DRIVECOD

Compact rotary actuators with halt brake

Series **RD5 • RD53**

- Compact rotary actuator
- Quick change-over & positioning on secondary axes
- All-in-one gearmotor-drive-position controller & encoder
- Closed loop position control
- Absolute multiturn encoder
- RD53 with integrated halt-brake
- Boot loader via CANopen



RD5 - RD53

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature range:	0°C +60°C (32°F +140°F)
Storage temperature range:	-20°C +80°C (-4°F +176°F) (98% R.H. without condensation)
Protection:	IP54

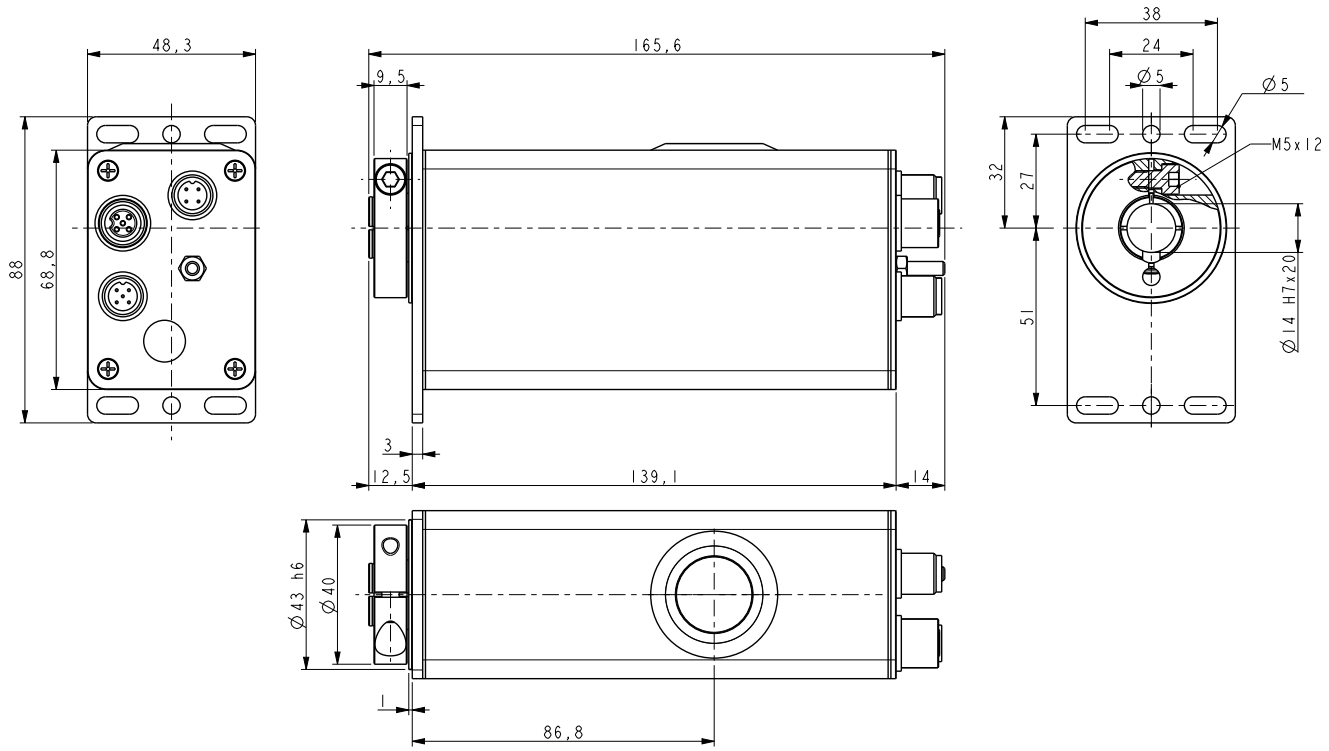
MECHANICAL SPECIFICATIONS	
Dimensions:	see drawing
Shaft hollow:	Ø 14 mm
Shaft loading (axial and radial):	50 N max.
Positioning accuracy:	± 0,9°
Electrical connections:	3 x M12 connectors
Duty cycle:	70% ED, 300 s
Torque and shaft rotational speed:	5 Nm @ 60 rpm
Starting torque:	12 Nm
Hold force with activated brake:	20 Nm
Weight:	~ 1 kg (35.2 oz)

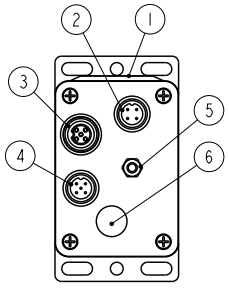
ELECTRICAL SPECIFICATIONS	
Resolution:	1024 inf./rev. x 256 rev.
Power supply:	+24Vdc ± 10%
Power (motor):	31 W
Input current:	motor: ~2 ÷ 2,5 A control unit: 80 mA max. brake: 480 mA max., when active (RD53)
Bus Interface:	Profibus-DP, CANopen, Modbus RTU (RS485)
Protection:	against overcurrent and overtemperature

MATERIALS	
Flanges:	die cast alluminium, UNI EN AC-46100
Housing:	die cast alluminium, UNI EN AC-46100
Bearings:	ABEC 5
Shaft/Fixing clamp:	stainless steel non-magnetic, UNI EN 4305
Motor:	high performance brushless motor
Brake:	electromagnetic brake

ACCESSORIES	
CC-RD-PB:	Profibus mating connectors
EC-M12MP-LK-PB-5:	PB cordset M12 male conn., 5 m cable
EC-M12FP-LK-PB-5:	PB cordset M12 female conn., 5 m cable
EC-M12FC-S37-P3-5:	Cordset M12 power supply, 5 m cable
CC-RD-CB/MB:	CANopen/Modbus mating connectors
EC-M12MC-LK-CB-5:	CB/MB cordset M12 male conn., 5 m cable
EC-M12FC-LK-CB-5:	CB/MB cordset M12 female conn., 5 m cable
E-M12FC:	M12 conn. for power supply
EXC-USB4-S54-GN-2-M12MC-S54:	Connection cable RDxx Modbus to USB/PC

Specifications subject to changes without prior notice





1 = Dip switch access, diagnostic LEDs
2 = Power supply connector
3 = Bus OUT connector
4 = Bus IN connector
5 = GND connection screw
6 = Magnet position for manual brake release

RD5 - RD53

Order code

RD5 RD53	-	X ⓐ	-	XXX ⓑ	-	XX ⓒ	-	XX ⓓ	-	X ⓔ

ⓐ **POWER SUPPLY**
P8 = 24Vdc ± 10%

ⓑ **TORQUE/SHAFT ROTATIONAL SPEED**
T50 = 5 Nm @ 60 rpm

ⓒ **INTERFACE**
CB = CANopen (DS301)
PB = Profibus-DP
MB = Modbus RTU (RS485)

ⓓ **ENCODER**
E3 = Absolute, 1024 inf./rev. x 256 rev.

ⓔ **CONNECTIONS**
M = M12 connectors