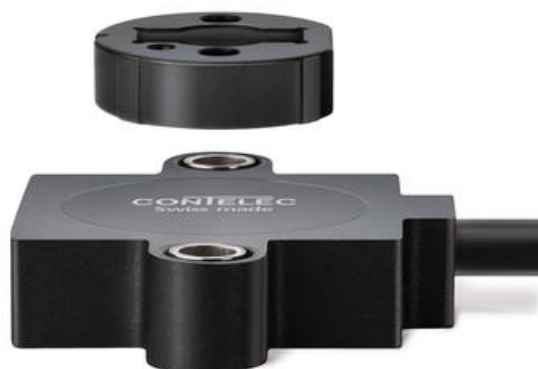


## BERÖRINGSFRI VINKELGIVARE VERT-X 31E

VERT-X 31E MH-C

- Hög mätnoggrannhet
- Obegränsad mekanisk livslängd
- Radial och axial tolerans



### PRODUKTBESKRIVNING

Vert-X 31E - Beröringsfri vinkelgivare med hög tolerans

Med fysiskt litet mått och mycket flexibla utgångsmöjligheter skräddarsyr du enkelt din karaktär på givaren

Givaren monteras på fast del och magneten på rörlig del. Ingen radial eller axial belastning ger oändlig mekanisk livslängd. Välj på ett antal olika magneter helt beroende på just dina behov av avstånd och funktion.

För beställning, använd nedan beställningsnycklar och/eller kontakta oss.

Vert-X 31E 5 V 10..90 Ub

| Output characteristics                         |          |                                               |  |  |  |  |  |  |  |
|------------------------------------------------|----------|-----------------------------------------------|--|--|--|--|--|--|--|
| Positive gradient CW                           | Standard | 1                                             |  |  |  |  |  |  |  |
| Positive gradient CCW                          | Optional | 2                                             |  |  |  |  |  |  |  |
| Redundant, positive gradient CW                | Optional | 3                                             |  |  |  |  |  |  |  |
| Redundant, positive gradient CCW               | Optional | 4                                             |  |  |  |  |  |  |  |
| Redundant, crossed signal curves               | Optional | 5                                             |  |  |  |  |  |  |  |
| Positive gradient CW with 1 switch output*     | Optional | A                                             |  |  |  |  |  |  |  |
| Positive gradient CCW with 1 switch output*    | Optional | B                                             |  |  |  |  |  |  |  |
| Positive gradient CW with 2 switch outputs*    | Optional | C                                             |  |  |  |  |  |  |  |
| Positive gradient CCW with 2 switch outputs*   | Optional | D                                             |  |  |  |  |  |  |  |
| Sense of rotation settable                     | Optional | E                                             |  |  |  |  |  |  |  |
| Zero point & sense of rotation settable        | Optional | F                                             |  |  |  |  |  |  |  |
| Middle point & sense of rotation settable      | Optional | G                                             |  |  |  |  |  |  |  |
| Start + end point & sense of rotation settable | Optional | H                                             |  |  |  |  |  |  |  |
| Programmable with Vert-X EasyAdapt             | Optional | P                                             |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Electrical connection                          |          |                                               |  |  |  |  |  |  |  |
| 4                                              | Standard | Cable 3pole                                   |  |  |  |  |  |  |  |
| 6                                              | Optional | Cable 6pole                                   |  |  |  |  |  |  |  |
| 9                                              | Optional | Special cable ; Special wires                 |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Length of cable                                |          |                                               |  |  |  |  |  |  |  |
| 02                                             | Standard | 1.0m                                          |  |  |  |  |  |  |  |
| 06                                             | Optional | 3.0m                                          |  |  |  |  |  |  |  |
| 10                                             | Optional | 5.0m                                          |  |  |  |  |  |  |  |
| 99                                             | Optional | Special length                                |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Power supply voltage                           |          |                                               |  |  |  |  |  |  |  |
| 5VDC                                           | Standard | 2                                             |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Output signal                                  |          |                                               |  |  |  |  |  |  |  |
| 10% ... 90% Ub                                 | Standard | 2                                             |  |  |  |  |  |  |  |
| x% ... y% Ub (within 5 ... 95%)                | Optional | 3                                             |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Vert-X 3 1 E 6 a 7 3 6 2 2 1 4 0 2             |          |                                               |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Electrical angle                               |          |                                               |  |  |  |  |  |  |  |
| 36                                             | Standard | Electrical angle 360°                         |  |  |  |  |  |  |  |
| xx                                             | Optional | 03 to 35; Declaration in 10° steps            |  |  |  |  |  |  |  |
| 99                                             | Optional | Special angle                                 |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Sensor principle                               |          |                                               |  |  |  |  |  |  |  |
| 7                                              | MH-C     |                                               |  |  |  |  |  |  |  |
| 8                                              | MH-C2    |                                               |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Mounting hole                                  |          |                                               |  |  |  |  |  |  |  |
| a                                              | Standard | Through-hole ø 4.4mm                          |  |  |  |  |  |  |  |
| b                                              | Optional | Through-hole ø 4.4mm with counterbore ø 7.4mm |  |  |  |  |  |  |  |
|                                                |          |                                               |  |  |  |  |  |  |  |
| Mechanical version                             |          |                                               |  |  |  |  |  |  |  |
| 31E5                                           | Standard | Magnetic actuator type 5                      |  |  |  |  |  |  |  |
| 31E6                                           | Standard | Magnetic actuator type 6                      |  |  |  |  |  |  |  |
| 31E7                                           | Optional | Magnetic actuator type 7                      |  |  |  |  |  |  |  |
| 31E9                                           | Optional | Special magnetic actuator                     |  |  |  |  |  |  |  |

|        |   |   |   |   |   |   |   |   |   |   |   |                                  |          |                                               |
|--------|---|---|---|---|---|---|---|---|---|---|---|----------------------------------|----------|-----------------------------------------------|
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Output characteristics</b>    |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | Positive gradient CW             | Standard | 1                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Positive gradient CCW            | Optional | 2                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Redundant, positive gradient CW  | Optional | 3                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Redundant, positive gradient CCW | Optional | 4                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Redundant, crossed signal curves | Optional | 5                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Electrical connection</b>     |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 4                                | Standard | Cable 3pol                                    |
|        |   |   |   |   |   |   |   |   |   |   |   | 6                                | Optional | Cable 6pol                                    |
|        |   |   |   |   |   |   |   |   |   |   |   | 9                                | Optional | Special cable ; Special wires                 |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Length of cable</b>           |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 02                               | Standard | 1.0m                                          |
|        |   |   |   |   |   |   |   |   |   |   |   | 06                               | Optional | 3.0m                                          |
|        |   |   |   |   |   |   |   |   |   |   |   | 10                               | Optional | 5.0m                                          |
|        |   |   |   |   |   |   |   |   |   |   |   | 99                               | Optional | Special length                                |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Output signal</b>             |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | PWM                              | Standard | 4                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Power supply voltage</b>      |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 5VDC                             | Standard | 2                                             |
| Vert-X | 3 | 1 | E | 6 | a | 7 | 3 | 6 | 2 | 4 | 1 | 4                                | 0        | 2                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Electrical angle</b>          |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 36                               | Standard | Electrical angle 360°                         |
|        |   |   |   |   |   |   |   |   |   |   |   | xx                               | Optional | 03 to 35; Declaration in 10° steps            |
|        |   |   |   |   |   |   |   |   |   |   |   | 99                               | Optional | Special angle                                 |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Sensor principle</b>          |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 7                                | MH-C     |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Mounting hole</b>             |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | a                                | Standard | Through-hole ø 4.4mm                          |
|        |   |   |   |   |   |   |   |   |   |   |   | b                                | Optional | Through-hole ø 4.4mm with counterbore ø 7.4mm |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Mechanical version</b>        |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E5                             | Standard | Magnetic actuator type 5                      |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E6                             | Standard | Magnetic actuator type 6                      |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E7                             | Optional | Magnetic actuator type 7                      |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E9                             | Optional | Special magnetic actuator                     |

Vert-X 31E 5 V / SPI

|        |   |   |   |   |   |   |   |   |   |   |   |                                  |          |                                               |
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|        |   |   |   |   |   |   |   |   |   |   |   | <b>Output characteristics</b>    |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | Positive gradient CW             | Standard | 1                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Positive gradient CCW            | Optional | 2                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Redundant, positive gradient CW  | Optional | 3                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Redundant, positive gradient CCW | Optional | 4                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | Redundant, crossed signal curves | Optional | 5                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Electrical connection</b>     |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 1                                | Optional | Cable 10pol                                   |
|        |   |   |   |   |   |   |   |   |   |   |   | 6                                | Standard | Cable 6pol                                    |
|        |   |   |   |   |   |   |   |   |   |   |   | 9                                | Optional | Special cable ; Special wires                 |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Length of cable</b>           |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 02                               | Standard | 1.0m                                          |
|        |   |   |   |   |   |   |   |   |   |   |   | 06                               | Optional | 3.0m                                          |
|        |   |   |   |   |   |   |   |   |   |   |   | 10                               | Optional | 5.0m                                          |
|        |   |   |   |   |   |   |   |   |   |   |   | 99                               | Optional | Special length                                |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Output signal</b>             |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | SPI                              | Standard | 8                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Power supply voltage</b>      |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 5VDC                             | Standard | 2                                             |
| Vert-X | 3 | 1 | E | 6 | a | 7 | 3 | 6 | 2 | 8 | 1 | 6                                | 0        | 2                                             |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Electrical angle</b>          |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 36                               | Standard | Electrical angle 360°                         |
|        |   |   |   |   |   |   |   |   |   |   |   | xx                               | Optional | 03 to 35; Declaration in 10° steps            |
|        |   |   |   |   |   |   |   |   |   |   |   | 99                               | Optional | Special angle                                 |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Sensor principle</b>          |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 7                                | MH-C     |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Mounting hole</b>             |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | a                                | Standard | Through-hole ø 4.4mm                          |
|        |   |   |   |   |   |   |   |   |   |   |   | b                                | Optional | Through-hole ø 4.4mm with counterbore ø 7.4mm |
|        |   |   |   |   |   |   |   |   |   |   |   | <b>Mechanical version</b>        |          |                                               |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E5                             | Standard | Magnetic actuator type 5                      |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E6                             | Standard | Magnetic actuator type 6                      |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E7                             | Optional | Magnetic actuator type 7                      |
|        |   |   |   |   |   |   |   |   |   |   |   | 31E9                             | Optional | Special magnetic actuator                     |

Vert-X 31E 24 V / 0,1-10 V



| Output characteristics |                                                |          |   |  |    |  |  |  |  |
|------------------------|------------------------------------------------|----------|---|--|----|--|--|--|--|
|                        | Positive gradient CW                           | Standard | 1 |  |    |  |  |  |  |
|                        | Positive gradient CCW                          | Optional | 2 |  |    |  |  |  |  |
|                        | Positive gradient CW with 1 switch output*     | Optional | A |  |    |  |  |  |  |
|                        | Positive gradient CCW with 1 switch output*    | Optional | B |  |    |  |  |  |  |
|                        | Positive gradient CW with 2 switch outputs*    | Optional | C |  |    |  |  |  |  |
|                        | Positive gradient CCW with 2 switch outputs*   | Optional | D |  |    |  |  |  |  |
|                        | Sense of rotation settable                     | Optional | E |  |    |  |  |  |  |
|                        | Zero point & sense of rotation settable        | Optional | F |  |    |  |  |  |  |
|                        | Middle point & sense of rotation settable      | Optional | G |  |    |  |  |  |  |
|                        | Start + end point & sense of rotation settable | Optional | H |  |    |  |  |  |  |
|                        | Programmable with Vert-X EasyAdapt             | Optional | P |  |    |  |  |  |  |
|                        |                                                |          |   |  |    |  |  |  |  |
|                        |                                                |          |   |  |    |  |  |  |  |
|                        |                                                |          |   |  |    |  |  |  |  |
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|                        |                                                |          |   |  |    |  |  |  |  |
|                        |                                                |          |   |  |    |  |  |  |  |
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|                        |                                                |          |   |  |    |  |  |  |  |
|                        |                                                |          |   |  | </ |  |  |  |  |





Temperaturområde till

85 °C

Upplösning

12 bit

