



Inner Tension Bushes with Closed Joint PN7000

Where extremely high retention forces are required from a Bush then the Pentz type PN7000 with its Closed Joint will rise to this exacting task. Upon assembly the slot edges come together and exert increasing pressure upon the walls of the housing.

PN7000 Applications

Pentz Inner Tension Bushes of this type have been developed to satisfy the need for better performance in the more exacting environments. Fields of application are:

- All the usual machinery previously referred to
- Plus applications where service life is an extra consideration
- Plus e.g. hazardous applications where Bush may not be accessible as often as may be preferred

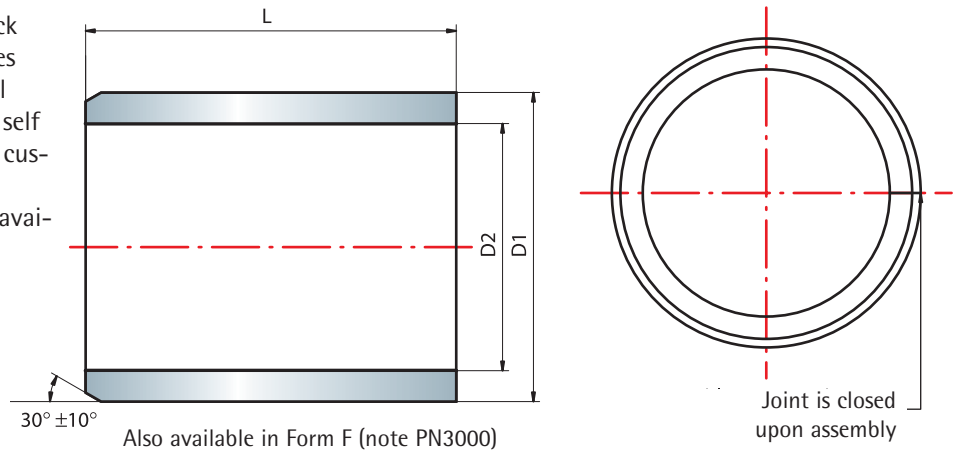
PN7000 Advantages

- No loss of lubricant
- Extra security in housing
- Bushes can be ground upon request offering closer tolerances
- Reduced life costs
- Increased maintenance periods
- Production times as standard Bushes
- Easy assembly and removal with standard hydraulic fitment
- Patented design



Inner Tension Bush PN7000 cont'd

Due to the closed joint of this Bush even shock loadings are more easily dealt with. The Bushes are through hardened and tempered giving all the advantages of a solid Bush together with self retention, press-in forces are agreed with the customer prior to delivery. All Pentz variations of lubrication grooves and through holes are available on this Bush type also.



EGP1 / EGPG1*
Inner Tension with closed joint

- 1 inner spiral groove, one side running-out into chamfer



EGP2 / EGPG2*
Inner Tension with closed joint

- To D2 90mm, 3 inner inclined grooves not running-out
- 90mm Dia upwards 4 similar grooves
- Optionally with 1 inner annular groove



EGP3 / EGPG3*
Inner Tension with closed joint

- 1 outer annular groove
- 1 inner annular groove
- To D2 90mm Dia. 3 inclined grooves not running out
- From D2 90mm Dia. 4 similar grooves
- 3 or 4 drilled holes



EGP4 / EGPG4*
Inner Tension with closed joint

- 1 outer groove
- 1 inner groove
- 2 holes through



EGP5 / EGPG5*
Inner Tension with closed joint

- To D2 90mm, Dia. 3 inner inclined grooves running-out to chamfer
- From D2 90mm Dia. 4 grooves similar



EGP / EGPG*
Inner Tension with closed joint

- plain surface

*) internally ground

Technical data

Inner diameter – tolerances for Tension Bushes PN7000

Nominal size of inner Ø D2		10			18			30			50			80			100		120		180	
		to 50	to 100	to 150	to 50	to 100	to 150	to 50	to 100	to 150	to 50	to 100	to 200	to 50	to 100	to 200	to 100	to 200	to 100	to 200		
ISO tolerances of inner Ø D2	D 11	+0,160 +0,050	+0,160 +0,050		+0,195 +0,065	+0,195 +0,065		+0,240 +0,080	+0,240 +0,080		+0,290 +0,100			+0,340 +0,120								
	D 12			+0,230 +0,050			+0,275 +0,065			+0,330 +0,080			+0,400 +0,100			+0,470 +0,120		+0,470 +0,120		+0,545 +0,145	+0,630 +0,170	
	D 13												+0,560 +0,100			+0,660 +0,120		+0,660 +0,120		+0,775 +0,145	+0,890 +0,170	
	*H 8	+0,027 0,000			+0,033 0,000			+0,039 0,000			+0,046 0,000			+0,054 0,000			+0,054 0,000			+0,063 0,000		+0,072 0,000
	*F 8	+0,043 +0,016			+0,053 +0,020			+0,064 +0,025			+0,076 +0,030			+0,090 +0,036			+0,090 +0,036			+0,106 +0,043		+0,122 +0,050
	*E 8	+0,059 +0,032			+0,073 +0,040			+0,089 +0,050			+0,106 +0,060			+0,126 +0,072			+0,126 +0,072			+0,148 +0,085		+0,172 +0,100

* Tolerances for ground Bushes or others to your specification.
To control the inner diameter note the sum of the tolerances, housing plus tension Bush.

Minimum pre-tension sizes not applicable, as this Bush achieves its high retention force from the Closed Joint principle.

Length tolerances

Inner Ø D2	10 to 50	50 to 100	100 to 250
Length L > 100	-1	-1,5	-2
< 100	-1,5	-1,5	-2

Housing tolerances for Bush type PN7000

Housing		10 to 18	18 to 30	30 to 50	50 to 80	80 to 120	120 to 180	180 to 250
ISO tolerance	H 8	+0,027 0	+0,033 0	+0,039 0	+0,046 0	+0,054 0	+0,063 0	+0,072 0

All dimensions in millimetres.

