

Material : SUS303

Catalog No.	Partner	Shape	Bore		Socket head screw			Flange diameter	Flange length	Hub width	Total length
			A <sub>H7</sub>	B	No. of threaded hole	Size	C				
SUKB20030	PSA2-32 or more	T8	10	30	6	M5	42	51	10	20	30
SUKB20046	PSA2-40 or more			46			58	67			
SUKB20066	PSA2-50 or more			66			78	87			
SUKB25038	PSA2.5-32 or more	T8	12	38	6	M6	53	63	12.5	24.5	37
SUKB25058	PSA2.5-40 or more			58			73	83			
SUKB25083	PSA2.5-50 or more			83			98	108			
SUKB30046	PSA3-32 or more	T8	15	46	6	M8	64	76	15	30	45
SUKB30070	PSA3-40 or more			70			88	100			
SUKB30100	PSA3-50 or more			100			118	130			

- [Caution on Product Characteristics]**
- The area where PSA Plastic Spur Gears are attached, with hub tolerance h7.
  - The friction coupling torques shown in the table are reference values calculated according to these set values; friction factors and fastening torques of the tapping screw.
  - Please refer to the assembly example below, and then attach the hub to the gear with the accessories, plain washers, spring washers and hexagon socket head cap screws.
  - In accordance with the fastening torque values shown in the dimension table, use a torque wrench and fasten hexagon socket head cap screws firmly, to attach the hub.
  - If a fastened hexagon socket head cap screw comes loose, the friction tightening torque values shown in the table can not be maintained. It is recommended to check the fasteners regularly and retighten when required.
  - For secure positioning, it is recommended to use dowel pins.

**Features of Stainless Steel Hubs**

- This is an attached stainless steel hub with excellent rust resistance.
- Perfectly matches with PSA Plastic Spur Gears, and suitable for food processing machinery.
- Efficient use of materials and superior cost performance for this product.

**Friction Coupling Torque for Stainless Steel Hubs**

Friction coupling torque, for Stainless Steel Hubs, is calculated from the frictional force generated by the fastening torque at the contact face of the gear and the stainless steel hub.

Fastening Torque F(N) is calculated from the equation below.

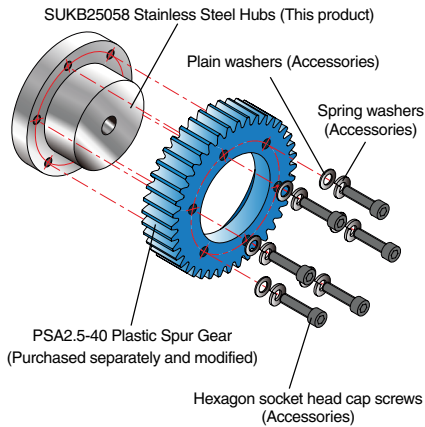
$$F = \frac{n \cdot 1000 \cdot T}{K \cdot d}$$

- n : Number → No. of threaded holes shown in the dimension table.
- T : Tightening torque (N · m) → Fastening torque shown in the dimension table.
- K : Torque coefficient → Set the value at 0.164
- d : Nominal diameter (mm) → Socket head screw size shown in the dimension table (M5 = 5mm)

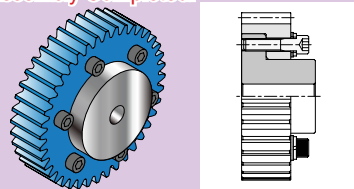
Friction Coupling Torque T<sub>r</sub> (N · m) is calculated from the equation below.

$$T_r = \frac{F \cdot \mu \cdot d_w}{2000}$$

- F : Fastening torque (N) → The value obtained from the calculation above.
- μ : Friction factor at the contact face of the gear and the stainless steel hub → Set the value at 0.18
- d<sub>w</sub> : Pitch diameter of the threaded hole (mm) → Socket head screw size C shown in the dimension table



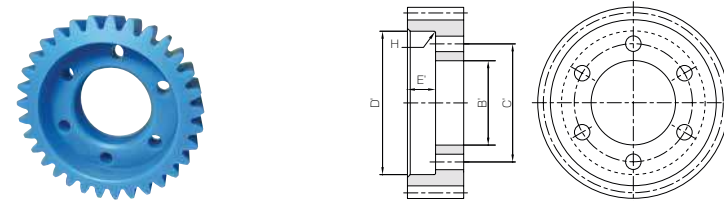
Assembly Completed!



Recommended fastening torque		Friction coupling torque		Weight (kg)	Catalog No.
(N-m)	(kgf-m)	(N-m)	(kgf-m)		
0.9	0.092	24.9	2.54	0.24	SUKB20030 SUKB20046 SUKB20066
		34.4	3.51	0.51	
		46.2	4.71	0.97	
1.5	0.15	43.6	4.45	0.47	SUKB25038 SUKB25058 SUKB25083
		60.1	6.13	0.98	
		80.7	8.23	1.88	
3.7	0.38	97.5	9.94	0.82	SUKB30046 SUKB30070 SUKB30100
		134	13.7	1.72	
		180	18.3	3.29	

- [Caution on Secondary Operations]**
- Please read "Cautions on Performing Secondary Operations" in Page 32 when performing modification and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
  - Datum plane for machining hubs is the outer circumference of the hub, where PSA Plastic Spur Gears are attached, and the flank of the flange is facing the hub.
  - For modifying tapped holes at the outer circumference of the hub, apply machining with care and in consideration of the positions of the screw holes for the fastening screws, that attach the hub. (This position is where no interference occurs with the hexagon socket head cap screws).

**Partner Products and Modifications**



Stainless Steel Hubs		Partner						
Catalog No.	Catalog No.	Bore		Drilled hole		Bore 2	Length of bore	Fillet radius
		B <sub>1/16</sub>	No. of threaded hole	Size	C'			
SUKB20030	PSA2-32 or more	30	6	φ5.5	42	51	10	R0.5 or less
SUKB20046	PSA2-40 or more	46			58	67		
SUKB20066	PSA2-50 or more	66			78	87		
SUKB25038	PSA2.5-32 or more	38	6	φ6.6	53	63	12.5	R0.5 or less
SUKB25058	PSA2.5-40 or more	58			73	83		
SUKB25083	PSA2.5-50 or more	83			98	108		
SUKB30046	PSA3-32 or more	46	6	φ9	64	76	15	R0.5 or less
SUKB30070	PSA3-40 or more	70			88	100		
SUKB30100	PSA3-50 or more	100			118	130		

**Modifications for bores, keyways and tapped holes done in 3 days!**

Please request modifications at KHK Quick-Mod Gears.

To find more information on KHK Quick-Mod Gears, please see Page 6.



Modifications for SUKB Products (With fee)      Modifications for PSA Products (Purchased separately and modified with fee)