



ATEX ABSOLUTE DEVICENET MULTITURN ENCODER, SAUX RANGE

ATEX certified Explosion-proof encoders according to Directive 94/9/CE

Explosion-proof rotary encoders for hazardous environments gas & dust
 Robust design for heavy-duty applications
 Hollow through shaft up to 30mm
 Application fields: explosive atmospheres except for firedamp mines

EC type examination certificate

Download from our website www.bei-ideacod.com

LCIE 03 ATEX 6407/01

CE0081

II 2 G/D

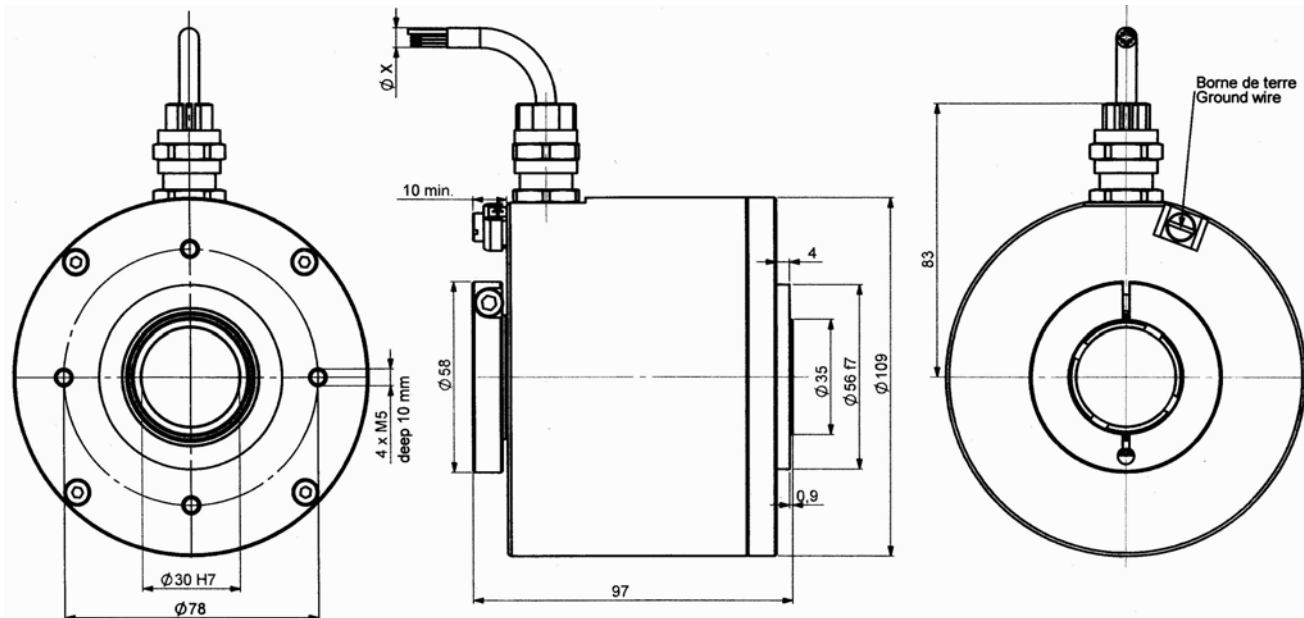
Ex d IIC T6, T5 or T4

Ex tD A21 IP6X T80°C T95°C T100°C

DeviceNet.



SAUX_30 connection B1R (radial cable)



Material	Cover: aluminium
Stainless steel option	Body: aluminium
Shaft	Stainless steel
Bearings	6807 serie
Maximal load	Axial : 50 N
	Radial : 80 N
Shaft Inertia	$\leq 50 \cdot 10^{-6}$ kg.m ²
Torque	$\leq 25 \cdot 10^{-3}$ N.m
Permissible max. speed	4 500 min ⁻¹
Continuous max speed	3 000 min ⁻¹
Shaft seal	Viton

Shock (EN60068-2-27)	≤ 300 m.s ⁻² (during 6 ms)
Vibration (EN60068-2-6)	≤ 100 m.s ⁻² (10 ... 500 Hz)
EMC	EN 50081-1, EN 61000-6-2
Isolation	1 000 V eff
Weight	2kg aluminium body & cover
	5kg stainless steel body & cover
Operating temperature	Cf here-under table (encoder T°)
Storage temperature	- 10... + 70 °C
Protection(EN 60529)	IP 65
Theoretical mechanical lifetime 10 ⁹ turns (F _{axial} / F _{radial})	
25 N / 40 N : 140	50 N / 80 N : 17

T _{amb}	Temperature class for gas atmosphere	Temperature class for dust atmosphere
-20°C ≤ T _a ≤ +40°C	T6	T80°C
-20°C ≤ T _a ≤ +55°C	T5	T95°C
-20°C ≤ T _a ≤ +60°C	T4	T100°C

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DeviceNet.

Programmable Parameters

Resolution could be 13, 10, 2 and 0 bits

Reset to a value (X) : puts the code of the present position to 0 (immobile shaft)

Transmission speed: configurable at 125 kBaud (default value), 250 kBaud, 500 kBaud

Address: defines the position of the encoder on the bus 1 to 63, default value: id = 63

The Communication Modes: The interrogation of the encoders could be done according to the following 4 modes :

CYCLIC Mode: the encoder transmits its position at the start of a programmed timer via the bus (with no answer). With an answer, the master must send an acknowledgement of the position of each frame

BIT STROBE Mode: A general request from the master (broadcast) makes it possible to interrogate max. 64 devices simultaneously

EXPLICIT Mode: This mode makes it possible to program and interrogate the parameters of the encoder, as well as its position

POOLING Mode: the encoder answers upon request of the master

The user manual and the ESD file are delivered with the encoder

DEVICENET CONNECTION

Red RD	Black BK	White WH	Blue BU
11/30Vdc	GND	CAN HIGH	CAN LOW

Nota : Refer to the bus standards for the maximal derivation length

REFERENCE DE COMMANDE

	Shaft Ø	Supply	Output stage	Code	Resolution	Number of turns	Connection	Orientation connection
SEUX (stainless steel)	30: 30mm	5: 11-30Vdc	BA: DeviceNet	B: Binary	13 : 8192 codes per revolution (2 ¹³)	B16 : 65 536 turns (2 ¹⁶)	B1: PUR cable output	Example : R030 : 3m radial cable
SAUX (aluminium)								
SEUX _	30 //	5	BA	B //	13	B16 //	B1	R030

ASSEMBLY CAUTION

NEVER OPEN THE ENCODER

NEVER CONNECT/DISCONNECT UNDER POWER SUPPLY/IN PRESENCE OF DUSTS ATMOSPHERE

The customer obliges to take up and to use our products, according to our specifications and to the manners of the profession. Our company would not be responsible for any defect resulting from a defective or erroneous assembly. From a use superior to the standard, or in abnormal conditions. The breakdowns resultant of shocks, bad electric supply, put in low capacity or overcapacity of the product, the environment of bad conditions (humidity, projection, dust, etc) cannot be imputed to us. The converter doesn't require any maintenance. Any encoder presenting a dysfunction will have to be the object of immediate return for control in our facilities. The encoder mustn't be open in any case (cable gland and/or cover)
An earth situated on the cover must be linked with the ground of the installation


**ATEX ABSOLUTE DEVICENET MULTITURN ENCODER, SAUX RANGE**

1) Déclaration de conformité CE

2) Nous, société BEI-IDEACOD, certifions que ce matériel : capteurs antidéflagrants, type

GAUX, CAUX, SAUX, GEUX, CEUX, SEUX

3) Avec les inscriptions suivantes :

CE 0081  II 2 G/D, Ex d II C T6, T5 ou T4
Ex tD A21 IP6X T80°C T95°C T100°C

A été conçu et fabriqué conformément à la directive applicable suivante :

ATEX directive 94/9/CE

Directive CEM 89/336/CEE

4) La certification a été obtenu grâce à l'application des normes suivantes :

EN 60079-0 (2006), EN 60079-1 (2004), EN 61241-0 (2004) et EN 61241-1 (2004)

5) Une attestation d'examen CE de type a été obtenu :

LCIE 03 ATEX 6407/01

et une notification :

LCIE 03 ATEX Q8060

6) L'application des normes suivantes a participé à l'obtention de la certification :

EN 60-529, NFC 23-520, NFC 23-539, EN 50081-1, EN 55022 classe B, EN 55014, EN 61000-6-2, CEI 61000-4-2, CEI 61000-4-3, CEI 61000-4-4, CEI 61000-4-5, CEI 61000-4-6, CEI 61000-4-8, CEI 61000-4-11

7) L'organisme notifié responsable du suivi de la directive **ATEX** est le

LCIE,B.P.8, F92260 Fontenay-aux-Roses

Numéro d'identification : 0081

8) La société chargée de la certification **CEM** est nommée ci-après :

GRME, Cellule CEM, B.P.8, 68840 Pulversheim

9) Nous certifions que nos produits désignés ci-dessus sont conformes à la directive et aux normes spécifiées


Date :

1) Declaration of conformity EC

2) Us, BEI-IDEACOD, let us certify that this material : sensor explosion-proof standard

GAUX, CAUX, SAUX, GEUX, CEUX, SEUX

3) With the following inscriptions :

CE 0081  II 2 G/D, Ex d II C T6, T5 or T4
Ex tD A21 IP6X T80°C T95°C T100°C

Conceived and manufactured has the directive applicable following :

ATEX directive 94/9/CE

Directive CEM 89/336/CEE

4) Certification to summer obtained thanks to the application of the standards :

EN 60079-0 (2006), EN 60079-1 (2004), EN 61241-0 (2004) and EN 61241-1 (2004)

5) EC type examination certificate was obtained :

LCIE 03 ATEX 6407/01

and a notification :

LCIE 03 ATEX Q8060

6) The application of the following standards took part in obtaining certification :

EN 60-529, NFC 23-520, NFC 23-539, EN 50081-1, EN 55022 classe B, EN 55014, EN 61000-6-2, CEI 61000-4-2, CEI 61000-4-3, CEI 61000-4-4, CEI 61000-4-5, CEI 61000-4-6, CEI 61000-4-8, CEI 61000-4-11

7) The notified organization responsible for the follow-up of the directive **ATEX** is the

LCIE,B.P.8, F92260 Fontenay-aux-Roses

Identification number : 0081

8) The company in charge of certification **CEM** is named :

GRME, Cellule CEM, B.P.8, 68840 Pulversheim

9) We certify that our indicated products so above are in conformity with the directive and the specified standards

Dominique MALLET
Directeur Général