

TBU

SWIVEL GRIPPER SCREWS



TBU-S 12025-16050
(Serrated, Steel Ball)



TBU-S 20030-24080
(Serrated, Steel Tip)



TBU-F 12025-16050
(Plain, Steel Ball)



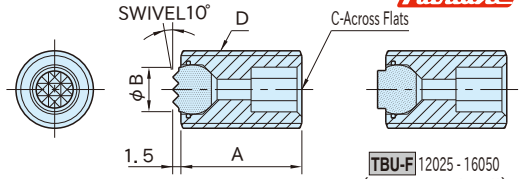
TBU-F 20030-24080
(Plain, Steel Tip)



TBU-E 12025-16050
(Plain, Plastic Ball)



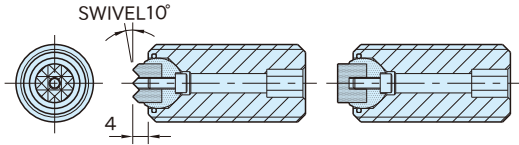
TBU-E 20030-24080
(Plain, Plastic Tip)



TBU-S 12025-16050
(Serrated, Steel Ball)

TBU-F 12025-16050
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TBU-S 20030-24080
(Serrated, Steel Tip)

TBU-F 20030-24080
(Plain, Steel Tip)

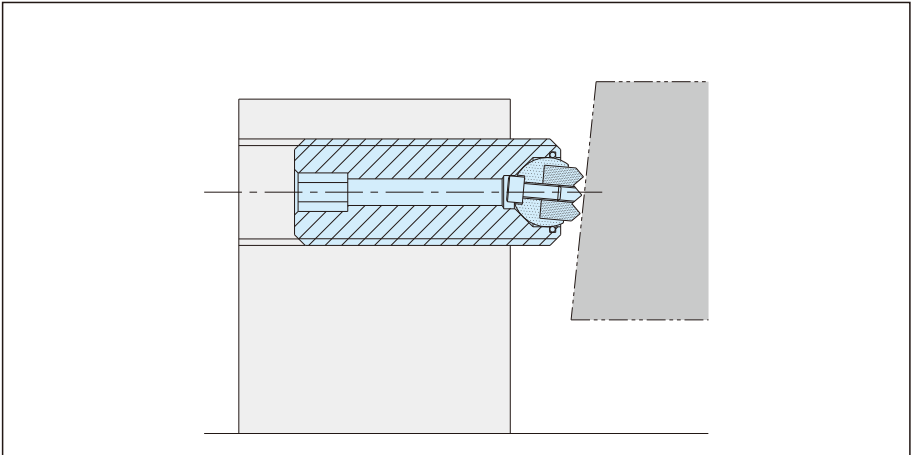
TBU-E 20030-24080
(Plain, Plastic Tip)

Type	Body	Ball	Tip	
TBU-S 12025-16050	Steel (SCM440) Quenched and tempered Black oxide finish Heat treated to Rc45	Steel (SKH51) Quenched and tempered Black oxide finish Heat treated to Rc60		
TBU-F 12025-16050		Polyacetal plastic White		
TBU-E 12025-16050		Stainless steel (SUS440)	Steel (SKH51) Quenched and tempered Black oxide finish Heat treated to Rc62	
TBU-S 20030-24080			Steel (SNCM220) Carburized-hardened Black oxide finish Heat treated to Rc60	
TBU-F 20030-24080			Polyacetal plastic White	
TBU-E 20030-24080			Polyacetal plastic White	

Serrated (Steel)		Plain (Steel)		Plain (Plastic)		A	B	C	D	Allowable Load (kN)*
Part Number	Weight(g)	Part Number	Weight(g)	Part Number	Weight(g)					
TBU-12025-S	13	TBU-12025-F	13	TBU-12025-E	12	25	6	6	M12×1.75	5.300
TBU-12035-S	19	TBU-12035-F	19	TBU-12035-E	18	35				
TBU-12050-S	28	TBU-12050-F	28	TBU-12050-E	27	50				
TBU-16025-S	26	TBU-16025-F	26	TBU-16025-E	25	25	8.5	8	M16×2	10.900
TBU-16035-S	39	TBU-16035-F	39	TBU-16035-E	38	35				
TBU-16050-S	58	TBU-16050-F	58	TBU-16050-E	57	50	10	10	M20×2.5	18.400
TBU-20030-S	57	TBU-20030-F	57	TBU-20030-E	53	30				
TBU-20050-S	90	TBU-20050-F	90	TBU-20050-E	86	50				
TBU-20070-S	123	TBU-20070-F	123	TBU-20070-E	119	70	12	10	M24×3	24.500
TBU-24040-S	113	TBU-24040-F	113	TBU-24040-E	107	40				
TBU-24080-S	210	TBU-24080-F	210	TBU-24080-E	204	80				

*) Except for plastic tips.

Application Example



Ideal for workpiece positioning and positive holding.

Notes:

How To Install Tip

TBU-S 20030~24080, **TBU-F** 20030~24080, **TBU-E** 20030~24080

Push the ball out of the body and then secure the tip to the ball using the included hex. socket-head cap screw.

Tip Change

Tips can be replaced by removing the tip-fixing screw.

Grippers Part Number	Tips Part Number	Grippers Part Number	Tips Part Number	Grippers Part Number	Tips Part Number
TBU-20030-S	HS-100	TBU-20030-F	SRP-100	TBU-20030-E	DRP-100
TBU-20050-S		TBU-20050-F		TBU-20050-E	
TBU-20070-S		TBU-20070-F		TBU-20070-E	
TBU-24040-S	HS-120	TBU-24040-F	SRP-120	TBU-24040-E	DRP-120
TBU-24080-S		TBU-24080-F		TBU-24080-E	