

## Series AWI 90 Redundant

- ▶ Incremental rotary-encoder with a solid shaft diameter of 12 mm
- ▶ Housing diameter 90 mm, robust design and high degree of protection
- ▶ Maximum 5.000 pulses / revolution
- ▶ For highest industrial requirements
- ▶ Redundant version (two completely separate, optical and electronic systems in one housing)
- ▶ Also available in stainless steel for aggressive environmental conditions
- ▶ Accessories from page 78

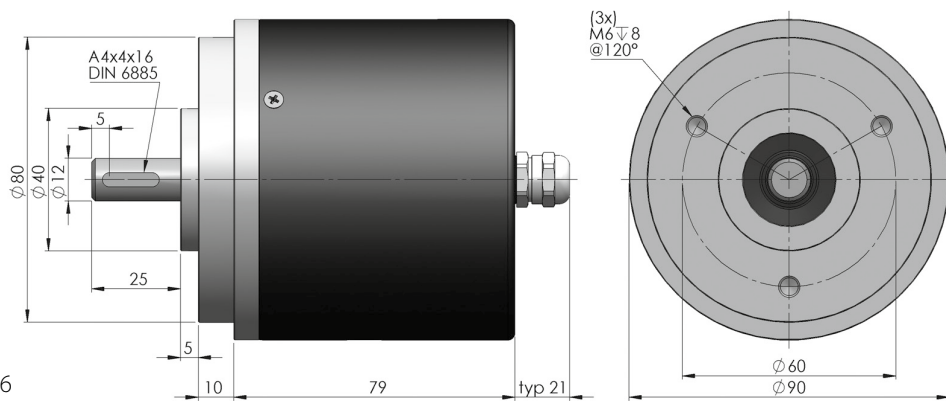
### Electrical specifications

|                           |                                      |
|---------------------------|--------------------------------------|
| Max. step frequency:      | 100 kHz                              |
| Perm. temperature range:  | -30°... +70° C                       |
| Power supply:             | 10 V... 30 V DC                      |
| Max. current consumption: | 80 mA (without load)                 |
| Max. output load:         | 30 mA (per channel)                  |
| Residual ripple:          | max. ± 5% UB                         |
| Power supply:             | 5 V DC ± 5%                          |
| Max. current consumption: | 80 mA                                |
|                           | 150 mA for Line Driver 75114 or sim. |

### Mechanical specifications

|                  |                           |
|------------------|---------------------------|
| Flange:          | Aluminium                 |
| Housing:         | Powder-coated sheet steel |
| Shaft:           | stainless steel           |
| Shaft seal:      | oil/salt-water resistant  |
| Bearing:         | Deep groove ball bearing  |
| Weight:          | approx 1,2 kg             |
| Protection type: | IP 65                     |
| Max. speed:      | 6.000 U/min               |
| Torque:          | approx 5 Ncm              |
| Max. shaft load: | axial 30 N/radial 50 N    |

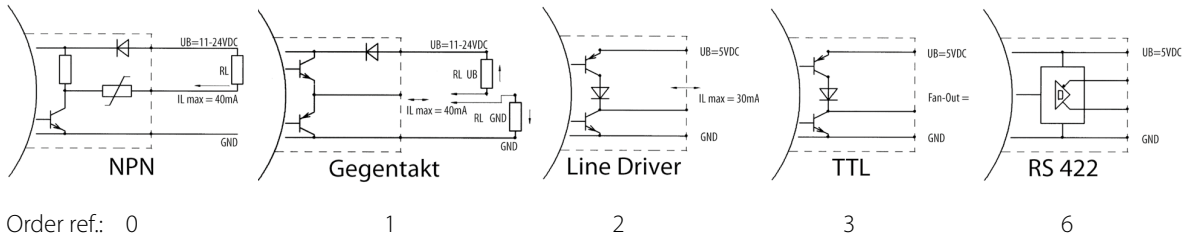
### Mechanical dimensions



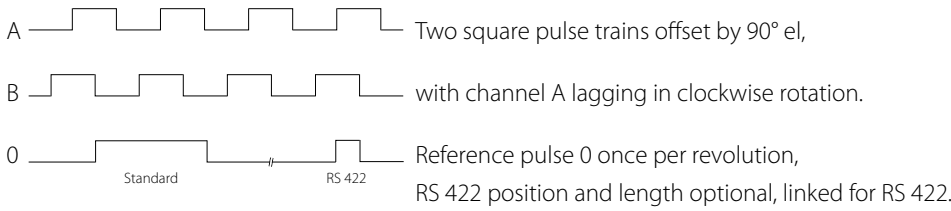
\* Tolerance = h 6

All specification in millimeters

## Output circuits



## Signal outputs



All channels can also be executed inversely.

## Pin configuration

|                                                            | GND   | + U <sub>B</sub> | A     | B      | $\bar{A}$ | $\bar{B}$ | 0      | $\bar{0}$ |
|------------------------------------------------------------|-------|------------------|-------|--------|-----------|-----------|--------|-----------|
| Connection type 00<br>(Colour code according to DIN 47100) | white | brown            | green | yellow |           |           | gray   |           |
| Connection type 00<br>(Colour code according to DIN 47100) | white | brown            | green | yellow | gray      | rosa      | blue   | red       |
| Connection type 01                                         | black | blue             | brown | beige  |           |           | yellow |           |
| Connection type 01                                         | black | blue             | brown | beige  | yellow    | green     | pink   | purple    |

## Order reference

