



**GS300 Linear Scale Technical**

Part No: GS300 Series  
Doc V: 1.1

- GS300 standard scale for common linear measurement applications on machine tools and inspection equipment.
- 70 to 1020mm reading lengths available.
- Accuracy test report included.
- Mounting bolt kit included.
- Cover options available.
- 2 year Warranty.



**GS300 Standard Linear Scales**

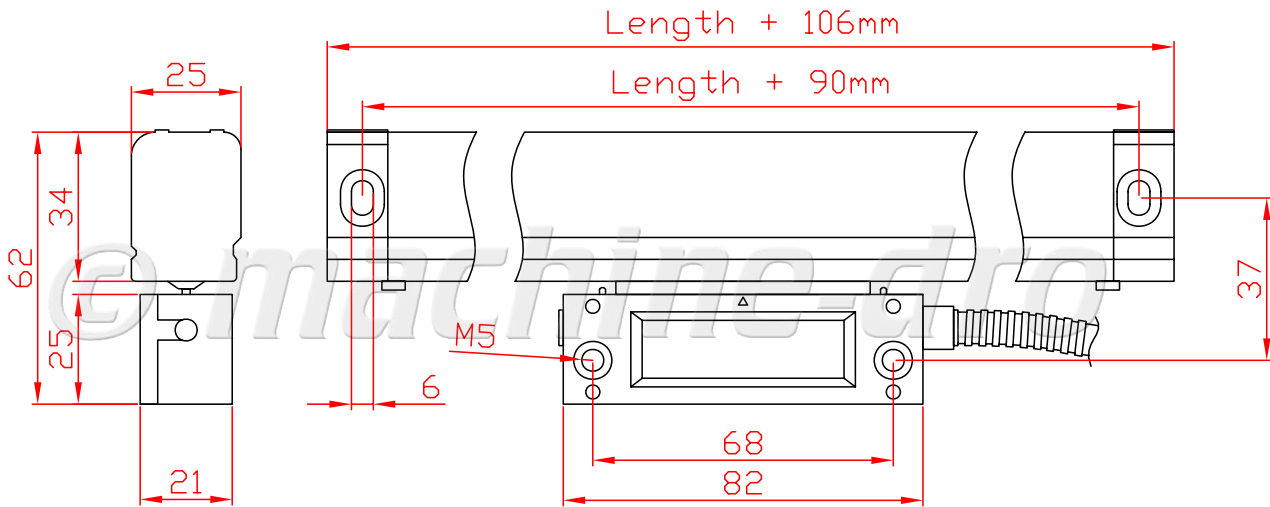
**Technical Specifications**

Specifications							
<b>Encoder type</b>	Optical (Glass)						
<b>Resolution</b>	5 micron (other resolutions also available, please contact us for details)						
<b>Accuracy (@20°C)</b>	<table border="0"> <tr> <td>0~200mm</td> <td>±0.005mm</td> </tr> <tr> <td>201~520mm</td> <td>±0.008mm</td> </tr> <tr> <td>521~1020mm</td> <td>±0.010mm</td> </tr> </table>	0~200mm	±0.005mm	201~520mm	±0.008mm	521~1020mm	±0.010mm
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201~520mm	±0.008mm						
521~1020mm	±0.010mm						
<b>Grating Period</b>	20µm						
<b>Maximum reading speed</b>	60 metres per minute						
<b>Cable length</b>	3 metres flexible armored						
<b>Scale length requirement</b>	Reading length +106mm						
<b>Protection class</b>	IP53 (when installed as per instructions)						
<b>Output Signal</b>	5 volt TTL Quadrature						
<b>Reference mark</b>	Every 50mm						
<b>Working temperature</b>	0 ~ 50°C						
<b>Storage temperature</b>	-20 ~ 70°C						
<b>Relative Humidity</b>	20% to 85% Non-condensing						

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## Dimensions



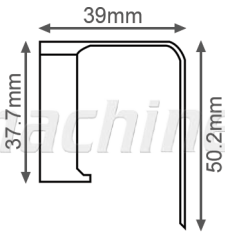
## GS300 Scale Lengths

Model Number	Reading Length		Mounting Holes		Overall Length	
	mm	inch	mm	inch	mm	inch
GS300-70	70	2 3/4	160	-	176	6 15/16
GS300-120	120	4 3/4	210	-	226	8 7/8
GS300-170	170	6 3/4	260	-	276	10 7/8
GS300-220	220	8 5/8	310	-	326	12 7/8
GS300-270	270	10 5/8	360	-	376	14 3/4
GS300-320	320	12 5/8	410	-	426	16 3/4
GS300-370	370	14 1/2	460	-	476	18 3/4
GS300-420	420	16 1/2	540	-	526	20 1/2
GS300-470	470	18 1/2	560	-	576	22 11/16
GS300-520	520	20 1/2	610	-	626	24 1/2
GS300-570	570	22 7/16	660	-	676	26 6/8
GS300-620	620	24 3/8	710	-	726	28 5/8
GS300-670	670	26 3/8	760	-	776	30 9/16
GS300-720	720	28 3/8	810	-	826	32 1/2
GS300-770	770	30 1/4	860	-	876	34 1/2
GS300-820	820	32 1/4	910	-	926	36 1/2
GS300-870	870	34 1/4	960	-	976	38 7/16
GS300-920	920	36 1/4	1010	-	1026	40 3/8
GS300-970	970	38 1/8	1060	-	1076	42 3/8
GS300-1020	1020	40 1/8	1110	-	1126	44 3/8



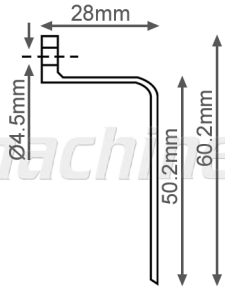


## Optional Protective Covers



B-type cover for GS300 linear scales;

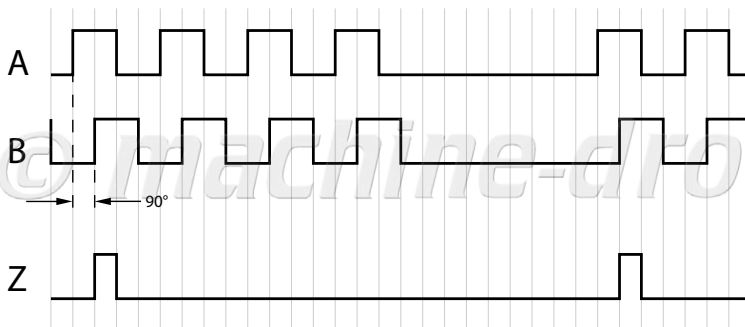
- Two part cover.
- Backing beam is mounted to machine first.
- Simplifies scale mounting.
- Removable outer cover.
- Additional protection from coolant and knocks.



C-type cover for GS300 linear scales;

- Single piece cover.
- Additional protection from coolant and knocks.

## Output Signal



- Fitted with 9 pin male D type connector for encoder input.
- For encoder compatibility please check compatibility chart datasheet.

	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
Signal	N/C	0v	N/C	Screen	N/C	A	+5v	B	Z

