



AM8041 | Servomotor 2.45 Nm (M_0), F4 (87 mm)

The AM8041 standard servomotor is suitable for drive solutions with highest demands on dynamics and performance in the 400...480 V AC voltage range. The standstill torque of the motor depends on the winding and is in the range of 2.37...2.45 Nm. It is available with the OCT feedback system (absolute encoder). The standard servomotor with flange code F4 (87 mm) and motor length 1 has a shaft diameter $b = 19 \text{ k6}$ and a free shaft end of $d = 40 \text{ mm}$.

Data for 400 V AC	AM8041-wDyz	AM8041-wEyz	AM8041-wHyz
Motor type	permanent magnet-excited three-phase synchronous motor		
Standstill torque	2.37 Nm	2.45 Nm	2.40 Nm
Rated torque	2.30 Nm	2.31 Nm	2.10 Nm
Cooling	convection		
Rated speed	3000 min ⁻¹	6000 min ⁻¹	8000 min ⁻¹
Rated power	0.72 kW	1.45 kW	1.76 kW
Peak torque	9.00 Nm		
Standstill current	1.65 A	3.00 A	5.25 A
Peak current	8.30 A	13.6 A	23.2 A
Torque constant	1.43 Nm/A	0.81 Nm/A	0.45 Nm/A
Voltage constant	102 mV/min ⁻¹	56 mV/min ⁻¹	33 mV/min ⁻¹
Number of poles	8		
Rotor moment of inertia	1.09 kgcm ²		
Weight	2.8 kg		
Holding torque brake (M_{br})	9 Nm		
Power consumption (brake) at 24 V DC (P_{br})	18 W		
Rotor moment of inertia incl. brake (J)	1.73 kgcm ²		
Weight incl. brake (m)	3.6 kg		
Connection technology	M23 speedtec® plug		
One Cable Technology (OCT)	yes		
Approvals/markings	CE, UL		

Order reference AM80uv-wxyz	
u	flange code F
v	motor length
w = 0	smooth shaft
w = 1	shaft with groove and feather key according to DIN 6885
w = 2	smooth shaft with IP 65 sealing ring (FPM)
w = 3	shaft with IP 65 sealing ring (FPM) and shaft with groove and feather key
x	winding code A...Z
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 = A	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 23 bit (only for AM803x to AM807x and AM853x to AM856x)

y = B	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 23 bit (only for AM803x to AM807x and AM853x to 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, SIL2 (only in combination with AX8xxx-0200)
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, SIL2 (only in combination with AX8xxx-0200)
y = N	without feedback (sensorless)
z = 0	without holding brake
z = 1	with permanent magnet-excited holding brake
	All electric quantities are RMS values.
	The options cannot be installed in the field.