



- Diagnostic LED
- Poll and auto mode
- Programmable: Direction, limit values
- Option: Display „tico“

TECHNICAL DATA mechanical

| | |
|-----------------------------------|--|
| Housing diameter | 58 mm |
| Protection class shaft input | IP64 or IP67 |
| Protection class housing | Connection bus cover IP67 Connection conin, cable IP64 (IP67 optional) |
| Flange | Synchro flange, clamping flange, hubshaft with tether, square flange |
| Shaft diameter | Solid shaft 6 mm, 10 mm; hub shaft 10 mm, 12mm |
| Max. speed | 12 000 min ⁻¹ (short term), 10 000 min ⁻¹ (continuous) |
| Starting torque | ≤ 0.5 Ncm |
| Moment of inertia | 3.8 10 ⁻⁶ kgm ² |
| Spring tether (hollow shaft) | |
| Tolerance axial | ± 1.5 mm |
| Tolerance radial | ± 0.2 mm |
| Max. shaft load | axial 40 N / radial 60 N |
| Vibration resistance (IEC 68-2-6) | 100 m/s ² (10 - 500 Hz) |
| Shock resistance (IEC 68-2-27) | 1000 m/s ² (6 ms) |
| Operating temperature | -40...+85 °C |
| Storage temperature | -40...+85 °C |
| Material shaft | Stainless steel |
| Material housing | Aluminium |
| Weight approx. | 350 g (ST), 400 g (MT) |

TECHNICAL DATA electrical

| | |
|-----------------------------|--|
| Supply voltage | DC 10 - 30 V (SELV) |
| Max. current w/o load ST/MT | 220 mA/ 250 mA |
| EMC | Noise emission according to EN 50081-2 Immunity to interference according to EN 50082-2 |
| Interface | CAN High-Speed according to ISO/DIS 11898 |
| Protocol | CAN 2.0 A |
| General design | as per EN 61010-Part 1, protection class III, contamination level 2, overvoltage class II |
| Resolution singleturn | 10 to 14 Bit |
| Resolution multiturn | 12 Bit |
| Programmable | Direction, limit values |
| Linearity | ± ½ LSB (± 1 LSB for resolution 13, 14, 25, 26 Bit) |
| Output code | Binary |
| Updating of values | every millisecond |
| Basic identifier | set via DIP switches |
| Baud rate | set via DIP switches within a range of 10 through 1000 Kbit/s |
| Bus termination resistor | set via DIP switches |

TECHNICAL DATA electrical (continued)

| | |
|------------|--|
| Connection | Cable radial or axial Conin radial or axial, cw or ccw Bus cover with: - 3 sealed cable exits - double conin 9 pole radial cw - 4 pole M12 f. "tico" display + 2 sealed cable exits |
|------------|--|

DIMENSIONAL DRAWINGS

see chapter "Dimensional drawings ACURO industry", starting page 146

PIN ASSIGNMENT Bus cover with double conin

| Conin PIN | Bus cover with | |
|-----------|---------------------|---------------------|
| | Pin insert (IN) | Socket insert (OUT) |
| 1 | CAN in + | CAN out + |
| 2 | CAN in - | CAN out- |
| 3 | CAN GND in | CAN GND out |
| 4 | N.C. | N.C. |
| 5 | N.C. | N.C. |
| 6 | N.C. | N.C. |
| 7 | UB in | UB out |
| 8 | 0 V in | 0 V out |
| 9 | N.C. | N.C. |
| screen | screen ¹ | screen ¹ |

¹ screen connected with encoder housing

PIN ASSIGNMENT with conin or cable

| Conin Pin | TPE cable | Cable pairs | Signal |
|-----------|--------------|-------------|-------------|
| 7 | yellow | Pair 1 | CAN in+ |
| 2 | green | | CAN in - |
| 4 | pink | Pair 2 | CAN out + |
| 5 | grey | | CAN out - |
| 3 | blue | Pair 3 | CAN GND in |
| 11 | brown | | CAN GND out |
| 12 | white 0.5 mm | | UB in |
| 10 | brown 0.5 mm | | 0 V in |
| screen | screen | screen | screen |

PIN ASSIGNMENT Bus cover with 3 sealed cable exits

| Connection block KL 1 (10 pole) | |
|---------------------------------|------------------------|
| No. | Signal name |
| 1 | UB in (DC 10-30V) |
| 2 | 0 V in |
| 3 | CAN in - (dominant L) |
| 4 | CAN in + (dominant H) |
| 5 | CAN GND in |
| 6 | CAN GND out |
| 7 | CAN out + (dominant H) |
| 8 | CAN out - (dominant L) |
| 9 | 0 V out |
| 10 | UB out (DC 10-30V) |

ACCESSORIES

| | Ordering code |
|--|---------------|
| Clamping eccentric for synchro flange | 0 070 655 |
| Diaphragm coupling (hub 6/6 mm) | 3 520 081 |
| Diaphragm coupling (hub 10/10 mm) | 3 520 088 |
| Mating connector for connection I (Bus input, 9 pole, bushing, cw) | 3 539 294 |
| Mating connector for connection I (Bus output, 9 pole, pins, cw) | 3 539 293 |
| Mating connector for connection C; D (12 pole, cw) | 3 539 202 |
| Mating connector for connection G; H (12 pole, ccw) | 3 539 229 |
| "Tico" display for connection T | |
| (Caution: Neutralizes ohmic isolation) | 0 731 205 |
| Connection cable bus cover (connection T) to "tico" | 3 539 575 |

ORDERING INFORMATION

| Type | Resolution | Supply voltage | Flange, Protection, Shaft | Interface | Connection |
|---|---|----------------------|--|----------------------|--|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| AC58 | 0010 10 Bit ST 0012 12 Bit ST 0013 13 Bit ST 0014 14 Bit ST 1212 12 Bit MT+12 Bit ST 1213 12 Bit MT+13 Bit ST 1214 12 Bit MT+14 Bit ST | E DC 10 - 30 V | S.41 Synchro, IP64, 6x10mm S.71 Synchro, IP67 ¹ , 6x10mm K.42 Clamping, IP64, 10x19.5mm K.72 Clamping, IP67 ¹ , 10x19.5mm K.46 Clamping, IP64, 9.52x19.5mm K.76 Clamping, IP67 ¹ , 9.52x19.5mm F.42 Hubshaft with tether, IP64, 10x19.5mm hollow shaft F.47 Hubshaft with tether, IP64, 12x19.5mm hollow shaft F.46 Hubshaft with tether, IP64, 9.52x19.5mm hollow shaft Q.42 Square, IP64, 10x19.5mm Q.72 Square, IP67 ¹ , 10x19.5mm Q.46 Square, IP64, 9.52x19.5mm Q.76 Square, IP67 ¹ , 9.52x19.5mm | CL CAN L2 | A Cable axial ¹ B Cable radial ¹ C Conin 12 pole axial cw ¹ D Conin 12 pole radial cw ¹ G Conin 12 pole axial ccw ¹ H Conin 12 pole radial ccw ¹ I Bus cover with double conin 9 pole radial cw Z Bus cover with 3 sealed cable exits |
| ¹ Protection class IP67 not available in combination with cable and conin connection (A - H) Preferably available versions are printed in bold type. | | | | | |