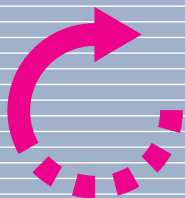


YOUR EXPERT SOURCE FOR **ENCODERS**



**GES**group

*DESIGN*

*PRODUCTION*

*EXPEDITED SERVICE*

*CUSTOMER SUPPORT*



*GESGROUP -  
GLOBAL ENCODER*



## *SIX FUNDAMENTAL REASONS WHY WE SHOULD BE YOUR FIRST CHOICE*

**!:** 5 - 10 Business day turn around  
from order to delivery !

**!:** All encoder models backed by a  
5 YEAR WARRANTY !

**!:** Unbreakable code discs produced in  
house allow for flexible production !

**!:** Continuous product development using  
newest technological advancements!

**!:** Rapid delivery available/No extra fees!

**!:** Niche Market Solutions!

Our purpose is to provide encoder solutions tailored to your exact requirements.

We are committed to the success of all our customers and partners.

With our global presence and company network we service world wide markets.

Our Know-how, innovation & commitment are the reasons for our success.



# SOLUTIONS



Global Encoder Solutions - The name says it all.  
All members of the GESgroup work together towards a common goal.

## Canada

### Industrial Encoder Corporation

Industrial Encoder Corporation  
22 Commerce Place  
St. Catharines, Ontario L2S 0B3  
Tel. +1 905 984 3256

Fax +1 905 984 5017  
Toll Free 888 277 6205  
[www.globalencoder.ca](http://www.globalencoder.ca)  
[info@globalencoder.ca](mailto:info@globalencoder.ca)

## Germany

### W+S Meßsysteme

W+S Meßsysteme GmbH  
Humboldtstraße 11  
78549 Spaichingen

Tel. +49 (0)7424 502740  
Fax +49 (0)7424 502741  
Freecall 0800 encoder  
[www.globalencoder.com](http://www.globalencoder.com)  
[info.de@globalencoder.com](mailto:info.de@globalencoder.com)

## France

### ISS Industrial Sensors & Solutions

ISS Industrial  
Sensors & Solutions S.à.r.l.  
1b, rue des Frères Lumière  
67201 Strasbourg Eckbolsheim

Tél. +33 (0)388 595 110  
Fax +33 (0)388 595 111  
[www.globalencoder.com](http://www.globalencoder.com)  
[info.fr@globalencoder.com](mailto:info.fr@globalencoder.com)

## United Kingdom

### W+S Measuring Systems

W+S Measuring Systems Ltd.  
16 Woodside Road  
Purley  
Surrey CR8 4LN

Tel. +44 (0) 20 8668 5686  
Fax +44 (0) 20 3292 9394  
[www.globalencoder.com](http://www.globalencoder.com)  
[info.uk@globalencoder.com](mailto:info.uk@globalencoder.com)

GESGROUP – WORLD WIDE



# *DEVELOPMENT AND PRODUCTION*

## *WITH FLEXIBLE MANUFACTURING PROCESSES*

The GESgroup has many years of experience in the design, development and production of optical encoders. Since we specialize in the development and manufacturing of rotary encoders, we can provide our customers with solutions for a wide range of applications to meet their exact requirements while maintaining the highest standards of quality. We achieve this through our flexible development concept and well trained professionals that understand your needs and application demands.

The GESgroup is committed to the success of our partners, we achieve this through our products, technologies and employees.



Our product range includes Incremental, Absolute Single-Turn and Absolute Multi-Turn encoders. In addition to our standard product range we manufacture Atex Certified Explosion proof encoders, Wash-Down rated encoders and special encoders of all kinds. Most of our products are produced using our own in house made custom plastic code disc, which is why our encoders are extremely shock resistant and resistant to vibration

We are continuously working on technologies and processes to improve our products in cooperation with our customers.



Incremental Encoder

Absolute Single-Turn Encoder

Absolute Multi-Turn Encoder

Motor Commutation Encoder

Atex - EX Incremental Encoder

Atex - EX Absolute Encoder

Incremental Wash-Down Encoder





Absolute Wash-Down Encoder

Magnetic Absolute Encoder

Custom Designed Encoder



# INCREMENTAL SOLID SHAFT ENCODER

	<i>IS 240</i>	<i>IS 280</i>	<i>IS 410</i>	<i>IS 580</i>
				
<b>Housing Size</b>	24 mm	28 mm	41 mm	58 mm
<b>Available Shaft Ø or Hollow Shaft Ø</b>	4 mm - 6 mm	4 mm - 6 mm	6 mm	6 mm - 10 mm
<b>Mechanical Options</b>	—	—	Stainless Steel	Stainless Steel
<b>Connection Exit Location</b>	axial radial	axial radial	axial radial	axial radial
<b>Signals</b>	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z
<b>Operating Voltage Output Circuit</b>	4,75-30 VDC Push Pull	4,75-30 VDC Push Pull	4,75-30 VDC Push Pull	4,75-30 VDC Push Pull
<b>Resolution</b>	1-1000	1-1250	1-10000	1-25000

**IS 581****IS 700****IS 900****Housing Size**

58 mm

70 mm

90 mm

**Available Shaft Ø  
or Hollow Shaft Ø**6 mm - 8 mm  
1/4" - 3/8"10 mm - 12 mm  
3/8" - 1/2"

10 mm - 12 mm

**Mechanical  
Options**

Stainless Steel

Stainless Steel

Stainless Steel


**Connection  
Exit Location**axial  
radialaxial  
radialaxial  
radial**Signals**A+B+Z  
A+B+Z+/A+/B+/ZA+B+Z  
A+B+Z+/A+/B+/ZA+B+Z  
A+B+Z+/A+/B+/Z**Operating Voltage  
Output Circuit**4,75-30 VDC  
Push Pull4,75-30 VDC  
Push Pull4,75-30 VDC  
Push Pull**Resolution**

1-25000

1-25000





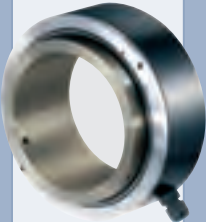
1-25000

# INCREMENTAL HOLLOW SHAFT ENCODERS

	<i>IH 490</i>	<i>IH 510</i>	<i>IH 581</i>	<i>IH 740</i>
				
<b>Housing Size</b>	49 mm	51 mm	58 mm	74 mm
<b>Available Shaft Ø or Hollow Shaft Ø</b>	6 mm - 8 mm 1/4"	6 mm 1/4"	6 mm - 12 mm 1/4" - 1/2"	6 mm - 18 mm 1/4" - 5/8"
<b>Mechanical Options</b>	Stainless Steel	—	—	Stainless Steel
<b>Connection Exit Location</b>	radial	radial	radial	radial
<b>Signals</b>	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z
<b>Operating Voltage Output Circuit</b>	4,75-30 VDC Push Pull	4,75-30 VDC Push Pull	4,75-30 VDC Push Pull	4,75-30 VDC Push Pull
<b>Resolution</b>	1-3600	1-1250	1-10000	1-25000










	<i>IH 950</i>	<i>IH 951</i>	<i>IH 103</i>	<i>IH 120</i>	<i>IH 150</i>
					
<b>Housing Size</b>	95 mm	95 mm	103 mm	120 mm	150 mm
<b>Available Shaft Ø or Hollow Shaft Ø</b>	14 mm-30 mm 5/8" - 1.0"	14 mm-30 mm 5/8" - 1.0"	30 mm-40 mm 1.5" - 1.625"	40 mm-65 mm 1.625" - 2.5"	65-100 mm 2.5" - 4.0"
<b>Mechanical Options</b>	Stainless Steel	Stainless Steel	—	—	—
<b>Connection Exit Location</b>	radial	radial	radial	radial	radial
<b>Signals</b>	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z	A+B+Z A+B+Z+/A+/B+/Z
<b>Operating Voltage Output Circuit</b>	4.75-30 VDC Push Pull	4.75-30 VDC Push Pull	4.75-30 VDC Push Pull	4.75-30 VDC Push Pull	4.75-30 VDC Push Pull
<b>Resolution</b>	1-25000	1-25000	1-50000	1-50000	1-50000



# ABSOLUTE SINGLE-TURN ENCODERS

	<i>AS 580</i>	<i>AS 700</i>	<i>AS 900</i>	<i>AH 740</i>	<i>AH 950</i>
					
<b>Housing Size</b>	58 mm	70 mm	90 mm	74 mm	95 mm
<b>Available Shaft Ø or Hollow Shaft Ø</b>	4 mm - 6 mm 1/4" - 3/8"	10 mm - 12 mm 3/8" - 1/2"	10 mm - 12 mm	6 mm - 12 mm 1/4" - 1/2"	15 mm - 25 mm 5/8" - 1.0"
<b>Mechanical Options</b>	Stainless Steel	Stainless Steel	—	Stainless Steel	Stainless Steel
<b>Connection Exit Location</b>	axial radial	axial radial	axial radial	radial	radial
<b>Signals</b>	Binary Code-Parallel Gray Code-Parallel	Binary Code-Parallel Gray Code-Parallel	Binary Code-Parallel Gray Code-Parallel	Binary Code-Parallel Gray Code-Parallel	Binary Code-Parallel Gray Code-Parallel
<b>Operating Voltage Output Circuit</b>	8-30 VDC Push Pull	8-30 VDC Push Pull	8-30 VDC Push Pull	8-30 VDC Push Pull	8-30 VDC Push Pull
<b>Resolution</b>	Up to 13 Bits	Up to 13 Bits	Up to 13 Bits	Up to 13 Bits	Up to 13 Bits



# ABSOLUTE MULTI-TURN

# SPECIAL FUNCTION

**MS 360**

**MS 581**

**MH 360**

**XS 410**



**Housing Size**

36.5 mm

58 mm

36.5 mm

41 mm

**Available Shaft Ø  
or Hollow Shaft Ø**

6 mm  
1/4"

6 mm - 8 mm  
1/4" - 3/8"

6 mm  
1/4"

6 mm  
1/4"

**Mechanical  
Options**

—

—

—

Stainless Steel

**Connection  
Exit Location**

radial

radial  
axial

radial

axial

**Signals**

SSI

SSI

SSI

A+PL+PR+DR  
A+B+Z+PL+PR+  
DR+X2+X4

**Operating Voltage  
Output Circuit**

RS 422

RS 422

RS 422

8 - 30 V DC  
Push Pull

**Resolution**

28 Bits







13 x 12 Bits

28 Bits

Max. 1024x4



# EXPLOSION PROOF AND WASH-DOWN ENCODERS

	<i>IX 700</i>	<i>AX 700</i>	<i>MX 700</i>	<i>IP 700</i>	<i>AP 700</i>	<i>MP 700</i>
						
<b>Housing Size</b>	70 mm	70 mm	70 mm	70 mm	70 mm	70 mm
<b>Available Shaft Ø or Hollow Shaft Ø</b>	10 mm - 12 mm	10 mm - 12 mm	10 mm - 12 mm	10 mm - 12 mm	10 mm - 12 mm	10 mm - 12 mm
<b>Mechanical Options</b>	—	—	—	—	—	—
<b>Connection Exit Location</b>	axial	axial	axial	axial	axial	axial
<b>Signals</b>	A+B+Z A+B+Z+/A+/B+/Z	Binary Code-Parallel Gray Code-Parallel	SSI	A+B+Z A+B+Z+/A+/B+/Z	Binary Code-Parallel Gray Code-Parallel	SSI
<b>Operating Voltage Output Circuit</b>	4,75-30 VDC Push Pull	8-30 VDC Push Pull	RS 422	4,75-30 VDC Push Pull	8-30 VDC Push Pull	RS 422
<b>Resolution</b>	1-50000	Up to 12 Bits	13 x 12 Bits	1-50000	Up to 12 Bits	13 x 12 Bits



## STRING ENCODERS

**DWS150**

**DWS1210**



**Measuring Length**

Up to 6 Meters

Up to 10 Meters

**Linearity**

+/-0.05% full scale

+/-0.05% full scale

**Velocity**

10 meters/second

10 meters/second

**Acceleration (max)**

5 m/s<sup>2</sup>

5 m/s<sup>2</sup>

**Drum Circumference**

409.6 mm

300 mm

**Encoder Feed  
Optionst**

Incremental Encoder  
Absolute Encoder

Incremental Encoder  
Absolute Encoder

**Linear Resolution**

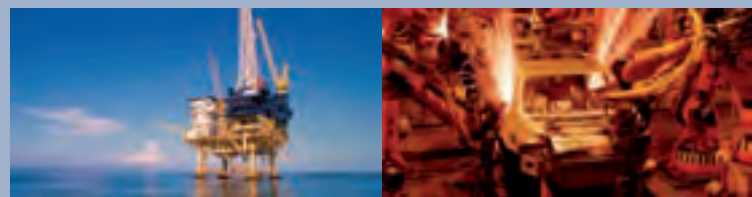
0.05 mm

0.05 mm



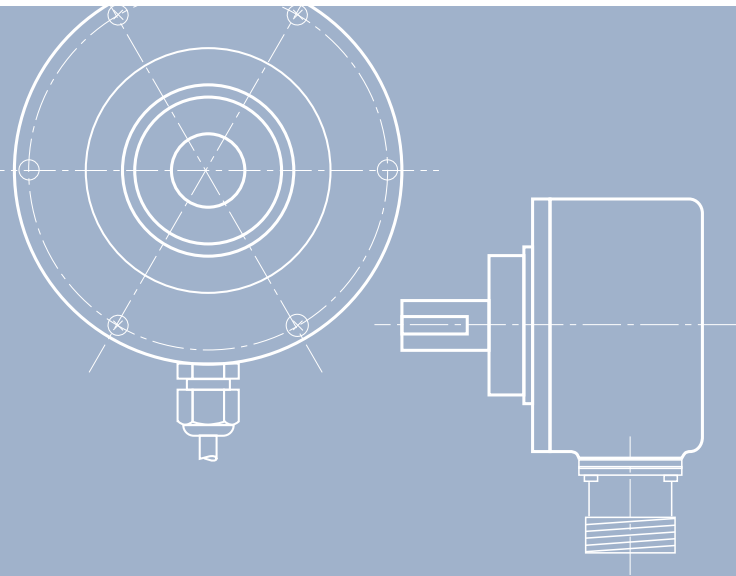
## *TIME PROVEN AND TESTED EXPERIENCE*

We work with you to design, develop and manufacture encoders that are specifically tailored to your needs and to your application. In order to provide you with the highest level of performance and reliability we familiarize ourselves with every aspect of your application, taking the necessary time to understand your requirements and to identify potential problems before they happen. When it comes to reliability and product performance we don't leave it to chance.





- Automotive
- Research and Military
- Forestry
- Crane Systems
- Engineering
- Off Shore
- Oil and Gas
- Personal Transportation
- Alternative Energy



**GESgroup**

**Industrial Encoder Corporation**

Member of the **GESgroup**

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