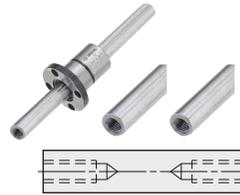


# Ball Splines / Miniature Ball Guides

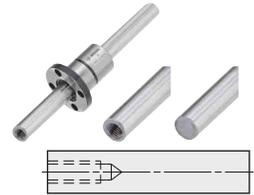
## Ball Splines



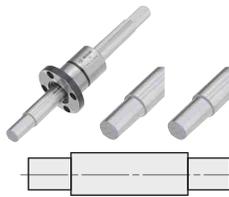
**Product Name** Ball Splines - Standard  
**Page** 341



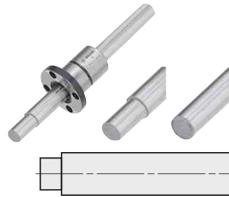
**Product Name** Both Ends Tapped  
**Page** 343



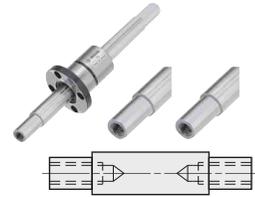
**Product Name** One End Tapped  
**Page** 345



**Product Name** Both Ends Stepped  
**Page** 347



**Product Name** One End Stepped  
**Page** 349



**Product Name** Both Ends Stepped and Tapped  
**Page** 351



**Product Name** One End Stepped and Threaded, One End Tapped  
**Page** 353



**Product Name** Both Ends Stepped and Threaded  
**Page** 355



**Product Name** One End Stepped and Threaded  
**Page** 357

## Miniature Ball Guides



**Product Name** Miniature Ball Guide Sets - Compact  
**Page** 362



**Product Name** Standard  
**Page** 361



**Product Name** With Retaining Ring  
**Page** 363



**Product Name** Shafts for Miniature Ball Guides - Straight  
**Page** 363



**Product Name** One End Machined / Both Ends Machined  
**Page** 364



**Product Name** Bushings for Miniature Ball Guides  
**Page** 365



**Product Name** Ball Sliders  
**Page** 366

## High Rigidity Needle Guide Set



**Product Name** Needle Guide Set  
**Page** 368

### Characteristics Comparison List

Product Name	Torque Transmission	Rotary Motion	Feature
Ball Splines P.341~	○	×	Single shaft-based ball splines are useful in many machine applications requiring transmission of linear motion / rotational torque and movement free from misalignment toward rotary motion for space saving, cost, weight, parts reduction advantages.
Miniature Ball Guides P.361~	×	○	Since balls are aligned in a staggered arrangement, Miniature Ball Guides are useful for linear/rotary compounded motion.

○: Available ×: Unavailable