RESOLVERS

CUSTOMER-SPECIFIC RESOLVER DESIGN – PRECISION ACCORDING TO REQUIREMENTS

Mechanical Adaptations:
Customized flange and shaft diameters as well as housing shapes for perfect integration into your assembly.

Electrical interfaces:
Tailormade connection options and signal format options for smooth integration into your control systems.

Operating temperatures:
Optimized resolvers for use in extreme temperature ranges, from arctic cold conditions to high temperature environments.

Robustness against environmental influences:
Special seals and material selection for harsh environments such as humidity, dust, oil or vibrations.

Precision requirements:
Accuracy levels adapted to customer application requirements, from high resolution for precise movements to robust, reliable standard solutions.

Speed optimization:
Adaptation of the resolvers to specific speed ranges for maximum performance in high-speed applications.

LTN's customized resolvers offer tailor-made solutions for specific drive and positioning requirements.
Whether special conditions need to be met or specific performance parameters are required, LTN adapts its resolvers to exact requirements.
With a focus on durability, precision and robustness, LTN's resolvers offer an ideal solution for any environment.

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LTN Servotechnik GmbH

RESOLVERS
FOR THE EXACT COMMUTATION OF SERVOMOTORS

Aveko Servomotory

PRECISION AND RELIABILITY

Servomotors are the centerpiece of modern machine controls and automation technologies.
Precise commutation is essential for optimal performance and longevity.

LTN resolvers provide a reliable solution for this.

RESOLVERS

WHY RESOLVERS FOR COMMUTATION?

Exact commutation for precise control:
Resolvers provide exact position data that enables precise commutation - this ensures smooth and efficient motor control.

Safe operation under extreme conditions:
Reliable measurement results are provided by resolvers even in the event of severe temperature. fluctuations or vibrations.

High operational reliability:
With proven technology and robust design, resolvers are ideal for applications where reliability is paramount.

Cost efficiency:
Due to their long service life and low maintenance costs, resolvers make a significant contribution to an economical solution for your drive control.

-55°C

+155°C

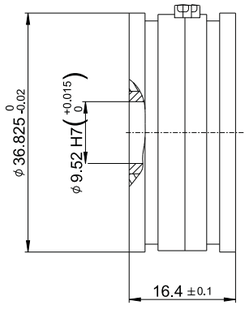
50G / 100G
vibration / shock

e.g. X-ray

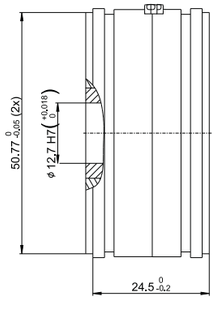
100m
electronic control unit

MANUFACTURER OF CUSTOMER-SPECIFIC RESOLVER SOLUTIONS

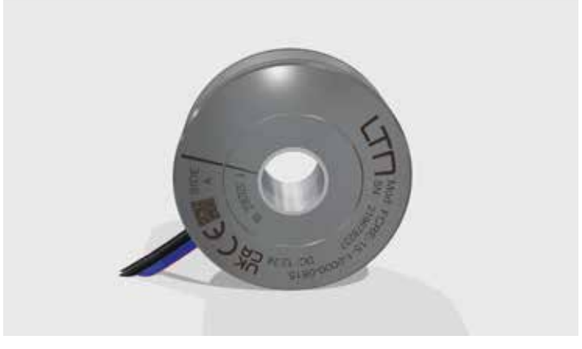
LTN PRODUCT PORTFOLIO



FCRE-15



FCRE-21



FCRE-15 (design example)

LTN Servotechnik GmbH

RESOLVERS

OVERVIEW RESOLVERS

Type	Outer Diameter	Max. Hollow Shaft Diameter	Pole Pairs	Accuracy	Typ. Input Current (can vary by types)	Rated Input Voltage	Nominal Impedance		Transfor-mation Ratio	Phase Shift Out-In
							Primary	Secondary		
RE-15	36 mm	12 mm	1/3/4/5	+/- 4' / +/- 6' / +/- 12'	<50 mA	5 V rms	> 115 Ω abs (Zro) at 4 kHz	< 440 Ω abs (ZSS) AT 4 KHZ	0.5 +/- 20%	0+/-10°
RE-21	52 mm	19 mm	1/3/4/5	+/- 4' / +/- 6' / +/- 12'	<50 mA	5 V rms	> 115 Ω abs (Zro) at 4 kHz	< 440 Ω abs (ZSS) AT 4 KHZ	0.5 +/- 20%	0+/-10°

Number of pole pair	1	3	4	5
Rated input voltage	5 V rms			
Frequency	4-10 kHz (optimised for mini error at specific frequency if applicable)			
Primary	Rotor			
Secondary	Stator			
Nominal impedance				
Primary (stator winding open) abs (Zro) at 4kHz	> 115 Ω	tbd/ upon request	tbd	tbd
Secondary (rotor winding closed) abs (Zss) at 4 kHz	< 440 Ω	tbd	tbd	tbd
Transformation ratio	0.5 ± 20%			
Phase shift out-in	0±10°			
Max. error spread				
Size 15	≤ 12'			
Size 21	≤ 10'			