



Datasheet

Length measurement system LMSCA22

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Wachendorff Automation

... systems and encoders

- Complete systems
- Industrial rugged encoders to suit your application
- Standard range and customer versions
- Maximum permissible loads
- 48-hour express production
- Made in Germany
- Worldwide distributor network

Robust length measurement system LMSCA22



- Ultra compact system with new spring-loaded arm, including WDGP 36A encoder and 200 mm measuring wheel
- Up to 0.0125 mm/impulse for measurement results
- Suitable for many surfaces
- Absorbent mounting
- Contact pressure – easily adaptable by intelligent central adjustment

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Resolution WDGP 36A with	
200 ppr:	1 pulse/mm = 1.0 mm/pulse
2000 ppr:	10 pulses/mm = 0.1 mm/pulse
5000 ppr:	25 pulses/mm = 0.04 mm/pulse
16000 ppr:	80 pulses/mm = 0.0125 mm/pulse

Mechanical Data of the system modules	
Housing encoder	
Flange	synchro flange
Flange material	aluminium
Housing cap	stainless steel

Shaft(s)	
Shaft material	stainless steel
Starting torque	approx. 0.2 Ncm at ambient temperature

Shaft	Ø 6 mm shaft with flat
Shaft length	L: 11.5 mm
Max. permissible shaft loading radial	80 N
Max. permissible shaft loading axial	50 N

Bearings	
Max. operating speed	12000 rpm

Spring loaded arm	
Adjustable prestressing force	0 N up to 20 N in steps of 5 N
Length of spring lever axis	74.5 mm
Material	aluminum
Contact pressure	adjustable, 3°-step equates 5 N pressure increase

Machinery Directive: basic data safety integrity level	
MTTF _a	1200 a
Mission time (T _M)	20 a
Nominal service life (L _{10h})	1.7 x 10 ¹⁰ revs. at 20 % rated shaft load and 12000 rpm
Diagnostic coverage (DC)	0 %




Electrical Data	
Power supply/ Current consumption	4.75 VDC up to 32 VDC: typ. 80 mA
Output circuit	TTL, HTL
Channels	ABN and inverted signals
Load	max. 40 mA / channel
Circuit protection	inverse-polarity and short-circuit protection

Accuracy	
Phase offset	90° ± max. 8.5 % of a period duration
pulse-/pause-ratio	50 % ± max. 7 %

General Data	
Weight	approx. 270 g
Connection	Connector radial
Protection rating (EN 60529)	IP67, shaft sealed to IP65

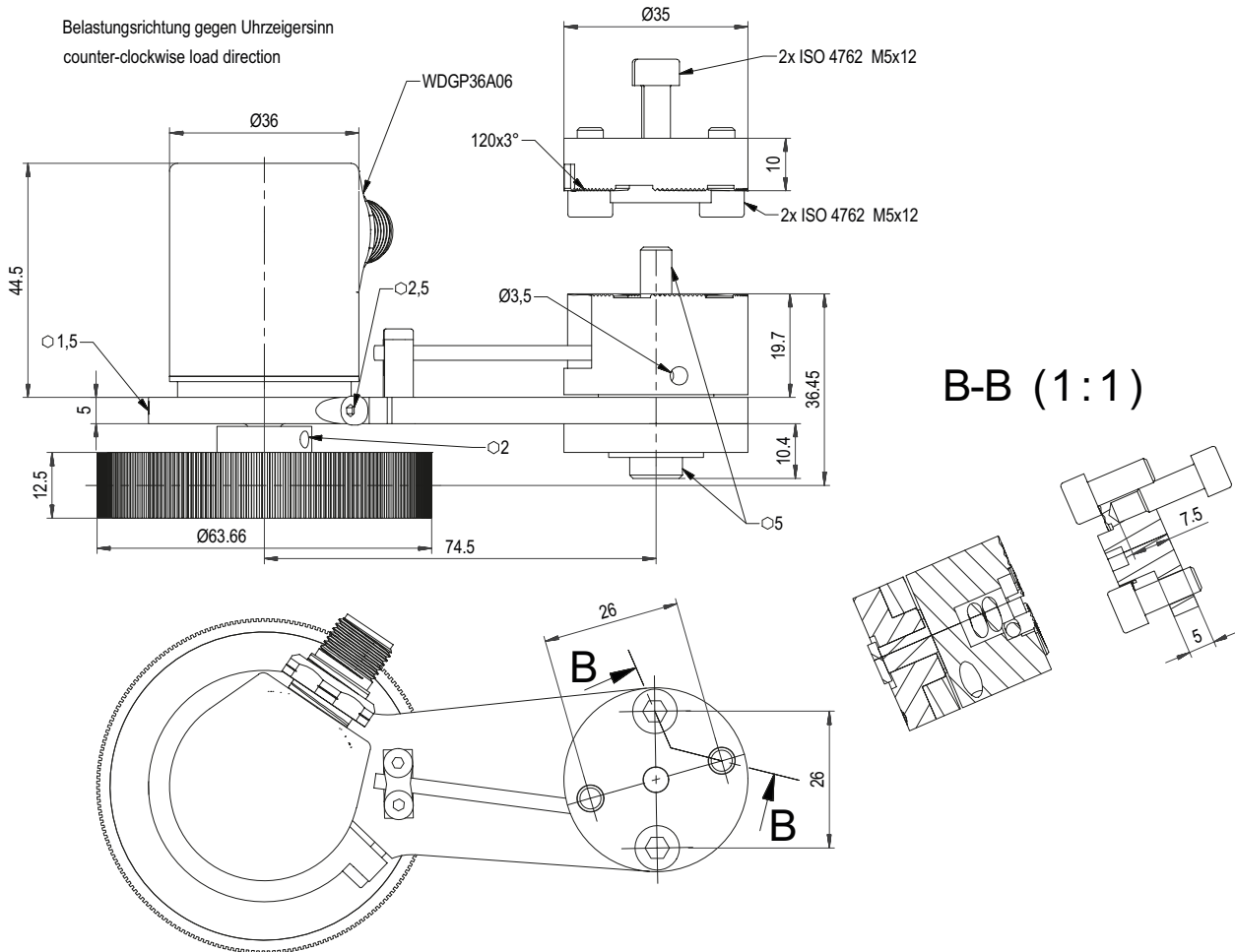
Operating temperature	
LMSxxxKH:	-10 °C up to +70 °C
LMSxxxKG:	-10 °C up to +70 °C
LMSxxxNG:	-10 °C up to +50 °C

Range of application measuring wheel U = 200 mm

	LMSxxxKH: (even)	Plastic, painted surfaces, paper, paste-board, wood, metal, textiles.
	LMSxxxKG: (fluted)	Plastic, painted surfaces, paper, paste-board, wood, metal, textiles.
	LMSxxxNG: (pimpled)	Textiles.

More information	
General technical data and safety incremental encoders	
www.wachendorff-automation.com/gtd	
Options	
www.wachendorff-automation.com/acc	

Sensor-connector (M12x1) SC, 8-pin



Description

SC8 radial, 8-pin, connector connected to encoder housing

Assignment	
	SC8
	8-pin
Circuit	M11, M12
GND	1
+UB	2
A	3
B	4
N	5
SET	-
A inv.	6
B inv.	7
N inv.	8
n. c.	-
Shield	-



For further information please contact our local distributor.
Here you find a list of our distributors worldwide.
http://www.wachendorff-automation.com/distributors_worldwide.html



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