

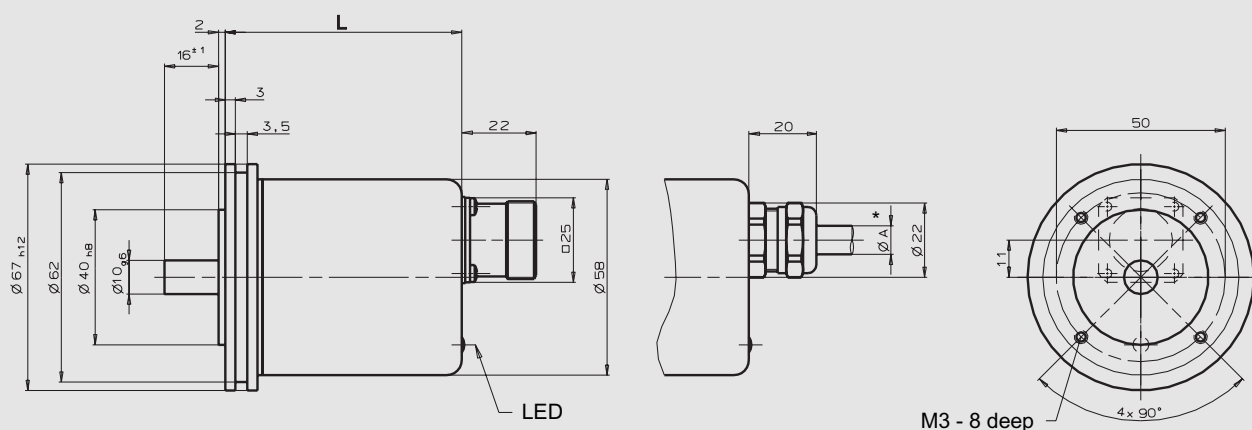
Model PWF-A2



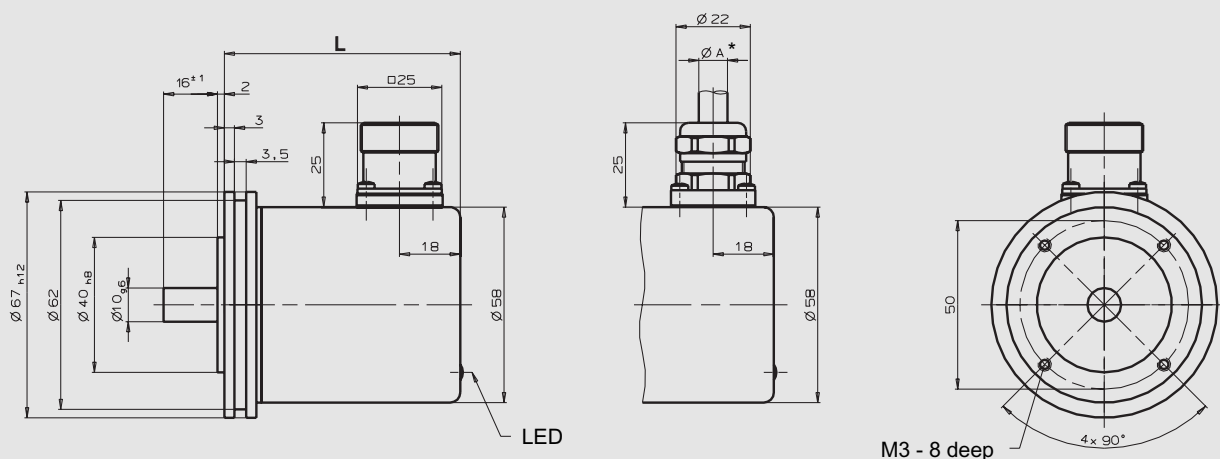
- Centring boss 40 mm
- Number of steps per revolution max. 4096
- Custom EPROM
- Up to 8 code tables accessible
- EMC compatible push-pull output circuit overload protected

Dimensions

Version PWF-A2 plug connector / lead axial



Version PWF-A2 plug connector / lead radial



Number of outputs	L
up to 8	70
up to 12	96

Ordering Table / Type Table

Accessories see page 74-77

Type	No. of steps	Meas. step	Outputs	Cat. No.	
				Lead radial, 2 m	Plug connector radial
PWF-A2	256	1.406°	8	custom	custom
	4096	0.088°	12		

On request

- Lead axial
- Plug connector axial

Model PWF-A2

Centring boss 40 mm

Technical Data

Measuring parameters	Value	Unit
Number of steps per revolution	max. 4 096	
Measuring step (resolution) α	min. 0.088	°
Error limit	$\alpha/2$	°
Pitch code	gray	
Output code	binary, BCD, custom	
Code direction (of rotation)	clockwise (cw) / custom	
Mechanical parameters		
Housing material	aluminium	
Weight	0.5	kg
Housing diameter	67	mm
Shaft material	stainless steel	
Shaft diameter	10	mm
Mech. operating speed, max.	3,000	rpm
Starting torque, typical	0.02	Nm
Operating torque at 500 rpm, typical	0.02	Nm
Mass moment of inertia (rotor)	2.5×10^{-6}	kg m ²
Max. axial shaft load	25	N
Max. radial shaft load	40	N
Bearing service life at max. operating speed and load	4×10^{10}	U
Operating temperature range	0 to +70	°C
Storage temperature range	-25 to +50	°C
Environmental protection to EN 60529	IP 65	
Resistance to vibration		
Oscillation DIN / IEC 68-2-6 (3 axes)	10 - 55 Hz, amplitude 1 mm, 6 cycles of 5 min	
Shock DIN / IEC 68-2-27 (3 axes)	6 shocks semi-sine, 18 ms, 30 g	
Electrical parameters		
Output circuit	push-pull	
Operating voltage range U_B	15 to 30	V DC
Operating current (without load)	< 50	mA
Output voltage U_A at max. output current		
U_A (HIGH; 1), min.	$U_B - 3$	V
U_A (LOW; 0), max.	3	V
Output current per output max.	30	mA
Overload/short-circuit protection	non-latching thermal cutout	
EMC protection requirements to 	met	
Output frequency max.	300,000	Hz
Connection type		
PUR shielded lead, length 2 m	●	
Plug connector 21-pin male	●	

Pin Assignment

Designation	Wire colour	Connector pin	Designation	Wire colour	Connector pin	Designation	Wire colour	Connector pin
Output 1	BK	1	Output 9	GYPK	9	-	-	17
Output 2	WH	2	Output 10	WHGN	10	-	-	18
Output 3	YE	3	Output 11	WHYE	11	-	-	19
Output 4	GN	4	Output 12	WHGY	12	+ U_B	BN	20
Output 5	VT	5	Input 1	WHPK	13	0 volts	BU	21
Output 6	PK	6	Input 2	WHBU	14	Shield	transparent	housing
Output 7	GY	7	Input 3	RDBU	15			
Output 8	RD	8	Input 4	BNGN	16			