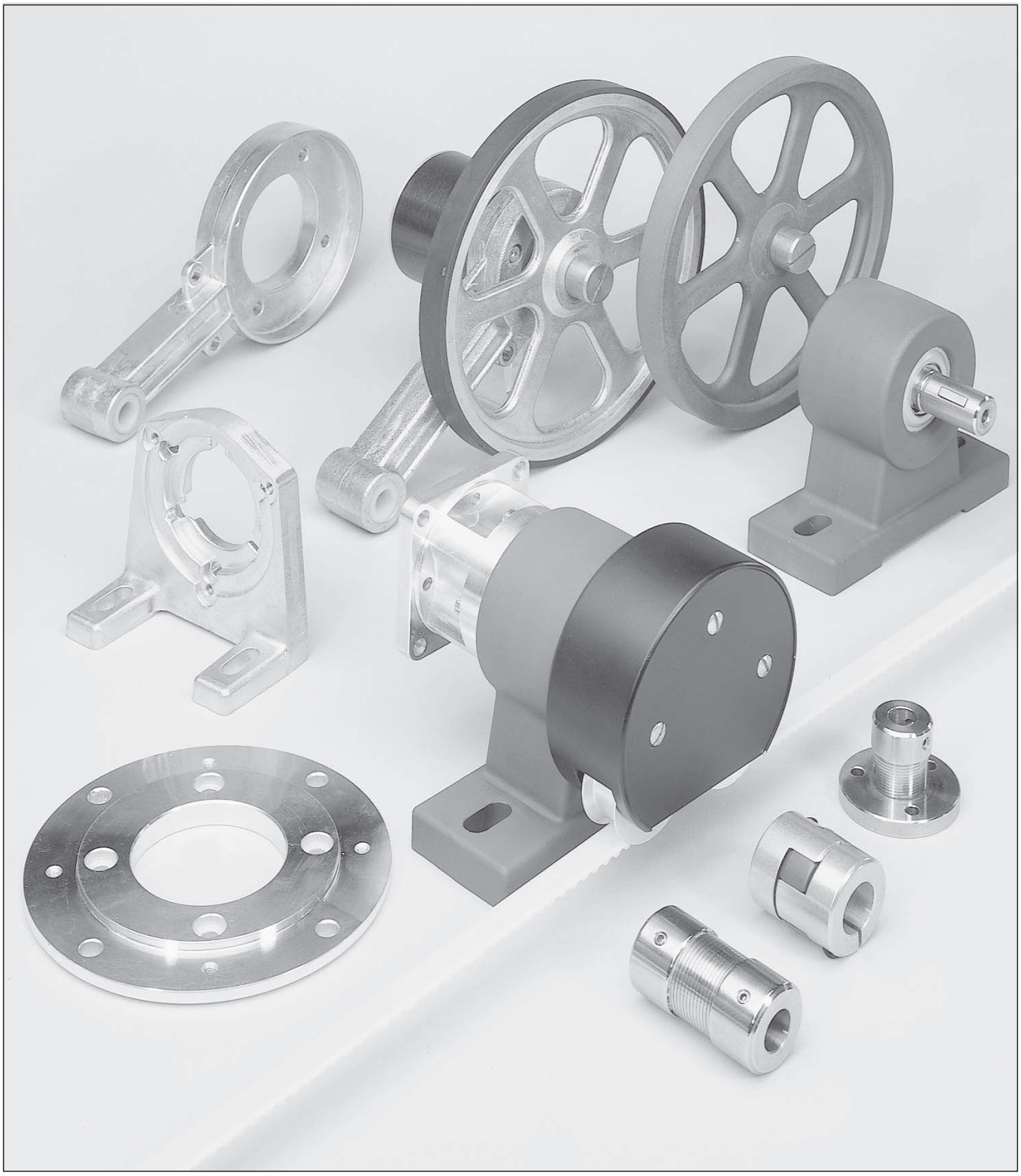
Encoder Accessories

LENORD +BAUER

05.02



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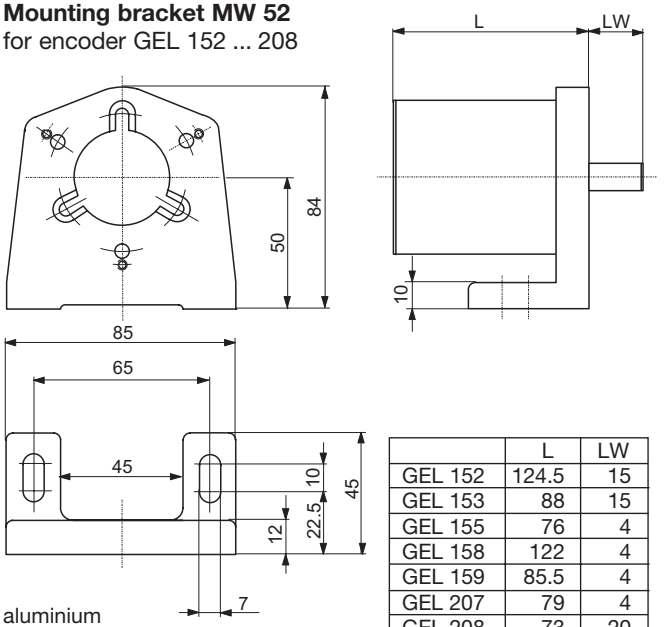
...automates motion

Mounting brackets
Installation, Condensed-water outlet

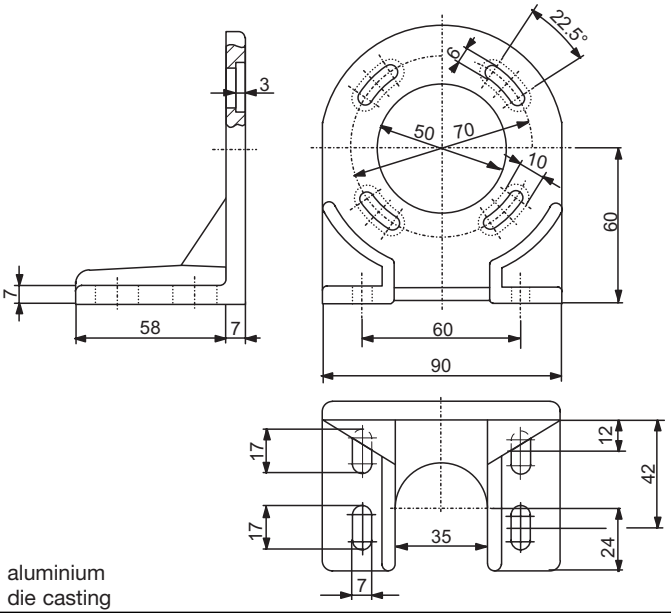
Mounting bracket MW 52
for encoder GEL 152 ... 208



	L	LW
GEL 152	124.5	15
GEL 153	88	15
GEL 155	76	4
GEL 158	122	4
GEL 159	85.5	4
GEL 207	79	4
GEL 208	73	20

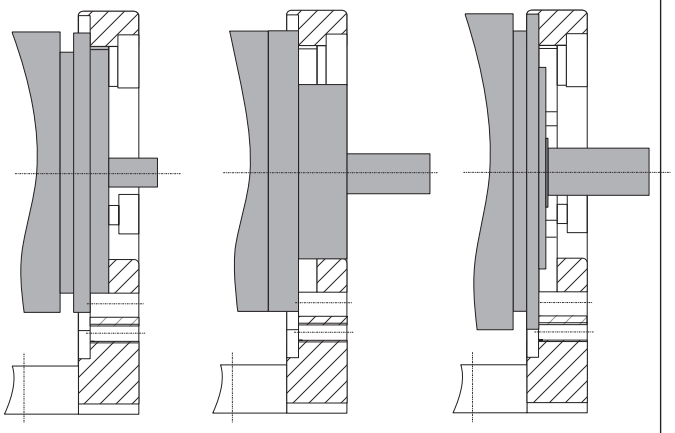
aluminium
die casting

Mounting bracket MW 92
for encoder GEL 260



aluminium
die casting

Installation example (Encoder, Mounting bracket MW 52)

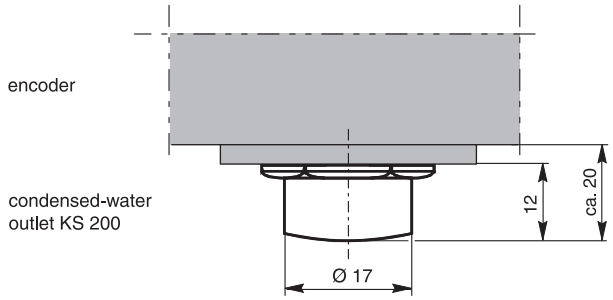


GEL 155
GEL 207

GEL 208

GEL 152
GEL 153

Condensed-water outlet [1] KS 200 and accessories
for axial and radial mounting to encoder housing



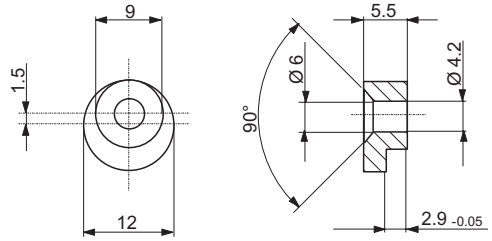
Protection class: IP 64

Please define the mounting orientation when placing your order. When the encoder is fitted the condensed-water outlet KS 200 must point down.

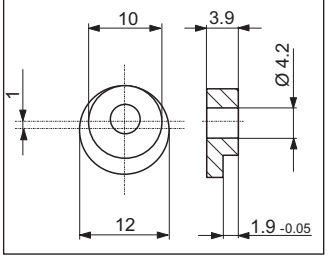
[1] for all encoders GEL **...** (excluding GEL 260 EEx)

Clamps, Flange
Measuring Wheel, Collet chuck

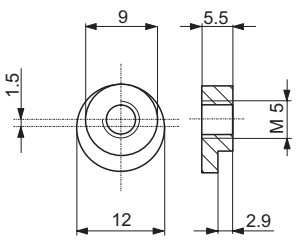
Clamp KL 200
for GEL 207/155



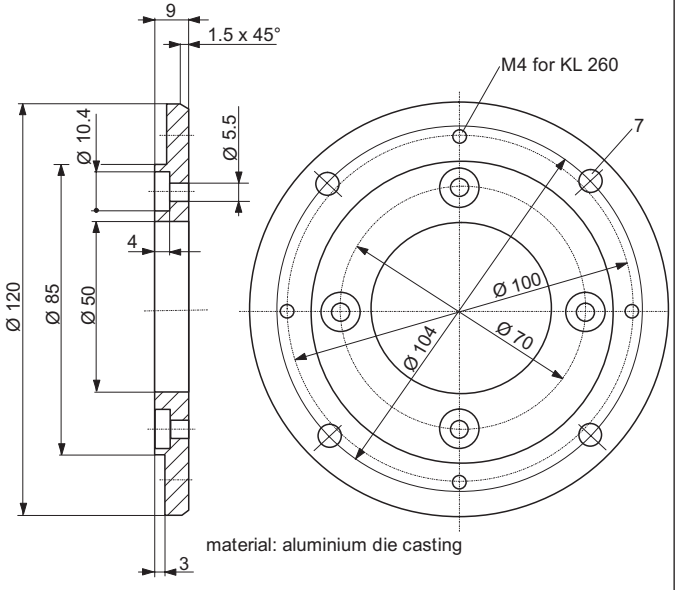
Clamp KL 260
for GEL 152/153/260



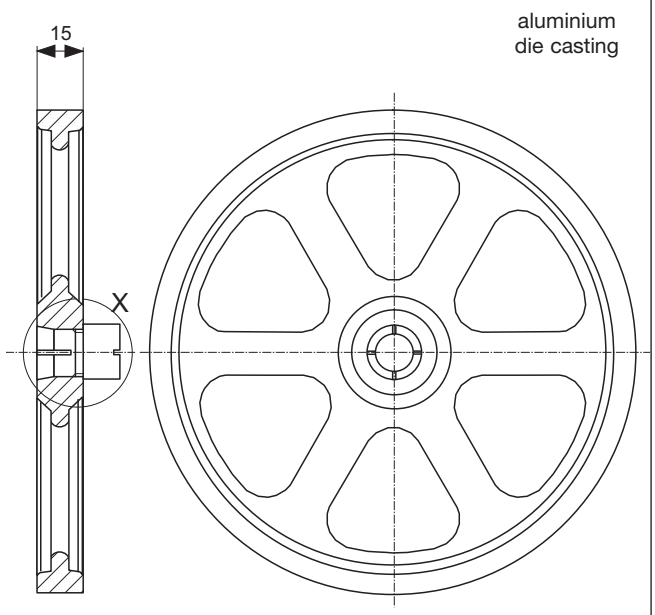
Clamp KL 150
for GEL 155



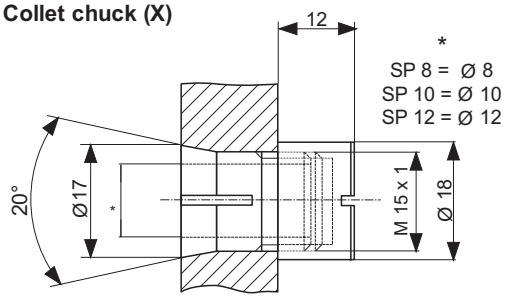
Mounting flange MF 121
for GEL 260



Measuring wheel MRM 500 / MRG 500
incl. Collet chuck



Collet chuck (X)

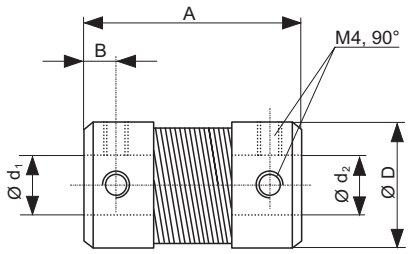


MRM 500: circumference 500 mm ± 0.3 mm
(hard anodic coated surface, approx. 700 HV)
MRG 500: circumference 500 mm ± 0.8 mm
(rubber coated surface, approx. shore 70)

temperature (rubber) -30° ... +120° C continous
-40° ... +150° C short term

Couplings

Metal coupling MK 8/MK 12



MK 8 material: X12CrNi18 8 (V2A)
MK 12 material: St

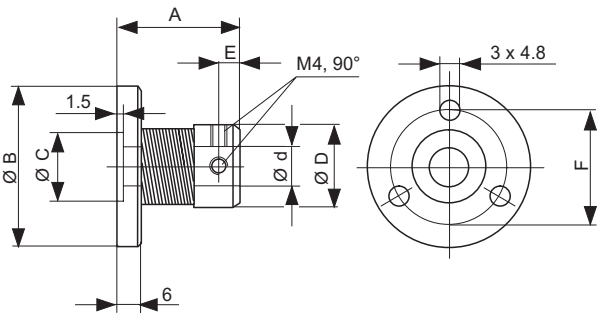
	A	B	D	d_1*	d_2*	standard d_1* - d_2*			
MK 8	35	5	21	5 ... 12	5 ... 12	6-6	8-8	10-10	12-12
MK 12	50	7	26 [1)]	6 ... 15	6 ... 15	12-12			

[1)] This coupling can be supplied with a key-way.

* Diameter with Tolerance H7

Maximum play of shaft (coupling size): 3° or 3%

Screw mount coupling MKF 8/MKF 12



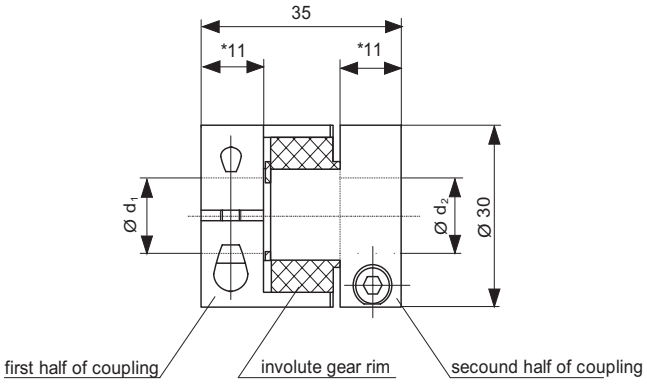
	A	B	C	D	E	F	d*	standard d*		
MKF 8	30	42	18 H7	21	5	30	6 ... 10	6	8	10
MKF 12	40	48	22 H7	26 [1)]	7	37	8 ... 15	12		

[1)] This coupling can be supplied with a key-way.

* Diameter with Tolerance H7

Maximum play of shaft (coupling size): 3° or 3%
Note: Mount coupling with 1 mm pre-load

Clamp coupling KK14



*11 = maximum dimension for inserted shaft

The coupling consists of 2 identical halves, which can be supplied with different inside diameters (d_1 and d_2) .

Through fitting the involute gear rim, the two halve of the coupling may be clamped seamlessly and can be assembled free of play (easy to mount).

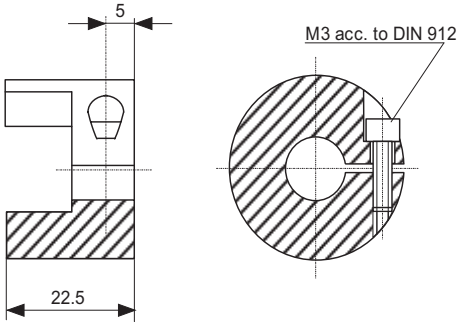
static stiffness of the torsion spring	125 Ncm/degree		
transferabel torque, free of play	100 Ncm		
misalignment of the shaft:	axial	-1	mm
	radial	0.2	mm
	angular	1	degree

d_1/d_2: 6, 8, 10, 12, 16 mm, toleranz H7
optionally pre-drilled to 5 mm

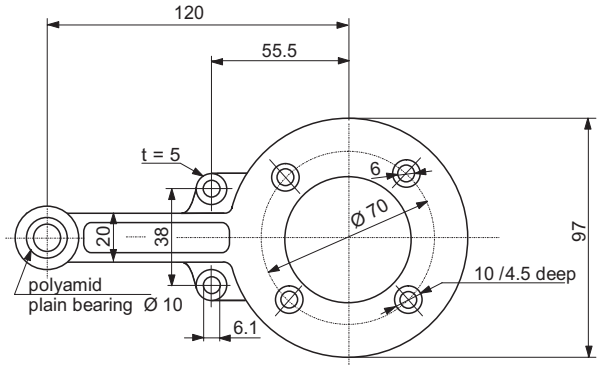
Order example: KK 14.08-12

Operating temperature range
intermittent -60°C ... + 120 °C
nominal -50°C ... + 80 °C

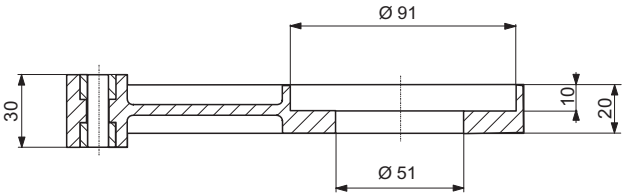
Half of coupling



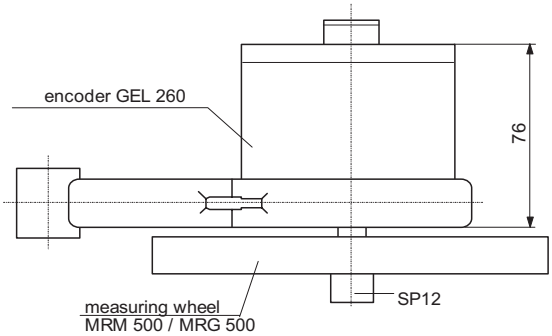
Measuring arm MA 262
for encoder GEL 260



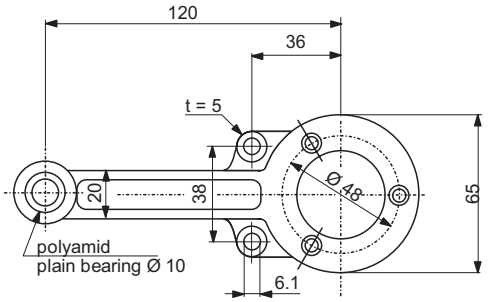
aluminium
die casting



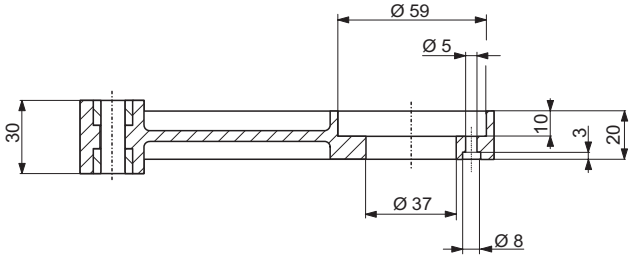
Measuring arm MA 262
with mounted encoder GEL 260
and measuring wheel MR 500



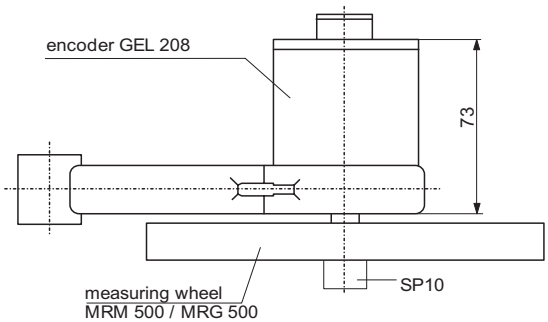
Measuring arm MA 205
for encoder GEL 208



aluminium
die casting

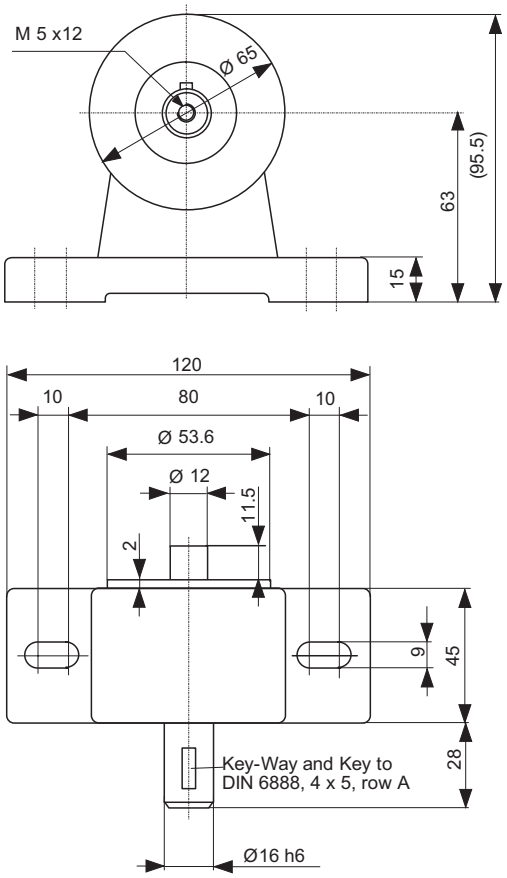


Measuring arm MA 205
with mounted encoder GEL 208
and measuring wheel MR 500

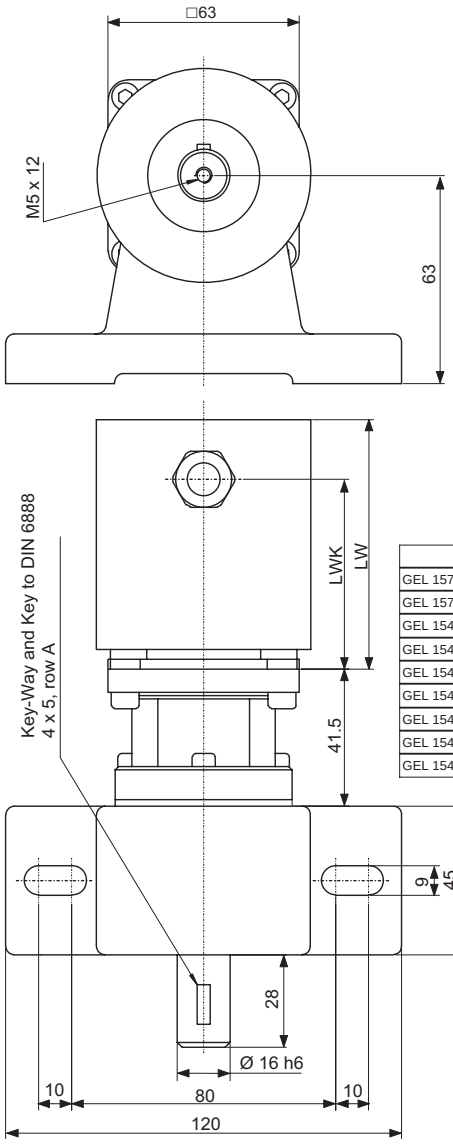


Bearing pedestal

Bearing pedestal LB 200
for encoder GEL 209



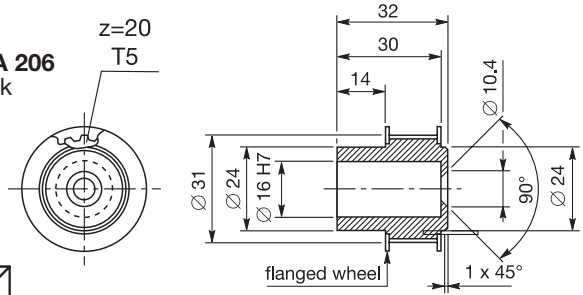
Bearing pedestal LB 150 /LB 154
for absolute encoder GEL 158/159 or GEL 154/157

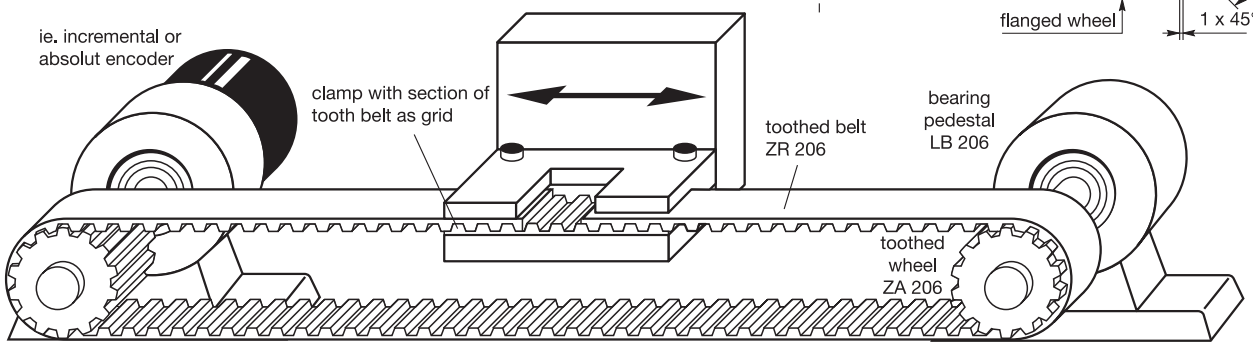


type	LWK =	LW=
GEL 157/159G4096A05	58	75.5
GEL 157/159G4096A25	58	75.5
GEL 154/158G4096N05	71.5	97
GEL 154/158G4096N25	71.5	97
GEL 154/159G4096A35	42	59.5
GEL 154/158G4096N35	58	75.5
GEL 154/158F00	71	97
GEL 154/158F20	71	97
GEL 154/158F30	71	97

Application example
Length measurement via tooth belt (by the meter). One turn of the encoder equals 100 mm travel.

tooth wheel ZA 206
with countersunk screw M5 x 12

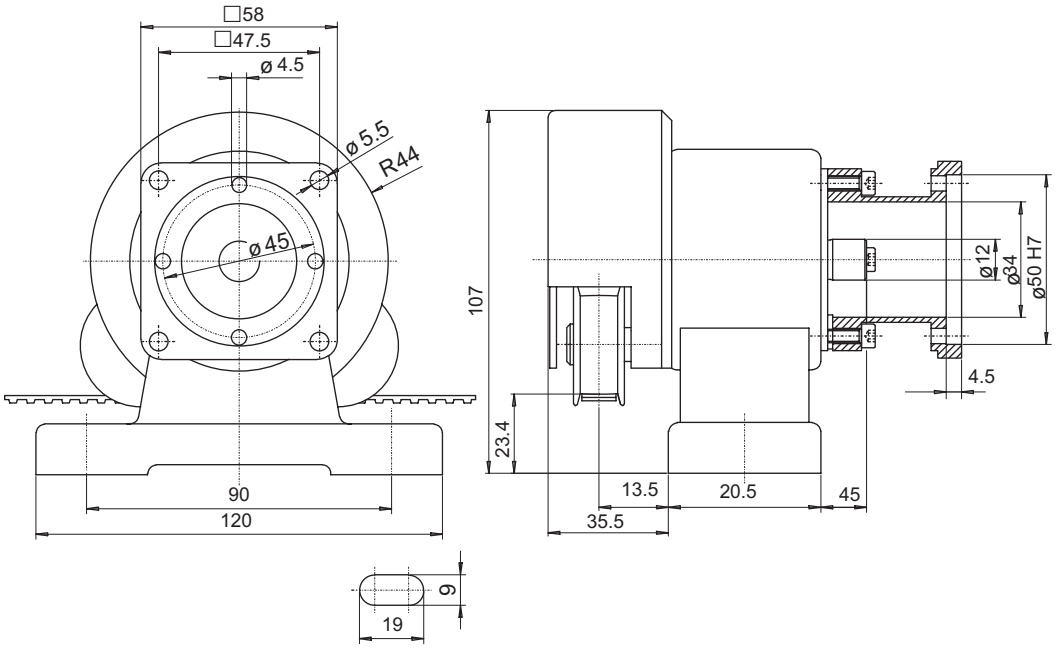




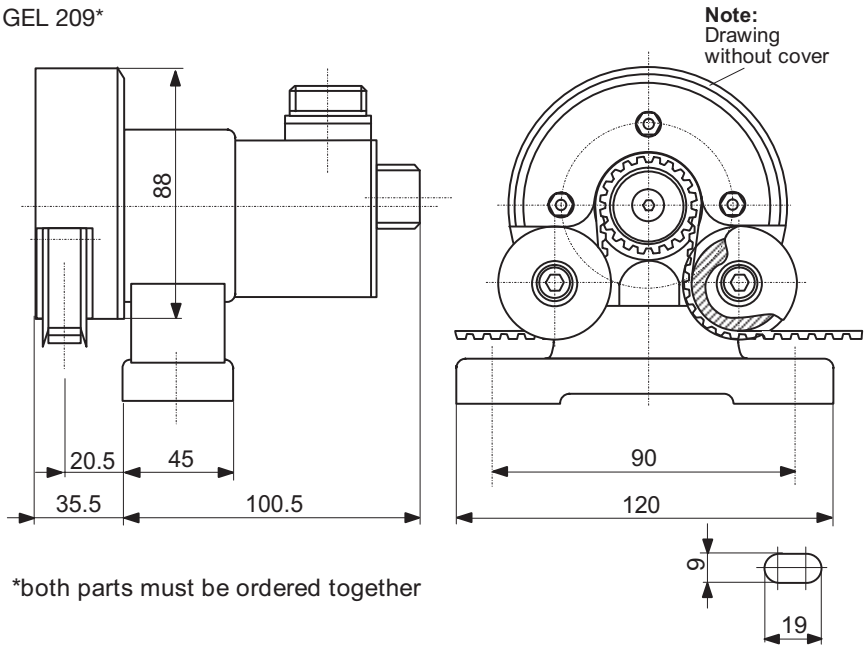
Measuring pedestal

with slip free belt drive for incremental or absolute measurement of large distance for example on cranes.

Measuring pedestal MB 150/MB 154 for absolute encoder type GEL 154 or GEL 158

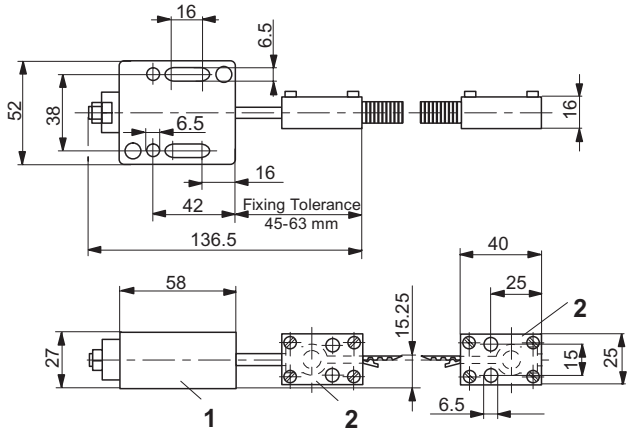


Measuring pedestal MB 206*
with mounted encoder GEL 209*



*both parts must be ordered together

Tensioner SE 206 (1)**, Tension Head SK 206** (2, kit)



Toothed Belt ZR 206

Dimension	:	width 10 mm, tooth pitch 5 mm
Construction	:	10 Steel-Cord strands (0.32 mm diameter bedded into Polyurethane-Elastomer)
Techn. Data	:	operating temperature - 10° C ... +80° C
		short term 120° C
		breaking load 1200 N
		max. tension 300 N at 4 ‰ elasticity
Weight	:	0.022 kg
Accuracy*	:	typ. ± 0.3 mm/m at 60 N toothed belt tension

In a mounted condition the accuracy can be improved by altering the tension. The stretching characteristic is linear. The coefficient is 0.01 mm / (1 m · 1 N).

Advantages : Unaffected by damp, petrol, oil, fats, hydrosol, uv-rays, ozone etc. Steel-Cord as tensioning strands: constant lengths at specified load, no additional stretching.

(toothed belt for -30° C on request)

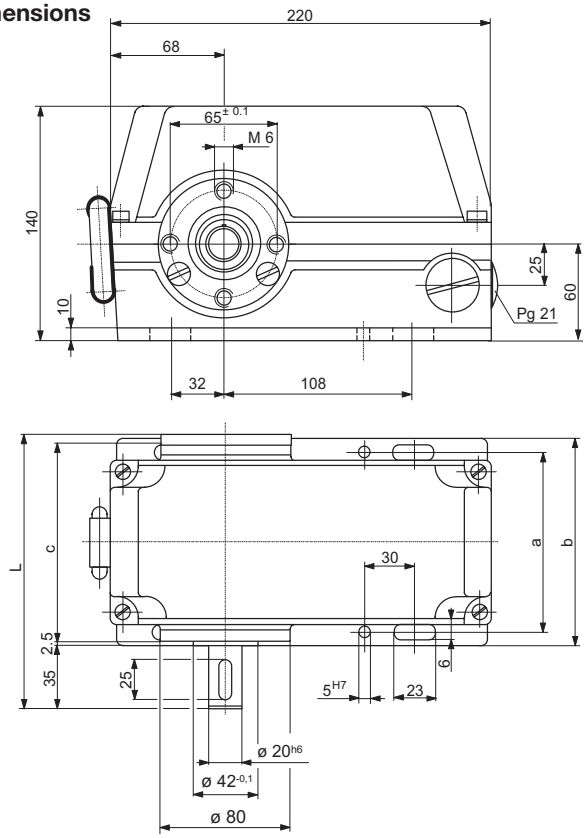
Protective casing SG 110/111

This casing protects rotary encoders GEL 207/260 or absolute encoders GEL 152/153 against high mechanical stress and environmental conditions.

Attention:
The shaft of rotary encoder GEL 207 must have a diameter of 12 mm

- Material: non-ferrous metal, seawater-resistant
- Type of protection: IP 65
- Seals: oil- and petrol-resistant
- Painting: hammer-finish green RAL 6011

Dimensions



Casing	Cable glands	Dimensions a	b	c	L	Weight [kg]
SG 110	5 x PG21	225	244	234	278	9.4
SG 111	6 x PG21	285	304	294	338	12.0

Protective casing SG 150/208

SG 150 **for absolute encoders**

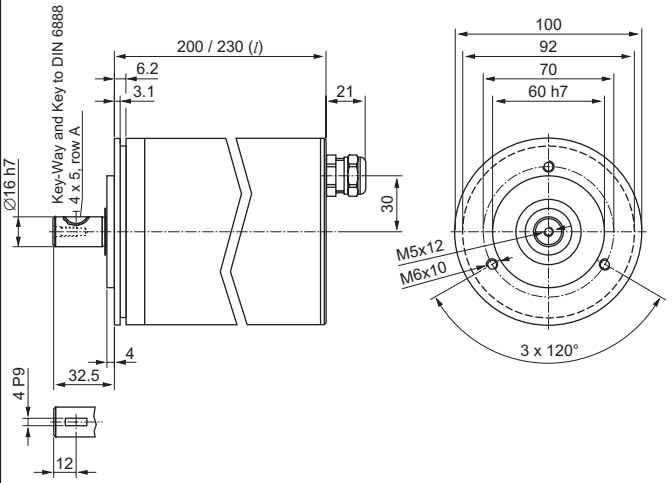
- GEL 152/153 single- or multiturn with parallel or SSI output (cf. Technical Information on encoders, absolute encoder GEL 15X, SSI or parallel interface)
- GEL 152 F for remote programming by PC (cf. Technical Information on encoders, absolute encoder GEL 15X, PC-programmable

SG 208 **for incremental rotary encoders**

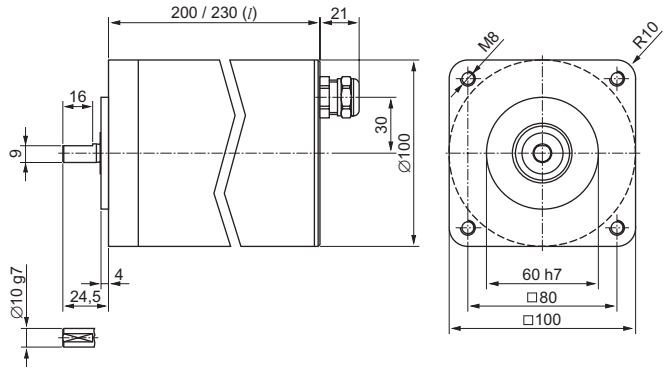
- GEL 208 (cf. Technical Information on incremental encoders GEL 207... 219)

Material: anodized aluminium, wall thickness 5 mm
Type of protection: IP 68

SG 150/208 with round flange



SG 150/208 with square flange



Type code SG 150

		Type of flange	
	1	round, shaft 16 mm	
	2	round, shaft 10 mm	
	3	square, shaft 16 mm	
	4	square, shaft 10 mm	
		Type of casing	
		1	(length of casing *l* = 230 mm) casing without intermediate plug for absolute encoders with direct cable outlet and mechanical zero adjust
		2	(length of casing *l* = 230 mm) casing with intermediate plug for absolute encoders with parallel interface and mechanical zero adjust
		3	(length of casing *l* = 200 mm) casing with intermediate plug for absolute encoders with SSI interface without mechanical zero adjust
		4	(length of casing *l* = 230 mm) casing with intermediate plug for absolute encoders with parallel interface without mechanical zero adjust
SG 150 -	_	_	

Type code SG 208

		Type of flange	
	1	round, shaft 16 mm	
	2	round, shaft 10 mm	
	3	square, shaft 16 mm	
	4	square, shaft 10 mm	
		Outlet (length of casing *l* = 200 mm)	
		1	axial cable
		2	axial connector 6 or 12 pole
SG 208 -	_	_	

Subject to technical modifications and typographical errors. For the latest version please visit our web site : **www.lenord.de.**