

Product brochure: EWC-6 WIRE COUNTER UNIT

© 2023, A.G.O. Environmental Electronics, Ltd.

#10-626 Esquimalt Rd Victoria, BC, Canada, V9A3L4 info@agoenvironmental.com T: +1 (250) 386-4015



The EWC-6 Electronic Wire Counter unit is a simple, handheld, splash-proof wire payout display unit for use with A.G.O.'s matching magnetically-encoded sheaves, pulleys, and wheels.

It connects to encoded wheels via a cable and can be connected to a computer for data output or calibration for use with different cable sizes. It is a standalone system that can be used with any winch.

Display values	Length paid out and line speed	Display units	Meters or feet	
Max count	+/- 4999.9 units (m or ft)	Resolution	0.1m (0.328ft = 3.9in)	
Power	9V internal battery or can take up to 24VDC external power	Battery life	90 hrs (backlight off) 20 hrs (backlight on)	
Data output cable	~1m (3.3ft) long USB cable (D-sub serial also available)	Data output string format	NMEA sentence*: \$YXXDR,D,301.2,M,L,S,30.0,M,R*24[CR][LF]	

\* Some payload companies (e.g. side scan sonar companies like Klein) may have their payload monitoring software configured to parse this string – check with your payload rep to find out if the EWC-6 is compatible with your payload's software.

## **Compatible encoded sheaves**

## Splash-proof housing





## **EWC-6 COMPATIBLE ENCODED SHEAVES**

Brand	Sheave	Groove root diameter	Max cable size	Safe Working Load <sup>1</sup>	Maximum Load Limit <sup>1</sup>
Loomis	PS-06 <sup>2</sup>	6" (152.4mm)	0.25" (6.35mm)	375 lbs (170 kg)	1,500 lbs (680 kg)
-	SR10 <sup>3</sup>	7.9375" (201.6mm)	1.00" (25.4mm)	1,625 lbs (737 kg)	6,500 lbs (2,948 kg)
	SR12	10" (254.0mm)	1.10" (28.1mm)	1,625 lbs (737 kg)	6,500 lbs (2,948 kg)
	SR14 <sup>3</sup>	12.239" (310.9mm)	1.21" (30.7mm)	1,875 lbs (850 kg)	7,500 lbs (3,401 kg)
an & Reilly	SR16	14" (355.6mm)	1.34" (34.0mm)	2,250 lbs (1,020 kg)	9,000 lbs (4,082 kg)
	SR20	16.25" (412.8mm)	1.51" (38.4mm)	3,000 lbs (1,361 kg)	12,000 lbs (5,442 kg)
Shern	SR22	18.125" (460.4mm)	1.51" (38.4mm)	3,000 lbs (1,361 kg)	12,000 lbs (5,442 kg)
	SR28	24" (609.6mm)	1.86" (47.3mm)	3,000 lbs (1,361 kg)	12,000 lbs (5,442 kg)
	SR35	30.25 (768.4mm)	2.09" (53.2mm)	3,000 lbs (1,361 kg)	12,000 lbs (5,442 kg)
	SR42	36" (914.4mm)	2.09" (53.2mm)	4,250 lbs (1,927 kg)	17,000 lbs (7,710 kg)
A.G.O.	Gunwale- mount	Customized to suit cable		Depends on custom configuration	

## How to select a sheave

Collect the following information:				
Cable diameter	d =			
Cable's minimum dynamic bend diameter (not radius)	D =			
Maximum expected line tension X2	2T =			

- 1. Select a sheave with a groove root diameter greater than or equal to your cable's minimum dynamic bend diameter (D).
- 2. Check that the sheave's maximum cable size is greater than or equal to your cable's diameter (d). Select a larger sheave if needed.
- 3. Check that the sheave's SWL is greater than or equal to twice your tension (2T). Select a larger sheave if needed.
- 1. Load limits refer to the maximum load applied to the sheave as measured at the shackle that supports it. It is the operator's duty to determine the corresponding tension limit according to their particular site's geometry and how much the cable is wrapped over the sheave. For a conservative estimate on recommended safe maximum tension for a given sheave, divide the Safe Working Load by 2.
- 2. The Loomis sheave is a simple plastic trolling block with bushings rather than bearings. It is not recommended for use in high-speed applications like sound velocity profiling as the friction can cause the material supporting the axle to deform.

The Loomis sheave is not a snatch block and must be almost completely disassembled to load and unload cable. Sherman & Reilly sheaves are snatch blocks – their frames can be opened up on the side to load and unload cable without disassembling the sheave. The A.G.O. gunwale-mount sheave is designed custom according to client needs, but usually features one open side + a moveable pinch roller for cable retainment to make cable loading easy.

3. These sizes are not commonly kept in stock and may have longer leadtimes compared to other more commonly-stocked sizes.

