

High force density
at small installation space



- **Linear Direct Drive System**
LDDS-074-B

LDDS-074-B

Features, benefits, applications, drawing

Features

- One-axis positioning system
- Slotted linear motor, type: L1A, with moving secondary part
- Enclosed system: splash-proof by bellows, protection class IP54
- Robust design
- Wear-free components

Benefits

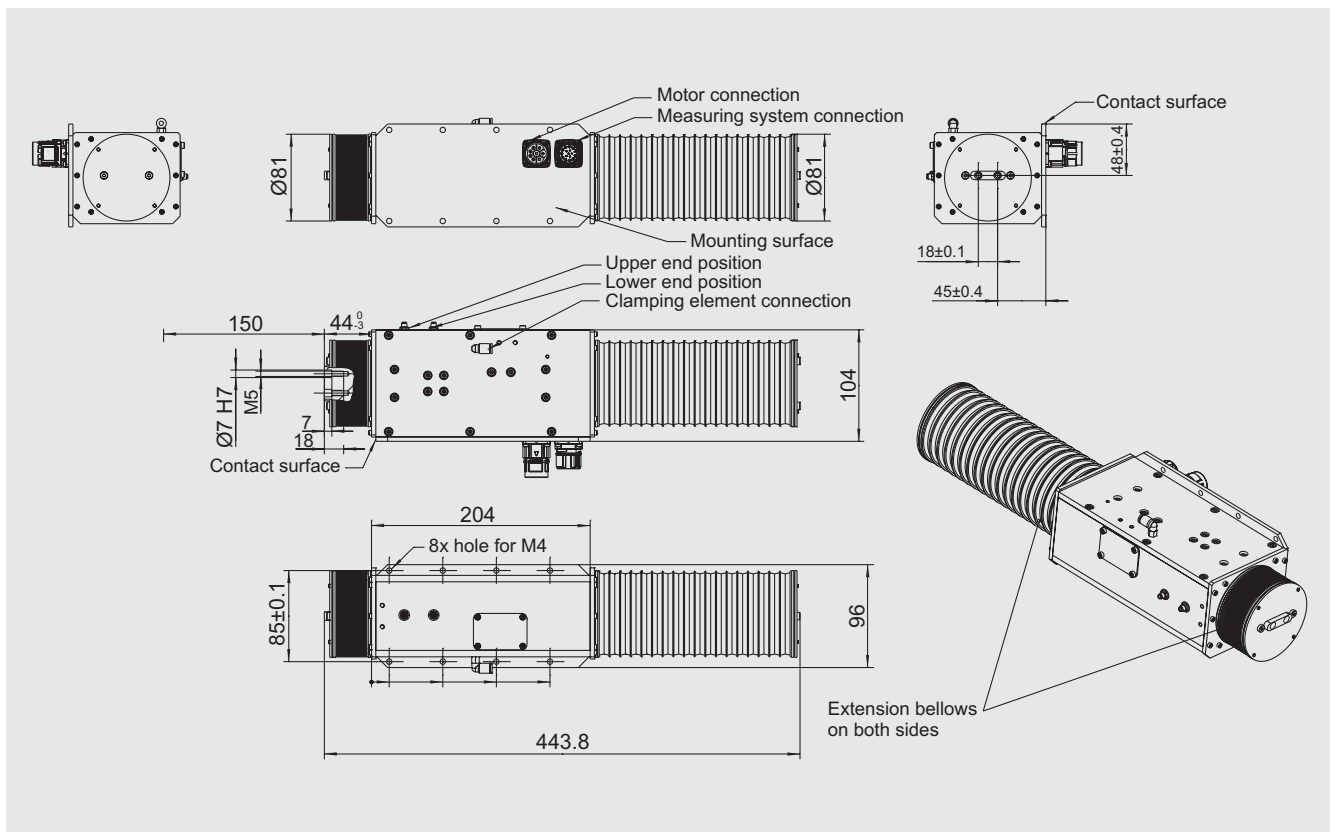
- High positioning accuracy
- High dynamics
- High force density at small installation space
- Used as Z-axis by an integrated pneumatic clamping element
- Ready-to-mount (incl. limit switches, reference mark, clamping element ...)

Applications

- Machine tools
- Automation
- Precise handling
- For tough environments



Drawing



LDDS-074-B

System data, system components, motor data

System data	Symbol	Unit	LDDS-074-B
Dimension	L x W x H	mm	443.8 x 104 x 96
Total mass	m_{ges}	kg	8.9
Moving net mass incl. bellows	m	kg	2.5
Payload	m	kg	1
Usable stroke	s	mm	145 (other on request)
Maximum acceleration	a_{max}	m/s^2	80
Maximum speed	v_{max}	m/s	3
Maximum acceleration with payload	a_{max}	m/s^2	57
Maximum speed with payload	v_{max}	m/s	2.7
Positioning accuracy		μm	On request
System components	Symbol	Unit	LDDS-074-B
Guidance system			Ball monorail guidance system
Measuring system			Magnetic
Clamping element			$1 V_{pp}$ sin/cos, grating period 1 mm Pneumatically opening
Motor data	Symbol	Unit	LDDS-074-B
Motor type: L1A-3P-100-50-WM			
Ultimate force at I_u	F_u	N	398
Peak force (saturation range) at I_p	F_p	N	338
Nominal force at I_c	F_c	N	81
Motor constant (25 °C)	k_m	N/\sqrt{W}	15.2
Ultimate current	I_u	A_{rms}	14.3
Peak current (saturation range)	I_p	A_{rms}	11.4
Nominal current	I_c	A_{rms}	2.3
DC link voltage	U_{DCL}	V	600



INA – Drives & Mechatronics AG & Co. KG

Mittelbergstrasse 2
98527 Suhl, Germany

Phone +49 3681 | 7574-0

Fax +49 3681 | 7574-30

E-mail idam@schaeffler.com

Web www.idam.de

