Stainless Steel Hubs for PSA

Material: SUS303

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Shape</th>
<th>Bore</th>
<th>Hub dia.</th>
<th>Socket head screw</th>
<th>Range diameter</th>
<th>Range length</th>
<th>Hub width</th>
<th>Total length</th>
<th>Recommended fastening torque</th>
<th>Coupling torque</th>
<th>Weight</th>
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</table>

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.

Coupling Torque for Stainless Steel Hubs

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.

\[ F_r = \frac{1000 T}{K d} \]

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

Coupling torque \( T_c \) (N-m) is calculated from the equation below.

\[ T_c = \frac{F_r \mu d_n}{2000} \]

- \( F_r \) : Friction factor at the contact face of the gear and the stainless steel hub → Set the value at 0.18
- \( \mu \) : Pitch diameter of the threaded hole (mm) → Socket head screw size C shown in the dimension table

Assembly Example of Stainless Steel Hubs

- Stainless steel plain washers (Accessories)
- Stainless steel spring washers (Accessories)
- Hexagon socket head cap stainless steel screws (Accessories)

Other Products

- Spur Gears
- Helical Gears
- Internal Gears
- Rack & Pinion Gears
- Miter Gears
- Bevel Gears
- Screw Gears
- Worm Gears
- Gearboxes