1-5/8	1-5/8	13/16	2	7/32
3/16	2-1/8	1-1/16	1-7/8	1-15/16	31/32	2-7/16	9/32

Net weight: 1/4"-1 lb. 11 oz; 1/2"-3 lb. 1 oz.

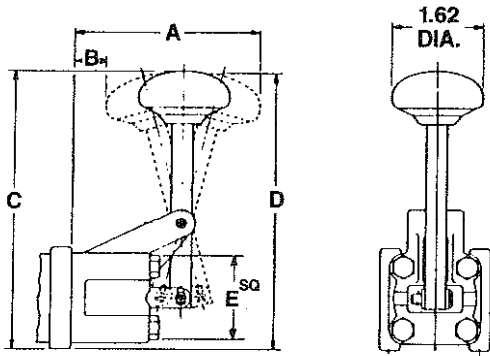


REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way / 2 & 3 Position Operator Selections

(Operator code numbers shown on page 81)

LEVER OPERATOR

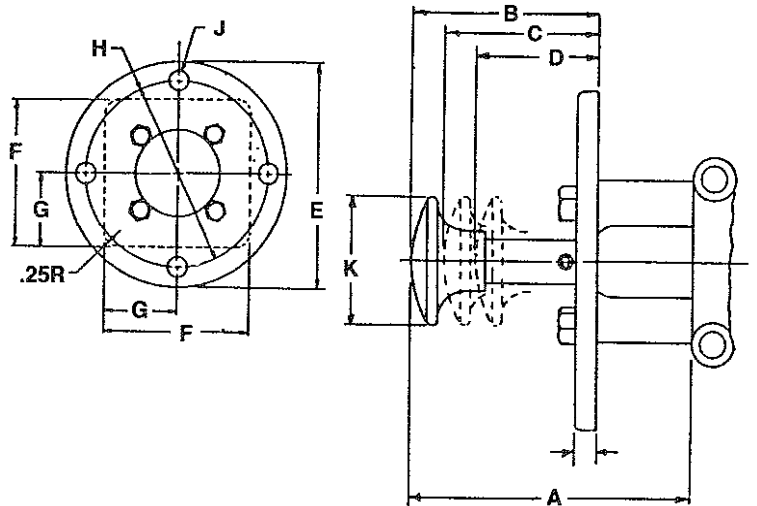


Size	A	B	C	D	E
1/4"	3.38	.56	5.12	5.06	1.65
1/2"	3.75	.38	6.06	6.03	1.95

For manual operation. May be used for push or pull operation on two- or three-position valves. May also be used with detent kit.

Net weight: 1/4"-9 oz., 1/2"-14 oz.

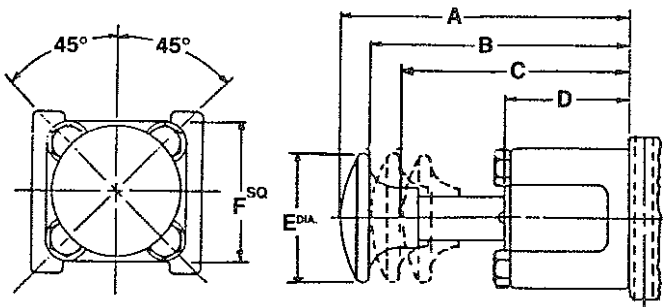
BUTTON OPERATOR WITH FLANGE MOUNTING



Size	A	B	C	D	E	F	G	H	J	K
1/4"	3.62	2.47	2.12	1.78	3.38	2.19	1.09	2.75	.28	1.50
1/2"	3.56	2.50	2.12	1.75	3.94	2.56	1.28	3.25	.34	1.50

Same as button operator, except it contains a mounting flange for panel installation. Net weight: 1/4"-7 oz., 1/2"-9 oz.

BUTTON OPERATOR

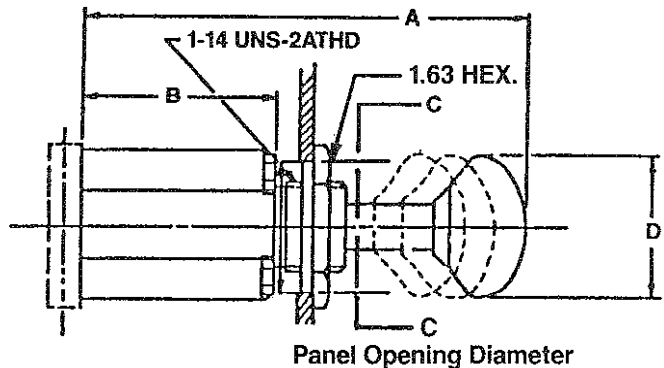


Size	A	B	C	D	E	F
1/4"	3.62	3.28	2.94	1.47	1.50	1.65
1/2"	3.56	3.19	2.81	1.41	1.50	1.95

Finger operation. Generally used on two-position valves with full return spring. May also be used on three-position valves with or without return springs for push or pull operation. May also be used with detent kit.

Net weight: 1/4"-5 oz., 1/2"-7 oz.

NOSE MOUNT OPERATOR



Size	A	B	C	D
1/4"	5.19	2.19	1.50	1.62

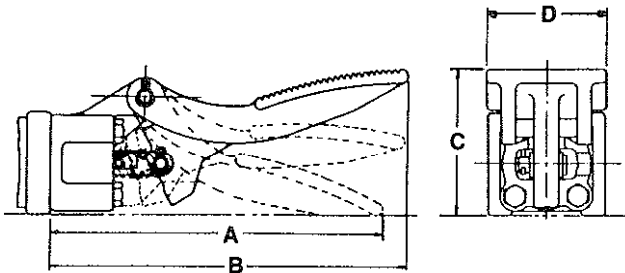
Mounts in control panel hole (1-1/2" dia.). Two and three position integral detents, no additional detent kits required. 1/4" valve size only. Net weight: 1/4"-10 oz.

REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way / 2 & 3 Position Operator Selections

(Operator code numbers shown on page 81)

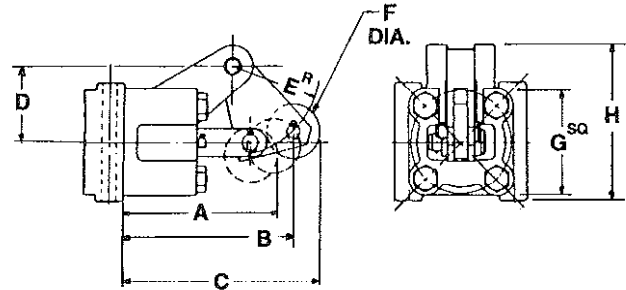
FOOT PEDAL OPERATOR



Size	A	B	C	D
1/4"	7.00	7.47	2.81	2.50
1/2"	7.00	7.47	3.06	2.50

Toe-operated. Must have return spring when used as only operator. When used with another operator it should have no return spring.
Net weight: 1/4"-1 lb. 2 oz., 1/2"-1 lb. 4 oz.

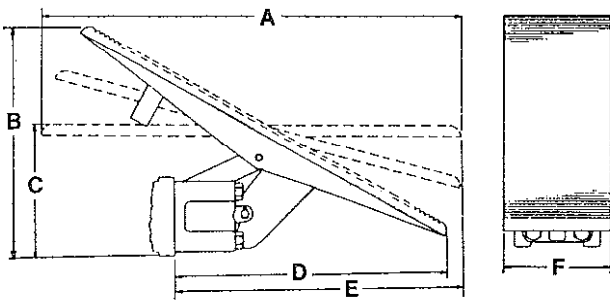
CAM OPERATOR



Size	A	B	C	D	E	F	G	H
1/4"	2.69	3.12	3.38	1.38	1.63	.50	1.65	2.56
1/2"	2.81	3.22	3.56	1.38	1.69	1.00	1.95	2.81

Mechanically operated. Must be used with full return spring or operator on opposite end to return spool.
Net weight: 1/4"-6 oz., 1/2"-8 oz.

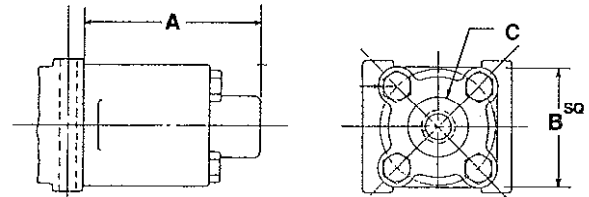
FOOT TREADLE OPERATOR



Size	A	B	C	D	E	F
1/4"	9.75	5.47	3.19	6.25	6.69	2.50
1/2"	9.75	5.75	3.44	6.25	6.69	2.50

Foot-operated. May be used with no return spring or with centering springs. Ordinarily would not be used with another operator.
Net weight: 1/4"-1 lb 4 oz., 1/2"-1 lb 11 oz.

PILOT CYLINDER OPERATOR



Size	A	B	C
1/4"	3.00	1.65	1/4"-18 NPT
1/2"	2.94	1.95	1/4"-18 NPT

45 psi minimum with spring, 12 psi minimum without spring.

Remote pneumatic operation. Must have return spring when used as only operator. When used with another operator, it may be used with no return spring or with centering springs.
Net weight: 1/4"-8 oz., 1/2"-8 oz.

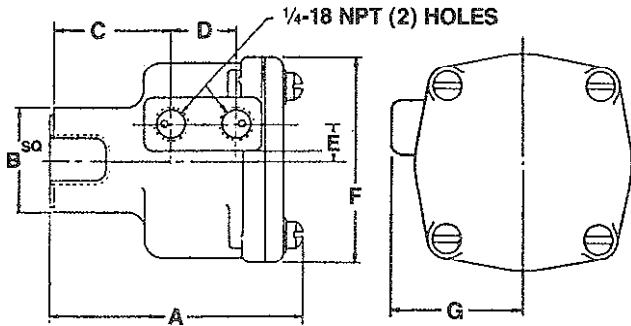
AUTOMATIC DRAIN VALVE: The pilot cylinder operated Type "D" PILOTAIR valve has been utilized to operate as an automatic drain valve. For more information, see "Air Line Conditioning Units" section, catalog SC-500.

REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way / 2 & 3 Position Operator Selections

(Operator code numbers shown on page 81)

LOW PRESSURE PILOT CYLINDER

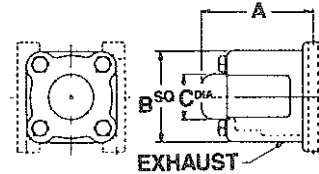


Size	A	B	C	D	E	F	G
1/4"	4.50	1.62	2.04	1.16	.62	3.62	2.22
1/2"	4.44	1.88	2.03	1.16	.62	3.62	2.22

120 psi maximum, 9 psi minimum with spring, 3 psi minimum without spring.

Pneumatically-operated by low control pressure. May have full spring return or be dual-piloted. Either side of pilot piston diaphragm is pressurized to position spool when dual-piloted. May also be used with another operator with no return spring or with centering springs. Net weight: 1/4"-1 lb. 13 oz., 1/2"-1 lb. 14 oz.

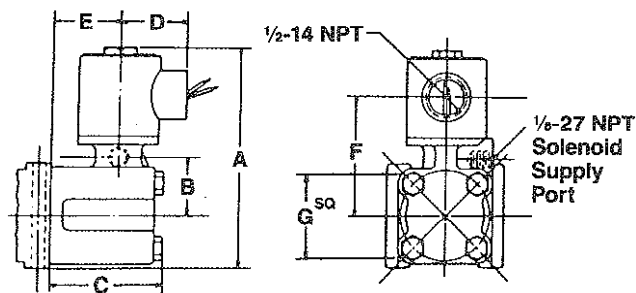
END COVER KIT



Size	A	B	C
1/4"	1.84	1.65	.81
1/2"	1.81	1.95	.94

Used to protect the open end of a valve from foreign matter or damage and to house return springs when used. Net weight: 1/4"-5 oz., 1/2"-6 oz.

SOLENOID CONTROLLED OPERATOR

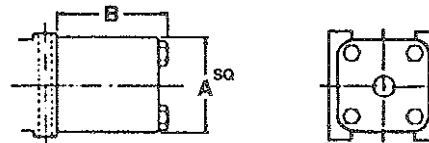


Size	A	B	C	D	E	F	G
1/4"	4.44	1.19	2.38	1.38	1.44	2.50	1.65
1/2"	4.56	1.19	2.31	1.38	1.38	2.50	1.95

150 psi maximum, 45 psi minimum with spring, 12 psi minimum without spring.

Solenoid controlled air pilot operated. Uses an external pilot pressure to operate its piston. Pilot port tapped 1/8" NPT and is either connected to the supply port of the valve or to an independent supply pressure. Must have return spring when used as only operator. When used with another operator, it may be used with no return spring or with centering springs. Molded weatherproof coils standard. For coil voltages available, see page 81. Net weight: 1/4"-1 lb. 4 oz., 1/2"-1 lb. 7 oz.

DETENT KIT



Size	A	B
1/4"	1.75	2.38
1/2"	2.00	2.28

Available for lever and button operators with no return spring. Holds the spool in position in severe vibration applications or provides positive "position-feel." Available in two- and three-position. Net weight: 1/4"-10 oz., 1/2"-12 oz.

REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

OPERATOR SELECTION CODES

DESCRIPTION	SEE NOTE NO.	CODE NO.
Lever, No Spring Return	—	01
Lever, Full Return Spring	2	02
Lever with Centering Spring	3	03
Button, No Spring Return	—	04
Button, Full Return Spring	2	05
Button with Centering Spring	3	06
Cam, No Spring Return	4	07
Cam, Full Return Spring	2	08
Cam with Centering Spring	5	09
Pilot Cylinder, No Spring Return	4	10
Pilot Cylinder, Full Return Spring	2	11
Pilot Cylinder with Centering Spring	5	12
Solenoid (120V, 60 Cycle), No Return Spring	4	13
Solenoid (120V, 60 Cycle), Full Return Spring	2	14
Solenoid (120V, 60 Cycle), with Centering Spring	5	15
Solenoid (240V, 60 Cycle), No Return Spring	4	16
Solenoid (240V, 60 Cycle), Full Return Spring	2	17
Solenoid (240V, 60 Cycle), with Centering Spring	5	18
Pilot Cylinder (Low Pressure), No Spring Return	6	19
Pilot Cylinder (Low Pressure), Full Return Spring	2	20
Pilot Cylinder (Low Pressure) with Centering Spring	5 & 6	21
Foot Pedal, No Spring Return	4	22
Foot Pedal, Full Return Spring	2	23
Nose Mount, Spring Return	2 & 7	36
Nose Mount, 2-Position Detent	7	37
Nose Mount, 3-Position Detent	7	38
Foot Treadle, No Spring Return	—	52
Foot Treadle with Centering Spring	3	53
End Cover with Centering Spring	4	54
End Cover with Return Spring	4	55
Solenoid (480V, 60 cycle) No Spring Return	1 & 4	57
Solenoid (480V, 60 cycle) Full Return Spring	1 & 2	58
Solenoid (480V, 60 cycle) with Centering Spring	1 & 5	59
Solenoid (125V DC) No Spring Return	1 & 4	63
Solenoid (125V DC) Full Spring Return	1 & 2	64
Solenoid (125V DC) with Centering Spring	1 & 5	65
Solenoid (150V DC) No Spring Return	1 & 4	66
Solenoid (150V DC) Full Spring Return	1 & 2	67
Solenoid (150V DC) with Centering Spring	1 & 5	68
Solenoid (24V DC) No Spring Return	1 & 4	69
Solenoid (24V DC) Full Return Spring	1 & 2	70
Solenoid (24V DC) with Centering Spring	1 & 5	71
Solenoid (12V DC) No Spring Return	1 & 4	72
Solenoid (12V DC) Full Return Spring	1 & 2	73
Solenoid (12V DC) with Centering Spring	1 & 5	74
Solenoid (90V DC) No Spring Return	1 & 4	75
Solenoid (90V DC) Full Return Spring	1 & 2	76
Solenoid (90V DC) with Centering Spring	1 & 5	77
Solenoid (40V DC) No Spring Return	1 & 4	78
Solenoid (40V DC) Full Return Spring	1 & 2	79
Solenoid (40V DC) with Centering Spring	1 & 5	80
Solenoid (6V DC) No Spring Return	1 & 4	81
Solenoid (6V DC) Full Return Spring	1 & 2	82
Solenoid (6V DC) with Centering Spring	1 & 5	83
Solenoid (12V DC Explosion Proof) No Spring Return	1 & 4	84
Solenoid (12V DC Explosion Proof) Full Spring Return	1 & 2	85
Solenoid (12V DC Explosion Proof) with Centering Spring	1 & 5	86
Button, Panel-Mounted, No Spring Return	—	87
Button, Panel-Mounted, Full Return Spring	2	88
Button, Panel-Mounted, with Centering Spring	3	89
Detent Kit, Two-Position	4	90
Detent Kit, Three-Position	4	91
Solenoid (120V, 60 cycle Explosion Proof) No Spring Return	1 & 4	92
Solenoid (120V, 60 cycle Explosion Proof) Full Return Spring	1 & 2	93
Solenoid (120V, 60 cycle Explosion Proof) with Centering Spring	1 & 5	94
Solenoid (240V, 60 cycle Explosion Proof) No Spring Return	1 & 4	95
Solenoid (240V, 60 cycle Explosion Proof) Full Return Spring	1 & 2	96
Solenoid (240V, 60 cycle Explosion Proof) with Centering Spring	1 & 5	97
End Cover Kit	—	98

NOTES:

1. Molded waterproof coils standard in all valves.
2. Not normally used when valve is to have two operators. Use an operator with no spring return or one with centering spring. Installation on the "A" End of two- or three- way valve makes normally closed valve. Installation on the "B" End makes normally open valve.
3. When used as only operator on valve, specify Centering Spring

4. To be used only on valve with another operator.
5. To be used only with another operator having centering spring.
6. Cannot be used with low pressure pilot operator on opposite end.
7. For 1/4 inch valves only.

REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

2, 3 & 4 Way / 2 & 3 Position 1/4" & 1/2" NPT

BASIC VALVE WITH PILOT PRESSURE PIPING FOR SOLENOID OPERATORS

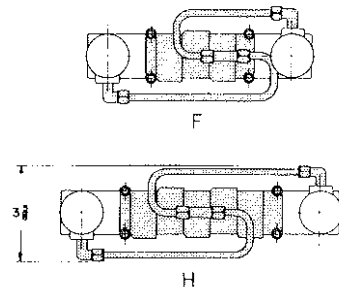
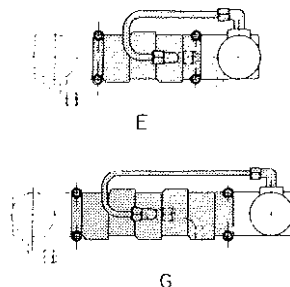
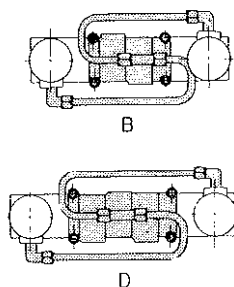
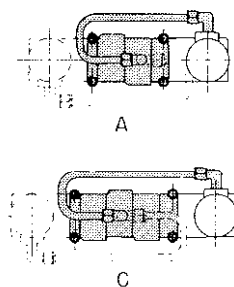
Select the Basic Valve Portion as shown below, add the desired Solenoid Operator Kits (which must be coded in the suffix when Factory assembly is desired).

SINGLE SOLENOID VALVES

DOUBLE SOLENOID VALVES

SINGLE SOLENOID VALVES

DOUBLE SOLENOID VALVES



The Basic Valve for a Piped Solenoid Operator has the special tapped body segment already assembled in the valve. Shaded areas indicate material furnished. Tubing is cut to length and formed and fittings are furnished, but tubing and fittings are not assembled to the valve. Dotted lines indicate alternate piping arrangement (the alternate tube, when required, is provided), depending on the location of the solenoid operator. The Basic Valve will be furnished less operators when suffix is not coded.

BASIC VALVES (with solenoid piping as shown above)

VIEW	VALVE TYPE	CODE NO.	1/4"		1/2"	
			VALVE PART NO.	VALVE PART NO.	VALVE PART NO.	VALVE PART NO.
A	Two-way	120	PD20120-0000		PD40120-0000	
A	Three-way, open exhaust	131	PD20131-0000		PD40131-0000	
E	Three-way, tapped exhaust	232	PD20232-0000		PD40232-0000	
B	Two-way	320	PD20320-0000		PD40320-0000	
B	Three-way, open exhaust	331	PD20331-0000		PD40331-0000	
F	Three-way, tapped exhaust	432	PD20432-0000		PD40432-0000	
C	Four-way, open exhaust, closed center	541	PD20541-0000		PD40541-0000	
C	Four-way, open exhaust, exhaust center	543	PD20543-0000		PD40543-0000	
C	Four-way, open exhaust, supplied center	545	PD20545-0000		PD40545-0000	
D	Four-way, open exhaust, closed center	641	PD20641-0000		PD40641-0000	
D	Four-way, open exhaust, exhaust center	643	PD20643-0000		PD40643-0000	
D	Four-way, open exhaust, supplied center	645	PD20645-0000		PD40645-0000	
G	Four-way, tapped exhaust, closed center	742	PD20742-0000		PD40742-0000	
G	Four-way, tapped exhaust, exhaust center	744	PD20744-0000		PD40744-0000	
G	Four-way, tapped exhaust, supplied center	746	PD20746-0000		PD40746-0000	
H	Four-way, tapped exhaust, closed center	842	PD20842-0000		PD40842-0000	
H	Four-way, tapped exhaust, exhaust center	844	PD20844-0000		PD40844-0000	
H	Four-way, tapped exhaust, supplied center	846	PD20846-0000		PD40846-0000	

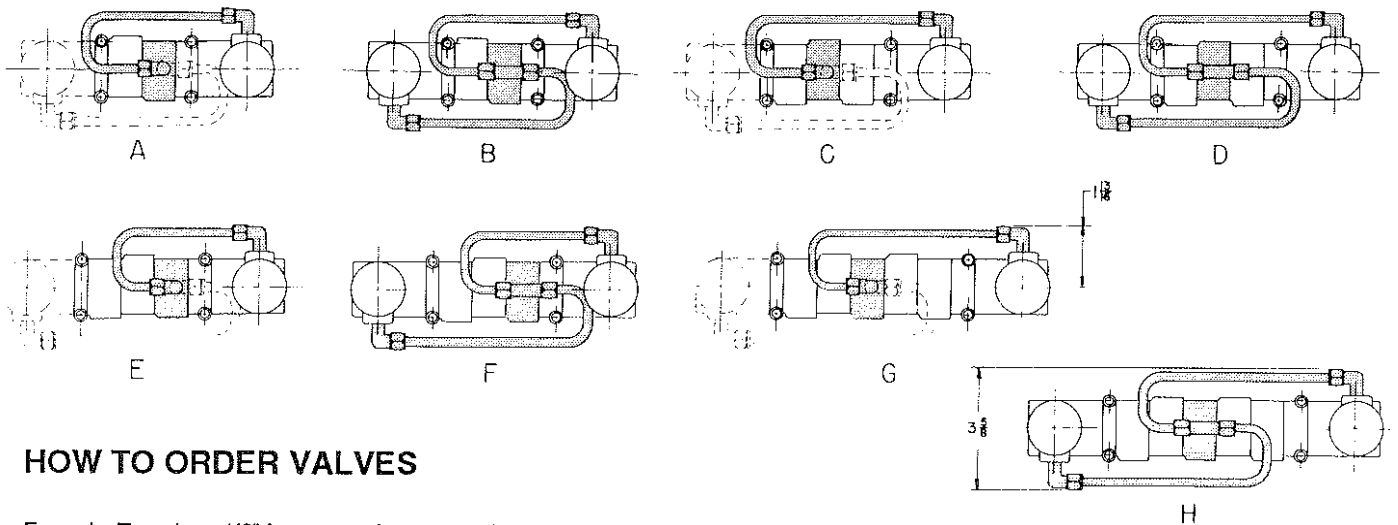
CONVERSION KITS FOR PILOT PRESSURE PIPING

To convert a basic valve portion to a piped solenoid operator, select one of the following part numbers

VIEW	VALVE TYPE	1/4"		1/2"	
		VALVE PART NO.	VALVE PART NO.	VALVE PART NO.	VALVE PART NO.
A	Two-way and Three-way, Open Exhaust	PD20100		PD40100	
E	Three-way, Tapped Exhaust	PD20200		PD40200	
B	Two-way and Three-way, Open Exhaust	PD20300		PD40300	
F	Three-way, Tapped Exhaust	PD20400		PD40400	
C	Four-way, Open Exhaust	PD20500		PD40500	
D	Four-way, Open Exhaust	PD20600		PD40600	
G	Four-way, Tapped Exhaust	PD20700		PD40700	
H	Four-way, Tapped Exhaust	PD20800		PD40800	

Conversion Kits include tubing cut to length and formed, required fittings, and special tapped body segment. Shaded areas indicate material furnished (when a different length is required, this tube is also in the kit.) Dotted lines indicate alternate piping arrangement, depending on the location of the solenoid operator. (See top of page 83 for Kit Reference Drawing.)

REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL



HOW TO ORDER VALVES

Example: To order a 1/2" four-way valve, open exhaust, closed center position with lever operator on "A" end and solenoid operator with return spring on "B" end, select Part Number as follows:

Basic Valve—"PD" plus 5 digits) Four Way Valve, open exhaust shown. See description, view B and code number below.

"A" End Operator—(2 digit suffix) Lever with no return spring shown. (See operators page 81 and select code number for operator required.)

P D 4 - 0 0 4 1 - 0 1 1 4

(Porting)—1/2" NPT
PD2 = 1/4" Valve
PD4 = 1/2" Valve

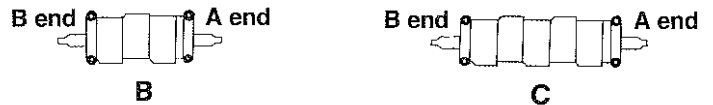
Use for ordering prepped solenoid valve—see page 82. "00" indicates no solenoid piping.

"B" End Operator—(2 digit suffix) Solenoid, full return spring shown. (See operators page 81 and select code number for operator required.)

Diagram showing the "A" end operator (Lever) and "B" end operator (Solenoid) configurations.

BASIC VALVE

Select the Basic Valve Portion as shown below, add the desired Operator Kits (which must be coded in the suffix, as in the example above, when factory assembly is desired.)



VIEW	DESCRIPTION	CODE NUMBER	
		1/4"	1/2"
A	Two-way valve	PD20020	PD40020
A	Three-way valve, open exhaust	PD20031	PD40031
B	Three-way valve, tapped exhaust, closed center position	PD20032	PD40032
B	Four-way valve, open exhaust, closed center position	PD20041	PD40041
C	Four-way valve, tapped exhaust, closed center position	PD20042	PD40042
B	Four-way valve, open exhaust, exhaust center position	PD20043	PD40043
C	Four-way valve, tapped exhaust, exhaust center position	PD20044	PD40044
B	Four-way valve, open exhaust, open center position	PD20045	PD40045
C	Four-way valve, tapped exhaust, open center position	PD20046	PD40046

For solenoid operators with pilot pressure piping, see page 82.

REXROTH TYPE "D" PILOTAIR[®] 2, 3 & 4-WAY DIRECTIONAL

MINOR REPAIR KITS FOR "D" PILOTAIR VALVE PORTIONS

KIT PT. NO.	DESCRIPTION 1/4" Valves
P68829	Kit, Minor Repair F/PD2-20, 31 Valve
P68830	Kit, Minor Repair F/PD2-32, 41, 43, & 45 Valve
P68831	Kit, Minor Repair F/PD2-42, 44, & 46 Valve

KIT PT. NO.	DESCRIPTION 1/2" Valves
P68837	Kit, Minor Repair F/PD4-20, 31 Valve
P68838	Kit, Minor Repair F/PD4-32, 41, 43, & 45 Valve
P68839	Kit, Minor Repair F/PD4-42, 44, & 46 Valve

The above minor kits contain seals, seal retainers, and a grease tube.

KIT PT. NO.	DESCRIPTION 1/4" Valves
P68823	Kit, Major Repair F/PD2-20 Valve
P68824	Kit, Major Repair F/PD2-31 Valve
P68825	Kit, Major Repair F/PD2-32 Valve
P64877	Kit, Major Repair F/PD2-41 Valve
P68826	Kit, Major Repair F/PD2-42 Valve
P64878	Kit, Major Repair F/PD2-43 Valve
P68827	Kit, Major Repair F/PD2-44 Valve
P64879	Kit, Major Repair F/PD2-45 Valve
P68828	Kit, Major Repair F/PD2-46 Valve

KIT PT. NO.	DESCRIPTION 1/2" Valves
P68832	Kit, Major Repair F/PD4-20 Valve
P68539	Kit, Major Repair F/PD4-31 Valve
P68833	Kit, Major Repair F/PD4-32 Valve
P68540	Kit, Major Repair F/PD4-41 Valve
P68834	Kit, Major Repair F/PD4-42 Valve
P68541	Kit, Major Repair F/PD4-43 Valve
P68835	Kit, Major Repair F/PD4-44 Valve
P68542	Kit, Major Repair F/PD4-45 Valve
P68836	Kit, Major Repair F/PD4-46 Valve

The above major kits contain the minor repair kit plus a stainless steel spool.

With the above kits and parts, the elastomer seals and some common wear parts in the basic valve portion of the assemblies can be repaired. On severely worn or damaged valves, additional parts may be required.

The basic valve portion kits do not contain any parts for the mechanical operator portions of the valves. The mechanical operator portion of the valves should be repaired when necessary, with individually selected parts and tested before being put into service. Refer to Service Bulletin B4-75.01 for additional parts information and service instructions for the Type "D" PILOTAIR valve

COILS

PART NUMBER	COIL VOLTAGE	COMPLETE SOLENOID OPERATOR PART NUMBER
P61920	120 VAC 60 Hz	P50861
P61920-0001	240 VAC 60 Hz	P50861-1
P61920-0002	480 VAC 60 Hz	P50861-2
P61920-0003	24 VDC	P50861-3
P61920-0004	12 VDC	P50861-4
P61920-0007	6 VDC	P50861-7

Other voltage ratings are available, consult factory.

REPAIR PARTS FOR SOLENOID OPERATORS

PART NO.	COIL VOLTAGE
P60969	Kit, Minor Solenoid Repair - PD2 - and PD4 - Valves (includes Plunger, Spring, Base Gasket)
P49708-0212	O-ring, Pilot Piston (Standard) - PD2 - Valves
P49708-0215	O-ring, pilot Piston (Standard) - PD4 - Valves

NOTE: Piston O-ring is also used in operator codes -10, -11, -12 and all solenoid operators.