

CHK5

PARALLEL SINGLE TURN ABSOLUTE ENCODER, CHK5 RANGE



Features

The new generation of parallel absolute single turn encoders :

- Blind version up to Ø15mm (reduction hubs available)
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65
- High resolutions possibility, upto 15bits (Gray or binary)
- Universal electronic circuits from 5 to 30 Vdc
- High performances in temperature -20°C to 90°C (option -40°C to 100°C)
- Standard DIRECTION entry, LATCH option

SPECIFICATIONS

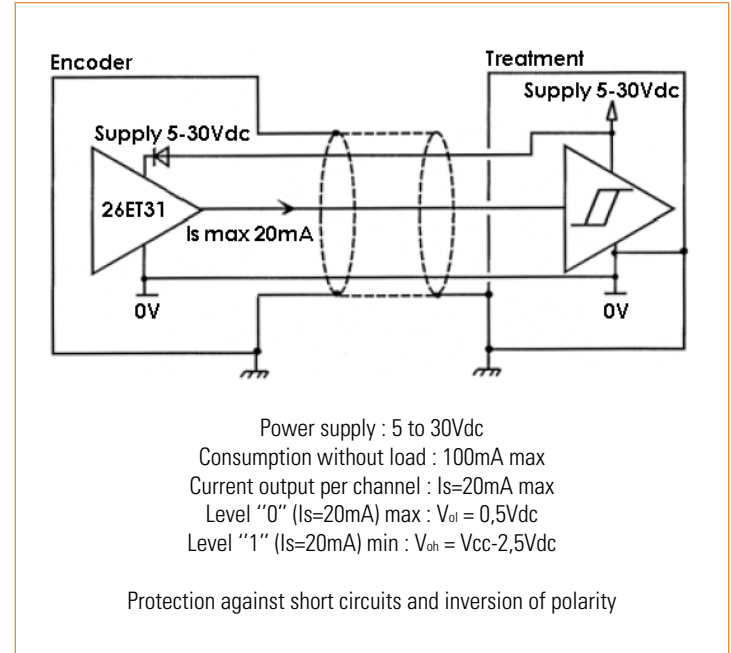
Material	Cover : zinc alloy, Body : aluminium, Shaft : stainless steel
Bearings	6 803 serie
Maximal loads	Axial: 20 N, Radial: 50 N
Shaft inertia	$\leq 2,2 \cdot 10^{-6} \text{ kg.m}^2$
Torque	$\leq 6 \cdot 10^{-3} \text{ N.m}$
Permissible max. speed	9 000 min ⁻¹
Continuous max. speed	6 000 min ⁻¹
Shocks (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (during 6 ms)
Vibrations (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (55 ... 2 000 Hz)
EMC	EN 50081-1, EN 61000-6-2
Isolation	1 000 V eff
Encoder weight (approx.)	0,300 kg
Operating temperature	- 20... + 90°C (encoder T°)
Storage temperature	- 40 ... + 100°C
Protection (EN 60529)	IP 65
Torque (ring pressure screw)	nominal: 1.5 N.m, break: 2.0 N.m
Theoretical mechanical lifetime	10 ⁹ turns (Faxial / Fradial)
10N / 25N	230
20N / 50N	29

CONNECTION

	color	13 bits + DIRECTION CP or C3	14 bits + DIRECTION C1
1	white WH	0V	0V
2	brown BN	+Vcc	+Vcc
3	green GN	D0	D0
4	yellow YE	D1	D1
5	grey GY	D2	D2
6	pink PK	D3	D3
7	blue BU	D4	D4
8	red RD	D5	D5
9	black BK	D6	D6
10	violet VT	D7	D7
11	white/brown WH/BN	D8	D8
12	white/green WH/GN	D9	D9
13	white/yellow WH/YE	D10	D10
14	white/grey WH/GY	D11	D11
15	white/pink WH/PK	D12	D12
16	white/blue WH/BU	DIRECTION	D13
17	white/red WH/RD	/	DIRECTION

Example, 10 bits encoder : only MSB will be supplied (D3 to D12)

ELECTRONIC



DIRECTION

CW increasing code: DIRECTION pin to +Vcc
CCW increasing code : DIRECTION pin to 0Vdc

LATCH (OPTION)

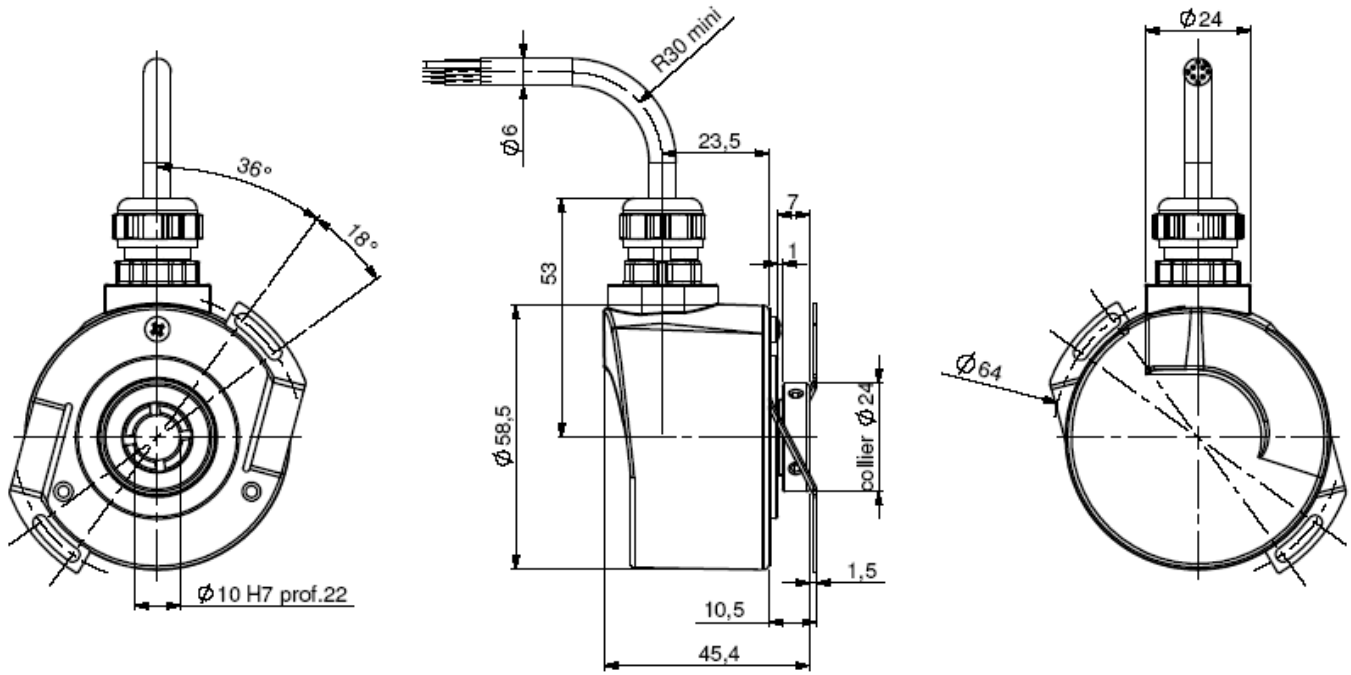
Active data on the outputs : LATCH pin to 0V
Frozen data on the outputs: LATCH pin to +Vcc

Consult us for the connection of an encoder with this option



CHK5_10 CONNECTION C3R (RADIAL CABLE), DAC 9445/016* MOUNTED ON THE BODY

Minimal shaft depth : 12mm for an optimal centering * Accessory to be ordered separately

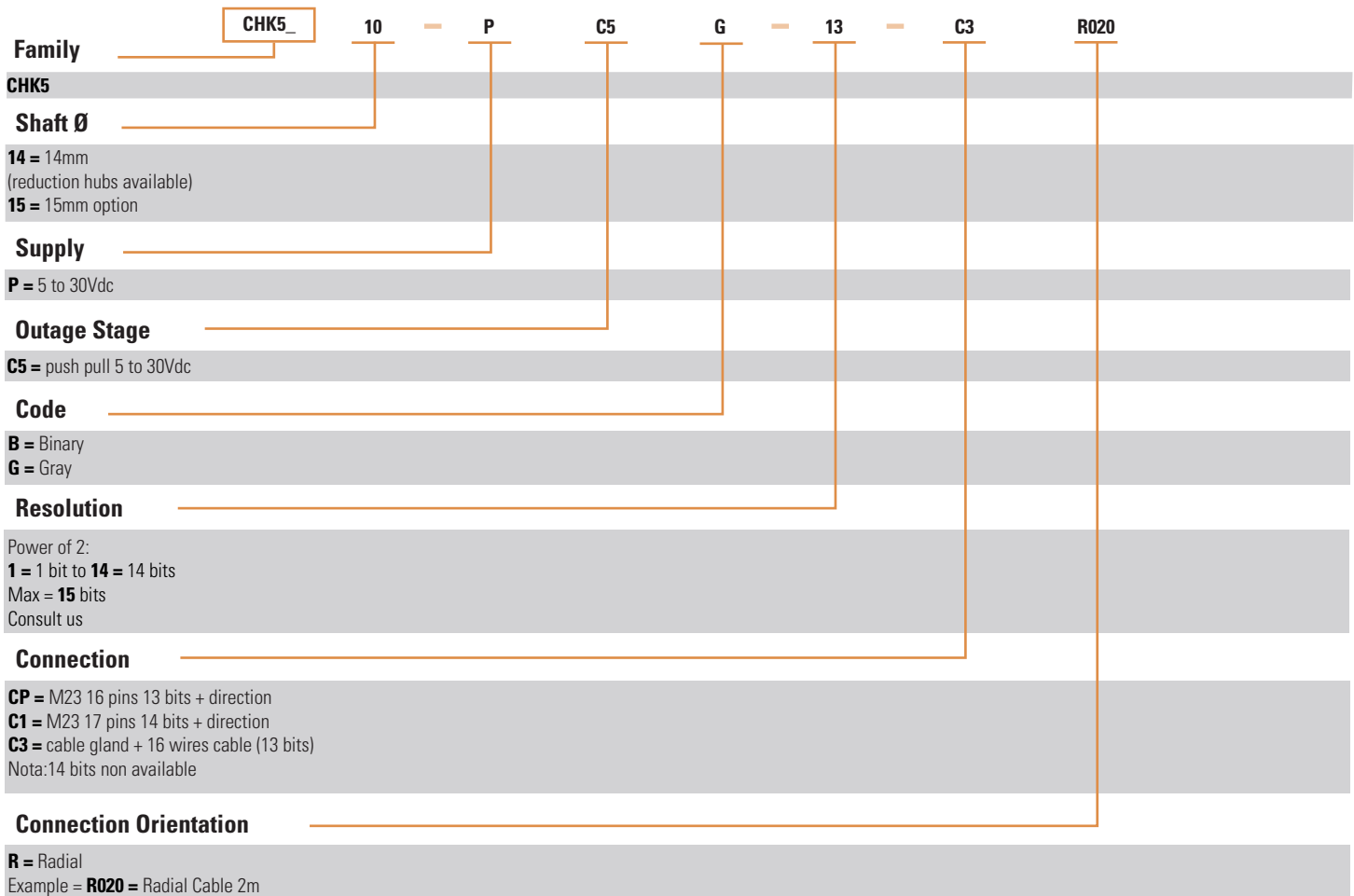




ORDERING OPTIONS

Example : **CHK5_10-PC5G-13-C3R020**

(Contact the factory for special versions, ex: special flanges, connections, electronics...)
Made in France



Monitoring function available in option :
- of the code coherence
- of the LED internal regulated current loop
- of temperature range with 2 limits
Consult us

Entry / output available in option:
- LATCH entry
- ERROR output for monitoring functions



AGENCY APPROVALS & CERTIFICATIONS



Made in France

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 SHEETS 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

Americas
+1 (800) 350 2727
sensors@sensata.com
Europe, Middle East & Africa
+33 (3) 88 20 8080
position-info.eu@sensata.com
Asia Pacific
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 +886 (2) 27602006
ext 2808