



KNIGHT GLOBAL



Control Handles

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Knight Global | Warranty Information

Knight warrants that its products and parts shall meet all applicable specifications, performance requirements, and be free from defects in material and workmanship for one year, (Servo Systems for two years, Pneumatic Lift Tables for 5 years), from the date of invoice, unless otherwise noted. One exclusion would include any purchased components not manufactured by Knight and their specific individual warranties. Paint defects, scratches and marring from shipping are also excluded.

This warranty shall not cover the failure or defective operation caused by inadequate training provided by customer regarding the operation and / or maintenance of the tool, misuse, negligence, misadjustment, or any alteration not approved by Knight. Knight's obligation is limited to the replacement or repair of Knight's products at a location designated by Knight. Buyer is responsible for all associated internal removal and reinstallation costs as well as freight charges to and from Knight Industries. Knight's maximum liability shall not in any case exceed the contract price for the products claimed to be defective.

Any field modification made to Knight Products or Systems without the written authorization by Knight Global shall void Knight's warranty obligation.

Knight warrants the Servo Hoist, Arms, and Tractors to be free from defects in material or workmanship for a period of two years or 6000 hours use from the date of shipment.

Knight Distributors/ Agents are not authorized to circumvent or change any of these terms and or conditions of this warranty unless prior approval is received in writing by Knight Global Management. Verbal statements made by Knight Distributors/ Agents do not constitute warranties.

On a design and build job, the customer is the owner of the equipment once they authorize shipment. The purchased equipment can not be returned for reimbursement or credit.

DISCLAIMERS: OTHER THAN AS SET FORTH HEREIN, NO OTHER EXPRESSED WARRANTIES, AND NO IMPLIED WARRANTIES, ORAL AND WRITTEN, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE BY KNIGHT GLOBAL WITH RESPECT TO ITS PRODUCTS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

KNIGHT GLOBAL SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL, SPECIAL AND/OR CONSEQUENTIAL DAMAGES WHATSOEVER, WHETHER OR NOT FORESEEABLE, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST PROFITS AND ALL SUCH INCIDENTAL, SPECIAL AND/OR CONSEQUENTIAL DAMAGES ARE HEREBY ALSO SPECIFICALLY DISCLAIMED.

KNIGHT GLOBAL WILL NOT BE LIABLE FOR ANY LOSS, INJURY OR DAMAGE TO PERSONS OR PROPERTY, NOR FOR DAMAGES OF ANY KIND RESULTING FROM FAILURE OR DEFECTIVE OPERATION OF ANY MATERIALS OR EQUIPMENT FURNISHED HEREUNDER.

We are committed to
Total Customer Satisfaction
through
QUALITY, RELIABILITY and
EMPLOYEE INVOLVEMENT.

Overview

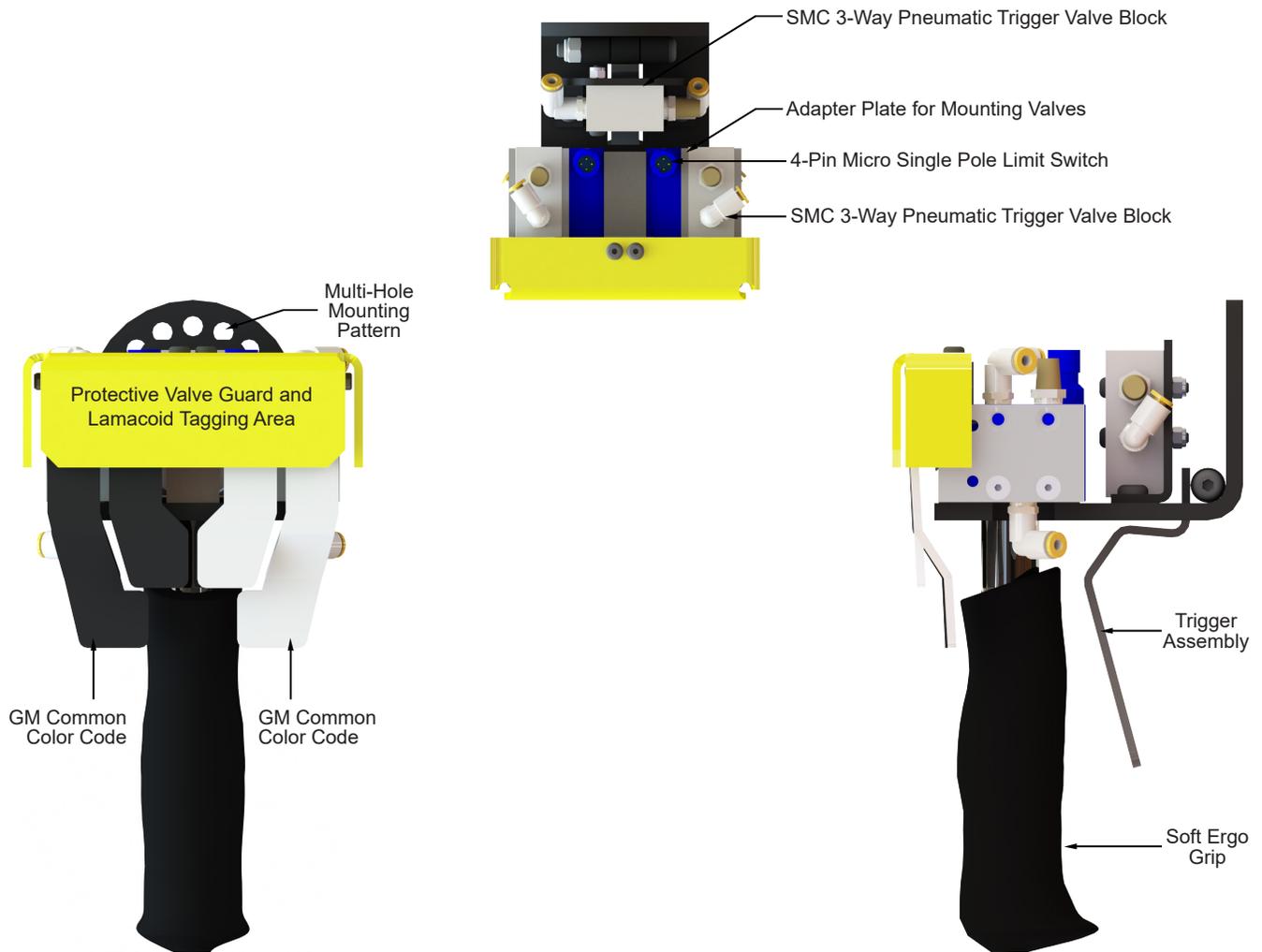
Knight Global's GM Control Handles are designed to meet GM requirements for ergonomics and design. Each handle is equipped with Black and White powder coated levers to meet the GM Global specification. The GM Control Handle Series modular design allows for various Electric and Pneumatic Push Button and Trigger configurations.

Features and Options

- Meets GM requirements for Ergonomics and Design.
- Powder Coated Black/ White Levers (GM Global Spec).
- Knight Ergonomic Grip.
- Modular construction allows for various pushbutton configurations.
- Protective "Yellow" Valve Guard
- Guard can be used for Lamacoid Tags which eliminates the need for individual callout stampings.
- Multi-hole mounting pattern.
- Optional Trigger Lever
- Lighter weight than most other handles in the market.



Lamacoid Tags



GM Control Handles

Pneumatic Control Handles



One (1) Button
Model# GMBPA9040 (Shown)



Two (2) Button
Model# GMBPA9300 (Shown)



Three (3) Button
Model# GMBPA9340 (Shown)



Four (4) Button
Model# GMBPA9434 (Shown)

Electric Control Handles



One (1) Button
Model# GMEPA9050 (Shown)



Two (2) Button
Model# GMEPA9600 (Shown)



Three (3) Button
Model# GMEPA9650 (Shown)



Four (4) Button
Model# GMEPA9660 (Shown)

Pneumatic-Electric Control Handles



Three (3) Button
Model# GMEPPA9150 (Shown)



Four (4) Button
Model# GMEPPA9360 (Shown)



Pneumatic Trigger
Model# GMEPPTA9460 (Shown)



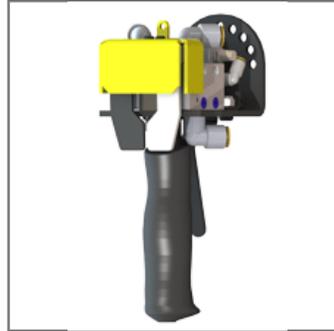
Electric Trigger
Model# GMEPETA9360 (Shown)

GM Control Handles

Pneumatic w/ Pneumatic Trigger Control Handles



One (1) Button
Model# GMBPTA9040 (Shown)



Two (2) Button
Model# GMBPTA9300 (Shown)



Three (3) Button
Model# GMBPTA9340 (Shown)



Four (4) Button
Model# GMBPTA9434 (Shown)

Electric w/ Electric Trigger Control Handles



One (1) Button
Model# GMEPTA9500 (Shown)



Two (2) Button
Model# GMEPTA9600 (Shown)



Three (3) Button
Model# GMEPTA9650 (Shown)



Four (4) Button
Model# GMEPTA9660 (Shown)

Pneumatic w/ Electric Trigger Control Handles



One (1) Button
Model# GMBPETA9040 (Shown)



Two (2) Button
Model# GMBPETA9100 (Shown)



Three (3) Button
Model# GMBPETA9340 (Shown)



Four (4) Button
Model# GMBPETA9310 (Shown)

GM Control Handles

Electric w/ Pneumatic Trigger Control Handles



One (1) Button
Model# GMEPPTA9050 (Shown)



Two (2) Button
Model# GMEPPTA9600 (Shown)



Three (3) Button
Model# GMEPPTA9650 (Shown)



Four (4) Button
Model# GMEPPTA9660 (Shown)

Pneumatic-Electric w/ Pneumatic Trigger Control Handles



Three (3) Button
Model# GMEPPTA9150 (Shown)



Three (3) Button
Model# GMEPPTA9510 (Shown)



Four (4) Button
Model# GMEPPTA9360 (Shown)



Four (4) Button
Model# GMEPPTA9630 (Shown)

Pneumatic-Electric w/ Electric Trigger Control Handles



Three (3) Button
Model# GMEPETA9150 (Shown)



Three (3) Button
Model# GMEPETA9530 (Shown)



Four (4) Button
Model# GMEPETA9360 (Shown)



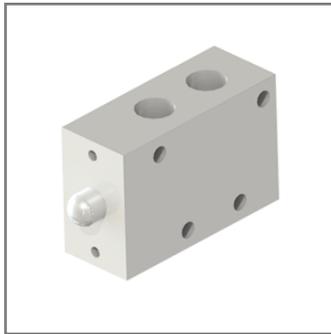
Four (4) Button
Model# GMEPETA9630 (Shown)

Specifications

Each GM Control Handle is configured with a **SMC 3-Way Pneumatic Valve Block**, **4-Pin Micro Single Pole Limit Switch** or a combination of both. Each GM Series Control Handle can be equipped with a pneumatic or electric trigger lever for optimum ergonomics or as a fifth button. Movements are controlled by utilizing either a pneumatic valve block or a electric single pole limit switch that are available in multiple pilot signal configurations.

Common Pilot Signals

- Up and Down
 - Retract and Extend
 - Tilt
 - Low
 - Forward and Reverse
 - Part and No Part
- Tilt Up and Down
 - VAC On and Off
 - Clamp and Un-Clamp
 - Rotate
 - Brake
 - Common
- Push Off
 - High
 - Track Dog Off and On
 - Track Dog
 - Start



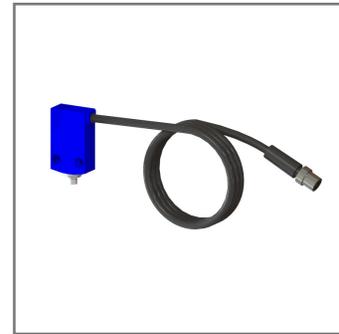
SMC Valve Block Assembly

Knight's BPA9111 Pneumatic Valve Block Assembly has 3-Way valves used for sending common pilot signals.



4-Pin Micro Single Pole Limit Switch

Knight's Electric 4-Pin Micro Single Pole Limit Switch has 1-N/O (Normally/ Open) and 1- N/C (Normally/ Closed) contacts.



Trigger 4-Pin Micro Single Pole Limit Switch

Knight's BPA9001 Pneumatic Valve Block Assembly has 3-Way valves used for sending common pilot signals.

Pneumatic / Electric Valve Operation

