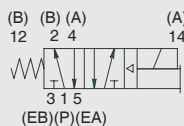
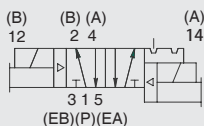


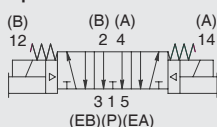
single solenoid pilot
2 position 4-way



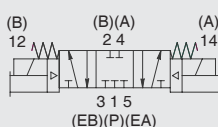
double solenoid pilot
2 position 4-way



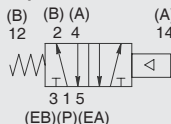
double solenoid pilot
3 position 4-way
open center



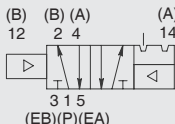
double solenoid pilot
3 position 4-way
closed center



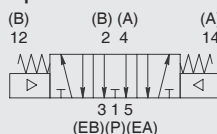
single air pilot
2 position 4-way



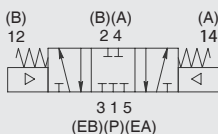
double air pilot
2 position 4-way



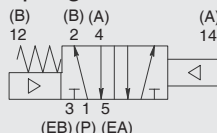
double air pilot
3 position 4-way
open center



double air pilot
3-position 4-way
closed center



double air pilot
2 position 4-way
spring offset



5 Ported, 2 and 3 position, 4-way, Spool & Sleeve
Cv: 1.7

- Solenoid pilot
- DIN plug-in solenoid indicator light
- Unlubricated or lubricated service
- In-line or manifold mounted

double solenoid pilot
3 Position 4-Way (5/3),
open to 4 (A) and
2 (B) in center



double air pilot
3 Position 4-Way (5/3),
open to 4 (A) and
2 (B) in center



Technical Data

VALVE DATA	ENGLISH		METRIC	
Cv	1/4 = 1.7	3/8 = 1.7	1/4 = 1.7	3/8 = 1.7
Flow Capacity	79 SCFM upstream pressure to atmosphere @ 80 PSIG		1674 NI/m @ 6 bar upstream/5 bar downstream	
Main Valve Operating Pressure Range	28" HG. Vacuum to 150 PSIG		Vacuum to 10 bar	
Pilot Pressure Range: Internal and External	14.5 to 150 PSIG		1 to 10 bar	
Temperature Range: Solenoid Pilot (ambient)	-10°F to +115°F		-23°C to +46°C	

Operating Data

ALL SOLENOIDS ARE CONTINUOUS DUTY RATED		12 VDC	24 VDC	24 VAC 50-60 Hz	110 VAC 50-60 Hz	230 VAC 50-60 Hz
*Power (Watts)		2.5	2.5	2.5	2.5	2.5
Holding Current (Amps.)		0.21	0.1	0.146	0.032	0.015
Inrush Current (Amps.)		N/A	N/A	0.25	0.055	0.026
Energize in Seconds	2-Position, Single, Spring Return	0.050	0.050	0.045	0.045	0.045
	2-Position, Double, Detented	0.050	0.050	0.045	0.045	0.045
	3-Position, Spring Centered	0.050	0.050	0.045	0.045	0.045
De-Energize in Seconds	2-Position, Single, Spring Return	0.035	0.035	0.035	0.035	0.035
	2-Position, Double, Detented	N/A	N/A	N/A	N/A	N/A
	3-Position, Spring Centered	0.035	0.035	0.035	0.035	0.035

How to Order

Valves

YB2 BA 4 52 4 N 000 20

Valve Series & Port Size

YB2 = 1/4
YB3 = 3/8

Valve Type

BA = Single Solenoid Pilot, Spring
Return W/Flush Locking Override
BB = Double Solenoid Pilot W/Flush
Locking Override
PA = Single Air Pilot w/Spring Return
PP = Double Air Pilot

Function

4 = 2 Position, 4-Way
5 = 3 Position, 4-Way Open Center
6 = 3 Position, 4-Way Closed Center
7 = 3 Position, 4-Way (5/3)
Open to 4 (A) and 2 (B) in Center

Mounting

52 = Line Mounted
(Manifold Mount With Adaptor)

Voltage

20 = 24 / 50-60 VAC
30 = 110 / 50-60 VAC
40 = 230 / 50-60 VAC
60 = 12 VDC
61 = 24 VDC
00 = N/A (Used With Air Pilot)

Options

000 = Standard (Class F Coil)
*83C = 22mm Class H Coil
14A = External Pilot Supply
12B = Dry Assembly

Port Type

N = NPTF
G = G tap

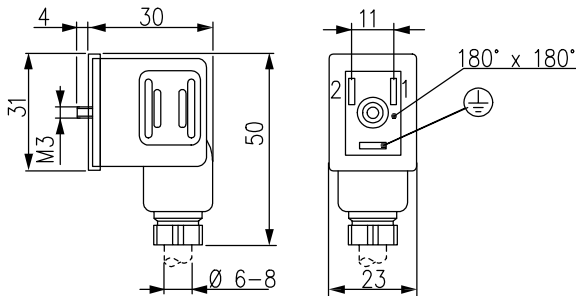
Wiring Option

4 = DIN Plug-In DC Solenoid
2 = DIN Plug-In AC Solenoid or Air Pilot

NOTE: Plug connector is included with DIN solenoid

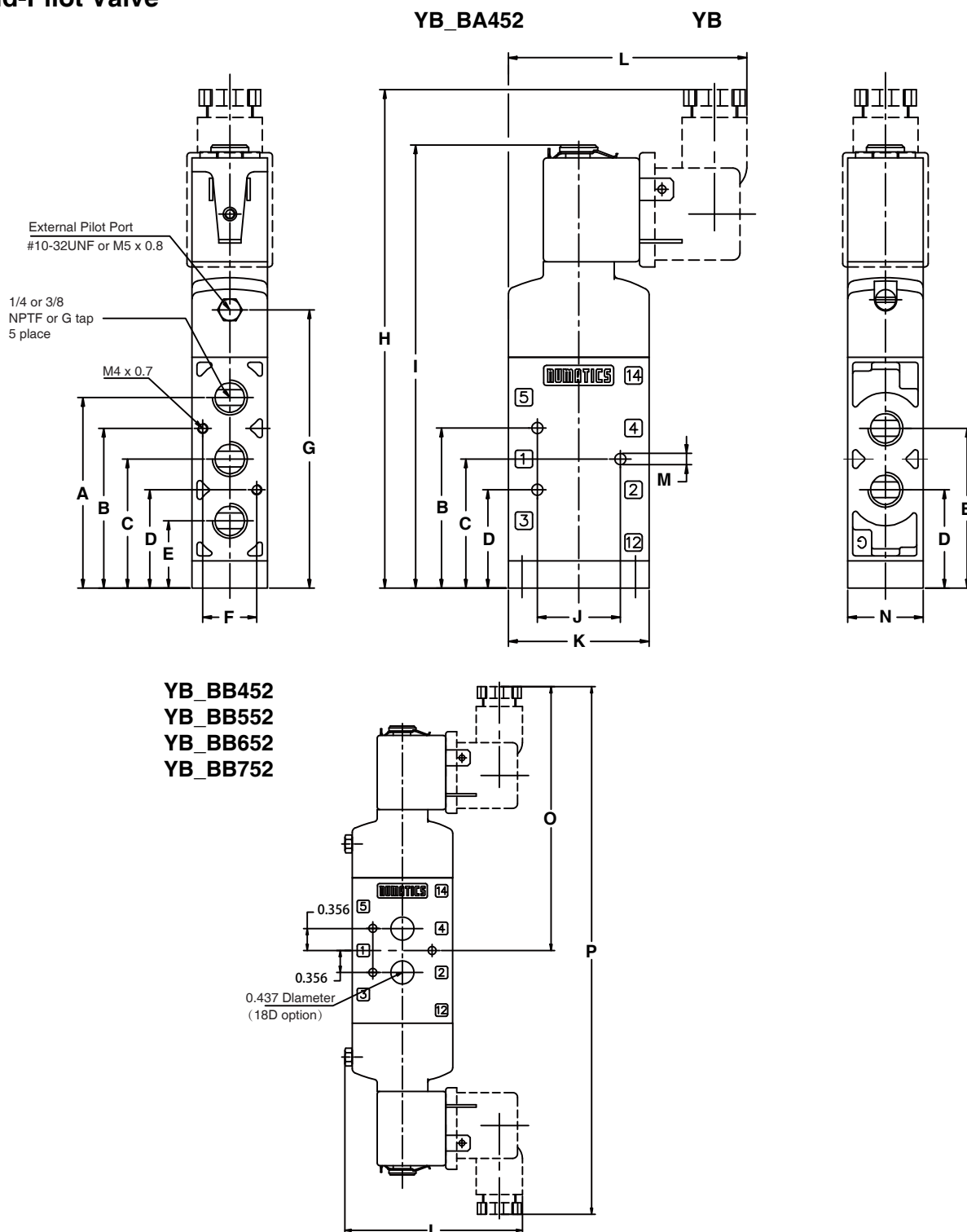
* : Consult ASCO SongJiang factory

Plug Connector Assemblies



PLUG CONNECTOR DESCRIPTION	PART NO.
Black Plug Assembly	88122404
Plug Assembly with 24V Led	88122405
Plug Assembly with 115V Led	88122407
Plug Assembly with 230V Led	88122410

Solenoid-Pilot Valve

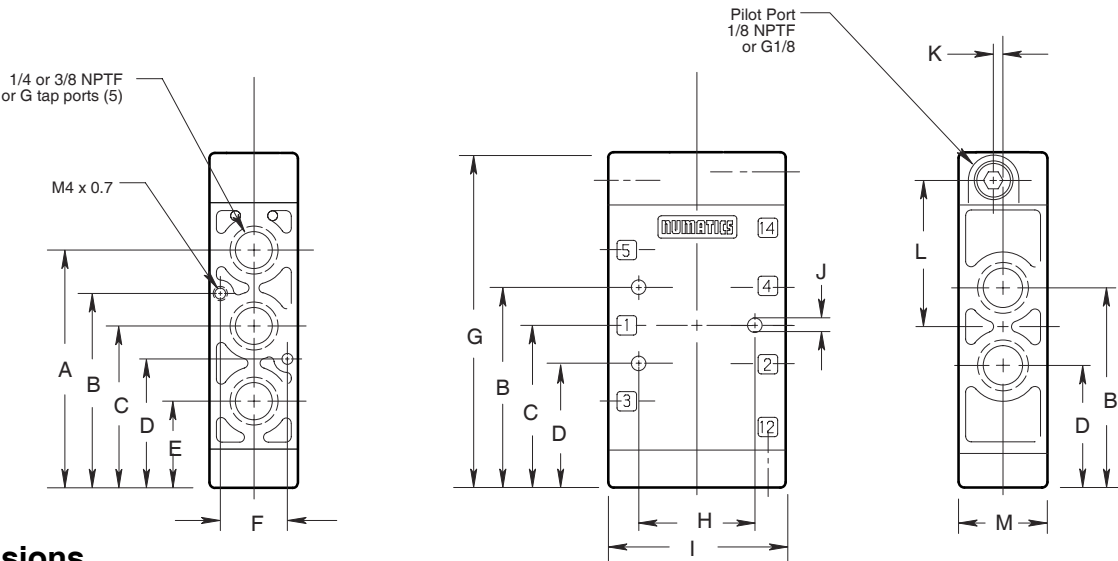


Dimensions

top dimensions = inches and bottom dimensions (in parenthesis) = millimeters

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2.72 (69.1)	2.28 (57.9)	1.85 (47.0)	1.41 (35.8)	0.97 (24.6)	0.75 (19.1)	3.87 (98.4)	6.37 (161.8)	5.8 (147.2)	1.27 (32.3)	2.00 (50.8)	2.9 (73.6)	0.17 (4.3)	1.00 (25.4)	4.52 (114.8)	9.04 (229.6)

Air-Pilot Valve - 2 PositionYB_PA425

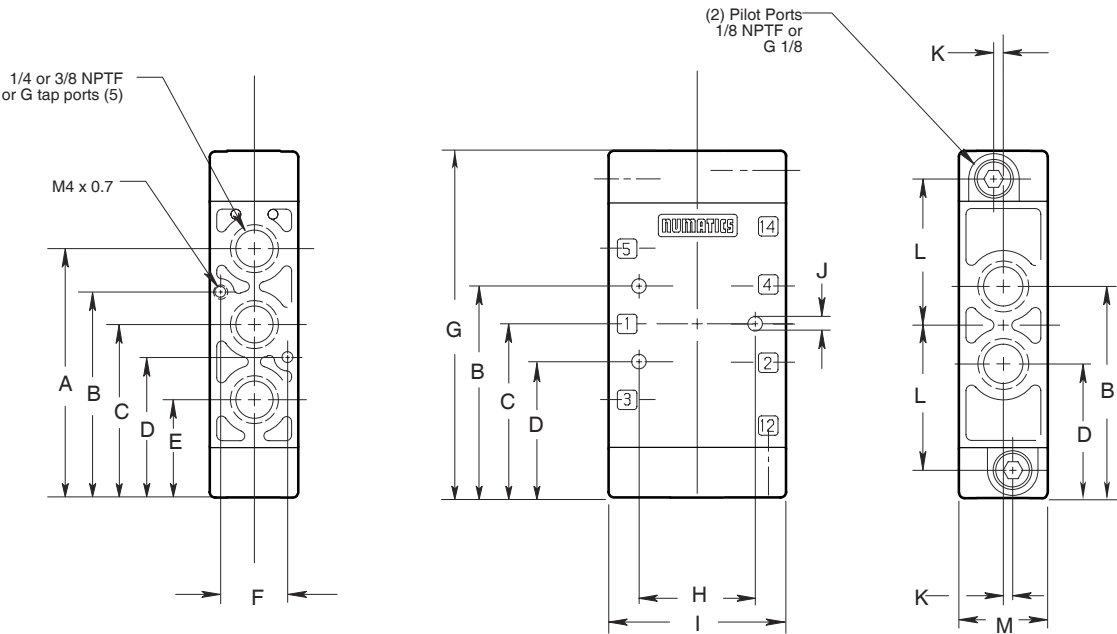


Dimensions

top dimensions = inches and bottom dimensions (in parenthesis) = millimeters

A	B	C	D	E	F	G	H	I	J	K	L	M
2.72 (69.1)	2.28 (57.9)	1.85 (47.0)	1.41 (35.8)	0.97 (24.6)	0.75 (19.1)	3.85 (97.8)	1.27 (32.3)	2.00 (50.8)	0.17 (4.3)	0.08 (2.1)	1.69 (42.9)	1.00 (25.4)

Air-Pilot Valve YB_PP452, YB_PP552, YB_PP652, YB_PP752

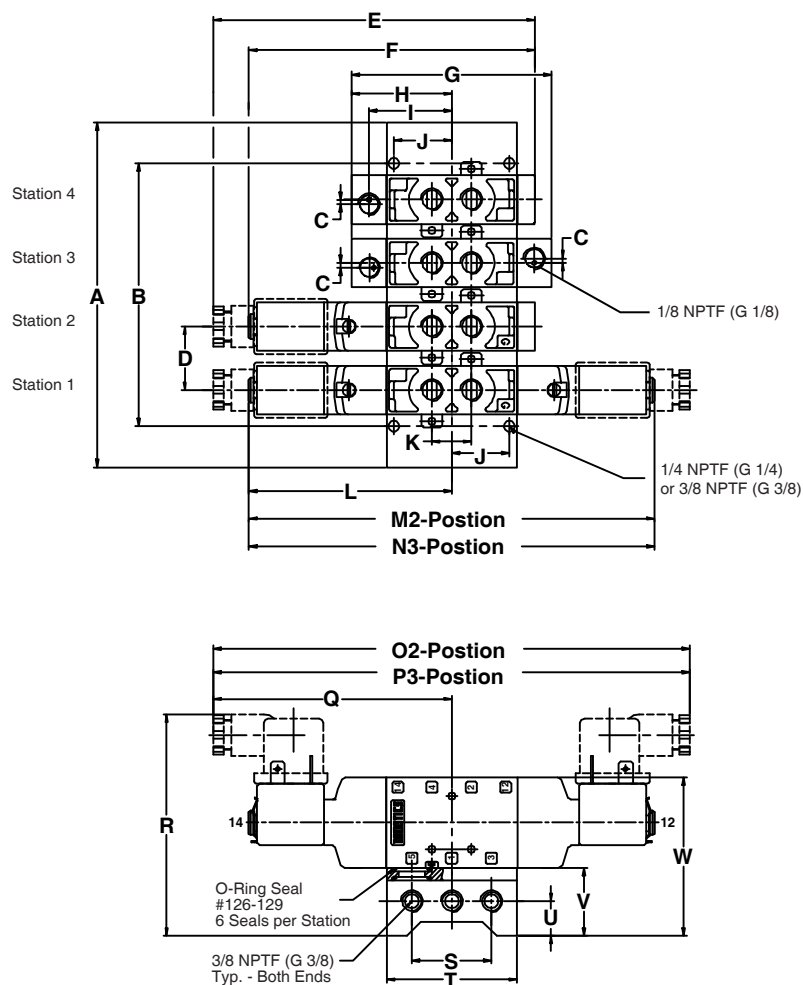


Dimensions

top dimensions = inches and bottom dimensions (in parenthesis) = millimeters

A	B	C	D	E	F	G	H	I	J	K	L	M
2.88 (73.2)	2.44 (61.9)	2.00 (50.8)	2.09 (39.8)	1.13 (28.6)	0.75 (19.1)	4.01 (101.9)	1.27 (32.3)	2.00 (50.8)	0.17 (4.3)	0.08 (2.1)	1.69 (42.9)	1.00 (25.4)

Manifold Assembly



Dimensions

top dimensions = inches and bottom dimensions (in parenthesis) = millimeters

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
See Below	See Below	0.08 (2.0)	1.26 (32.0)	6.37 (161.8)	5.8 (147.2)	4.01 (101.9)	2.01 (51.0)	1.69 (42.9)	1.25 (31.8)	0.88 (22.4)	3.94 (100.2)	7.89 (200.4)	7.89 (200.4)	9.04 (229.6)	9.04 (229.6)

Q	R	S	T	U	V	W
4.52 (114.8)	4.38 (111.25)	1.76 (44.70)	2.78 (70.6)	0.72 (18.3)	1.48 (37.6)	3.48 (88.4)

MANIFOLD # STATIONS	DIM A	DIM B	3/8 NPTF PART NO.	G 3/8 PART NO.	MANIFOLD # STATIONS	DIM A	DIM B	3/8 NPTF PART NO.	G 3/8 PART NO.
2 Stations	4.16 (105.7)	2.64 (67.1)	106-704	106-715	8 Stations	11.72 (329.7)	10.20 (259.1)	106-710	106-721
3 Stations	5.42 (137.7)	3.90 (99.1)	106-705	106-716	9 Stations	12.98 (329.7)	11.46 (291.1)	106-711	106-722
4 Stations	6.68 (169.7)	5.16 (131.1)	106-706	106-717	10 Stations	14.24 (361.7)	12.72 (323.1)	106-712	106-723
5 Stations	7.94 (201.7)	6.42 (163.1)	106-707	106-718	11 Stations	15.50 (393.7)	13.98 (355.1)	106-713	106-724
6 Stations	9.20 (233.7)	7.68 (195.1)	106-708	106-719	12 Stations	16.76 (425.7)	15.24 (387.1)	106-714	106-725
7 Stations	10.46 (265.7)	8.94 (227.1)	106-709	106-720	Adaptor Kit	Order (1) adaptor kit for each station on the manifold. Includes all seals and screws.			239-312

Internal / External Pilot Selection

NOTE: On double solenoid-pilot valves, both ends must be converted.

External pilot supply must be used if pressure is supplied to any port except No.1.

INTERNAL
PILOT SUPPLY



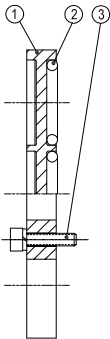
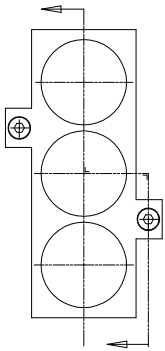
PILOT SUPPLY HOLE MUST
BE VISIBLE BOTH ENDS

EXTERNAL
PILOT SUPPLY



ROTATE GASKET TO COVER
PILOT SUPPLY HOLE.
REMOVE PIPE PLUG
(PART NO. 129-100)

Blank Station Plate Kit* 239-471-SJ

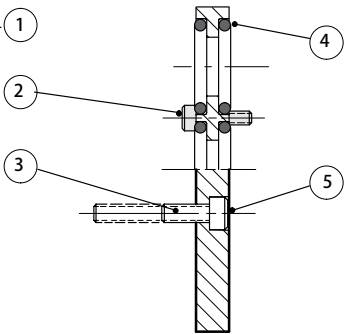
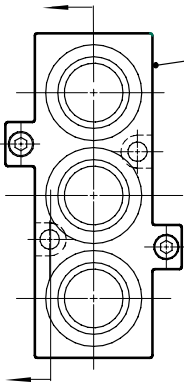


Parts List*

DET. NO.	NO. REQ'D	PART NAME	PART NO.
1	1	Blank Station Plate	119-264S
2	2	Screw	127-570
3	3	O-Ring	126-129

*To be sold separately

Adaptor Kit 239-312*

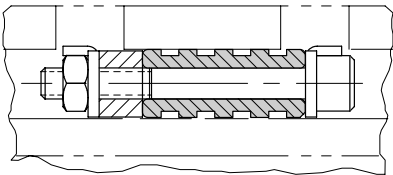


Parts List*

DET. NO.	NO. REQ'D	PART NAME	PART NO.
1	2	Adaptor	119-354
2	2	Screw	127-570
3	2	Screw	127-577
4	6	O-Ring	126-129
5	2	Screw (shipped loose)	127-400

*To be sold separately

Blocking Plug Kit*



MANIFOLD TYPE	PART NO.
---------------	----------

Common Supply, Common Exhaust (shown) 239-516
Kit includes (2) blocking plug spacer, rubber spacer, nut and screw
*To be sold separately

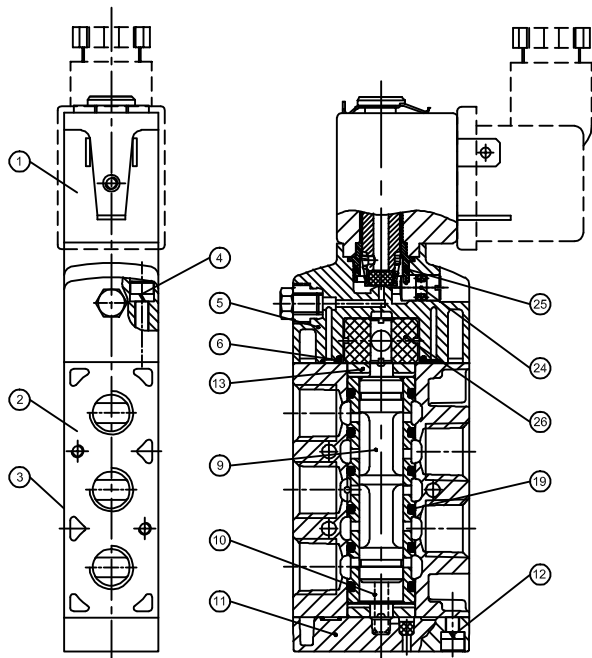
Solenoid Assemblies*

STANDARD VOLTAGES	110/50-60 VAC	230/50-60 VAC	24/50-60 VAC	12 VDC	24 VDC	110 VDC
Part No.	43005069	43004886	43004878	43004867	43004869	43004875

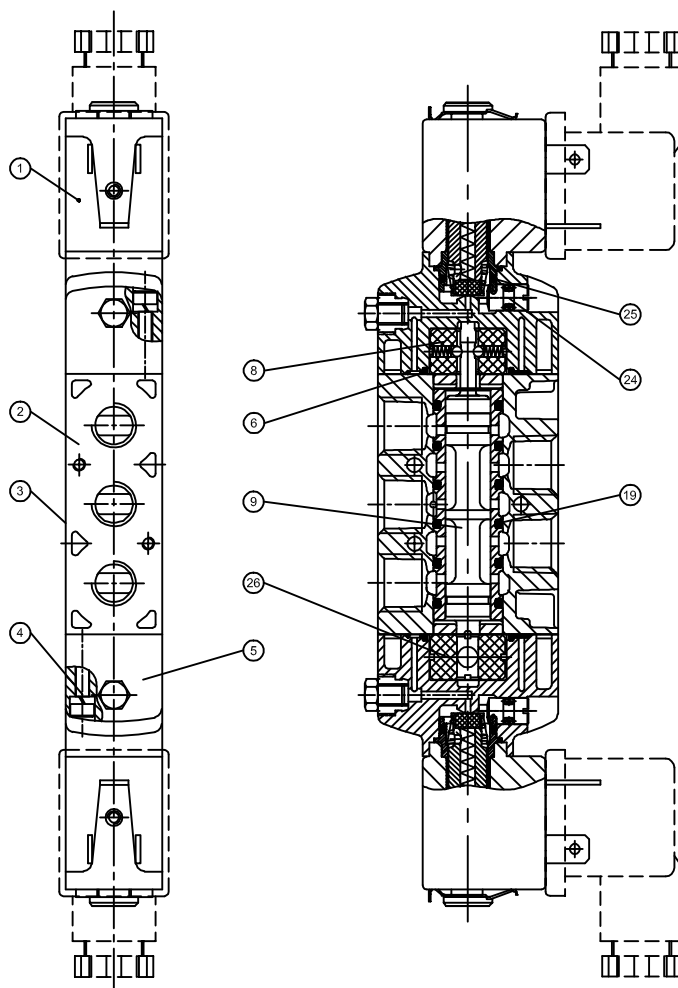
*To be sold separately

Valve Service Kits and Parts – 2 Position Solenoid-Pilot Actuated

Kit No. YB-K1 (For Models YB2BA4, YB3BA4)

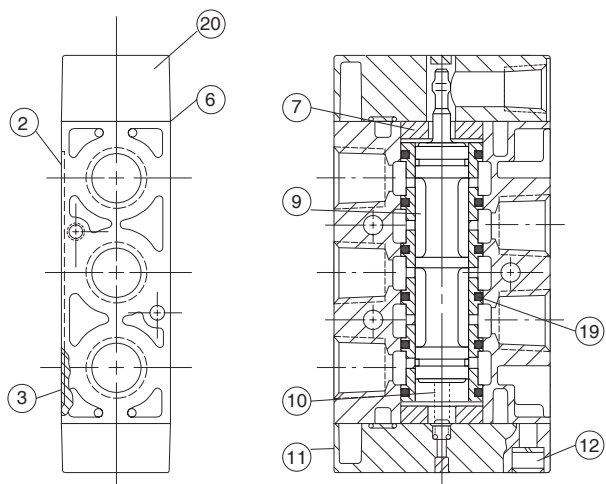


Kit No. YB-K2 (For Models YB2BB4, YB3BB4)

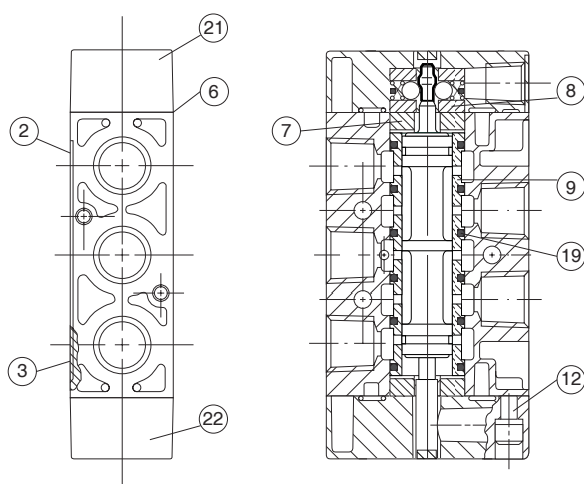


Air-Pilot Actuated

Kit No. YB-K1 (For Models YB_PA4)



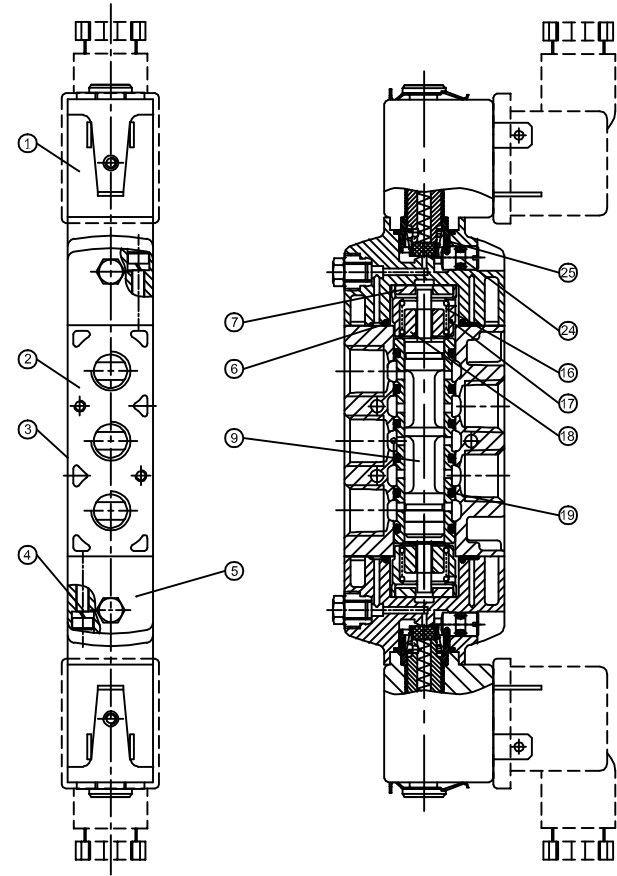
Kit No. YB-K2 (For Models YB_PP4)



Valve Service Kits and Parts – 3 Position

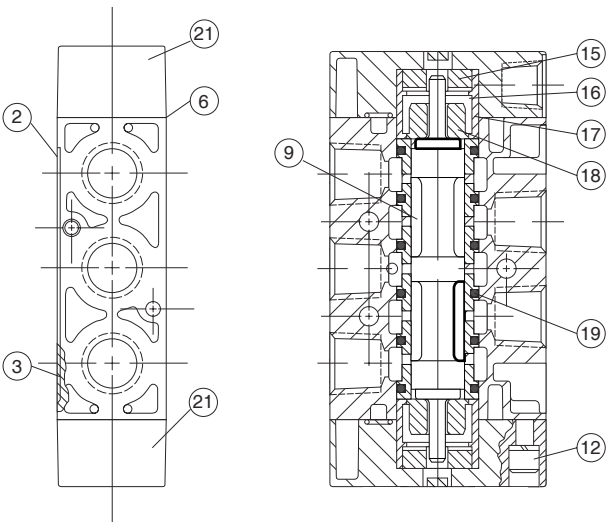
Solenoid-Pilot Actuated

Kit No. YB-K3 (For Models YB2-BB5, YB2-BB6, YB2-BB7)
(YB3-BB5, YB3-BB6, YB3-BB7)



Air-Pilot Actuated

Kit No. YB-K3 (For Models YB_PP5, YB_PP6, YB_PP7)



Parts List

DET NO	NO REQ'D	PART NAME	PART NO
1	1 or 2	Solenoid Capsule Assembly	See p. 6
2	1	Valve Body (not sold separately)	
3	1	Nameplate	122-940
4	2 or 4	Screw	127-672-SS
5	1 or 2	Pilot Body	295505-001
		Insert	293706-001
		Plug	127-589AT
6 *	2	Gasket	113-313
7 ****	2	Bumper	114-148
8 ***	1	Detent Assembly	210-116
9	1	Sleeve Assembly w/Seals ‡ for models:	
		YB-BA4	209-323
		YB-BB4, PA4	209-327
		YB-BB5, PP5	209-370
		YB-BB6, PP6	209-371
		YB-BB7, PP7	209-372
10 **	1	Spring	115-248
11	1	Spring Cover	104-281
12	<	Screw Assembly	127-396-SS
13 ~	2	Bumper	114-147
16 ****	2	Spring	115-247
17 ****	2	Spacer	116-341
18 ****	2	Spring Retainer	116-340
19 *	6	O-Ring Seal	126-204
20	1	Pilot Cap Assembly	204-404
21	>	Pilot Cap Assembly	204-408
22	1	Pilot Cap Assembly	204-406
24 *	2	Seal (override)	2401001
25 *	2	Seal (solenoid pilot)	2400116
26 ~	1	Detent Body	110-113

* indicates parts in YB-K1, YB-K2, and YB-K3

** indicates part in YB-K1 only

*** indicates part in YB-K2 only

**** indicates part in YB-K3 only

~ indicates part in YB-K1 and YB-K2 only

‡ Spool & sleeve assemblies are precision matched sets
& include (6) 126-204 seals; spools are not interchangeable.

> (1) for 2-position models; (2) for 3-position models

< (4) for YB-BA4, (2) for YB-BB4

• (2) for 2-position models; (4) for 3-position models