



## New ball slip clutches

### Features

New slip clutches have been developed, which feature a ball snap function instead of the disc pads used in the old types. The old clutches will be phased out during Q4 2001, and the new type will be delivered as the old stock runs out. There is total compatibility between the two clutches.

The new design gives the following advantages:

- Maintenance free – requires no spare parts
- Long life span
- Easy to adjust
- High resistance to oil and chemicals
- Generates no dust
- The clutch releases when the pre-defined force is exceeded. Exact repeating accuracy when reset.

### Ordering information

If replacement of an existing slip clutch is necessary, use the following order numbers. "Standard drive" means a drive unit with sprocket chain transmission. The 5/8" standard drives are type XK H, all other drives use 1/2" diameter shafts.

Drive unit type	Dia.	Standard	Order no.
Standard drive	1/2"	DIN	5053981
	1/2"	ANSI	5054000
Standard drive	5/8"	DIN	5054001
	5/8"	ANSI	5054002
Direct drive	1/2"	DIN	5054003
Direct drive, stainless	1/2"	DIN	5054004

Each slip clutch is delivered in a cardboard box. Adjustment instructions are included. Please note that the new DIN types are marked with the same item number as the old DIN types.

The new design requires no spare parts, thus the following spare part kits become obsolete:

DIN: 5044945, 3925289, 3927005, 3925289,  
ANSI: 5044943, 5044978, 5045366, 5045367

These will be phased out completely during 2004.

### Hook spanner

Adjustment of the slip clutch requires use of a hook spanner, which is supplied by FlexLink (order no. 5053980).



Direct drive



Standard drive 5/8"



Standard drive 1/2"

### ► Purpose of the slip clutch

The slip clutch on the drive unit is a safety device which allows the chain to stop if the load becomes excessive. It has two purposes:

- Prevent damage to products on the conveyor
- Prevent damage to the conveyor

*Important:* The slip clutch is not a personal safety device. It is primarily intended to protect the equipment.

## Slip clutch adjustment

When a slip clutch is fitted, it must be adjusted so that it does not slip when the drive unit is started under full load. The installation is carried out as follows:

### Preparations:

- 1 Stop the conveyor.
- 2 Ensure that the conveyor cannot be started accidentally. For example: unplug the electric power plug.
- 3 Remove any load on the conveyor.

**Caution:** If you try to adjust the slip clutch when there is still load on the conveyor, the accumulated tension in the chain can cause severe injuries when you release the clutch.

### Slip clutch adjustment (see Fig. 1):

- 1 Remove the drive unit protection cover.
- 2 Use an Allen key, 3 mm, to loosen the screw (1) on the slip clutch so that the adjustment nut (2) can be freely rotated.
- 3 Turn the adjustment nut (2) clockwise with a hook spanner until the arrow on the nut is aligned with the desired  $F_{max}$  value (3). See *Table 1* for correct values.  
**Note:** On delivery, the clutch is always set to "0".
- 4 Tighten the screw (1).
- 5 Re-install the drive unit protection cover.

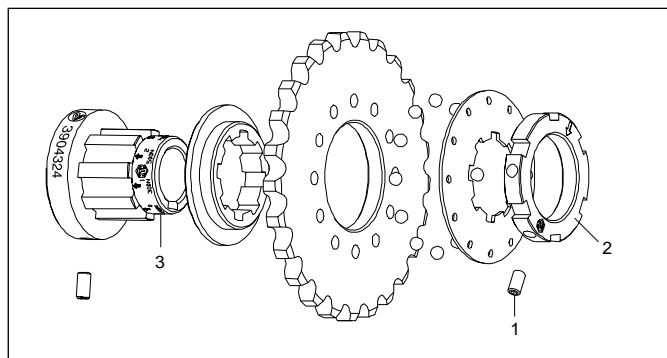


Figure 1.  
Slip clutch (exploded view)

Table 1. Slip clutch adjustment.

No.	Traction force, $F_{max}$ (N)			
	XS XL	XM XH XK XB	XT XW	XK H
0	300	300	300	600
1	400	400	400	800
2	500	500	500	1000
3		700	700	1150
4		800	800	1300
5		–	–	1550
6		1050	1050	1700
7		–	–	–
8		1250	1250	2000
9			–	–
10			1400	2200
11			–	–
12			1500	2400
13			–	–
14			1650	2500

Standard and direct drives ½":  
Slip clutches marked 3904324,  
5052769, 3925774, 5052827

Standard drives 5/8":  
Slip clutches marked 3925071,  
5052772