



# Tubular Rack

# Ground Round Rack

## General Information

All dimensions in mm  
 General tolerances:  
 $\pm 0.13\text{mm}$   
 Material:  
 Stainless steel  
 Grade 316 series.  
 Pressure angle  $20^\circ$

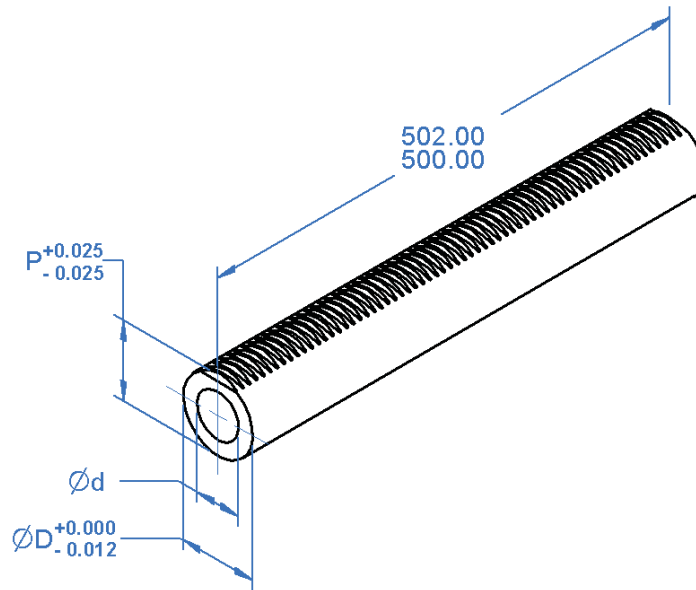
## Associated Products

PEEK™ polymer pinions  
 Stainless steel pinions  
 Bearings  
 Stepper motors

Or visit our online catalogue for associated products at:

## Notes

(1): 0.5 module not available on  $\varnothing 6$  tube.

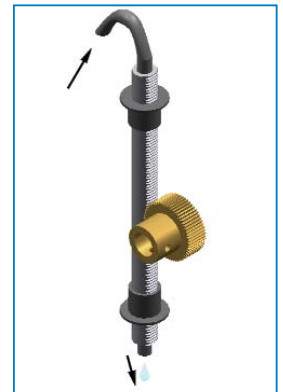


## Part number selection table

Part Number	Circular Pitch (mm)	Outer Dia $\varnothing D$	Bore Dia $\varnothing d$	Pitch Height P	Rack Thrust (N)
<b>RRT06-1M-500</b>	1	6	3.4	5.682	20*
<b>RRT08-1M-500</b>		8	5	7.682	
<b>RRT10-1M-500</b>		10	6	9.682	

\* Rack thrust based on a mesh with a 50 tooth stainless steel pinion, 3N if used with a 50 tooth PEEK™ polymer pinion.

- Cumulative pitch error less than 0.050mm.
- Ground teeth, standard accuracy grade 2.
- Hollow shaft allows for the passage of fluids, fibre-optics and gasses etc.
- Highly stainless material resists pitting corrosion.
- Ideal for medical and scientific applications.
- Bearing surface and drive in one.



## Non-standard options, please enquire....

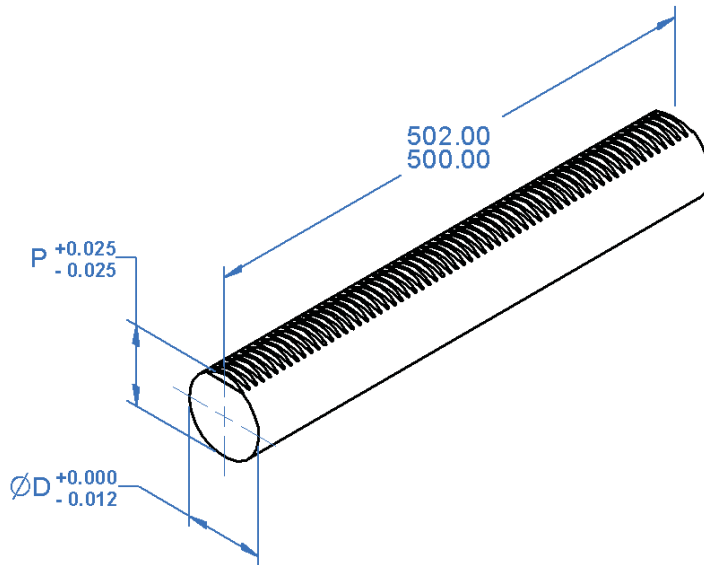
- Modifications :  
 ie. flats, journals, end modifications.
- Shorter lengths.
- Alternative pitches, including 0.3 and 0.5<sup>(1)</sup> module.
- Higher accuracy grades.



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Standard Product Sales : ☎ +44 (0)1484 601060 📠 +44 (0)1484 601061  
 www.rpmechatronics.co.uk sales@rpmechatronics.co.uk

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**General Information**

All dimensions in mm  
 General tolerances:  
 ±0.13mm  
 Material:  
 Stainless steel  
 Grade 300 series  
 Pressure angle 20°

**Associated Products**

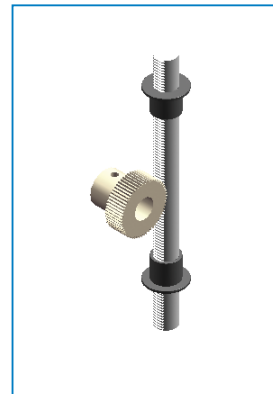
PEEK™ polymer pinions  
 Stainless steel pinions  
 Bearings  
 Stepper motors  
 Or visit our online catalogue for associated products at:

**Part number selection table**

Part Number	Circular Pitch (mm)	Outer Dia ØD	Pitch Height P	Rack Thrust (N)
RRS06-1M-500	1	6	5.682	20*
RRS08-1M-500		8	7.682	
RRS10-1M-500		10	9.682	

\* Rack thrust based on a mesh with a 50 tooth stainless steel pinion, 3N if used with a 50 tooth PEEK™ polymer pinion.

- Cumulative pitch error less than 0.050mm.
- Ground teeth, standard accuracy grade 2.
- Highly stainless material resists pitting corrosion.
- Ideal for medical and scientific applications.
- Bearing surface and drive in one.



**Non-standard options, please enquire....**

- Modifications :  
 ie. flats, journals, end modifications.
- Shorter lengths.
- Alternative pitches, including 0.3 and 0.5 module.
- Higher accuracy grades.

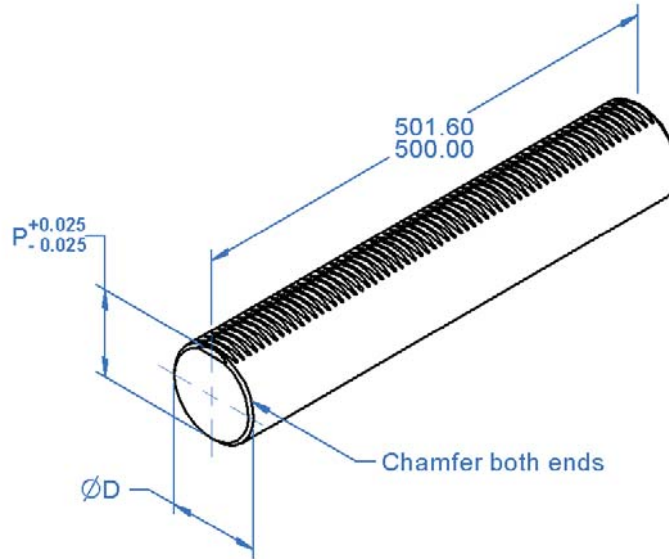


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# Round Bar Rack

## Hardened Round Rack



### General Information

All dimensions in mm  
 General tolerances:  
 $\pm 0.13\text{mm}$   
 Material:  
 linear brg shaft  
 St steel, Grade 440C  
 or X90CrMoV18.  
 Treatment:  
 Case hardened to  
 55HRC min.  
 Pressure angle 20°

### Associated Products

Hardened rack pinions  
 Bearings  
 Stepper motors

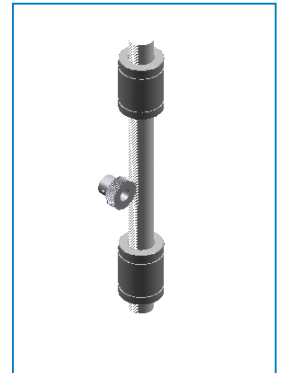
Or visit our online catalogue for associated products at:

### Part number selection table

Part Number	Circular Pitch (mm)	Outer Dia ØD		Pitch Height P	Rack Thrust (N)
<b>RR10-1M-500</b>	1	10	+0.000 - 0.011	9.682	60*
<b>RR12-1M-500</b>		12		11.682	
<b>RR16-1M-500</b>		16	15.682		
<b>RR20-1M-500</b>		20	+0.000 - 0.013	19.682	

\* Rack thrust based on a mesh with a 60 tooth hardened rack pinion.

- Cumulative pitch error less than 0.025mm.
- Ground teeth, standard accuracy grade 3.
- Manufactured from a linear bearing stainless steel.
- Can be used with both open and closed linear bearings with either 4, 5 or 6 ball tracks. (The bearing must be positioned so the balls do not run on the edges of the teeth. See technical section.)
- Bearing surface and drive in one.



### Non-standard options, please enquire....

- Modifications :  
ie. flats, journals, end modifications.
- Shorter lengths.
- Alternative pitches, including 0.3 and 0.5 module.
- Higher accuracy grades.



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