TAPER BUSH LOCKING DEVICES

Cross Reference Table 228

Engineering Data 229

Taper Bush Locking Devices 231

Interchange table

DUNLOP	FENNER DRIVES B-LOC	BONFIGLIOLI BONFIX	CHIARAVALLI	TRANSDEV DRIVELOCK	CHALLENGE EASTLOCK	FENNER/ERIKS FENLOCK	POGGI POGGILOCK	RINGFEDER	RINGSPAN	TOLLOK
DLK110	B-800	1000	RCK 80	80	02	FLK110	CAL-B	RFN 7110	RLK110	TLK110
DLK130	-	4000	RCK 70	70	04	FLK130	CAL-D	TI 9013.A	RLK130	TLK130
DLK131	B-103	4500	RCK 71	71	06	FLK131	CAL-E	TI 9013.B	RLK131	TLK131
DLK132	-	4100	RCK 13	13	05	FLK132	CAL-DS	RFN 7013.0	RLK132	TLK132
DLK133	B-106	4600	RCK 16	16	07	FLK106/133	CAL-ES	RFN 7013.1	RLK133	TLK106/133
DLK134	-	4900	RCK 15	15	15	FLK134	-	-	RLK134	TLK134
DLK200	B-400	2000	RCK 40	40	01	FLK200	CAL-A	RFN 7012	RLK200	TLK 200
DLK300	B-500	3000	RCK 50	50	03	FLK300	CAL-C	RFN 8006	RLK300	TLK300
DLK450	B-112	9500	RCK 11	11	19	FLK450	CAL-F	RFN 7015.0	RLK450	TLK450
DLK603	SD-10	8000	RCK 19	19	14	FLK603	CAL-SD	RFN 4071	RLK603	TLK603

TECHNICAL INFORMATION

The functioning principle of the articles presented is based on radial deformation of the items, made up of a trunicated cone section: the tightening torque applied to the connecting screws causes an axial movement of the parts in contact with each other and in function of the inverse cone shape and the longitudinal cuts made on them provokes an increase in the diameter (of the external ring) and a reduction of the diameter (of the internal ring).

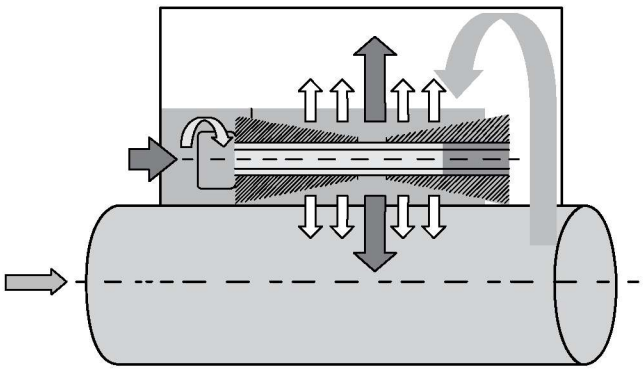
This changes allows (by virtue of the specific pressure between the bodies in contact) transmission of the torque between the shaft and the part connected to it (gear, timing belt pulley, V-Belt pulley or other specific parts).

- The advantages of the system block are as follows:
- Elimination of play between the sahft and the part driven.
- Uniform distribution of the load over the entire diameter
- Facility of synchronisation between the various possible parts connected as a set
- Reduction of the diameter (of project) of the drive shaft
- Increase of the resistant section of the drive shaft
- Reduction of the procurement times for machine assembly
- Maintenance facilitated with no need to stop the machine
- Availability of spare parts by main sub-suppliers of technical equipment

	DLK132	DLK133	DLK134	DLK110	DLK130	DLK131	DLK450	DLK200	DLK300	DLK603
SELF CENTERING	●	●	●	●	●	●	●			
NOT SELF CENTERING								●	●	●
MINIMUM RADIAL DIMENSIONS				●					●	
RAPID MAINTENANCE AND ASSEMBLY	●	●	●	●	●	●		●	●	●
MEDIUM TO LOW TORQUE									●	
MEDIUM TO HIGH TORQUE	●	●						●		●
HIGH TORQUE			●		●	●	●			
SELF LOCKING	●	●	●	●	●	●	●			
NON SELF LOCKING								●	●	●

Duty Factor (s)	LOAD TYPE		
	Constant	Intermittent	Alternating
Electric Motor	1 - 1.2	1.2 - 1.5	1.5 - 2
Combustion Engine	1.2 - 1.5	1.5 - 2	2 - 3

TECHNICAL SPECIFICATION



Pt hub = $\pi, D.H_2.Pm$

Pt shaft = $\pi, d.H_2.Pa$

Pt = $Pt.\mu.d/2$

Ta = $2.Mt.s$

Pt shaft = Pt hub

μ = coefficient of friction (0.13) for lubricated locking set (dry 0.15)

s = Duty Factor

Pm Pressure of locking set on hub

Pa Pressure of locking set on shaft

Ta Axial force transmissible

Tv Screw tightening torque

Tm Axial force exerted

Mt Transmissible torque of locking set

Pt Radial force (pressure)

Screws UNI 5931 DIN 6912-7984	Pitch (mm)	Tightening torque Tv with class 12.9 screws NM (UNI 3740-9)
M6	1.00	17.5
M8	1.25	42.0
M10	1.50	85.0
M12	1.75	145.0
M14	2.00	235.0
M16	2.00	360.0
M18	2.50	485.0
M20	2.50	705.0
M22	2.50	960.0
M24	3.00	1220.0
M30	3.00	2400.0

Tollerance and degree of roughness of surfaces.

Shaft:
Tollerance h8
roughness Rz<=16 µm

Hub:
Tollerance H8
roughness Rz<=16 µm