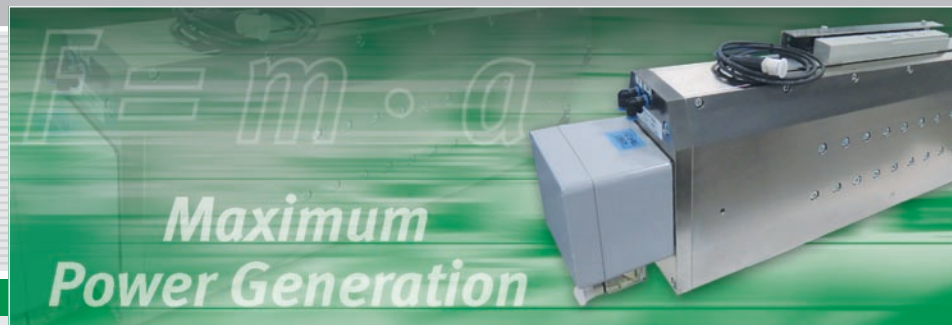




- **LDDS**
Linear Direct Drive System
- **LDDS-055**

LDDS-055

Features, benefits, applications, drawing

Features

- High power generation
- Water cooled
- Double-comb arrangement of the linear motors
- Moved secondary part without iron counterplate
- No moving cables
- Easy adjustment of the outside absolute measuring system

Benefits

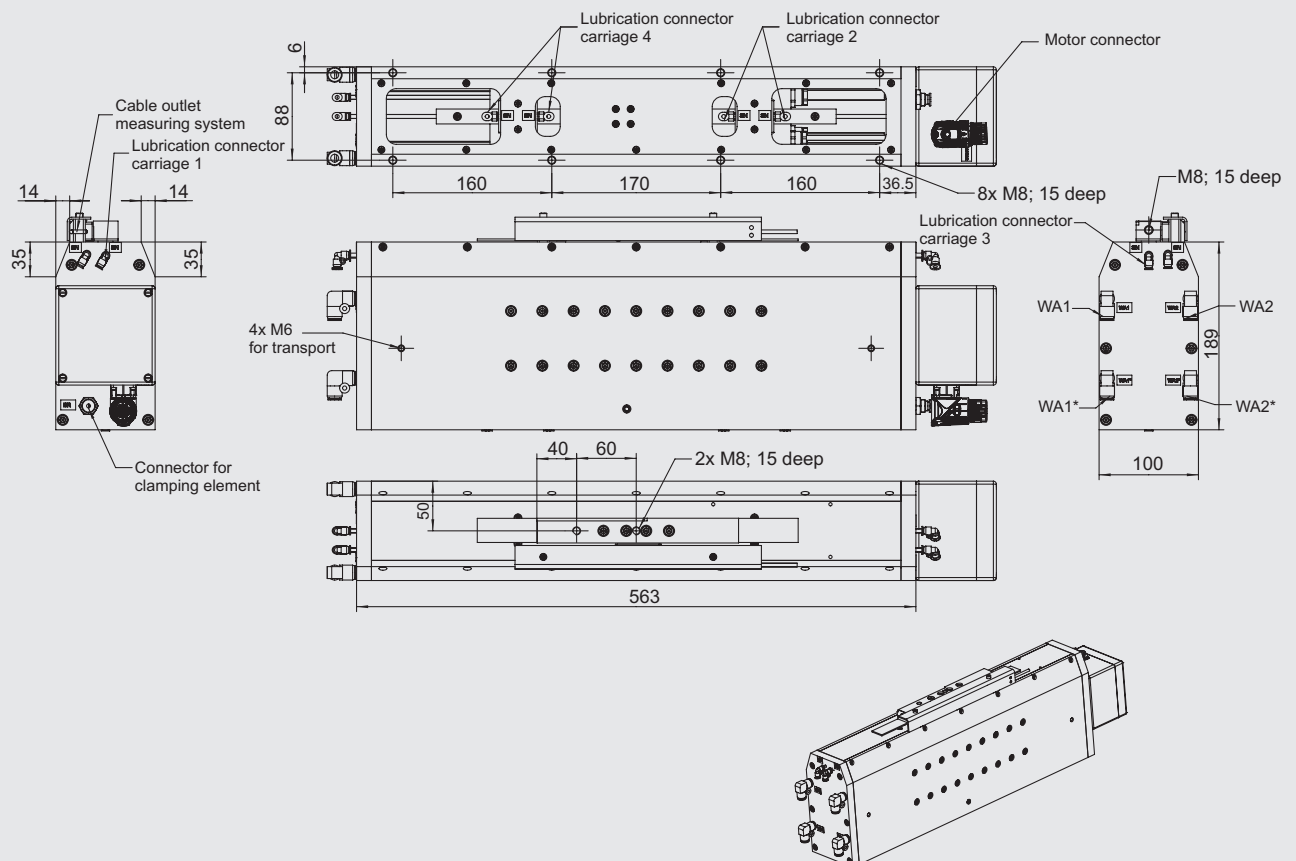
- High positioning accuracy
- Extremely high acceleration up to 300 m/s^2 (30 G)
- Low moving net mass
- Compact design
- Higher nominal force by water cooling
- Dirt resistant due to the enclosed design
- Low maintenance

Applications

- Textile industry
- Automation
- Packaging industry
- Food industry
- Material testing machines
- For precise handling



Drawing



LDDS-055

Dimensions, masses, performance data, components

Dimensions/masses	Symbol	Unit	LDDS-055
Dimensions incl. connectors	L x W x H	mm	673.5 x 100 x 218
Total mass	m_{total}	kg	48
Moving net mass	m	kg	4.1
Maximum payload	m	kg	10
Usable stroke	s	mm	100
Performance data	Symbol	Unit	LDDS-055
Motor type: 2x L1C-3P-300-75-HD1-O-O-G with water cooling			
Peak force (saturation range) at I_p	F_p	N	2449
Nominal force (not cooled) at I_c	F_c	N	780
Nominal force (cooled) at I_{cw}	F_{cw}	N	1531
Motor constant (25 °C)	k_m	N/ $\sqrt{W}$	52.6
Peak current (saturation range)	I_p	A_{rms}	25.5
Nominal current (not cooled)	I_c	A_{rms}	6.9
Nominal current (cooled)	I_{cw}	A_{rms}	13.6
DC link voltage	U_{DCL}	V	600
Maximum acceleration (3.64 mm stroke; 10 kg payload, water cooling)	a_{max}	m/s^2	67
Maximum speed (3.64 mm stroke; 10 kg payload, water cooling)	v_{max}	m/s	0.5
Positioning accuracy		μm	± 15
Repeat accuracy		μm	± 5
Components	Symbol	Unit	LDDS-055
Guidance			Linear guidance KUVÉ
Measuring system			Optical, absolute with EnDat 2.2 (22) position values without incremental signals (LIC 4000)
Operating pressure, pneumatic clamp	p	bar	5.5 – 8.0



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

