PROGRAMMABLE DRAW WIRE SENSOR

AWP 722

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

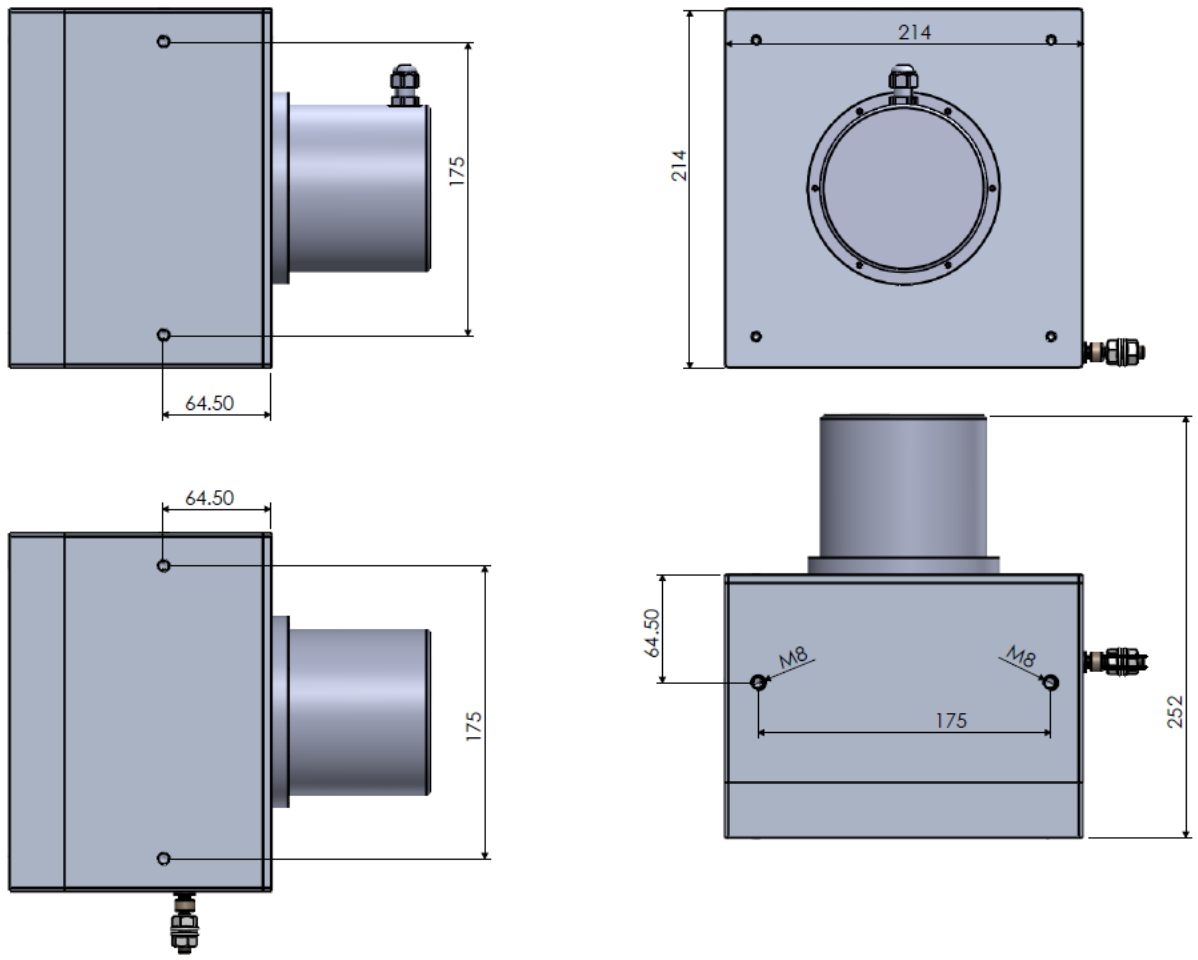
MAGNETIC MEASUREMENT | PROG. ANALOG OUTPUT | CANopen OUTPUT | HIGH ACCURACY | LONG SERVICE LIFE

- 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

MECHANICAL DATA

Measuring Range (stroke)	Different measuring lengths between 0…14000 mm and 0…22000 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

MECHANICAL DIMENSIONS (mm)



TECHNICAL DATA

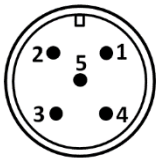
ANALOG VERSION

Electrical Specifications

Measuring range	Different measuring lengths between 0…14000 mm and 0…22000 mm
Supply voltage	15…26 VDC
Current consumption	≤60 mA
Reverse polarity protection	Yes
Short circuit protection	Yes (only supply)
Response frequency	500 Hz
Resolution	0.05 mm
Linearity	±%0.3 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+ (15…26 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

Model

Electrical Connection

S13M: M12/5 pin male connector
2M: 2m cable
*Optional others

AWP 722	-	XXXX	-	XXXX	-	XX

Measuring Range

Different stroke (measuring) lengths between 0…14000 mm and 0…22000 mm

Analog Output Signal

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 VDC

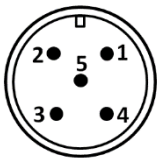
ANALOG VERSION, PROGRAMMABLE

Electrical Specifications

Measuring range	Different measuring lengths between 0…14000 mm and 0…22000 mm
Supply voltage	15…26 VDC
Current consumption	≤60 mA
Reverse polarity protection	Yes
Short circuit protection	Yes (only supply)
Response frequency	500 Hz
Resolution	0.05 mm
Linearity	±%0.3 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

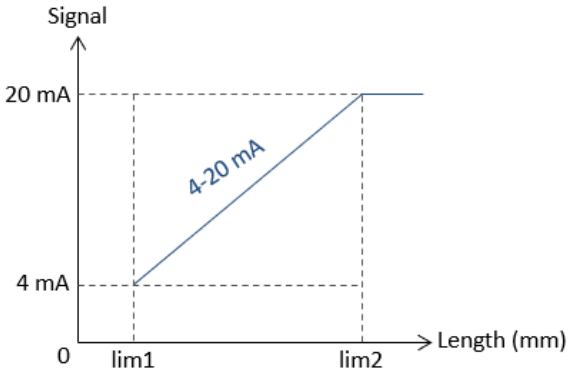
Electrical Connection

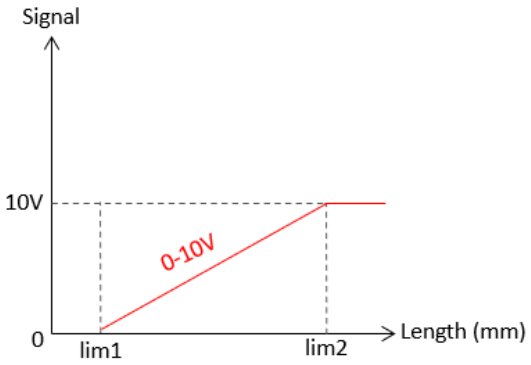
Signal	Cable	M12 / 5 pin male connector
V+ (15…26 VDC)	Red	Pin 1
Analog output signal	Yellow	Pin 2
GND	Black	Pin 3
N/C	Green	Pin 4
SPAN/ZERO	Pink	Pin 5



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





Order Code

Model

Electrical Connection

S13M: M12/5 pin male connector
2M: 2m cable
*Optional others

Programming Feature

PL: Programmable

AWP 722	-	**XXXX**	-	**XXXX**	-	**XX**	-	**XX**

Measuring Range

Different stroke (measuring) lengths
between 0…14000 mm and 0…22000 mm

Analog Output Signal

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 VDC

CANopen VERSION

Electrical Specifications

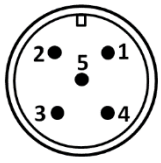
Measuring range	Different measuring lengths between 0…14000 mm and 0…22000 mm
Supply voltage	12…30 VDC
Current consumption	≤60 mA
Reverse polarity protection	Yes
Short circuit protection	Yes (only supply)
Response frequency	500 Hz
Resolution	50µm
Linearity	±%0.3 FS
Sensing device	Magnetic absolute encoder
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 120Ω

Electrical Connection

Signal	Cable	M12 / 5 pin male connector
CAN SHIELD	CAN SHIELD	Pin 1
V+ (12...30VDC)	Red	Pin 2
GND	Black	Pin 3
CAN_H	Yellow	Pin 4
CAN_L	Green	Pin 5



Order Code

Model

Electrical Connection

S13M: M12/5 pin male connector
2M: 2m cable
*Optional others

AWP 722	-	XXXX	-	XXXX	-	X

Measuring Range

Different stroke (measuring) lengths between 0…14000 mm and 0…22000 mm

Output Signal

C : CANopen

DISTRIBUTOR / DISTRIBUIDOR

Brazil and South America / Brasil e América do Sul

www.metrolog.net

Metrolog Controles de Medição

Address / Endereço:

Rua Sete de Setembro, 2656
13560-181 - São Carlos - SP
Brazil / Brasil

Phone / Telefone:

+55 (16) 3371-0112
+55 (16) 3372-7800

Internet:

www.metrolog.net
metrolog@metrolog.net