1. Check list for drive dimensioning:

Editor:	*
Region/department:	
Telephone:	
Fax:	
E-mail:	

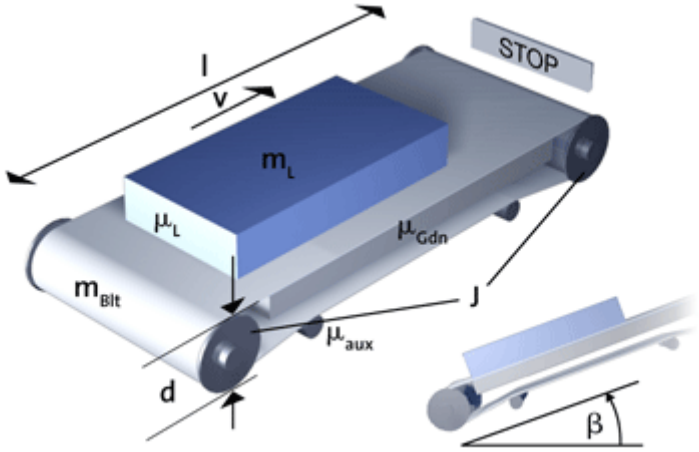
Customer:	*
Customer number:	
Contacts:	
Department:	
Telephone:	
Fax:	
E-mail:	
Street/house number or PO box:	
Country, postcode, town/city:	

Project:	
Project no.:	
Drive axis:	*

Notes:	

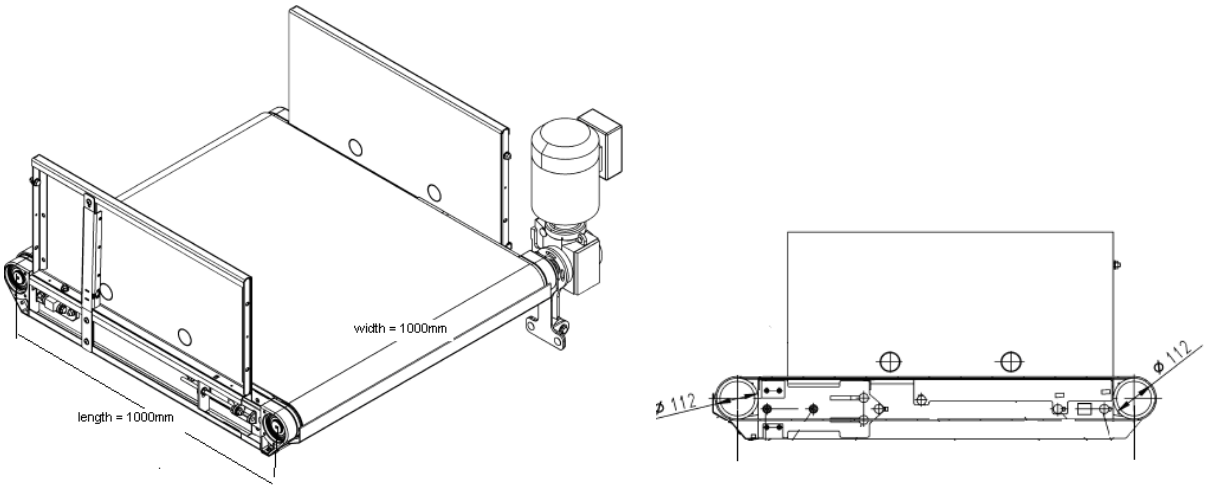
*) required data

2. Application data:



2.1 Physical data:			
Diameter drive roll:	d	112	mm
Belt mass:	m_{Blt}	7,5	kg
Mass of supporting rollers:	m_{aux}	-	kg
Moment of inertia of rollers:	J_{sum}	0,12	kgm²
Additional force:	F_{add}	-	N
Angle of tilt:	β	0	°
Coefficient of friction belt/supporting rollers:	μ_{Gdn}	-	
Coefficient of friction belt/bearing:	μ_{Gdn}	0,3	
Mass of payload:	m_L	65	kg
Velocity:		Speed profile: Start/stop operated belt conveyor with 60 cycles per minute. Infeed per cycle = 54inch Speed profile with three segments of identical length for acceleration, dwell and deceleration. Infeed within 0.95s + standstill time 0.05s	

If necessary, draw a freehand sketch containing further specific data.



Drive roller and idler pulley both with diameter 112mm.
No supporting rollers due to short belt length.

3. Motion

You can choose between operating modes S1, S2, S3, S6 or S8. To define the motion profile in operating mode S8, enter the data in a table or sketch the profile on a separate sheet.

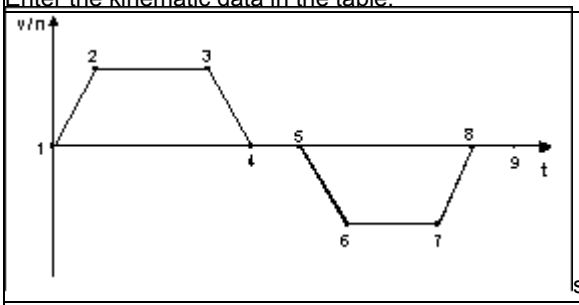
3.1 Operating mode

Select the operating mode and operating time

S1 Continuous operation	S2 Short-time operation		S3 Intermittent operation		S6 Intermittent load	
	ED [min]		ED [%]		ED [%]	
	10	☐	15	☐	15	☐
☐	30	☐	25	☐	25	☐
	60	☐	40	☐	40	☐
	90	☐	60	☐	60	☐

3.2 Define the motion profile in tabular format

Enter the kinematic data in the table.



see above, chapter 2.1

Note: The relative time period is the time between the current and last point in time. Ideally, you should enter the motion profile graphically.

Time-value	Absolute time t2 [s]	Relative time period (dt) [s]	Velocity v [m/s]	Mass of payload m1 [kg]	Additional force F_{add} [N]
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Does dimensioning need to take account of a holding brake being activated during the standstill phases? This reduces the load on the components.
Yes ☐ / No ☐ / Lenze recommendation ☐

As a result of the controller inhibit that applies during standstill phases when the motor does not need to provide any torque, the motor and inverter do not experience a temperature rise. The load on the components is reduced.
Yes ☐ / No ☐ / Lenze recommendation ☐

3.3 Graphically define motion profile
Describe and sketch the kinematic requirements of the application (path-time diagram, etc.).

4. Supply network

Feed	*	x Decentralised supply ☐ Central supply (DC-bus operation)
Mains voltage	*	Rated voltage U_N [V] _____400V_____ +/-[%] _____
Number of phases	*	☐ 1 x 3
Supply frequency	*	x 50 Hz ☐ 60 Hz ☐ DC
Power system	*	x TT/TN system ☐ IT system ☐ Earthed outer conductor

5. Ambient conditions

Ambient temperature of the motor or geared motor	$\vartheta_{opr,M}$	*	From/to _____
Max. ambient temperature, inverter	ϑ_{opr}	*	From/to _____
Site altitude	h	*	Required entry with site altitudes from 1000 m / 3280 ft _____
Special ambient conditions			

6. Miscellaneous

Positioning accuracy	
Radio interference level	
Special features	
Other information	

System integration

7. Mechanical integration

7.1 Motor

Motor type	*	☐ Lenze recommendation ☐ Standard asynchronous motor x Three-phase AC motor IE3 high efficiency ☐ Three-phase AC motor FI-optimised ☐ Asynchronous servo motor ☐ Synchronous servo motor ☐ Motor from another manufacturer
Data relating to a motor from another manufacturer		Manufacturer _____ Type _____ Rated power P_N [kW] _____ M_N [Nm] _____ n_2 [1/min] _____ Other information _____
Load on shaft (see appendix)	*	Radial forces _____ Axial forces _____
Dimensions		
Other information		

7.2 Gearbox, ratio

Gearbox type	*	☐ Lenze recommendation x Geared motor ☐ Belt or chain ☐ Geared motor with belt or chain ☐ Direct drive
Lenze gearbox		x Yes ☐ No
Type	*	x Right-angle gearbox ☐ Axial gearbox
Output end	*	☐ Solid shaft ☐ Hollow shaft ☐ Hollow shaft with shrink disc ☐ _____
Operation (entry only required when selecting the operating mode as described in Chapter 3.1)	*	☐ Steady ☐ Uneven ☐ No shocks ☐ Slight shocks ☐ Heavy shocks ☐ Alternating loads
Type of load	*	Switching operations per h _____
Operating hours per day	*	☐ 8 h ☐ 16 h

	x 24 h
Data relating to a gearbox from another manufacturer	Manufacturer _____ Type _____ Ratio _____ J [kgcm²] _____ Permissible output torque M _____ Other information _____
Driving belt/chain	Type _____ i (area) _____ n_2 [1/min] _____ J [kgcm²] _____
Motor clutch type	☐ Elastic ☐ Rigid ☐ _____
Load on shaft (see appendix)	* Radial forces _____ Axial forces _____
Comments	
Other information	

7.3 Mechanical brake

Motor with brake	* ☐ Lenze recommendation ☐ Yes x No ☐ Other
Brake design	* ☐ Holding brake ☐ Holding brake with safety function ☐ Service brake
Type of current	* ☐ AC ☐ DC
Supply voltage	* Rated voltage U_N [V] _____
Safety factor k_s	
Other information	

8. Electrical integration

8.1 Inverter

Drive with inverter		☐ Lenze recommendation x Yes ☐ No
Inverter type		☐ Servo inverter, standard mounting x Frequency inverter, standard mounting ☐ Inverter on motor ☐ Motor starter
Safety function		x None ☐ Safe torque off ☐ _____
Switching frequency	*	x Lenze recommendation ☐ Up to 8 kHz ☐ 16 kHz constant
Other information		

Dissipation of the regenerative power

Dissipation of the regenerative power	*	☐ Lenze recommendation ☐ Power recovery x Brake resistor ☐ DC-bus connection
Other information		

Feedback

Motor with feedback for drive control	*	☐ Lenze recommendation ☐ Yes x No
Encoder type		
Pulse rate/frequency		
Other information		