

## Data sheet

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Torque Transfer  
Wrench

**Series Dm-TS**

(2 N·m - 3000 N·m)



### Benefits/Application

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- Class 0,1 and 0,2 acc. DKD-R-3-7
- High precision
- Little weight
- Standardised connection dimensions
- For static moments
- Insensitive to changes in the lever arm length
- Easy adaption

### Options/Accessories

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- Temperature measurement with PT 100

# Technical data

## Class 0,1

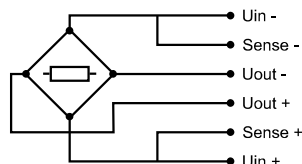
Metrological Data	Rated Torque	$M_{nom}$	N·m	2	5	10	20	25	50	100	200	500	1000	2000	3000
	Torque measurement range		%	20 - 100											
	Interpolation error	$f_c$	%	0,05											
	Reversibility error	$v$	%	0,125											
	Zero error	$f_0$	%	0,025											
	Creep		%	0,01											
	Temperature effect on characteristic value per 10 K	$TK_C$	%/10 K	0,05											
	Temperature effect on zero signal per 10 K	$TK_0$	%/10 K	0,05											
Electrical Data	Rated characteristic value	$C_{nom}$	mV/V	2											
	Input resistance	$R_e$	$\Omega$	1100								700-800			
	Output resistance	$R_a$	$\Omega$	850-1000								1700-2000			
	Insulation resistance	$R_{is}$	$\Omega$	>2x10 <sup>9</sup>											
	Operating range of excitation voltage	$B_{U,G}$	V	5 - 12											
	Protection (DIN EN 60529)			IP 60											
Limits	Mass	$m$	kg	0,3					0,9		1,5	2,5	3,2	4	30
	Torque limit		%	120											
	Breaking torque		%	200											
	Lateral force limit	$N$	%	24	60	120	240	300	480	690	1200	2400		2900	
	Rated temperature range	$B_{T,nom}$	°C	-10 - +70											
	Operating temperature range	$B_{T,G}$	°C	-20 - +85											

# Technical data

## Class 0,2

			2	5	10	20	25	50	100	200	500	1000	2000	3000
Metrological Data	Rated Torque	$M_{nom}$	N·m											
	Torque measurement range		%											
	Interpolation error	$f_c$	%											
	Reversibility error	$v$	%											
	Zero error	$f_0$	%											
	Creep		%											
	Temperature effect on characteristic value per 10 K	$TK_C$	%/10 K											
	Temperature effect on zero signal per 10 K	$TK_0$	%/10 K											
Electrical Data	Rated characteristic value	$C_{nom}$	mV/V											
	Input resistance	$R_e$	$\Omega$											
	Output resistance	$R_a$	$\Omega$											
	Insulation resistance	$R_{is}$	$\Omega$											
	Operating range of excitation voltage	$B_{U,G}$	V											
	Protection (DIN EN 60529)		IP 60											
Limits	Mass	$m$	kg											
	Torque limit		%											
	Breaking torque		%											
	Lateral force limit	$N$	%											
	Rated temperature range	$B_{T,nom}$	$^{\circ}\text{C}$											
	Operating temperature range	$B_{T,G}$	$^{\circ}\text{C}$											

# Cable connection



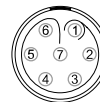
Permanent connection  
end connected<sup>1)3)4)</sup>

7-pin LEMO Series 1  
Female<sup>3)</sup>



Connection  
pluggable<sup>1)2)5)</sup>

7-pin LEMO Series 0  
Female: - Male:



Connection		Pin	Pin
Supply voltage (+)	$U_{in+}$	3	3
Supply voltage (-)	$U_{in-}$	2	2
Measurement signal (+)	$U_{out+}$	1	1
Measurement signal (-)	$U_{out-}$	4	4
Sense (+)	Sense+	5	5
Sense (-)	Sense-	6	6
Shielding		Housing	Housing

1) View to welding side.

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

3) Available up to Size 25 N·m

4) Cable length 0,5 m

5) Available from Size 50 N·m



*Permanent connection  
end connected  
(up to size 10 N·m)*



*Connection pluggable*

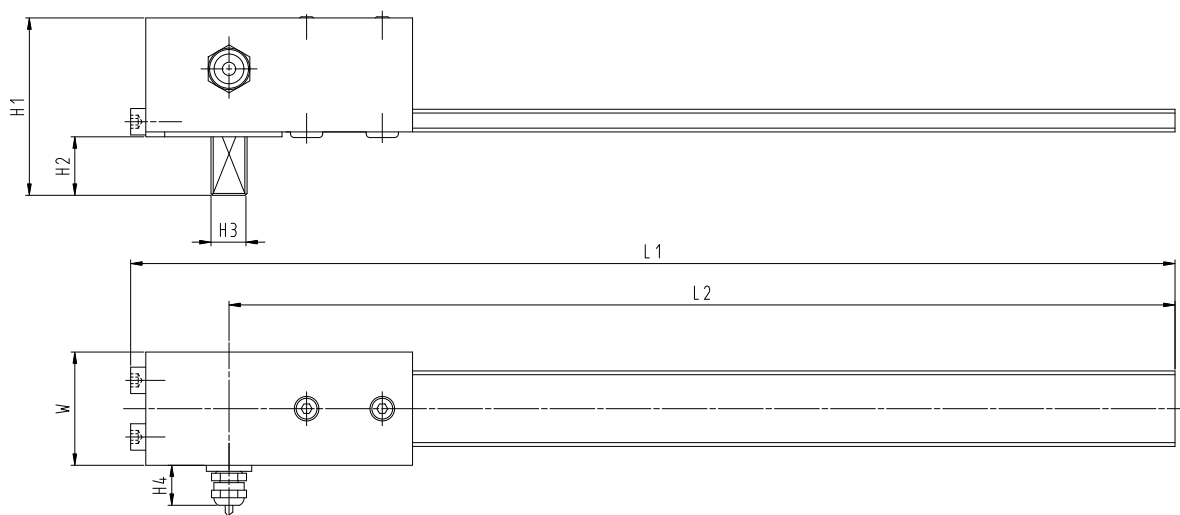
- Available types of connectors for the cable:  
D-Sub 9 pol ;D-Sub 15pol ;M-S 7pol ;LEMO Series1 7pol
- Configuration with customer defined connection is possible

# Mating dimensions

up to 25 N·m

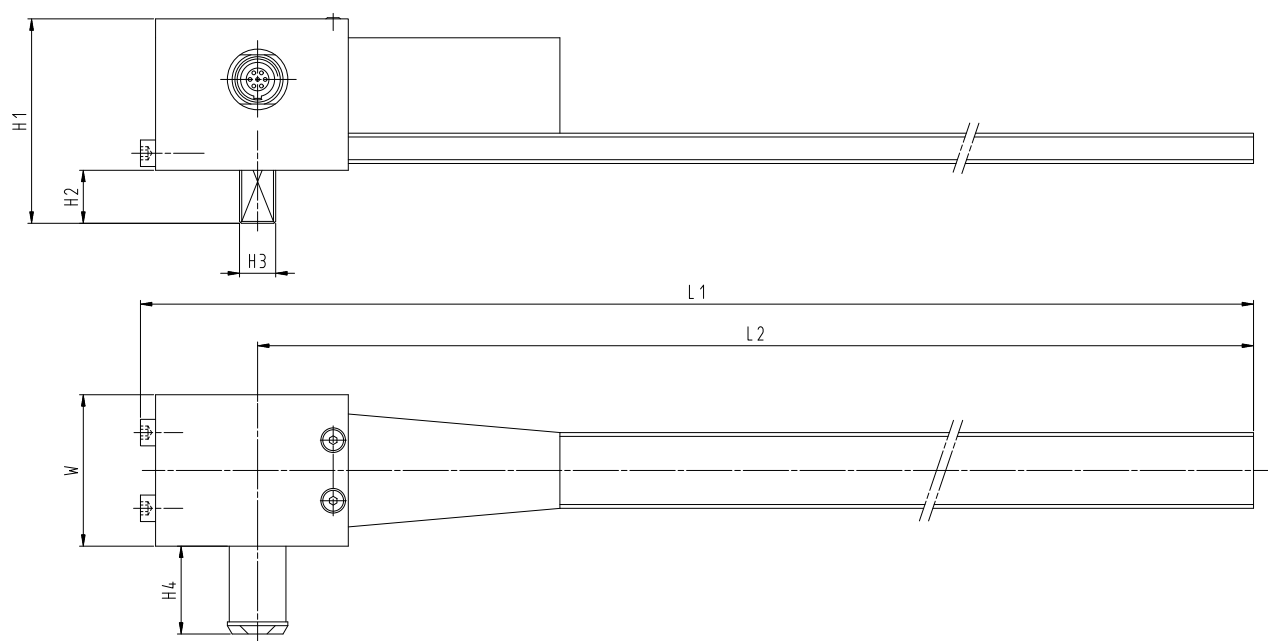
Rated Torque	$M_{nom}$	N·m	2	5	10	20	25
Height	$H_1$	mm			47		
Height	$H_2$	mm			15,5		
Height	$H_3$	mm			3/8"		
Height	$H_4$	mm			11		
Lenght	$L_1$	mm			276		
Lenght	$L_2$	mm			250		
Width	$W$	mm			30		

2 N·m - 25 N·m



# Mating dimensions

up to 200 N·m

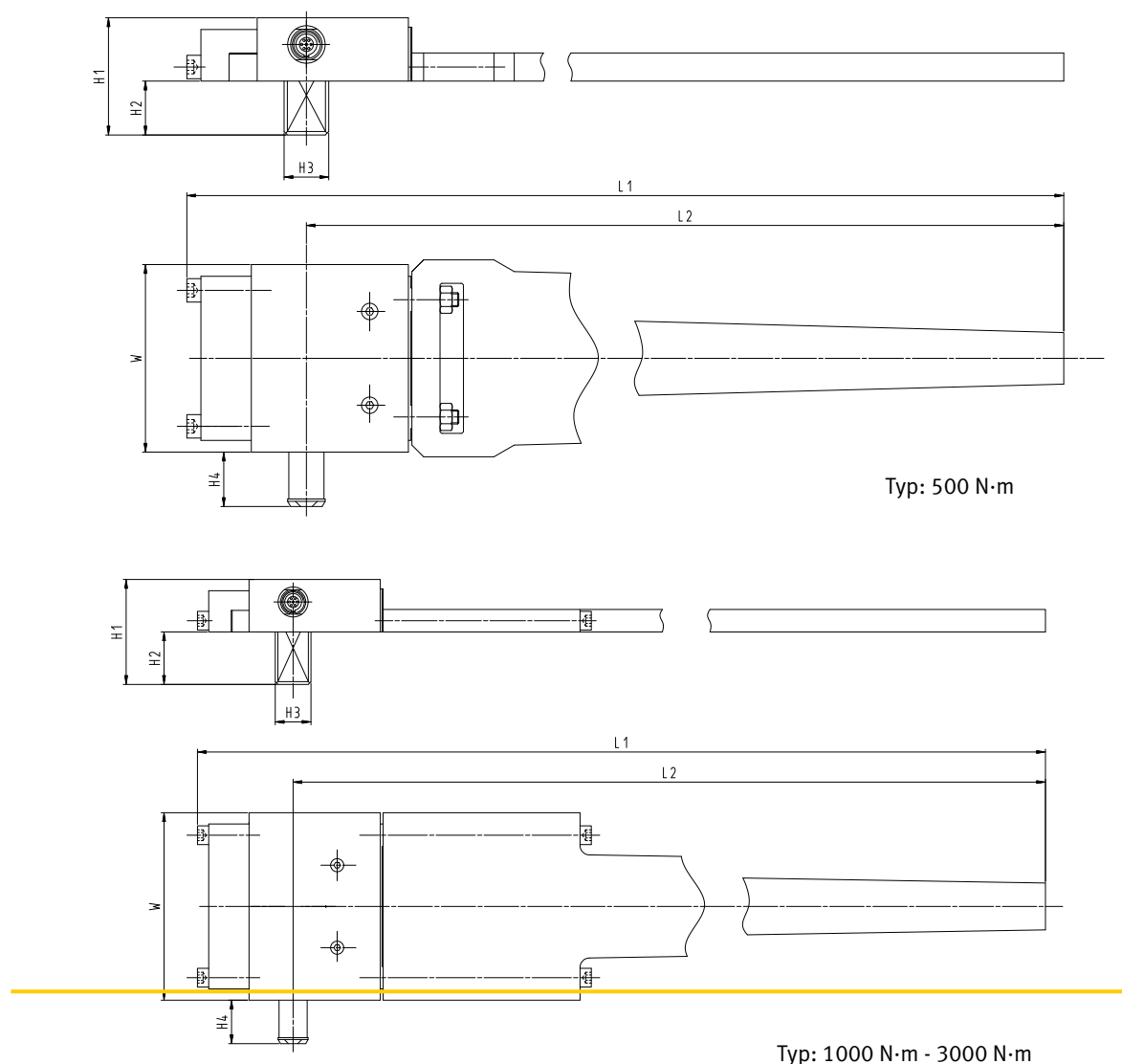


Typ: 50 N·m - 200 N·m

Rated Torque	$M_{nom}$	N·m	50	100	200
Height	$H_1$	mm	54	63,5	28
Height	$H_2$	mm	14	23,5	20
Height	$H_3$	mm	3/8"		1/2"
Height	$H_4$	mm	23		
Lenght	$L_1$	mm	481	582	799
Lenght	$L_2$	mm	450	550	756
Width	$W$	mm	40		60

# Mating dimensions

from 3000 N·m



Rated Torque	$M_{nom}$	N·m	500	1000	2000	3000 <sup>1)</sup>
Height	$H_1$	mm	50	56	62	83,5
Height	$H_2$	mm	23	28		33,5
Height	$H_3$	mm	3/4"	1"		1 1/2"
Height	$H_4$	mm	25			
Lenght	$L_1$	mm	1113	1115	1124	2587
Lenght	$L_2$	mm	1062	1064		2500
Width	$W$	mm	80	100	132	197

1) Lever arm is divided for transportation provided.

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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