

AM8551-wFyz | Servomotor with increased moment of inertia 6.20 Nm (M_0), F5 (104 mm)



i **Product status:** Regular delivery

The AM8551 high-inertia servomotor is suitable for drive solutions with increased moment of inertia to ensure synchronism and optimal ratio of load/motor inertia in the 100...480 V AC voltage range. The standstill torque of the motor depends on the winding and is in the range of 4.80...6.30 Nm. It is available with the OCT feedback system (absolute encoder). The high-inertia servomotor with flange code F5 (104 mm) and motor length 1 has a shaft diameter $b = 24 \text{ k6}$ and a free shaft end of $d = 50 \text{ mm}$.

Product information

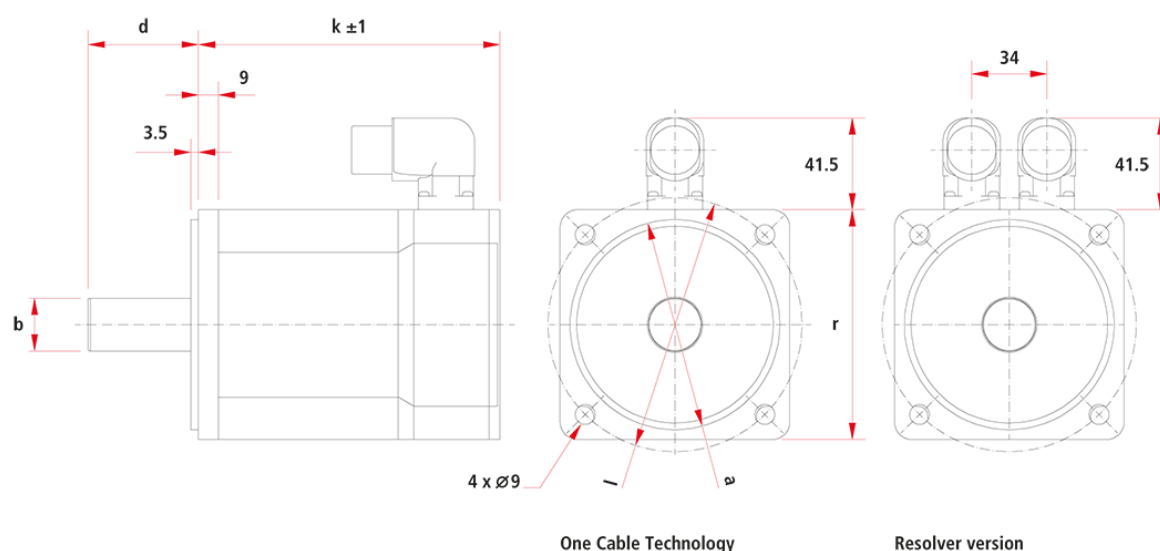
Technical data

Data for 400 V AC	AM8551-wFyz
Motor type	permanent magnet-excited three-phase synchronous motor
Nominal voltage	100...480 V AC
Standstill torque	6.20 Nm
Rated torque	5.8 Nm
Peak torque	17.7 Nm
Rated speed	2500 min ⁻¹
Rated power	1.52 kW
Standstill current	3.50 A
Peak current	12.1 A

Torque constant	1.77 Nm/A
Rotor moment of inertia	8.75 kgcm ²
Motor feedback	OCT, 18 bit , OCT, 24 bit, SIL 2 , Resolver , single-turn absolute encoder , multi-turn absolute encoder
Cooling	external axial ventilation
Connection technology	M23 speedtec® plug
Ambient temperature (operation)	+5...+40 °C
Approvals/markings	CE, cURus in preparation, EAC

All electric quantities are RMS values.

Housing data	AM8xx forced cooling
Protection rating	selectable IP20, IP65
Design form	flange-mounted according to IM B5, IM V1, IM V3
Material	aluminum
Coating/surface	dark gray powder coating, similar to RAL7016



Dimensions	AM8551-wFyz
a	95 j6
b	24 k6
d	50 mm
l	115 mm
r	104 mm
k (without brake)	183.5 mm
k (with brake)	216.5 mm

Ordering information

Order reference AM8551-wFyz	
w = 0	smooth shaft
w = 1	shaft with groove and feather key according to DIN 6885
w = 2	smooth shaft with IP65 sealing ring
w = 3	shaft with IP65 sealing ring and with groove and feather key
w = 4	shaft with IP65 sealing ring, smooth shaft and sealing air connection (not for AM801x)
w = 5	shaft with IP65 sealing ring, shaft with groove and feather key and sealing air connection (not for AM801x)
y = 0	2-cable standard: feedback resolver
y = 1	One Cable Technology for power and feedback: feedback transmission via motor cable, no feedback cable necessary, electronic identification plate, single-turn, absolute position within one revolution, 18 bit resolution
y = 2	One Cable Technology for power and feedback: feedback transmission via motor cable, no feedback cable necessary, electronic identification plate, multi-turn, absolute position within 4096 revolutions, 18 bit resolution
y = G	One Cable Technology for power and feedback: feedback transmission via motor cable, no feedback cable necessary, electronic identification plate, single-turn, absolute position within one revolution, resolution 24 bit, SIL 2 (mandatory for TwinSAFE Safe Motion functions at AX8xxx-x2xx)
y = H	One Cable Technology for power and feedback: feedback transmission via motor cable, no feedback cable necessary, electronic identification plate, multi-turn, absolute position within 4096 revolutions, resolution 24 bit, SIL 2 (mandatory for TwinSAFE Safe Motion functions at AX8xxx-x2xx)
z = A	forced cooling IP20, without holding brake, for AM805x, AM806x, AM807x, AM855x, AM856x ⁽¹⁾
z = B	forced cooling IP20, with backlash-free permanent magnet holding brake, for AM805x, AM806x, AM807x, AM855x, AM856x
z = C	forced cooling IP65, without holding brake, for AM805x, AM806x, AM807x, AM855x, AM856x ⁽²⁾
z = D	forced cooling IP65, with backlash-free permanent magnet holding brake for AM805x, AM806x, AM807x, AM855x, AM856x
	AM855x-wxyz-9000: flange and shaft compatible with AM355x-wxyz-000a
	The options cannot be installed in the field.

Accessories

Accessories	
ZK450x-8003-xxxx	Motor cable 1.5 mm ² with M23 speedtec® plug, 12 A, fixed installation
ZK450x-8004-xxxx	motor cable 2.5 mm ² with M23 speedtec® plug, 18 – 25 A, fixed installation
ZK450x-8023-xxxx	motor cable 1.5 mm ² with M23 speedtec® plug, 12 A, highly flexible, for drag-chain use

ZK450x-8024-xxxx	motor cable 2.5 mm ² with M23 speedtec® plug, 18 – 25 A, highly flexible, for drag-chain use
ZK453x-8010-xxxx	Resolver cable 4 x 2 x 0.25 mm ² with M23 speedtec® plug, flexible for drag-chain use
