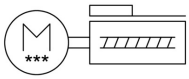
Ball Screw axis unit
ELGS-BS-KF-32-600-8P-ST-M-H1-PLK-AA

Part number: 8083429



General operating condition

Data sheet

Feature	Value
Working stroke	600 mm
Size	32
Stroke reserve	0 mm
Screw diameter	8 mm
Spindle pitch	8 mm/U
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Electromechanical linear axis with ball screw With integrated drive
Motor type	Stepper motor
Spindle type	Ball screw drive
Symbol	00997292
Position sensing	Motor encoder For proximity sensor
Homing	Fixed stop block positive Fixed stop block, negative
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Temperature monitoring	Shutdown in the event of over temperature Integrated precise CMOS temperature sensor with analogue output
Additional functions	User interface Integrated end-position sensing
Display	LED
Ready status indication	LED
Max. acceleration	5 m/s²
Max. speed	0.18 m/s
Speed "Speed Press"	0.01 m/s
Repetition accuracy	±0.015 mm
Characteristics of digital logic outputs	Configurable Not galvanically isolated
Duty cycle	100%
Insulation protection class	B
Max. current of digital logic outputs	100 mA
Max. current consumption	3000 mA
Logic max. current consumption	0.3 A
DC nominal voltage	24 V
Nominal current	3 A

Feature	Value
Parameterization interface	IO-Link® User interface
Rotor position sensor resolution	16 bit
Permissible voltage fluctuations	+/- 15 %
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
Power supply, connection pattern	00995989
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 To UK RoHS instructions
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
Cleanroom class	Class 7 according to ISO 14644-1
Storage temperature	-20 °C ... 60 °C
Relative air humidity	0 - 90 %
Degree of protection	IP40
Protection class	III
Ambient temperature	0 °C ... 50 °C
Note on ambient temperature	Above an ambient temperature of 30°C, the power must be reduced by 2% per K.
2nd moment of area Iy	38000 mm⁴
2nd moment of area Iz	45000 mm⁴
Max. force Fy	356 N
Max. force Fz	356 N
Max. force Fy total axis	150 N
Max. force Fz total axis	300 N
Fy with theoretical service life of 100 km (from a guide perspective only)	1310 N
Fz with theoretical service life of 100 km (from a guide perspective only)	1310 N
Max. torque Mx	1.3 Nm
Max. torque My	1.1 Nm
Max. torque Mz	1.1 Nm
Max. moment Mx total axis	1.3 Nm
Max. moment My total axis	1.1 Nm
Max. moment Mz total axis	1.1 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	5 Nm
My with theoretical service life of 100 km (from a guide perspective only)	4 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	4 Nm
Max. feed force Fx	40 N
Guide value for payload, horizontal	2 kg
Guide value for payload, vertical	2 kg
Torsion moment of inertia It	1700 mm⁴
Feed constant	8 mm/U
Reference service life	5000 km
Maintenance interval	Life-time lubrication
Moving mass	83.4 g
Product weight	1969 g
Dynamic deflection (load moved)	0.05% of axis length, maximum 0.5 mm

Feature	Value
Static deflection (load at standstill)	0.1 % of axis length
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Logic input specification	Based on IEC 61131-2, type 1
Work range of logic input	24 V
IO-Link®, SIO mode support	Yes
Characteristics of logic input	Configurable Not galvanically isolated
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 In 1 bit State Out 1 bit State Move 1 bit State Device 1 bit State Intermediate 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	500 byte
Max. cable length	15 m outputs 15 m inputs 20 m for IO-Link® operation
Switching logic at outputs	PNP (positive switching)
Input switching logic	PNP (positive switching)
IO-Link®, Connection technology	Plug
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
Logic interface, connection pattern	00992264
Type of mounting	With internal thread With centering sleeve and pin With accessories
Material of end caps	Die cast aluminum, painted
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS-compliant
Cover strip material	High-alloy stainless steel
Drive cover material	Die cast aluminum, painted
Slide carriage material	Steel
Guide rail material	Steel
Slide material	Die-cast aluminum
Spindle nut material	Steel
Spindle material	Steel