## Special interfaces for the TIGRE encoders

1) Interface from 5 V to 24 V opened collector

TTL, 5 V input connector description


| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | $0 V$ | - | - | - | A | +5 V | B | Z |

(shielding is connected to the connector body)
TTL, 24 V input connector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | $0 V$ | - | +24 V | - | A | - | B | Z |

(shielding is connected to the connector body)
2) Interface from 5 V TTL to 5 V RS422

TTL, 5 V input connector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signál | - | $0 \vee$ | - | - | - | A | +5 V | B | Z |

(shielding is connected to the connector body)
RS422, 5 V output connector

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | -A | 0 V | -B | +24 V | -Z | A | +5 V | B | Z |

(shielding is connected to the connector body)

## 3) Interface from 5 V TTL to negated $A+/ A-/ B+/ B-/ Z+/ Z-24 V$ opened collector

TTL, 5 V input connector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | $0 \vee$ | - | - | - | A | +5 V | B | Z |

(shielding is connected to the connector body)

## A+/A-/B+/B-/Z+/Z-, 24 V openned collector output conector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | -A | 0 V | -B | +24 V | +Z | A | - | B | Z |

(shielding is connected to the connector body)

## 4) Interface from 5 V to 24 V PNP NPN

TTL, 5 V input connector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | 0 V | - | - | - | A | +5 V | B | Z |

(shielding is connected to the connector body)
24 V PNP NPN output conector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | OV | - | $+24 V$ | - | A | - | B | Z |

(shielding is connected to the connector body)
5) Interface for the pulses multiplication by integer

TTL, 5 V input connector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | 0 V | - | - | - | A | +5 V | B | Z |

(shielding is connected to the connector body)
TTL, 5V (pulses are multiplied by integer) - output connector description

| Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signal | - | 0 V | - | - | - | A | +5 V | B | Z |

(shielding is connected to the connector body)

