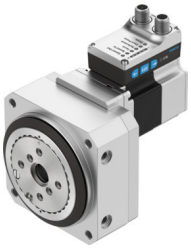
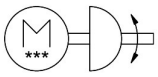
Rotary drive unit
ERMS-32-90-ST-M-H1-PLK-AA

Part number: 8087821





Data sheet

Feature	Value
Size	32
Structural design	Electromechanical rotary actuator With integrated drive with integrated gearbox
Mounting position	Any
Type of mounting	With internal thread
Gear ratio	7:1
Max. rotational speed	100 rpm
Torsional backlash	0.2 deg
Repetition accuracy	±0.1 °
Position sensing	Motor encoder
Max. axial force	450 N
Max. radial force	550 N
Permissible mass moment of inertia	0.0164 kgm²
Product weight	2304 g
Step angle with full step	1.8 deg
Step angle tolerance	±5%
Duty cycle	100%
Power supply, type of connection	Plug
Power supply, connection technology	M12x1, T-coded as per EN 61076-2-111
Power supply, number of pins/wires	4
Logic interface, connection type	Plug
Logic interface, connection technology	M12x1, A-coded as per EN 61076-2-101
Logic interface, number of poles/wires	8
Max. cable length	15 m outputs 15 m inputs 20 m for IO-Link® operation
DC nominal voltage	24 V
Nominal current	5.3 A
Motor nominal current	5 A
Max. current consumption	5.3 A
Permissible voltage fluctuations	+/- 15 %

Feature	Value
Number of digital logic inputs	2
Characteristics of logic input	Configurable Not galvanically isolated
Logic input specification	Based on IEC 61131-2, type 1
Work range of logic input	24 V
Input switching logic	PNP (positive switching)
Number of digital logic outputs 24 V DC	2
Characteristics of digital logic outputs	Configurable Not galvanically isolated
Max. current of digital logic outputs	100 mA
Switching logic at outputs	PNP (positive switching)
IO-Link®, SIO mode support	Yes
IO-Link®, protocol version	Device V 1.1
IO-Link®, communication mode	COM3 (230.4 kBd)
IO-Link®, port class	A
IO-Link®, number of ports	1
IO-Link®, process data width OUT	2 Byte
IO-Link®, process data content OUT	Move in 1 bit Move out 1 bit Quit Error 1 bit Move Intermediate 1 bit
IO-Link®, process data width IN	2 Byte
IO-Link®, process data content IN	State Device 1 bit State In 1 bit State Intermediate 1 bit State Move 1 bit State Out 1 bit
IO-Link®, service data contents IN	32 bit force 32 bit position 32 bit speed
IO-Link®, minimum cycle time	1 ms
IO-Link®, data memory required	0.5 KB
IO-Link®, Connection technology	Plug
Parameterization interface	IO-Link® User interface
Insulation protection class	B
Motor type	Stepper motor
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Rotor position sensor resolution	16 bit
Homing	Fixed stop block positive Fixed stop block, negative
Protective function	Temperature monitoring
Additional functions	User interface Integrated end-position sensing
Display	LED
Angular acceleration	140 rad/s²
Certification	RCM compliance mark
KC characters	KC EMC
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
Peak torque	5.6 Nm
Interface code, base	E8-55
Degree of protection	IP40
Storage temperature	-20 °C...60 °C
Ambient temperature	0 °C...50 °C

Feature	Value
Note on ambient temperature	Above an ambient temperature of 30°C, the power must be reduced by 2% per K.
Relative air humidity	0 - 85 %
Vibration resistance	Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Logic max. current consumption	0.3 A
Maintenance interval	Life-time lubrication