

# L SERIES

## Coils

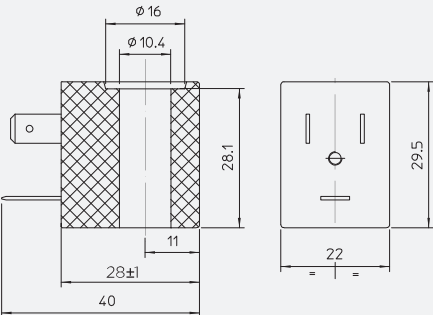
**L Series** coils are 22 mm wide, suitable for armature tubes with diameter 10 mm. They can be provided in different temperature classes and materials.



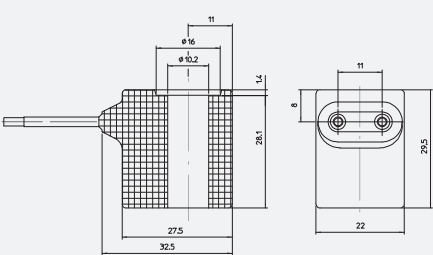
### TECHNICAL DATA

ELECTRICAL CONNECTIONS	LBA, LBS, LBV SERIES	EN 175301-803 INDUSTRIAL FORM B (11 mm)
	LTA SERIES	FLYING LEADS, LENGTH 20 cm
PROTECTION DEGREE	LBA, LBS, LBV SERIES	IP 65 EN 60529 (DIN 40050) WITH CONNECTOR
	LTA SERIES	IP 00
WINDING INSULATION CLASS	CLASS H	
COIL INSULATION CLASS	LBA, LBS, LTA SERIES	CLASS F (155°C)
	LBV SERIES	CLASS H (180°C)
COIL ENCAPSULATION MATERIALS	LBA, LTA SERIES	BLACK PA (POLYAMIDE)
	LBS	IMPREGNATED BLACK PA (POLYAMIDE)
	LBV SERIES	BLACK PET (POLYETHYLENE)

DIN CONNECTIONS



FLYING LEADS



DIN CONNECTIONS - CLASS F

CODE	VOLTAGE / FREQUENCY	POWER RATING	AMBIENT TEMPERATURE	DUTY CYCLE	APPROVALS
<b>LOW POWER</b>					
LBA2X012CS	12 V DC	2,5 W	-10°C +40°C	100%	CE
LBA2X024CS	24 V DC	2,5 W	-10°C +40°C	100%	CE
LBA2X024AS	24 V / 50 Hz	5 VA	-10°C +40°C	100%	CE
LBA2X110AS	110 V / 50 Hz	5 VA	-10°C +40°C	100%	CE
LBA2X230AS	230 V / 50 Hz	5 VA	-10°C +40°C	100%	CE
<b>STANDARD POWER</b>					
LBA05012CS	12 V DC	5 W	-10°C +40°C	100%	CE
LBA05012AS	12 V / 50 Hz	10 VA	-10°C +40°C	100%	CE
LBA05024CS	24 V DC	5 W	-10°C +40°C	100%	CE
LBA05024AS	24 V / 50Hz	10 VA	-10°C +40°C	100%	CE
LBA05110AS	110 V / 50 Hz 120 V / 60 Hz	10 VA	-10°C +40°C	100%	CE
LBA05220BS	220 V / 60 Hz	10 VA	-10°C +40°C	100%	CE
LBA05230AS	230 V / 50 Hz 240 V / 60 Hz	11,5 VA	-10°C +40°C	100%	CE
LBA05240AS	240 V / 50 Hz	10 VA	-10°C +40°C	100%	CE



















- Tolerances on nominal voltages: AC + 10% - 15% DC + 10% - 5%
- Performances of the valve may vary with low power category coils. Please contact ODE before order.

DIN CONN. - CLASS F -  
IMPREG. ENCAPSULATION

CODE	VOLTAGE / FREQUENCY	POWER RATING	AMBIENT TEMPERATURE	DUTY CYCLE	APPROVALS
<b>LOW POWER</b>					
LBS2X024AS	12 V DC	2,5 W	-10°C +40°C	100%	CE
LBS2X230AS	24 V DC	2,5 W	-10°C +40°C	100%	CE
<b>STANDARD POWER</b>					
LBS05024AS	12 V DC	5 W	-10°C +40°C	100%	CE
LBS05024CS	24 V DC	7 W	-10°C +40°C	100%	CE
LBS05230AS	230 V / 50 Hz 240 V / 60 Hz	11,5 VA	-10°C +40°C	100%	CE

- Tolerances on nominal voltages: AC + 10% - 15% DC + 10% - 5%
- Performances of the valve may vary with low power category coils. Please contact ODE before order.

DIN CONNECTIONS - CLASS H

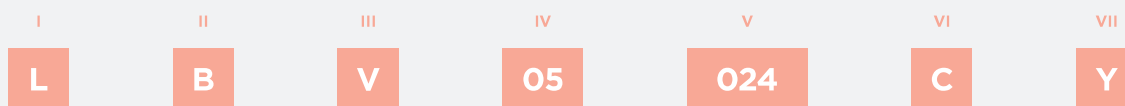
CODE	VOLTAGE / FREQUENCY	POWER RATING	AMBIENT TEMPERATURE	DUTY CYCLE	APPROVALS
<b>REDUCED POWER</b>					
LBV04230AY	230 V / 50 Hz 240 V / 60 Hz	9 VA	-20°C +60°C	100%	CE      
<b>STANDARD POWER</b>					
LBV05006CY	6 V DC	7 W	-20°C +60°C	100%	CE      
LBV05012CY	12 V DC	7 W	-20°C +60°C	100%	CE      
LBV05024CY	24 V DC	7 W	-20°C +60°C	100%	CE      
LBV05024DY	24 V / 50-60 Hz	11 VA	-20°C +60°C	100%	CE      
LBV05048CY	48 V DC	7 W	-20°C +60°C	100%	CE      
LBV05110AY	110 V / 50 Hz 120 V / 60 Hz	10 VA	-20°C +60°C	100%	CE      
LBV05230AY	230 V / 50 Hz 240 V / 60 Hz	11,5 VA	-20°C +60°C	100%	CE      
<b>REDUCED DUTY CYCLE</b>					
LBV08024HU	24 V DC	10 W	-20°C +40°C	50%	CE   
LBV21012KW	12 V DC	21 W	-20°C +60°C	33%	CE   
LO424024CS	24 V DC	24 W	-20°C +60°C	PWM 100 ms	CE

- Tolerances on nominal voltages: AC + 10% - 15% DC + 10% - 5%
- Cycle time considered for ED < 100% is 1 min.
- Performances of the valves may vary with low power or reduced duty cycle coils. Please contact ODE before order.

- The power values are indicative, as they change as a function of magnetic kit used.
- The power values are referred to holding phase for AC voltages and to cold values for DC voltages.
- Coil encapsulation and bobbin are made of 100% virgin material.
- Other voltages and power absorptions available on demand and for minimum order quantities. Please contact ODE for further information.

CODE	VOLTAGE / FREQUENCY	POWER RATING	AMBIENT TEMPERATURE	DUTY CYCLE	APPROVALS
<b>STANDARD POWER</b>					
LTA05024AS	24 V / 50 Hz	10 VA	-10°C +40°C	100%	CE
LTA05230AS	230 V / 50 Hz	10 VA	-10°C +40°C	100%	CE

- Tolerances on nominal voltages: AC + 10% - 15% DC + 10% - 5%.
- Coil without cable protection, connect the S.V. to a suitable earthing system.
- Available on request with minimum quantities.



**I. SERIES**

- L** - Width 22 - tube Ø 10
- B** - Width 30 - tube Ø 13
- U** - Width 36 - tube Ø 13
- G** - Width 52 - tube Ø 13

**II. ELECTRICAL CONNECTIONS**

- B** - connector EN 175301-803 industry standard form B
- D** - connector EN 175301-803 form A
- V** - 2 cables cm 50
- T** - 2 cables cm 20

**III. COIL HOUSING MATERIAL**

- A** - PA - Black polyamide - class F (155°C)
- V** - PET - Black Polyethylene - class H (180°C)
- H** - PPS - Black Polyphenilsulphide - class N (200°C)

**IV. POWER RATING**

- 1X** - 1,5 W
- 2X** - 2,5 W
- 4X** - 7,2 VA
- 05** - 5 W - 7 W - 7,7 VA - 9,24 VA - 10 VA - 11,5 VA - 12,5 VA - 13,5 VA
- 5X** - 9,13VA
- 08** - 8 W - 10 W - 11 W - 14,5 VA - 15 VA - 16 VA - 17 VA
- 10** - 9,9 W - 10,1 W
- 12** - 12 W - 22 VA - 23 VA - 25 VA
- 14** - 14 W - 23 VA - 26 VA - 27 VA
- 16** - 16 W

**V. VOLTAGE**

- 004** - 4,5 V
- 006** - 6 V
- 009** - 9 V
- 012** - 12 V
- 024** - 24 V
- 110** - 110 V / 50 Hz - 120 V / 60 Hz \*
- 112** - 110 -120 V
- 220** - 220 V
- 223** - 220-230 V
- 224** - 220-240 V
- 230** - 230 V / 50 Hz - 240 V / 60 Hz \*
- 240** - 240 V
- 380** - 380 V

**VI. FREQUENCY**

- A** - 50 Hz ED 100% \*
- B** - 60 Hz ED 100%
- C** - D.C. ED 100%
- D** - 50/60 Hz ED 100%
- E** - 50 Hz ED 50%
- H** -D.C. ED 50%
- L** - Latching coils

**VII. APPROVALS**

- S** - CE approval
- U** - CE, UL approval
- Y** - CE, UL, CSA, VDE approval

\* Voltage code 110 A = 110 V / 50 Hz - 120 V / 60 Hz ED 100%  
Voltage code 230 A = 230 V / 50 Hz - 240 V / 60 Hz ED 100%