#### Position sensors

Power conversion
Power generation

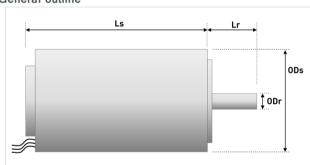
### Position sensors

# **RVDT** size 11



A RVDT (Rotary Variable Differential Transformer) is an angular position sensor that produces two output voltages of amplitude linear versus the angular position of the input shaft. RVDT are simple and robust sensors, able to work in harsh environments. 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
C11DRnH0	27	4.755	24	10.3		
C11DRnH4	2.1	4.7 33	24	14	90	1.75E-07

## **Key features**

- Brushless, variable reluctance
- Low weight and length
- Adjusted to secondary loads conditions
- Housed unit, standard interface
- Custom modifications available

### **Applications**

- Cockpit controls
- Engine controls
- Flight controls
- Targeting systems

#### **Contact**

#### Artus

37 Ch. Du Champ des Martyrs BP 20009

49241 Avrillé Cedex

France

Tel: +33 (0) 241 336 340 artus.sales@meggitt.com

www.meggittpower.com





### Position sensors

# **RVDT** size 11

Specifications			
	Symbol	Unit	C11DRn
Type and size constants			
Type of structure	/	1	Can-type, primary on rotor
Functional angular range	/	Degree	±35°
Energizing voltage	/	/	7 V <sub>RMS</sub> , Sine wave, DC offset ≤ 50 mV
Friction torque (max)	/	Nm	1E-03
Axial play (max)	/	mm	0.040
Radial play (max)	/	mm	0.015
	ptions availab F	l <b>e)</b> Hz	2000
Energizing frequency	-		2000 6
Energizing frequency Input current (max)	F	Hz	
Energizing frequency Input current (max) Sum voltage	F I <sub>a</sub>	Hz mA <sub>RMS</sub>	6
Energizing frequency Input current (max) Sum voltage Reference angle	F I <sub>a</sub> U <sub>SUM</sub>	Hz mA <sub>RMS</sub> V <sub>RMS</sub>	6 6.36
Winding constants (alternate of Energizing frequency Input current (max) Sum voltage Reference angle Gradient (on each single voltage) Accuracy (guaranteed; see curves)	F I <sub>a</sub> U <sub>SUM</sub> O <sub>REF</sub>	Hz mA <sub>RMS</sub> V <sub>RMS</sub>	6 6.36 42.6

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

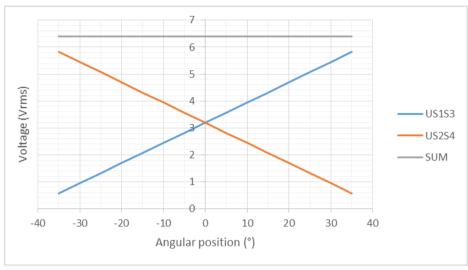




### Position sensors

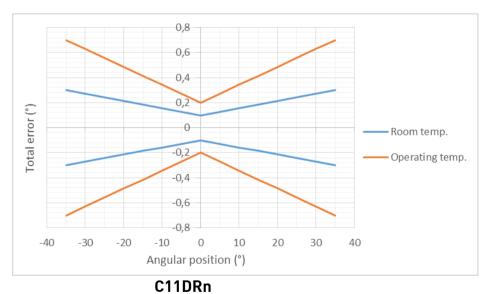
# **RVDT** size 11

## Voltage diagram



 $U_{\text{S1S3}}$  and  $U_{\text{S2S3}}$  designate both output signals, for a 7  $V_{\text{RMS}}$  excitation signal.

## **Accuracy limits**



#### Notes:

- 1. Typical electrical performances are given at 25 °C.
- Accuracy curves for operating temperatures are given for [-55°C to +90°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**

