

## Serie SS & SSM Series SS & SSM

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

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

### Mechanische Daten / Mechanics Data

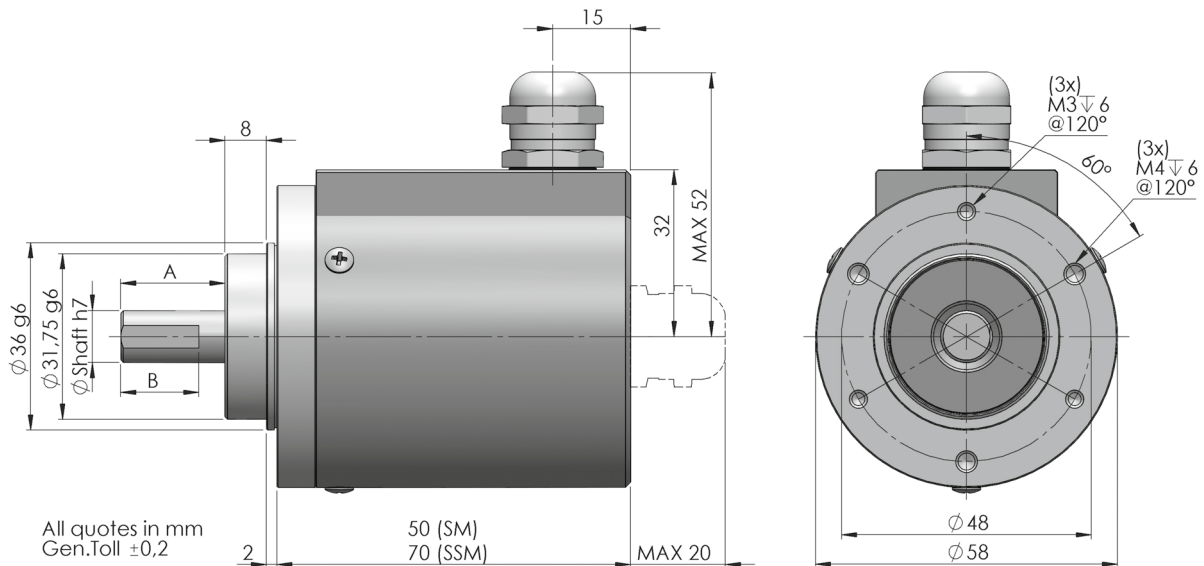
Haube / Cover:	Aluminium / Aluminium
Flansch / Body:	Aluminium / Aluminium
Welle / Shaft:	Edelstahl / Stainless steel
Kugellager / Bearings:	doppelt gelagert / 2 ballraces
Gewicht / Weight:	400 g
IP Schutzart / IP protection:	IP67
Umdrehungen / RPM:	max. 6000
Drehmoment / Torque:	< 0.5Ncm
Trägheitsmoment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



#### 11: Klemmflansch / Clamping flange

#### Welle / Shaft

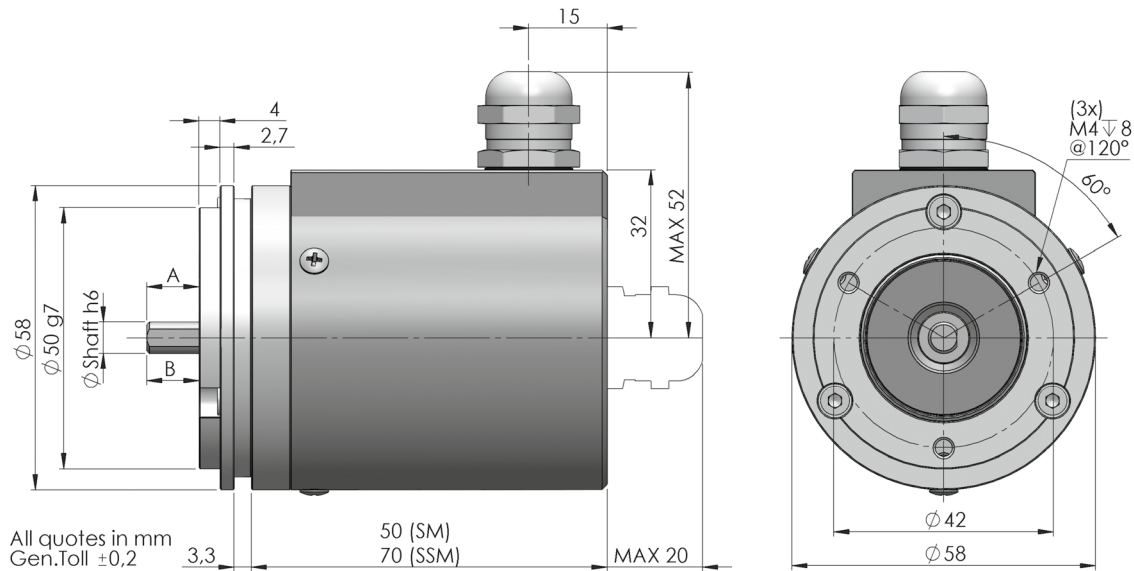
Ø	A	B
10 mm	20 mm	15 mm



Alle Bilder sind Beispielbilder und können nicht als verbindlich eingestuft werden  
All images are indicative and can not be considered binding the purpose of supplying

**33: Synchroflansch / Synchro flange**

Welle / Shaft		
∅	A	B
6 mm	10 mm	9 mm



**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)

## Bestellbezeichnung / Ordering Code

****	**	*	*	*	/	****
Serie Series	Welle und Flansche Shaft and Flanges	Ausgang Output	Anschlüsse Connections	Optionen Options		BIT / BIT
SS = Singleturn SSM = Multiturn	33 = ø 6mm L = 10 Synchro Flange  11 = ø 10mm L = 20 Clamping Flange	3 = SSI Gray 4 = SSI Binary  5 = SSI Gray + 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  <b>M12 8p</b> S = 94M12 Axi T = 94M12 Rad	0 = None 5 = 5 Volt K = Connection K Z = Reset (push button on cover) W = Preset on connector		Single Turn  12 13 14 15 16 17  Multi Turn  12 16

## Anschlüsse / Connections

Kabel Standard / Cable standard	9416 12P Standard connection	9416 12P Connection K	94M12 8p		
Beige / Beige	1	12	1	0V	0V
Gelb / Yellow	2	3	3	DATA+	Output Data +
Blau / Blue	3	1	5	CLOCK+	Input Clock +
Grün / Green	4	5		A	Channel A (SinCos version)
Schwarz / Black	5	8	8	UP/DOWN	(default: CW increase, to invert connect this pin to 0V)
Rosa / Pink	6	6		B	Channel B (SinCos version)
Grün / Gelb Green / Yellow	7	7		A-	Channel A- (SinCos version)
Braun / Brown	8	11	2	+VCC	+Vcc
Lila / Violet	9	10		B-	Channel B- (SinCos version)
Weiß / Gelb White / Yellow	10	4	4	DATA-	Output Data -
Weiß / Blau White / Blue	11	2	6	GND OUT	Internally connected with Pin 1. (only connection K)
	12	nc	7	PRESET	With option W

**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.