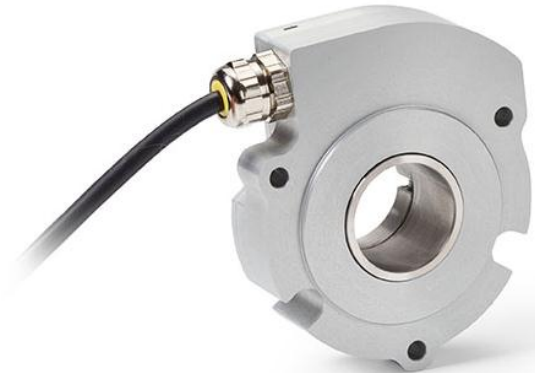


- Low profile package saves space
- Excellent resistance to shock and vibration
- 30mm standard through shaft, PEEK reduction hub available
- High protection level of IP66
- High performance in temperatures from -40°C to +100°C
- SSI output
- Resolution up to 16 bits



Certifications:

The LP35 Absolute Encoder is available with the following certifications



Output:



Serial Synchronous Interface SSI output provides effective synchronisation in a closed-loop control system. A clock pulse train from a controller is used to shift out sensor data: one bit of position data is transmitted to the controller per clock pulse received by the sensor.

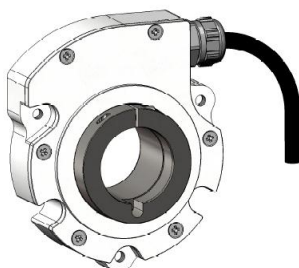
Mechanical Characteristics:

Material	Cover : anodised aluminum	Vibrations (EN60068-2-6)	≤ 200m.s ⁻² (55 ... 2 000 Hz)
	Body : anodised aluminum	Shaft inertia	< 84000 g.mm ²
	Shaft : AISI 303 stainless steel	Static/Dynamic torque	30 / 300 mN.m
Ball bearings	6807 - Sealed	Permissible max. speed	6000 min ⁻¹
Maximum loads	Axial: 40 N	Continuous max. speed	4000 min ⁻¹
	Radial: 80 N	Theoretical mechanical lifetime L _{10h} *	> 18.10 ⁹ turns / 100000 hours
Shocks (EN60068-2-27)	≤ 3000m.s ⁻² (during 5 ms)	Encoder weight (approx.)	450g

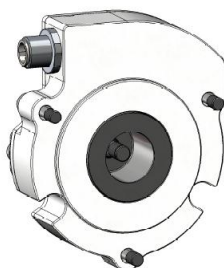
* continuous max. speed – ½ max. load – ISO 281, L₁₀

Available mechanics – shaft options:

AHU9: Through Hollow Shaft



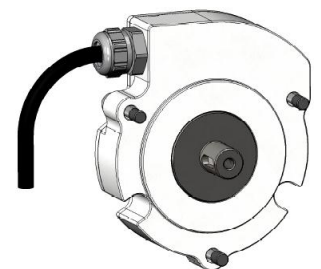
AHK9: Blind Hollow Shaft



AHA9: Shaft with Integrated coupling

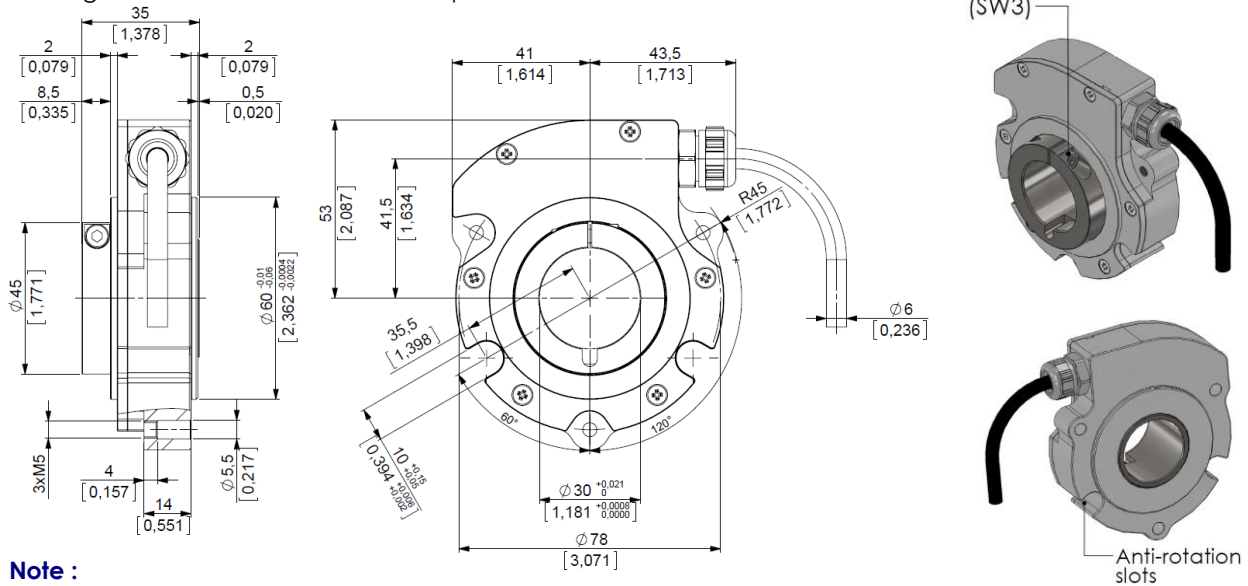


AHM9: Solid Shaft



Dimensions

AHU9 – Through hollow shaft – with cable output

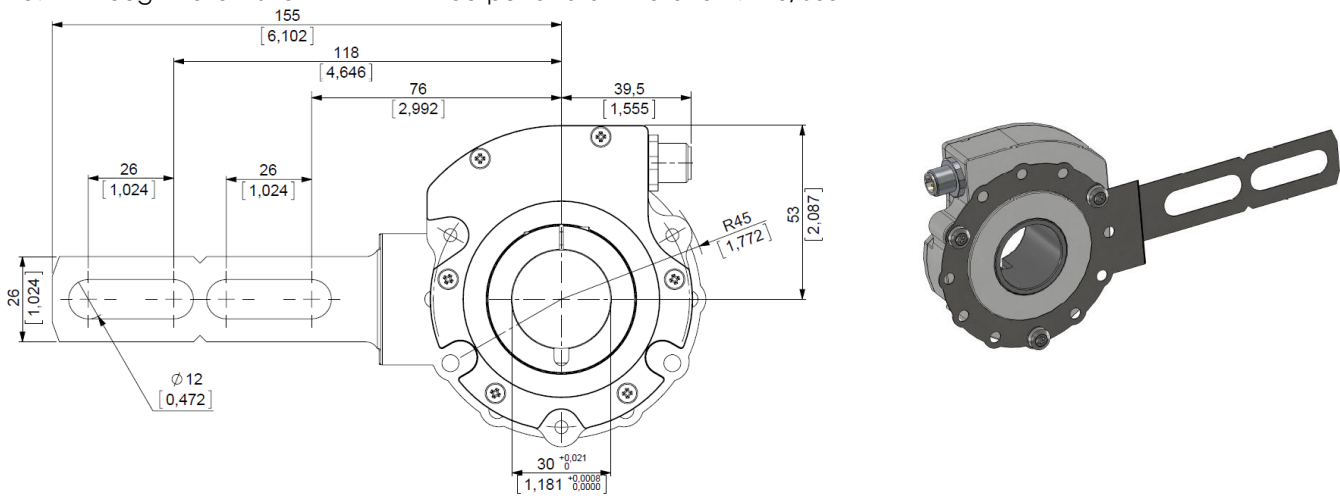


Note :

CHc : Hexagonal Socket head cap screws HC : Hexagonal socket set screws

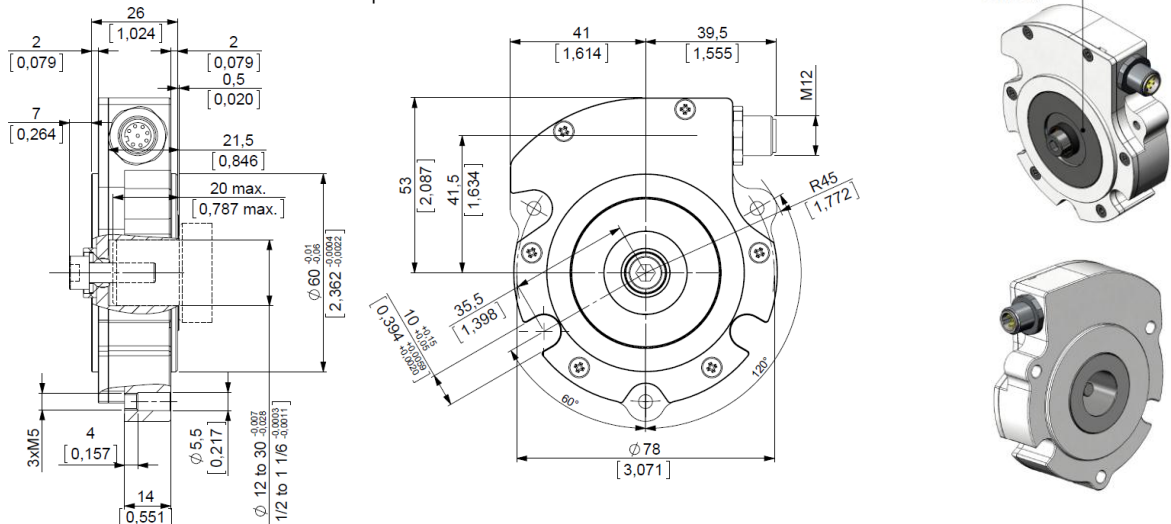
Dimensions

AHU9 – Through hollow shaft – with M12 output and anti-rotation 9445/053



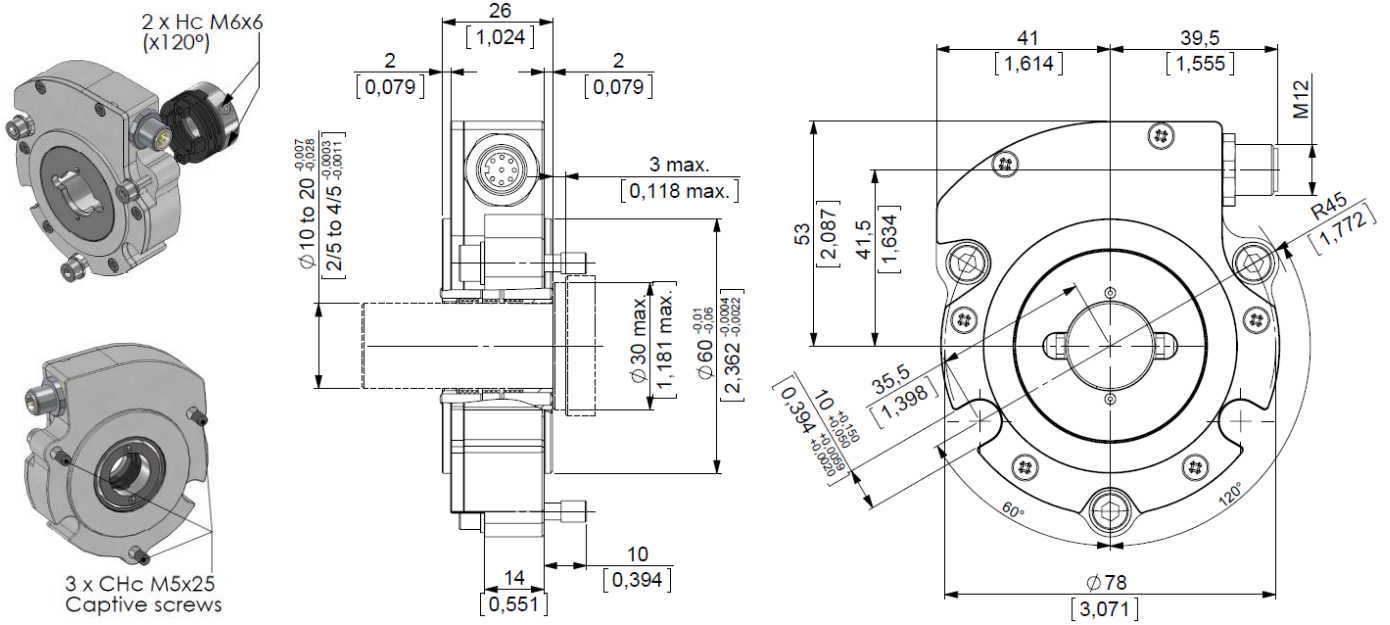
Dimensions

AHK9 – Blind hollow shaft – with cable output



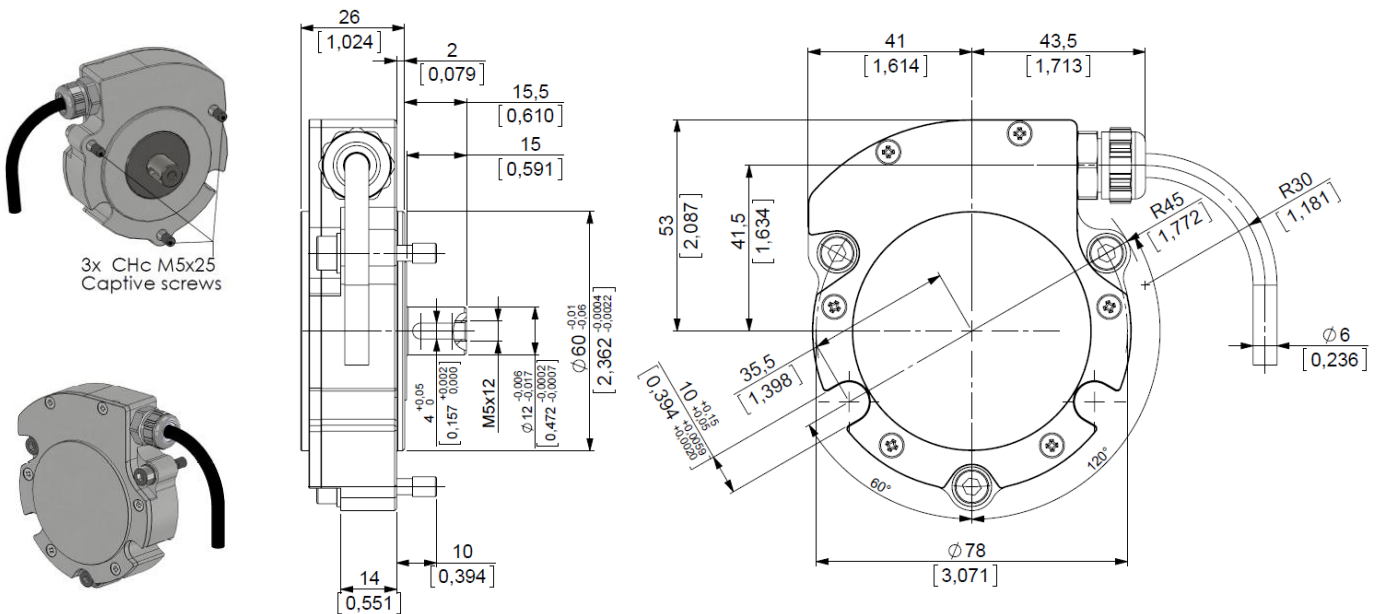
Dimensions

AHA9 – Shaft with integrated coupling – with M12 connection



Dimensions

AHM9 – Solid shaft – with cable output



Electrical Characteristics:

Version	Output signals	Resolution	Operating Voltage Vcl	Supply current (no loads)	Current per channel pair	Max Frequency capability	Encoder accuracy	Short circuits proof	Reverse polarity tolerant	Temperature range
PSS	RS422	up to 16 BITS	5-30V --- 250mA	75mA	40mA	1MHz	+/-0.1°	Yes (except to Vcl)	Yes	-40°C +100°C

Connection:

		-	+	Clk+	Clk-	Data+	Data-	RAZ	Ground
SL	M12 (1) - 8 pins	1	2	3	4	5	6	7	Connector Body
SM	PUR cable (1) 8 wires	BK Black	RD Red	GN Green	YE Yellow	BN Brown	OG Orange	BU Blue	General shielding

(1) UL listed : -20°C +80°C

Available resolution:

Standard: 12 and 13 bits

For non-standard resolutions up to 16 bits, please contact factory

LP35 Absolute Ordering Options

Use this diagram, working from left to right to construct your model number (Example : **AHU9_E6//PSSG//13//SLR//U6**)

AH_9	--	//	---	-	//	-----	//	---	---	//	--
TYPE:	SHAFT BORE:		VOLTAGE/ OUTPUT:	CODE:		CYCLES PER TURN:		OUTPUT TERMINATION:	CABLE LENGTH:		HUB:
AHU9 = hollow shaft	E5 = 5/8" E6 = 3/4" E8 = 1" 30 = 30mm		PSS = 5-30V voltage and SSI output (without parity)	B = Binary (CCW increasing code) G = Gray (CCW increasing code)		(Enter bits) See available resolutions above		SMR = PUR cable SLR = M12	xxx = cable length ex 020 = 2meters Blank = No cable		U3 = With insulated sleeve U5 = Blind sleeve U6 = Through sleeve ** = no sleeve
AHK9 = blind shaft											
AHA9 = hollow shaft with integrated coupling	E6 = 3/4" 14 = 14mm 20 = 20mm										
AHM9 = solid shaft	E3 = 3/8" 12 = 12mm										

Stainless steel option available.

Anti-rotation accessory: M9445/053 to be ordered separately

Datasheets provided by Sensata Technologies, Inc., its subsidiaries and/or affiliates (“Sensata”) are solely intended to assist third parties (“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, valuation, and judgment in designing Buyer’s systems and products. Sensata datasheets 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 datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its datasheets or components without notice.

Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. 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 DATASHEETS ARE PROVIDED “AS IS”. SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, 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 DATASHEETS 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

Regional head offices:

United States of America

Sensata Technologies

Attleboro, MA

Phone: 508-236-3800

E-mail: support@sensata.com

Netherlands

Sensata Technologies Holland B.V.

Hengelo

Phone: +31 74 357 8000

E-mail: support@sensata.com

China

Sensata Technologies China Co., Ltd.

Shanghai

Phone: +8621 2306 1500

E-mail: support@sensata.com

Copyright © 2023 Sensata Technologies, Inc.