DYNASYN

Convection-Cooled Servo Motors DS28.

Direct Drive System.

AMK

AMK

The powerful direct drive system with AMK field-weakening technology.

The extremely application oriented motor series DS28 combines the advantages of high efficiency with high overload capabilities. These motors are characterized by having low inertia as well as a peak torque of up to 1530 Nm, which allows fast deceleration of the load in emergency situations.

In addition a continuous torque of up to 650 Nm at zero speed can be achieved. AMK's proprietory field-weakening technology for permanent magnet servo motors provides a broad speed range of 1:10 at constant power.

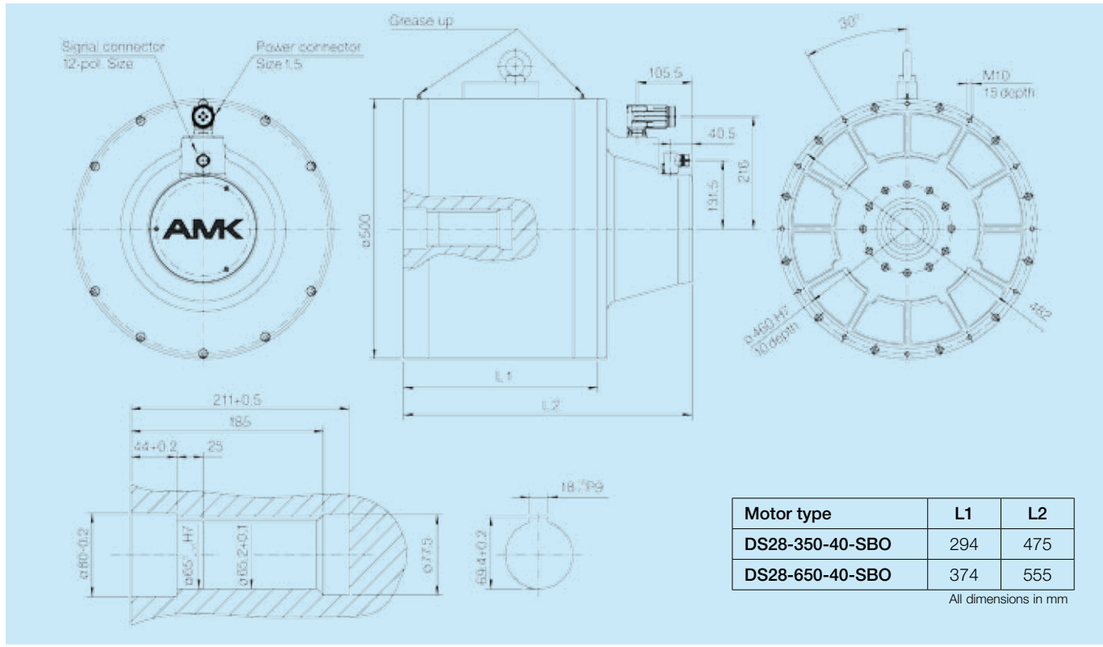
BENEFITS

- Rated Power up to 11 kW
- Acceleration Torque up to 1530 Nm
- Speed range up to 1000 rpm
- Continuous Zero Speed Torque up to 650 Nm
- Field-weakening with large range of constant power
- Excellent servo characteristics
- High Power Density
- Integrated high precision encoder feedback
- Standard with motor and encoder connectors

Technical data

Motor type	Stall data		Rated data					Maximum data		Electric data		Mechanical data					
	M_o [Nm]	I_o [A]	M_N [Nm]	P_N [kW]	I_N [A]	n_N [rpm]	k_T [Nm/A]	M_{max} [Nm]	I_{max} [A]	L_{tt} [mH]	R_{tt} [Ω]	n_{max} [rpm]	J [kgcm²]	m [kg]	M_{BR} [kg]	J_{BR} [kgcm²]	I_{br} [A]
DS28-350-40-SBO	350	18.4	255	6.7	13.4	250	19	920	66	40	1.25	1200	14828	243	230	28	2.8
DS28-650-40-SBO	650	34.2	550	11.5	29	200	19	1530	110	28	0.7	1200	24428	370	230	28	2.8

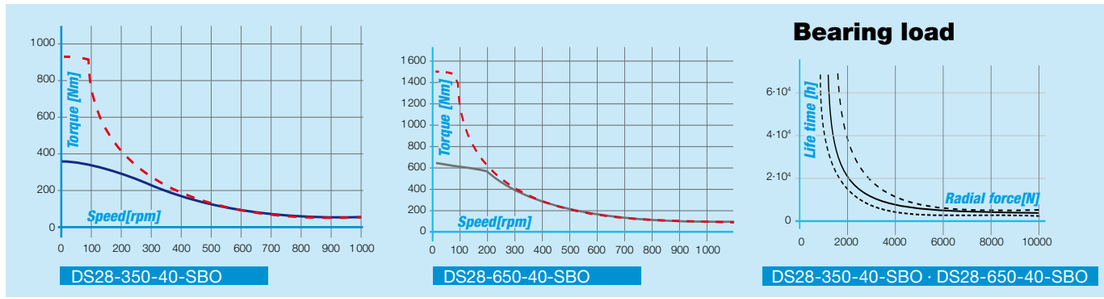
Dimensions



Motor type	L1	L2
DS28-350-40-SBO	294	475
DS28-650-40-SBO	374	555

All dimensions in mm

Characteristic curves



Control your Motion.

- **AMKAMAC**
  Controllers
- **AMKASYN**
  Servo inverter
- **AMKASMART**
  Decentralized motors
- **DYNASYN**
  Servomotors
- **SPINDASYN**
  Hollow-shaft motors
- **AMKAVERT**
  Frequency inverter

Abbreviations

Symbol	Unit	Explanation
M_o	Nm	Continuous stall torque
I_o	A	Continuous stall current
M_N	Nm	Rated torque
P_N	kW	Rated power
I_N	A	Rated current
n_N	rpm	Rated speed
k_T	Nm/A	Torque constant ($M=I*k_T$)
M_{max}	Nm	Maximum torque
I_{max}	A	Maximum current
n_{max}	rpm	Maximum speed
L_{tt}	mH	Terminal inductance
R_{tt}	Ω	Terminal resistance
J	$kgcm^2$	Motor moment of inertia
m	kg	Motor mass
M_{BR}	Nm	Min. static braking torque
J_{BR}	$kgcm^2$	Brake moment of inertia
I_{br}	A	Brake current

AMK Arnold Müller GmbH & Co. KG
Drives and Controls

Postfach 1355
73221 Kirchheim/Teck, Germany

Gaußstraße 37-39
73230 Kirchheim/Teck, Germany

Phone: +49 (0) 7021/5005-0
Fax: +49 (0) 7021/5005-199
info@amk-antriebe.de
www.amk-antriebe.de