

Series DRWB drives for the control of electric actuation

Drives for Brushless motors,
sizes in power classes 100, 400, 750, 1000 W

SERIES DRWB DRIVES



- » Completely digital drives
- » PLC function programmable with the Camozzi QSet configuration software
- » Control of speed, position and torque (torque only for Series DRWB)
- » 64 positions programmable through the QSet
- » Self-compensation of errors

The Camozzi drives Series DRWB have been designed to control the movement of the Camozzi electromechanical actuators (Series 5E and Series 6E).

The servo drives DRWB, compact and especially optimized for the brushless Camozzi motors, are completely digital and available in the power classes 100, 400, 750, 1000 W. Equipped with vector mode and the function of Autotuning and containment of vibrations, they are made in such a way to easily perform replacements and to have a two-line alphanumeric display with 4 control keys on the servo drive.

A digital pulse interface allows control of the direction, position, speed and torque. It is possible to control the drives with analogic signals.

GENERAL CHARACTERISTICS

Mod. DRWB-W01-2-D-E-A, DRWB-W04-2-D-E-A, DRWB-W07-2-D-E-A, DRWB-W10-2-D-E-A	
Power	100 W (Mod. DRWB-W01-2-D-E-A) 400 W (Mod. DRWB-W04-2-D-E-A) 750 W (Mod. DRWB-W07-2-D-E-A) 1000 W (Mod. DRWB-W10-2-D-E-A)
Electrical supply	200 ÷ 240 V AC (± 10%) single or three phase 50 ÷ 60 Hz (± 5%)
Number of phases	1
Maximum current	1.5 A (Mod. DRWB-W01-2-D-E-A) 4.1 A (Mod. DRWB-W04-2-D-E-A) 7.5 A (Mod. DRWB-W07-2-D-E-A, Mod. DRWB-W10-2-D-E-A)
Logic supply	200 ÷ 240 V AC (± 10 %) 50 ÷ 60 Hz (± 5 %) single phase
Maximum logic current	0.5 A max.
OUTPUT CURRENT	
Continuous current (effective)	0.9 A (Mod. DRWB-W01-2-D-E-A) 2.5 A (Mod. DRWB-W04-2-D-E-A) 5.1 A (Mod. DRWB-W07-2-D-E-A, Mod. DRWB-W10-2-D-E-A)
Peak current (effective)	2.7 A (Mod. DRWB-W01-2-D-E-A) 7.5 A (Mod. DRWB-W04-2-D-E-A) 15.3 A (Mod. DRWB-W07-2-D-E-A, Mod. DRWB-W10-2-D-E-A)
Maximum duration of peak current	1 second
Type of control	IGBT PWM vector control
Controller sampling rate	Current, speed and position: 15 kHz
Motor types supported	AC servo motors
Status of LED	Red: Error Green: Ready
OPERATING MODES	
Encoder interface	Operating voltage + 5 VDC ± 5 % @400 mA
Communication interface	USB 2.0
Parameterisable I/O interface	Digital Inputs [I1..I9], (single-end, optocoupler) Digital Outputs [O1..O4], (optocoupler) BRAKE Output [CN2_BRK], max. 1 A DC
Feedback	External transducer Activation threshold + HV > 370 V DC Activation threshold + HV < 360 V DC Tolerance ± 5 %
Monitoring functions	Short circuit, overvoltage (> 390 V DC ± 5 %), undervoltage (< 60 V DC); position error, encoder error, motor phase monitoring, overtemperature D2 (IGBT > 90 °C ± 1 °C), motor overtemperature
Autotuning	with automatic mass inertia calculation
VSF (vibration suppression)	01 Hz ÷ 200 Hz
Other functions	Friction compensation, gear play compensation
Ambient conditions	Operating temperature 0°C ÷ 40°C (above 55°C only with air conditioning) Storage temperature -20°C ÷ 65°C UAir humidity 20% ÷ 85% (non-condensing) Operating altitude < 1000 m above sea level Vibration 5.88 m/s (10 Hz ÷ 60 Hz) Protection class IP20

CODING EXAMPLE

DRWB	-	W01	-	2	-	D	-	E	-	A
-------------	----------	------------	----------	----------	----------	----------	----------	----------	----------	----------

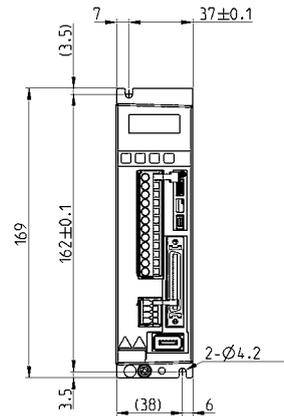
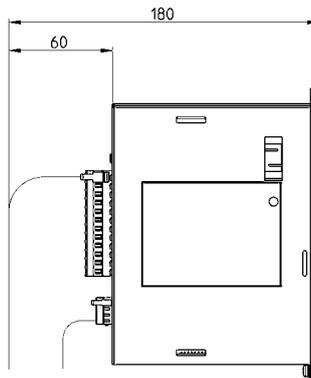
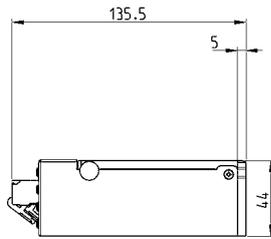
DRWB	SERIES
W01	SIZE W: W01 = 100 W W04 = 400 W W07 = 750 W W10 = 1000 W
2	SUPPLY: 2 = 220 V AC
D	COMMUNICATION: D = Digital I/O and Analog
E	FEEDBACK: E = incremental encoder 13 bit
A	VERSIONS: A = Standard

SERIES DRWB DRIVES

Drive Mod. DRWB-W01-2-D-E-A



Drive for the Camozzi Brushless motors

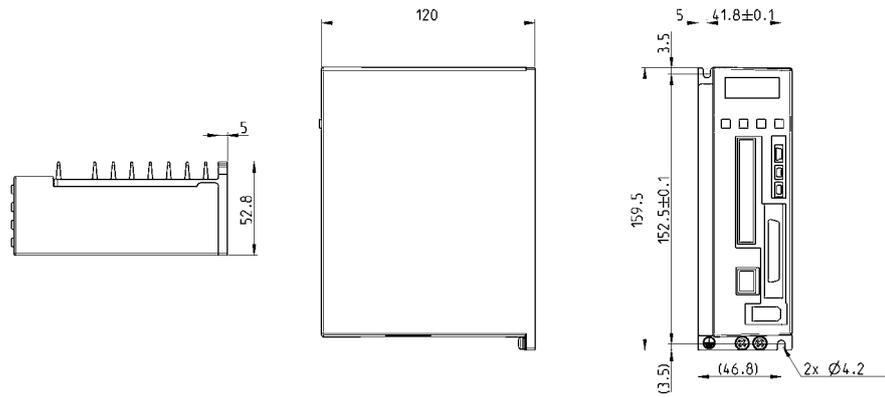


Mod.	Power	Supply	Encoder
DRWB-W01-2-D-E-A	100 W	230 V AC	13 bit

Drive Mod. DRWB-W04-2-D-E-A



Drive for the Camozzi Brushless motors

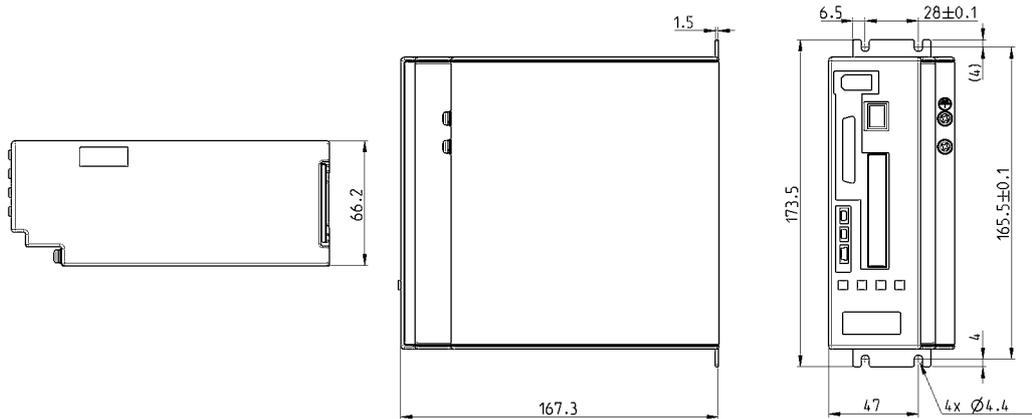


Mod.	Power	Supply	Encoder
DRWB-W04-2-D-E-A	400 W	230 V AC	13 bit

Drives Mod. DRWB-W07-2-D-E-A and Mod. DRWB-W10-2-D-E-A

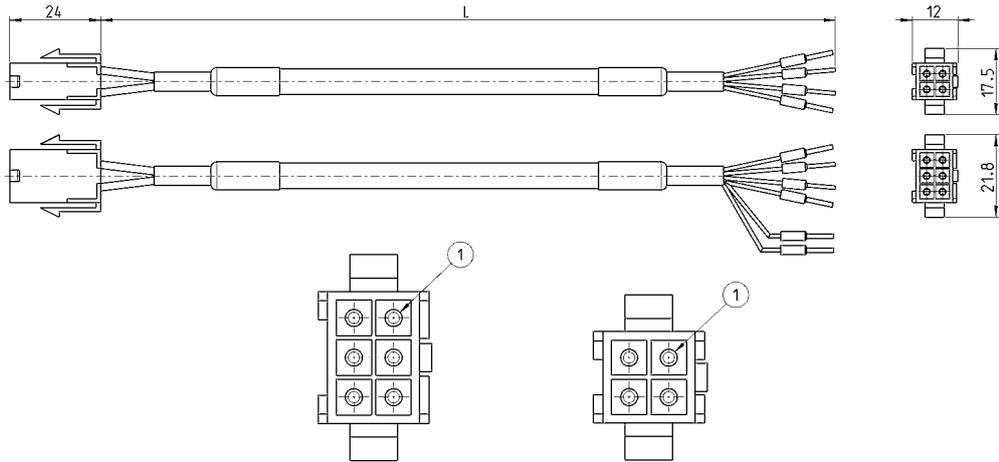


Drives for the Camozzi Brushless motors



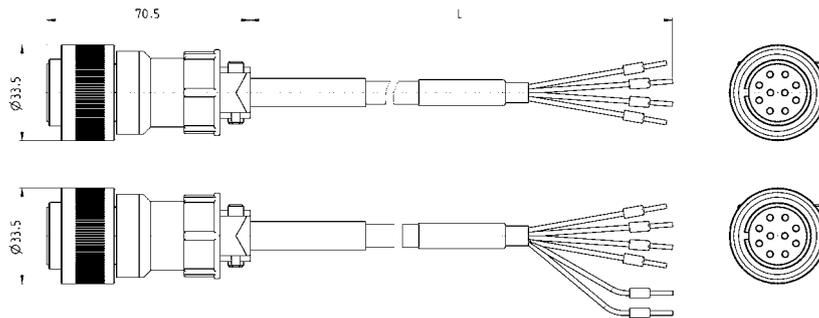
Mod.	Power	Supply	Encoder
DRWB-W07-2-D-E-A	750 W	230 V AC	13 bit
DRWB-W10-2-D-E-A	1000 W	230 V AC	13 bit

Cables for Brushless (MTB) motors, 100-400-750 W



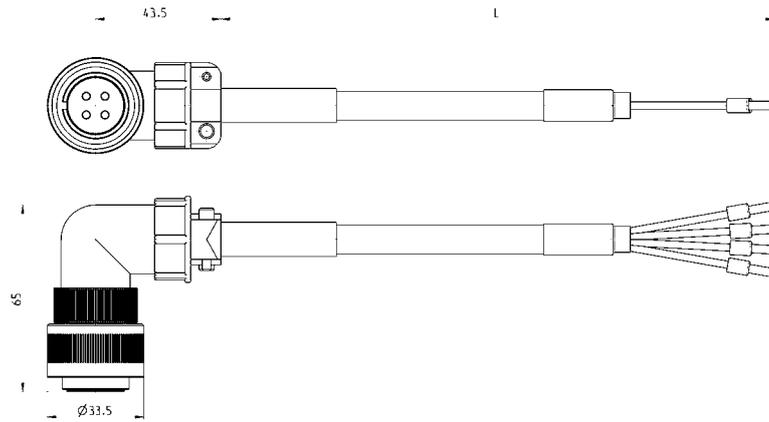
Mod.	Brake	Pins	L = cable (m)
EC-200421-B300	-	4	3
EC-200421-B500	-	4	5
EC-200421-BA00	-	4	10
EC-210621-B300	✘	6	3
EC-210621-B500	✘	6	5
EC-210621-BA00	✘	6	10

Cables for Brushless (MTB) motors, 100-400-750 W IP65



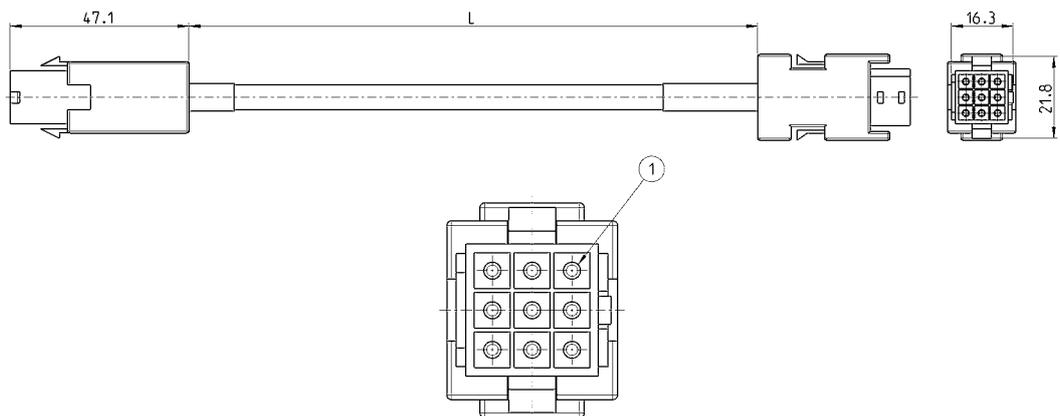
Mod.	Brake	Pins	L = cable (m)
EC-3004P1-B300	-	4	3
EC-3004P1-B500	-	4	5
EC-3004P1-BA00	-	4	10
EC-3106P1-B300	✘	6	3
EC-3106P1-B500	✘	6	5
EC-3106P1-BA00	✘	6	10

Cables for Brushless (MTB) motor, 1000W IP65



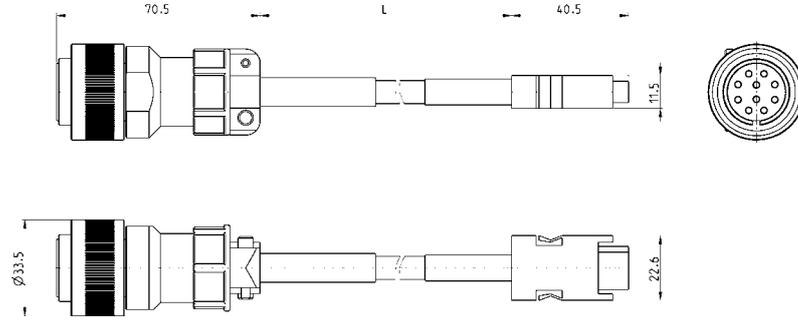
Mod.	Brake	Pins	L = cable (m)
EC-4704P1-B300	-	4	3
EC-4704P1-B500	-	4	5
EC-4704P1-BA00	-	4	10

Encoder cables for Brushless (MTB) motors, 100-400-750 W



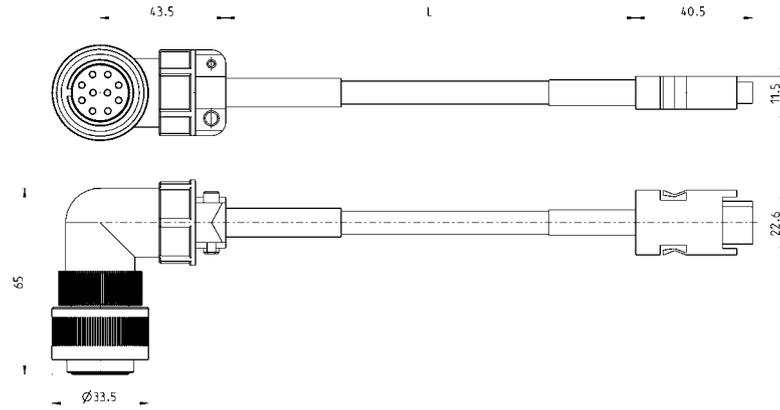
Mod.	Pins	L = cable (m)
EC-220923-B300	9	3
EC-220923-B500	9	5
EC-220923-BA00	9	10

Encoder cables for Brushless (MTB) motors, 100-400-750 W IP65



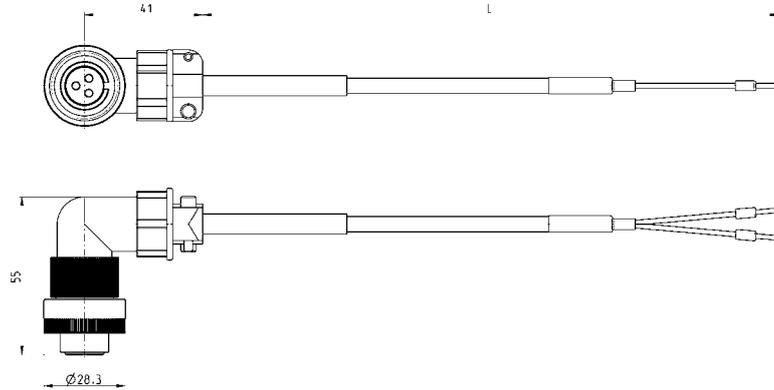
Mod.	Pins	L = cable (m)
EC-3209P3-B300	9	3
EC-3209P3-B500	9	5
EC-3209P3-BA00	9	10

Encoder cables for Brushless (MTB) motor, 1000W IP65



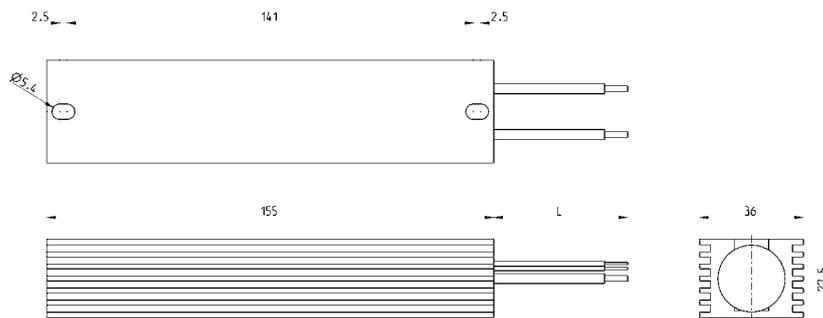
Mod.	Pins	L = cable (m)
EC-4809P3-B300	9	3
EC-4809P3-B500	9	5
EC-4809P3-BA00	9	10

Brake cables for Brushless (MTB) motor, size 1000W IP65



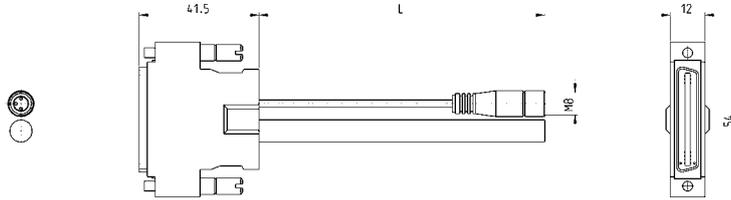
Mod.	Pins	L = cable (m)
EC-4902P1-B300	2	3
EC-4902P1-B500	2	5
EC-4902P1-BA00	2	10

Brake resistance for Brushless (MTB) motor



Mod.	Power
EC-212022	300 W

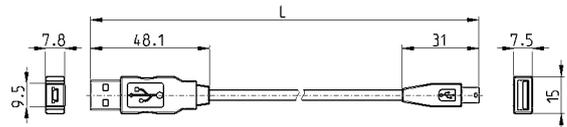
Cables for DRWB drive I/O



Mod.	Pins	L = cable (m)
G14W-1	50	1
G14W-3	50	3
G14W-5	50	5

USB to Mini USB cable Mod. G11W-G13W-2

For the hardware configuration of the Camozzi products



Mod.	description	connections	material for outer sheath	cable length "L" (m)
G11W-G13W-2	black shielded cable 28 AWG	standard USB to Mini USB	PVC	2