

# AM8561-wGyz | Servomotor with increased moment of inertia 12.8 Nm ( $M_0$ ), F6 (142 mm)



**i Product status:** Regular delivery

The AM8561 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 12.8...17.1 Nm. It is available with the OCT feedback system (absolute encoder). The high-inertia servomotor with flange code F6 (142 mm) and motor length 1 has a shaft diameter  $b = 32 \text{ k6}$  and a free shaft end of  $d = 58 \text{ mm}$ .

## Product information

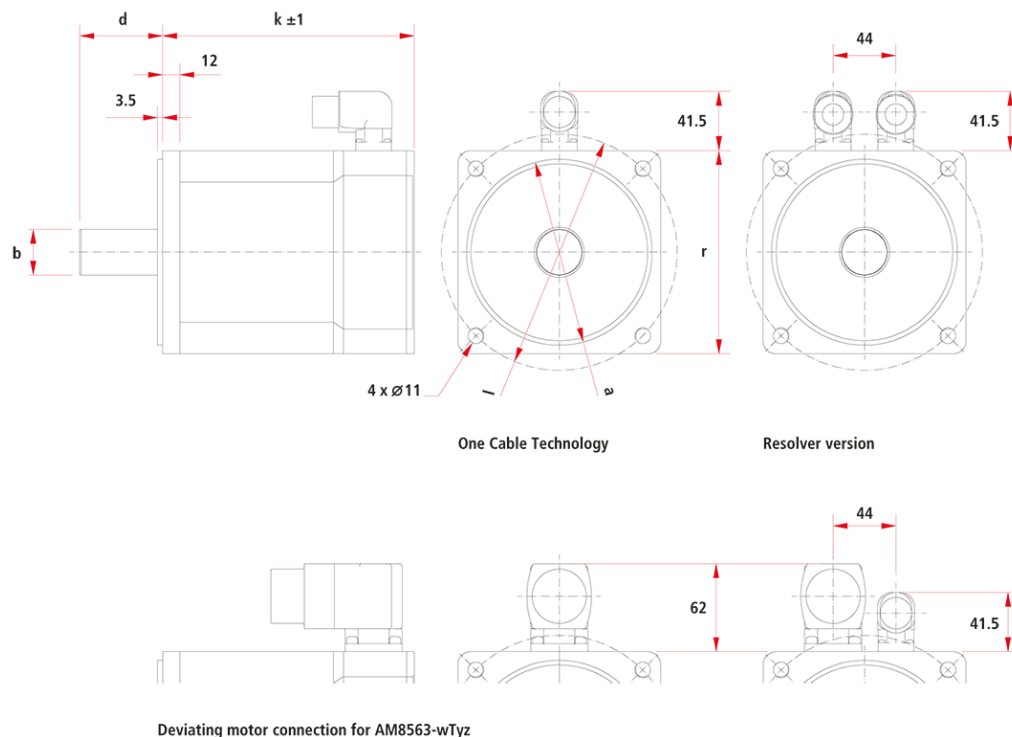
### Technical data

Data for 400 V AC	AM8561-wGyz
Motor type	permanent magnet-excited three-phase synchronous motor
Nominal voltage	100...480 V AC
Standstill torque	12.8 Nm
Rated torque	12.1 Nm
Peak torque	37.1 Nm
Rated speed	1500 min <sup>-1</sup>
Rated power	1.90 kW
Standstill current	4.00 A
Peak current	13.9 A

Torque constant	3.19 Nm/A
Rotor moment of inertia	48.2 kgcm <sup>2</sup>
Motor feedback	OCT, 18 bit , OCT, 24 bit, SIL 2 , Resolver , Hiperface , single-turn absolute encoder , multi-turn absolute encoder
Cooling	convection
Connection technology	M23 speedtec® plug
Ambient temperature (operation)	+5...+40 °C
Approvals/markings	CE, cURus, EAC

All electric quantities are RMS values.

Housing data	AM85xx
Protection rating	IP54, IP65 (shaft seal)
Design form	flange-mounted according to IM B5, IM V1, IM V3
Material	aluminum
Coating/surface	dark gray powder coating, similar to RAL7016



Dimensions	AM8561-wGyz
a	130 j6
b	32 k6
d	58 mm
l	165 mm
r	142 mm

k (without brake)	228 mm
k (with brake)	268 mm

## Ordering information

Order reference AM8561-wGyz	
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 = 4	2-cable standard: feedback multi-turn, absolute encoder SKM36, 128 SinCos periods (only for AM856x)
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 = 0	without holding brake
z = 1	with backlash-free permanent magnet holding brake
The options cannot be installed in the field.	