

# PROGRAMMABLE DRAW WIRE SENSOR

# **AWP** 722

"Analog or CANopen Output, High Accuracy, High Measuring Length"









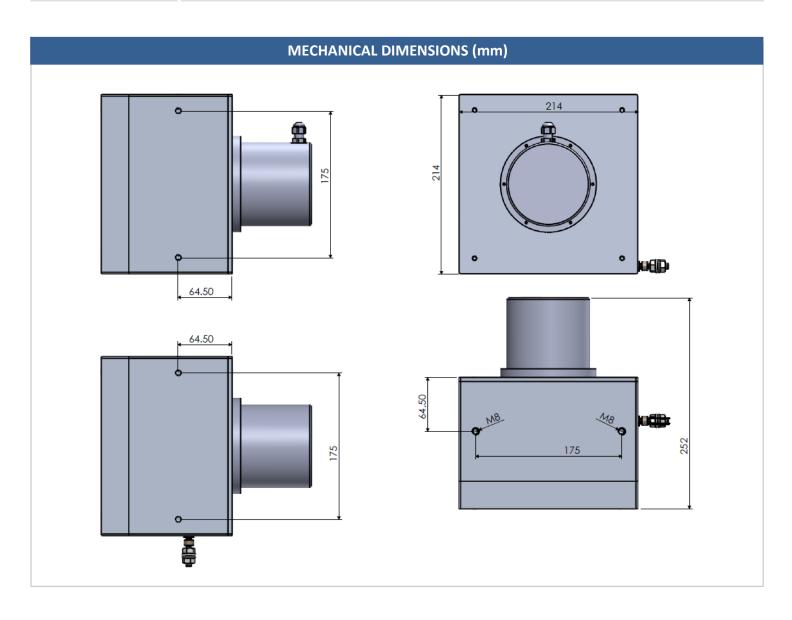




- Different stroke (measuring) lengths between 0...14000 mm and 0...22000 mm
- Magnetic absolute measurement technology
- Robust stainless steel measuring wire
- Aluminium housing
- Analog or CANopen output
- Programmable analog output option
- Standard IP53, optional IP67 protection class
- Compact design and easy mounting
- 1 m/s maximum movement speed
- Shock/vibration resistant

DS-AWP.034 REV NO:0

MECHANICAL DATA						
Measuring Range (stroke)	Different measuring lengths between 014000 mm and 022000 mm					
Max. Movement speed	1 m/s					
Extension Force	12N					
Protection Class	IP53 (optional IP67)					
Operating Temperature	-40°C+85°C					
Material	Body: Aluminium					
	Measuring wire: Stainless steel					



DS-AWP.034 REV NO:0 2

# **TECHNICAL DATA**

# **ANALOG VERSION**

# **Electrical Specifications**

Measuring range	Different measuring lengths between 014000 mm and 022000 mm
Supply voltage	1526 VDC
Current consumption	≤60 mA
Reverse polarity protection	Yes
Short circuit protection	Yes (only supply)
Response frequency	500 Hz
Resolution	0.05 mm
Linearity	±%0.5 FS
Output signal	Voltage: 0-10V, 0.5-4.5V, 0-5V Current: 4-20 mA
Signal charasteristics	Increasing (exmp: 4-20 mA) Decreasing (exmp:20-4 mA)
Sensing device	Magnetic absolute encoder
Electrical connection	M12 connector or cable

## **Electrical Connection**

Signal	Cable	M12 / 5 pin male connector			
V+ (1526 VDC)	Red	Pin 1			
Analog output signal	Yellow	Pin 2			
GND	Black	Pin 3			
N/C	Green	Pin 4			
N/C	Pink	Pin 5			



## **Order Code**

			Electrical Con	nectio	on		
Model			<b>S13M:</b> M12/5 pin male connector <b>2M:</b> 2m cable *Optional others				Protection Class No code: IP53 (std) E067: IP67
AWP 722 -	XXXX	-	XXXX	-	XX	-	XXX
	Measuring Range Different stroke (measurement 014000 mr	_	0		Analog Output V:0-10 VDC V1:0-5 VDC A:4-20 mA V3:0.5-4.5 VDC NV:10-0 VDC NV1:5-0 VDC NA:20-4 mA NV3:4.5-0.5 VD	2	l

DS-AWP.034 REV NO:0 3

# **ANALOG VERSION, PROGRAMMABLE**

#### **Electrical Specifications**

Measuring range	Different measuring lengths between 014000 mm and 022000 mm
Supply voltage	1526 VDC
<b>Current consumption</b>	≤60 mA
Reverse polarity protection	Yes
Short circuit protection	Yes (only supply)
Response frequency	500 Hz
Resolution	0.05 mm
Linearity	±%0.5 FS
Output signal	Voltage: 0-10V, 0.5-4.5V, 0-5V (programmable) Current: 4-20 mA (programmable)
Signal charasteristics	Increasing (exmp: 4-20 mA) Decreasing (exmp:20-4 mA)
Sensing device	Magnetic absolute encoder
Electrical connection	M12 connector or cable

#### **Electrical Connection**

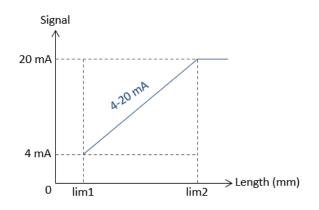
Signal	Cable	M12 / 5 pin male connector
V+ (1526 VDC)	Red	Pin 1
Analog output signal	Yellow	Pin 2
GND	Black	Pin 3
N/C	Green	Pin 4
SPAN/ZERO	Pink	Pin 5

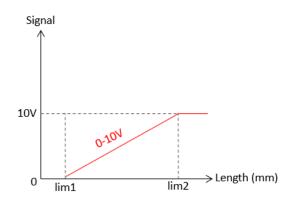


SETTING MEASUREMENT LIMITS: With this feature, you can set the minimum and maximum measurement limits.

In order to determine the **minimum measurement limit (lim1)**, the SPAN/ZERO and GND terminal are short-circuited for at least 3 seconds. In order to determine the **maximum measurement limit (lim2)**, the SPAN/ZERO and GND terminal are short-circuited for at least 6 seconds. To **return to the factory settings**, the SPAN/ZERO and GND terminal are short-circuited for at least 10 seconds.

#### **SAMPLE SIGNAL OUTPUT GRAPHICS**





C	Order Code				Electrical Con	nectio	on				
Model			<b>S13M:</b> M12/5 pin male connector <b>2M:</b> 2m cable *Optional others				Programming Feature PL: Programmable				
	AWP 722	-	XXXX	-	XXXX	-	XX	-	XX	-	XXX
	Measuring Range			Analog Output S			Sign	al		<b>Protection Class</b>	
			Different stroke (mea between 014000 mr	•	0		V : 0-10 VDC V1 : 0-5 VDC A : 4-20 mA				<b>No code</b> : IP53 (std) <b>E067</b> : IP67
							<b>V3</b> : 0.5-4.5 VDC	2			
							NV : 10-0 VDC NV1 : 5-0 VDC				
			_				<b>NA</b> : 20-4 mA				

DS-AWP.034 REV NO:0 **NV3**: 4.5-0.5 VDC

# **CANopen VERSION**

# **Electrical Specifications**

Measuring range	Different measuring lengths between 014000 mm and 022000 mm
Supply voltage	1230 VDC
Current consumption	≤60 mA
Reverse polarity protection	Yes
Short circuit protection	Yes (only supply)
Response frequency	500 Hz
Resolution	50μm
Linearity	±%0.5 FS
Sensing device	Magnetic absolute encoder
Electrical connection	M12 connector or cable

## **CANopen Specifications**

Communication Profile	CiA 301
Device Type	CANopen, CiA DS406
Node ID	Adjustable from 1 to 127 with LSS or SDO
Baud Rate	10 kBit/s, 20 kBit/s, 50 kBit/s, 100 kBit/s, 125 kBit/s, 250 kBit/s, 500 kBit/s, 800 kBit/s, 1 Mbit/s
PDO Data Rate	100 ms
Error Control	Heartbeat, Emergency Message
PDO	3 Tx PDO
PDO Modes	Event/Time triggered, Synch/Asynch
SDO	1 server
Position Information	Object Dictionary 0x6020
Termination Resistance	Optional $120\Omega$

#### **Electrical Connection**

Signal	Cable	M12 / 5 pin male connector			
CAN SHIELD	CAN SHIELD	Pin 1			
V+ (1230VDC)	Red	Pin 2			
GND	Black	Pin 3			
CAN_H	Yellow	Pin 4			
CAN_L	Green	Pin 5			



## **Order Code**

			Electrical Connection							
Model				S13M: M12/5 pin male connector 2M: 2m cable *Optional others				Protection Class No code: IP53 (std) E067: IP67		
AWP 722	-	XXXX	-	XXXX	XXXX - X -					
		Measuring Range	Range			Output Signal				
		Different stroke (measuring) lengths between 014000 mm and 022000 mm			<b>C</b> : CANopen					

DS-AWP.034 REV NO:0 5