

ELAP Inkrementalgeber bieten:

- Mehrere verschiedene mechanische Versionen
- Anzahl der PPR im Bereich von 2 bis 50.000
- Elektronischer Push-Pull- oder Line-Driver-Ausgang



./Nachfolgend Dokumentation



**E30**

**E40**

**E40A**

<b>Dimensions</b>	Ø 30 mm	Ø 40 mm	
<b>Flange</b>	Ø 30 mm	Ø 40 mm	
<b>Fixing</b>	2 holes on Ø 22 mm	6 holes on Ø 30 mm	4 holes on Ø 25.4 mm
<b>Connections</b>	Axial or radial cable L 1 m		
<b>Shaft Ø</b>	4 - 6 mm		
<b>Housing material</b>	ABS	ABS - Optional: Aluminium ( <i>series RE40</i> )	
<b>Protection degree</b>	IP54	IP54 – IP64 on request	
<b>PPR no.</b>	2 ÷ 12500		
<b>Zero reference</b>	On request ( <i>type E31/E41</i> )		
<b>Supply voltage</b>	5 Vdc – 8/24 Vdc		
<b>Output signals</b>	Push-pull – line driver TTL/HTL		

### Series E30 & series E40:

Compact-sized and accurate these miniature encoders are ideal for a great number of applications.

The series **E40** includes different flange types: round, square, hollow shaft.

The optional aluminium-housed version X27 grants high protection against environmental agents.



Encoders E30

# ENCODERS

## SIZE




**E40V**

**E40M**

**E40S**

**E40Q**

Ø 40 mm

Ø 40 mm	Hollow shaft	Hollow shaft	 44x44 mm
M18x1 screw fixing	Anti-rotational support	Anti-rotational elastic support	4 holes di Fixing
Axial or radial cable L 1 m			
6 mm	Hole Ø 6 or 8 mm		6 mm
ABS - Optional: Aluminium			
IP54 –IP64 on request, with aluminium housing (series RE40)			
2 ÷ 12500			
On request (type E41)			
5 Vdc – 8/24 Vdc			
Push pull – line driver TTL/HTL			

### Encoders series E40



Encoder RE40V

Encoder RE40

Versions RE40 with aluminium housing

# ► INCREMENTAL

## COMPACT ENCODERS WITH M12 CONNECTOR OUTLET

elap

SYNCHRO FLANGE

CLAMPING FLANGE



**REC620**

**REC520**

**REC540**

**REC440**

**REC450**

<b>Dimensions</b>	Ø 58 mm H 38 mm			
<b>Flange</b>	<input type="checkbox"/> 63.5x63.5 mm	Ø 58 mm		Hollow shaft
<b>Centering mask</b>	Ø 31.75 mm	Ø 50 mm	Ø 36 mm	
<b>Fixing</b>	4 holes	Servo/ 3 holes on Ø 42 mm	3 holes on Ø 48 mm	Anti-rotational support Anti-rotational elastic support
<b>Connections</b>	M12 connector or cable L 1 m in radial position			
<b>Shaft Ø</b>	6 – 8 – 9.52 – 10 mm	6 - 8 - 10 mm		Hole Ø 8-10-12-14 - 15 mm
<b>Materiale Housing</b>	Aluminium			
<b>Protection degree</b>	IP65			
<b>PPR no.</b>	2 ÷ 12500			
<b>Zero reference</b>	On request (type REC621/521/541/441/451)			
<b>Supply voltage</b>	5÷ 30 Vdc			
<b>Output signals</b>	Push pull – line driver TTL/HTL			

### Series REC:

Compact sized encoder • Body high: 38 mm

Connections by M12 connector 5 or 8 pins (socket connector excluded)

Optional: 5 or 10 m cable ended with flying socket connector



**LISTED** versions available

Encoders series REC



# ENCODERS

## SQUARE-FLANGED

## ROUND-FLANGED



### RE620

### RE650

### SEB

### RE50

Ø 58 mm

Ø 50 mm

Ø 50 mm

63.5x63.5 mm

Ø 31.75 mm

Ø 50 mm

4 holes

3 holes on Ø 36 mm

Axial or radial cable or MIL connector

Axial cable or MIL connector

Axial M12 connector or cable L 1 m

6 – 8 – 9.52 – 10 mm

10 mm

6 – 8 – 10 mm

Aluminium

ABS

Aluminium

IP65 – IP66 on request, with sealing ring on the shaft

IP65

2 ÷ 12500 / 50000 (version REV)

2 ÷ 12500

On request (type RE621/RE641)

On request (type SEB-Z)

On request (type RE51)

5÷ 30 Vdc

Push pull - line driver TTL/HTL– 1V<sub>pp</sub> sinusoidal outputs

Push pull  
– line driver TTL/HTL

Push pull  
– line driver TTL/HTL

### MECHANICAL VERSIONS ALSO AVAILABLE FOR SERIES

REV 50000 i/g

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REM

•

•

REP

•

•

### Series REV

HIGH PPR Number  
1000÷50000 ppr

Glass disk - Aluminium case  
Supply voltage: 5÷28 Vdc  
Output signals: push-pull or line driver  
Axial/radial cable/connector  
Protection degree IP65, optional IP66

### Series REM

MAGNETIC ENCODERS  
8÷2048 ppr

**Magnetic operating principle**  
Aluminium housing  
Supply voltage: 5÷ 30 Vdc  
Output signals: push-pull or line driver  
Axial/radial cable/connector  
Protection degree IP65, optional IP66

### Series REP

PROGRAMMABLE ENCODERS  
8÷2048 ppr

8÷2048 ppr **programmable** by the user  
Zero reference pulse  
Magnetic operating principle  
Aluminium housing  
Supply voltage: 5÷28 Vdc  
Output signals: push-pull or line driver  
Axial/radial cable/connector  
Protection degree IP65, optional IP66

### Series RE50:

Compact sized encoder • Body high: 48 mm  
Connections by M12 connector 5 or 8 pins (socket connector excluded)  
Optional: 5 or 10 m cable ended with flying socket connector



Encoder RE50

ROUND-FLANGED



SYNCHRO FLANGE



CLAMPING FLANGE



RE510



RE530

RE520

RE540

<b>Dimensions</b>	Ø 58 mm			
<b>Flange</b>	Ø 58 mm			RE0444 Ø 110 mm
<b>Centering mask</b>	Ø 50 mm	Ø 36 mm	Ø 31.75 mm	
<b>Fixing</b>	Servo 3 holes on Ø 42 mm	3 holes on Ø 48 mm	3 holes on Ø 47.6 mm	
<b>Connections</b>	Axial or radial cable or MIL connector			
<b>Shaft Ø</b>	6 – 8 – 9.52 – 10 mm			11 mm
<b>Housing material</b>	Aluminium			
<b>Protection degree</b>	IP65 – IP66 on request, with sealing ring on the shaft			
<b>PPR no.</b>	2 ÷ 12500 / 50000 (version REV)			
<b>Zero reference</b>	On request (type RE521/RE541/RE511/RE531)			
<b>Supply voltage</b>	5÷ 30 Vdc			
<b>Output signals</b>	Push-pull – line driver TTL/HTL –1 V <sub>pp</sub> sinusoidal outputs			

MECHANICAL VERSIONS ALSO AVAILABLE FOR SERIES

REV 50000 i/g	•	•		
REM	•	•	•	•
REP	•	•	•	

Series REV	Series REM	Series REP
<b>HIGH PPR Number</b> 1000÷50000 ppr	<b>MAGNETIC ENCODERS</b> 8÷2048 ppr	<b>PROGRAMMABLE ENCODERS</b> 8÷2048 ppr
Glass disk - Aluminium case Supply voltage: 5÷28 Vdc Output signals: push-pull or line driver Axial/radial cable/connector Protection degree IP65, optional IP66	<b>Magnetic operating principle</b> Aluminium housing Supply voltage: 5÷ 30 Vdc Output signals: push-pull or line driver Axial/radial cable/connector Protection degree IP65, optional IP66	8÷2048 ppr <b>programmable</b> by the user Zero reference pulse Magnetic operating principle Aluminium housing Supply voltage: 5÷28 Vdc Output signals: push-pull or line driver Axial/radial cable/connector Protection degree IP65, optional IP66



Encoder RE530



Encoder RE520



Encoder RE540



# ENCODERS

## HOLLOW SHAFT



<i>RE400</i>	<i>RE470</i>	<i>RE410</i>	<i>RE450</i>
Ø 58 mm	Ø 58 mm	Ø 58 mm	Ø 58 mm
Ø 53.5 mm	Ø 72 mm	Ø 58 mm	Ø 58 mm
3 holes on Ø 30 mm	4 holes on Ø 63.5 mm	Anti-rotational support	Anti-rotational elastic support
Axial or radial cable or MIL connector			
6, 8, 10 mm		8, 10, 12, 14, 15 mm	
Aluminium			
IP65			
2 ÷ 12500			
On request (type E401/E471/E411/E431)			
5÷30 Vdc			
Push-pull – line driver TTL/HTL – 1 V <sub>pp</sub> sinusoidal outputs			

### MECHANICAL VERSIONS ALSO AVAILABLE FOR SERIES

REV				
REM	•	•	•	•
REP	•	•	•	•



Encoder RE410



Encoder RE400

Encoder E430



Encoder E470



## ► ENCODER FITTINGS

### COUPLINGS



JOINTS series **BSS / WA**,  
aluminium  
Hole Ø mm 6-6, 6-10, 8-8,  
8-10, 10-10

JOINTS series **SK**  
Polyamid fiberglass reinforced  
Aluminium connecting element  
Hole Ø mm 4-4, 6-6, 8-8, 10-10

JOINTS series **FK**  
Nickel plated steel  
Hole Ø mm 6-6, 6-8, 8-8

JOINTS **PAGUFLEX**  
**PF0606**  
Galvanized steel-  
polyurethane connecting  
element  
Hole Ø mm 6-6, 8-8

### MEASURING WHEELS



**MEASURING WHEEL 552**  
Aluminium wheel, smooth rubber  
surface, development 500±1 mm,  
accuracy ±0.2%  
Hole Ø 8 or 10 mm

**MEASURING WHEEL 251**  
Aluminium wheel, smooth rubber  
surface, development 200±0.2 mm,  
accuracy 0,1%  
Hole Ø 6, 8 or 10 mm

Aluminium **MEASURING WHEELS**,  
development 200 or 500 mm  
**MRAR** milled-aluminium surface  
**MRAN** pointed polyurethane surface  
**MRAG** corrugated polyurethane  
surface

### SUPPORTING ARM



Encoder **supporting arm** type **B100**

Encoder with supporting arm and wheel