

ROTARY VOICE COIL ACTUATORS (VCA)

Introduction

Rotary voice coil actuators (VCA) are ideal for high acceleration applications that require angular movement. There are two types of designs available: Cylindrical and arc-segment. Cylindrical models are typically used in long stroke applications, whereas arc-segmented designs are better suited for short stroke and precise positioning. Rotary actuators feature all of the inherent advantages of VCA technology, such as direct-drive, zero backlash and cog free operation for accurate motion, as well as high acceleration and the use of single phase.



Features

- Wide range of torque and excursion angles
- · Various mechanical mounting options available
- Arc-segment and cylindrical designs available



ROTARY VOICE COIL ACTUATORS (VCA) CONFIGURATIONS

Part Number	Peak Torque (N-m / oz-in)	Continuous Stall Force (N/lb)	Total Excursion Angle (Degrees)	Actuator Constant (N√watt lb/√watt)	Width (mm/in)	Height (mm/in)
RA27-10-000A	.106 / 15	.029 / 4.09	100	.017 / 2.39	68.6 / 2.70	24 / 0.94
RA27-10-001A	.106 / 15	.029 / 4.09	100	.017 / 2.39	68.6 / 2.70	24 / 0.94
RA29-11-002A	.226 / 32	.093 / 13.2	32	.031 / 4.44	27.4 / 1.08	45.2 / 1.78
RA60-10-001A	.847 / 120	.396 / 56.1	30	.097 / 13.8	30.5 / 1.20	38.1 / 1.50
RA68-12-001A	1.20 / 170	.649 / 92	20	.158 / 22.4	30.2 / 1.19	45.2 / 1.78
RA54-18-000A	1.85 / 262	.798 / 113	7.5	.209 / 29.7	45.7 / 1.8	60.9 / 2.4
RA68-19-000A	7.06 / 1000	1.76 / 250	14	.376 / 53.3	46.5 / 1.83	55.9 / 2.20

Page 1

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEFTS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

America

+1 (760) 597 7042 sales.beikimco@sensata.com Europe, Middle East & Africa +1 (760) 597 7042 support@sensata.com Asia Pacific sales.isasia@list.sensata.com

sales.isasia@list.sensata.com China +86 (21) 2306 1500 Japan +81 (45) 277 7117 Korea +82 (31) 601 2004 India +91 (80) 67920890 Rest of Asia +8621 2306 1500

