



We pioneer motion

Rotary Direct Drive System RDDS-20-B

RDDS-20-B

Guarantee for more performance

Fast. Reliable. Long-lived.

In industries such as productronics and automation the demands on dynamics, availability and service life are constantly increasing. Complete drive systems are required here. The rotary direct drive system RDDS-20-B from Schaeffler Industrial Drives offers maximum performance in a small installation space, is extremely long-lived and is a ready-to-install complete system consisting of motor, bearing, measuring system and cooling.



Benefits

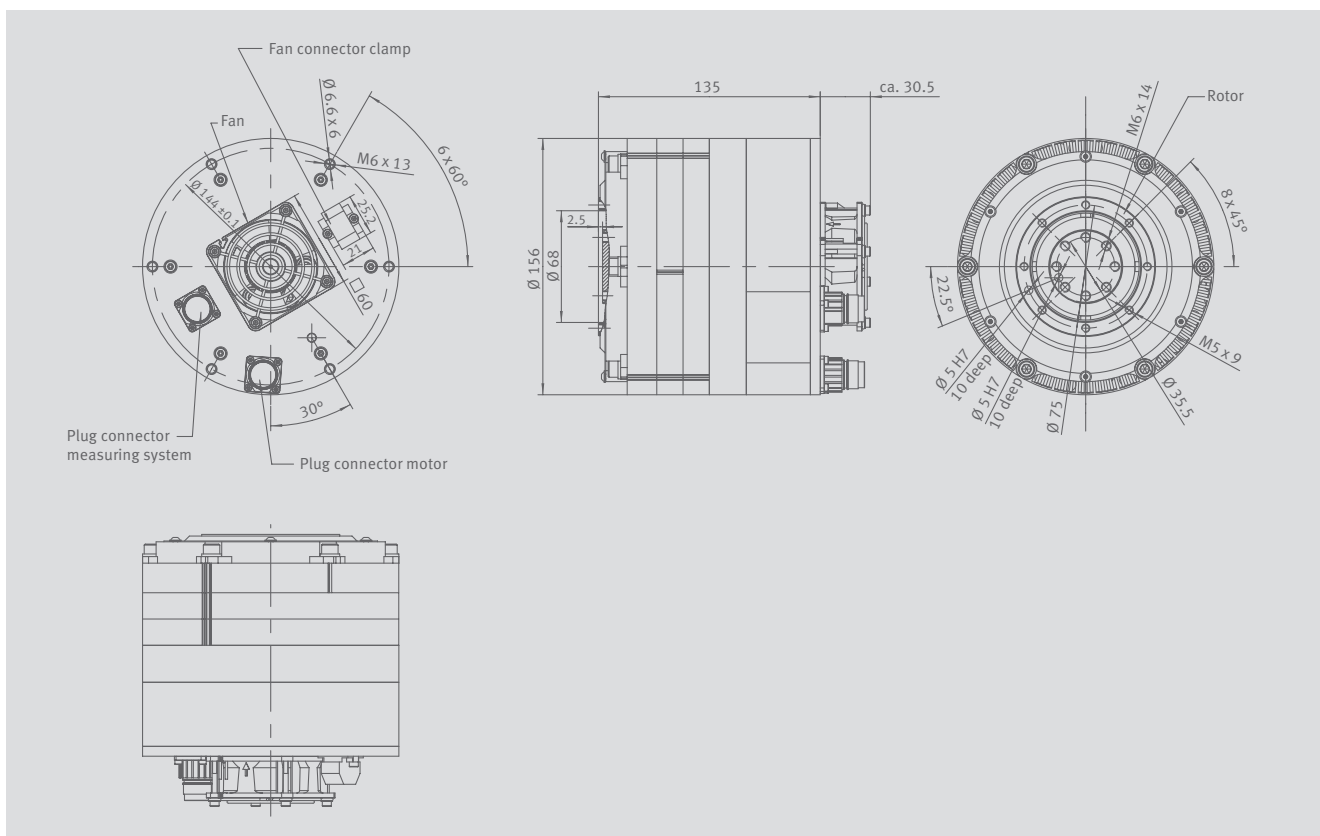
- 70% more torque in the installation space
- Up to 60,000 cycles per hour in the application
- Highest power density
- Compact design



Features

- Integrated air cooling
- Maximum reliability due to dust protection of the moving parts and the measuring system
- High dynamics
- Optimized for minimum mass inertia

Drawing



Technical data

System data	Symbol	Unit	RDDS-20-B
Dimensions	$\varnothing \times H$	mm	156 x 165.5
Total mass	m	kg	9.8
Screw-on version			Base plate
Connection version			Plug
Mass moment of inertia	J	kgm ²	2.11×10^{-3}
Axial runout		μm	± 10
Radial runout		μm	± 10
Repeatability (bidirectional)		μm	3
Limit speed	n_{max}	rpm	600

System components	Symbol	Unit	RDDS-20-B
Bearing			Ball bearing
Measuring system			Rotary · optical · incremental
– Resolution		Increments	1634
– Interface			1 V _{pp} (sin/cos) and BiSS C 25 Bit
– Reference mark			1
Cooling system			Active air cooling (integrated), 24 V _{DC}

Motor: RI11-3P-89x50-Z0	Symbol	Unit	RDDS-20-B
Ultimate torque (1 s) at I _u	T _u	Nm	59.3
Peak torque (saturation range) at I _p	T _p	Nm	53.7
Peak torque (linear range) at I _{pl}	T _{pl}	Nm	38.1
Continuous torque (active cooling)	T _{cw}	Nm	24.8
Motor constant (25 °C)	k _m	N/VW	1.57
Ultimate current (1 s)	I _u	A _{rms}	25.2
Peak current (saturation range)	I _p	A _{rms}	20.2
Peak current (linear range)	I _{pl}	A _{rms}	12.3
Continuous current (active cooling)	I _{cw}	A _{rms}	8.0
DC link voltage	U _{DCL}	V	360
Maximum permissible DC link voltage	U _{DCL max}	V	600

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Every care has been taken to ensure the correctness of the information contained in this publication but no liability can be accepted for any errors or omissions. We reserve the right to make technical changes.

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