

## Data sheet

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Force-  
standard

Series KTN-LF

(2 MN – 30 MN)



### Benefits/Application

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- Class 0.5 acc. ISO 376
- For static compressive forces
- Extremely robust
- Especially to calibrate testing machines
- Outstanding overload-tolerance
- 6-wire connection technology

### Options/Accessories

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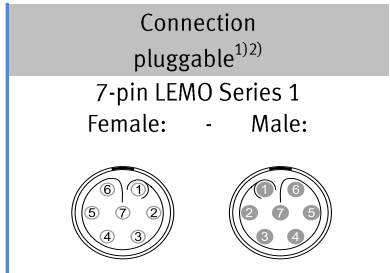
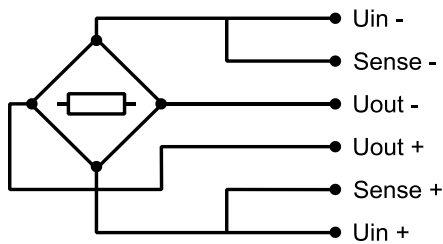
- Bending moment circuits
- Transport case

# Technical data

# Class 0,5

		$F_{nom}$	MN	2	3	5	10	20	30
Metrological Data	Nominal force	$F_{nom}$	MN	2	3	5	10	20	30
	Force measurement range		%	20 - 100					
	Interpolation error	$f_c$	%	0,045					
	Reversibility error	$v$	%	0,14					
	Repeatability error in unchanged mounting position	$b, b_{rg}$	%	0,045					
	Reproducibility error in different mounting positions	$b', b_{rv}$	%	0,09					
	Zero error	$f_0$	%	0,02					
	Creep	180 s...20 min	%	0,03					
	Temperature effect on characteristic value per 10 K	$TK_C$	%/10K	0,02					
	Temperature effect on zero signal per 10 K	$TK_0$	%/10K	0,02					
Electrical Data	Rated characteristic value	$C_{nom}$	mV/V	2					
	Input resistance	$R_e$	$\Omega$	ca. 750					
	Output resistance	$R_a$	$\Omega$	ca. 700					
	Insulation resistance	$R_{is}$	$\Omega$	$>10^9$					
	Operating range of excitation voltage	$B_{U,G}$	V	5 - 12					
	Protection (DIN EN 60529)			54					
Mechanical Data	Mass transducer	$m$	kg	18	35	65	143	308	527
	Mass thrust piece	$m$	kg	6	13	30	70	186	314
	Force limit		%	110					
	Breaking force		%	200					
	Permissible eccentricity	$e_G$	mm	10					
	Rated temperature range	$B_{T,nom}$	$^{\circ}C$	17 - 27					
	Operating temperature range	$B_{T,G}$	$^{\circ}C$	10 - 35					

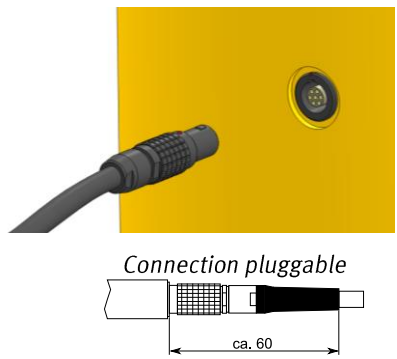
# Cable connection



Connection		Pin
Supply voltage (+)	U <sub>in+</sub>	3
Supply voltage (-)	U <sub>in-</sub>	2
Measurement signal (+)	U <sub>out+</sub>	1
Measurement signal (-)	U <sub>out-</sub>	4
Sense (+)	Sense+	5
Sense (-)	Sense-	6
Shielding		Housing

1)View too weldingside

2) Female LEMO S.A. Typ: EGG.1B.307.CLL; Male: FGG.1B.307.CLA.D72



● More cable types and lengths on request

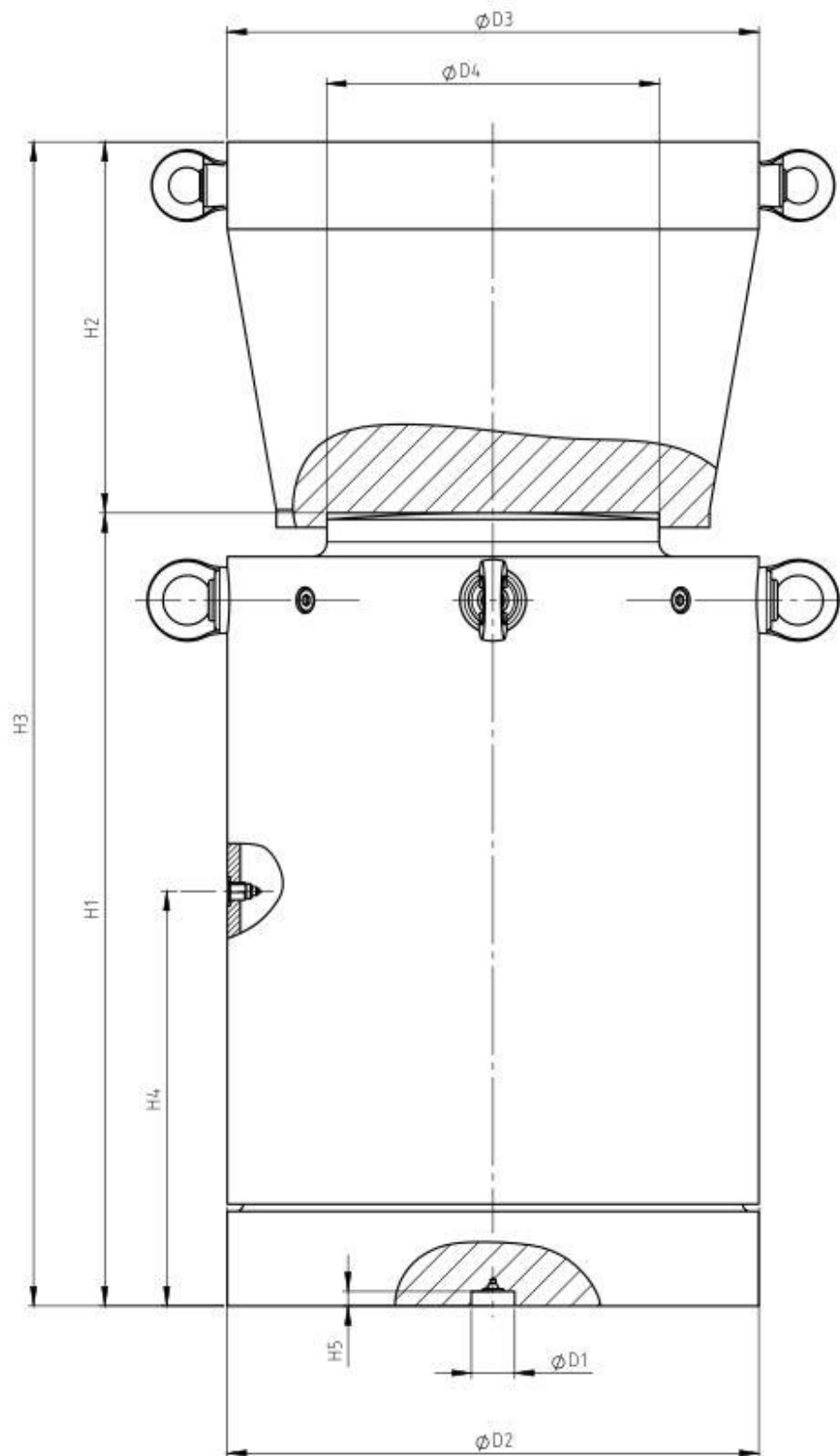
● Connector types on cable end: D-Sub 9; D-Sub 15; M-S 7pol

# Option: Bending moment

Nominal load	$F_{\text{nom}}$	MN	2	3	5	10	20	30
Temperature effect on characteristic value per 10 K	$TK_C$	%/10K				0,2		
Temperature effect on zero signal per 10 K	$TK_0$	%/10K				0,2		
Input resistance	$R_e$	$\Omega$				400		
Operating range of excitation voltage	$B_{U,G}$	V				5 - 12		

- The bending moment circuits  $M_x$  and  $M_y$  can be measured advantageous with a multichannel amplifier to check the load introduction.

# Mating dimensions



# Mating dimensions

Nominal force	$F_{\text{norm}}$	MN	2	3	5	10	20	30
Diameter	$\varnothing D_1$	mm	30 <sub>H7</sub>					
Diameter	$\varnothing D_2$	mm	120	145	200	273	368	440
Diameter	$\varnothing D_3$	mm	120	145	200	273	368	440
Diameter	$\varnothing D_4$	mm	80	100	150	158	230	275
Height	$H_1$	mm	220	320	345	455	545	600
Height	$H_2$	mm	80	110	125	180	255	300
Height	$H_3$	mm	300	430	470	635	800	900
Height	$H_4$	mm	97,5	120	185	232,5	285	290
Height	$H_5$	mm	10					

Änderungen vorbehalten. Alle Angaben beschreiben unsere Produkte in allgemeiner Form. Sie stellen keine vereinbarte Beschaffenheit im Sinne des § 434 Abs. 1 BGB dar



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