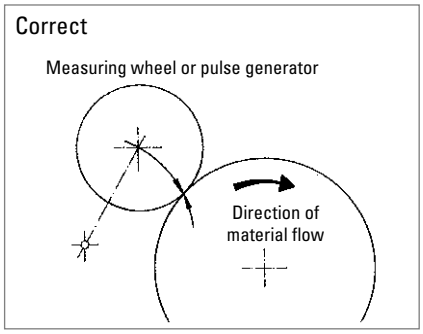
Measuring Wheels

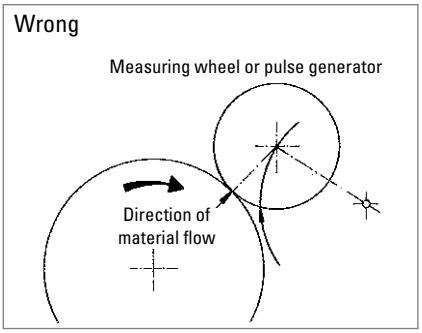
GENERAL ASPECTS

In order to prevent the result being distorted when the shaft encoder is driven by a measuring wheel make sure that the slip is as small as possible. When selecting the tread (surface), take into account the structure, stretchability, thickness, and resistance to being carried along of the material being measured.

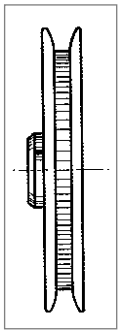
The slip is also affected by the width of the measuring wheel, the contact pressure, the tension in the material being measured, and the arc of contact. The arc of contact should be as large as possible. The wheel bodies are made of cast aluminium or plastic (as marked).

The position of the measuring wheel should be chosen so that the direction of movement of the material is away from the shaft encoder's bearing point.



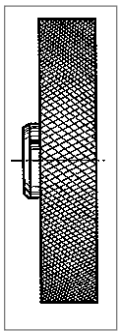


MEASURING WHEEL TREADS



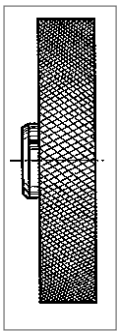
Tread 1
with rim and
fine crosshatched knurl
Material: aluminium

Applications such as
threads and yarns



Tread 2
with glued-on rubber profile
A = soft specially clinging rubber surface (red)
B = low-wear rubber surface with good grip (white)

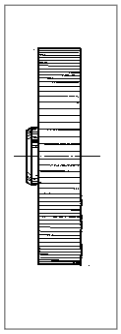
Applications such as
paper and cardboard, measuring cables, nongreasy metals, fleece, undressed or surface-treated wood, soft and hard plastics.



Tread 3
vulcanized rubber surface with parallel knurl

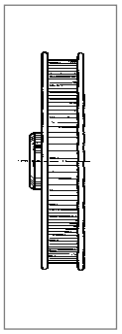
Applications such as
rubber, leather, fabrics, flooring and glass.

Measuring Wheels



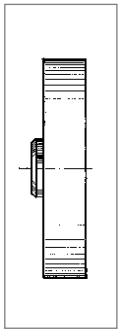
Tread 4
aluminium with parallel knurl

Applications such as rubber, soft plastics, wood with rough surface, and to a limited extent for fabrics.



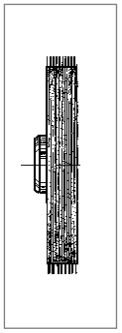
Tread 5
with rim, aluminium with parallel knurl

Applications such as threads, yarns, and bands.



Tread 6
plastic surface

Applications such as wire, greasy metals, and steel sections.



Tread 7
carding belt

Applications such as carpets and coarse fabrics.

ORDERING DATA

Aluminium

Diameter	Circumference	Tread	Width of bearing surface	Bore diameter (mm) fitting to encoder shaft				
				4.0 mm	6.0 mm	7.0 mm	10.0 mm	12.0 mm
6.37 cm	0.2 m	1	4 mm	0 601 014	0 601 015	0 601 017		
		2 A	12 mm	0 601 018				
		2 B	12 mm	0 601 118	0 601 048		0 601 049	
		2 A	24 mm	0 601 020		0 601 092		
		2 B	24 mm			0 601 192		
		4	20.5 mm	0 601 023				
		4	20 mm			0 601 093		
		5	16.5 mm	0 601 026		0 601 094		
15.92 cm	0.5 m	2 A	25 mm			0 601 05		
		2 B	25 mm			0 601 150	0 601 151	
		2 B	25 mm			0 601 204		
		3	25 mm			0 601 059	0 601 156	0 601 159
		4	25 mm			0 601 121 [1]	0 601 157	601 063 1
		6	25 mm			0 601 163	0 601 165	
5.73 cm	1/5 yd.	1	4 mm	0 601 034		0 601 037		
		2 A	24 mm	0 601 042				
		5	16.5 mm			0 601 096		
14.33 cm	1/2 yd.	4	25 mm			0 601 061		
9.70 cm	1 foot	2 A	25 mm			0 601 071		
		2 B	25 mm			0 601 171		

Plastic

6.37 cm	0.2 m	1	4 mm			0 601 100		
		4	25 mm			0 601 301		
15.92 cm	0.5 m	6	25 mm			0 601 300		

[1] PTB approved

Other measuring wheels available on request