

# Positioning drive

**MSIA – FlexiDrive**

**Profibus-DP**

## features

- power nominal 50 W
- absolute multi-turn encoder
- 4 programmable inputs
- bus in and bus out connector
- separate power supply for electronics
- run records programmable



## technical data

voltage supply	24 VDC ±10 %	
max. supply current	8 A	
operation mode	S1 <sup>2)</sup>	S3 <sup>3)</sup>
current nom.	1,7 A	5,0 A
power output nom. <sup>1)</sup>	22 W	50 W
rotational speed nom. <sup>1)</sup>	3'420 rpm	2'540 rpm
torque nom. <sup>1) 4)</sup>	0,06 Nm	0,2 Nm
positioning resolution <sup>1)</sup>	0,02°	
positioning accuracy <sup>1)</sup>	±1°	
repeatability <sup>1)</sup>	0,3°	
revolutions <sup>1)</sup>	262'144	
operating hours	20'000 h	
material	housing: aluminum	
max. shaft load <sup>1)</sup>	axial: 40 N radial: 400 N	

<sup>1)</sup> without gear

<sup>2)</sup> S1 continuous duty (DIN EN 60034-1)

specifications at ambient temperature +40 °C

## order designation

**MSIA 53P2PA11-N52**

gear ratio

004	046
007	150
014	000 (without gear)

gear variant

**K0** without gear  
**P5** planetary gear

protection class

**C** IP 54  
**E** IP 65

<sup>3)</sup> S3 intermittent duty, cycle 1 min, power on duration 25%

<sup>4)</sup> at operation factor = 1

<sup>5)</sup> only with leak-proof D-Sub connector

## communication

fieldbus	Profibus-DP		
profile	Profibus nr. 3 version 2.0		
max. baud rate	12 Mbit/s		

## ambient conditions

protection class	IP 65 <sup>5)</sup>
ambient temperature	-15...+40 °C
overtemp. protection	yes
isolation class	B (+130 °C, DIN EN 60034-1)

## motor-gear-combinations

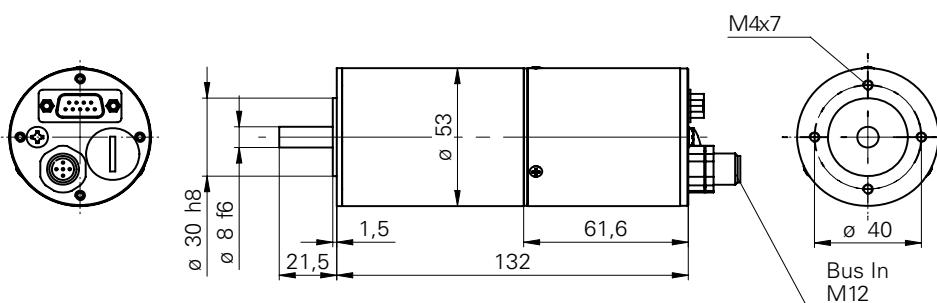
torque nominal (Nm) <b>S1</b>	output speed (rpm) <b>S3</b>	gear ratio <b>S1</b>	revolution <b>S3</b>	transmission play (in degrees)	shaft load axial (N)	shaft load radial (N)	weight (kg)	total length L (mm)
0,2	0,7	841	561	3,7	70'850	60	200	1,3
0,3	1,1	533	356					
0,6	2,0	262	175	13,73	19'093	100	320	1,5
2,0	6,8	79	53					
6,3	21	24	16	149,9	1'749	0,8	150	450
							1,7	216

Additional motor - gear combinations are available on request.

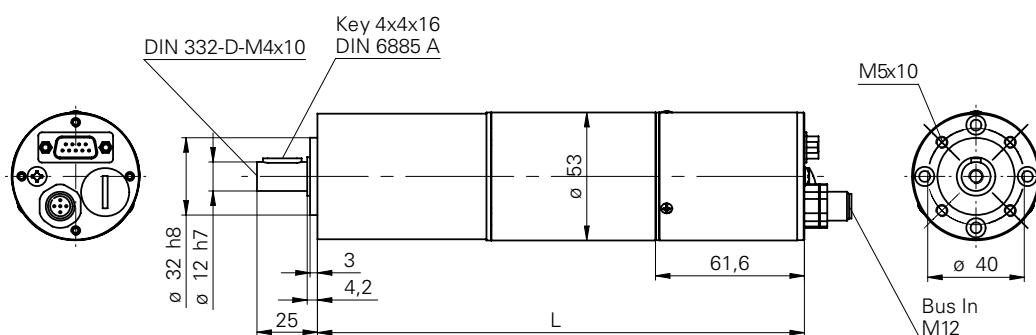
## Profibus-DP

### dimensions

#### K without gear



#### P planetary gear



#### hint

switches for bus address adjustment are located behind removable cover

### assignment connector 9-pin D-Sub male

pin nr.	signal	description
1	+VsE	+24 VDC voltage supply electronics
2	Input 1	programmable input
3	Input 2	programmable input
4	Input 3	programmable input
5	Input 4	programmable input
6	0 VME	0 VDC voltage supply motor/electronics
7	0 VME	0 VDC voltage supply motor/electronics
8	+VsM	+24 VDC voltage supply motor
9	+VsM	+24 VDC voltage supply motor

### assignment connector 5-pin M12 male

pin nr.	signal	description
1	+VsDP	VP Profibus +5VDC
2	A line green	cable green / Profibus-DP
3	0 VDP	DGND Profibus
4	B line red	cable red / Profibus-DP
5	screen	housing

B-coded

### accessoires

CD-ROM with GSD/EDS-/XML-files and manuals	part nr. 147362
D-Sub connector (female)	part nr. 153493
refer to fieldbus accessories, page 5.27	