

# Pneumatic friction shaft Series 409

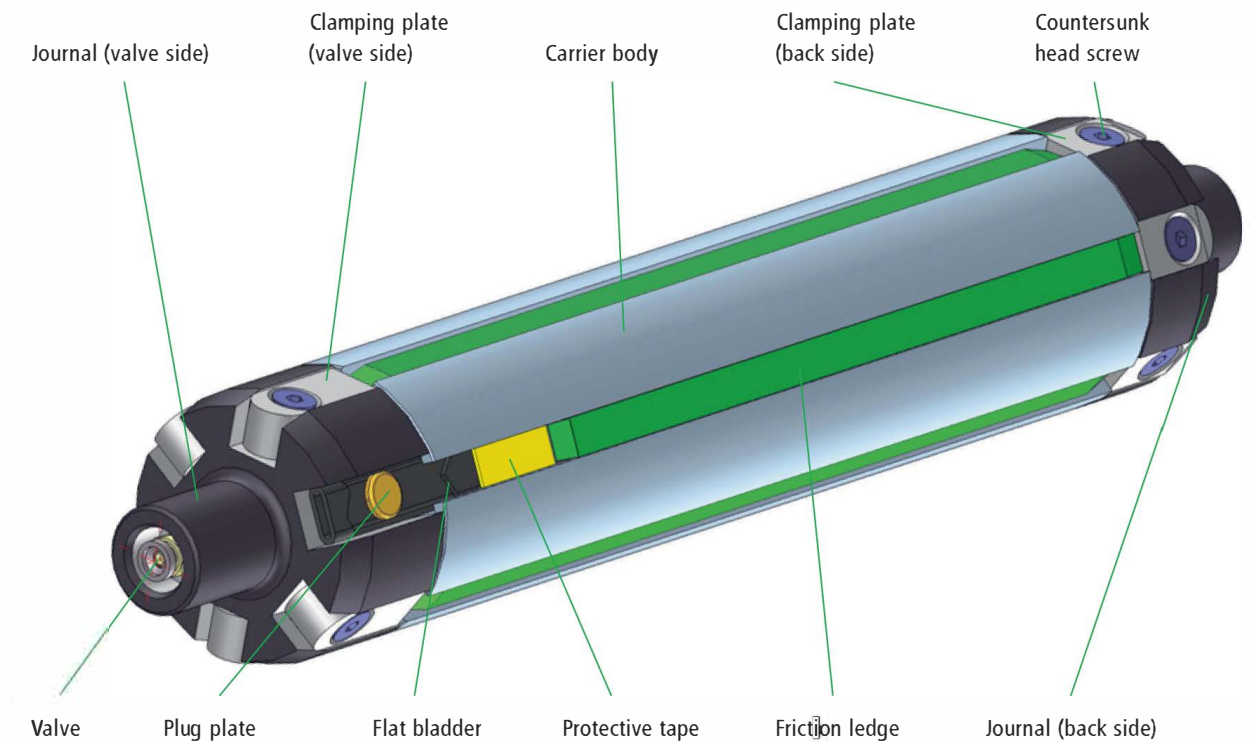
## Direct friction

Vorwald friction shafts of the Series 409 LF are recommended for winding processes with longitudinal web cutting of stretch-sensitive products. The friction shaft permits exact conformity with the specified tensional force, particularly with materials that do not have constant thickness. The frictional slip takes place between the friction elements and the core on the shaft body.

The carrier body is made of aluminium or steel with a refined smooth surface. The shaft journals are made of steel and manufactured according to the customer specifications. The expanding

ledges made of easy-slip plastic are pressed by flat bladders against the inner side of the core and thus apply the torque to the core.

The pneumatic pressure in the bladders is controlled, and thus the torque is varied, via a diameter sensing system. An overspeed of the friction shaft by at least 3% is necessary to sustain the web tension. The friction shaft of the Series 409 LF described above is available as from a core diameter of 50 mm. Special dimensions are possible on inquiry.



### Options

- Shaft ends can be designed as a flange or as a round journal
- Also suitable for safety chucks
- Reduced weight variant possible for larger diameters
- Special dimensions are possible on inquiry

### Advantages

- + Short set-up times for reel changing
- + Low maintenance
- + Suitable for a very wide range of web widths
- + Reel take-off can be automated

