

KNIGHT

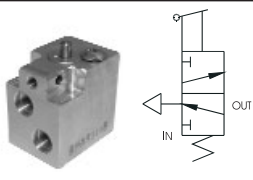
PROVEN INNOVATORS
of Material Handling Systems

Controls



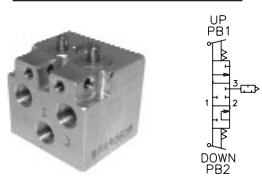
Pneumatic Control Handles

BPA9111
Single (1) signal spring return pilot valve



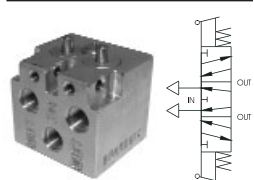
The BPA9111 pilot valve is used to send a signal to a power valve that provides functionality to a tool or fixture.

BPA9050
Three (3) port valve with rear exhaust

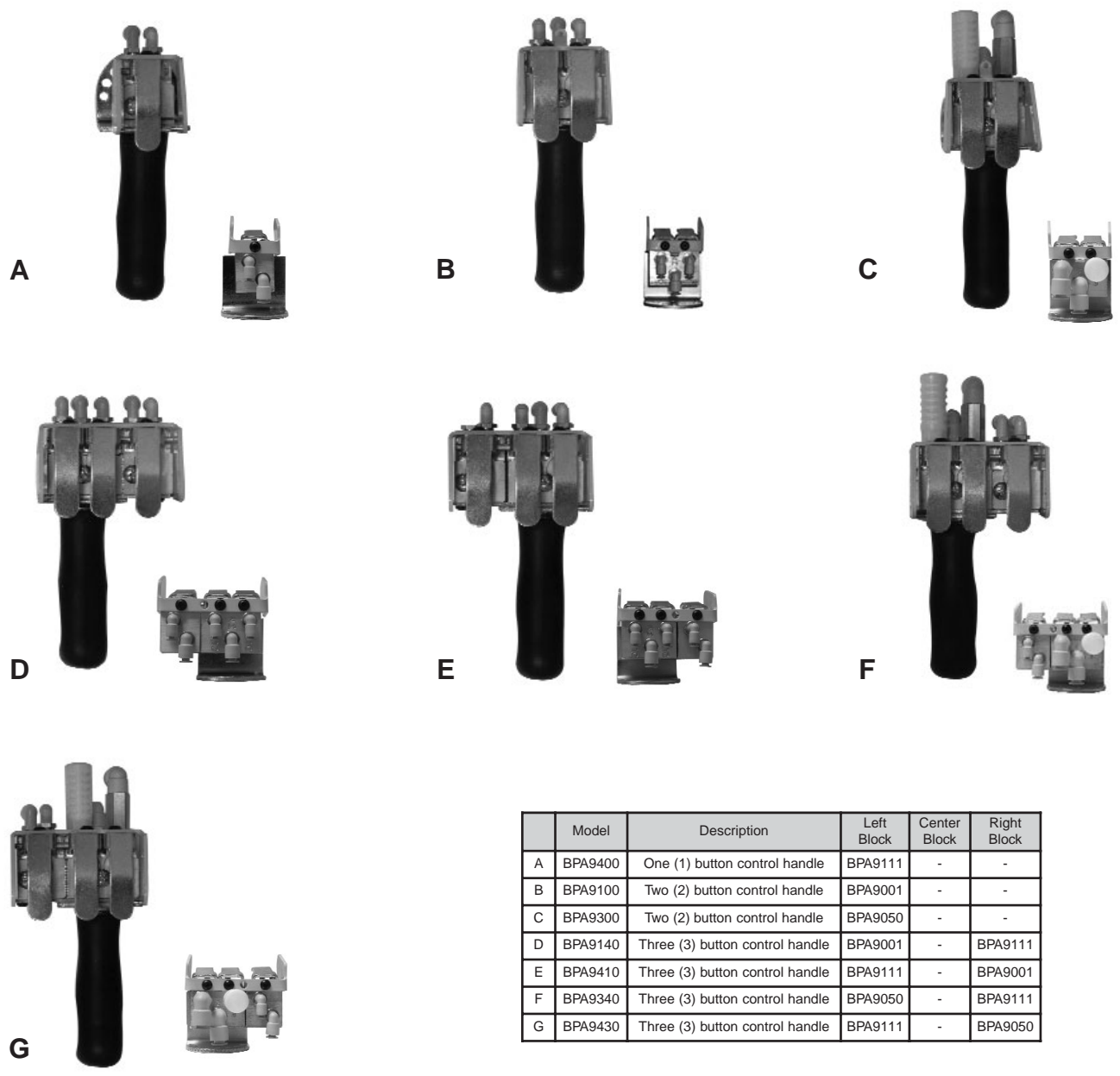


The BPA9050 block functions like a switch and provides up/down control. For arms and balancers only. Not for use with pilot signals.

BPA9001
Two (2) signal spring return pilot valve

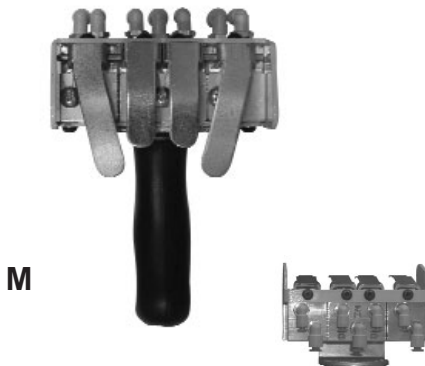


The BPA9001 valve is similar in function to the BPA9111 except that it sends two independent pilot signals instead of one.



	Model	Description	Left Block	Center Block	Right Block
A	BPA9400	One (1) button control handle	BPA9111	-	-
B	BPA9100	Two (2) button control handle	BPA9001	-	-
C	BPA9300	Two (2) button control handle	BPA9050	-	-
D	BPA9140	Three (3) button control handle	BPA9001	-	BPA9111
E	BPA9410	Three (3) button control handle	BPA9111	-	BPA9001
F	BPA9340	Three (3) button control handle	BPA9050	-	BPA9111
G	BPA9430	Three (3) button control handle	BPA9111	-	BPA9050

Pneumatic

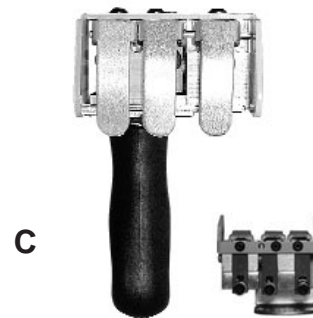
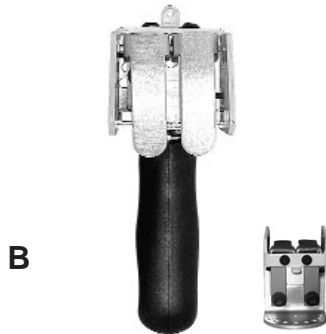
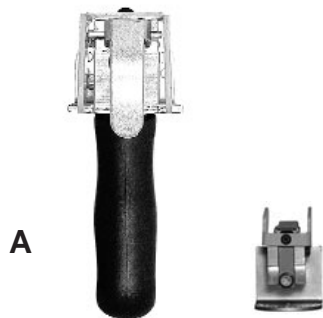
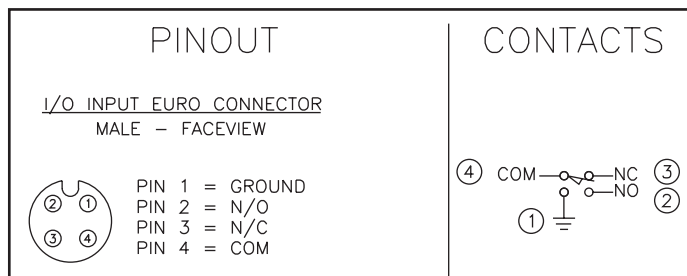


	Model	Description	Left Block	Center Block	Right Block
H	BPA9130	Four (4) button control handle	BPA9001	–	BPA9050
I	BPA9310	Four (4) button control handle	BPA9050	–	BPA9001
J	BPA9110	Four (4) button control handle	BPA9001	–	BPA9001
K	BPA9330	Four (4) button control handle	BPA9050	–	BPA9050
L	BPA9434	Four (4) button control handle	BPA9111	BPA9050	BPA9111
M	BPA9414	Four (4) button control handle	BPA9111	BPA9001	BPA9111
N	EPGA9400	One (1) button control handle	–	EPGA9111	–

Electric Control Handles

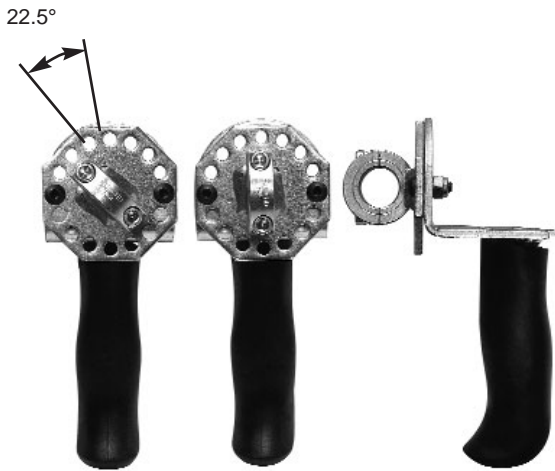
Switch Specifications

Switch - UL/CSA Rating
Contact 5 AMPS @ 28 V



	Model	Description	Micro-switches
A	EPA9201	Single button electrical control handle	1
B	EPA9202	Two button electrical control handle	2
C	EPA9203	Three button electrical control handle	3
D	EPA9204	Three button electrical control handle	3
E	EPA9205	Three button electrical control handle	4
F	EPA9206	Three button electrical control handle	1
G	EPA9207	Three button electrical control handle	1
H	EPA9208	Three button electrical control handle	1
I	EPA9209	Three button electrical control handle	1

Dead Handle Assembly



DEAD HANDLE ASSEMBLY

Knight standard handle without valve block or switch. Dead handle assembly comes with standard collar clamp sizes of 7/8 in., 1 in., 1 1/4 in. inner diameter.

BPA9000-1 Dead handle assembly with 7/8 in. I.D. collar clamp.

BPA9000-2 Dead handle assembly with 1 in. I.D. collar clamp.

BPA9000-3 Dead handle assembly with 1 1/4 in. I.D. collar clamp.

Knight control handles can be adjusted to ensure an ergonomically correct position. A rotation plate is affixed to the angle plate of the pendant handle. This rotation plate can easily be rotated in increments of 22.5° in either direction by simply removing the fasteners, turning the plate to the desired angle and replacing the fasteners.

Collar Clamps



Standard Collar Clamps
(sold separately)

COLLAR CLAMPS

Collar clamps come in standard sizes of 7/8 in., 1 in., 1 1/4 in. inner diameter. Other sizes are available as special orders.

BPD1119 - Rotating mounting plate with 7/8 in. I.D. collar clamp.

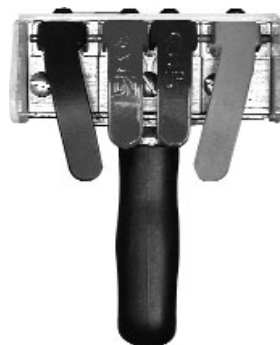
BPD1120 - Rotating mounting plate with 1 in. I.D. collar clamp.

BPD1121 - Rotating mounting plate with 1 1/4 in. I.D. collar clamp.

Lever Options

LEVER MARKINGS

UP	VAC OFF
DOWN	CLAMP
RETRACT	UNCLAMP
EXTEND	ROTATE
TILT	BRAKE
LOW	COMMON
FORWARD	PUSH OFF
REVERSE	HIGH
PART	TRACK DOG OFF
NO PART	TRACK DOG ON
TILT UP	TRACK DOG
TILT DOWN	START
VAC ON	REVERSE



CUSTOMIZING LEVERS

The levers can be customized for the purpose of identification and ease of use.

PAINT COLORS

Up and down levers painted red or green are standard. Custom colors can be applied according to customer specification.

ANGLED LEVERS

Control handle levers can be angled to compensate for spaces that may be created by different sized control blocks.