**Model Number Definition**

**TO ORDER SPECIFY:**
- Product, Series, Type, Three Position, Slide Size, Slide Travel, Add Position, Tool Plate Extension, and Options.

**SLIDES WITH TC COMPOSITE BUSHINGS**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SIZE</th>
<th>SHAFT SIZE DIA</th>
<th>CYLINDER DORE</th>
<th>EFF. AREA EXTENSION</th>
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**SLIDES WITH LINEAR BALL BUSHINGS**

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<th>EFF. AREA EXTENSION</th>
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<td>B</td>
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<td>1-1/8&quot;</td>
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<td>3/4&quot;</td>
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<tr>
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</tbody>
</table>

**SLIDE TRAVEL (in)**

- 22: 1-1/8 to 14
- 23: 1-1/8 to 14
- 24: 1-1/8 to 18
- 25: 1-1/8 to 18
- 26: 1-1/8 to 22

**SLIDE TRAVEL (in) & MID-POSITION TRAVEL**

- Specify for 5 position units. Travel from retract position 1 to mid-position 2.

**OPTIONS**

- PB - Port Control on extension and retraction
- JD - Adjustable Cushions on extension and retraction
- BL - External Seals
- BJ - Fluoro-Elastomer Seals
- BS - Corrosion resistant guide shafts
- GM - Side mounting holes in position 3
- AR - Rodlok® unit preassembled
- GM - Shock Absorber and 12 mm Proximity Switch Ready on extension and retraction
- BL - Shock Absorber and 8 mm Proximity Switch Ready on extension and retraction
- BL - Shock Absorber and 12 mm Proximity Switch Ready on extension and retraction

**SHOCK ABSORBER OPTIONS**

- GM - Shock Absorber mounting on extension and retraction
- GN - Shock Absorber mounting on extension and retraction
- GD - Shock Absorber mounting on extension and retraction
- GB - Shock Absorber mounting on extension and retraction
- GS - Shock Absorber mounting on extension and retraction
- GM - Shock Absorber mounting on extension and retraction
- GN - Shock Absorber mounting on extension and retraction
- GB - Shock Absorber mounting on extension and retraction
- GS - Shock Absorber mounting on extension and retraction

**SHOCK PADS OPTIONS**

- AR - Travel Adjustment and Shock Pads on retraction
- AC - Travel Adjustment and Shock Pads on extension
- AS - Travel Adjustment and Shock Pads on extension
- MS - Travel Adjustment and Shock Pads on extension
- GM - Shock Absorber and 12 mm Proximity Switch Ready on extension and retraction
- GN - Shock Absorber and 12 mm Proximity Switch Ready on extension and retraction
- GS - Shock Absorber and 12 mm Proximity Switch Ready on extension and retraction

**NOTES:**

1. Shock absorbers must be ordered separately. See page 5B-42. Shock mounting brackets must be ordered separately for GM, GN, and GD option.
2. Provisions for shock absorber mounting options include shock stops mounted on the shaft, stop collar on the opposite shaft, and threaded holes in the slider body for mounting the shock bracket.
3. Options may affect unit length. See unit dimension and options pages for adders.
GENERAL INFORMATION

PRESSURE RATINGS
All SD and SE Slides have a maximum working pressure rating of 150 psi air and are for pneumatic use only.

OPERATING TEMPERATURES
Standard SD and SE Slides are recommended for use in temperatures from –20° to +150°F. Consult factory for temperatures beyond this range.

LUBRICATION
All units are permanently lubricated at the factory for service under normal conditions. The cylinders can be run using non-lube air. Life can be extended on units by periodic lubrication of the shafts and the use of lubricated air with the cylinders. Silicon based lubrication should not be used on units with PHD’s TC bushings.

MAXIMUM SLIDE VELOCITY
Maximum velocity for SD and SE Slides is 50 inch/second without Port Controls and 16 inch/second with Port Controls. The above figures are based on no load with 100 psi working pressure.

PORT CONTROL AND CUSHION ADJUSTMENT POSITIONS

Port Control® and cushion needles are located in position number 1 (top surface) on the cylinders. Positions may vary if optional port positions are specified. Port Controls are used to adjust the slide’s speed and should be adjusted prior to adjusting the cushions. Clockwise adjustment provides a slower slide speed while counterclockwise adjustment provides a faster speed.

Cushions control deceleration over the last 3/8” of travel. Cushion adjustments control the rate of deceleration. Clockwise adjustment increases the cushion effect while counterclockwise adjustment decreases the cushion effect.

Do not loosen the hex needle retainers. The adjustment needles are self-locking and require no locking nut to retain position.

CUSTOM PRODUCTS
A model number “ML-xxxx” indicates the unit is a custom product. Contact your local distributor or PHD, Inc. for a complete product description.

TRAVEL ADJUSTMENT STOP COLLARS OPTIONS -AR, -AT, -AE, & -AS
Adjust one collar and tighten to proper torque (see chart below). Then adjust other collar so that both collars and pads make contact evenly.

-AE & -AS TRAVEL ADJUSTMENT AND SHOCK PADS ON EXTENSION

TORQUE SPECIFICATION (IN.-LBS.)

<table>
<thead>
<tr>
<th>SLIDE SIZE</th>
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<th>23</th>
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