

## Solutions for Lift Technology



### • Encoders

- ✓ Incremental encoders for controlling the speed and position of the drives
- ✓ Absolute multiturn encoders for absolute shaft copying/ lift car positioning
- ✓ Compact incremental encoders for monitoring of overspeed limiters
- ✓ Accessories for belt shaft copying and handwheels

### • Trip counters and Hours-run meters

- ✓ For precise definition of service intervals
- ✓ Simple retrofitting, also as DIN-rail versions
- ✓ Also available with high-voltage input for direct connection to the power mains

## Incremental encoders for controlling the speed and position of the drives



*Ideally suited to lift drives with geared motors and for retrofitting to handwheels*



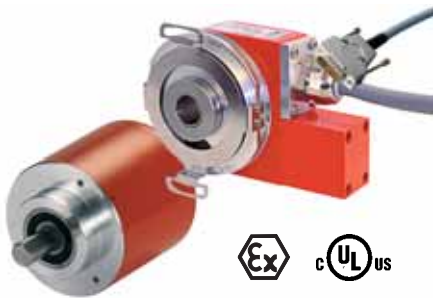
- Simple to install, simple to replace
- Always the right encoder
- Long service life, unaffected by rough installation, can handle large tolerances

Plug & Play: cable with SUB-D connector and corresponding PIN assignment for all common controllers can be supplied as standard

Adjustable: up to 5,000 ppr, RS422 (TTL), Push-Pull (HTL) and SIN/COS, many fixing options

Robust: IP65, -20°C ... +70°C, high shock and vibration resistance, short-circuit proof outputs, reverse connection protection for power supply

## Absolute multiturn encoders for absolute shaft copying / lift car positioning



- Absolute technology offers operation without the need for a reference trip; no additional reference sensors required
- Compact, for lift systems without a machine room
- Versatile and reliable

Up to 8192 pulses per revolution and up to 4096 revolutions, SSI, RS485, Fieldbus (e.g. CAN) and special protocols such as AWG

Only 40.5 mm clearance needed, with optional incremental track, two devices in one

Programmable versions, controller outputs for fast reactions on the spot, status inputs for increased operational reliability, through hollow shaft up to 28 mm

## Compact incremental encoders for monitoring of overspeed limiters



- Small and economical
- Rugged
- Universal use

Standard encoders starting from 24 mm diameter

Up to IP67, -30°C .. +85°C, very sturdy bearings with Safety-Lock technology

Up to 15.7 mm through hollow shaft, many fixing options and connector versions



*Take advantage of our Remote Design-In Desk: we will work out with you the optimal solution package "Encoder + Mounting fixture + Coupling" as a ready-to-install kit*

## Separation of bearing load and sensor component with belt shaft copying



- Simple to upgrade, no mechanical adaptation
- Long service life, unaffected by external influences
- Adjustable

Dimensionally compatible with existing encoders

Fast, simple retrofitting  
Increases four-fold the maximum permissible bearing load

Versions for retrofitting of shaft encoders  
Versions for hollow shaft encoders where installation space is particularly limited

### Mechanical characteristics:

Speed:	max. 3,000 min <sup>-1</sup>
Load capacity of the shaft:	radial: 400 N (optionally 600 N), axial: 200 N
Weight:	approx. 400 g
Material:	Shaft: stainless steel, flange: anodised aluminium, grub screw, protection for bore nut: steel



Shaft version



Hollow shaft version

## Upgrading handwheels with encoders



- Simple shaft extension for the handwheels
- Option to mount the encoder behind the handwheel
- Reduction of the shaft diameter, so that standard encoders can be used

# Trip counters and hours-run meters for precise definition of service intervals



## Electromechanical trip counters and hours-run meters



- Small and easy to retrofit
- Always readable
- Economical

Panel cut-out 27 x 14 mm or DIN-rail mount  
100% duty cycle (no pulse generation required)

After a power-failure or lightning strike the electromechanical technology continues to display the value

Low-cost retrofitting all lift systems, long service life thanks to high shock resistance and IP65 protection rating

## Electromechanical combination counter: time and trips



- Precise definition of service intervals
- Simple to use
- Long service life

Simultaneous counts the number of trips and hours of operation

High voltage input for direct connection to the mains, optional DIN-rail mounting  
100% duty cycle (no pulse generation required)

Rugged design, high shock resistance

## Electronic trip counters, hours-run meters and speed indicators



c us



- Simple, low-cost retrofitting
- Easy to read
- Versatile

DIN sizes, many options, also with high voltage input for direct connection to the mains, IP65, battery-powered versions (service life >8 years)

LCD also with backlighting or LED versions (8 year battery life)  
Large 8-digit LCD display or 6-digit LED display

Versions for trip counting, hours-run meters and speed indication, also versions with control outputs

## Further information



*Catalogues showing our full product range of counters and sensors are available on request*

Call Gaby Mancuso today for your copy of our comprehensive encoder and counter catalogues.  
Tel.: +49 (0) 7720 -3903-29

Call Uli Hezinger for technical support and advice.  
Tel.: +49 (0) 7720 -3903-92