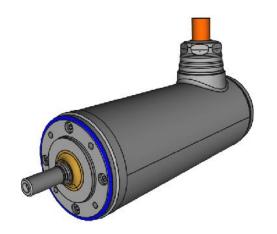


# Compact Stainless Steel Servo Motor in Hygienic Design Ø59mm

The servo motor with a diameter of Ø59mm is designed for applications in the food and pharmaceutical industries where only limited space is available. With IP69k protection and a hygienic design according to EHDGE guidelines, the motor can be easily cleaned and offers long-term operational reliability even during intensive and frequent cleaning processes. The small servo motor can also be supplied with an integrated planetary gearbox, bevel gearbox, or cycloidal gearbox.

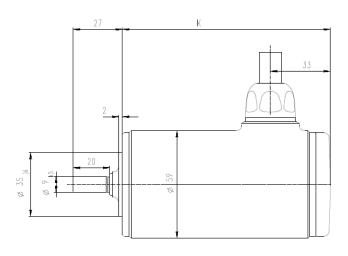


- ✓ Hygienic Design & IP69k
- ✓ Stainless-steel 316L 1.4404
- ✓ Compact design

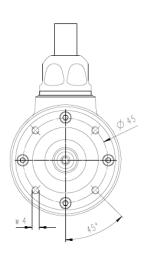
#### **Available Power Range of the Servo Motor:**

Туре	Rated Power	Rated Torque	Peak Torque	Max Speed
	(kW)	(Nm)	(Nm)	(1/min)
KSG 06x	0,075 - 0,27	0,16 - 0,59	0,7 - 2,7	12.000 (mech.)

#### **Dimensions:**



Туре	k (mm)
KSY 062 HD2_Rx	99
KSY 063 HD2_Rx	114
KSY 065 HD2_Rx	129
KSY 066 HD2_Rx	144
KSY 068 HD2_Rx	159



# Motor Data Type KSY 06x.45 HD2-Rx/...

(Data for Operation with Resolver)

	KSY 062.45	*	KSY 068.45
Rated Voltage, UN (V)	230		230
Rated Speed, nN (min <sup>-1</sup> )	4500		4500
Mechanical Limit Speed, n (min <sup>-1</sup> )	12,000		12,000
Rated Power, PN (kW)	0.075		0.276
Rated Torque, MN (Nm)	0.16		0.59
Rated Current, IN (A)	0.47		1.23
Rated Torque Constant, KTN (Nm/Aeff)	0.34		0.48
Voltage Constant, Ke (V/1000 min <sup>-1</sup> )	20.5		28.75
Stall Torque, MO (Nm) **	0.17		0.67
Stall Current, IO (A) **	0.49		1.40
Stall Torque Constant, KTO (Nm/A)	0.34		0.48
Peak Torque, Mmax (Nm) ***	0.7		2.7
Peak Current, Imax (A) ***	2.2		6.26
Peak Torque Constant, KT max (Nm/Aeff)	0.31		0.43
Ambient Temperature (°C)	40		40
Protection Class	IP69K		IP69K
Operating Mode	\$1		\$1
Insulation Class	F		F
Rotor Inertia, JR (kg·cm²)	0.06		0.18
Weight, m (kg)	1.4		2
Package Length (mm) (15 - 75mm available)	15		75

<sup>\*\*</sup> Values at 200 1/min, \*\*\* Short-term operation max. 3s, \*Data for intermediate sizes on request.

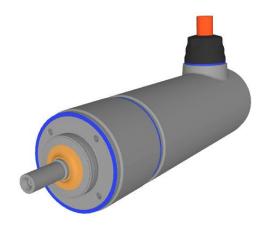
## **Additional Options:**

- Rated Voltage (e.g., 48V, 400V)
- Position Sensor: Resolver or Encoder
- Brake
- Axial Cable Output
- One-Cable Solution with Hybrid Cable
- Delivery with Servo Controller
- Customer-Specific Adaptations
- Motor with Integrated Planetary Gearbox, Bevel Gearbox, or Cycloidal Gearbox

For more information about our stainless-steel motors and geared motors please visit: <a href="https://www.georgiikobold.de/en/products/hygienic-design-motors-and-gearboxes/">https://www.georgiikobold.de/en/products/hygienic-design-motors-and-gearboxes/</a>

# Hygienic Design Stainless Steel Servo Motor with Integrated Planetary Gearbox Ø59mm

The compact servo motor with integrated planetary gearbox was developed for the food and pharmaceutical industries. With IP69k protection and a hygienic design according to EHDGE guidelines, the geared motor can be easily cleaned and offers long-term operational reliability even during intensive and frequent cleaning processes.



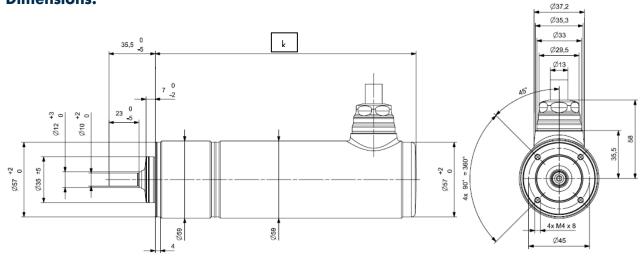
- √ Hygienic Design & IP69k
- ✓ Stainless-steel 316L 1.4404
- √ Compact design
- √ Gear ratio i = 3 10

#### **Available Power Range of the Geared Motor:**

Туре	Rated Power	Rated Torque	Peak Torque	Max Speed
	(kW)	(Nm)	(Nm)	(1/min)
KSG 06x	0,06 - 0,22	0,38 - 4,7	1,7 - 21	600 - 2000

Maximum Gearbox Input Speed = 6,000 rpm





Туре	K (mm)
KSG 062.45 HD2_Rx	140
KSG 063.45 HD2_Rx	155
KSG 065.45 HD2_Rx	170
KSG 066.45 HD2_Rx	185
KSG 068.45 HD2_Rx	200

#### Geared Motor Data Type KSY 06x.45 HD2-Rx/PG-I-40.xx

(See Servo Motor, Page 2)

Please note that depending on the selected gearbox ratio, the speed and torque must be recalculated. Gearbox efficiency and gearbox heating lead to a reduction in motor data performance. Depending on the selected ratio, rated power, rated torque, and stall torque are reduced by approximately 20%. The use of an encoder or brake requires a further reduction in rated power. On request, we are happy to provide you with a detailed data sheet for the desired geared motor.

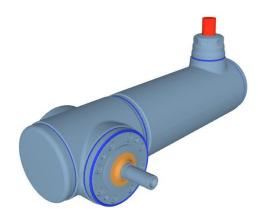
## **Additional Options for the Planetary Gearbox:**

- Customer-Specific Shaft and Flange Dimensions
- Shaft with Key
- Reinforced Bearings for High Axial Forces

For more information about our stainless-steel motors and geared motors please visit: <a href="https://www.georgiikobold.de/en/products/hygienic-design-motors-and-gearboxes/">https://www.georgiikobold.de/en/products/hygienic-design-motors-and-gearboxes/</a>

# Hygienic Design Stainless Steel Servo Motor with Integrated Bevel Gearbox Ø59mm

As a manufacturer of motors and gearboxes, Georgii Kobold can offer a variety of compact geared motors. The small servo motor with an integrated bevel gearbox provides another compact drive solution for the food and pharmaceutical industries. With IP69k protection and a hygienic design according to EHDGE guidelines, the geared motor can be easily cleaned and offers long-term operational reliability even during intensive and frequent cleaning processes.



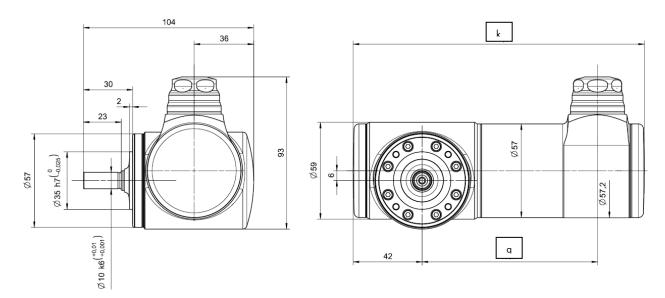
- √ Hygienic Design & IP69k
- ✓ Stainless-steel 316L 1.4404
- ✓ Compact design
- √ Gear ratio i = 3 10

## **Available Power Range of the Geared Motor:**

Туре	Rated Power	Rated Torque	Peak Torque	Max Speed
	(kW)	(Nm)	(Nm)	(1/min)
KSG 06x	0,05 - 0,19	0,34 - 4,1	1,47 - 18,9	600-2000

Maximum Gearbox Input Speed = 6,000 rpm

#### **Dimensions:**



Туре	q (mm)	k (mm)
KSG 063.45 HD2_Rx	107	1 <i>77,</i> 5
KSG 065.45 HD2_Rx	122	192,5
KSG 066.45 HD2_Rx	13 <i>7</i>	207,5
KSG 068.45 HD2_Rx	152	222,5

#### Geared Motor Data Type KSY 06x.45 HD2-Rx/KG-I-40.xx

(See Servo Motor, Page 2)

Please note that depending on the selected gearbox ratio, the speed and torque must be recalculated. Gearbox efficiency and gearbox heating lead to a reduction in motor data performance. Depending on the selected ratio, rated power, rated torque, and stall torque are reduced by approximately 30%. The use of an encoder or brake requires a further reduction in rated power. On request, we are happy to provide you with a detailed data sheet for the desired geared motor.

#### **Additional Options for the Planetary Gearbox:**

- Customer-Specific Shaft and Flange Dimensions
- Shaft with Key

For more information about our stainless-steel motors and geared motors please visit: https://www.georgiikobold.de/en/products/hygienic-design-motors-and-gearboxes/