

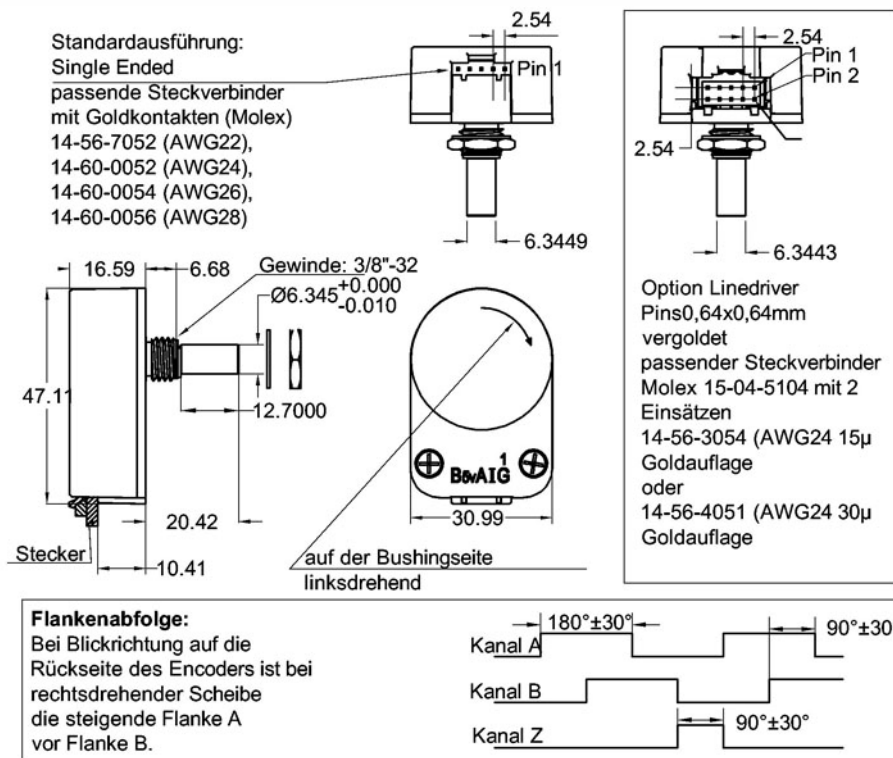
Series TP / Optoelectronic Encoder

- Flat installation height < 17 mm
- Resolution up to 1024 ppr
- Options: ball bearing, linedriver, index (3-rd. pulse), increased torque
- Standard types from stock

That well-priced and very flat encoder is applicable as setpoint device (with increased torque) and as a mechanical driven sensor (with ball bearing). Customized housings and shafts allows an optimal integration into the application.



Drawing



Series TP / Optoelectronic Encoder

Connector 5-pol			Connector 10-pol for Option Linedriver						Mounting
Pin	Name	Colour	Pin	Name	Colour	Pin	Name	Colour	Bore:
1	GND	black or brown	1	GND	Shield	6	A	bl/wh	9,525 + 0,127 / - 0mm Panel thickness max. 6,35mm Fastening torque nut < 2,25 Nm
2	Index	violet or green	2	GND	gn/wh	7	+5V	wh/gn	
3	A	blue or white	3	/Index	wh/orange	8	+5V	NC	
4	5 V	orange or red	4	Index	orange/wh	9	/B	wh/bn	
5	B	yellow or brown	5	/A	wh/blue	10	B	bn/wh	

Electrical Data

Resolution	50 ... 1024 ppr
Channels	A, B (optional Index)
Limit frequency	100 kHz
Supply voltage	5V ± 10% (Ripple < 100mV Vpp)
Current consumption	TTL < 85 mA Linedriver < 95 mA

Mechanical Data

Mechanical Data		Sleeve Bearing	Ball Bearing
Max. mechanical revolution	[U/min.]	100 rpm	10.000 rpm
Max. acceleration	[rad/s ²]	10.000 rad/s ²	
Operation torque option smooth running (NT)	[Nmm]	2,1 Nmm	0,35 Nmm
Operation torque increased	[Nmm]	3,5 Nmm	--
Fastening torque mounting nut	[Nm]	< 2,25 Nm	
Weight Single Ended / Linedriver	[g]	28 / 36	33 / 41

Other Data

Protection class		IP40
Operating temperature	[°C]	-40 .. + 100° C
Housing material		Polycarbonate with 20% glas share
Shaft material		stainless Steel or Brass
Disk material		Mylar
Vibration strength	[g]	20 g (50 Hz - 20 kHz)

Series TP / Optoelectronic Encoder

Options and Order Description

Description	Series	Options (Code)					
Type	TP						
Shaft Ø 6,35mm Standard Option: 6 mm		6,35 6					
Pulses / rev. 50, 96, 100, 200, 250, 256, 360 , 400, 500 Index possible			50 ... 500				
Pulses / rev. 540, 1000 , 1016, 1024 Index not possible			540 ... 1024				
Supply voltage 5 V				5			
Output signal: 2 channels: B, Index: BZ (availability depends on resolution)					B BZ		
Electronic: TTL (Standard) Linedriver						TTL N	
Sleeve bearing (Standard) Sleeve bearing smooth running Ball bearing							- NT KL
Example Order Code:	TP	6,35	360	5	BZ	TTL	-

Preference types (bold) in standard version from stock.

Our speciality are custom solutions for reasonable prices, even for small quantities

Examples: Mounting of gear wheels and other mechanical parts, assembling of cables, connectors and more.
Please contact us.

The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.

20. October 2003. All specifications are subject to change without notice.