

# Series MS

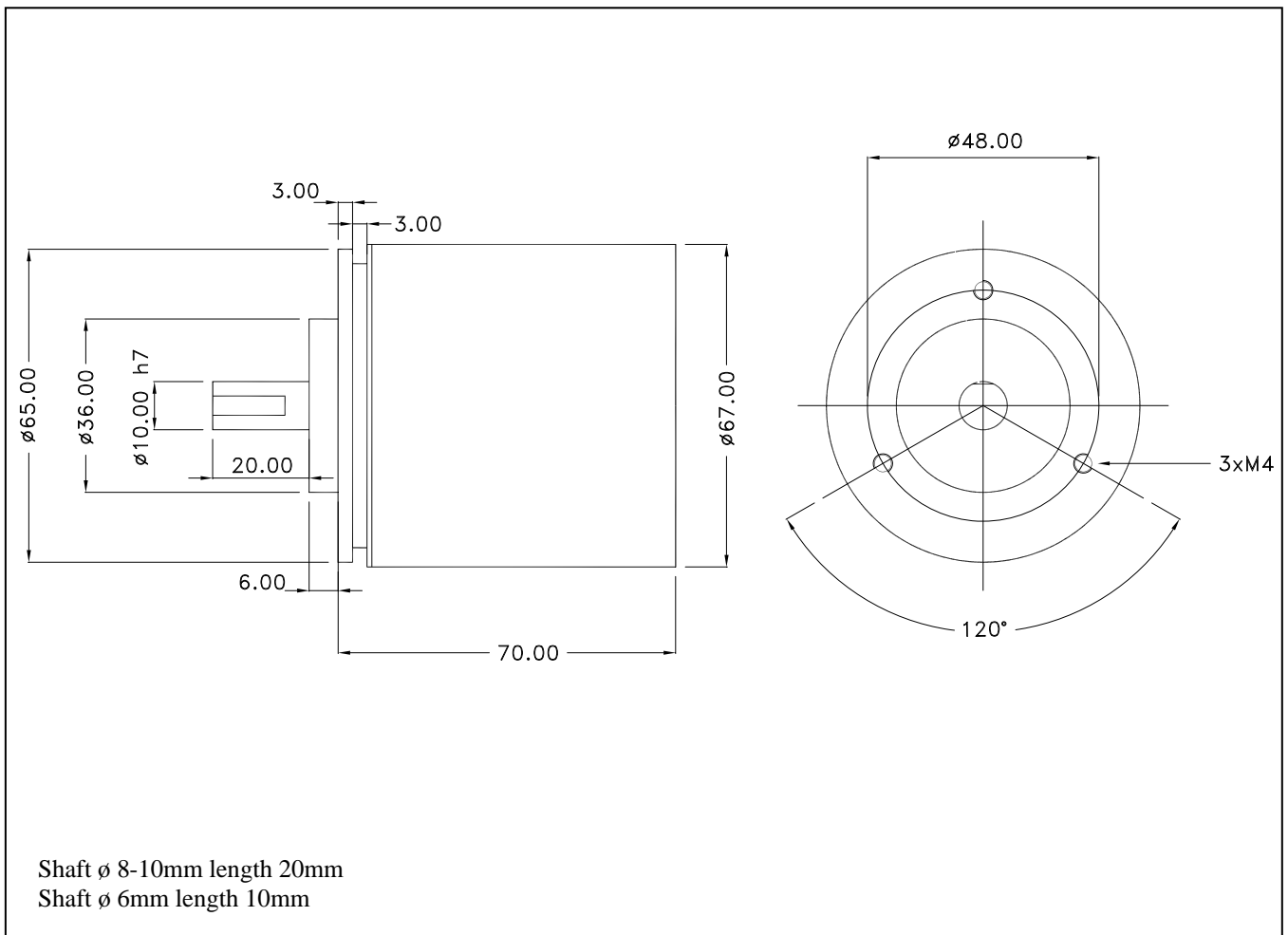
Absolute single turn shaft encoder  
high resolution (ø65mm)

## Mechanics Data

|                |                          |
|----------------|--------------------------|
| Cover:         | Lacquered aluminium      |
| Body:          | Aluminium                |
| Solid shaft:   | Stainless steel          |
| Bearings:      | 2, ballraces             |
| Weight:        | Approx.300gr.            |
| Protection:    | IP65                     |
| Rpm:           | 6000 Max                 |
| Torque:        | 5Ncm                     |
| Inertia:       | 100gcm <sup>2</sup>      |
| Shaft loading: | Axial 100N - Radial 100N |



Dimensions in mm.



**Series MS**

**Electronics Data**

Power supply: from 5 to 24V depends on the electronics circuit  
 Current consumption: 40/80mA depends on the electronics circuit  
 Permissible load: 40mA  
 Frequency: 50KHz (standard in LSB)  
 Protections: Against short circuit, reversal polarity  
 Operating Temp.: -20/+60°C

**Ordering code**

Series **M S** - **\* 3 \* \* \*** / **Pulses** (Max 8.192)  
See page pulses

|                                      |  |  |  |
|--------------------------------------|--|--|--|
| <b>Shaft</b>                         | <b>Outputs</b>   | <b>Options</b>   | <b>Connections</b>   |
| 3 = Ø 6mm<br>6 = Ø 8mm<br>1 = Ø 10mm | 1 = GRAY NPN 11/24V<br>2 = GRAY Push-Pull 11/24V<br>3 = GRAY TTL 5V<br>4 = BIN. NPN 11/24V<br>5 = BIN. Push-Pull 11/24V<br>6 = BIN. TTL 5V<br>7 = BCD NPN 11/24V<br>8 = BCD Push-Pull 11/24V<br>9 = BCD TTL 5V | A = None<br>B = Open Coll.<br>P = Parity parity<br>D = Parity Odd<br>E = GRAY Excess<br>S = Strobe<br>Z = Zero settings<br>(only for output 2 e 5) | 3 = Cable Radial<br>9 = Cable Axial<br>R = 9413 Radial<br>N = 9413 Axial<br><br>5 = 9416/9426 Rad<br>2 = 9416/9426 Ass<br>(contact Hohner) |

**Connections**

|                             | 0<br>Volt             | +<br>Volt        | 0<br>2                | 1<br>2                | 2<br>2                | 3<br>2                     | 4<br>2           | 5<br>2                     | 6<br>2                     | 7<br>2                               | 8<br>2                | 9<br>2      | 10<br>2               | 11<br>2               | M                          | DIR<br><->                 |                       |
|-----------------------------|-----------------------|------------------|-----------------------|-----------------------|-----------------------|----------------------------|------------------|----------------------------|----------------------------|--------------------------------------|-----------------------|-------------|-----------------------|-----------------------|----------------------------|----------------------------|-----------------------|
| <b>Connector 9416 12p</b>   | P1                    | P2               | P3                    | P4                    | P5                    | P6                         | P7               | P8                         | P9                         | P10                                  | P11                   |             |                       |                       |                            | P12                        |                       |
| <b>Conn 9416 16p - 9413</b> | P1                    | P2               | P3                    | P4                    | P5                    | P6                         | P7               | P8                         | P9                         | P10                                  | P11                   | P12         | P13                   | P14                   | P15                        | P16                        |                       |
| <b>Cable</b>                | B<br>L<br>A<br>C<br>K | B<br>L<br>U<br>E | B<br>R<br>O<br>W<br>N | B<br>E<br>I<br>G<br>E | G<br>R<br>E<br>E<br>N | Y<br>E<br>L<br>L<br>O<br>W | P<br>I<br>N<br>K | V<br>I<br>O<br>L<br>E<br>T | O<br>R<br>A<br>N<br>G<br>E | T<br>R<br>A<br>N<br>S<br>P<br>A<br>R | W<br>H<br>I<br>T<br>E | R<br>E<br>D | W<br>H<br>I<br>T<br>E | G<br>R<br>E<br>E<br>N | V<br>I<br>O<br>L<br>E<br>T | Y<br>E<br>L<br>L<br>O<br>W | G<br>R<br>E<br>E<br>N |

Legend connections:  
 M = optional outputs:  
 DIR <-> = is the signal direction: clockwise or anticlockwise  
 Clockwise standard  
 Anticlockwise connect DIR <-> to **0Volt**.