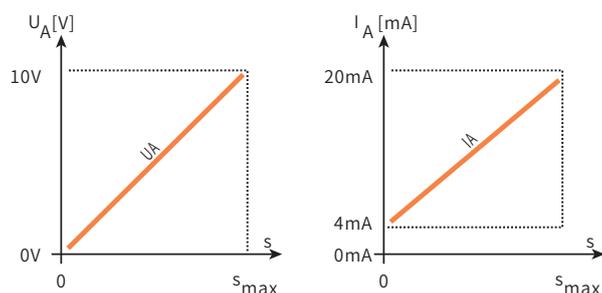




GUC2800(A)- Analog

GUC2800(A)-Mine intrinsic safety type



- + High vibration and shock resistance performance.
- + Compact design: suitable for applications with strict space requirements for the installation of electronics housing, extensive applications in construction machinery.
- + 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
- + Maximum durability, continuous non-contact
- + Full scale adjustable, 100% adjustable zero and full scale



Document Number:
GUC2800(A)-A (V1.5)-EN

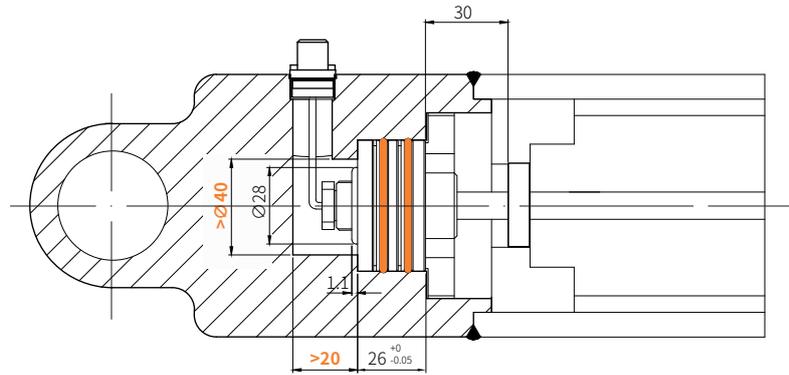
TECHNICAL PARAMETER

Input									
Measured data	Position								
Measurement range	50mm...2800mm								
Output									
Voltage	0...10VDC,10...0VDC,5...0VDC,0...5VDC								
Current	4...20mA,20~4mA								
Resolution									
Resolution	16 bit D/A (internal resolution 50 μm)								
None-Linearity	< ±0.05%F.S.								
Repeatability	< ±0.05%F.S.								
Update time	<table border="1"> <thead> <tr> <th>Stroke length</th> <th>≤ 1200mm</th> <th>≤ 2400mm</th> <th>≤ 2800</th> </tr> </thead> <tbody> <tr> <td>Update time</td> <td>0.5ms</td> <td>1ms</td> <td>1.5ms</td> </tr> </tbody> </table>	Stroke length	≤ 1200mm	≤ 2400mm	≤ 2800	Update time	0.5ms	1ms	1.5ms
Stroke length	≤ 1200mm	≤ 2400mm	≤ 2800						
Update time	0.5ms	1ms	1.5ms						
Temperature coefficient	< 30ppm/°C								
Mounting									
Mounting position	Any								
Mounting form	Extrusion mounting								
Design/Material									
Electronics housing	Stainless steel 304								
Measuring rod	Stainless steel 304/316L								
Magnet	Standard magnet								
Operating pressure	35MPa (continuous), 70MPa (peak)								
Electrical connection									
Wiring connection	Straight out cable								
Operating voltage	+12VDC (-15/+20%)								
Polarity protection	Up to -36VDC								
Overvoltage protection	Up to +36VDC								
Power consumption	≤ 60mA								
Dielectric strength	500 VDC (DC ground to machine ground)								
Operating conditions									
Magnet velocity	Any								
Operating temperature	0...40°C ,-30...80°C (Customizable)								
Humidity	90 % relative humidity, no condensation								
Ingress protection	IP68 (Customizable)								
Explosion-proof type	Mine intrinsic safety type								
Explosion-proof mark	Ex ib I Mb								
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								

MECHANICAL MOUNTING DIAGRAM

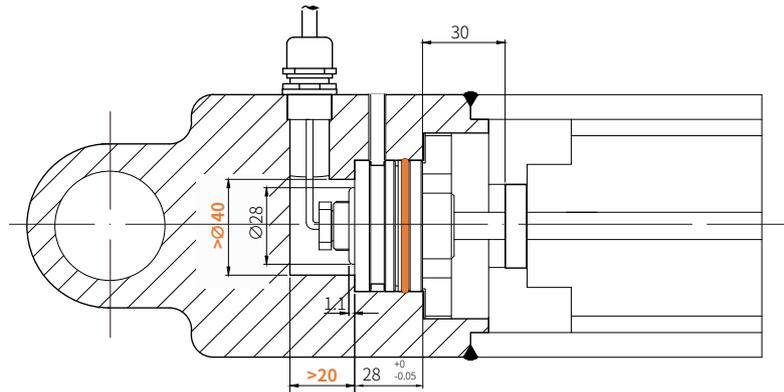
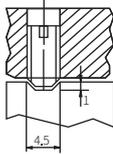
- + Secure the magnet with non-permeable gasket.
- + The size of hole in the piston rod depends on factors such as hydraulic pressure and piston speed. The minimum hole size is $\Phi 10$ ($\Phi 7$ measuring rods) or $\Phi 13.5$ ($\Phi 10$ measuring rods).
- + The top mounting hole of the cylinder is greater than 40mm in diameter and 20mm in depth.
- + The thimble is made of flat head top wire, and the force distance is $< 0.5\text{N.m}$.

Customized double seal type



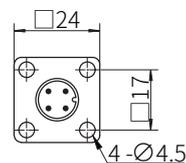
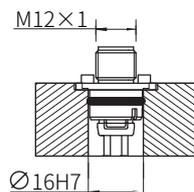
Thimble type

e.g. retaining with set screw DIN913
M5x10(with flat point!)
max. torque 0.5Nm

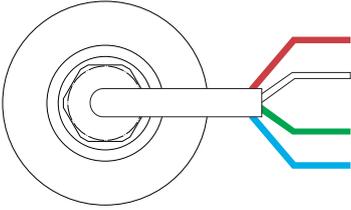


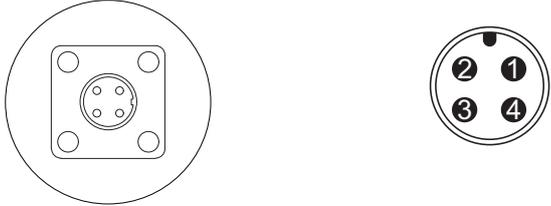
M12 connector

4 single lines, 0.5mm^2



Wiring

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

4 pin M12 connector	PIN	Function
	1	+12VDC (-15/+20%)
	2	GND
	3	Signal output
	4	SGND

ORDER CODE

GUC2800(A) - - - - M - - - -

Mounting	Stroke length	Connection type	Output (Output Code)
C Customized double seal type	0050...2800mm	RX_ _ Straight out _ _m coal safety cable	
R Customized double seal type,with M4x6 thread	(5mm increments)	(If the cable length is less than two digits, add zeros in front.)	
K Thimble type		DS_ _ straight out _ _mm cable, with 4 pin	
N Thimble type,with M27x1.5 thread		aviation plug, unit: 10 millimetre; 01=10mm, 02=20mm...99=990mm)	

Analog Output Code	[1][2][3]
	[1][2] Current/Voltage
	A0 4~20mA (forward)
	A1 20~4mA (reverse)
	V0 0~10VDC (forward)
	V1 10~0VDC (reverse)
	V2 0~5VDC (forward)
	V3 5~0VDC (reverse)
	[3] Magnet
	1 one magnet

K=Anti-vibration program (If there are special needs, please fill in the end of the model number.)

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: GUC2800(A)-C-0100M-RX10-A01
	Explanation: GUC2800(A) series magnetostrictive displacement sensor, customized double seal type, range 100mm, straight out 10m coal safety cable, 4 to 20mA current output (forward), single magnetic ring.

***This product is a mining product, the model must be GUC2800(A), 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	12-1032	12-1019	12-1024	12-1001
Name	Non-permeable gasket	Non-permeable gasket	Non-permeable gasket	Non-permeable gasket
Operating temperature	-40...125°C			
Order code	12-1037	12-1021	12-1025	12-1008



Connector	4 pin M12 female connector	5 pin female connector (90 degree angle)
Name	Integral cable (MA)	Integral cable (MA)
Color/Diameter	Blue/ Ø 8	Blue// Ø 8
Plug surface	<ul style="list-style-type: none"> 1-Red 2-White 3-Green 4-Blue 	<ul style="list-style-type: none"> 1-Red 2-White 3-Green 4-Blue
Length	5~30M	5/10/15/20/30M
Order code	16-1029	16-1027

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