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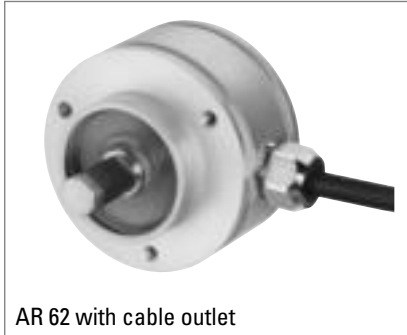
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Important Note

The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.

Absolute

BiSS / SSI



AR 62 with cable outlet



AR 62 with M12 connector

- Singleturn 12 Bit Resolution
- 300 N axial and radial load
- 200 g shock resistance
- 20 g vibrations resistance
- Submersible: Protection class up to IP69k
- High temperature range: -40 ... +100°C
- Compact design: 32 mm mounting depth
- Option: Stainless steel housing
- Option: Control inputs Preset and Direction

ACURO®-XR

HEAVY DUTY

BISS
INTERFACE

SSI

CE



GENERAL INFORMATION

ACURO-XR - THE ROBUST ENCODER FOR ALL ENVIRONMENTAL CONDITIONS!

The special features of the new ACURO-XR series not only comprise its particularly rugged enclosure, but also generously dimensioned, rigid ball-bearings. Capable of withstanding even high axial and radial loads on its shaft axis, this encoder type easily achieves a mechanical life of 10^9 rotations at a permanent radial load of 200 N and simultaneously, an axial load of 200N.

The newly designed ACURO-XR makes a difference. It easily withstands highest accelerations, extreme climatic fluctuations and even underwater operation. In this way, our rugged absolute encoder is ideally suitable for applications in wind farms, marine or utility vehicle applications, as well as for use in presses or wood and stone processing machinery: applications where high resistance to harsh environments and maximum reliability are required at the same time.

The AR62 is electrically compatible with standard encoders and operates with the magnetic technology. Available interfaces are SSI, BiSS, CANopen and Analogue (0 ... 10 V or 4 ... 20 mA).

With an installed depth of only 32 mm, this encoder is the most compact type in its class. Valuable space has been saved – to the benefit of the overall machinery design.

APPLICATIONS

Fields of application that clearly unfold the benefits of ACURO-XR:

- Construction machinery
- Utility vehicles / trucks
- Gantry cranes
- Marine equipment
- Offshore plants
- Wind power plants
- Commercial solar plants
- Food & Beverage Industry
- Filling plants
- Presses
- Your individual application

Absolute

BiSS / SSI

TECHNICAL DATA mechanical

Housing diameter	58 mm
Mounting depth	32 mm
Shaft diameter	10 mm / 12 mm (Solid shaft)
Flange (Mounting of housing)	Synchro clamping flange
Protection class shaft input (EN 60529)	IP67 or IP69k
Protection class housing (EN 60529)	IP67 or IP69k
Shaft load axial / radial	max.: 300 N / 300 N
Max. speed	max. 5000 rpm
Vibration resistance (DIN EN 60068-2-6)	200 m/s ²
Shock resistance (DIN EN 60068-2-27)	2000 m/s ² (6 ms)
Operating temperature	-40 °C ... +100 °C
Connection	Cable, radial M12-connector, radial

TECHNICAL DATA electrical

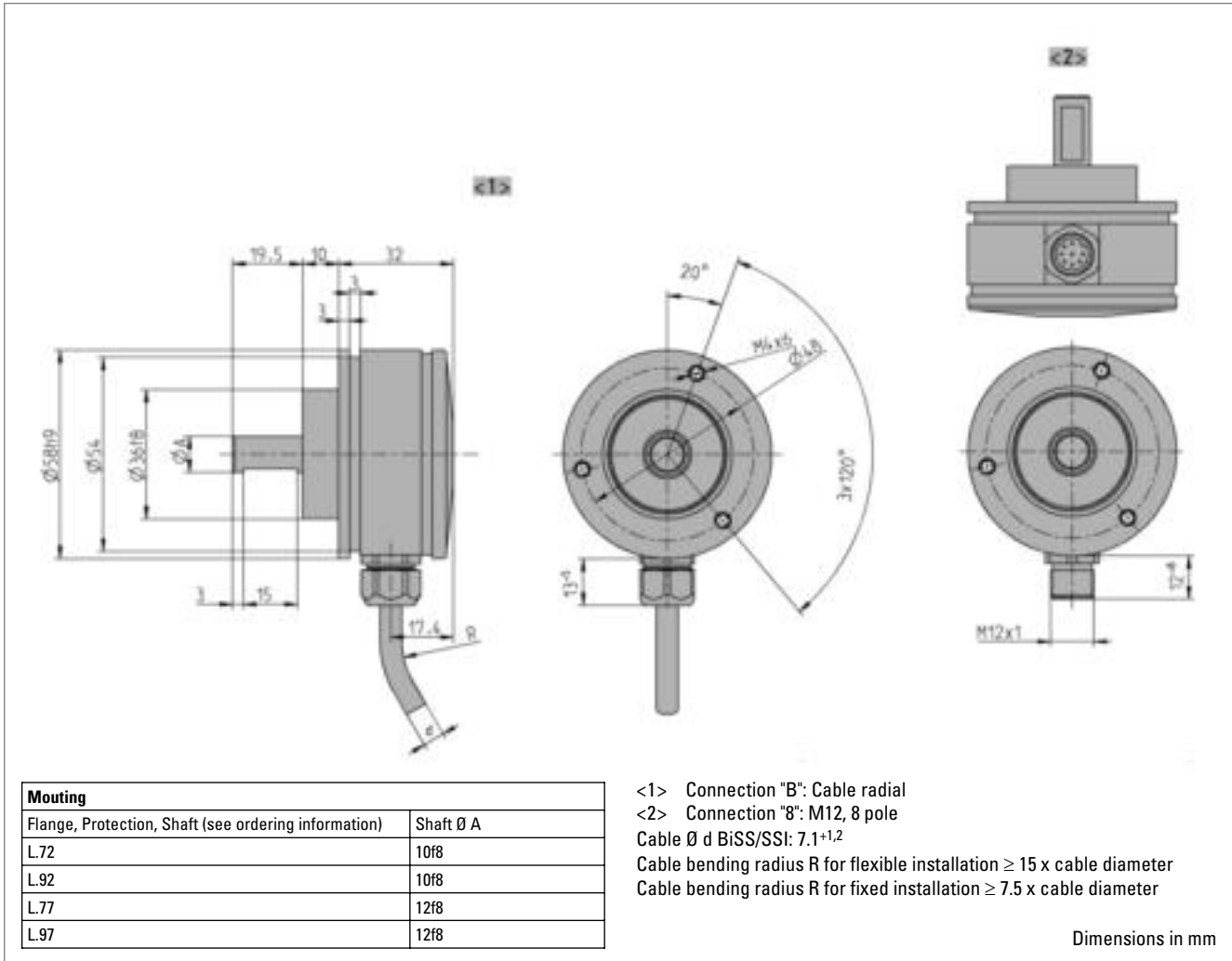
Supply voltage	DC 10-30 V
Max. current w/o load	50 mA (24 V)
EMC	EN 61326 Class A
Resolution singleturn	12 Bit
Output code	Gray
Repeatability	±0,2°
Control inputs ¹	Preset, Direction

¹ Preset, Direction optional available

ELECTRICAL CONNECTIONS Cable

Color cable	Signal
yellow	Clock
pink	Data
green	$\overline{\text{Clock}}$
grey	$\overline{\text{Data}}$
white	UB
brown	0 V
Screen	Screen

DIMENSIONED DRAWINGS



ORDERING INFORMATION

Type	Resolution	Supply voltage	Flange, Protection, Shaft	Interface	Connection ^{1,2}
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR62 Aluminum AR63 Stainless Steel	0012 12 Bit ST	E DC 10 - 30 V	L.72 Synchro clamping, IP67, 10 mm L.77 Synchro clamping, IP67, 12 mm L.92 Synchro clamping, IP69k, 10 mm L.97 Synchro clamping, IP69K, 12 mm	SG SSI Gray BG BiSS Gray	B Cable, radial 8 M12 connector, 8 pole, radial

¹ M12 connector not available with Stainless Steel housing

² M12 connector not available with IP69K

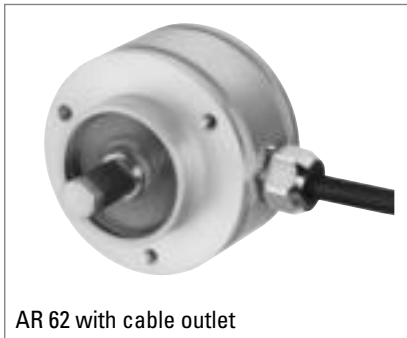
Absolute**BiSS / SSI****ORDERING INFORMATION**
Selection of cable length

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. 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

Absolute

CANopen



AR 62 with cable outlet



AR 62 with M12 connector

GENERAL INFORMATION

- Singleturn 12 Bit Resolution
- 300 N axial and radial load
- 200 g shock resistance
- 20 g vibration resistance
- Submersible: Protection class up to IP69K
- High temperature range: -40 ... +100°C
- Compact design: 32 mm mounting depth
- Option: Stainless steel housing

ACURO[®]-XR

HEAVY DUTY

CANopen

CE



ACURO-XR - THE ROBUST ENCODER FOR ALL ENVIRONMENTAL CONDITIONS!

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The AR62 is electrically compatible with standard encoders and operates with the magnetic technology. Available interfaces are SSI, BiSS, CANopen and Analogue (0 ... 10 V or 4 ... 20 mA).

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APPLICATIONS

Fields of application that clearly unfold the benefits of ACURO-XR:

- Construction machinery
- Utility vehicles / trucks
- Gantry cranes
- Marine equipment
- Offshore plants
- Wind power plants
- Commercial solar plants
- Food & Beverage Industry
- Filling plants
- Presses
- Your individual application

Absolute

CANopen

TECHNICAL DATA mechanical

Housing diameter	58 mm
Mounting depth	32 mm
Shaft diameter	10 mm / 12 mm (Solid shaft)
Flange (Mounting of housing)	Synchro clamping flange
Protection class shaft input (EN 60529)	IP67 or IP69k
Protection class housing (EN 60529)	IP67 or IP69k
Shaft load axial / radial	max.: 300 N / 300 N
Max. speed	max. 5000 rpm
Vibration resistance (DIN EN 60068-2-6)	200 m/s ²
Shock resistance (DIN EN 60068-2-27)	2000 m/s ² (6 ms)
Operating temperature	-40 °C ... +100 °C
Connection	Cable, radial M12-connector, radial

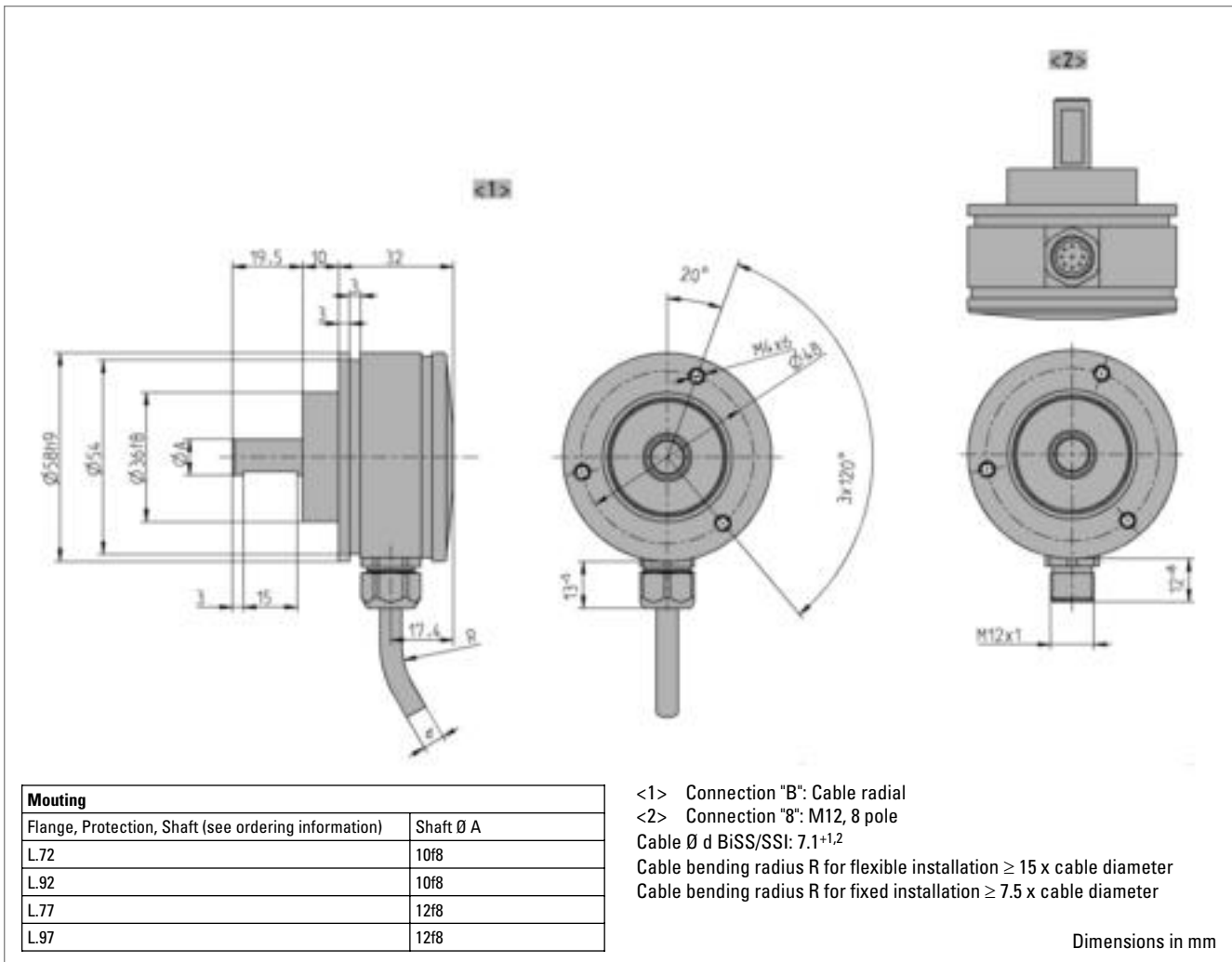
TECHNICAL DATA electrical

Supply voltage	DC 10-30 V
Max. current w/o load	220 mA
EMC	EN 61326 Class A
Resolution singleturn	12 Bit
Output code	Binary
Interface	CAN High-Speed according to ISO/DIS 11898
Profile/ protocol	CANopen according to DS 301 with profile DSP 406, programmable encoder according class C2
Repeatability	±0,2°
Parametrization	Scaling, Preset, Offset, Direction
Integrated special functions	Speed, Acceleration, Limit values

ELECTRICAL CONNECTIONS Cable

Color cable	Cable pairs	Signal
yellow	Pair 1	CAN in+
green		CAN in-
pink	Pair 2	CAN out+
grey		CAN out-
blue		n.c.
red		n.c.
white	Pair 3	UB
brown		0 V
Screen	Screen	Screen

DIMENSIONED DRAWINGS



ORDERING INFORMATION

Type	Resolution	Supply voltage	Flange, Protection, Shaft	Interface	Connection ^{1,2}
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR62 Aluminum AR63 Stainless Steel	0012 12 Bit ST	E DC 10 - 30 V	L.72 Synchro clamping, IP67, 10 mm L.77 Synchro clamping, IP67, 12 mm L.92 Synchro clamping, IP69k, 10 mm L.97 Synchro clamping, IP69K, 12 mm	OL CANopen	B Cable, radial 8 M12 connector, 8 pole, radial

¹ M12 connector not available with Stainless steel housing (AR63)

² M12 connector not available with IP69K

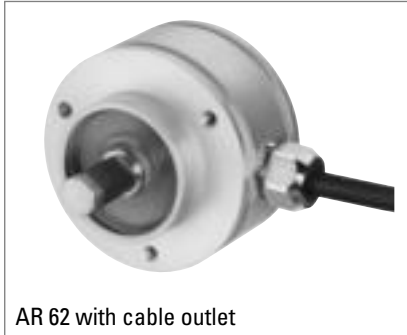
Absolute**CANopen****ORDERING INFORMATION**
Selection of cable length

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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

Absolute

Analogue



AR 62 with cable outlet



AR 62 with M12 connector

GENERAL INFORMATION

- Singleturn 12 Bit Resolution
- 300 N axial and radial load
- 200 g shock resistance
- 20 g vibration resistance
- Submersible: Protection class up to IP69k
- High temperature range: -40 ... +100°C
- Compact design: 32 mm mounting depth
- Option: Stainless steel housing
- Option: Control inputs Preset and Direction

ACURO®-XR

HEAVY DUTY



APPLICATIONS

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- Filling plants
- Presses
- Your individual application

Absolute

Analogue

TECHNICAL DATA mechanical

Housing diameter	58 mm
Mounting depth	32 mm
Shaft diameter	10 mm / 12 mm (Solid shaft)
Flange (Mounting of housing)	Synchro clamping flange
Protection class shaft input (EN 60529)	IP67 or IP69k
Protection class housing (EN 60529)	IP67 or IP69k
Shaft load axial / radial	max.: 300 N / 300 N
Max. speed	max. 5000 rpm
Vibration resistance (DIN EN 60068-2-6)	200 m/s ²
Shock resistance (DIN EN 60068-2-27)	2000 m/s ² (6 ms)
Operating temperature	-40 °C ... +100 °C
Connection	Cable, radial M12-connector, radial

TECHNICAL DATA electrical

Supply voltage	DC 17 - 30 V
Max. current w/o load	50 mA (24 V)
EMC	EN 61326 Class A
Resolution singleturn	12 Bit
Interface	Analogue: 0 ... 10 V, Analogue: 4 ... 20 mA
Tolerance	Voltage output: 0 V: + 100 mV; 10 V: +/- 100 mV Current output: 4 mA ± 100 µA typ; 20 mA ± 100 µA typ
Load resistor	Voltage output: max. 2 kΩ Current output: max. 600 Ω (Output current max. 5 mA)
Repeatability	±0,2°
Control inputs ¹	Direction, Preset
Updating of values	updating every millisec (continuously)

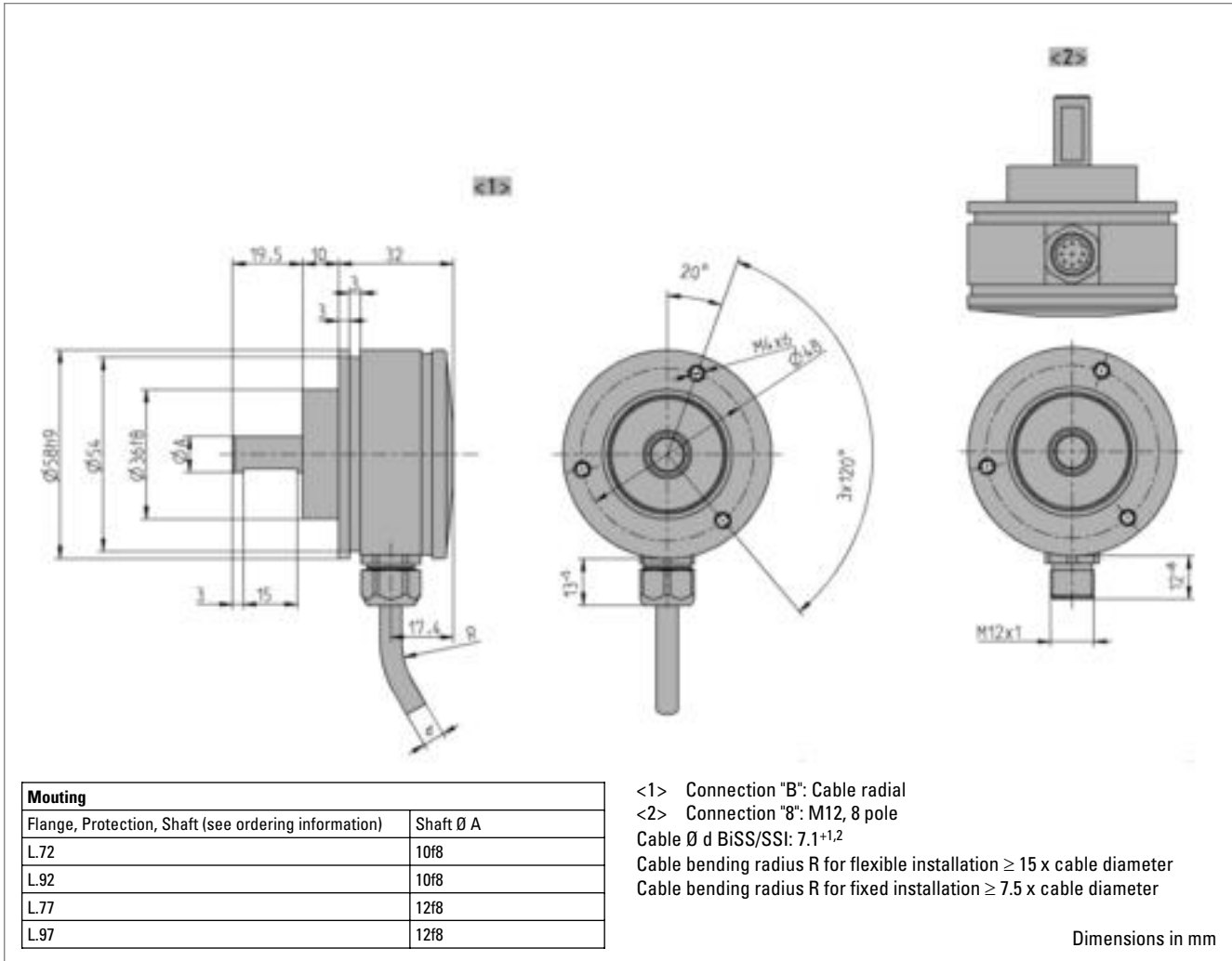
¹ Preset, Direction optional available

ELECTRICAL CONNECTIONS Analogue

Color Cable	Cable pairs	Signal
pink	Pair 1	0 ... 10 V (Voltage output max. 5 mA)
blau		0 ... 20 mA or 4 ... 20 mA (current output)
grey		AGND
red		preset (set to 0)
white	Pair 2	UB
brown		0 V
yellow ¹	Pair 3	Diagnostic 1
green ¹		Diagnostic 2
Screen	Screen	Screen

¹ Diagnostic signals only for service purposes. The cable wires have to be isolated.

DIMENSIONED DRAWINGS



ORDERING INFORMATION

Type	Resolution	Supply voltage	Flange, Protection, Shaft	Interface	Connection ^{1,2}
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AR62 Aluminum AR63 Stainless Steel	0012 12 Bit ST	F DC 17 - 30 V	L.72 Synchro clamping, IP67, 10 mm L.77 Synchro clamping, IP67, 12 mm L.92 Synchro clamping, IP69k, 10 mm L.97 Synchro clamping, IP69K, 12 mm	AV Analogue 0 ... 10 V A0 Analogue 0 ... 20 mA A4 Analogue 4 ... 20 mA	B Cable, radial 8 M12 connector, 8 pole, radial

¹ M12 connector not available with Stainless Steel housing (AR63)

² M12 connector is not available with IP69K

Absolute

Analogue

ORDERING INFORMATION Selection of cable length

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