



Series AWI 58 H

- ▶ Incremental rotary-encoder with a solid shaft diameter of 6-12 mm
- ▶ Housing diameter 58mm, compact design and high degree of protection up to IP67
- ▶ Maximum 90.000 pulses / revolution
- ▶ For highest industrial requirements
- ▶ Also available in stainless steel for aggressive environmental conditions
- ▶ Accessories from page 78

Electrical specifications

General design	according to DIN VDE 0160, protection class III, degree of contamination 2, overvoltage category II
max. pulse frequency:	200 kHz (Push-pull) 300 kHz (RS 422)
Perm. temperature range:	-30° ... +70° C
Power supply:	10 ... 30 V DC* (Push-pull (K, I)) 5 V ± 10% or 10 ... 30 V DC* (RS 422 + (R))
Current consumption:	40 mA (5 V DC) 60 mA (10 V DC) 30 mA (24 V DC)

* Reverse polarity protection for supply voltage 10 ... 30 V DC

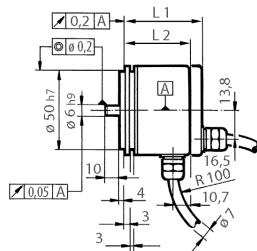
Mechanical specifications

Flange:	S = Synchro flange, K = Clamping flange
Housing:	Aluminium Ø 58 mm
Shaft:	stainless steel
Shaft diameter:	6 mm / 10 mm
Weight:	approx 0,4 kg
Protection class (EN60529):	IP 65 or IP 67
Max. speed:	10.000 U/min
Torque:	0,5 Ncm (IP 65) / 1 Ncm (IP 67)
Max. shaft load:	Ø 10 mm radial 60 N/axial 40 N Ø 6 mm radial 40 N/axial 20 N
Moment of inertia:	S = Synchro flange approx 14 g/cm ² K = Clamping flange approx 20 g/cm ²
Vibration resistance:	100 m/s ² (10..2.000 Hz) (DIN EN 60068-2-6)
Shock resistance:	1.000 m/s ² (6 ms) (DIN EN 60068-2-27)
Connection type:	1,5 m cable or flange receptacle

Mechanical dimensions

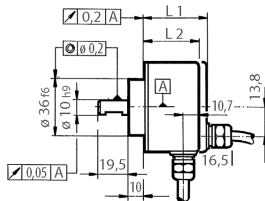
Synchro flange, 58 mm

L1 max. = 57.5 mm
L2 max. = 56 mm

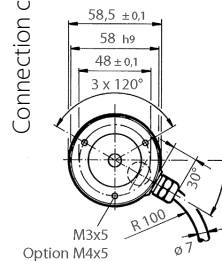
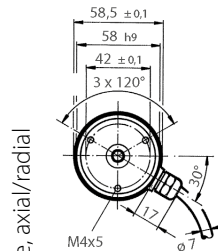


Clamping flange, 58 mm

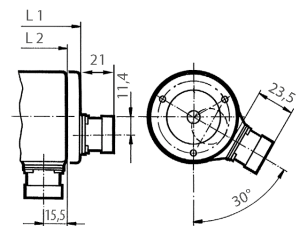
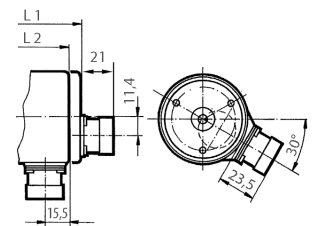
L1 max. = 57.5 mm
L2 max. = 56 mm



All specification in millimeters



Flange receptacle, 12-pol, axial/radial



Pin configuration cable

Colour code 00 depending on the version	Colour code 01 depending on the version	Function
white	black	-
brown	blue	+ UB
green	brown	A
yellow	beige	B
grey	yellow	AN
pink	green	BN
blue	pink	0
red	violet	0N

Numbers of pulses AWI 58 H

From 1 to 90.000

Flange receptacle 12-pole (clockwise)

PIN	RS 422 (R)	Push-pull (K)	Push-pull antivalent (I)
1	Channel B-	N.C.	Channel B-
2	Sense V_{CC}	N.C.	Sense V_{CC}
3	Channel N	Channel N	Channel N
4	Channel N-	N.C.	Channel N-
5	Channel A	Channel A	Channel A
6	Channel A-	N.C.	Channel A-
7	N.C.	N.C.	N.C.
8	Channel B	Channel B	Channel B
9	N.C.	N.C.	N.C.
10	GND	GND	GND
11	N.C.	N.C.	N.C.
12	5/10 ... 30 V DC =	10 ... 30 V DC =	10 ... 30 V DC =

Standard- output variants

RS 422 (R):

A, B, N, A-, B-, N-

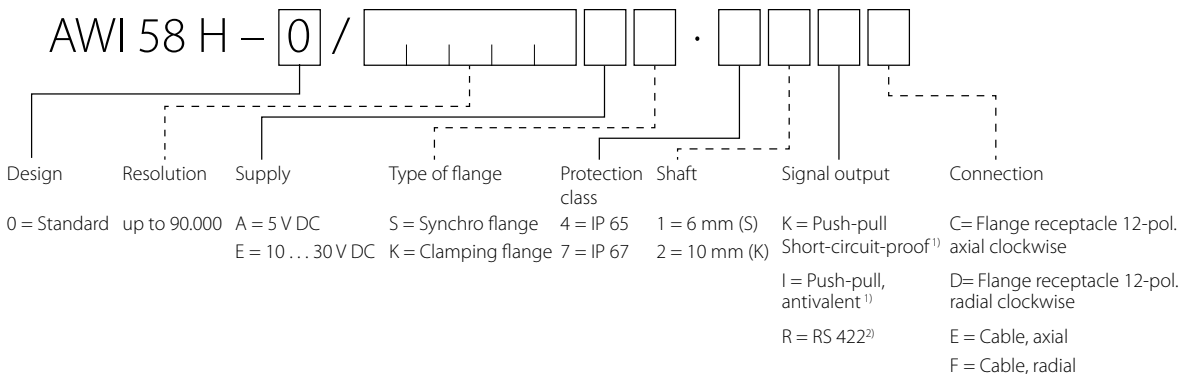
Push-pull (K):

A, B, N

Push-pull antivalent(I):

A, B, N, A-, B-, N-

Order reference



¹⁾Supply 10 ... 30 V DC ²⁾Supply 5 V DC