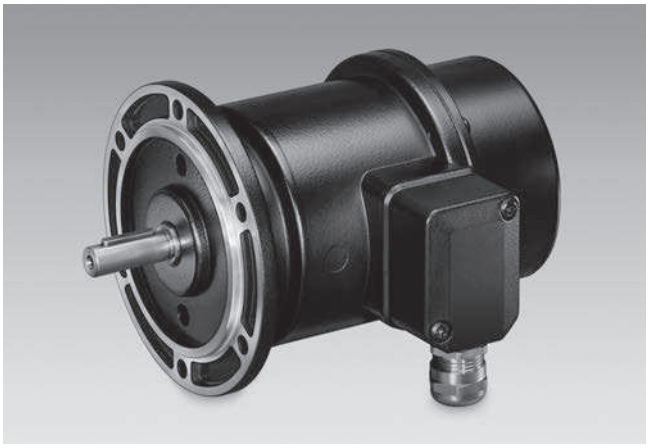
Tachogenerators

Solid shaft with EURO flange B10

With own bearings

TDP 0,2, TDPZ 0,2



TDP 0,2

Features

- **Low response time**
- **Open circuit voltage 10…150 mV per rpm**
- **Redundant output (TDPZ)**
- **EURO-flange B10 / solid shaft ø11 mm**
- **Very high resistance to shock**
- **High signal quality due to patented LongLife technology**
- **Recognition of sense of rotation possible via control**

Optional

- **Marine air protected/tropicalized**
- **Second shaft end (B14) / Housing foot (B3)**

Technical data - electrical ratings

Reversal tolerance	≤0.1 %
Linearity tolerance	≤0.15 %
Temperature coefficient	±0.05 %/K (open-circuit)
Isolation class	B
Calibration tolerance	±1 %
Climatic test	Humid heat, constant (IEC 60068-2-3, Ca)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE
TDP 0,2	
Performance	12 W (speed ≥3000 rpm)
Armature-circuit time-constant	<75 µs
Open-circuit voltage	10...150 mV per rpm
TDPZ 0,2	
Performance	2x 3 W (speed ≥3000 rpm)
Armature-circuit time-constant	<40 µs
Open-circuit voltage	20...100 mV per rpm

Technical data - mechanical design

Size (flange)	ø115 mm
Shaft type	ø11 mm solid shaft ø7 mm solid shaft (optional) ø14 mm solid shaft (optional)
Flange	EURO flange B10
Protection DIN EN 60529	IP 55, IP 56 (option)
Operating speed	≤10000 rpm
Torque	1.5 Ncm
Admitted shaft load	≤60 N axial ≤80 N radial
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+130 °C
Resistance	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 1 ms
Connection	Terminal box
TDP 0,2	
Rotor moment of inertia	1.1 kgcm²
Weight approx.	2.4 kg
TDPZ 0,2	
Rotor moment of inertia	1.2 kgcm²
Weight approx.	2.9 kg

Subject to modification in technic and design. Errors and omissions excepted.

TDP 0,2, TDPZ 0,2

Part number

Tachogenerator

TDP0,2LT- ☐

Open-circuit voltage

6	10 mV per rpm
7	20 mV per rpm
10	30 mV per rpm
5	40 mV per rpm
4	60 mV per rpm
3	100 mV per rpm
1	150 mV per rpm

Twin tachogenerator

TDPZ0,2LT- ☐

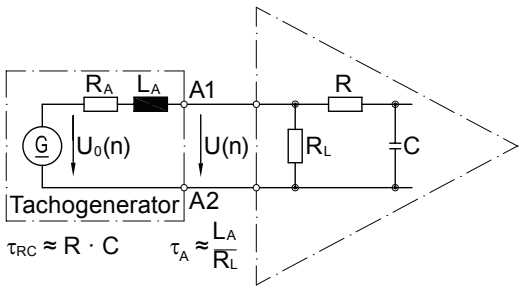
Open-circuit voltage

7	20 mV per rpm
5	40 mV per rpm
4	60 mV per rpm
3	100 mV per rpm

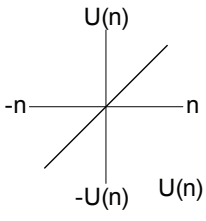
Data according to type

Type	Open-circuit voltage	Minimum load required depending on speed range [rpm]			Maximum operating speed	Armature resistance	Armature inductance
		0-3000	0-6000	0-n_{max}			
	U_0 [mV/rpm]	R_L [kΩ]	R_L [kΩ]	R_L [kΩ]	n_{max} [rpm]	R_A (20°C) [Ω]	L_A [mH]
TDP0,2LT-**6**	10	≥0.1	≥0.3	≥0.9	10000	3	6
TDP0,2LT-**7**	20	≥0.3	≥1.2	≥3.3	10000	11	23
TDP0,2LT-**10**	30	≥0.7	≥2.7	≥7.5	10000	26	50
TDP0,2LT-**5**	40	≥1.2	≥5	≥13.5	10000	47	90
TDP0,2LT-**4**	60	≥2.7	≥11	≥30	10000	99	200
TDP0,2LT-**3**	100	≥7.5	≥30	≥30	6000	271	550
TDP0,2LT-**1**	150	≥16	---	≥30	4000	630	1260
Twin tachogenerator with redundant output (The data refer to each of the two tachogenerator outputs)							
TDPZ0,2LT-**7**	20	≥1.2	≥4.8	≥14	10000	19	45
TDPZ0,2LT-**5**	40	≥4.8	≥20	≥54	10000	70	170
TDPZ0,2LT-**4**	60	≥11	≥44	≥120	10000	160	390
TDPZ0,2LT-**3**	100	≥30	≥120	---	6000	445	1080
Superimposed ripple (for τ_{RC} = 0.7 ms):		≤0.5% (peak-peak)			≤0.2% (rms)		

Replacement switching diagram



Polarity for positive rotating direction: A1 (TDPZ: 1A1, 2A1): **+** (VDE)
A2 (TDPZ: 1A2, 2A2): **–** (VDE)



$U(n) = U_0(n) \frac{R_L}{R_A + R_L} \approx U_0(n)$ for $R > R_L \gg R_A$

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Tachogenerators

Solid shaft with EURO flange B10

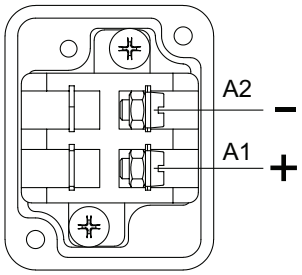
With own bearings

TDP 0,2, TDPZ 0,2

Terminal assignment

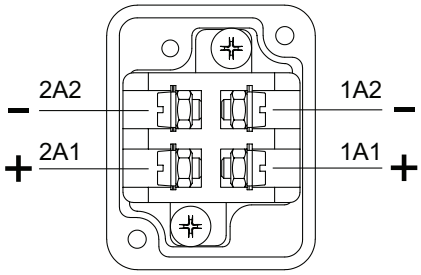
View A - Connecting terminal TDP 0,2

Polarity for positive direction of rotation



View A - Connecting terminal TDPZ 0,2

Polarity for positive direction of rotation



Accessories

Carbon brushes

Mounting accessories

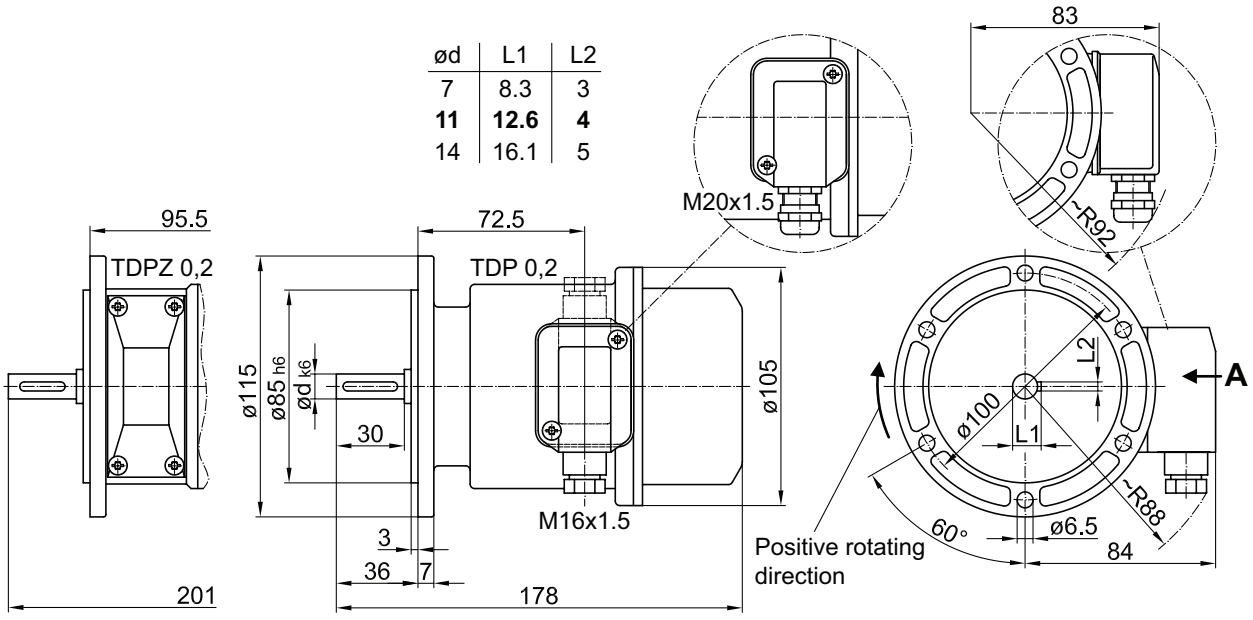
K 35	Spring washer coupling for solid shaft ø6...12 mm
K 50	Spring washer coupling for solid shaft ø11...16 mm
K 60	Spring washer coupling for solid shaft ø11...22 mm

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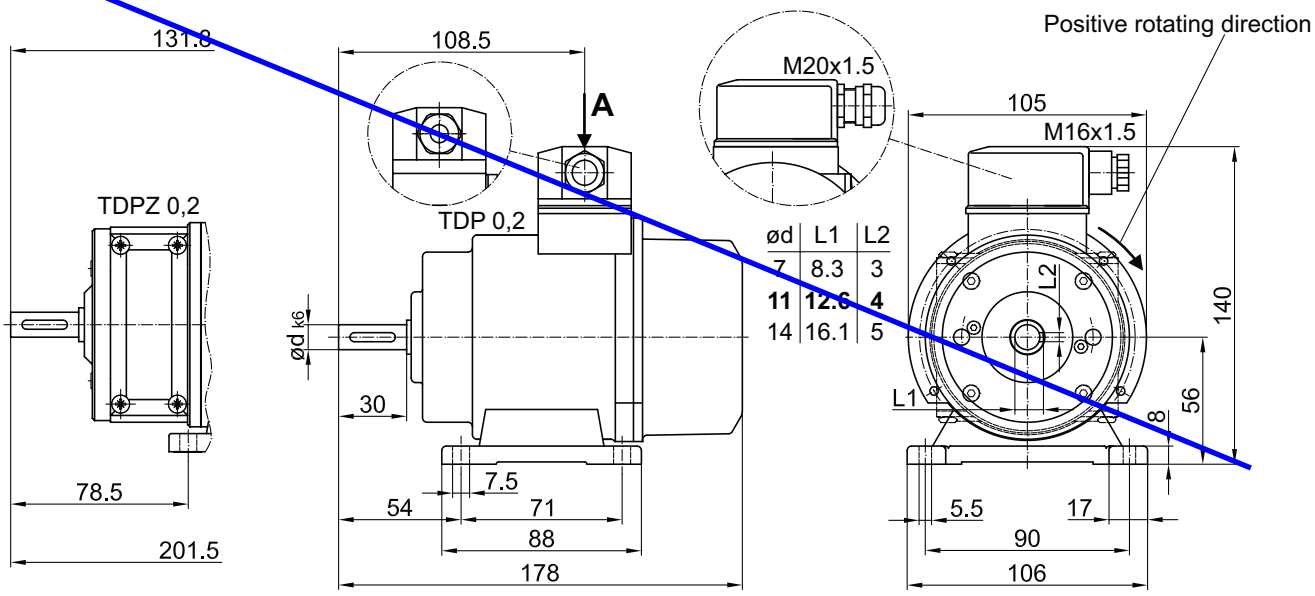
TDP 0,2, TDPZ 0,2

Dimensions

TDP 0,2 (TDPZ 0,2) - Version with Euro flange (B10)



TDP 0,2 (TDPZ 0,2) - Version with housing foot (B3)



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