



## AM803x | Servomotor 1.3 – 3.2 Nm (standstill torque)

Data for 400 V AC three-phase	AM8031-wDyz	AM8032-wEyz	AM8033-wFyz
Standstill torque ( $M_0$ )	1.38 Nm	2.37 Nm	3.22 Nm
Rated torque ( $M_N$ )	1.33 Nm	2.2 Nm	2.7 Nm
Rated speed ( $n_N$ )	6,000 min <sup>-1</sup>		
Rated power ( $P_N$ )	0.84 KW	1.38 KW	1.7 KW
Peak torque ( $M_{max}$ )	5.75 Nm	11.5 Nm	17.0 Nm
Standstill current ( $I_0$ )	1.95 A <sub>rms</sub>	2.95 A <sub>rms</sub>	4.1 A <sub>rms</sub>
Rated current ( $I_N$ )	1.9 A <sub>rms</sub>	2.75 A <sub>rms</sub>	3.6 A <sub>rms</sub>
Peak current ( $I_{max}$ )	10.7 A <sub>rms</sub>	17.2 A <sub>rms</sub>	24.6 A <sub>rms</sub>
Torque constant ( $k_T$ )	0.71 Nm/A <sub>rms</sub>	0.8 Nm/A <sub>rms</sub>	0.79 Nm/A <sub>rms</sub>
Voltage constant (20 °C) ( $k_E$ )	50 V <sub>rms</sub> /kmin <sup>-1</sup>	56 V <sub>rms</sub> /kmin <sup>-1</sup>	57 V <sub>rms</sub> /kmin <sup>-1</sup>
Winding resistance (ph-ph, 20 °C) ( $R_{ph-ph, 20}$ )	12.6 Ω	6.5 Ω	3.9 Ω
Winding inductance (ph-ph) ( $L_{ph-ph}$ )	40.5 mH	26.4 mH	16.3 mH
Number of pole pairs (p)	4		
Moment of inertia (J)	0.433 kgcm <sup>2</sup>	0.787 kgcm <sup>2</sup>	1.139 kgcm <sup>2</sup>
Weight (m)	1.8 kg	2.4 kg	3.0 kg

Data for holding brake option	AM8031-wDy1	AM8032-wEy1	AM8033-wFy1
Holding torque ( $M_{br}$ )	2.0 Nm	2.0 Nm	3.5 Nm
Power consumption at 24 V DC ( $P_{br}$ )	11 W	11 W	12 W
Moment of inertia incl. brake (J)	0.513 kgcm <sup>2</sup>	0.86 kgcm <sup>2</sup>	1.376 kgcm <sup>2</sup>
Weight incl. brake (m)	2.2 kg	2.8 kg	3.5 kg

AM80uv-wxyz:

u: flange code

v: motor length

Options

w = 0: smooth shaft

w = 1: shaft with groove and feather key according to DIN 6885

w = 2: shaft with IP 65 sealing ring and smooth shaft

w = 3: shaft with IP 65 sealing ring and shaft with groove and feather key

x = winding code A...Z

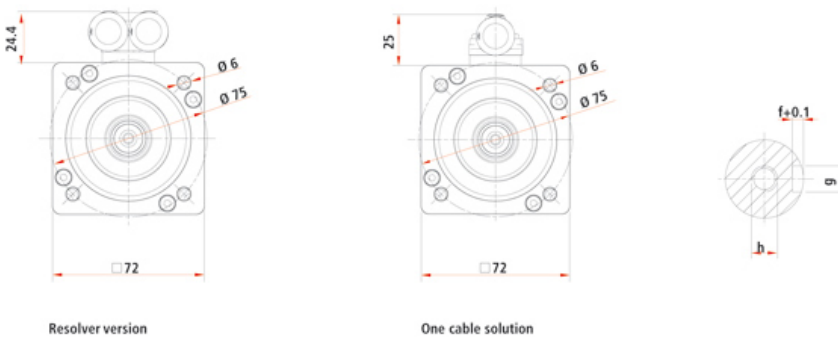
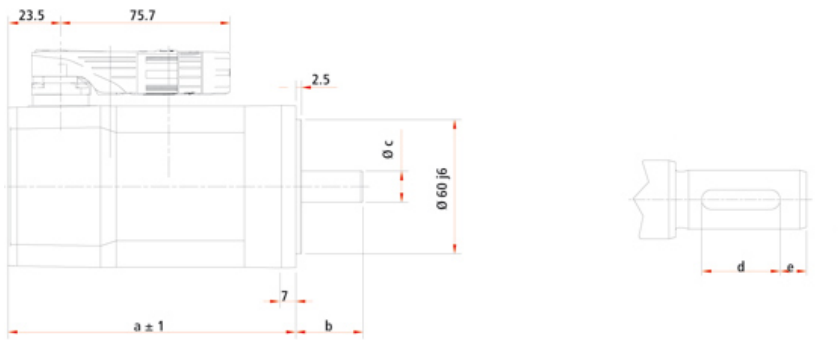
y = 0: 2-cable technology, feedback resolver

y = 1: 1-cable technology for power and feedback: feedback transmission via motor cable, no feedback cable necessary, electronic identification plate, single-turn

y = 2: 1-cable technology for power and feedback: feedback transmission via motor cable, no feedback cable necessary, electronic identification plate, multi-turn

z = 0: without holding brake

z = 1: with holding brake



Dimensions	a (without brake)	a (with brake)	b	c	d	e	f	g	h	Feather key
AM8031-wDy1	128.7 mm	168.2 mm	30 mm	14 k6	20 mm	5 mm	3 mm	5 N9	DIN 332-D M5	DIN 6885- A5x5x20
AM8032-wEy1	154.2 mm	193.7 mm	30 mm	14 k6	20 mm	5 mm	3 mm	5 N9	DIN 332-D M5	DIN 6885- A5x5x20
AM8033-wFy1	179.7 mm	228.7 mm	30 mm	14 k6	20 mm	5 mm	3 mm	5 N9	DIN 332-D M5	DIN 6885- A5x5x20