Conveyor unit selection

Application and functions

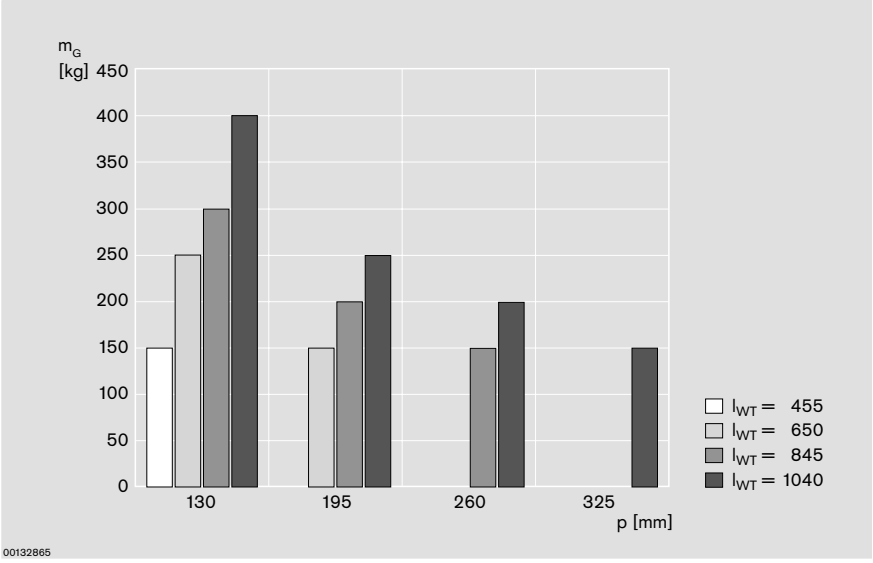
Conveyor units are available in 2 load classes and 3 different system widths (455, 650, 845 mm) for longitudinal conveyors, as well as a further width for transverse conveyors (1040 mm). All rollers in the conveyor unit are driven by a king shaft in the respective drive unit. The king shaft is located behind a protective cover below the transport level; the workpiece pallet can pass over the king shaft.
The conveyor units have a symmetrical design and there is no drive side selection.
The rollers are driven by bevel wheels; a friction clutch protects the drive during accumulation operation.
2 roller types:

- Split rollers as standard for longitudinal conveyors
- Full rollers (FR) as standard for curves, diverters, and junctions
- Full rollers for longitudinal conveyors to transport workpieces without workpiece pallets

Note:
The use of conveyor units with full rollers with WTs is limited. Depending on the roller dimensions, it may not be possible to assemble stop gates, sensor supports, and supports for ID systems.

Required accessories:

- AS 5/... drive unit ☞🗎 3-2
- SZ 5/... leg sets ☞🗎 7-2
- Connection kits ☞🗎 4-14



m_G = WT total mass
p = roller spacing (pitch)

Conveyor unit load carrying capacity
Permissible section load with a leg distance ≤ 2 m:
ST 5/XH: 380 kg/m
ST 5/H: 200 kg/m

The permissible loads apply only on condition that workpiece pallets with the maximum permitted weight m_{Gzul} have accumulated.
Accumulation operation is not permitted in curves, diverters, junctions, or the positioning unit.

Max. permissible WT weight m_{Gzul} with various WT lengths and roller spacings (division p)
When designing the transfer system, the WT length, WT total weight m_G and roller spacing (division p) must be adjusted to each other.

The carrying force per roller is 50 kg. The WT must always be on at least 3 rollers. The resulting load limits are illustrated in the graphic (☞🗎 2-6).

Use of the customer's own workpiece pallets
The indicated interdependencies between b_{WT} and l_{WT} must be taken into account when using curves, diverters and lift transverse units.
If a WT is only conveyed on a straight section, it can be any length; note the permissible section load and roller load.