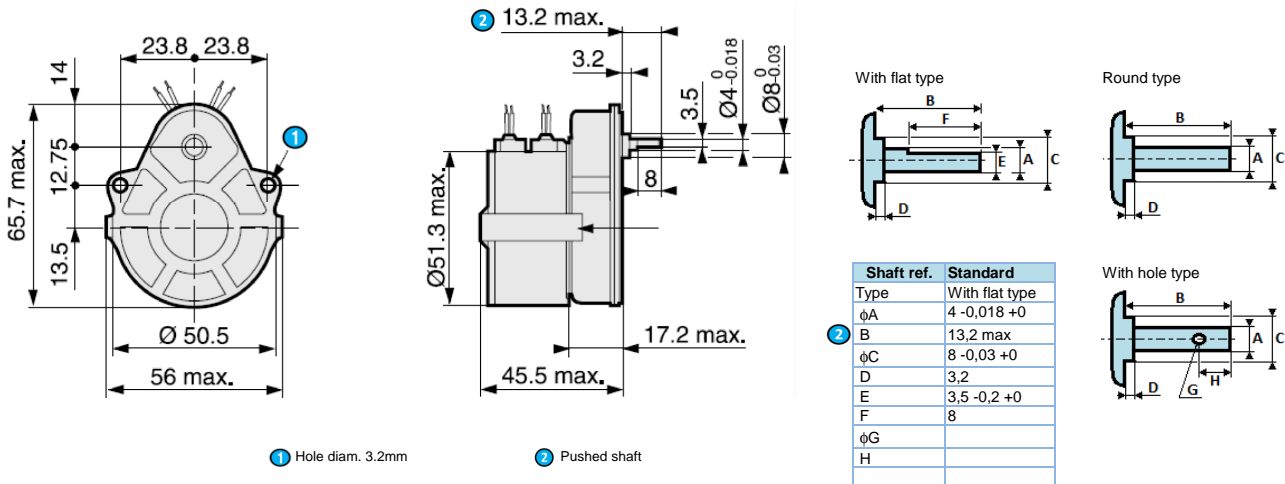


# Stepper gearmotor Data sheet

82 924 059  
ratio 300 - 4 phases

Series  
**829240**



## Product

|            |                                                                               |                        |  |
|------------|-------------------------------------------------------------------------------|------------------------|--|
| Code       | 82 924 059                                                                    |                        |  |
| Family     | 82924                                                                         |                        |  |
| Type       | Stepper gearmotor                                                             |                        |  |
| Definition | Motor 82920 1,7W 500 rpm nominal 7,5 °/t 48 step/t + Gearbox Ovoide ratio 300 | 4 phases 46 Ohms/phase |  |

## General characteristics

| Motor characteristics (1)                |                   | 829200       |  |
|------------------------------------------|-------------------|--------------|--|
| Motor type                               |                   | 829200       |  |
| Number of phases                         |                   | 4            |  |
| Input power                              | W                 | 7,5          |  |
| Phase resistor                           | Ohm               | 46           |  |
| Phase inductance                         | mH                | 24           |  |
| Phase current                            | A                 | 0,28         |  |
| Maintain torque                          | mNm               | 70           |  |
| Voltage per phase                        | Vcc               | 12,9         |  |
| Step angle                               | deg               | 7,5          |  |
| Step precision                           | %                 | 5            |  |
| Rotor inertia                            | g.cm <sup>2</sup> | 18,8         |  |
| Max. detent torque                       | mNm               | 6            |  |
| Weight                                   | g                 | 210          |  |
| <b>Output leads</b>                      |                   |              |  |
| UL style 1569 105°C 300V - 6 leads AWG24 |                   | 250 mm +- 10 |  |

| Gearmotor characteristics (1) (2) |                | A                                        | B                                   | C      | D    |
|-----------------------------------|----------------|------------------------------------------|-------------------------------------|--------|------|
| Additional resistor /phase        | Ohm            | 0                                        | 46                                  | 92     | 138  |
| Voltage (phase + add. resistor)   | Vcc            | 12,9                                     | 25,8                                | 38,7   | 51,6 |
| Max. output power                 | W              | 0,53                                     | 0,94                                | 1,11   | 1,24 |
| Speed at max. output power        | rpm            | 0,9                                      | 1,4                                 | 1,6    | 1,6  |
| Torque at max. output power       | Nm             | 5,35                                     | 6,65                                | 6,77   | 7,56 |
| Max. current                      | A              | 0,28                                     |                                     |        |      |
| Weight                            | g              | 140                                      |                                     |        |      |
| Noise level                       | dBA            | 35                                       |                                     |        |      |
| Motor fixing on gearbox           |                | <input checked="" type="checkbox"/> Clip |                                     | Screws |      |
| <b>Miscellaneous</b>              |                |                                          |                                     |        |      |
| Dielectric (1s/2mA/50Hz)          | CEI60335       | Vac                                      | 600                                 |        |      |
| Motor insulation                  | CEI60085       | class                                    | B                                   |        |      |
| Degree of protection              | CEI60529       | IP                                       | 40                                  |        |      |
| Temperature range                 | CEI60068-2-1/2 | °C                                       | -30 -> +70                          |        |      |
| Storage temperature               |                | °C                                       | -40 -> +80                          |        |      |
| <b>Approvals</b>                  |                |                                          |                                     |        |      |
| ROHS                              | 2011/65/UE     |                                          | <input checked="" type="checkbox"/> |        |      |
| EC                                | 2014/30/UE     |                                          | <input checked="" type="checkbox"/> |        |      |

| Notes                                                                                                 |  |
|-------------------------------------------------------------------------------------------------------|--|
| Values without tolerance, are average production values.                                              |  |
| (1) Cold motor, 20 ° C ambient temperature, full speed                                                |  |
| (2) Without taking in count the torque gearbox limits, check gearbox characteristics                  |  |
| (3) Continuously rated torque, zero radial and axial loads                                            |  |
| (4) Max torque for continuous operation at 20 ° C, decrease this value for higher ambient temperature |  |

## Command sequence

Drive sequence for Clock Wise rotation

| Step | 1 | 2 | 3 | 4 |
|------|---|---|---|---|
| 1    | - | - | - | - |
| 2    | - | - | - | - |
| 3    | - | - | - | - |
| 4    | - | - | - | - |
| 5    | - | - | - | - |

| Gearbox Characteristics                 |          |       |
|-----------------------------------------|----------|-------|
| Type                                    | Ovoide   | 81021 |
| ratio                                   | 300      |       |
| Shaft                                   | standard |       |
| Front bearing                           | brass    |       |
| Continuous max. torque                  | Nm       | 0,5   |
| Max. Radial force (6mm from front face) | N        | 80    |
| Max. axial force                        | N        | 10    |
| Weight                                  | g        | 275   |

