Position sensors

Power conversion Power generation

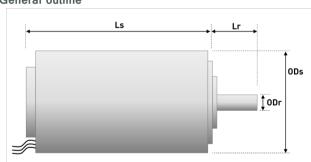
Position sensors

Resolver size 11



The standard size 11 brushless resolver represents the best weight-cost-robustness compromise for many aerospace and military sensing applications. Each design can be specific for each application. Please contact our team to discuss your latest requirements.

General outline



Outside dia. Stator (ODs) Outside dia. Shaft (ODr) Casing length (Ls) Shaft length (Lr)

Model	ODs	ODr	Ls	Lr	Weight	Rotor inertia
Unit	mm	mm	mm	mm	g	Kg.m²
T11RX4aG5	27	4.755	45	9.1		
T11RX4aG1	21	7.7 33	73	15.9	130	3.0E-07

Key features

- Transmitter Resolver
- Differential output signals
- Brushless, rotating transformer
- Frequency 400 Hz to 10 kHz
- Housed unit, standard interface
- Custom modification available

Applications

- Brushless motors' drive
- Cockpit controls
- Engine controls
- Flight controls

Contact

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Position sensors

Resolver size 11

Speci	fications	

Accuracy (guaranteed; see note 2)

Type and size constants			
Type of structure	/	1	Can-type, primary on rotor
Angular range	/	Degree	360°
Speed options	/	1	1
Energizing voltage	/	1	4 to 26 V_{RMS} , Sine wave, DC offset \leq 50 mV
Friction torque (max)	/	Nm	1.0E-03
Axial play (max)	/	mm	0.040
Radial play (max)	/	mm	0.015
Rotational speed (up to)	1	rpm	10,000
Speed and winding constants			(Speed 1)
Energizing frequency range	f	Hz	400 to 10,000
Input impedance (modulus; see curves)	Z _{PO}	0hm	217 to 2600
Transformation Ratio (see curves)	RT	-	0.454 to 0.492
Phase Shift (see curves)	φ	٥	-4 to 16

See RT, ϕ and Z_{PO} performances versus frequency range on next page.

0.2

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T11RX4a

Note: Due to continuous process improvement, specifications are subject to change without notice

Symbol

Unit

Arcmin.

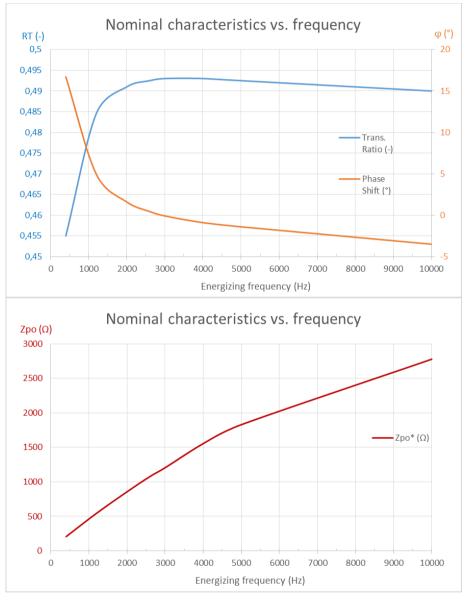




Position sensors

Resolver size 11

Performances over frequency range



T11RX4a

Notes:

- 1. Typical electrical performances are given at 25 °C.
- Accuracy includes temperature effects within [-40°C / +70°C] range.
- 3. Other custom mechanical options are available please contact our applications engineer.
- 4. Compatibility to specific environment is analysed on request please contact our applications engineer.

Meggitt Sensing Systems

