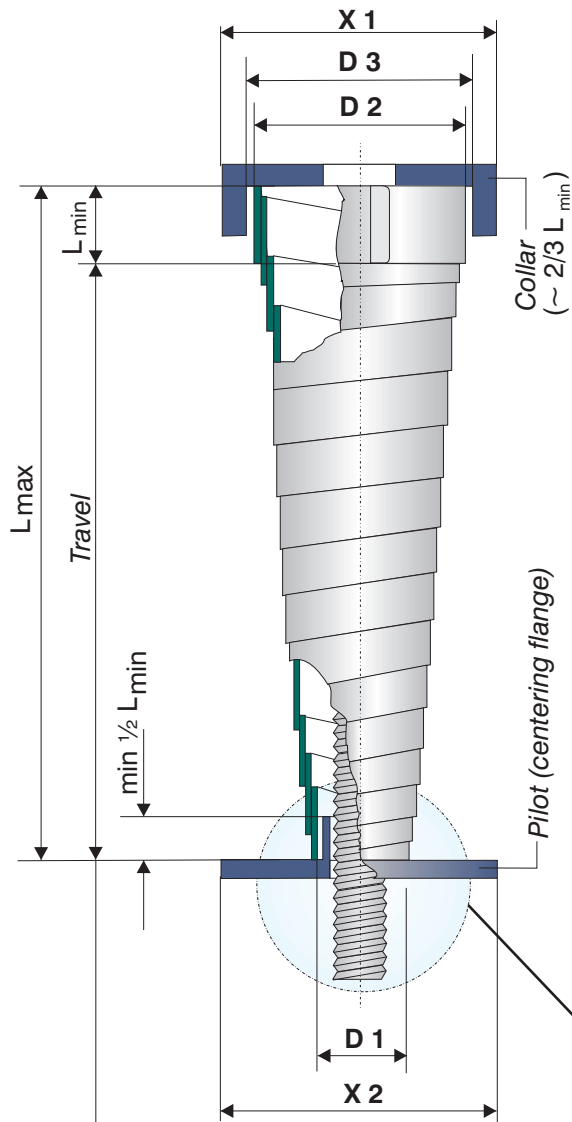


Telescopic Springs

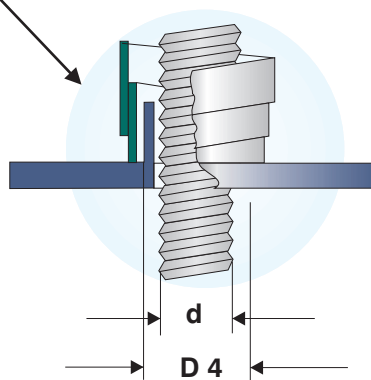
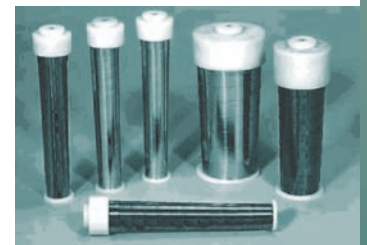
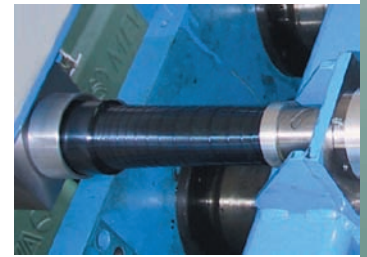
Safe protection against accidents, dirt, chips and mechanical damages on rotating machine parts, spindles, ball screws, shafts etc.



Legend

d	Max. diameter of the part to be protected
D1	Inner diam. of spring ± 1 mm
D2	Outer diam. of spring ± 2 mm
D3	Inner diameter of collar ($D2 + 4$ mm)
D4	Outer diam. of pilot (centering flange) ($D1 - 2$ mm)
L _{min}	Compressed length (min)
L _{max}	Length of spring (max)
X1=X2	Flanges (outside dimensions)

$Travel = L_{max} - L_{min}$



If a centering flange (pilot) is used, please add 6 - 8 mm to dimension "d" (spindle diameter), depending on the size of the spring, to obtain dimension "D1" (inside diameter of spring).

Then select the desired spring in column "D1".
Example: Your spindle diameter (d) is 11 mm.
 If a centering flange is used, we have:
 $11 + 6 \text{ mm} = 17 \text{ mm}$ (D1). You will select the next larger dimension = 20 mm for "D1".

When selecting a suitable telescopic spring, please distinguish between **horizontal** and **vertical** use (**L max horiz.** and **L max vert.** in the following charts).