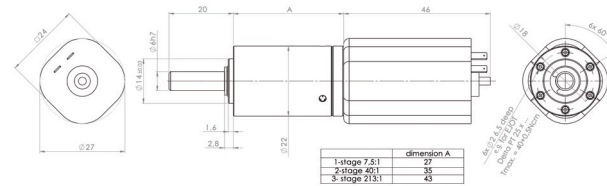
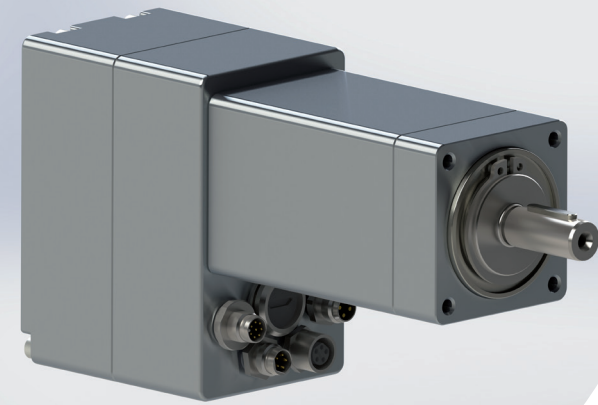


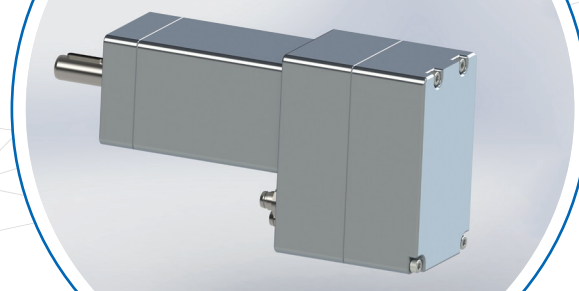
FUTURIS F45

Actuator for mechanical engineering
 Variant 12100_20_06_D_368

Actuator for mechanical engineering applications, e.g. adjustment of guide rails, positioning of stops. Integrated in a robust aluminium housing for harsh environments. A second gear ratio of $i=188:1$ is possible. The output shaft can be customised. Various electrical interfaces are available.



technical data		12100_20_06_D_386
actuator 368:1 / 188:1		
nominal torque (Nm) (16min ⁻¹ ±10%)		14
duty cycle		30% ED bei 53 (10min)
blocking torque (Nm) (short time)		15
rated output speed (U/min)		14
brushless dc-motor		
motor power (W)		50
motor voltage (V DC)		24



LAUDENBACH ADVANTAGES

- Reduced set-up times - increased productivity
- Simple integration and commissioning
- Numerous applications
- Precise format changes
- Increased machine efficiency due to robust and compact design

LAUDENBACH - INNOVATIONS FROM THE TOP OF THE SWABIAN JURA

As a gear producer and system service provider (GPS), we support you throughout the entire production chain:

From customised development and design at the start, through prototype and series production, to robot technology, including logistics and materials management.

Make the most of our skill sets for the production of individual components, the assembly of units, as well as for devices and entire systems.

Your requirements determine our vertical range of manufacture.



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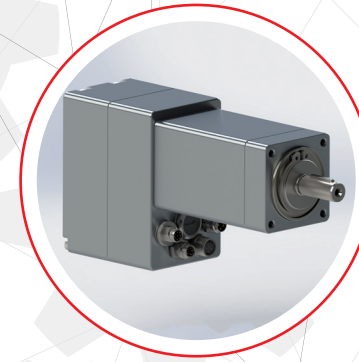
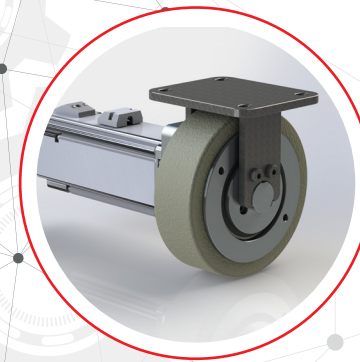
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**FULL SPEED AHEAD -
 INNOVATIONS FROM
 THE TOP OF THE SWABIAN JURA**

**SMART SOLUTIONS FOR
 MOTION CONCEPTS**



WHEEL DRIVES FOR AGVs

Variants 12100_20_11_000C/D
and
12100_21_02_000B/D/E/F

Wheel drive with fixed support for symmetrical load distribution and high payloads. Two large radial bearings are installed in X arrangement. The wheel drive is available in two gear ratio variants. Both have a very compact design due to a 1-stage or 2-stage planetary gear integrated in the wheel. High degree of efficiency and low noise emissions due to helical „minimum toothing“ design, or helical first planetary stage.

- Low maintenance, can be dismantled with only four screws.
- Various wheel coatings possible.
- Wheel tyre can be changed easily.
- Motor according to customer requirements.
- Screw-on plate according to customer requirements.

technical data						
technical data wheel drive 12100_21_02_000B/D/E/F	B	D	E	F	C	D
technical data wheel drive 12100_20_11_000C/D						
load capacity per wheel (Kg)	600	600	600	600	600	600
rated speed per wheel (km/h)	Ø200mm - 5,7	Ø200mm - 7,2	Ø165mm - 4,7	Ø165mm - 5,95	Ø165mm - 11	Ø165mm - 8,8
rated torque output (Nm)	24	34	24	34	21	14,6
power motor (W)	500	900	500	900	900	500
motor voltage (V DC)	48	48	48	48	48	48
incremental magnet encoder (p)	4096	4096	4096	4096	4096	4096
brake	electric parking brake	electric parking brake	electric parking brake	electric parking brake	electric parking brake	electric parking brake
gear reduction	22,5:1	22,5:1	22,5:1	22,5:1	12:1	12:1
protection class (IP)	40	40	40	40	40	40
weight (Kg)	10	12	10	11	13	13
temperature range (°C)	-20 bis +55	-20 bis +55	-20 bis +55	-20 bis +55	-20 bis +55	-20 bis +55
total length "A" mm	291,5	321,5	291,5	321,5	321,7	291,7
length motor from wheel center "B" mm	224	254	224	254	254,2	224,2
height "C" mm	213	213	178	178	178	178
wheel diameter "D" mm	200	200	165	165	165	165
length motor to hub "E" mm	264,5	294,5	264,5	294,5	298,7	268,7
ground clearance "F" mm	60	60	42,5	42,5	42,5	42,5
height from hub center "G" mm	113	113	95,5	95,5	95,5	95,5

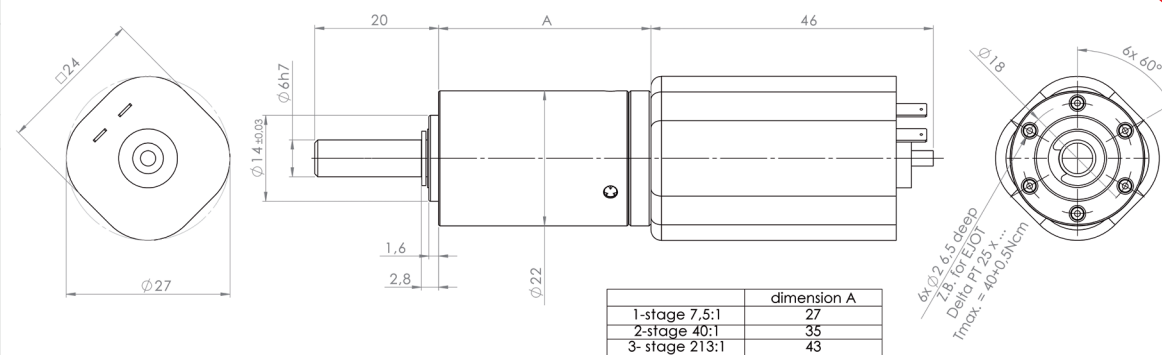
PLANETARY GEAR PG22 (LowNoise)

Variant 12100_17_01_A_XXX (XXX=75 - 40 - 213)

Plastic planetary gear for noise-sensitive applications. Further gear ratios are possible (see LFT data sheet 12100_08_03_000). The output shaft can be customised.

LAUDENBACH-ADVANTAGES

High power density, smooth running - best quality!
Laudenbach Formtechnik produces tailored gear solutions according to customer requirements. The necessary tool sets are applied and produced; customers receive complete gear products according to their specifications. This has the advantage that everything is available from under one roof.



technical data			
	12100_17_01_A_7,5	12100_17_01_A_40	12100_17_01_A_213
noise (dBA) acc. to 1m distance	42	42	42
gear reduction	7,5:1	40:1	213:1
engine speed (U/min)	2500	2500	2500
rated torque (Nm)	0,6	0,6	0,6
block torque (Nm)	1,2	1,2	1,2
engine power (W)	8	8	8
motor voltage (V DC)	24	24	24
temperature range (°C)	-15 bis +65	-15 bis +65	-15 bis +65

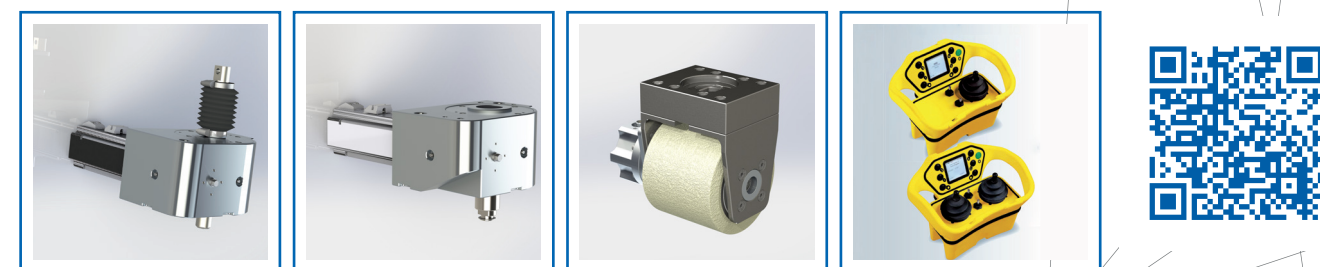
LIFT TRUCK WITH SEPARATE LIFT/STEER WHEEL DRIVE

Can be used individually or as a kit

This kit can be used to upgrade a lift truck (industry standard). With a few simple modifications, a manual lift truck can be turned into an electrically driven vehicle that can be operated using a remote control. Optionally, the lift truck can be upgraded to an AGV by attaching a sensor system.

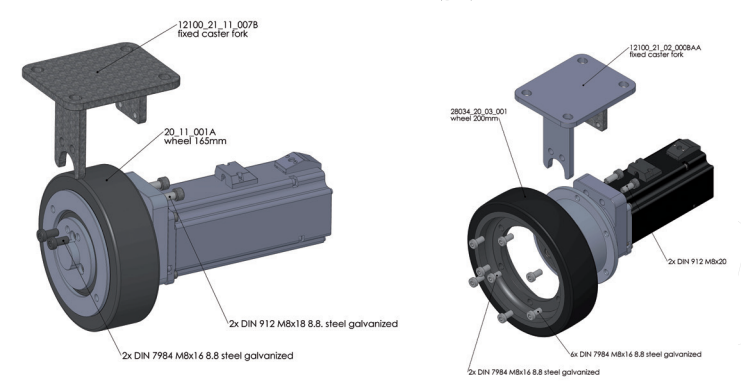
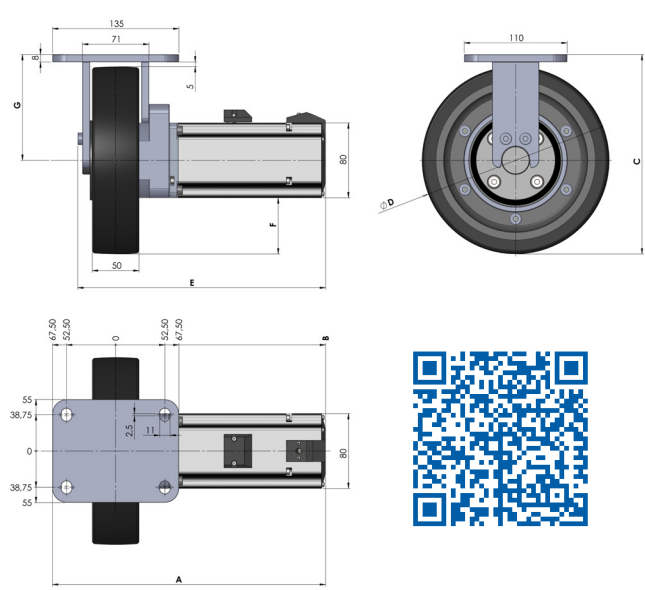
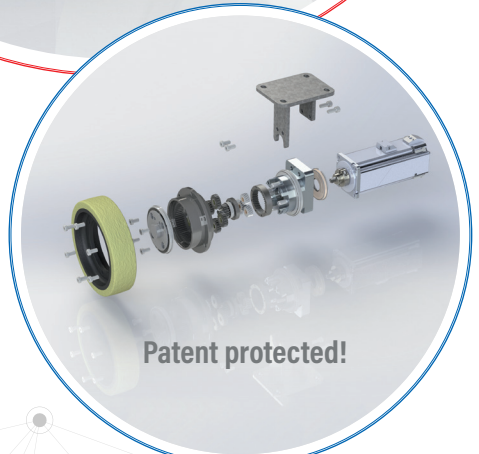
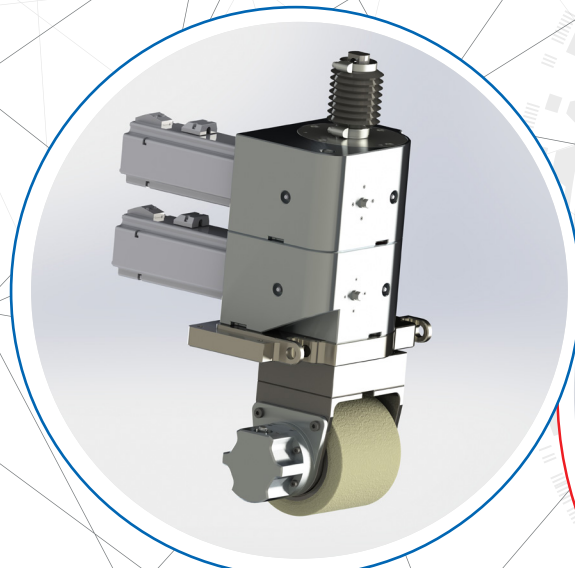
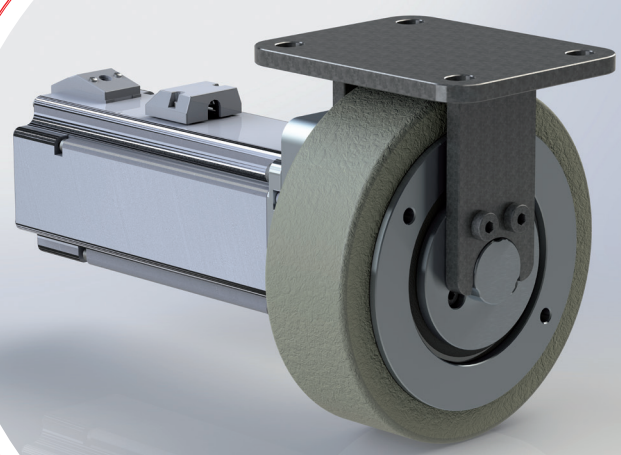
- Modular construction, each drive can also be installed individually.
- Easy upgrade from cheap manual ones series lifting trucks possible.

technical data					
technical data lift truck 12100_20_15_000A/B	12100_20_15_000A remote control pallet truck	12100_20_15_000B pallet truck autonomous	12100_20_12_000A integrated wheel drive	12100_20_13_000B modular steering drive	12100_20_14_000B modular lift drive
integrated wheel drive / steering drive / lifting drive					
lifting capacity (Kg)	1000	1000			1000
min. lifting time (sec.)	4,5	4,5			6
max. stroke (mm)	80	80			105
nominal speed (km/h)			4,3		
power motor (W)			1300	900	900
motor voltage (V DC)			48	48	48
incremental magnet encoder (p)			4096	4096	4096
brake			electric parking brake	electric parking brake	electric parking brake
gear reduction			36:1	20:1	20:1
protection class (IP)			IP40	IP40	IP40
temperature range (°C)			-20 bis +55	-20 bis +55	-20 bis +55



LAUDENBACH-ADVANTAGES

- Innovative special solutions
- Optimised logistics
- Sensible upgrading
- Simple and thus better upgrade
- Improved lift truck through retrofitting
- More compact design
- Improved manoeuvrability
- Increased flexibility
- AGV solutions possible



LAUDENBACH-ADVANTAGES

- Optimised wheel drive system for autonomous guided vehicles and autonomous mobile robots
- Cost-effective and space-saving design
- Robust design with a high level of durability for mobile applications even on uneven surfaces
- Connection to PLC and modular safety control possible
- Smooth running due to „minimum toothing“ technology for low noise development and a high degree of efficiency
- High payload due to optimum bearing solution
- Low power consumption
- Ready-to-use wheel drive system with or without mounted wheel