

Type DR-2500

Torque sensor with analogue output

- High speed
- Without bearings
- Output signal $\pm 5V$
- Sample rate 10 kSample

This sensor has a contact less and digital signal transmission from shaft to case, that means no failure of transmission and maintenance free.



Art.no.	Nominal torque [Nm]	Max. speed [min ⁻¹]	Spring rate [Nm/rad]	Moment of inertia J in [kg cm ²]		Max. thrust load [N]
				Messeite test side	Antriebsseite drive side	
107606	0,005	20000	15	0,00013	0,011	3
107607	0,01	20000	15	0,00013	0,011	3
107428	0,02	30000	30	0,00013	0,011	10
107429	0,05	30000	30	0,00013	0,011	10
107430	0,1	30000	80	0,00078	0,012	15
107431	0,2	30000	80	0,00078	0,012	20
107432	0,5	30000	240	0,00078	0,012	30
107433	1	30000	240	0,00078	0,012	40
107434	2	30000	370	0,00083	0,013	50
107435	5	30000	370	0,00083	0,013	50
107436	10	30000	750	0,00161	0,013	50
107598	20	20000	4940	0,0367	0,065	100
107599	50	20000	9270	0,0398	0,068	200
107600	100	20000	9270	0,0398	0,068	200

Specifications

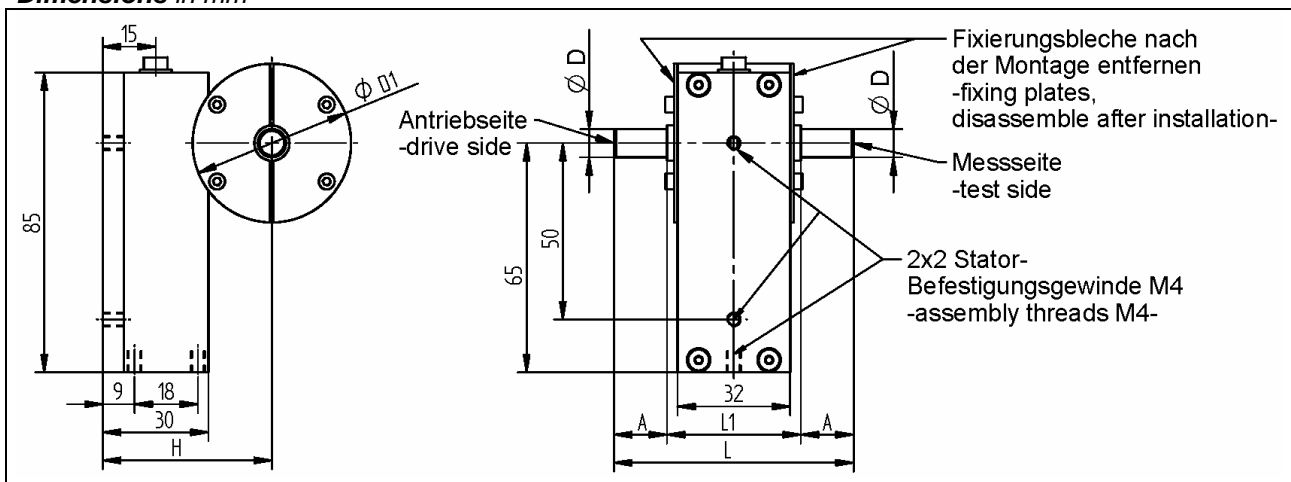
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Accuracy class	% v.E	0,1
DIN 1319 - nonrepeatability	%	±0,02
Supply voltage	VDC	12 ... 28
Supply current	mA	<60
Output signal	V	±0 ... 5
Output current max.	mA	5 short circuit resist.
Calibration control	V	L <2,0; H>3,5
Sample rate	kSample	10
Nominal temp. range	°C	+5 ... +45
Service temp. range	°C	0 ... +60
Temp. coeff. of sensitivity	% v.E./K	+0,01
Temp. coeff. of zero	% v.E./K	±0,02
(statisch) - service torque	% v.E.	150
(statisch) - limit torque	% v.E.	200
(statisch) - ultimate torque	% v.E.	>300
Bandwidth (DIN 50100)	%	70 (top - top)
Level of protection (DIN 40 050)		IP 50
Connector		8-polig – 8-pin

Artikel Nr. Option - options

	Speed control	Imp./n	6
	Output signal	V	± 0 ... 10

Dimensions in mm



Nominal torque [Nm]	Dimensions [mm]					
	ϕD	$\phi D1$	A	L	L1	H
0,005; 0,01	4 g6	45	5	48	38	48
0,02; 0,05; 0,1; 0,2; 0,5; 1	6 g6	45	7	52	38	48
2; 5	8 g6	45	15	68	38	48
10	10 g6	45	15	68	38	48
20; 50; 100	18 g6	59,5	36	122	50	53

Connection

8-polig – 8-pin		DR-2500
Pin 1	Excitation (+)	12 ... 28 V
Pin 2	Excitation (GND)	0 V
Pin 3	Signal (+)	± 5 V
Pin 4	Signal (GND)	0
Pin 5	Cal. control	L < 2,0V; H > 3,5V
Pin 6	Speed	TTL
Pin 7	NC	-
Pin 8	NC	-