

## Serie SS & SSM Series SS & SSM

**Absoluter Single- und Multiturn Drehgeber  
mit SSI / Biss C und Sin / Cos Schnittstelle bis 33 Bit**

**Absolute Encoder singleturn and multiturn  
with Reset SSI / Biss C and sin-cos Ø58mm up to 33Bits**

### Mechanische Daten / Mechanics Data

Haube / Cover:	Aluminium / Aluminium
Flansch / Body:	Aluminium / Aluminium
Welle / Shaft:	Edelstahl / Stainless steel
Kugellager / Bearings:	doppelt gelagert / 2 ballraces
Gewicht / Weight:	400 g
IP Schutzart / IP protection:	IP67
Umdrehungen / RPM:	max. 6000
Drehmoment / Torque:	< 0.5Ncm
Trägheitsmoment / Inertia:	20gcm <sup>2</sup>
Wellenbelastung / Shaft Load:	Axial 20N – Radial 40N (Welle / shaft Ø 6mm) Axial 40N – Radial 60N (Welle / shaft Ø 10mm)

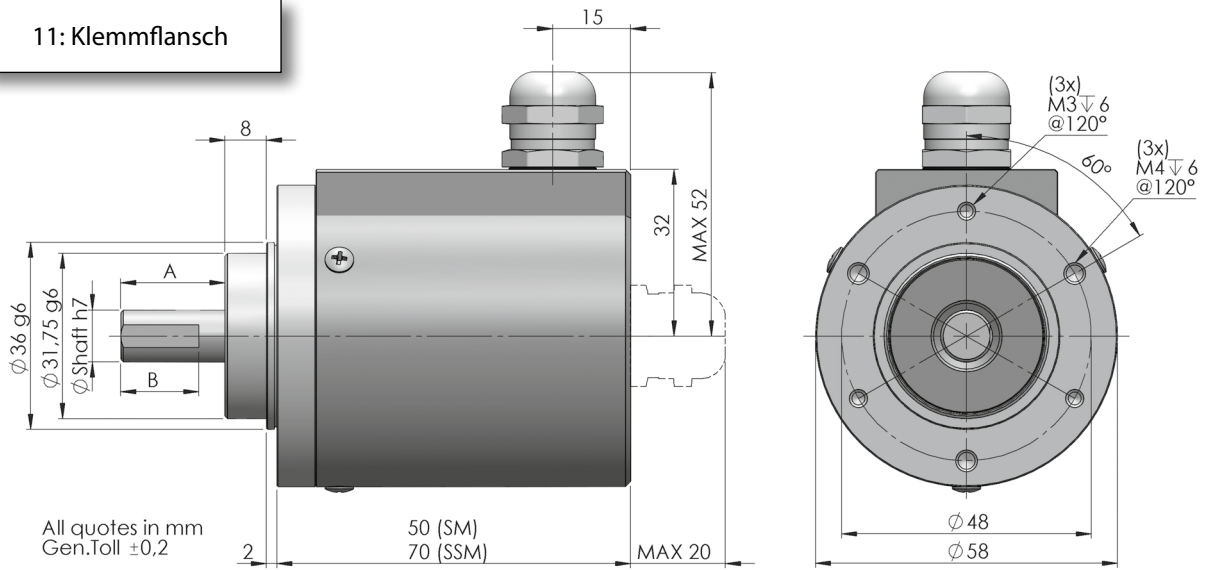


### Elektronische Daten / Electronics Data

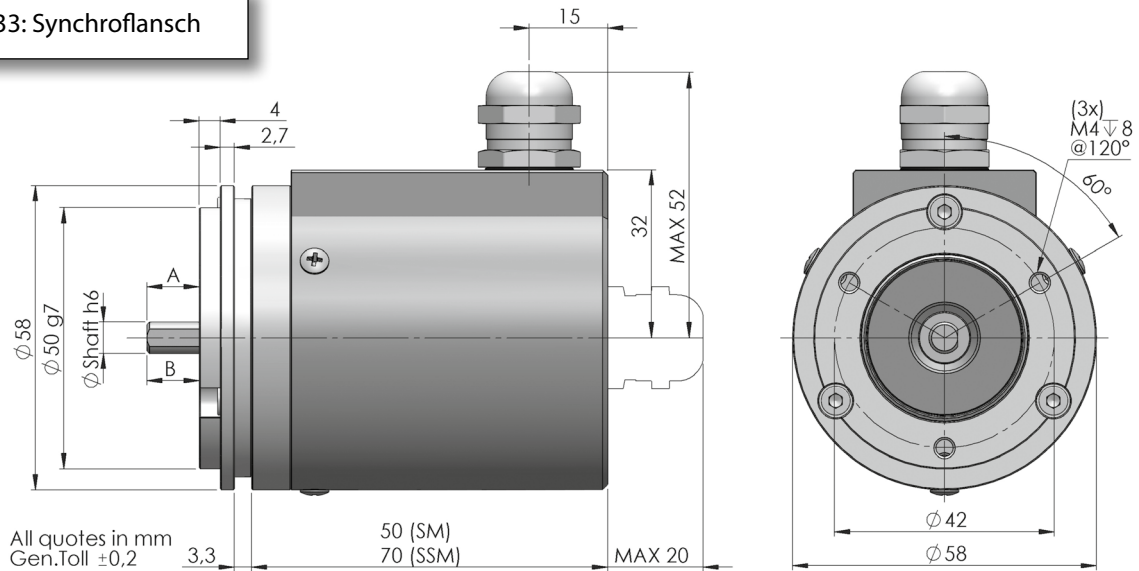
Auflösung / Resolution:	ST: Single turn max 17 Bit MT: Multiturn 33 bit (17 Bit ST - 16bit MT)
Versorgungsspannung / Power Supply:	10-28V +/- 5%
max. Stromaufnahme / Current Cons.:	160mA
Schnittstelle / Interface:	SSI / BiSS C
Monoflop:	20usec
Ausgangsdaten / Output Data:	RS422
Codeart / Type of Code:	Gray / Binary
Betriebstemperatur / Operating temperature:	Standard -20 / +70°C (-40°+100° auf Anfrage / on request)

Serie SS & SSM

11: Klemmflansch



33: Synchroflansch



## Bestellbezeichnung / Ordering Code

****	**	*	*	*	/	****
Serie Series	Welle und Flansche Shaft and Flanges	Ausgang Output	Anschlüsse Connections	Optionen Options		BIT / BIT
SS = Singleturn SSM = Multiturn	33 = $\varnothing$ 6mm L=10 Sincro Flange  11 = $\varnothing$ 10mm L = 20 Clamping Flange	3 = SSI Gray 4 = SSI Binary  5 = SSI Gray + SinCos 2048 1Vpp A = BissC + SinCos 2048 1Vpp	<b>Kabel / Cable</b> 9 = Cable Axi 3 = Cable Rad  <b>M23 12p</b> 1 = 9416 Axi CW 2 = 9416 Rad CW 4 = 9416 Axi CCW 5 = 9416 Rad CCW	0= None Z= Reset 5 = 5 Volt K= Connection K		Single Turn  12 13 14 15 16 17 (360) *
						Multi Turn  12 16

## Anschlüsse / Connections

Cable Standard	9416 12P Standard con- nection	9416 12P Connection K		
<b>Blau / Blue</b>	<b>3</b>	<b>1</b>	<b>CLOCK+</b>	Input Clock +
<b>Weiß/ Blau White/ Blue</b>	<b>11</b>	<b>2</b>	<b>CLOCK-</b>	Input Clock -
<b>Gelb / Yellow</b>	<b>2</b>	<b>3</b>	<b>DATA+</b>	Output Data +
<b>Weiß / Gelb White / Yellow</b>	<b>10</b>	<b>4</b>	<b>DATA-</b>	Output Data -
Grün / Green	4	5	A	Channel A (SinCos version)
Rosa / Pink	6	6	B	Channel B (SinCos version)
Grün / Gelb Green / Yellow	7	7	A-	Channel A- (SinCos version)
<b>Schwarz / Black</b>	<b>5</b>	<b>8</b>	<b>UP/DOWN</b>	(default: CW increase, to invert connect this pin to 0V)
	<b>12</b>	<b>nc</b>	<b>GND OUT</b>	Internally connected with Pin 1. (only connection K)
Violett / Violet	9	10	B-	Channel B- (SinCos version)
<b>Braun / Brown</b>	<b>8</b>	<b>11</b>	<b>+VCC</b>	+Vcc
<b>Beige / Beige</b>	<b>1</b>	<b>12</b>	<b>0V</b>	0V

**OPTION RESET: Reset Knopf auf der Haube**  
Kanal A, A/, B, B/ Preset nur mit Ausgang 5V und A

**RESET OPTION: Reset button on the cover.**  
Channel A, /A, B, /B, present only with output 5 and A.