

# B SERIES

## Coils

**B Series** coils are 30 mm wide, suitable for armature tubes with diameter 13 mm. They can be provided with different electrical connections and temperature classes.
The latching version is also available.

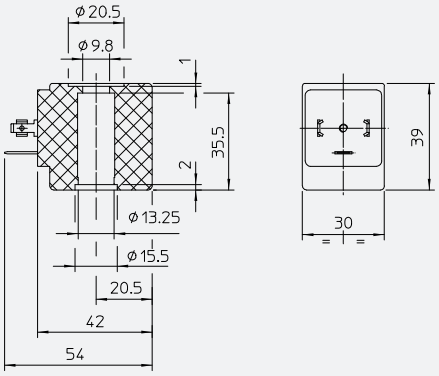
TECHNICAL DATA

| | | |
|---|---|---|
| ELECTRICAL CONNECTIONS | BDA, BDS, BDV SERIES | EN 175301-803 PARAGRAPH 5.3.1 (FORM A, 18 mm) |
| | BVA SERIES | FLYING LEADS, LENGTH 50 cm |
| PROTECTION DEGREE | BDA, BDS, BDV SERIES | IP 65 EN 60529 (DIN 40050) (WITH CONNECTOR)* |
| | BVA SERIES | IP 00 |
| WINDING INSULATION CLASS | CLASS H | |
| COIL INSULATION CLASS | BDA, BDS, BVA SERIES | CLASS F (155°C) |
| | BDV SERIES | CLASS H (180°C) |
| COIL ENCAPSULATION MATERIALS | BDA, BVA SERIES | BLACK PA (POLYAMIDE) |
| | BDS SERIES | IMPREGNATED BLACK PA (POLYAMIDE) |
| | BDV SERIES | BLACK PET (POLYETHYLENE) |

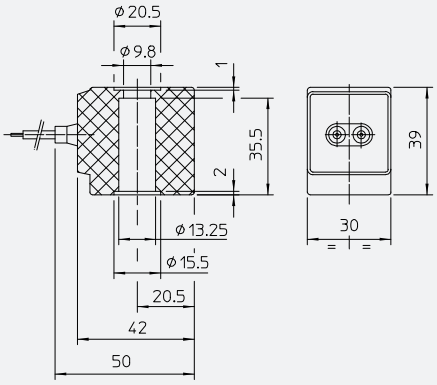
▪ *For BDS and BDV coils IP 67 possible with anti-umidity kit R453382/B and suitable connector. Please refer to chapter 9.

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## DIN CONNECTIONS




## FLYING LEADS



## DIN CONNECTIONS CLASS F

| CODE | VOLTAGE / FREQUENCY | POWER RATING | AMBIENT TEMPERATURE | DUTY CYCLE | APPROVALS |
|---|---|---|---|---|---|
| **LOW POWER** | | | | | |
| BDA2X024CS | 24 V DC | 2,5 W | -10°C +40°C | 100% | CE |
| **STANDARD POWER** | | | | | |
| BDA08012AS | 12 V / 50 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08024DS | 24 V / 50-60 Hz | 17 VA | -10°C +40°C | 100% | CE |
| BDA08036CS | 36 V DC | 8 W | -10°C +40°C | 100% | CE |
| BDA08042AS | 42 V / 50 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08100DS | 100 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08110DS | 110 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08190DS | 190 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08200DS | 200 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08223DS | 220-230 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08240AS | 240 V / 50 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08380DS | 380 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDA08480BS | 480 V / 60 Hz | 14,5 VA | -10°C +40°C | 100% | 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 when using low power or reduced duty cycle coils. Please contact ODE before order.

## DIN CONN. - CLASS F - IMPREG. ENCAPSULATION

| CODE | VOLTAGE / FREQUENCY | POWER RATING | AMBIENT TEMPERATURE | DUTY CYCLE | APPROVALS |
|---|---|---|---|---|---|
| BDS08012CS | 12 V DC | 11 W | -10°C +40°C | 100% | CE |
| BDS08024CS | 24 V DC | 11 W | -10°C +40°C | 100% | CE |
| BDS08024DS | 24 V / 50-60 Hz | 17 VA | -10°C +40°C | 100% | CE |
| BDS08110DS | 110 V / 50-60 Hz | 14,5 VA | -10°C +40°C | 100% | CE |
| BDS08223DS | 220-230 V / 50-60 HZ | 14,5 VA | -10°C +40°C | 100% | CE |
| BDS08240AS | 240 V / 50 Hz | 14,5 VA | -10°C +40°C | 100% | CE |

- Tolerances on nominal voltages: AC + 10% - 15% DC + 10% - 5%

## DIN CONNECTIONS CLASS H

| CODE | VOLTAGE / FREQUENCY | POWER RATING | AMBIENT TEMPERATURE | DUTY CYCLE | APPROVALS |
|---|---|---|---|---|---|
| BDV08012CY | 12 V DC | 11 W | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08024CY | 24 V DC | 11 W | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08024DY | 24 V / 50-60 Hz | 17 VA | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08048CY | 48 V DC | 10 W | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08048DY | 48 V / 50-60 Hz | 15 VA | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08110AY | 110 V / 50 Hz<br>120 V / 60 Hz | 15 VA | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08110CY | 110 V DC | 11 W | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08230CY | 230 V DC | 10 W | -20°C +60°C | 100% | CE \| cULus \| EAC |
| BDV08230AY | 230 V / 50 Hz<br>240 V / 60 Hz | 16 VA | -20°C +60°C | 100% | CE \| cULus \| EAC |
| **REDUCED DUTY CYCLE** | | | | | |
| BDV23012KW | 12 V DC | 23 W | -20°C +60°C | 33% | CE \| cULus |

- Tolerances on nominal voltages: AC + 10% - 15% DC + 10% - 5%
- Performances of the valves may vary when using low power or reduced duty cycle coils. Please contact ODE before order.

## FLYING LEADS CONNECTIONS CLASS F

| CODE | VOLTAGE / FREQUENCY | POWER RATING | AMBIENT TEMPERATURE | DUTY CYCLE | APPROVALS |
|---|---|---|---|---|---|
| BVA08024CS | 24 V DC | 8 W | -10°C +40°C | 100% | CE |
| BVA08024AS | 24 V / 50 Hz | 17 VA | -10°C +40°C | 100% | CE |
| BVA08223DS | 220-230 V / 50-60 Hz | 14,5 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.



- 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.
- The power values for AC voltages are referred to holding phase.
- 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.

CODIFICATION

| I | II | III | IV | V | VI | VII |
|---|---|---|---|---|---|---|
| B | D | V | 08 | 024 | C | Y |

**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 Polyphenilsuplhide - 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** - 9,13 VA
- **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** - Lachting coils

**VII. APPROVALS**
- **S** - CE 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%