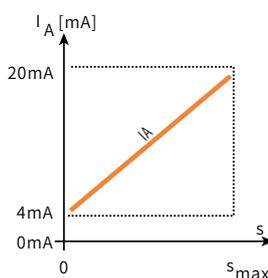
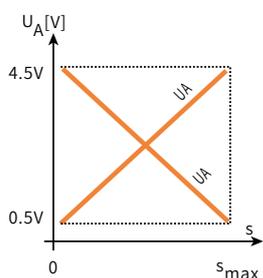
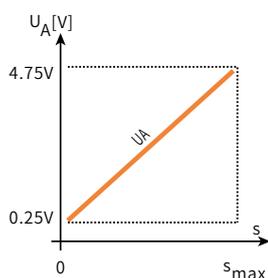




GUC1800 (B) - Analog

GUC1800 (B) - Mine intrinsic safety type



- + Maximum durability, continuous non-contact
- + Linear measurement, absolute value output
- + Built-in flexible outer tube suitable for long stroke length, easy installation and transportation
- + Robust and durable, fully enclosed design, highest IP68 protection level
- + Linear measurement, absolute value output without zeroing
- + Easy to use, standard signal output, maintenance-free
- + None-Linearity $\leq \pm 0.2\%F.S.$



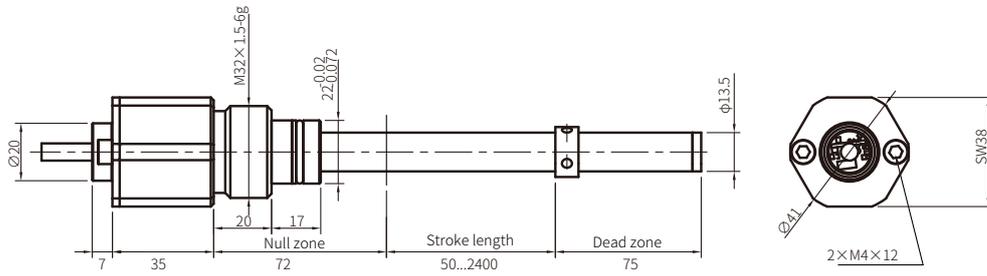
Document Number:
GUC1800(B)-A (V1.1)-EN

TECHNICAL PARAMETER

Input							
Measured data	Position						
Measurement range	50mm...2400mm						
Output							
Voltage	0.25~4.75VDC, 0.5~4.5VDC, 4.5~0.5VDC						
Current	4~20mA						
Resolution							
Resolution	14 bit D/A (internal resolution 100 μ m)						
None-Linearity	$\leq \pm 0.2\%$ F.S.						
Repeatability	$\leq \pm 0.05\%$ F.S.						
Update time	<table border="1"> <thead> <tr> <th>Stroke length</th> <th>≤ 1200mm</th> <th>≤ 2400mm</th> </tr> </thead> <tbody> <tr> <td>Update time</td> <td>0.5ms</td> <td>1ms</td> </tr> </tbody> </table>	Stroke length	≤ 1200 mm	≤ 2400 mm	Update time	0.5ms	1ms
Stroke length	≤ 1200 mm	≤ 2400 mm					
Update time	0.5ms	1ms					
Temperature coefficient	< 30 ppm/ $^{\circ}$ C						
Mounting							
Mounting position	Any						
Mounting form	M32x1.5						
Design/Material							
Electronics housing	Stainless steel 304						
Measuring rod	Stainless steel 304/316L						
Magnet	Standard magnet (Customizable)						
Operating pressure	45MPa (continuous), 70MPa (peak)						
Electrical connection							
Wiring connection	Straight out cable						
Operating voltage	+12VDC(-15/+20%)						
Polarity protection	Up to -28VDC						
Overvoltage protection	Up to +30VDC						
Power consumption	≤ 30 mA						
Dielectric strength	500 VDC (DC ground to machine ground)						
Operating conditions							
Magnet velocity	Any						
Operating temperature	-20~80 $^{\circ}$ C						
Humidity	90 % relative humidity, no condensation						
Ingress protection	IP68 (Customizable)						
Shock	100 g/11 ms,IEC standard 60068-2-27						
Vibration	15 g/10...2000 Hz, IEC standard 60068-2-6 (resonant frequencies excluded)						
EMC	Electromagnetic emission according to EN 61000-6-3 Electromagnetic immunity according to EN 61000-6-2						

TECHNICAL DRAWING

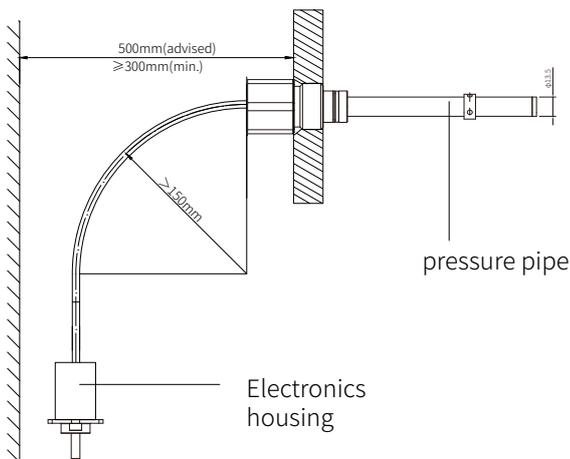
Straight-out cable RX_ _



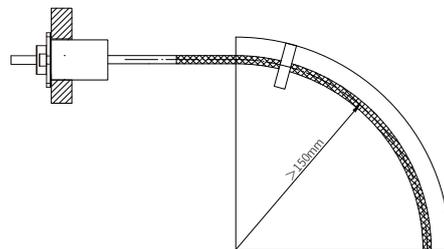
MOUNTING DRAWING

- + Electronics housing for GUC1800(B) flexible sensor employs two M4x60 non permeable screws for installation.
- + When arc measurement is adopted, the flexible pipe can be bended into required shape with min.
- + With long range sensor, pipes made of non permeable materials can be used as support. In addition, pressure pipe with flange can also be ordered to support and protect the sensor.
- + The size of hole in the piston rod depends on factors such as hydraulic pressure and piston speed. The minimum hole size is $\phi 18$ ($\phi 13.5$ measuring rods).

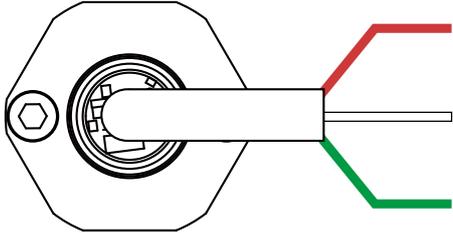
Pressure pipe



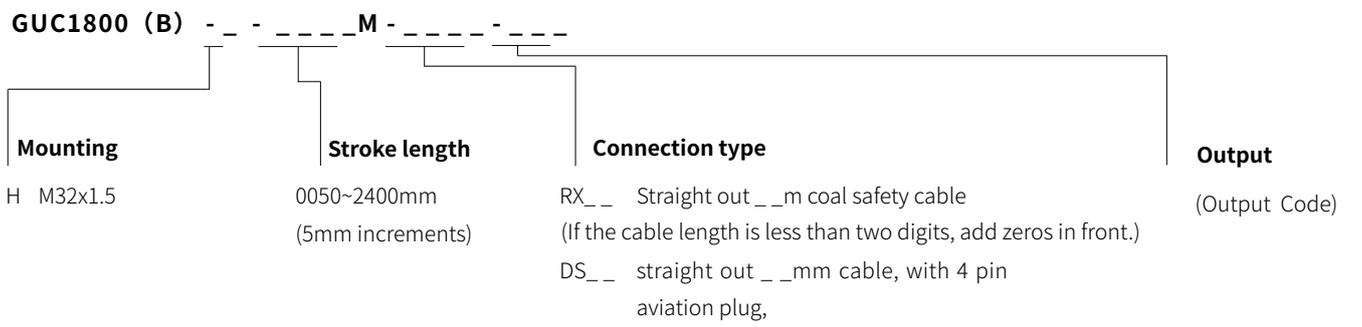
Arc measurement



Wiring

Straight out cable	Color	Function
	Red	+12VDC (-15/+20%)
	White	GND
	Green	Signal output

ORDER CODE



Analog Output Code	[1][2][3]
	[1][2] Current/Voltage
	[3] Magnet
	A0 4...20mA(forward)
	V5 0.5...4.5V (forward)
	V6 0.25...4.75 (forward)
	V8 4.5...0.5 (reverse)
	1 one magnet

Note: Forward, data grows larger when the magnet is distant from the electronics housing;
Reverse, data grows larger when the magnet approaches the electronics housing.

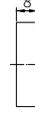
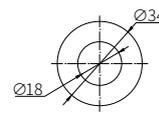
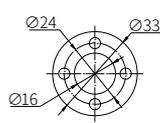
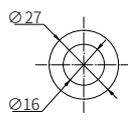
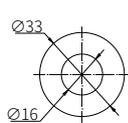
Model selection

Model: GUC1800 (B) -H-0100M-RX05-V51
Explanation: GUC1800 (B) mine intrinsically safe displacement sensor, mounting thread metric M32x1.5, stroke range 100mm, straight out 5m coal safety cable, 0.5 to 4.5V voltage output (forward), single magnetic ring.

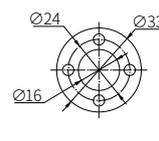
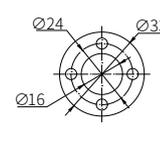
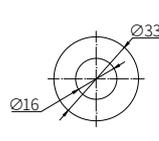
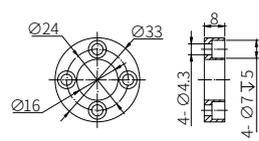
***This product is a mining product, the model must be GUC1800(B), please refer to the selection code when ordering.**



PARTS SELECTION



Name	Ring magnet	Ring magnet	Ring magnet	Ring magnet
Operating temperature	-40~125°C			
Order code	12-1028	12-1029	12-1033	12-1053



Name	Ring magnet	Non-permeable gasket	Non-permeable gasket	Non-permeable gasket
Operating temperature	-40~125°C			
Order code	12-1035	12-1043	12-1047	12-1034

Building 6, Dazu Enterprise Bay,
8th yard of Liangshuihe 2nd street, BDA P.R.China

Tel: +86 10-67948976 67948916
Fax: +86 10-67948979
Technical support: +86 (0)13370126657

Beijing Tebeifu Electronic Technology Co., Ltd.

TECHNOLOGY PERCEIVES THE FUTURE

www.tbfsensor.com