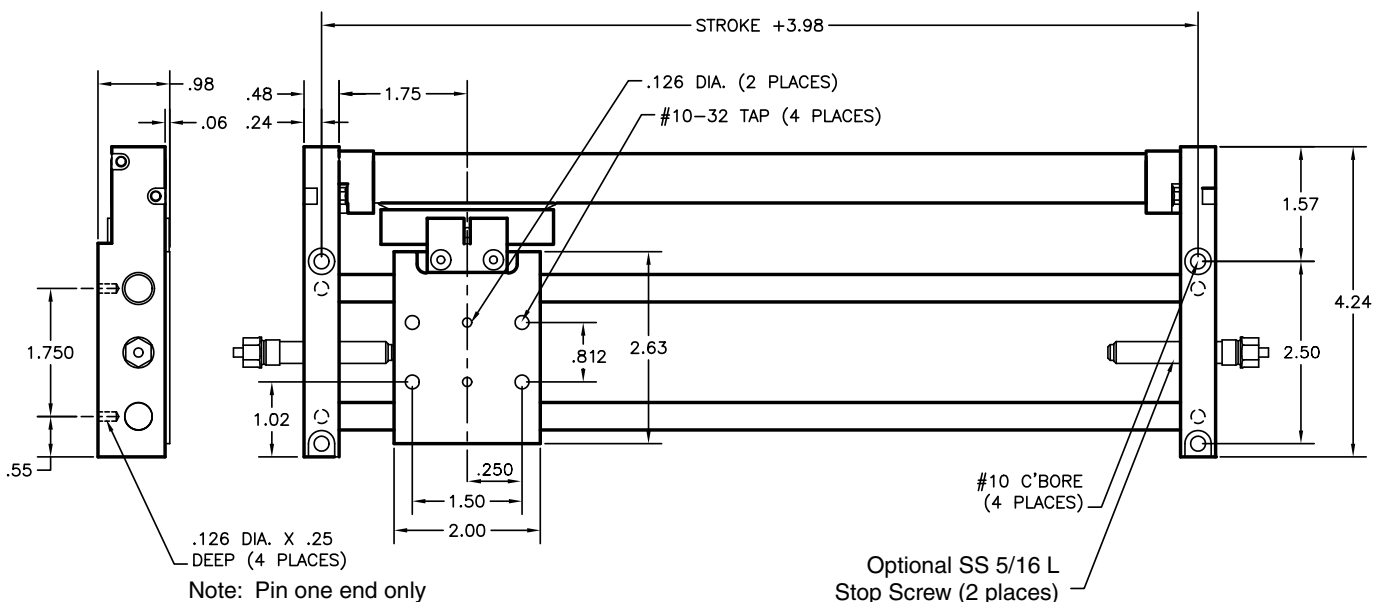




F Features

- External mounted rodless cylinder
- Rodless cylinder for short overall length
- 0.375 dia. case hardened & ground shafts
- 4 linear ball bearings and seals for extended cycle life
- Tapped & dowel pin holes in anodized body for ease of mounting
- Tapped & dowel pin holes in anodized end plates for ease of mounting
- Hardened adjustable stopscrews for accurate and repeatable positioning
- End of stroke sensing switches are available for stopscrews

Dimensions



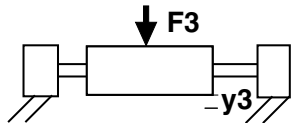
NOTE: Flow controls are recommended for all applications.

ES-1 Table Slide

Technical Data

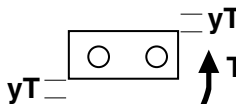
Bore = .38"
 Force @ 80 psi = 9 lbs
 Operating medium = compressed air 60-100 psi
 Air connection = 10-32
 Repeat accuracy = +/-0.0005"
 Life expectancy = >100 million travel inches

Force diagrams below depict the load and the resultant deflection caused by that force (or torque).



$$F3 = X * F1$$

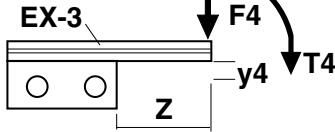
$$y3 = y1 / X$$



$$T = F3 * 0.87 / X$$

$$yT = y1 / 2 \text{ or}$$

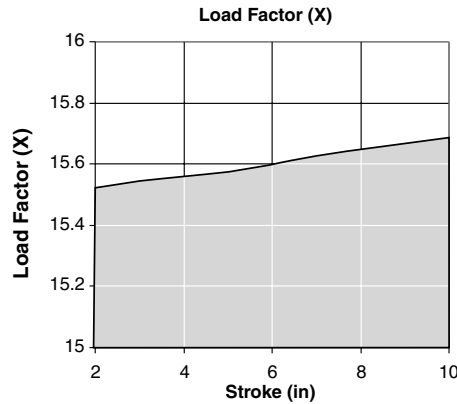
$$yT = y3 * X / 2$$



For $T4 = T$;
 If $T4 = F4 * (z + 0.87)$ and $T = F3 * 0.87 / X$ then,

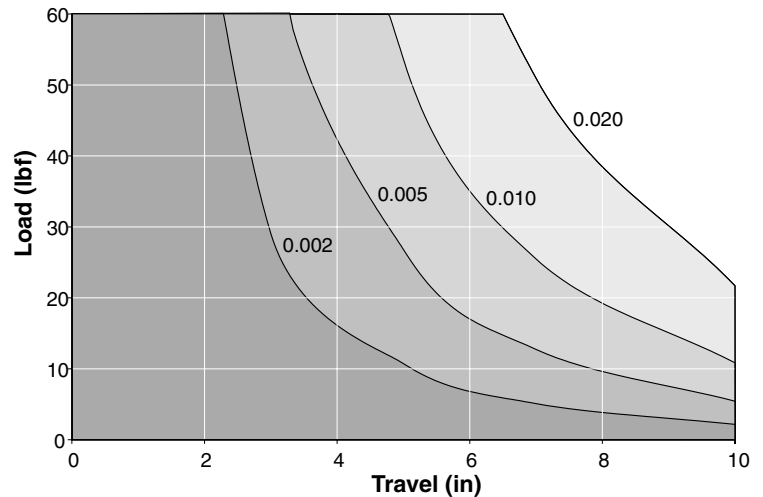
$$F4 = F3 * 0.87 / (X * (z + 0.87))$$

-F4 is the force that will cause a deflection (yT) at the block's edge. To determine the deflection at the cantilever end use the following:
 $y4 = F4 * z^3 / (9.78E+07)$



The load factor (X) is used in calculations as a relationship between a load on the ends (F1) versus a load in the center (F3).

F3 Load vs. Travel at set Deflection (y₃) for the ES-1



Ordering & Options

ES - 1 - -

STROKE
(1" to 10")

C = Base ES with
internal air cushion standard
SS = with 2 Stop Screws

No Shocks Available

For end of stroke sensing,
see page 143-149

