

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet



Clamping flange

- Compact design
- SUCOnet or Hengstler-G1-Protocol
- Parameterizable: preset, direction, scaling factor, resolution
- PC communication via RS 485 with Hengstler-G1-Protocol



**TECHNICAL DATA
mechanical**

Housing diameter	58 mm
Shaft diameter	6 mm / 10 mm (Solid shaft) 10 mm / 12 mm (Hubshaft)
Flange (Mounting of housing)	Synchro flange, Clamping flange, Tether, Square flange
Protection class shaft input (EN 60529)	IP64
Protection class housing (EN 60529)	IP64
Shaft load axial / radial	40 N / 60 N
Max. speed	max. 6000 rpm (continuous), max. 12 000 rpm (short term)
Starting torque typ. ¹	≤ 0.1 Nm
Vibration resistance (DIN EN 60068-2-6)	100 m/s ²
Shock resistance (DIN EN 60068-2-27)	1000 m/s ²
Operating temperature	-10 °C ... +60 °C
Storage temperature	-25 °C ... +85 °C
Material shaft	Stainless Steel
Material housing	Aluminum
Weight	approx. 260 g (ST) / 310 g (MT)
Connection	Cable, axial or radial

¹ at 20°C

**TECHNICAL DATA
electrical**

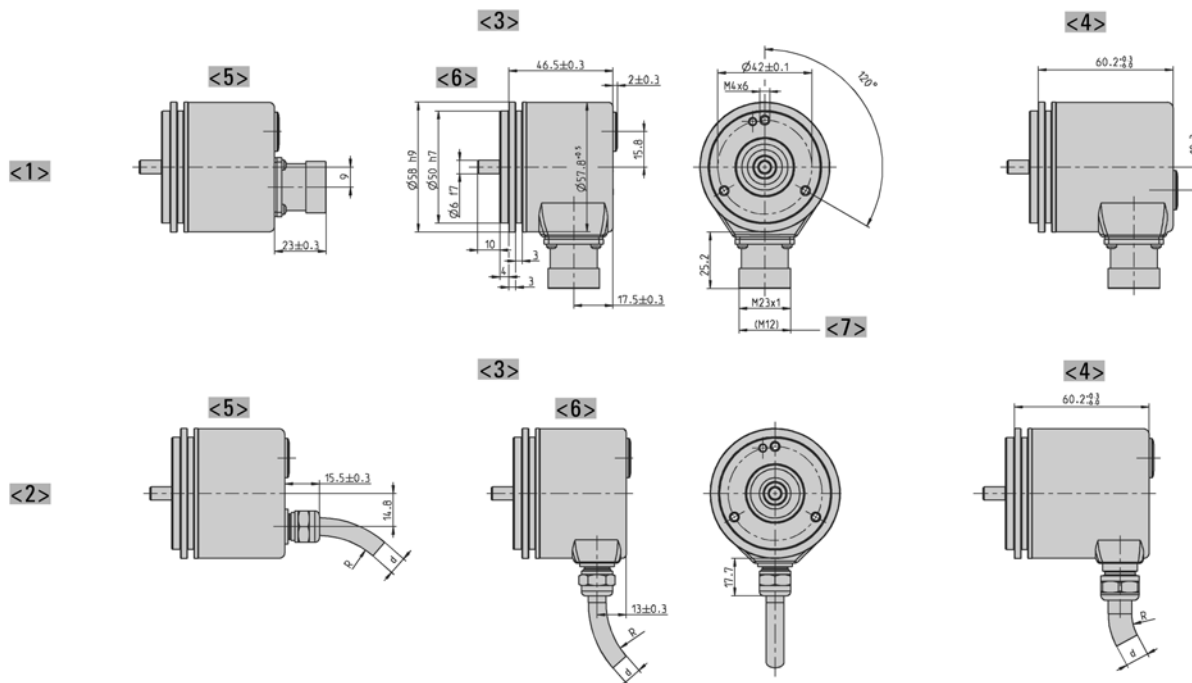
Supply voltage	DC 10-30 V
Max. current w/o load	200 mA
Resolution singleturn	10 - 13 Bit
Resolution multiturn	12 Bit
Output code	Binary
Drives	RS485
Linearity	± ½ LSB (± 1 LSB for resolution 13 and 25 Bit)
Profile/ protocol	SUCOnet-K1 or Hengstler-G1
Programmable	Resolution, Direction
Address switch	set via DIP switches
Bus termination resistor	set via DIP switches

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet

DIMENSIONED DRAWINGS

Synchro flange "S"



- <1> Connection M23 (Conin)
- <2> Connection cable
- <3> Interface: BiSS, SSI, ST-Parallel
- <4> Interface: MT-Parallel (only with cable), Fieldbus, SSI-P
- <5> axial
- <6> radial
- <7> Value in brackets alternative at SSI

- Cable bending radius R for flexible installation $\geq 15 \times$ cable diameter
- Cable bending radius R for fixed installation $\geq 7.5 \times$ cable diameter
- Cable \varnothing d BiSS/SSI/SSI-P: $7,1^{+1,2}$
- Cable \varnothing d ST-P: $7,8^{+0,9}$
- Cable \varnothing d MT-P: $9,3^{+1,3}$
- Cable \varnothing d Fieldbus: $7,1^{+1,2}$

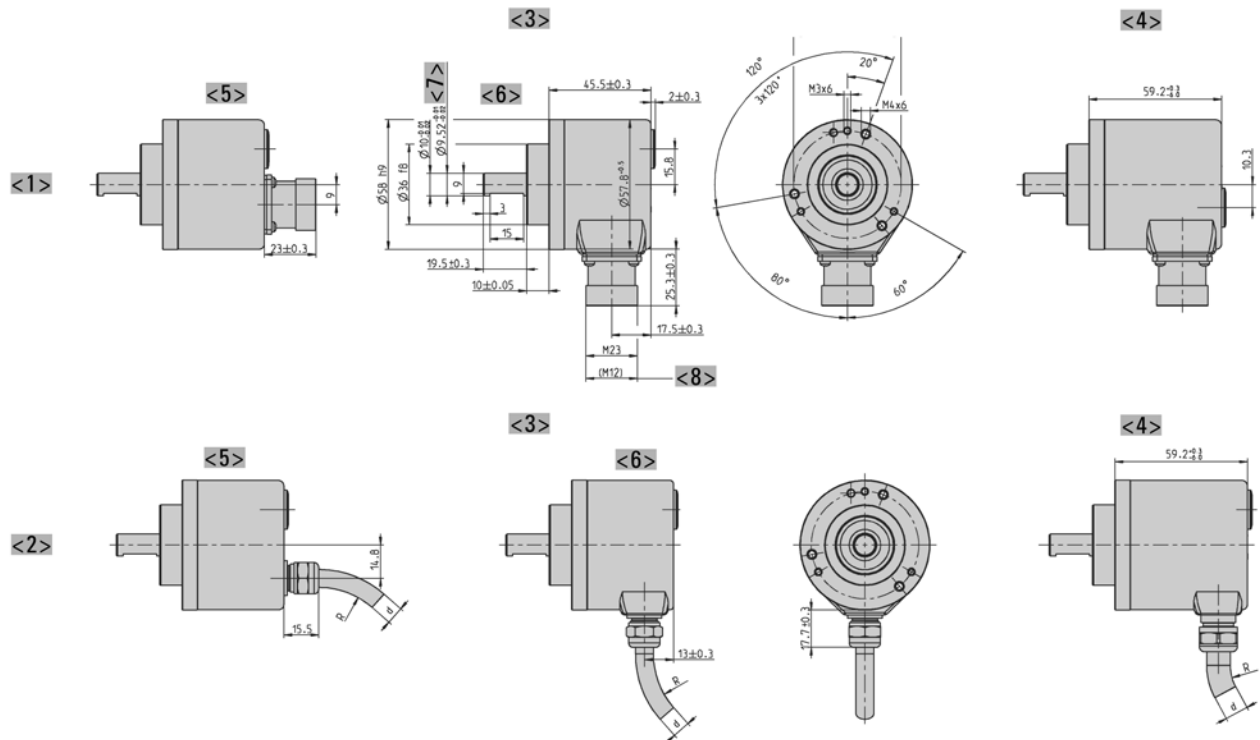
Dimensions in mm

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet

DIMENSIONED DRAWINGS (continued)

Clamping flange "K"



<1> Connection M23 (Conin)

<2> Connection cable

<3> Interface: BiSS, SSI, ST-Parallel

<4> Interface: MT-Parallel (only with cable), Fieldbus, SSI-P

<5> axial

<6> radial

<7> alternative

<8> Value in brackets alternative at SSI

Cable bending radius R for flexible installation $\geq 15 \times$ cable diameter

Cable bending radius R for fixed installation $\geq 7.5 \times$ cable diameter

Cable \varnothing d BiSS/SSI/SSI-P: $7,1^{+1,2}$

Cable \varnothing d ST-P: $7,8^{+0,9}$

Cable \varnothing d MT-P: $9,3^{+1,3}$

Cable \varnothing d Fieldbus: $7,1^{+1,2}$

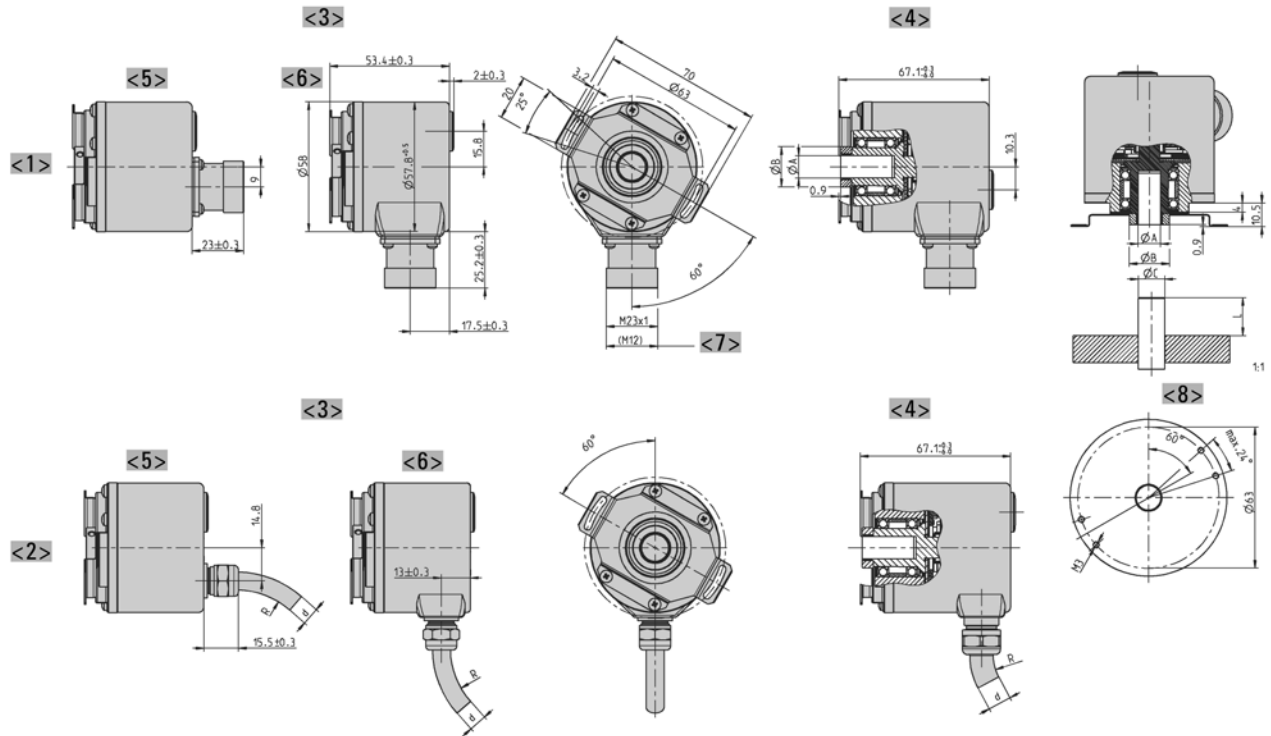
Dimensions in mm

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet

DIMENSIONED DRAWINGS (continued)

Hollow shaft "F"



	Dim.				Unit
	<5>	<6>	<3>	<7>	
Hollow shaft Ø A	10 ^{+0.012}	12 ^{+0.012}	9,52 ^{+0.012}	12,7 ^{+0.012}	mm
Connecting shaft Ø C	10 _{g7}	12 _{g7}	9,52 _{g7}	12,7 _{g7}	mm
Clamping ring Ø B	18	20	18	22	mm
L _{min}	15	18	15	18	mm
L _{max}	20	20	20	20	mm
Shaft code	"2"	"7"	"6"	"E"	

L = Inside length of connection shaft

- <1> Connection M23 (Conin)
 - <2> Connection cable
 - <3> Interface: BiSS, SSI, ST-Parallel
 - <4> Interface: MT-Parallel (only with cable), Fieldbus, SSI-P
 - <5> axial
 - <6> radial
 - <7> Value in brackets alternative at SSI
 - <8> Customer side
- Cable bending radius R for flexible installation $\geq 15 \times$ cable diameter
 Cable bending radius R for fixed installation $\geq 7.5 \times$ cable diameter
 Cable Ø d BiSS/SSI/SSI-P: 7,1^{+1,2}
 Cable Ø d ST-P: 7,8^{+0,9}
 Cable Ø d MT-P: 9,3 +1,3
 Cable Ø d Fieldbus: 7,1^{+1,2}

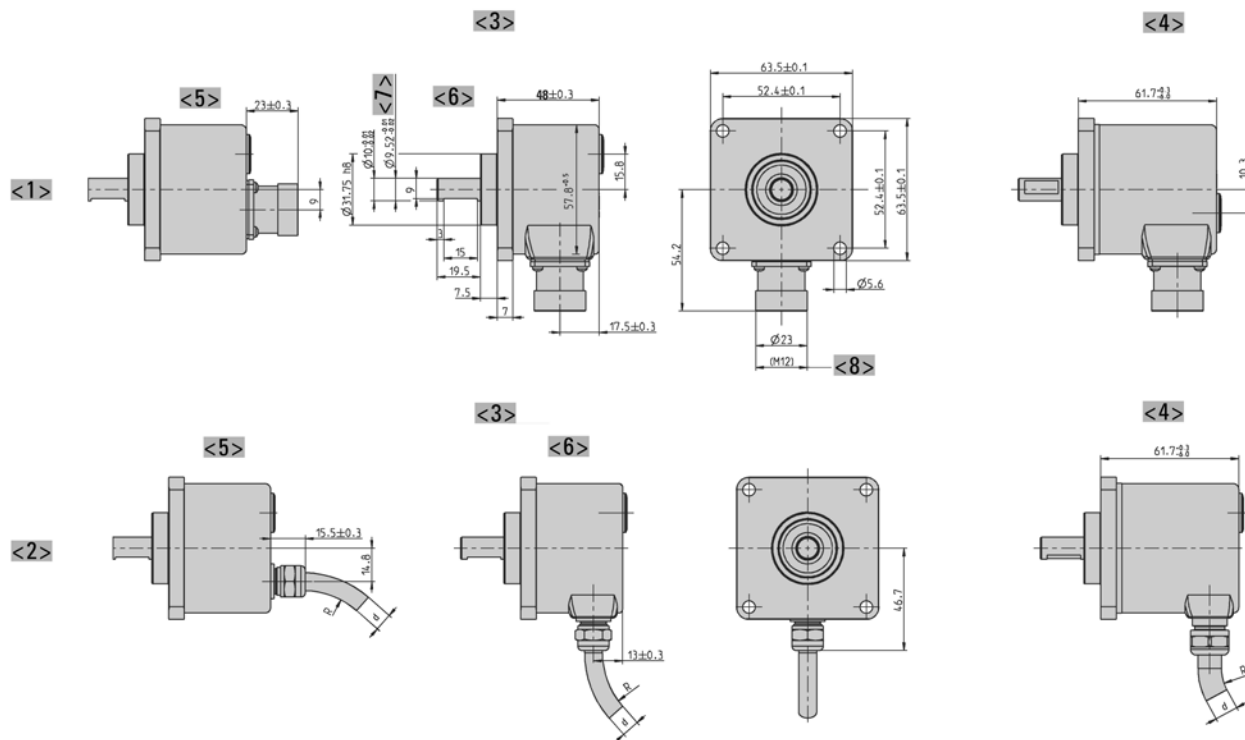
Dimensions in mm

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet

DIMENSIONED DRAWINGS (continued)

Square flange "Q"



<1> Connection M23 (Conin)

<2> Connection cable

<3> Interface: BiSS, SSI, ST-Parallel

<4> Interface: MT-Parallel (only with cable), Fieldbus, SSI-P

<5> axial

<6> radial

<7> alternative

<8> Value in brackets alternative at SSI

Cable bending radius R for flexible installation $\geq 15 \times$ cable diameter

Cable bending radius R for fixed installation $\geq 7.5 \times$ cable diameter

Cable \emptyset d BiSS/SSI/SSI-P: $7,1^{+1,2}$

Cable \emptyset d ST-P: $7,8^{+0,9}$

Cable \emptyset d MT-P: $9,3^{+1,3}$

Cable \emptyset d Fieldbus: $7,1^{+1,2}$

Dimensions in mm

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet

ORDERING INFORMATION

Type	Resolution	Supply voltage	Flange, Protection, Shaft	Interface	Connection
<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AC58	0010 10 Bit ST 0012 12 Bit ST 0013 13 Bit ST 1210 12 Bit MT + 10 Bit ST 1212 12 Bit MT + 12 Bit ST 1213 12 Bit MT + 13 Bit ST	E DC 10 - 30 V	S.41 Synchro, IP64, 6 mm K.42 Clamping, IP64, 10 mm K.46 Clamping, IP64, 9.52 mm F.46 Spring tether, IP64, hubshaft 9.52 mm, mounting with clamping ring front F.42 Spring tether, IP64, hubshaft 10 mm, mounting with clamping ring front F.47 Spring tether, IP64, hubshaft 12 mm, mounting with clamping ring front Q.46 Square, IP64, 9.52 mm Q.42 Square, IP64, 10 mm	RS Hengstler-G1-Protocol US SUCOnet	A Cable, axial B Cable, radial

Preferably available versions are printed in bold type.

ORDERING INFORMATION

Selection of cable length

Versions with cable outlet (connection A, B, E or F) are available with various lengths of cable. To order your desired cable length, please add the respective code to the end of your ordering code. For variants with connector on cable end please add cable length code in between. Further cable lengths on request.

Code	Cable length
without code	1.5 m
-D0	3 m
-F0	5 m
-K0	10 m
-P0	15 m
-U0	20 m
-V0	25 m

Example:

Cable 3 m length: ... B - D0

Cable mit 3 m length and M23 connector, cw: ... B - D0 - I

TECHNICAL DATASHEET

Absolute Encoder AC 58 - SUCOnet Accessories

FLEXIBLE COUPLINGS



Bellows coupling



Disk coupling



Helical coupling



Isolated disk coupling

		Ordering code
Bellows coupling	10 mm / 10 mm	3 520 037
Bellows coupling	6 mm / 6 mm	3 520 068
Bellows coupling	8 mm / 10 mm	3 520 077
Disk coupling	6 mm / 6 mm	0 070 663
Helical coupling 19/28	5 mm / 6 mm	3 520 035
Helical coupling 19/28	6 mm / 6 mm	0 070 653
Helical coupling 19/28	6 mm / 6.35 mm	3 520 051
Helical coupling 25/32	6 mm / 9.53 mm	3 520 052
Helical coupling 25/32	6 mm / 10 mm	3 520 066
Helical coupling 25/32	10 mm / 12 mm	3 520 065
Helical coupling 25/32	10 mm / 10 mm	3 520 074
Isolated disk coupling	6 mm / 6 mm	3 520 081
Isolated disk coupling	6 mm / 10 mm	3 520 082
Isolated disk coupling	10 mm / 10 mm	3 520 088

MOUNTING

	Ordering code
Clamping eccentric, For M4 (set of three)	1 522 300
Clamping eccentric for synchro flange, d6,5 for M3 (set of three)	0 070 655
Fastening angle (plastic), for clamping flange RI 58, AC 58 (fastening material included)	1 522 329
Mounting bell (plastic), for synchro flange RI 58, AC 58 (clamping eccentric and fastening material included)	1 522 330
Square flange adapter 58 x 58 mm, for clamping flange RI 58, AC 58 (fastening material included)	1 522 326
Square flange adapter 80 x 80 mm, for clamping flange RI 58, AC 58 (fastening material included)	1 522 327
Synchro flange adapter , for clamping flange RI 58, AC 58 (fastening material included)	1 522 328
Torque support	1 531 188

CONNECTING CABLES

Cable not made up with connectors	Ordering code
TPE cable, 12-core + screen	3 280 220 + length

TECHNICAL MANUALS

	Ordering code
Technical manual, English, SUCOnet	2 547 081
Technical manual, German, SUCOnet	2 547 080