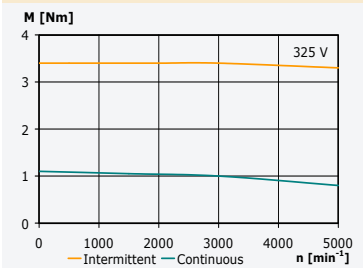
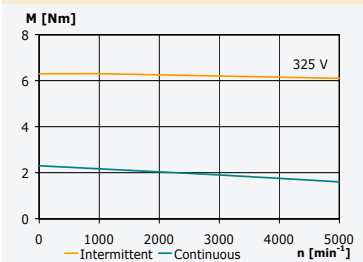


		Series 80B31-0330- D05JD-AA	Series 80B32-0340- D05JD-AA	Series 80B33-0460- D08JD-AA
→ Rated Values				
Peak torque (c.d.f. 15%)*	[Nm]	3.4	6.3	7.3
Stall torque (c.d.f. 100%)*	[Nm]	1.1	2.3	3.0
Rated torque (c.d.f. 100%)*	[Nm]	0.8	1,6	2,3
Rated speed	[min ⁻¹]	5000	5000	3000
Peak current (per phase) (c.d.f. 15%)*	[A _{RMS}]	12.8	14.0	14.0
Stall current (per phase) (c.d.f. 100%)*	[A _{RMS}]	5.0	5.5	5.9
Rated current (per phase) (c.d.f. 100%)*	[A _{RMS}]	3.9	4.0	4.8
Rated DC link voltage	[V _{DC}]	325	325	325
* Mounting Flange 200 x 240 x 20 mm ³				
→ Technical Data Motor				
Motor constant (at 25 °C)	[Nm/W ^{1/2}]	0.13	0.23	0.32
Torque constant	[Nm/A]	0.22	0.42	0.51
Voltage constant	[V/1000min ⁻¹]	11.4	21.7	26.4
Winding resistance (at 25 °C)	[Ω]	1.50	1.60	1.30
Winding inductivity	[mH]	3.00	3.30	3.10
Maximum current per phase	[A _{RMS}]	14.0	14.0	14.0
Number of pole pairs		3	3	3
Number of motor phases		2	2	2
Motor inertia	[kgm ² x10 ⁻³]	0.07	0.14	0.20
Insulation class		F _r 155 °C		
Ambient temperature	[°C]	-20...+40		
Protection class		IP54 (shaft gland IP40)		
Max. axial load	[N]	130		
Max. radial load	[N]	250		
Max. axial load during assembly	[N]	500		
Mass	[kg]	2.2	3.0	3.8
Motor length (L)	[mm]	120	145	170
→ Technical Data - Incremental Encoder				
Resolution	[inc/rev]	8000		
Operating voltage	[V]	5 (±10%)		
Current input	[mA]	100		
Signal specification		RS 422		

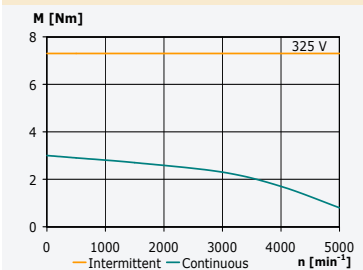
→ Characteristic 80B31



→ Characteristic 80B32



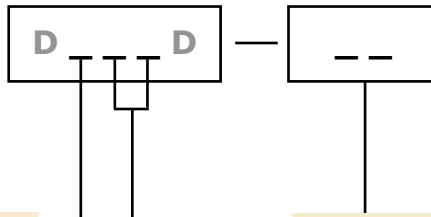
→ Characteristic 80B33



All characteristics with ECOVARIO®414 servo amplifier

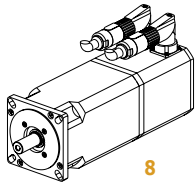


80B31 — 0330
 80B32 — 0340
 80B33 — 0460



Holding Brake

0	none
6	1 Nm holding brake integrated (for 80B31)
7	2 Nm holding brake integrated (for 80B32)
8	4.5 Nm holding brake integrated (for 80B33)



With holding brake fixed, motor length (L) increases by 78 mm. This is also valid for the combination of Multiturn absolute value encoder and holding brake, which also results in an additional length of 78 mm. The weight of the motors with holding brake increases by 1,2 kg.

Mechanical Options

AA	Standard version
07	A-shaft with key DIN6885 5 x 5 x 20
08	A-shaft with key 8 x 8 x 18

Further options on request.

Encoder Type

5J	Incremental encoder 8,000 inc/rev (80B31, 80B32)
8J	Incremental encoder 8,000 inc/rev (80B33)
8M	Incremental encoder resolution 20,000 inc/rev (80B33)
5L	Incremental encoder 40,000 inc/rev (80B31, 80B32)*
8L	Incremental encoder resolution 40,000 inc/rev (80B33)*
8X	SINCOS encoder, programmable resolution, max. 128,000 inc/rev, servo amplifier ECOVARIO®
7W	Multiturn absolute value encoder, resolution 17 bit/rev and 12 bit revolutions, servo amplifier ECOVARIO®

With multiturn absolute encoder fixed, motor length (L) increases by 26 mm (for motors without holding brake).

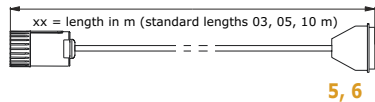
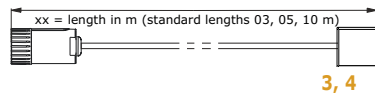
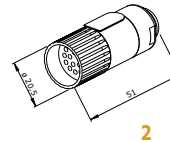
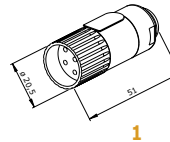
* maximum speed with ECOVARIO®: 3000 min⁻¹

→ **Mating Connector Set 70.070 (for cables made by customer)**

- 1 Motor mating connector M17
- 2 Encoder mating connector M17

→ **Cable Assemblies**

3	Motor Cable (for ECOVARIO® controller) MOT61-133-523-0xx-100	Ø 8.9 mm; trailing capability from bend radius > 125 mm
4	Motor/brake cable (for ECOVARIO®) MOT63-134-523-0xx-100	Ø 10.8 mm; trailing capability from bend radius > 105 mm
5	Incremental encoder cable (f. ECOVARIO®) INK65-491-525-0xx-000	Ø 9.5 mm; trailing capability from bend radius > 120 mm
6	Absolute encoder cable (for ECOVARIO®) ABS65-300-525-0xx-000	Ø 9.5 mm; trailing capability from bend radius > 120 mm



→ **3, 4**

Connection	Motor connector pin	Motor cable wire
Phase A	4	3
Phase /A	1	1
Phase B	5	4
Phase /B	2	2
Brake + (optional)	3	Black (MOT63 only)
Brake - (optional)	6	White (MOT63 only)
PE	7	gn / ye
Shield	Housing	Shield

→ **5**

Connection	Encoder connector pin	Encoder cable wire	Pin DSub (9 pins)
+5V	15	brown	1
GND	16	white	6
Cannel A	1	green	2
Channel /A	2	yellow	7
Channel B	3	grey	3
Channel /B	4	pink	8
Channel N	5	blue	4
Channel /N	6	red	9
PTC T+	7	violet	5
PTC T-	8	black	6
Shield	Housing	Bare	Shroud

→ **6**

Connection	Encoder connector pin	Encoder cable wire	Pin DSub (15 pins)
+Up	13	brown	1
GND	16	white	6
Channel CLK	11	green	14
Channel /CLK	12	yellow	15
Sens S-	17	grey	11
Sens S+	14	pink	12
Channel DAT	9	blue	4
Channel/DAT	10	red	9
PTC T+	7	violet	5
PTC T-	8	black	10
Shield	Housing	bare	Shroud