

GTF 7

Solid shaft \varnothing 11 mm with EURO flange B10

Housing \varnothing 115 mm

Overview

- Open circuit voltage 10...60 mV per rpm
- Solid shaft \varnothing 11 mm
- EURO flange B10
- High signal quality due to patented LongLife technology
- Temperature compensation of tacho voltage as standard
- Low moment of inertia
- No auxiliary energy source required



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Technical data

Technical data - electrical ratings

Reversal tolerance	$\leq 0.1 \%$
Linearity tolerance	$\leq 0.15 \%$
Temperature coefficient	$\pm 0.05 \%/K$ (open-circuit)
Isolation class	B
Calibration tolerance	$\pm 5 \%$
Climatic test	Humid heat, constant (IEC 60068-2-3, Ca)
Performance	GTF 7.08: 0.3 W (speed ≥ 5000 rpm) GTF 7.16: 0.6 W (speed ≥ 5000 rpm)
Armature-circuit time-constant	$< 4 \mu s$
Open-circuit voltage	10...60 mV per rpm
Approval	CE CSA

Technical data - mechanical design

Size (flange)	$\varnothing 115$ mm
Shaft type	$\varnothing 11$ mm solid shaft

Technical data - mechanical design

Flange	EURO flange B10
Protection EN 60529	IP 55
Torque	1.5 Ncm
Rotor moment of inertia	0.4 kgcm ² (GTF 7.08) 0.6 kgcm ² (GTF 7.16)
Admitted shaft load	≤ 100 N axial ≤ 200 N radial
Material	Housing: stainless steel / plastic Shaft: stainless steel
Operating temperature	-30...+130 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Weight approx.	0.9 kg (GTF 7.08) 1.1 kg (GTF 7.16)
Connection	Screw terminal connector

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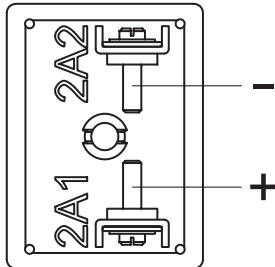
Housing $\varnothing 115$ mm

Terminal assignment

View A (see dimension)

Connecting terminal

Polarity for positive rotating direction

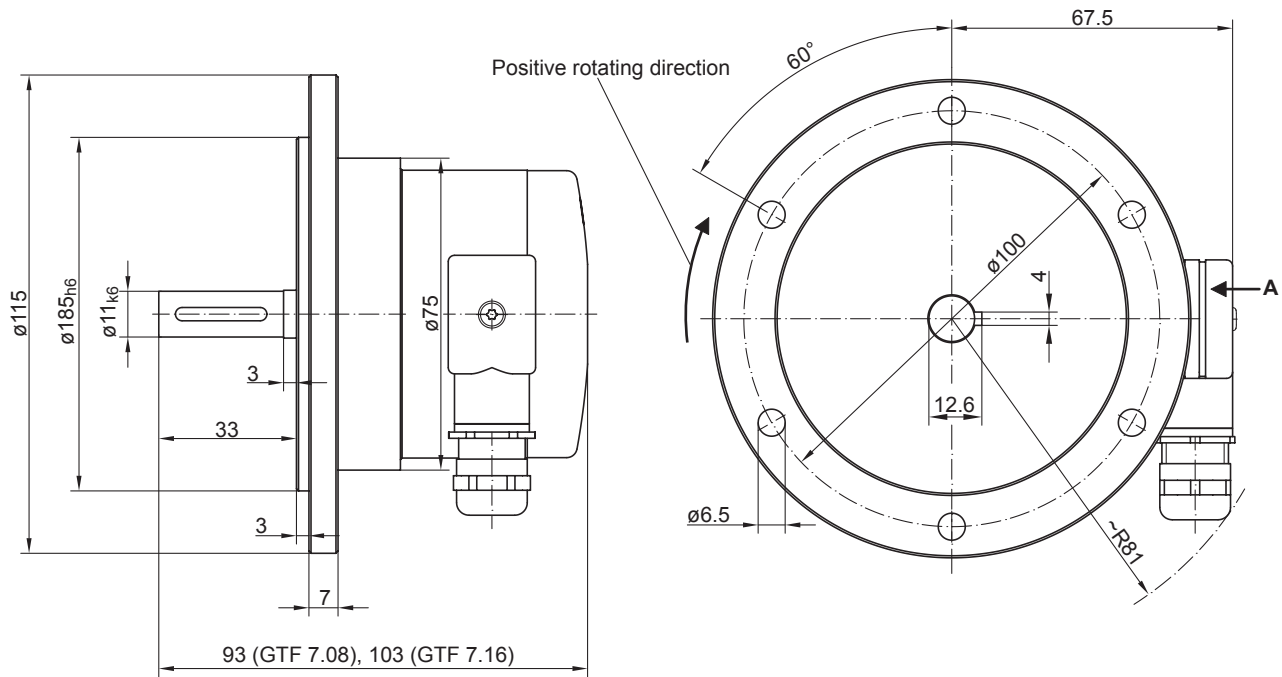


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Dimensions



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Ordering reference

GTF7 #####

Product

GTF7

Tachogenerator

Open-circuit voltage

10 mV per rpm	.08L/410
20 mV per rpm	.08L/420
30 mV per rpm	.08L/430
40 mV per rpm	.16L/440
60 mV per rpm	.16L/460

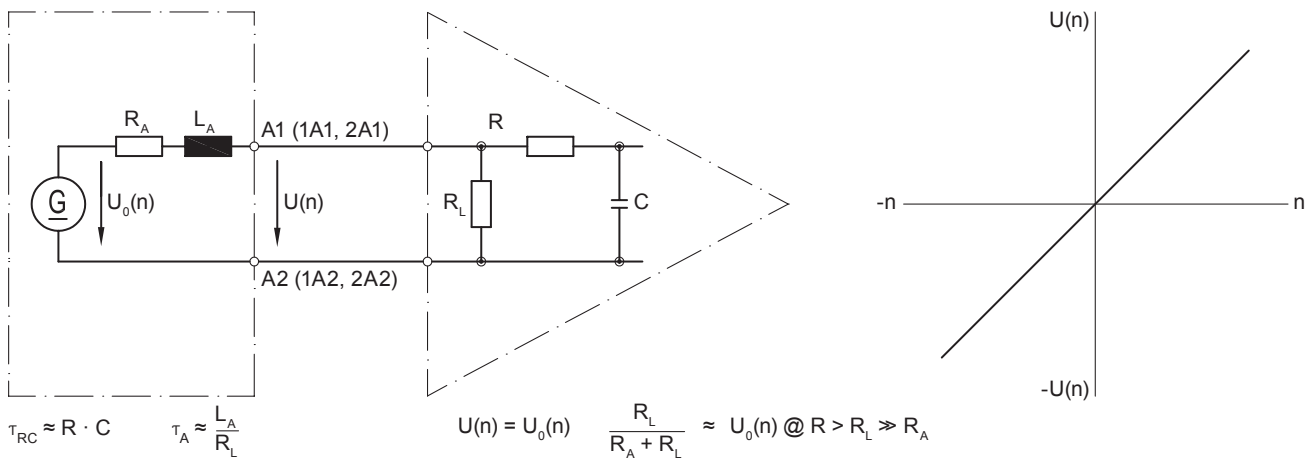
Data according to type

Type	Open-circuit voltage U_0 [mV/rpm]	Minimum load required depending on speed range [rpm]			Maximum operating speed n_{max} [rpm]	Armature resistance R_A (20°C) [Ω]	Armature inductance L_A [mH]
		0-3000 R_L [k Ω]	0-6000 R_L [k Ω]	0- n_{max} R_L [k Ω]			
GTF7.08L/410	10	≥ 5	≥ 12	≥ 27	9000	60	20
GTF7.08L/420	20	≥ 20	≥ 48	≥ 108	9000	230	80
GTF7.08L/430	30	≥ 45	≥ 108	≥ 243	9000	550	180
GTF7.16L/440	40	≥ 40	≥ 96	≥ 216	9000	410	160
GTF7.16L/460	60	≥ 90	≥ 215	≥ 223	6100	760	360

Superimposed ripple (for $\tau_{RC} = 0.3$ ms): $\leq 0.6\%$ (peak-peak) $\leq 0.25\%$ (rms)

Equivalent circuit diagram

Tachogenerator



Polarity for positive rotating direction (see dimension) / A1 (1A1, 2A1): + (VDE) / A2 (1A2, 2A2): - (VDE)

Accessories

Mounting accessories

- Spring disk coupling K 35 (shaft $\varnothing 6 \dots 12$ mm)
- Spring disk coupling K 50 (shaft $\varnothing 11 \dots 16$ mm)
- Spring disk coupling K 60 (shaft $\varnothing 11 \dots 22$ mm)

Spare parts

- 11248745 Maintenance kit for GT7 / GTF7