



# Servo motors - dynamic and robust

With synchronous motors and asynchronous motors, our servo motors offer the right solution, even for highly dynamic, sensitive or compact applications. They are optimally designed for operation with our servo inverters.

## Typical application fields

- Positioning
- Robotics
- Packaging technology
- Handling systems
- Environments where hygiene matters.
- And many more

## Features

- Robust drive behavior
- Safe control behavior
- Optimal smooth running characteristic
- One Cable Technology (OCT)
- Easy mounting
- Low moments of inertia

## The benefits for you

- Optimized for Lenze servo inverters
- Easy mounting
- Highly dynamic, sensitive or compact application areas
- Precise and robust requirements
- High operational reliability
- Solutions for heavy motor loads

# Features at a glance

## Robust behavior



High degree of protection and/or smooth surfaces enable operation in harsh environments.

Drives with a protection class of up to IP65 can be used there.

## Safely controlled



The servo motors are perfectly matched to the i750 cabinet and i950 cabinet servo inverters.

With these servo inverters, the servo motor is safely controlled in every operating state. Both components can be easily adapted to the application using the inverter's auto-tuning function.

## Optimal concentricity



Very smooth running characteristics of the servo motors lead to optimal work results.

For example, a film can be processed safely and continuously.

## One Cable Technology (OCT)



The MCS and m850 servo synchronous motors are equipped with a digital absolute value encoder (HIPERFACE-DSL®) as standard.

This makes wiring easier and reduces the costs.

## Easy to mount



The servo motors are equipped with commercially available connectors as standard.

The bayonet lock enables quick and secure installation. This also enables very short machine down-times when servicing is required.

## Low mass inertia





The internal design of the rotors serves the dynamic and precise requirements of the machine.

The materials used ensure precise operation with a low mass moment of inertia.

# Servo motors

Is your application dynamic and demanding With synchronous motors and asynchronous motors, our servo motors offer the right solution, even for highly dynamic, sensitive or compact applications. They are optimally designed for operation with our servo inverters.

You can easily call up a lot of information online when selecting a product:

- Use the EASY Product Finder to configure your required version of the product in next to no time (simply click on the  icon).
- For further technical details such as data sheets, CAD data or EPLAN data, please contact our support team simply click on the  icon).



## Product overview

	<b>MCS synchronous servo motor</b>	<b>m850 synchronous servo motor</b>	<b>SDSGA asynchronous servo motor</b>	<b>MCA asynchronous servo motor</b>	<b>MQA asynchronous servo motor</b>
					
<b>Degree of protection</b>	IP5, IP65	IP54, IP65	IP54	IP23s, IP54, IP65	IP23s

### Power range

	<b>MCS</b>	<b>m850</b>	<b>SDSGA</b>	<b>MCA</b>	<b>MQA</b>
<b>Standstill torque</b>	0.8 ... 86 Nm	0.18 ... 67 Nm	0.3 ... 2.2 Nm	2.3 ... 290 Nm	76 ... 325 Nm
<b>Rated torque</b>	0.5 ... 72 Nm	0.12 ... 35 Nm	0.27 ... 1.9 Nm	2.0 ... 280 Nm	66.2 ... 296 Nm
<b>Rated speed</b>	1050 ... 6000 1/min	2520 ... 9000 1/min	2700 ... 2825 1/min	550 ... 4160 1/min	550 ... 2935 1/min
<b>Max. torque</b>	2.4 ... 190 Nm	0.7 ... 200 Nm	1.0 ... 8.0 Nm	10 ... 1100 Nm	250 ... 1100 Nm
<b>Power range</b>	0.31 ... 15.8 kW	0.11 ... 9.2 kW	0,075 ... 0.6 kW	0.8 ... 53.8 kW	10.6 ... 60.2 kW

### Feedback

	<b>MCS</b>	<b>m850</b>	<b>SDSGA</b>	<b>MCA</b>	<b>MQA</b>
<b>Digital absolute value encoder One Cable Technology (OCT)</b>	✓	✓	-	-	-
<b>Resolver</b>	✓	✓	✓	✓	✓
<b>Resolver for functional safety</b>	✓	✓	-	✓	✓
<b>TTL incremental encoder</b>	✓	-	-	✓	✓
<b>SinCos absolute value encoder</b>	✓	✓	✓	✓	✓
<b>SinCos absolute value encoder for functional safety</b>	✓	✓	-	-	-

### Market approvals

	<b>MCS</b>	<b>m850</b>	<b>SDSGA</b>	<b>MCA</b>	<b>MQA</b>
<b>CE</b>	✓	✓	✓	✓	✓
<b>UKCA</b>	✓	✓	✓	✓	✓
<b>UL</b>	✓	✓	✓	✓	✓
<b>CSA</b>	✓	✓	✓	✓	✓
<b>CCC</b>	✓	✓	✓	✓	✓
<b>RoHs</b>	✓	✓	✓	✓	✓

# SDSGA asynchronous servo motors

The small SDSGA asynchronous servo motors with a smooth surface are particularly suitable for environments where hygiene matters.

<b>Standstill torque</b>	0.3 ... 2.2 Nm
<b>Rated torque</b>	0.27 ... 1.9 Nm
<b>Rated speed</b>	2700 ... 2825 1/min
<b>Max. torque</b>	1.0 ... 8.0 Nm
<b>Power range</b>	0,075 ... 0.6 kW

## Highlights

- Smooth surface
- Plug connections for quick mounting and easy serviceability
- Resolver as feedback



## SDSGA asynchronous servo motors

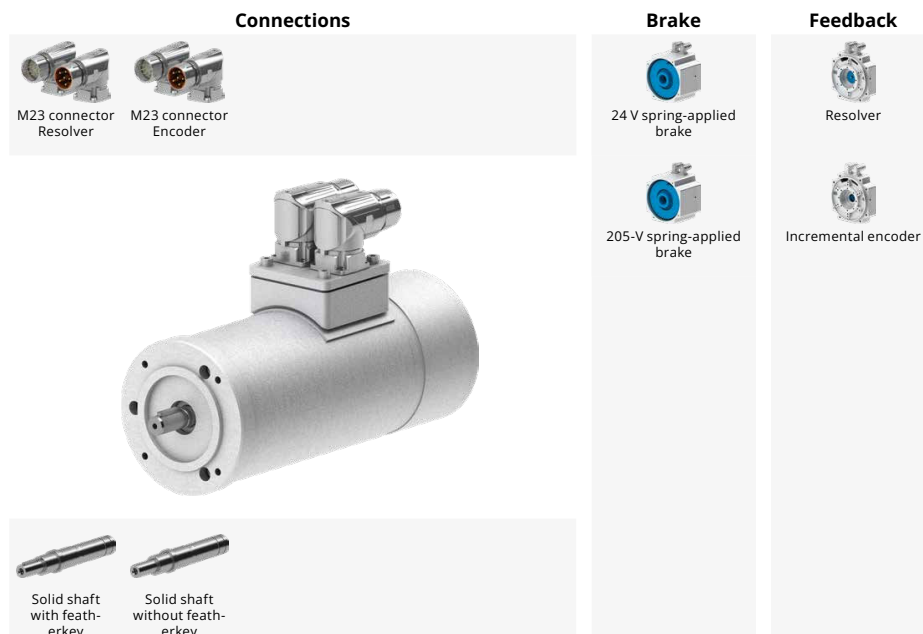


SDSGA, self-ventilated, 3 x 400V

	$M_0$	$M_{rated}$	$M_{max}$	$n_{rated}$	$n_{max}$	$P_{rated}$	$I_{rated}$	$m$	H x L x T	ID
	[Nm]	[Nm]	[Nm]	[1/min]	[1/min]	[kW]	[A]	[kg]	[mm]	
<b>SDSGAxxx 047-22</b>	0.3	0.27	1.0	2700	6000	0.075	0.52	3.0	138.5 x 220 x 79	<a href="#">i</a> <a href="#">🛒</a> 16129644
	$M_0$	$M_{rated}$	$M_{max}$	$n_{rated}$	$n_{max}$	$P_{rated}$	$I_{rated}$	$m$	H x L x T	ID
	[Nm]	[Nm]	[Nm]	[1/min]	[1/min]	[kW]	[A]	[kg]	[mm]	
<b>SDSGAxxx 056-22</b>	1.0	0.81	3.2	2790	6000	0.24	0.86	4.0	148.5 x 230 x 89	<a href="#">i</a> <a href="#">🛒</a> 16142392
	$M_0$	$M_{rated}$	$M_{max}$	$n_{rated}$	$n_{max}$	$P_{rated}$	$I_{rated}$	$m$	H x L x T	ID
	[Nm]	[Nm]	[Nm]	[1/min]	[1/min]	[kW]	[A]	[kg]	[mm]	
<b>SDSGAxxx 063-22</b>	1.5	1.35	5.0	2800	6000	0.4	1.23	5.3	158.5 x 244 x 104	<a href="#">i</a> <a href="#">🛒</a> 16168858
<b>SDSGAxxx 063-32</b>	2.2	1.9	8.0	2825	6000	0.6	1.74	6.8	158.5 x 284 x 104	<a href="#">i</a> <a href="#">🛒</a> 16168853

The motors listed are equipped with resolvers as feedback.

# SDSGA asynchronous servo motors – options



## Connections

<b>Connector</b>	2 x M23 connector Power connection/resolver connection	Included as standard
	2 x M23 connector Power connection/encoder connection	

## Brake

<b>24 V spring-applied brake</b>	SDSGAxx-047	Braking torque 1 Nm
	SDSGAxx-056	Braking torque 1 Nm
	SDSGAxx-063	Braking torque 2 Nm

## Feedback

<b>Resolver</b>	Resolver RS0	Included as standard
<b>Incremental encoder</b>	HTL incremental encoder IG512-24V-H	
	HTL incremental encoder IG1024-24V-H	
	TTL incremental encoder IG2048-5V-T	

## Machine connections

<b>Shaft</b>	Solid shaft with featherkey	Included as standard
	Solid shaft without featherkey	

# SDSGA asynchronous servo motors – accessories

## System cables

<b>Motor cables</b>	See brochure "Accessories for frequency and servo inverters"
<b>Feedback cables</b>	See brochure "Accessories for frequency and servo inverters"

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