

## hamotic system direct drive



### Technical data



High performance direct drives for mobile robotic platforms/Outer rotor motor

Model type	IWDD-142/30	IWDD-142/50	
<b>Performance specifications</b>			
Continuous torque [Nm]	10.0	17.0	
Peak torque [Nm]	25.0	42.0	
Rated power [W]	209	356	
Speed range [/min]	0-400	0-400	
Efficiency max. [%]	75.8	79.2	
Radial load capacity [N]	2,500	3,500	
Axial load capacity [N]	1,500	1,500	
<b>Mechanical specifications</b>			
Stator outer diameter [mm]	142	142	
Rotor outer diameter [mm]	157	157	
Stator length [mm]	30	50	
Weight [kg]	7.5	8.8	
Weight [kg] with brake and encoder	9.9	11.6	

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<b>Ambient conditions</b>			
Ambient temperature [°C]	-15 to 40	-15 to 40	
Protection class IP (higher on request)	IP43	IP43	
<b>Electrical specifications</b>			
Maximum operation voltage [VAC]	48	48	
Continuous current [A]	10.4	17.4	
Winding resistance Phase-phase [Ω]	0.24	0.20	
Winding inductance Phase-phase [mH]	2.51	0.43	
Number of poles	60	60	
Motor torque constant [Nm/A]	0.95	1.26	
Lead wires [AWG]	14	14	
HANNING encoder	18 bit resolution		
SIL encoder	Optional, e.g. SICK DFS60S		
Brake	Optional, e.g. Mayr Robastop ECO		

## Notes