



- **LDDS**
Linear Direct Drive System
- **LDDS-061**

LDDS-061

Features, benefits, applications, drawing

Features

- High power density
- Very low power loss
- Integrated measurement system
- Inside energy chain
- Optimal protection by fixed stainless steel cover
- Electrical interfaces directly on front cover
- Weight-optimised carriage

Benefits

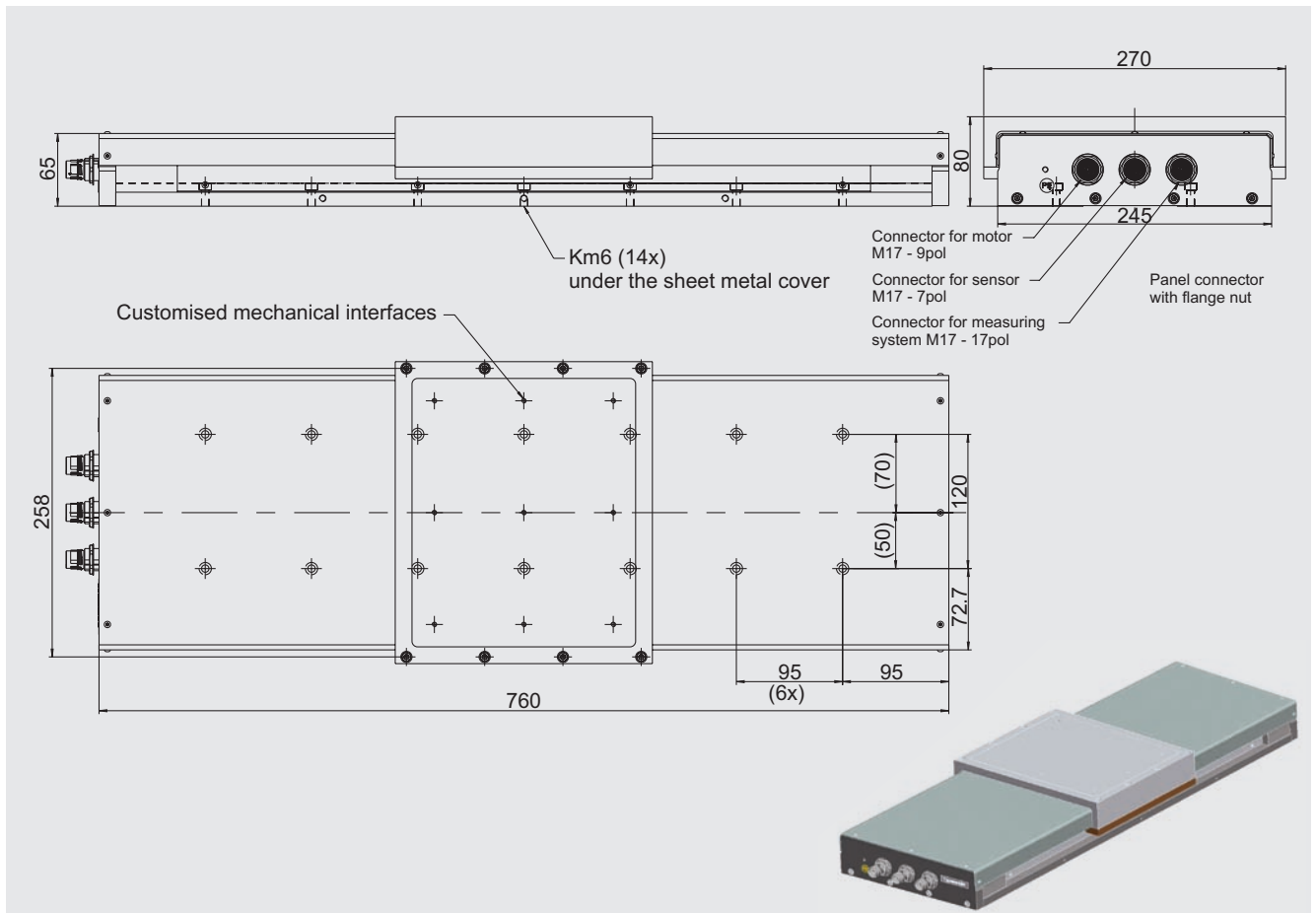
- High accuracies
- Low warming of the axis
- Low heat transfer to the machine
- Fast build up of force in the axis
- Precise, regulated movement and positioning
- Compact design
- Low maintenance

Applications

- Laser machining of small parts
- Precise handling
- In the medical engineering
- In the automation area



Drawing



Technical Data

Dimensions, masses, performance data, components

Dimensions/masses		Symbol	Unit	LDDS-061
Dimensions	L x W x H		mm	760 x 245 x 80 (width of carriage: 270 mm)
Total mass	m_{total}		kg	34
Moving net mass	m		kg	12.7
Payload	m		kg	6.8
Usable stroke	s		mm	350
Performance data		Symbol	Unit	LDDS-061
Motor type: L1B-3P-200-50-WM-O-O-W-PRIM				
Peak force (saturation range) at I_p	F_p		N	679
Nominal force (not cooled) at I_c	F_c		N	200
Peak current (saturation range)	I_p		A_{rms}	14.5
Nominal current	I_c		A_{rms}	3.4
DC link voltage	U_{DCL}		V	300
Motor constant (25 °C)	k_m		N/\sqrt{W}	27.9
Maximum acceleration (without addition)	a_{max}		m/s^2	35
Maximum speed	v_{max}		m/s	3.5
Positioning accuracies (these values are based on a stroke of 350 mm)				
Accuracy			μm	± 10
Repeat accuracy			μm	± 2
Straightness, horizontal			μm	± 8
Straightness, vertical			μm	± 8
Pitch			arcsec	± 8
Yaw			arcsec	± 8
Components		Symbol	Unit	LDDS-061
Guidance				Linear guidance KUVE 15
Measuring system				Optical incremental with $1 V_{pp}$ output signals
Grating period, measuring system			μm	20



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