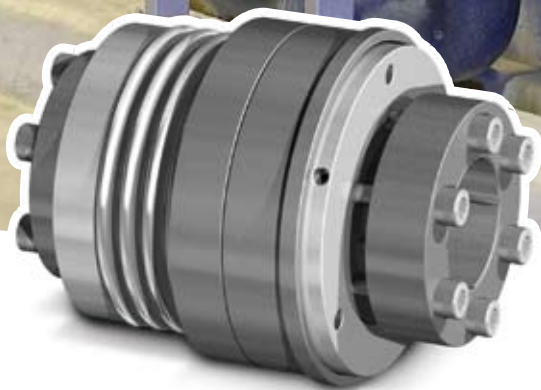


US
08|2009

Safety Couplings



Partner for performance
www.gerwah.com

GERWAH®



A Global Presence For You

The RINGFEDER POWER TRANSMISSION GMBH was founded in 1922 in Krefeld, Germany to fabricate and promote Friction Spring technology. Today we have expanded our offerings to top power transmission and damping products. Innovative thinking sets us apart and allows us to develop progressive and economical solutions to support our customers.





Special applications require special solutions

Our extensive range of RINGFEDER POWER TRANSMISSION products can be applied to solve most applications. We don't just sell, but by understanding the individual requirements of our customers (e.g. loads on the components, easy installation/removal capability and reduction of production costs) assist you in every step with innovative engineering to plan efficient and technically mature solutions.



Content

02 Pages Corporate Image

Basics

06 Information

Series

08 Information

DMK/L Series

12 Characteristics

14 Type **DMK/L-FK**

16 Type **DMK/L-FI**

18 Type **DMK/L-FO**

20 Type **DMK/L-FC**

DMK/LD Series

22 Characteristics

24 Type **DMK/LD-FK**

26 Type **DMK/LD-FI**

28 Type **DMK/LD-FO**

30 Type **DMK/LD-FC**

DMK/B Series

32 Characteristics

34 Type **DMK/B-CI**

36 Type **DMK/B-CO**

38 Type **DMK/B-CC**

40 Type **DMK/B-II**

42 Type **DMK/B-IO**

44 Type **DMK/B-IC**

DMK/E Series

46 Characteristics

48 Type **DMK/E-OI**

50 Type **DMK/E-OO**

52 Type **DMK/E-OC**

54 Type **DMK/E-CI**

56 Type **DMK/E-CO**

58 Type **DMK/E-CC**

DXM/C(L) Series

60 Characteristics

62 Type **DXM/C-FK**

64 Type **DXM/C-FI**

66 Type **DXM/CL-FK**

68 Type **DXM/CL-FI**

DXM/CD Series

70 Characteristics

72 Type **DXM/CD-FK**

74 Type **DXM/CD-FI**

DXM/N(L) Series

76 Characteristics

78 Type **DXM/N-FK**

80 Type **DXM/N-FI**

82 Type **DXM/NL-FK**

84 Type **DXM/NL-FI**

DXM/ND Series

86 Characteristics

88 Type **DXM/ND-FK**

90 Type **DXM/ND-FI**

Content

DXM/E Series

- 92 Characteristics**
- 94 Type DXM/E-CI**
- 96 Type DXM/E-OI**
- 98 Type DXM/E-KK**

DCM/S Series

- 100 Characteristics**
- 102 Type DCM/S-FK**
- 104 Type DCM/SK-FK**
- 106 Type DCM/SL-FK**
- 108 Type DCM/SE-KK**

DCM/D Series

- 110 Characteristics**
- 112 Type DCM/D-FK**
- 114 Type DCM/DK-FK**
- 116 Type DCM/DL-FK**
- 118 Type DCM/DE-KK**

DCM/V Series

- 120 Characteristics**
- 122 Type DCM/V-FK**
- 124 Type DCM/VK-FK**
- 126 Type DCM/VL-FK**
- 128 Type DCM/VE-KK**

130 Technical Details

138 Fax Inquiry

139 Product range RINGFEDER POWER TRANSMISSION

All technical details and information is non-binding and cannot be used as a basis for legal claims. The user is obligated to determine whether the represented products meet his requirements. We reserve the right at all times to carry out modifications in the interests of technical progress. Upon the issue of this catalogue all previous brochures and questionnaires on the products displayed are no longer valid.

Backlash-free Safety Couplings

GERWAH Backlash-free safety couplings are precision torque limiters with different functional principles for overloads:

Machine and system protection

- High-speed disengagement within 2-4 msec.
- Minimal residual friction

High Output

- Low mass moment of inertia

Process control

- Accurate adjustment of disengaging torque
- Signalling of overloads

Specific customer solutions

- High flexibility through modular design

Process accuracy

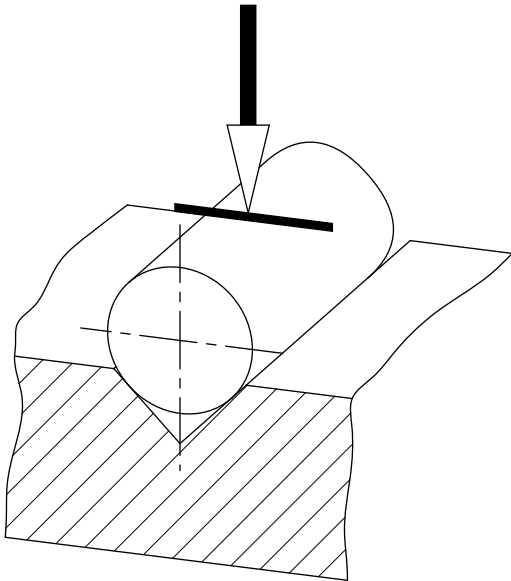
- Backlash-free torque transmission
- Excellent disengagement repeatability after long downtimes
- Easy handling

Customers benefit

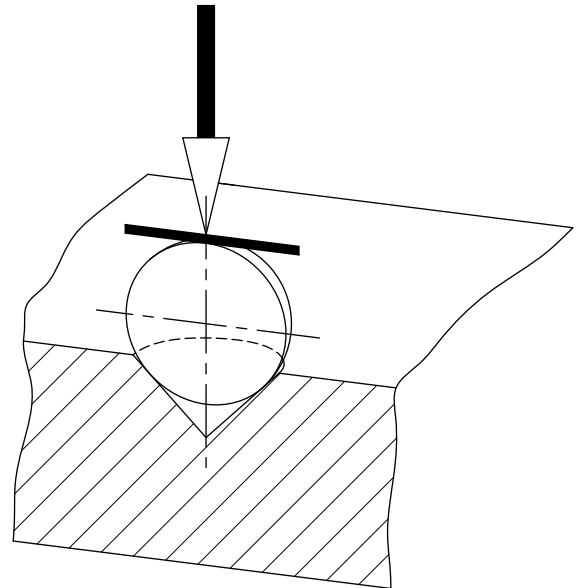
- Higher machine availability, increased productivity and profitability
- Lightweight construction possible, low masses, flexibility and dynamic of the machine increases, energy costs are reduced
- Machine parts can be used optimal because peak loads have no chance
- No damage by large destructive forces (e.g. in a collision)
- Long durability , i.e. constant production quality, longer machine operating times, better amortization

The principle of the spring-loaded form closure as an overload protection

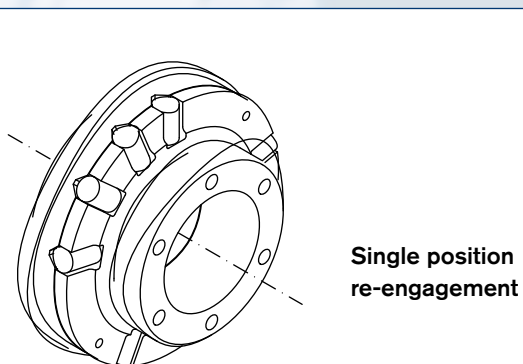
Roller detent system



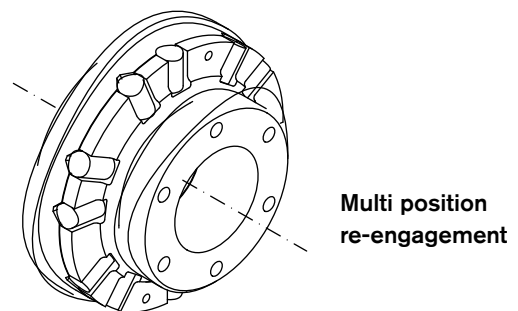
Ball detent system

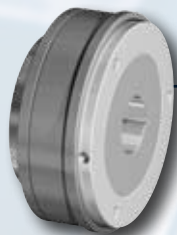


Single-position re-engagement



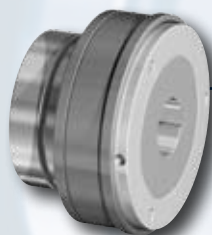
Multi-position re-engagement





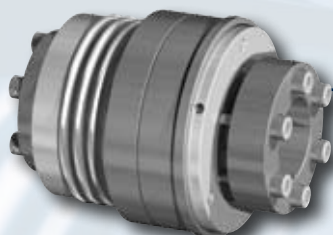
DMK/L Series

- Backlash-free safety coupling with a flange and ball bearing designed for the direct mounting of sprockets, pulleys, gears, etc.
- Roller technology, for high dynamic loads



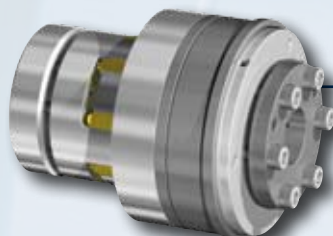
DMK/LD Series

- Backlash-free safety coupling with a flange and robust, double ball bearing for direct mounting of sprockets, pulleys, gears, etc.
- Designed for high loads
- Roller technology, for high dynamic loads



DMK/B Series

- Safety coupling, designed to connect two shafts with a metal bellows which serves as a torsionally rigid compensation element.
- Compensation of axial, radial and angular shaft misalignment
- Roller technology, for high dynamic loads



DMK/E Series

- Safety coupling with an elastomeric spider as an elastic compensation element
- High damping characteristic
- Roller technology, for high dynamic loads



DXM/C(L) Series

- Backlash-free safety coupling with a flange and ball bearing for the direct mounting of sprockets, pulleys, gears, etc.



DXM/CD Series

- Backlash-free safety coupling with a flange and robust, double ball bearing for the direct mounting of sprockets, pulleys, gears, etc.
- Designed for higher loads



DXM/N(L) Series

- Backlash-free safety coupling with a flange and ball bearings for the direct mounting of sprockets, pulleys, gears, etc.
- The torque is transmitted backlash free up to the disengagement point and is reduced within milliseconds at overload
- Easily adjustable torque setting



DXM/ND Series

- Backlash-free safety coupling with a flange and robust, double ball bearing for the direct mounting of sprockets, pulleys, gears, etc.
- For higher loads
- The torque is transmitted backlash-free up to the disengagement point and is reduced within milliseconds at overload
- Easily adjustable torque setting



DXM/E Series

- Backlash-free safety coupling, designed to connect two shafts equipped with an elastomeric spider which serves as a torsionally flexible compensation element.
- High damping characteristic
- Compensation of axial, radial and angular shaft misalignment



DCM/S Series

- Safety coupling for the mounting of sprockets, pulleys, gears, etc.
- Easily adjustable torque setting



DCM/D Series

- Safety coupling for the mounting of sprockets, pulleys, gears, etc.
- Easily adjustable torque setting



DCM/V Series

- Safety coupling for the mounting of sprockets, pulleys, gears, etc.
- Easily adjustable torque setting

Bottling Plant



Series DMK/L

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Characteristics

- Backlash-free safety coupling with a flange and ball bearings for the direct mounting of sprockets, pulleys, gears, etc.
- Roller technology, for high dynamic loads

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction
- High durability

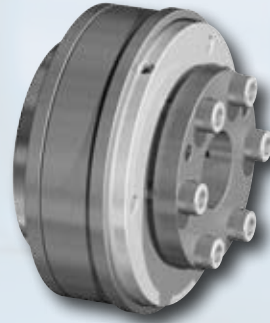




Series
DMK/L-FK

- with flange – keyway hub
- Torque 265-10600 lb-in

Page 14



Series
DMK/L-FI

- with flange – Internal keyless locking device hub
- Torque 265-10600 lb-in

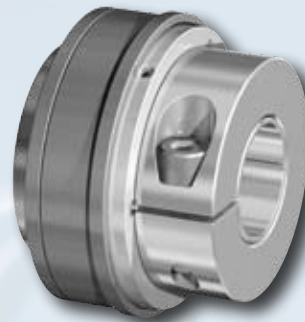
Page 16



Series
DMK/L-FO

- With flange – Shrink Disc[®] connection for self-loosening disassembly
- Torque 265-10600 lb-in

Page 18



Series
DMK/L-FC

- With flange – clamping hub for easy assembly / disassembly
- Torque 265-4500 lb-in

Page 20

Type DMK/L-FK with flange – keyway hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

- øA** = Outer diameter of flange
- øB** = Outer diameter of clutch body
- øC** = Pitch circle diameter
- øD^{H7}** = Bore diameter
- øF_{g6}** = Centering diameter
- G** = Thread depth
- K** = Distance from adjusting nut to flange face
- L** = Total length
- N** = Bearing support length
- O** = Clutch face to mounting flange
- S** = Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C1	øF _{g6}	C2	G 6x Thread/ depth mm	K	L	N	O	S
	Inch								Inch				
30	2.56	2.44	1.81	0.47-0.67	0.001	1.46	-0.0004/-0.0010	M5 / 7	1.14	1.42	0.28	0.91	0.05
60	2.95	2.76	2.17	0.59-0.83	0.001	1.65	-0.0004/-0.0010	M6 / 7	1.18	1.46	0.28	0.91	0.05
150	3.74	3.62	3.07	0.79-1.14	0.001	2.68	-0.0004/-0.0011	M6 / 9	1.30	1.81	0.51	1.06	0.08
200	4.13	4.02	3.39	0.79-1.30	0.001	2.95	-0.0004/-0.0011	M6 / 10	1.42	1.97	0.55	1.18	0.08
300	4.53	4.33	3.54	0.98-1.50	0.001	3.15	-0.0004/-0.0011	M8 / 12	1.57	2.13	0.55	1.24	0.08
500	5.08	4.92	4.33	1.38-1.81	0.001	3.74	-0.0005/-0.0013	M8 / 12	1.65	2.05	0.39	1.34	0.08
800	6.65	6.50	4.92	1.57-2.17	0.001	4.33	-0.0005/-0.0013	M12 / 15	2.44	3.03	0.59	1.87	0.08
1200	6.65	6.50	4.92	1.57-2.17	0.001	4.33	-0.0005/-0.0013	M12 / 16	2.44	3.03	0.59	1.87	0.08

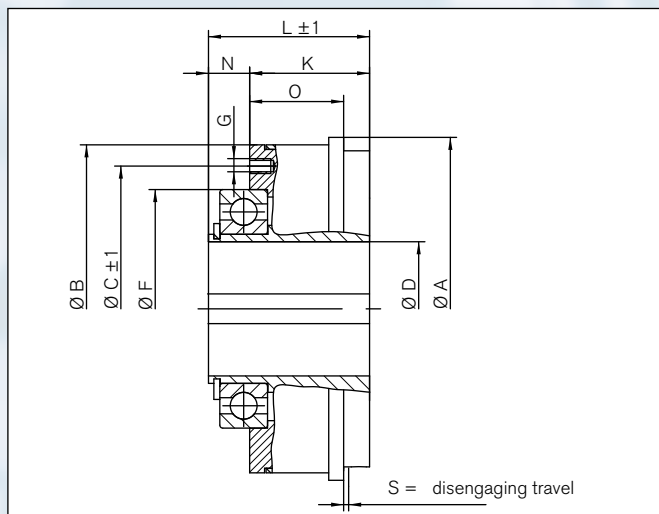
Ordering Example:

DMK/L-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DMK/L-FK	200	1.259	708	b	C

Torque range: a or b

Type DMK/L-FK with flange – keyway hub



Sectional view

Technical Data

T_{KN} = Disengagement torque

n_{max} = Max. rotational speed

J = Moment of inertia

Technical Data

Size	Torque adjustment range		n_{max} rpm	Flange side	Hub side	Weight m lbs
	Version a	Version b		J 10^{-3} lb-in^2		
30	44-177	133-310	9240	342	684	1.0
60	106-310	177-620	8185	684	1367	1.8
150	221-664	575-1328	6230	2051	3760	3.1
200	443-1062	708-1770	5620	3076	6153	3.7
300	266-1239	885-2655	5610	3760	8887	5.5
500	1239-3098	2213-4426	4585	4444	23722	8.4
800	2301-5311	4426-8852	3470	17432	77591	24
1200	3541-7966	7081-12392	3470	17432	77591	24

Type DMK/L-FI with flange – internal keyless locking device

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Locking device outer diameter
øF_{g6}	=	Centering diameter
G	=	Thread depth
H	=	Screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
M	=	Shaft clamping length
N	=	Bearing support length
O	=	Clutch face to mounting flange
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C2	øE	øF _{g6}	C1	G 6x Thread/depth	H 6xDIN EN ISO 4762	J	L	L1	M	N	O	S
	Inch								mm		Inch						
30	2.56	2.44	1.81	0.47-0.79	0.001	1.65	1.46	-0.0004/-0.0010	M5 / 7	M4	0.47	1.89	1.42	0.79	0.28	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	1.97	1.65	-0.0004/-0.0010	M6 / 7	M6	0.59	2.05	1.46	0.98	0.28	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.44	2.68	-0.0004/-0.0011	M6 / 9	M6	0.67	2.48	1.81	1.18	0.51	1.06	0.08
200	4.13	4.02	3.39	0.79-1.57	0.001	2.68	2.95	-0.0004/-0.0011	M6 / 10	M6	0.67	2.62	1.97	1.18	0.55	1.18	0.08
300	4.53	4.33	3.54	0.98-1.77	0.001	3.11	3.15	-0.0004/-0.0011	M8 / 12	M8	0.83	2.95	2.13	1.38	0.55	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	3.35	3.74	-0.0005/-0.0013	M8 / 12	M8	0.83	2.87	2.05	1.50	0.39	1.34	0.08
800	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 15	M16	1.42	4.45	3.03	2.36	0.59	1.87	0.08
1200	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 16	M16	1.42	4.45	3.03	2.36	0.59	1.87	0.08

Ordering Example:

DMK/L-FI

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DMK/L-FI	200	1.259	708	b	C

Torque range:

Functional principle:

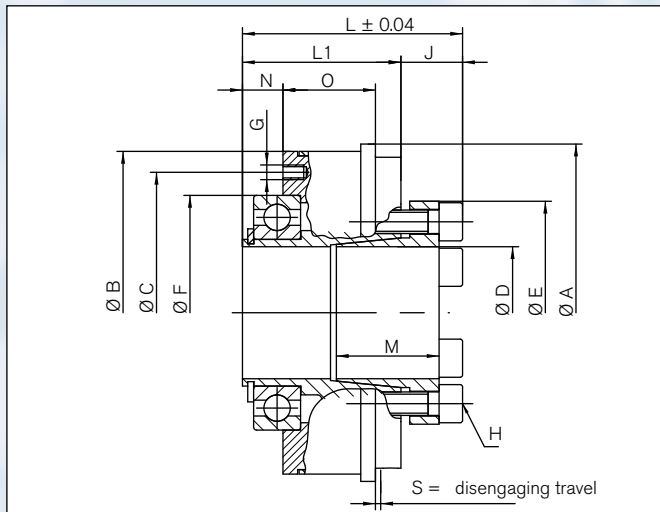
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/L-FI with flange – internal keyless locking device



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = max. rotational speed
MA = Tightening torque of retaining screws
J = Moment of inertia

Technical Data

Size	Torque adjustment range		N _{max} rpm	H MA lb-in	Flange side J 10 ⁻³ lb-in ²	Hub side J 10 ⁻³ lb-in ²	Weight m lbs
	Version a T _{KN} lb-in	Version b T _{KN} lb-in					
30	44-177	133-310	9240	44	341	682	1.0
60	106-310	177-620	8185	75	682	1365	1.8
150	221-664	575-1328	6230	124	2047	3753	3.1
200	443-1062	708-1770	5620	124	3071	6141	3.7
300	266-1239	885-2655	5610	159	3753	8871	5.5
500	1239-3098	2213-4426	4585	230	4435	23679	8.4
800	2301-5311	4426-8852	3470	398	17401	77450	24
1200	3541-7966	7081-12392	3470	708	17401	77450	24

Type DMK/L-FO with flange – Shrink Disc® connection

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Locking device outer diameter
øF_{g6}	=	Centering diameter
G	=	Thread depth
H	=	Screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
M	=	Max. shaft insertion depth
N	=	Bearing support length
O	=	Clutch face to mounting flange
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C1	øE	øF _{g6}	C2	G 6x Thread/depth	H 6xDIN EN ISO 4762	J	L	L1	M	N	O	S
					Inch				mm				Inch				
30	2.56	2.44	1.81	0.47-0.79	0.001	1.65	1.46	-0.0004/-0.0010	M5 / 7	M4	0.87	2.28	1.42	1.18	0.28	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	1.97	1.65	-0.0004/-0.0010	M6 / 7	M5	0.91	2.36	1.46	1.50	0.28	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.44	2.68	-0.0004/-0.0011	M6 / 9	M6	1.18	2.99	1.81	1.57	0.51	1.06	0.08
200	4.13	4.02	3.39	0.98-1.57	0.001	2.68	2.95	-0.0004/-0.0011	M6 / 10	M6	1.02	2.99	1.97	1.77	0.55	1.18	0.08
300	4.53	4.33	3.54	1.18-1.77	0.001	3.11	3.15	-0.0004/-0.0011	M8 / 12	M8	1.18	3.31	2.13	1.97	0.55	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	3.35	3.74	-0.0005/-0.0013	M8 / 12	M8	1.42	3.46	2.05	2.09	0.39	1.34	0.08
800	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 15	M16	1.42	4.45	3.03	3.15	0.59	1.87	0.08
1200	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.37	-0.0005/-0.0013	M12 / 16	M16	1.42	4.45	3.03	3.15	0.59	1.87	0.08

Ordering Example:

DMK/L-FO

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DMK/L-FO	200	1.259	708	b	C

Torque range:

Functional principle:

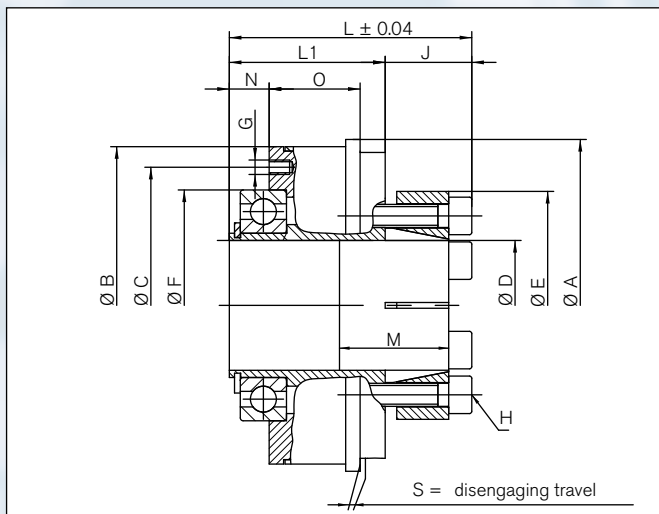
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/L-FO with flange – Shrink Disc® connection



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = max. rotational speed
M_A = Tightening torque of retaining screws
J = Moment of inertia

Technical Data

Size	Torque adjustment range		N _{max} rpm	H M _A lb-in	Flange side J 10 ⁻³ lb-in ²	Hub side J 10 ⁻³ lb-in ²	Weight m lbs
	Version a T _{KN} lb-in	Version b T _{KN} lb-in					
30	44-177	133-310	9240	4	342	684	1.0
60	106-310	177-620	8185	6	684	1367	1.8
150	221-664	575-1328	6230	10	2051	3760	3.1
200	443-1062	708-1770	5620	10	3076	6153	3.7
300	266-1239	885-2655	5610	13	3760	8887	5.5
500	1239-3098	2213-4426	4585	19	4444	23722	8.4
800	2301-5311	4426-8852	3470	33	17432	77591	24
1200	3541-7966	7081-12392	3470	59	17432	77591	24

Type DMK/L-FC with flange – clamping hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD_{H7}	=	Bore diameter
øE	=	Locking device outer diameter
øF_{g6}	=	Centering diameter
G	=	Thread depth
H	=	Screw
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
M	=	Max. shaft Insertion depth
N	=	Bearing support length
O	=	Clutch face to mounting flange
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øDH7	C1	øE	øF _{g6}	C2	G	H	J	L	L1	M	N	O	S
				min- max					6x Thread/depth	1xDIN EN ISO 4782							
				Inch					mm	Inch							
30	2.56	2.44	1.81	0.47-0.79	0.001	2.17	1.46	-0.0004/-0.0010	M5 / 7	M6	0.59	2.01	1.42	1.18	0.28	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	2.60	1.65	-0.0004/-0.0010	M6 / 7	M8	0.94	2.40	1.46	1.57	0.28	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.99	2.68	-0.0004/-0.0011	M6 / 9	M10	1.02	2.83	1.81	1.77	0.51	1.06	0.08
200	4.13	4.02	3.39	0.98-1.57	0.001	3.78	2.95	-0.0004/-0.0011	M6 / 10	M12	1.18	3.15	1.97	1.97	0.55	1.18	0.08
300	4.53	4.33	3.54	1.18-1.77	0.001	4.33	3.15	-0.0004/-0.0011	M8 / 12	M12	1.18	3.31	2.13	1.97	0.55	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	4.33	3.74	-0.0005/-0.0013	M8 / 12	M12	1.34	3.39	2.05	2.32	0.39	1.34	0.08

Ordering Example:

DMK/L-FC

Type	Size	øD _{H7}	lb-in	Version	Functional principle
DMK/L-FC	200	1.259	708	b	C

Torque range:

Functional principle:

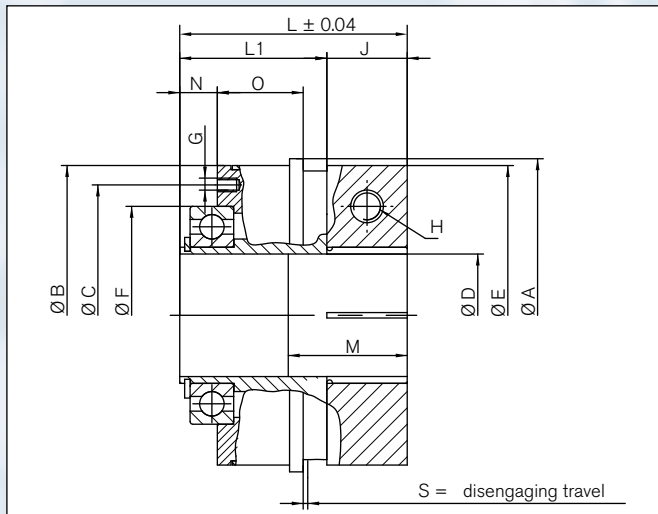
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/L-FC with flange – clamping hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = max. rotational speed
MA = Tightening torque of retaining screws
J = Moment of inertia

Technical Data

Size		Torque adjustment range		N _{max}	H	Flange side	Hub side	Weight
		Version a	Version b			J	m	
		T _{KN}						10 ⁻³ lb-in ²
	lb-in		rpm		lb-in			
	30	44-177	133-310	9240	133	342	684	1.0
	60	106-310	177-620	8185	354	684	1367	1.8
	150	221-664	575-1328	6230	531/487	2051	3760	3.1
	200	443-1062	708-1770	5620	885/708	3076	6153	3.7
	300	266-1239	885-2655	5610	974/797	3760	8887	5.5
	500	1239-3098	2213-4426	4585	1283	4444	23722	8.4



Series DMK/LD double mounted

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

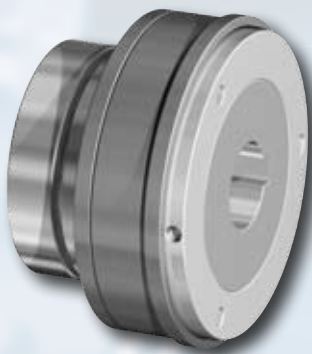
Characteristics

- Backlash-free safety coupling with a flange hub and robust, double ball bearing for direct mounting of sprockets, pulleys, gears, etc.
- Designed for high loads
- Roller technology, for high dynamic loads

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction
- High durability

Series DMK/LD double mounted



Series
DMK/LD-FK

- With flange – keyway hub
- Torque 265-10600 lb-in

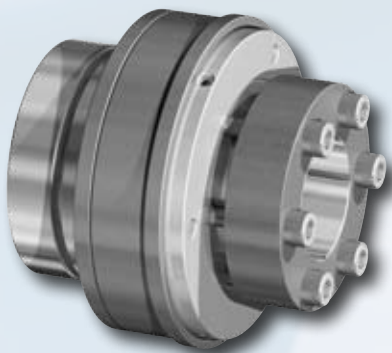
Page 24



Series
DMK/LD-FI

- With flange – Internal keyless locking device hub
- Torque 265-10600 lb-in

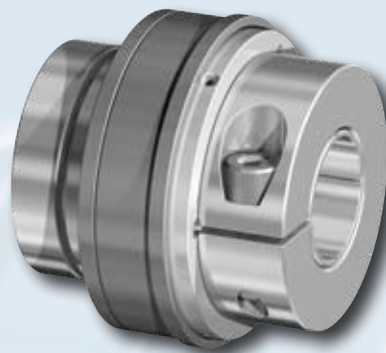
Page 26



Series
DMK/LD-FO

- With flange – Shrink Disc[®] for easy installation
- Torque 265-10600 lb-in

Page 28



Series
DMK/LD-FC

- With flange – clamping hub for easy assembly / disassembly
- Torque 265-4500 lb-in

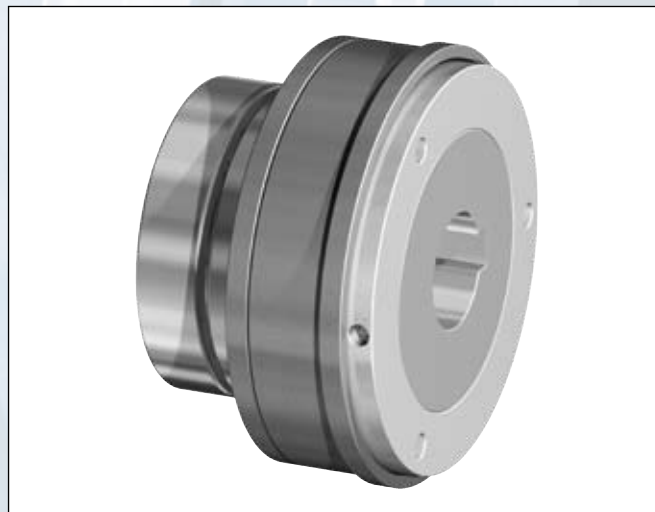
Page 30

Type DMK/LD-FK double mounted; with flange – keyway hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øF_{g6}	=	Centering diameter
G	=	Thread depth
H	=	Screw
J	=	Locking device projection
L	=	Total length
M	=	Max. shaft insertion depth
N	=	Bearing support length
O	=	Clutch face to mounting flange
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C1	øF _{g6}	C2	G 6x Thread/depth	K	L	N	O	S
	Inch							mm	Inch				
30	2.56	2.44	1.81	0.47-0.79	0.001	1.46	-0.0004/-0.0010	M5 / 7	1.14	1.75	0.61	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	1.65	-0.0004/-0.0010	M6 / 7	1.18	1.79	0.61	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.68	-0.0004/-0.0011	M6 / 9	1.30	2.48	1.18	1.06	0.08
200	4.13	4.02	3.39	0.79-1.57	0.001	2.95	-0.0004/-0.0011	M6 / 10	1.42	2.68	1.26	1.18	0.08
300	4.53	4.33	3.54	0.98-1.77	0.001	3.15	-0.0004/-0.0011	M8 / 12	1.57	2.83	1.26	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	3.74	-0.0005/-0.0013	M8 / 12	1.65	2.83	1.18	1.34	0.08
800	6.65	6.50	4.92	1.57-2.36	0.001	4.33	-0.0005/-0.0013	M12 / 15	2.44	3.94	1.26	1.87	0.08
1200	6.65	6.50	4.92	1.57-2.36	0.001	4.33	-0.0005/-0.0013	M12 / 16	2.44	3.94	1.26	1.87	0.08

Ordering Example:

DMK/LD-FK

Type	Size	ØD ^{H7}	lb-in	Version	Functional principle
DMK/LD-FK	200	1.259	708	b	C

Torque range:

Functional principle:

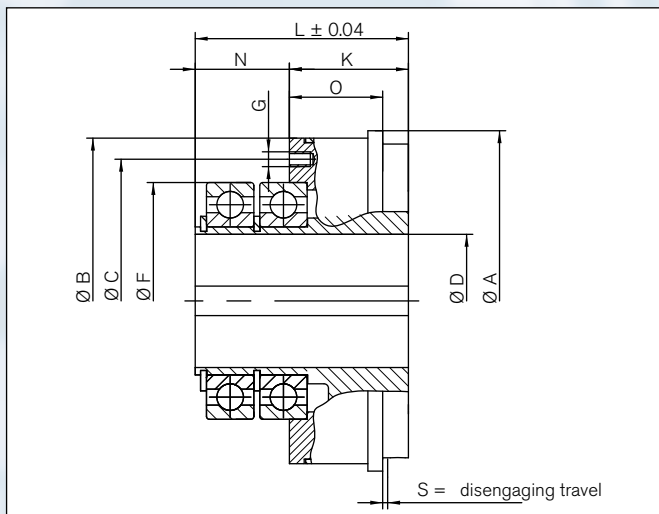
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/LD-FK double mounted; with flange – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = max. rotational speed
M_A = Tightening torque of retaining screws
J = Moment of inertia

Technical Data

Size		Torque adjustment range		N _{max} rpm	Flange side	Hub side	Weight
		Version a	Version b				
		T _{KN} lb-in			J 10 ⁻³ lb-in ²	m lbs	
	30	44-177	133-310	9240	376	718	1.2
	60	106-310	177-620	8185	820	1436	2.3
	150	221-664	575-1328	6230	2734	3965	4.0
	200	443-1062	708-1770	5620	4033	6665	4.4
	300	266-1239	885-2655	5610	6153	9571	6.4
	500	1239-3098	2213-4426	4585	7862	24610	9.7
	800	260-600	500-1000	3470	22218	84769	27
	1200	400-900	800-1400	3470	22218	84769	27

Type DMK/LD-FI double mounted; with flange – internal keyless connection

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	= Outer diameter of flange
øB	= Outer diameter of clutch body
øC	= Pitch circle diameter
øD^{H7}	= Bore diameter
øE	= Locking device outer diameter
øF_{g6}	= Centering diameter
G	= Thread depth
H	= Screws
J	= Locking device projection
L	= Total length
L1	= Overall clutch width
M	= Shaft clamping length
N	= Bearing support length
O	= Clutch face to mounting flange
S	= Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C1	øE	øF _{g6}	C2	G 6x Thread/depth	H 6xDIN EN ISO 4762	J	L	L1	M	N	O	S
					Inch				mm					Inch			
30	2.56	2.44	1.81	0.47-0.79	0.001	1.65	1.46	-0.0004/-0.0010	M5 / 7	M4	0.47	2.22	1.75	0.79	0.61	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	1.97	1.65	-0.0004/-0.0010	M6 / 7	M6	0.59	2.38	1.79	0.98	0.61	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.44	2.68	-0.0004/-0.0011	M6 / 9	M6	0.67	3.15	2.48	1.18	1.18	1.06	0.08
200	4.13	4.02	3.39	0.79-1.57	0.001	2.68	2.95	-0.0004/-0.0011	M6 / 10	M6	0.67	3.35	2.68	1.18	1.26	1.18	0.08
300	4.53	4.33	3.54	0.98-1.77	0.001	3.11	3.15	-0.0004/-0.0011	M8 / 12	M8	0.83	3.66	2.83	1.38	1.26	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	3.35	3.74	-0.0005/-0.0013	M8 / 12	M8	0.83	3.66	2.83	1.50	1.18	1.34	0.08
800	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 15	M16	1.42	5.35	3.94	2.36	1.50	1.87	0.08
1200	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 16	M16	1.42	5.35	3.94	2.36	1.50	1.87	0.08

Ordering Example: DMK/LD-FI

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DMK/LD-FI	200	1.259	708	b	C

Torque range:

a or b

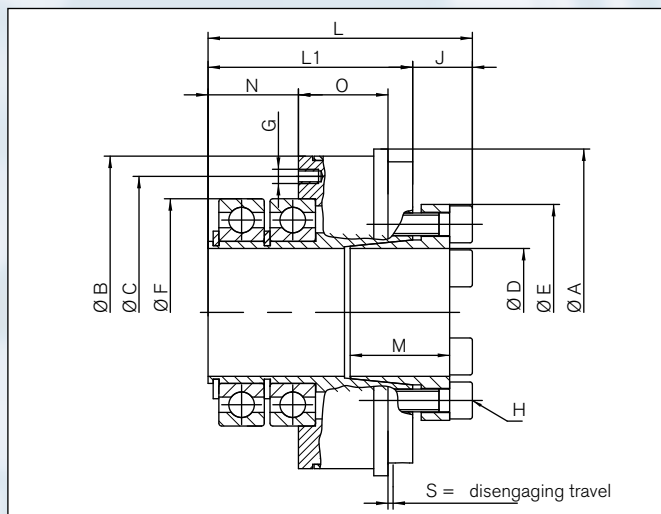
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/LD-FI double mounted; with flange – internal keyless connection



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
- N_{max}** = max. rotational speed
- M_A** = Tightening torque of retaining screws
- J** = Moment of inertia

Technical Data

Size	Torque adjustment range		n _{max} rpm	H MA lb-in	Flange side	Hub side	Weight
	Version a	Version b			J 10 ⁻³ lb-in ²		m lbs
30	44-177	133-310	9240	4	376	718	1.2
60	106-310	177-620	8185	6	820	1436	2.3
150	221-664	575-1328	6230	10	2734	3965	4.0
200	443-1062	708-1770	5620	10	4033	6665	4.4
300	266-1239	885-2655	5610	13	6153	9571	6.4
500	1239-3098	2213-4426	4585	19	7862	24610	9.7
800	260-600	500-1000	3470	33	22218	84769	27
1200	400-900	800-1400	3470	59	22218	84769	27

Type DMK/LD-FO double mounted; with flange – Shrink Disc® connection

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Locking device outer diameter
øF_{g6}	=	Enter diameter
G	=	Thread depth
H	=	Screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
M	=	Max. shaft Insertion depth
N	=	Bearing support length
O	=	Clutch face to mounting flange
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C1	øE	øF _{g6}	C2	G 6x Thread/depth	H 6xDIN EN ISO 4762	J	L	L1	M	N	O	S
					Inch				mm				Inch				
30	2.56	2.44	1.81	0.47-0.79	0.001	1.65	1.46	-0.0004/-0.0010	M5 / 7	M4	0.47	2.22	1.75	0.79	0.61	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	1.97	1.65	-0.0004/-0.0010	M6 / 7	M6	0.59	2.38	1.79	0.98	0.61	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.44	2.68	-0.0004/-0.0011	M6 / 9	M6	0.67	3.15	2.48	1.18	1.18	1.06	0.08
200	4.13	4.02	3.39	0.79-1.57	0.001	2.68	2.95	-0.0004/-0.0011	M6 / 10	M6	0.67	3.35	2.68	1.18	1.26	1.18	0.08
300	4.53	4.33	3.54	0.98-1.77	0.001	3.11	3.15	-0.0004/-0.0011	M8 / 12	M8	0.83	3.66	2.83	1.38	1.26	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	3.35	3.74	-0.0005/-0.0013	M8 / 12	M8	0.83	3.66	2.83	1.50	1.18	1.34	0.08
800	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 15	M16	1.42	5.35	3.94	2.36	1.50	1.87	0.08
1200	6.65	6.50	4.92	1.57-2.36	0.001	4.72	4.33	-0.0005/-0.0013	M12 / 16	M16	1.42	5.35	3.94	2.36	1.50	1.87	0.08

Ordering Example: DMK/LD-FO

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DMK/LD-FO	200	1.259	708	b	C

Torque range:

Functional principle:

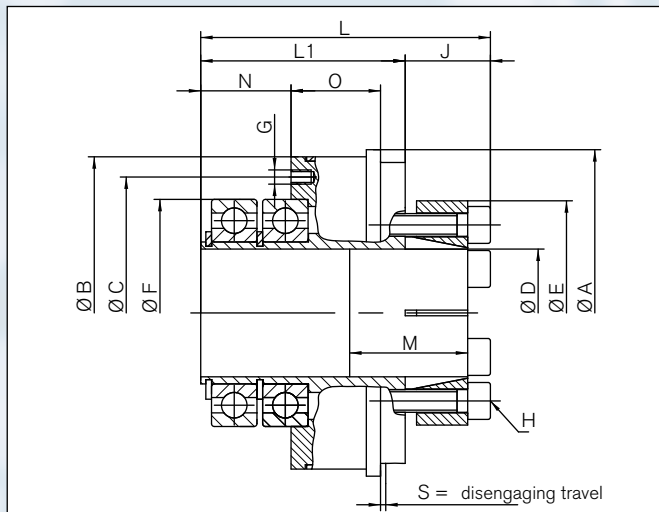
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/LD-FO double mounted; with flange – Shrink Disc® connection



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
- N_{max}** = max. rotational speed
- MA** = Tightening torque of retaining screws
- J** = Moment of inertia

Technical Data

Size	Torque adjustment range		N _{max} rpm	H MA lb-in	Flange side	Hub side	Weight
	Version a	Version b			J 10 ⁻³ lb-in ²		m lbs
30	44-177	133-310	9240	4	376	718	1.2
60	106-310	177-620	8185	6	820	1436	2.3
150	221-664	575-1328	6230	10	2734	3965	4.0
200	443-1062	708-1770	5620	10	4033	6665	4.4
300	266-1239	885-2655	5610	13	6153	9571	6.4
500	1239-3098	2213-4426	4585	19	7862	24610	9.7
800	260-600	500-1000	3470	33	22218	84769	27
1200	400-900	800-1400	3470	59	22218	84769	27

Type DMK/LD-FC double mounted; with flange – clamping hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Locking device outer diameter
øF_{g6}	=	Enter diameter
G	=	Thread depth
H	=	Screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
M	=	Max. shaft Insertion depth
N	=	Bearing support length
O	=	Clutch face to mounting flange
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min- max	C1	øE	øF _{g6}	C2	G 6x Thread/depth	H 1xDIN EN ISO 4762	J	L	L1	M	N	O	S
	Inch								mm		Inch						
30	2.56	2.44	1.81	0.47-0.79	0.001	2.17	1.46	-0.0004/-0.0010	M5 / 7	M6	0.59	2.34	1.75	1.18	0.61	0.91	0.05
60	2.95	2.76	2.17	0.59-0.98	0.001	2.60	1.65	-0.0004/-0.0010	M6 / 7	M8	0.94	2.74	1.79	1.57	0.61	0.91	0.05
150	3.74	3.62	3.07	0.79-1.38	0.001	2.99	2.68	-0.0004/-0.0011	M6 / 9	M10	1.02	3.50	2.48	1.77	1.18	1.06	0.08
200	4.13	4.02	3.39	0.98-1.57	0.001	3.78	2.95	-0.0004/-0.0011	M6 / 10	M12	1.18	3.86	2.68	1.97	1.26	1.18	0.08
300	4.53	4.33	3.54	1.18-1.77	0.001	4.33	3.15	-0.0004/-0.0011	M8 / 12	M12	1.18	4.02	2.83	1.97	1.26	1.24	0.08
500	5.08	4.92	4.33	1.38-1.97	0.001	4.33	3.74	-0.0005/-0.0013	M8 / 12	M12	1.34	4.17	2.83	2.32	1.18	1.34	0.08

Ordering Example: DMK/LD-FC

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DMK/LD-FC	200	1.259	708	b	C

Torque range:

a or b

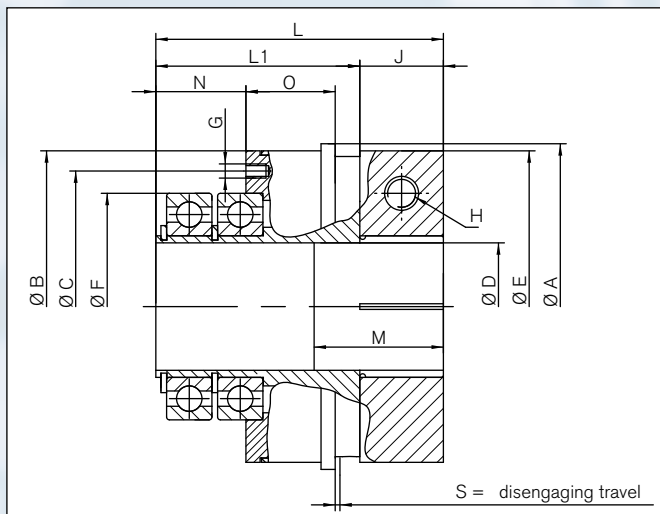
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/LD-FC double mounted; with flange – clamping hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = max. rotational speed
MA = Tightening torque of retaining screws
J = Moment of inertia

Technical Data

Size	Torque adjustment range		N _{max} rpm	H MA lb-in	Flange side	Hub side	Weight
	Version a	Version b			J 10 ⁻³ lb-in ²		m lbs
30	44-177	133-310	9240	133	376	718	1.2
60	106-310	177-620	8185	354	820	1436	2.3
150	221-664	575-1328	6230	531/487	2734	3965	4.0
200	443-1062	708-1770	5620	885/708	4033	6665	4.4
300	266-1239	885-2655	5610	974/797	6153	9571	6.4
500	1239-3098	2213-4426	4585	1283	7862	24610	9.7

Series DMK/B

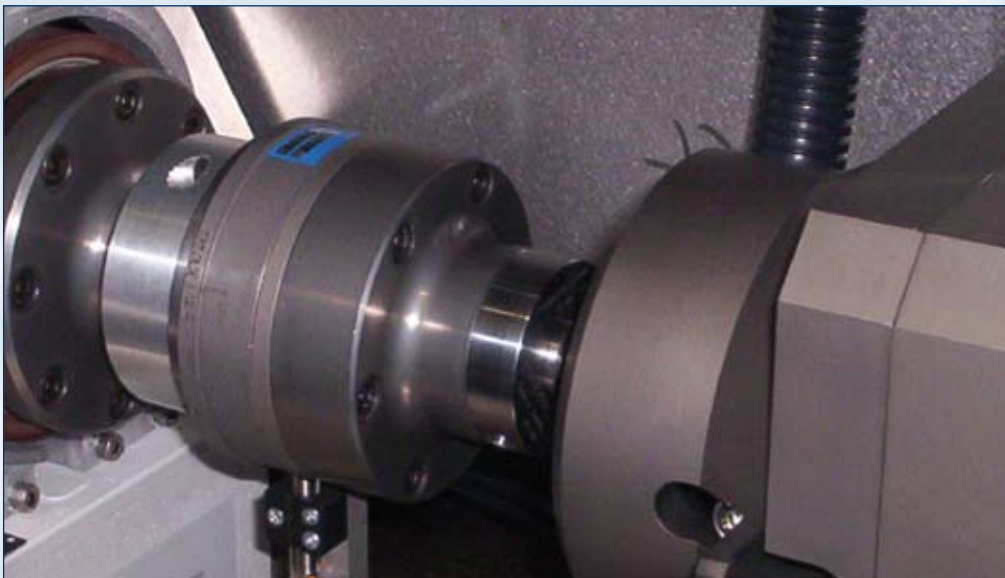
Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Characteristics

- Safety coupling, designed to connect two shafts with a metal bellows which serves as a torsionally rigid compensation element.
- Compensation of axial, radial and angular shaft misalignment
- Roller technology, for high dynamic loads

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability



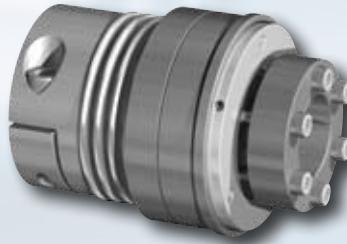
Series DMK/B



Series
DMK/B-CI

- With clamping hub - internal keyless locking device
- Torque 265-4500 lb-in

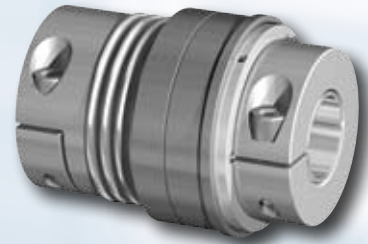
Page 34



Series
DMK/B-CO

- With clamping hub - Shrink Disc[®] connection for easy installation
- Torque 265-4500 lb-in

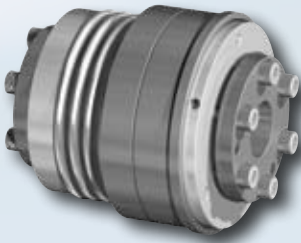
Page 36



Series
DMK/B-CC

- With clamping hub - clamping hub for easy assembly / disassembly
- Torque 265-4500 lb-in

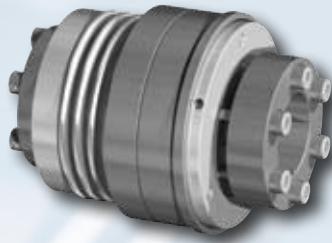
Page 38



Series
DMK/B-II

- With internal keyless locking device
- Torque 265-10600 lb-in

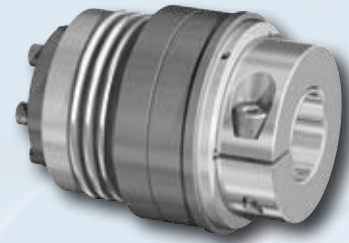
Page 40



Series
DMK/B-IO

- With internal keyless locking device - Shrink Disc[®] connection for easy installation
- Torque 265-10600 lb-in

Page 42



Series
DMK/B-IC

- With internal keyless locking device - clamping hub for easy assembly / disassembly
- Torque 265-4500 lb-in

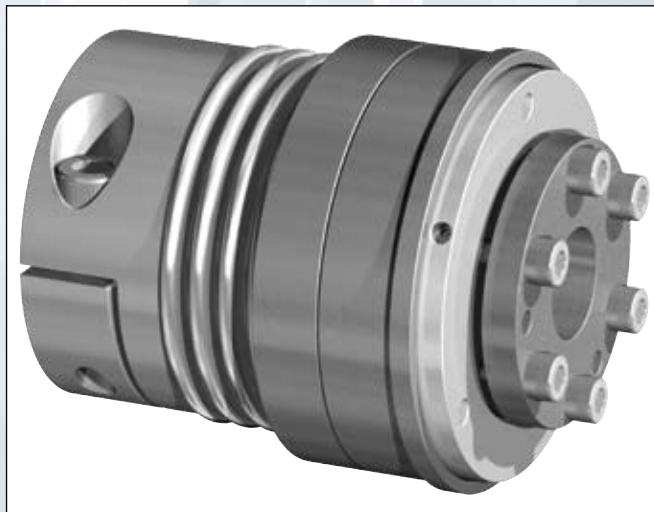
Page 44

Type DMK/B-CI with clamping hub – internal keyless locking device

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øC	=	Coupling hub outer diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
H1	=	Clamp hub screws
H2	=	Locking device screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload
T	=	Centerline distance of clamp screw



Dimensions

Size	øA	øA1	øB	øB1	øC	øD1 ^{H7} min- max Inch	C ^{D1}	øD2 ^{H7} min- max	C ^{D2}	H1 1x DIN EN ISO 4762 mm	H2 6x DIN EN ISO 4762	J 4/6 ¹⁾	L	L1 Inch	L2	M1	M2	S	T
30	2.559	1.654	2.441	2.205	2.165	0.3937-0.9843	+0.0007 -0	0.472-0.787	+0.0007 -0	M6	M4	0.472	3.228/3.543	0.709	1.614	0.965	0.787	0.047	0.315
60	2.953	1.969	2.756	2.598	2.520	0.5512-1.3780		0.591-0.984		M8	M6	0.591	3.740/4.134	0.866	1.772	1.142	0.984	0.047	0.394
150	3.740	2.441	3.622	3.228	3.150	0.787-1.575		0.787-1.378		M10	M6	0.669	4.606/5.079	0.886	2.362	1.299	1.181	0.079	0.472
200	4.134	2.677	4.016	3.543	3.543	0.984-1.654	+0.001 -0	0.787-1.575	+0.001 -0	M12	M6	0.669	4.921/5.433	0.886	2.480	1.476	1.181	0.079	0.512
300	4.528	2.992	4.331	4.331	4.331	1.260-1.772		0.984-1.772		M12	M8	0.827	5.039/5.472	1.169	2.402	1.476	1.378	0.079	0.512
500	5.079	3.346	4.921	4.803	4.685	1.575-2.362		1.378-1.969		M14	M8	0.827	5.472/5.906	1.142	2.717	1.614	1.496	0.079	0.591

Ordering Example:

DMK/B-CI

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DMK/B-CI	200/4	1.378	1.181	1062	b	C

Torque range:

a or b

Bellows type:

4=short bellows (4 ripples),

6=long bellows (6 ripples)

Length of the bellows influences installation length L

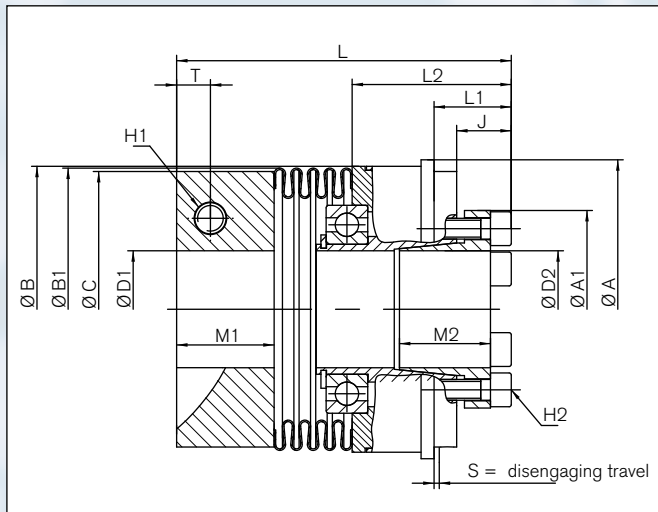
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/B-CI with clamping hub – internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
C_r	=	Radial spring stiffness
C_a	=	Axial spring stiffness
C_{tdyn}	=	Dynamic torsional stiffness
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size		Torque adjustment range			4/6 ¹⁾			H1	H2	Metal bellows side	Hub side	Weight
		Version a	Version b		C _r	C _a	C _{tdyn}					
		T _{KN}	N _{max}					lb-in		M _A	J	m
		lb-in	rpm		lb-in	lb-in/rad	lb-in		10 ⁻³ lb-in ²	lbs		
	30	44-177	133-310	9240	4100/1268	274/154	319/230	133	44	547	547	1.5
	60	106-310	177-620	8183	6424/1901	520/303	646/434	310	75	1367	1367	3.1
	150	221-664	575-1328	6830	11591/3432	839/491	1336/894	620	124	5125	5125	5.3
	200	443-1062	708-1770	5620	8742/2570	839/485	1531/1027	797	124	5638	5638	6.6
	300	266-1239	885-2655	5210	36133/8394	1622/874	4416/2478	885	159	11105	11105	12
	500	1239-3098	2213-4425	4585	50248/5550	600/502	6018/2744	1283	230	12984	12984	14

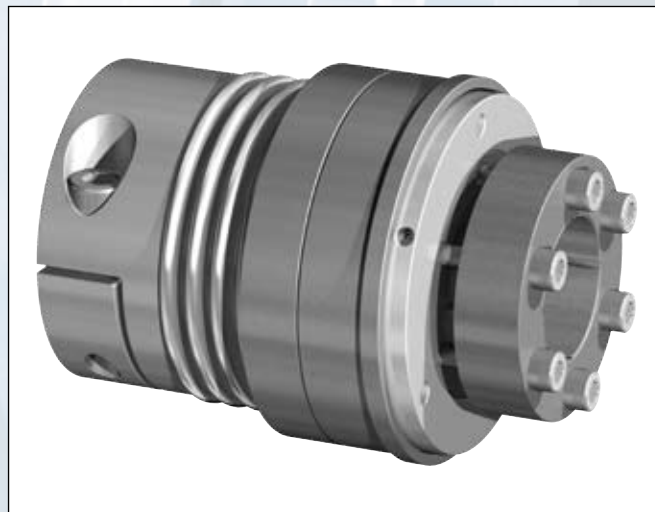
1) We offer two different versions of metal bellows (4 = short bellows, 6 = long bellows) with different torsional stiffnesses. Consequently the length varies.

Type DMK/B-CO with clamping hub – Shrink Disc® connection

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øC	=	Coupling hub outer diameter
øD1 H7	=	Bore diameter
øD2 H7	=	Bore diameter
H1	=	Clamp hub screws
H2	=	Locking device screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload
T	=	Centerline distance of clamp screw



Dimensions

Size	øA	øA1	øB	øB1	øC	øD1 H7 min- max	C1	øD2 H7 min- max	C2	H1 1xDIN EN ISO 4762	H2 6xDIN EN ISO 4762	J	L 4/6 ¹⁾	L1	L2	M1	M2	S	T
						Inch				mm				Inch					
30	2.56	1.77	2.44	2.20	2.17	0.39-0.98	0.001	0.39-0.79	0.001	M6	M4	0.87	3.62/3.94	1.10	2.01	0.96	1.18	0.05	0.31
60	2.95	2.17	2.76	2.60	2.52	0.55-1.38	0.001	0.59-0.98	0.001	M8	M5	0.91	4.06/4.45	1.18	2.09	1.14	1.50	0.05	0.39
150	3.74	2.56	3.62	3.23	3.15	0.79-1.57	0.001	0.79-1.38	0.001	M10	M6	1.18	5.12/5.59	1.40	2.83	1.30	1.77	0.08	0.47
200	4.13	3.11	4.02	3.54	3.54	0.98-1.65	0.001	0.79-1.57	0.001	M12	M6	1.02	5.35/5.87	1.24	2.83	1.48	1.57	0.08	0.51
300	4.53	3.11	4.33	4.33	4.33	1.26-1.77	0.001	1.18-1.77	0.001	M12	M8	1.18	5.39/5.83	1.52	2.76	1.48	1.97	0.08	0.51
500	5.08	3.54	4.92	4.80	4.69	1.57-2.36	0.001	1.38-1.97	0.001	M14	M8	1.42	6.06/6.50	1.73	3.31	1.61	2.09	0.08	0.59

Ordering Example:

DMK/B-CO

Type	Size	øD1 H7	øD2 H7	lb-in	Version	Functional principle
DMK/B-CO	200/4	1.378	1.181	1062	b	C

Torque range:

a or b

Bellows type:

4=short bellows (4 ripples),

6=long bellows (6 ripples)

Length of the bellows influences installation length L

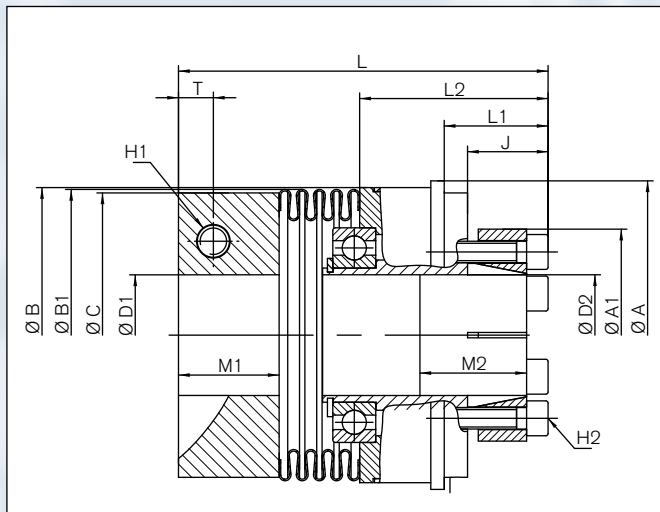
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/B-CO with clamping hub – Shrink Disc® connection



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
C_r	=	Radial spring stiffness
C_a	=	Axial spring stiffness
C_{tdyn}	=	Dynamic torsional stiffness
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size	Torque adjustment range				4/6 ¹⁾		H1	H2		Metal bellows side	Hub side	Weight
	Version a	Version b			C _r	C _a				M _A	J	
	T _{KN}		N _{max}		lb-in		C _{tdyn}	M _A				m
	lb-in		rpm				10 ³ lb-in/rad		M _A	10 ⁻³ lb-in ²		lbs
30	44-177	133-310	9240		4100/1268	274/154	319/230	133	44	547	547	1.5
60	106-310	177-620	8183		6424/1902	520/303	646/434	310	75	1367	1367	3.1
150	221-664	575-1328	6830		11592/3432	839/491	1337/894	620	124	5127	5127	5.3
200	443-1062	708-1770	5620		8743/2570	839/485	1531/1027	797	124	5640	5640	6.6
300	266-1239	885-2655	5210		36136/8394	1622/874	4417/2478	885	159	11109	11109	12
500	1239-3098	2213-4426	4585		50252/5551	600/503	6019/2744	1283	230	12989	12989	14

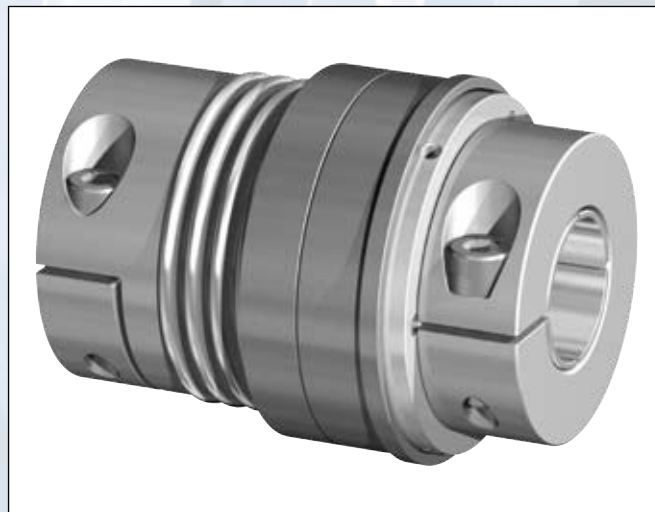
1) We offer two different versions of metal bellows (4 = short bellows, 6 = long bellows) with different torsional stiffnesses. Consequently the length varies.

Type DMK/B-CC with clamping hub – clamping hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øC	=	Coupling hub outer diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
H1	=	Clamp hub screws
H2	=	Locking device screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload
T	=	Centerline distance of clamp screw



Dimensions

Size	øA	øA1	øB	øB1	øC	øD1 ^{H7} Min- Max	øD2 ^{H7} Min- Max	H1 1xDIN EN ISO 4762	H2 1xDIN EN ISO 4762	J	L 4/6 ¹⁾	L1	L2	M1	M2	S	T
	Inch							mm				Inch					
30	2.559	2.165	2.441	2.205	2.165	0.394-0.984	0.472-0.787	M6	M6	0.591	3.346-3.661	0.827	1.732	0.965	1.181	0.047	0.315
60	2.953	2.598	2.756	2.598	2.520	0.551-1.378	0.591-0.984	M8	M8	0.945	4.055-4.488	1.220	2.126	1.142	1.575	0.047	0.394
150	3.740	2.992	3.622	3.228	3.150	0.787-1.575	0.787-1.378	M10	M10	1.024	4.961-5.433	1.260	2.677	1.299	1.772	0.079	0.472
200	4.134	3.780	4.016	3.543	3.543	0.984-1.654	0.984-1.575	M12	M12	1.181	5.433-5.906	1.417	2.953	1.476	1.969	0.079	0.512
300	4.528	4.331	4.331	4.331	4.331	1.260-1.772	1.181-1.772	M12	M12	1.181	5.354-5.787	1.496	2.756	1.476	1.969	0.079	0.512
500	5.079	4.331	4.921	4.803	4.685	1.575-2.362	1.378-1.969	M14	M14	1.339	5.984-6.417	1.654	3.228	1.614	2.323	0.079	0.591

Ordering Example:

DMK/B-CC

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DMK/B-CC	200/4	1.378	1.181	1062	b	C

Torque range:

a or b

Bellows type:

4=short bellows (4 ripples),

6=long bellows (6 ripples)

Length of the bellows influences installation length L

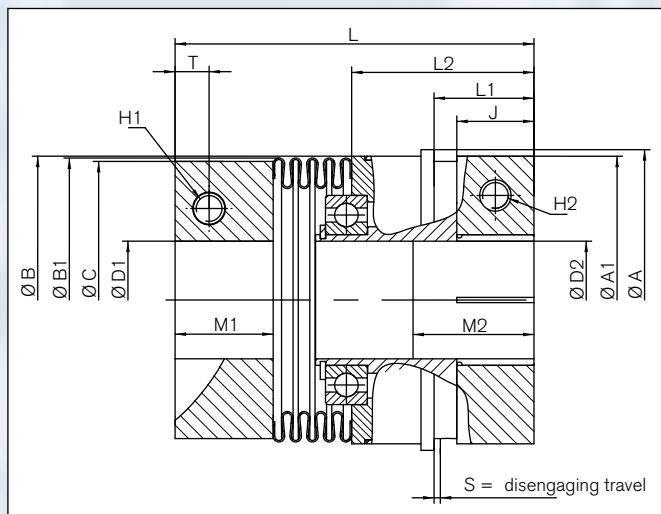
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/B-CC with clamping hub – clamping hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
C_r	=	Radial spring stiffness
C_a	=	Axial spring stiffness
C_{tdyn}	=	Dynamic torsional stiffness
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size		Torque adjustment range		N _{max} rpm	4/6 ¹⁾			H1 MA lb-in	H2	Metal bellows side	Hub side	Weight
		Version a	Version b		C _r	C _a	C _{tdyn}					
		T _{KN} lb-in			10 ³ lb-in/rad					J lb-in ²	m lbs	
	30	44-177	133-310	9240	4100/1268	274/154	319/230	133	133	0.5	0.5	1.5
	60	106-310	177-620	8183	6424/1901	520/303	646/434	310	354	1.4	1.4	3.1
	150	221-664	575-1328	6830	11591/3432	839/491	1336/894	620	531	5.1	5.1	5.3
	200	443-1032	708-1770	5620	8742/2570	839/485	1531/1027	797	797	5.6	5.6	6.6
	300	266-1239	885-2655	5210	36133/8394	1622/874	4416/2478	885	885	11	11	11.7
	500	1239-3098	2213-4425	4585	50248/5550	600/502	6018/2744	1283	1283	13	13	13.7

1) We offer two different versions of metal bellows (4 = short bellows, 6 = long bellows) with different torsional stiffnesses. Consequently the length varies.

Type DMK/B-II with internal keyless locking device

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øC	=	Coupling hub outer diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
H1	=	Clamp hub screws
H2	=	Locking device screws
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
L3	=	Locking device projection
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload
T	=	Centerline distance of clamp screw



Dimensions

Size	øA	øA1	øB	øB1	øC	øD1 ^{H7} min- max	C1	øD2 ^{H7} min- max	C2	H1 6xDIN EN ISO 4762	H2 6xDIN EN ISO 4762	J	L 4/6 ¹⁾	L1	L2	L3	M1	M2	S
	Inch									mm				Inch					
30	2.56	1.65	2.44	2.20	1.65	0.47-0.79	0.001	0.47-0.79	0.001	M4	M4	0.47	2.99/3.31	0.71	1.61	0.39	0.79	0.79	0.05
60	2.95	1.97	2.76	2.60	1.97	0.59-0.98	0.001	0.59-0.98	0.001	M6	M6	0.59	3.46/3.90	0.87	1.77	0.51	0.98	0.98	0.05
150	3.74	2.44	3.62	3.23	2.44	0.79-1.38	0.001	0.79-1.38	0.001	M6	M6	0.67	4.61/5.08	0.89	2.36	0.59	1.18	1.18	0.08
200	4.13	2.68	4.02	3.54	2.68	0.79-1.65	0.001	0.98-1.57	0.001	M6	M6	0.67	4.61/5.12	0.89	2.48	0.59	1.18	1.18	0.08
300	4.53	2.99	4.33	4.33	3.50	0.98-1.97	0.001	1.18-1.77	0.001	M8	M8	0.83	4.88/5.31	1.17	2.40	0.71	1.50	1.38	0.08
500	5.08	3.35	4.92	4.80	3.70	1.38-2.17	0.001	1.38-1.97	0.001	M8	M8	0.83	5.39/5.83	1.14	2.72	0.71	1.69	1.50	0.08
800	6.65	4.72	6.50	6.18	5.08	1.57-2.76	0.001	1.57-2.36	0.001	M16	M16	1.42	3.70	1.97	3.50	1.18	2.36	2.36	0.08
1200	6.65	4.72	6.50	6.18	5.08	1.57-2.76	0.001	1.57-2.36	0.001	M16	M16	1.42	3.70	1.97	3.50	1.18	2.36	2.36	0.08

Ordering Example: DMK/B-II

Type	Size	øD1 ^{H7}	øD2 ^{H7}	lb-in	Version	Functional principle
DMK/B-II	200/4	1.378	1.181	1062	b	C

Torque range:

a or b

Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

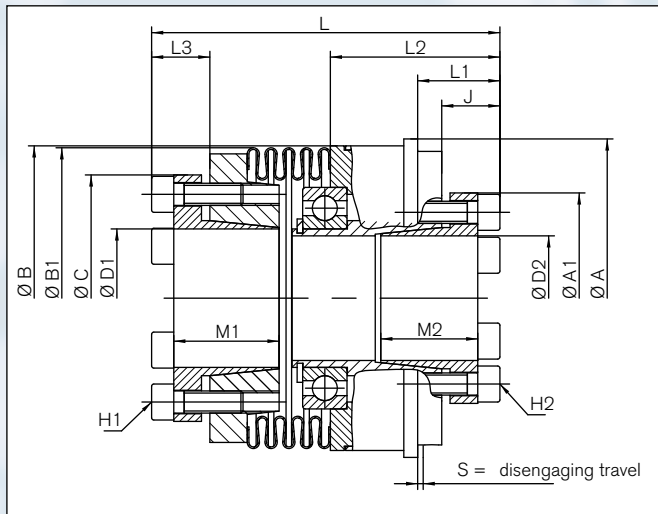
Bellows type:

4=short bellows (4 ripples),

6=long bellows (6 ripples)

Length of the bellows influences installation length L

Type DMK/B-II with internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
C_r	=	Radial spring stiffness
C_a	=	Axial spring stiffness
C_{tdyn}	=	Dynamic torsional stiffness
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size		Torque adjustment range		N _{max} rpm	4/6 ¹⁾		H1	H2	MA lb-in	Metal bellows side	Hub side	Weight
		Version a	Version b		C _r	C _a						
										T _{KN}	C _{tdyn}	J
										lb-in	10 ³ lb-in/rad	10 ⁻³ lb-in ²
	30	44-177	133-310	9240	4100/1268	274/154	319/230	44	44	376	718	1.5
	60	106-310	177-620	8183	6424/1902	520/303	646/434	75	75	923	1812	3.3
	150	221-664	575-1328	6830	11592/3432	839/491	1337/894	124	124	2393	4444	5.5
	200	443-1062	708-1770	5620	8743/2570	839/485	1531/1027	124	124	3760	7178	7.1
	300	266-1239	885-2655	5210	36136/8394	1622/874	4417/2478	159	159	7520	14698	12
	500	1239-3098	2213-4426	4585	50252/5551	600/503	6019/2744	230	230	19483	38624	16
	800	2301-5311	4426-8852	3470	512	186	6710	398	398	61526	123051	42
	1200	3541-7966	7081-12392	3470	706	278	11206	708	708	61526	123051	44

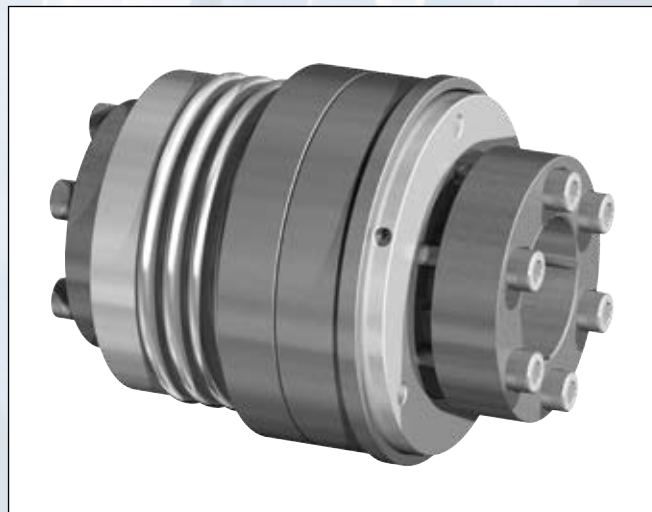
1) We offer two different versions of metal bellows (4 = short bellows, 6 = long bellows) with different torsional stiffnesses. Consequently the length varies.

Type DMK/B-IO with internal keyless locking device – Shrink Disc® connection

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	= Outer diameter of flange
øA1	= Locking device outer diameter
øB	= Outer diameter of clutch body
øB1	= Metal bellows diameter
øC	= Coupling hub outer diameter
øD1 H7	= Bore diameter
øD2 H7	= Bore diameter
H1	= Screws
H2	= Locking device screws
J	= Locking device projection
L	= Total length
L1	= Overall clutch width
L2	= Length to bearing centerline
L3	= Locking device projection
M1	= Max. shaft insertion depth
M2	= Max. shaft clamping length
S	= Release path at overload



Dimensions

Size	øA	øA1	øB	øB1	øC	øD1 H7 min- max	C1	øD2 H7 min- max	C2	H1 6xDIN EN ISO 4762	H2 6xDIN EN ISO 4762	J	L 4/6 ¹⁾	L1	L2	L3	M1	M2	S
	Inch									mm				Inch					
30	2.56	1.77	2.44	2.20	1.65	0.47-0.79	0.001	0.47-0.79	0.001	M4	M4	0.87	3.39/3.70	1.10	2.01	0.39	0.79	1.18	0.05
60	2.95	2.17	2.76	2.60	1.97	0.59-0.98	0.001	0.59-0.98	0.001	M6	M5	0.91	3.78/4.21	1.18	2.09	0.51	0.98	1.50	0.05
150	3.74	2.56	3.62	3.23	2.44	0.79-1.38	0.001	0.79-1.38	0.001	M6	M6	1.18	4.96/5.43	1.40	2.87	0.59	1.18	1.77	0.08
200	4.13	3.11	4.02	3.54	2.68	0.79-1.65	0.001	0.98-1.57	0.001	M6	M6	1.02	4.96/5.43	1.24	2.83	0.59	1.18	1.57	0.08
300	4.53	3.11	4.33	4.33	3.50	0.98-1.97	0.001	1.18-1.77	0.001	M8	M8	1.18	5.24/5.67	1.52	2.76	0.71	1.50	1.97	0.08
500	5.08	3.54	4.92	4.80	3.70	1.38-2.17	0.001	1.38-1.97	0.001	M8	M8	1.42	5.98/6.42	1.73	3.31	0.71	1.69	2.09	0.08
800	6.65	5.47	6.50	6.18	5.08	1.57-2.76	0.001	1.57-2.36	0.001	M16	M16	2.32	10.08	1.97	4.76	1.18	2.36	3.15	0.08
1200	6.65	5.47	6.50	6.18	5.08	1.57-2.76	0.001	1.57-2.36	0.001	M16	M16	2.32	10.08	1.97	4.76	1.18	2.36	3.15	0.08

Ordering Example:

DMK/B-IO

Type	Size	øD1 H7	øD2 H7	lb-in	Version	Functional principle
DMK/B-IO	200/4	1.378	1.181	1062	b	C

Torque range:

a or b

Functional principle:

C = Single position re-engagement (360°)

D = Multiple position re-engagement

Lb-Ft = Torque required

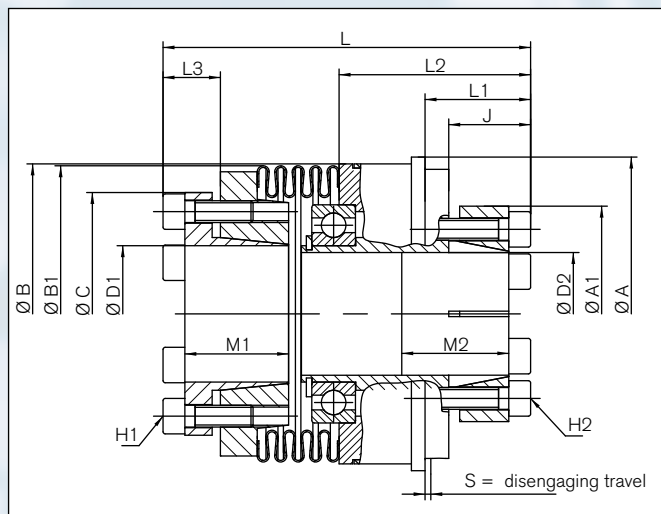
Bellows type:

4=short bellows (4 ripples),

6=long bellows (6 ripples)

Length of the bellows influences installation length L

Type DMK/B-IO with internal keyless locking device – Shrink Disc® connection



Sectional view

Technical Data

TKN	= Disengagement torque
N_{max}	= max. rotational speed
C_r	= Radial spring stiffness
C_a	= Axial spring stiffness
C_{tdyn}	= Dynamic torsional stiffness
MA	= Tightening torque of retaining screws
J	= Moment of inertia
ΔK_r	= Max. approved misalignment radial
ΔK_a	= Max. approved misalignment axial
ΔK_w	= Max. approved misalignment angular

Technical Data

Size		Torque adjustment range		N _{max} rpm	4/6 ¹⁾		H1 C _{tdyn} 10 ³ lb-in/rad	H2	M _A lb-in	Metal bel- lows side J 10 ⁻³ lb-in ²	Hub side J 10 ⁻³ lb-in ²	Weight m lbs
		Version a TKN lb-in	Version b		C _r lb-in	C _a						
	30	44-177	133-310	9240	4100/1268	274/154	319/230	44	44	376	718	1.5
	60	106-310	177-620	8183	6424/1902	520/303	646/434	75	75	923	1812	3.3
	150	221-664	575-1328	6830	11592/3432	839/491	1337/894	124	124	2393	4444	5.5
	200	443-1062	708-1770	5620	8743/2570	839/485	1531/1027	124	124	3760	7178	7.1
	300	266-1239	885-2655	5210	36136/8394	1622/874	4417/2478	159	159	7520	14698	12
	500	1239-3098	2213-4426	4585	50252/5551	600/503	6019/2744	230	230	19483	38624	16
	800	2301-5311	4426-8852	3470	2924	1062	6710	398	398	61526	123051	42
	1200	3541-7966	7081-12392	3470	4032	1588	11206	708	708	61526	123051	44

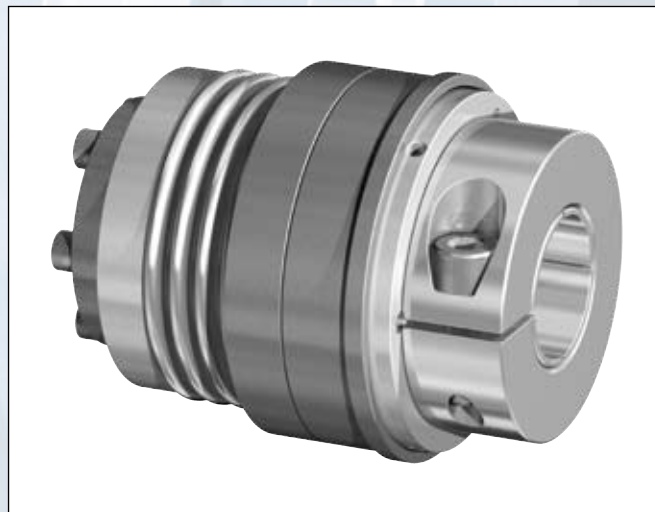
1) We offer two different versions of metal bellows (4 = short bellows, 6 = long bellows) with different torsional stiffnesses. Consequently the length varies.

Type DMK/B-IC with internal keyless locking device – clamping hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	= Outer diameter of flange
øA1	= Locking device outer diameter
øB	= Outer diameter of clutch body
øB1	= Metal bellows diameter
øC	= Coupling hub outer diameter
øD1 H7	= Bore diameter
øD2 H7	= Bore diameter
H1	= Screws
H2	= Locking device screws
J	= Locking device projection
L	= Total length
L1	= Overall clutch width
L2	= Length to bearing centerline
L3	= Locking device projection
M1	= Max. shaft insertion depth
M2	= Max. shaft clamping length
S	= Release path at overload



Dimensions

Size	øA	øA1	øB	øB1	øC	øD1 H7 Min- Max	C1	øD2 H7 Min- Max	C2	H1 6xDIN EN ISO 4762	H2 1xDIN EN ISO 4762	J	L 4/6 ¹⁾	L1	L2	L3	M1	M2	S
	Inch									mm			Inch						
30	2.56	2.17	2.44	2.20	1.65	0.47-0.79	0.001	0.47-0.79	0.001	M4	M6	0.59	3.11/3.43	0.83	1.73	0.39	0.79	1.18	0.05
60	2.95	2.60	2.76	2.60	1.97	0.59-0.98	0.001	0.59-0.98	0.001	M6	M8	0.94	3.82/4.25	1.22	2.13	0.51	0.98	1.57	0.05
150	3.74	2.99	3.62	3.23	2.44	0.79-1.38	0.001	0.79-1.38	0.001	M6	M10	1.02	4.80/5.28	1.26	2.68	0.59	1.18	1.77	0.08
200	4.13	3.78	4.02	3.54	2.68	0.79-1.57	0.001	0.98-1.57	0.001	M6	M12	1.18	5.12/5.59	1.42	2.95	0.59	1.18	1.97	0.08
300	4.53	4.33	4.33	4.33	3.50	0.98-1.97	0.001	1.18-1.77	0.001	M8	M12	1.18	5.24/5.67	1.50	2.76	0.71	1.50	1.97	0.08
500	5.08	4.33	4.92	4.80	3.70	1.38-2.17	0.001	1.38-1.97	0.001	M8	M12	1.34	5.91/6.34	1.65	3.23	0.71	1.69	2.32	0.08

Ordering Example: DMK/B-IC

Type	Size	øD1 H7	øD2 H7	lb-in	Version	Functional principle
DMK/B-IC	200/4	1.378	1.181	1062	b	C

Torque range:

a or b

Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

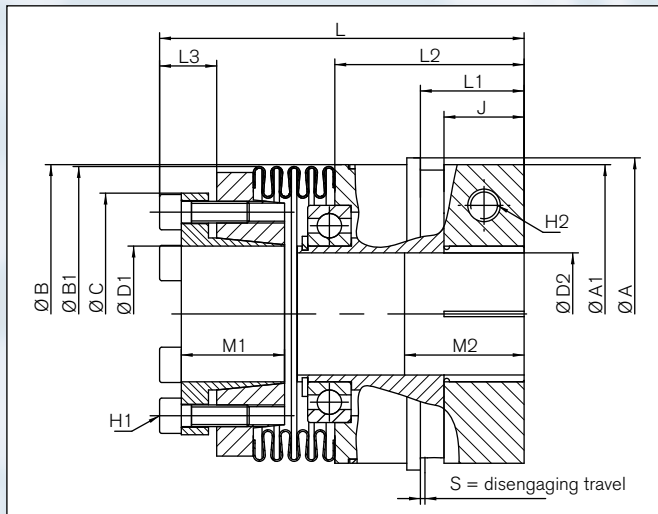
Bellows type:

4=short bellows (4 ripples),

6=long bellows (6 ripples)

Length of the bellows influences installation length L

Type DMK/B-IC with internal keyless locking device – clamping hub



Sectional view

Technical Data

T_{KN}	= Disengagement torque
N_{max}	= Max. rotational speed
C_r	= Radial spring stiffness
C_a	= Axial spring stiffness
C_{tdyn}	= Dynamic torsional stiffness
M_A	= Tightening torque of retaining screws
J	= Moment of inertia
ΔK_r	= Max. approved misalignment radial
ΔK_a	= Max. approved misalignment axial
ΔK_w	= Max. approved misalignment angular

Technical Data

Size		Torque adjustment range			4/6 ¹⁾		H1	H2		Metal bellows side	Hub side	Weight	
		Version a	Version b										
													T _{KN}
				N _{max}	C _r	C _a	C _{tdyn}	MA	J		m		
		lb-in		rpm	lb-in		10 ³ lb-in/rad	lb-in		10 ⁻³ lb-in ²		lbs	
	30	44-177	133-310	9240	4100/1268	274/154	319/230	44	133	376	718	1.5	
	60	106-310	177-620	8183	6424/1902	520/303	646/434	75	354	923	1812	3.3	
	150	221-664	575-1328	6830	11592/3432	839/491	1337/894	124	531	2393	4444	5.5	
	200	443-1062	708-1770	5620	8743/2570	839/485	1531/1027	124	797	3760	7178	7.1	
	300	266-1239	885-2655	5210	36136/8394	1622/874	4417/2478	159	885	7520	14698	12	
	500	1239-3098	2213-4426	4585	50252/5551	600/503	6019/2744	230	1283	19483	38624	16	

1) We offer two different versions of metal bellows (4 = short bellows, 6 = long bellows) with different torsional stiffnesses. Consequently the length varies.

Series DMK/E

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

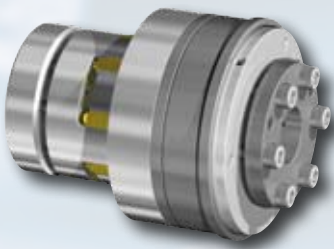
Characteristics

- Safety Coupling with elastomeric spider as torsionally elastic misalignment compensating element
- High damping characteristic
- Roller technology, for high dynamic loads

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability

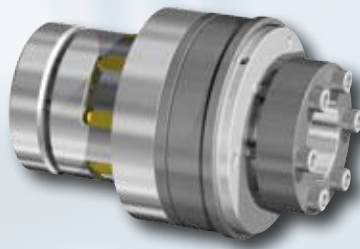
Series DMK/E



Series
DMK/E-OI

- With Shrink Disc[®] connection - internal keyless locking device
- Torque 265-4500 lb-in

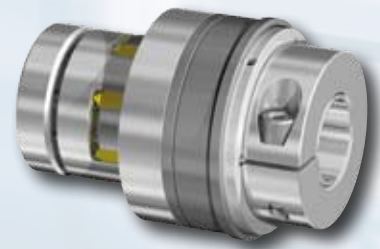
Page 48



Series
DMK/E-OO

- With Shrink Disc[®] connection - internal keyless locking device
- Torque 265-4500 lb-in

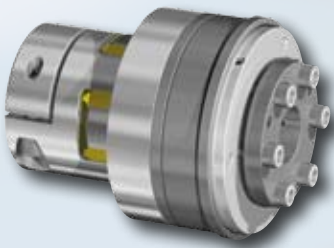
Page 50



Series
DMK/E-OC

- With Shrink Disc[®] connection - clamping hub for easy assembly / disassembly
- Torque 265-4500 lb-in

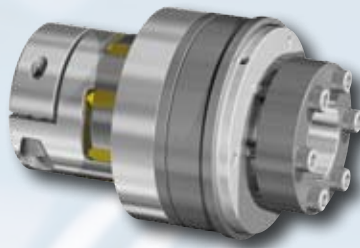
Page 52



Series
DMK/E-CI

- With clamping hub - internal keyless locking device
- Torque 265-4500 lb-in

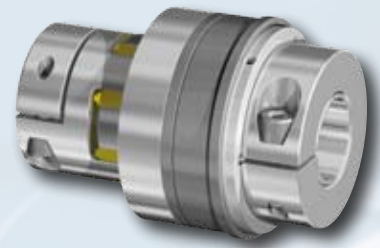
Page 54



Series
DMK/E-CO

- With clamping hub - Shrink Disc[®] connection for self loosening disassembly
- Torque 265-4500 lb-in

Page 56



Series
DMK/E-CC

- With clamping hub - clamping hub for easy assembly / disassembly
- Torque 265-4500 lb-in

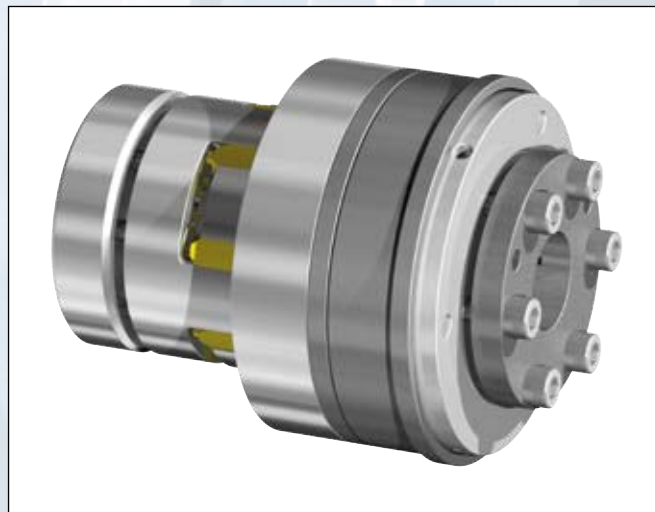
Page 58

Type DMK/E-OI with Shrink Disc® connection – internal keyless locking device

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Coupling hub outer diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
E	=	Mounting dimension for elastomeric spider
H1	=	Clamp hub screws
H2	=	Locking device screw
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD1 ^{H7}	C1	øD2 ^{H7}	C2	E	H1	H2	J	L	L1	L2	M1	M2	S
					min- max		min- max			6xDIN EN ISO 4762	6xDIN EN ISO 4762							
					Inch					mm				Inch				
30	2.56	1.65	2.44	1.77	0.47-0.79	0.001	0.47-0.79	0.001	0.71	M4	M4	0.47	3.80	0.71	1.04	1.04	0.79	0.05
60	2.95	1.97	2.76	2.17	0.39-0.98	0.001	0.59-0.98	0.001	0.71	M5	M6	0.59	4.29	0.87	1.18	1.18	0.98	0.05
150	3.74	2.44	3.62	2.56	0.59-1.42	0.001	0.79-1.38	0.001	0.79	M5	M6	0.67	4.92	0.89	1.38	1.38	1.18	0.08
300	4.53	2.99	4.33	3.15	0.79-1.61	0.001	0.98-1.77	0.001	0.94	M6	M8	0.83	5.96	1.17	1.77	1.77	1.38	0.08
500	5.08	3.35	5.04	4.13	1.18-2.17	0.001	1.38-1.97	0.001	1.10	M8	M8	0.83	6.65	1.14	2.22	2.22	1.50	0.08

Ordering Example:

DMK/E-OI

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DMK/E-OI	150	1.378	1.181	1062	b	C

Torque range:

a or b

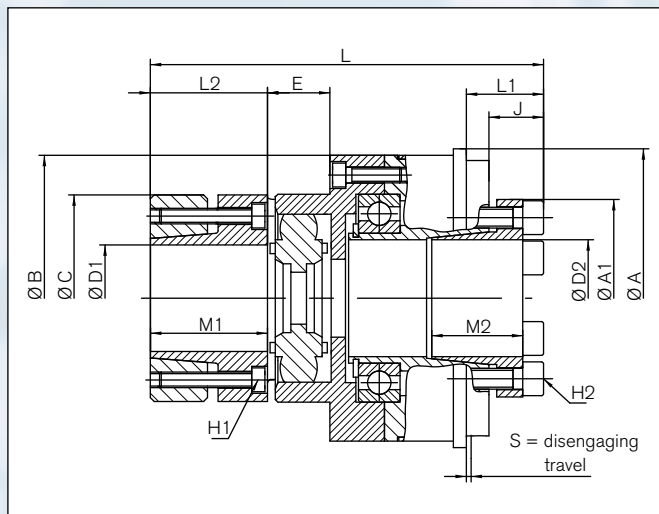
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/E-OI with Shrink Disc® connection – internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

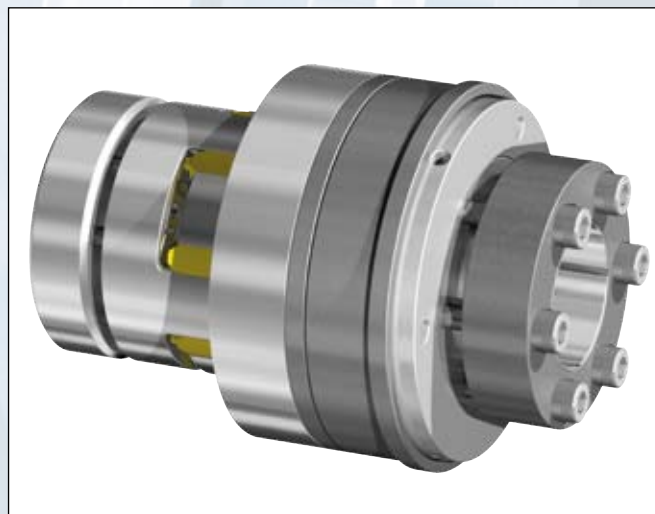
Size	Torque adjustment range		N _{max} rpm	H1	H2	Elastomer Spider side	Hub side	Weight
	Version a	Version b						
	T _{KN} lb-in			M _A lb-in		J 10 ⁻³ lb-in ²		m lbs
30	44-177	133-310	8950	27	44	123	342	1.1
60	106-310	177-620	7000	53	75	513	1094	3.1
150	221-664	575-1328	6000	53	124	1128	2734	6.2
300	266-1239	885-2655	5000	89	159	3555	10254	10
500	1239-3098	2213-4426	3600	310	230	10596	17090	17

Type DMK/E-OO with Shrink Disc® connection – Shrink Disc® connection

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Coupling hub outer diameter
øD1 H7	=	Bore diameter
øD2 H7	=	Bore diameter
E	=	Mounting dimension for elastomeric spider
H1	=	Clamp hub screws
H2	=	Locking device screw
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft Insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD1 ^{H7} min- max	øD2 ^{H7} min- max	C1	E	H1 6xDIN EN ISO 4762	H2 6xDIN EN ISO 4762	J	L	L1	L2	M1	M2	S
					Inch				mm				Inch				
30	2.56	1.65	2.44	1.77	0.47-0.79	0.47-0.79	0.001	0.71	M4	M4	0.87	4.19	1.10	1.04	1.04	1.18	0.05
60	2.95	1.97	2.76	2.17	0.39-0.98	0.59-0.98	0.001	0.71	M5	M5	0.91	4.61	1.18	1.18	1.18	1.50	0.05
150	3.74	2.44	3.62	2.56	0.59-1.42	0.79-1.38	0.001	0.79	M5	M6	1.18	5.43	1.40	1.38	1.38	1.57	0.08
300	4.53	2.99	4.33	3.15	0.79-1.61	1.18-1.77	0.001	0.94	M6	M8	1.18	6.32	1.52	1.77	1.77	1.97	0.08
500	5.08	3.35	5.04	4.13	1.18-2.17	1.38-1.97	0.001	1.10	M8	M8	1.42	7.24	1.73	2.22	2.22	2.09	0.08

Ordering Example: DMK/E-OO

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DMK/E-OO	150	1.378	1.181	1062	b	C

Torque range:

Functional principle:

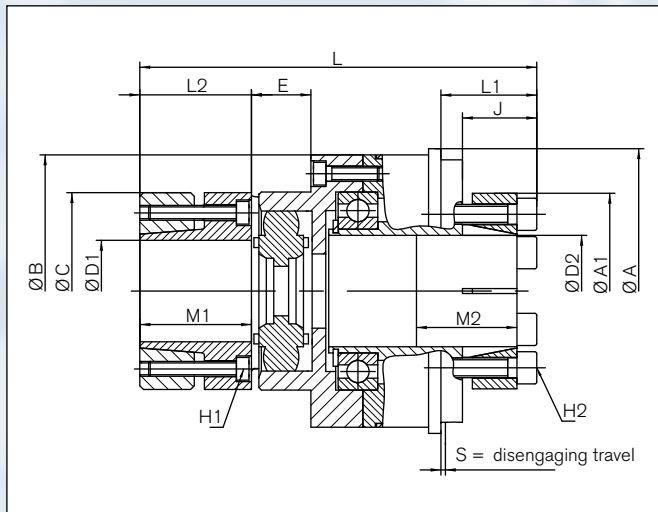
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/E-OO with Shrink Disc® connection – Shrink Disc® connection



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

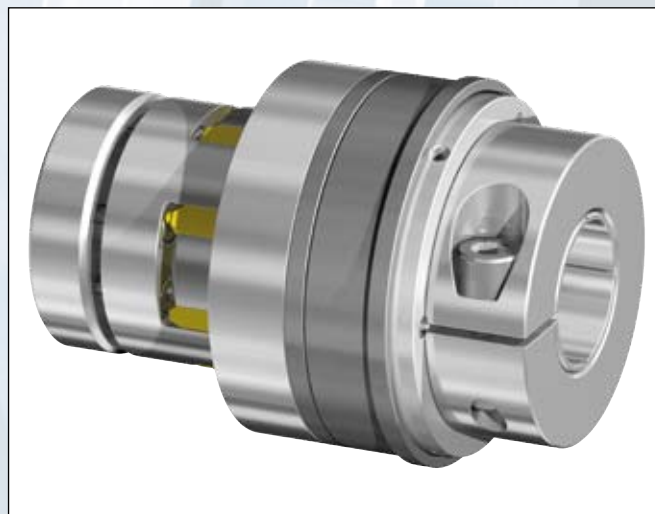
Size	Torque adjustment range		N _{max} rpm	H1	H2	Elastomer Spider side	Hub side	Weight
	Version a	Version b						
		T _{KN} lb-in			M _A lb-in	J 10 ⁻³ lb-in ²		m lbs
30	44-177	133-310	8950	2	4	123	342	1.1
60	106-310	177-620	7000	4	6	513	1094	3.1
150	221-664	575-1328	6000	4	10	1128	2734	6
300	266-1239	885-2655	5000	7	13	3555	10254	10
500	1239-3098	2213-4426	3600	26	19	10596	17090	17

Type DMK/E-OC with Shrink Disc® connection – clamping hub

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Dimensions

øA	= Outer diameter of flange
øA1	= Locking device outer diameter
øB	= Outer diameter of clutch body
øC	= Coupling hub outer diameter
øD1 H7	= Bore diameter
øD2 H7	= Bore diameter
E	= Mounting dimension for elastomeric spider
H1	= Clamp hub screws
H2	= Locking device screw
J	= Locking device projection
L	= Total length
L1	= Overall clutch width
L2	= Length to bearing centerline
M1	= Max. shaft insertion depth
M2	= Shaft clamping length
S	= Release path at overload



Dimensions

Size Size	øA	øA1	øB	øC	øD1 H7 min- max	C1	øD2 H7 min- max	C2	E	H1 6xDIN EN ISO 4762	H2 1xDIN EN ISO 4762	J	L	L1	L2	M1	M2	S
					Inch					mm					Inch			
30	2.56	1.65	2.44	1.77	0.47-0.79	0.001	0.47-0.79	0.001	0.71	M4	M6	0.59	3.92	0.83	1.04	1.04	1.18	0.05
60	2.95	1.97	2.76	2.17	0.39-0.98	0.001	0.59-0.98	0.001	0.71	M5	M8	0.94	4.65	1.22	1.18	1.18	1.57	0.05
150	3.74	2.44	3.62	2.56	0.59-1.42	0.001	0.79-1.38	0.001	0.79	M5	M10	1.02	5.28	1.26	1.38	1.38	1.65	0.08
300	4.53	2.99	4.33	3.15	0.79-1.61	0.001	1.18-1.77	0.001	0.94	M6	M12	1.18	6.30	1.50	1.77	1.77	1.97	0.08
500	5.08	3.35	5.04	4.13	1.18-2.17	0.001	1.38-1.97	0.001	1.10	M8	M12	1.34	7.17	1.65	2.22	2.22	2.32	0.08

Ordering Example: DMK/E-OC

Type	Size	ØD1H7	ØD2H7	lb-in	Version	Functional principle
DMK/E-OC	150	1.378	1.181	1062	b	C

Torque range:

Functional principle:

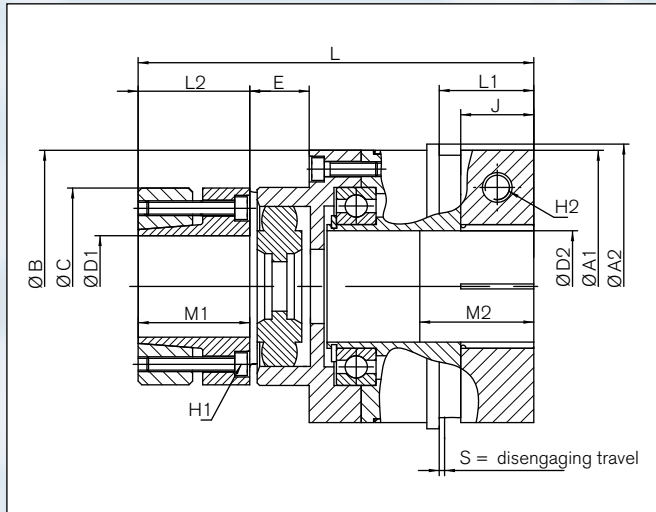
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/E-OC with Shrink Disc[®] connection – clamping hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

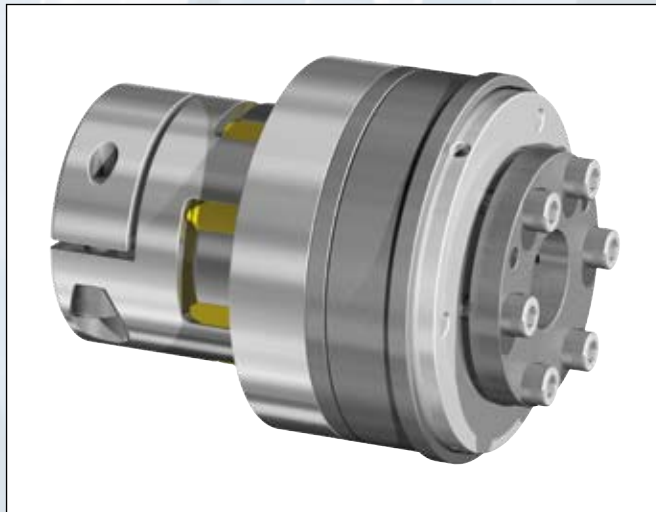
Size		Torque adjustment range		N _{max} rpm	H1	H2	Elastomer Spider side	Hub side	Weight
		Version a	Version b						
							J 10 ⁻³ lb-in ²		m lbs
	30	44-177	133-310	8950	27	133	929	2581	1.1
	60	106-310	177-620	7000	53	354	3872	8260	3.1
	150	221-664	575-1328	6000	53	531	8518	20649	6.2
	300	266-1239	885-2655	5000	89	797	26844	77434	10
	500	1239-3098	2213-4426	3600	310	1283	80015	129056	17

Type DMK/E-CI with clamping hub – internal keyless locking device

Single-position re-engagement / multi-position re-engagement -
backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Coupling hub outer diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
E	=	Mounting dimension for elastomeric spider
H1	=	Screw
H2	=	Locking device screw
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD1 ^{H7} min- max	C1	øD2 ^{H7} min- max	C2	E	H1 1xDIN EN ISO 4762	H2 6xDIN EN ISO 4762	J	L	L1	L2	M1	M2	S
	Inch									mm		Inch						
30	2.56	1.65	2.44	1.77	0.47-0.95	0.001	0.47-0.79	0.001	0.71	M5	M4	0.47	3.80	0.71	1.04	1.04	0.79	0.05
60	2.95	1.97	2.76	2.17	0.39-1.10	0.001	0.59-0.98	0.001	0.71	M6	M6	0.59	4.29	0.87	1.18	1.18	0.98	0.05
150	3.74	2.44	3.62	2.56	0.55-1.50	0.001	0.79-1.38	0.001	0.79	M8	M6	0.67	4.92	0.89	1.38	0.85	1.18	0.08
300	4.53	2.99	4.33	3.15	0.59-1.77	0.001	1.18-1.77	0.001	0.94	M8	M8	0.83	5.96	1.17	1.77	1.22	1.38	0.08
500	5.08	3.35	5.04	4.13	0.98-2.17	0.001	1.38-1.97	0.001	1.10	M8	M8	0.83	6.65	1.14	2.22	1.50	1.50	0.08

Ordering Example:

DMK/E-CI

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DMK/E-CI	150	1.378	1.181	1062	b	C

Torque range:

a or b

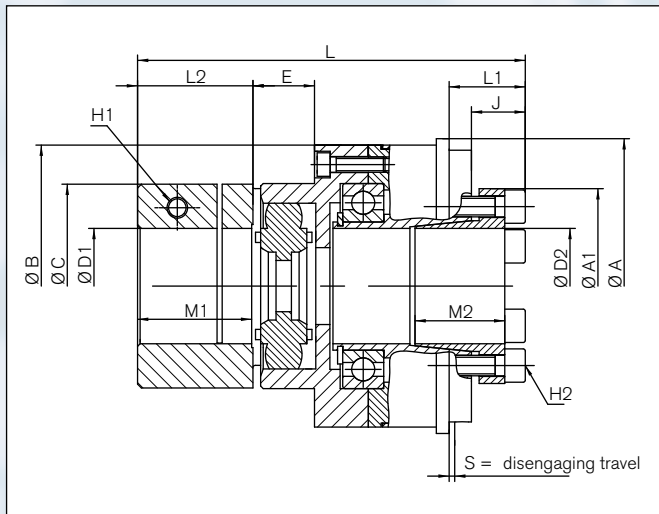
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/E-CI with clamping hub – internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

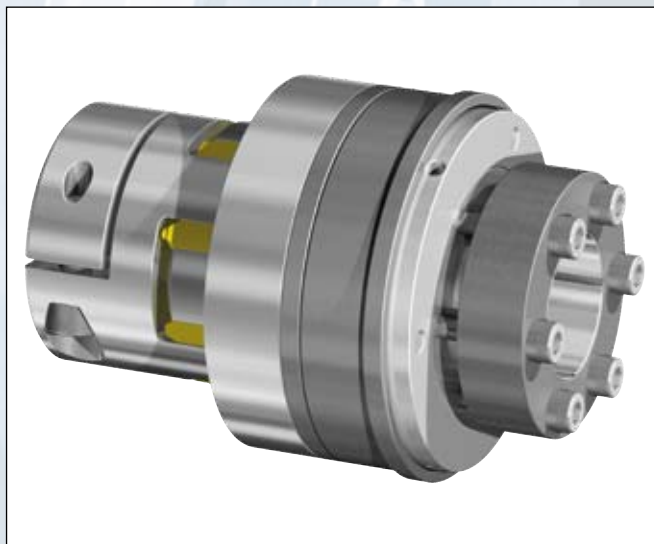
Size	Torque adjustment range		N _{max} rpm	H1	H2	Elastomer Spider side	Hub side	Weight
	Version a	Version b						
		T _{KN} lb-in			M _A lb-in	J 10 ⁻³ lb-in ²		m lbs
30	44-177	133-310	8950	133	44	123	342	1.1
60	106-310	177-620	7000	354	75	513	1094	3.1
150	221-664	575-1328	6000	531	124	1128	2734	6.2
300	266-1239	885-2655	5000	797	159	3555	10254	10
500	1239-3098	2213-4426	3600	1283	230	10596	17090	17

Type DMK/E-CO with clamping hub – Shrink Disc® connection

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Coupling hub outer diameter
øD1 H7	=	Bore diameter
øD2 H7	=	Bore diameter
E	=	Mounting dimension for elastomeric spider
H1	=	Screw
H2	=	Locking device screw
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD1 H7	C1	øD2 H7	C2	E	H1	H2	J	L	L1	L2	M1	M2	S
					min- max		min- max			1xDIN EN ISO 4762	6xDIN EN ISO 4762							
					Inch					mm					Inch			
30	2.56	1.65	2.44	1.77	0.47-0.95	0.001	0.47-0.79	0.001	0.71	M5	M4	0.87	4.19	1.10	1.04	1.04	1.18	0.05
60	2.95	1.97	2.76	2.17	0.39-1.10	0.001	0.59-0.98	0.001	0.71	M6	M5	0.91	4.61	1.18	1.18	1.18	1.50	0.05
150	3.74	2.44	3.62	2.56	0.55-1.50	0.001	0.79-1.38	0.001	0.79	M8	M6	1.18	5.43	1.40	1.38	0.85	1.57	0.08
300	4.53	2.99	4.33	3.15	0.59-1.77	0.001	1.18-1.77	0.001	0.94	M8	M8	1.18	6.32	1.52	1.77	1.22	1.97	0.08
500	5.08	3.35	5.04	4.13	0.98-2.17	0.001	1.38-1.97	0.001	1.10	M8	M8	1.42	7.22	1.73	2.22	1.50	2.09	0.08

Ordering Example:

DMK/E-CO

Type	Size	øD1 H7	øD2 H7	lb-in	Version	Functional principle
DMK/E-CO	150	1.378	1.181	1062	b	C

Torque range:

a or b

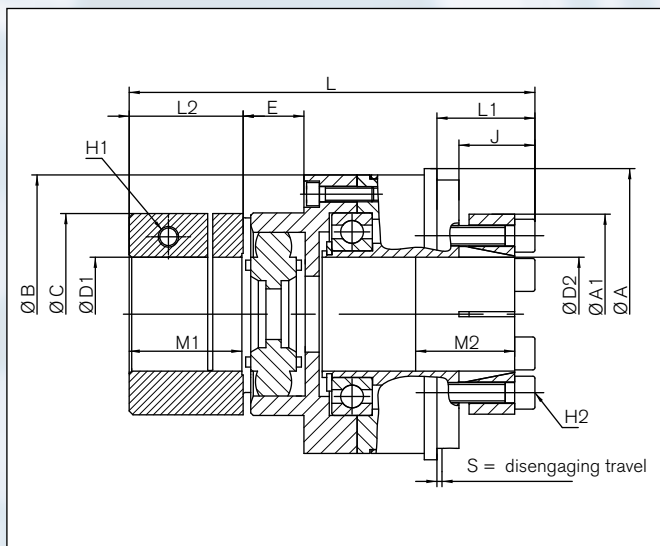
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/E-CO with clamping hub – Shrink Disc® connection



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

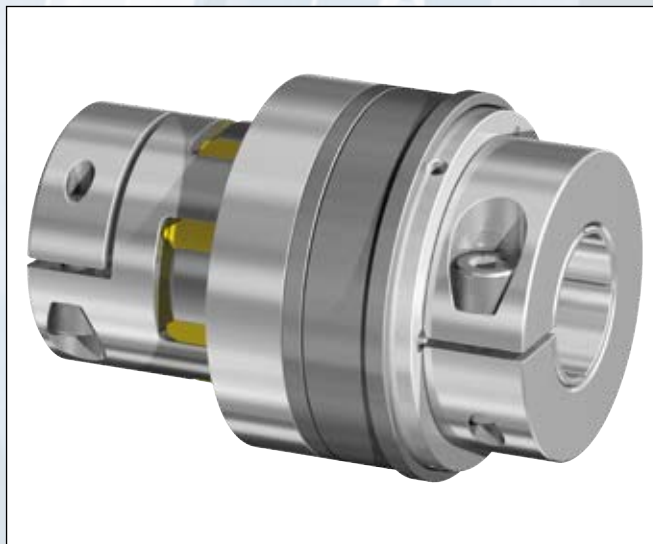
Size		Torque adjustment range			H1	H2	Elastomer Spider side	Hub side	Weight
		Version a	Version b				J		m
		T _{KN}							
		lb-in		rpm	MA lb-in		10 ⁻³ lb-in ²		lbs
	30	44-177	133-310	8950	133	44	123	342	1.1
	60	106-310	177-620	7000	354	75	513	1094	3.1
	150	221-664	575-1328	6000	531	124	1128	2734	6.2
	300	266-1239	885-2655	5000	797	159	3555	10254	10
	500	1239-3098	2213-4426	3600	1283	230	10596	17090	17

Type DMK/E-CC with clamping hub – clamping hub

Single-position re-engagement / multi-position re-engagement - backlash-free - with roller technology

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Coupling hub outer diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
E	=	Mounting dimension for elastomeric spider
H1	=	Clamp hub screws
H2	=	Locking device screw
J	=	Locking device projection
L	=	Total length
L1	=	Overall clutch width
L2	=	Length to bearing centerline
M1	=	Max. shaft insertion depth
M2	=	Shaft clamping length
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD1 ^{H7} min- max	C1	øD2 ^{H7} min- max	C2	E	H1 1xDIN EN ISO 4762	H2 1xDIN EN ISO 4762	J	L	L1	L2	M1	M2	S
	Inch									mm		Inch						
30	2.56	1.65	2.44	1.77	0.47-0.95	0.001	0.47-0.79	0.001	0.71	M5	M6	0.59	3.92	0.83	1.04	1.04	1.18	0.05
60	2.95	1.97	2.76	2.17	0.39-1.10	0.001	0.59-0.98	0.001	0.71	M6	M8	0.94	4.65	1.22	1.18	1.18	1.57	0.05
150	3.74	2.44	3.62	2.56	0.55-1.50	0.001	0.79-1.38	0.001	0.79	M8	M10	1.02	5.28	1.26	1.38	0.85	1.65	0.08
300	4.53	2.99	4.33	3.15	0.59-1.77	0.001	1.18-1.77	0.001	0.94	M8	M12	1.18	6.30	1.50	1.77	1.22	1.97	0.08
500	5.08	3.35	5.04	4.13	0.98-2.17	0.001	1.38-1.97	0.001	1.10	M8	M12	1.34	7.15	1.65	2.22	1.50	2.32	0.08

Ordering Example:

DMK/E-CC

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DMK/E-CC	150	1.378	1.181	1062	b	C

Torque range:

a or b

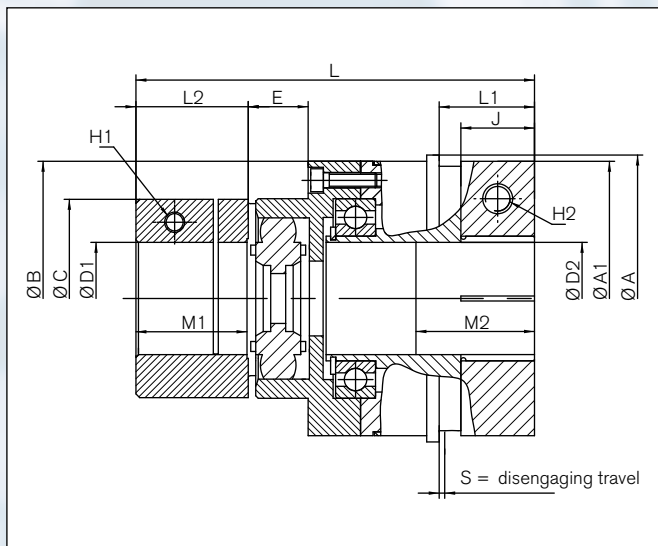
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DMK/E-CC with clamping hub – clamping hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	max. rotational speed
M_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size		Torque adjustment range					Elastomer Spider side	Hub side	Weight
		Version a	Version b		H1	H2			
		lb-in		rpm		lb-in	10 ⁻³	lb-in ²	m lbs
	30	44-177	133-310	8950	133	133	123	342	1
	60	106-310	177-620	7000	354	354	513	1094	3
	150	221-664	575-1328	6000	531	531	1128	2734	6
	300	266-1239	885-2655	5000	797	797	3555	10254	10
	500	1239-3098	2213-4426	3600	1283	1283	10596	17090	17

Series DXM/C(L)

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Characteristics

- Backlash-free safety coupling with a flange hub and ball bearing for the direct mounting of sprockets, pulleys, gears, etc.

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability



Series DXM/C(L)



Series
DXM/C-FK

- Short hub with flange – parallel key
- Torque 440-10600 lb-in

Page 62



Series
DXM/C-FI

- Short hub with flange – internal keyless locking device
- Torque 440-10600 lb-in

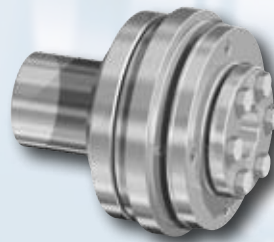
Page 64



Series
DXM/CL-FK

- Long hub with flange – keyway hub for use in wide driving elements or objects with small diameters
- Sleeve bearings, needle bearings and ball bearings are additionally suitable to support the driving element on long hubs
- Torque 440-10600 lb-in

Page 66



Series
DXM/CL-FI

- Long hub with flange – internal keyless locking device for use in wide driving elements or objects with small diameters
- Sleeve bearings, needle bearings and ball bearings are additionally suitable to support the driving element on long hubs
- Torque 440-10600 lb-in

Page 68

Type DXM/C-FK short hub with flange – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øF^{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
L	=	Total length
M	=	Clutch outer diameter
N	=	Hub mounting length
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min.- max	C1	øE	øF ^{h5}	C2	G	G1	H	L	M	N	S	
				Inch					mm			Inch				
50	2.76	2.56	2.20	0.47-0.79	0.001	2.42	1.85	0.0004	8xM4	0.24	0.47	1.57	0.28	0.31	0.05	
100	3.35	3.15	2.80	0.59-0.98	0.001	2.64	2.44	0.0004	8xM5	0.28	0.53	1.89	0.31	0.43	0.06	
200	3.94	3.74	3.35	0.87-1.18	0.001	3.23	2.95	0.0005	8xM6	0.35	0.63	2.32	0.35	0.55	0.07	
400	4.53	4.33	3.94	1.10-1.57	0.001	3.82	3.54	0.0006	8xM6	0.39	0.67	2.52	0.39	0.63	0.08	
700	5.31	5.12	4.57	1.26-1.97	0.001	4.61	3.94	0.0006	8xM8	0.47	0.81	2.95	0.47	0.71	0.09	
1200	6.54	6.54	5.91	1.57-2.56	0.001	5.91	5.12	0.0007	8xM10	0.59	1.81	4.53	0.63	0.83	0.10	

Ordering Example:

DXM/C-FK

Type	Size	ØD ^{H7}	lb-in	Version	Functional principle
DXM/C-FK	200	0.984	1.575	b	C

Torque range:

Functional principle:

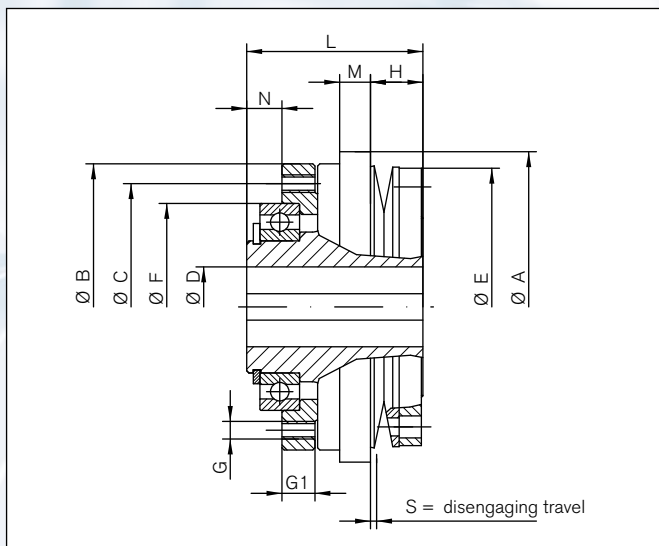
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/C-FK short hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
J = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N _{max} rpm	Weight m lbs
	Version a	Version b	Version c				
		T _{KN} lb-in			J 10 ⁻³ lb-in ²		
50	44-111	89-221	177-443	718	308	4000	1.4
100	89-221	177-443	354-885	1743	786	3000	2.2
200	177-443	354-885	708-1770	4444	2188	2500	3.9
400	354-885	708-1770	1416-3541	8990	4478	2000	5.6
700	620-1549	1239-3098	2478-6196	21637	9058	1200	9.0
1200	1062-2655	2124-5311	4249-10622	97210	22867	800	22

Type DXM/C-FI short hub with flange – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD H7	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
øF h5	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
K	=	Screw head height
L	=	Total length
M	=	Clutch outer diameter
N	=	Hub mounting length
O	=	Overall clutch length
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Dimensions

Size	øA	øB	øC	øD H7 min.- max	C1	øE	øE1	øF h5	C2	G	G1	H	K	L	M	N	O	S	S1	S2	SW
					Inch					mm					Inch					mm	Inch
4	-	1.57	1.38	0.24-0.47	0.001	1.46	1.02	1.18	0.001	6xM3	0.20	0.28	0.08	1.12	0.24	0.18	0.94	0.03	0.45	4xM3	5.5
15	-	1.85	1.65	0.31-0.59	0.001	1.65	1.18	1.46	0.001	6xM3	0.20	0.37	0.08	1.36	0.31	0.20	1.14	0.04	0.61	4xM3	5.5
30	-	2.36	2.09	0.35-0.63	0.001	2.24	1.38	1.85	0.001	6xM4	0.24	0.37	0.11	1.61	0.35	0.24	1.30	0.05	0.71	4xM4	7
60	2.95	3.03	2.72	0.47-0.79	0.001	2.48	1.54	2.44	0.001	6xM5	0.28	0.40	0.11	1.93	-	0.31	1.61	0.06	0.91	6xM4	7
100	3.54	3.54	3.15	0.59-0.98	0.001	3.23	1.89	2.68	0.001	6xM6	0.30	0.43	0.14	2.20	-	0.39	1.85	0.07	1.06	6xM5	8
200	4.13	4.17	3.54	0.87-1.38	0.001	4.06	2.40	3.15	0.001	6xM6	0.33	0.50	0.16	2.44	-	0.39	2.05	0.08	1.14	6xM6	10
450	4.92	4.92	4.41	1.26-1.77	0.001	4.69	2.91	4.06	0.001	6xM8	0.37	0.58	0.16	2.76	-	0.39	2.32	0.09	1.26	8xM6	10

Ordering Example: DXM/C-FI

Type	Size	ØDH7	lb-in	Version	Functional principle
DXM/C-FI	200	0.984	1.575	b	C

Torque range:

a or b

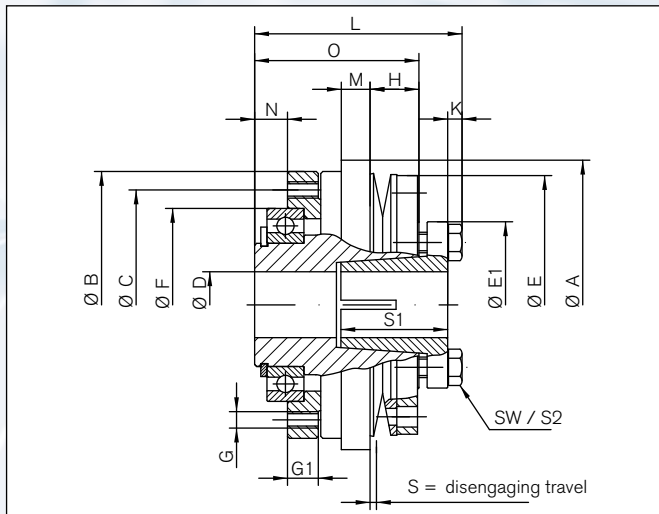
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/C-FI short hub with flange – internal keyless locking device



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
- N_{max}** = Max. rotational speed
- T_A** = Tightening torque of retaining screws
- J** = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N _{max} rpm	S2 T _A lb-in	Weight m lbs
	Version a	Version b	Version c					
		T _{KN} lb-in			J 10 ⁻³ lb-in ²			
4	6-12	12-23	18-34	92	27	4000	9	0.4
15	18-44	44-89	53-133	185	62	4000	9	0.6
30	35-88	71-177	106-266	649	205	4000	27	1.2
60	71-177	133-354	204-531	1607	615	4000	27	2.1
100	133-319	266-637	398-956	3828	1333	3000	44	3.6
200	266-664	531-1328	797-1992	9331	2632	2500	84	6.7
450	531-1328	1062-2655	1593-3983	21192	5913	2000	84	8.7

Type DXM/CL-FK long hub with flange – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øF^{h5}	=	Centering diameter
øF1^{h6}	=	Hub outer diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
L	=	Length
M	=	Clutch outer diameter
N	=	Hub mounting length
N1	=	Distance from Flange to snap ring
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min.- max	C1	øE	øF ^{h5}	C2	øF1 ^{h6}	C3	G	G1	H	L	M	N	N1	S
					Inch						mm				Inch			
50	2.76	2.56	2.20	0.47-0.79	0.001	2.42	1.85	0.0004	1.18	0.0005	8xM4	0.24	0.47	2.56	0.28	1.30	0.26	0.05
100	3.35	3.15	2.80	0.59-0.98	0.001	2.64	2.44	0.0004	1.57	0.0006	8xM5	0.28	0.53	3.15	0.31	1.69	0.35	0.06
200	3.94	3.74	3.35	0.87-1.18	0.001	3.23	2.95	0.0005	1.77	0.0006	8xM6	0.35	0.63	3.94	0.35	2.17	0.45	0.07
400	4.53	4.33	3.94	1.10-1.57	0.001	3.82	3.54	0.0006	2.17	0.0007	8xM6	0.39	0.67	4.53	0.39	2.64	0.51	0.08
700	5.31	5.12	4.57	1.26-1.97	0.001	4.61	3.94	0.0006	2.56	0.0007	8xM8	0.47	0.81	5.12	0.47	2.87	0.55	0.09
1200	6.54	6.54	5.91	1.57-2.56	0.001	5.91	5.12	0.0007	3.35	0.0009	8xM10	0.59	1.81	6.69	0.63	2.99	0.63	0.10

Ordering Example:

DXM/CL-FK

Type	Size	øDH7	lb-in	Version	Functional principle
DXM/CL-FK	200	0.984	708	b	C

Torque range:

Functional principle:

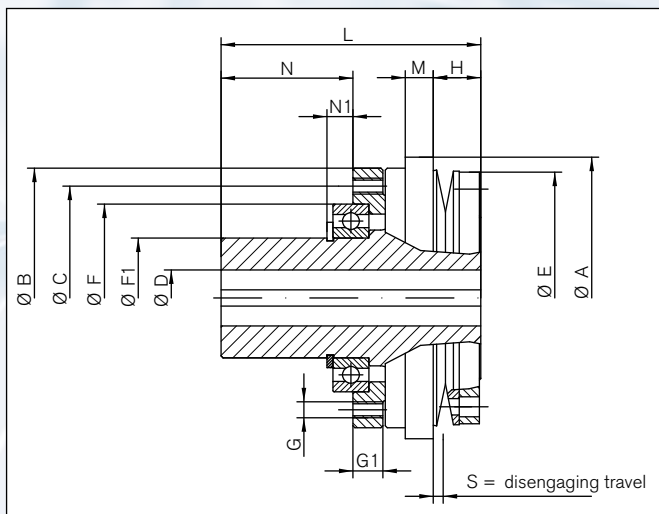
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/CL-FK long hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
J = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N _{max} rpm	Weight m lbs
	Version a	Version b T _{KN} lb-in	Version c				
50	44-111	89-221	177-443	752	308	4000	1.6
100	89-221	177-443	354-885	1914	786	3000	2.7
200	177-443	354-885	708-1770	4820	2188	2500	4.5
400	354-885	708-1770	1416-3541	9878	4478	2000	6.6
700	620-1549	1239-3098	2478-6196	23414	9058	1200	10
1200	1062-2655	2124-5311	4249-10622	102201	22867	800	24

Type DXM/CL-FI long hub with flange – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD ^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
øF ^{h5}	=	Centering diameter
øF1 ^{h6}	=	Hub outer diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
K	=	Screw head height
L	=	Total length
M	=	Clutch outer diameter
N	=	Hub mounting length
N1	=	Distance from Flange to snap ring
O	=	Overall clutch length
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Dimensions

Size	øA	øB	øC	øD min.- max	øE	øE1	øF h5	C1	øF1 h6	C2	G	G1	H	K	L	M	N	N1	O	S	S1	S2	SW	
Inch											mm	Inch											mm	Inch
50	2.76	2.56	2.20	0.39-0.79	2.42	1.50	1.85	0.0004	1.18	0.0005	8xM4	0.24	0.47	0.11	2.83	0.28	1.30	0.26	2.56	0.05	1.34	6xM4	7	
100	3.35	3.15	2.80	0.59-0.98	2.64	1.73	2.44	0.0004	1.57	0.0006	8xM5	0.28	0.53	0.11	3.46	0.31	1.69	0.35	3.15	0.06	1.54	6xM4	7	
200	3.94	3.74	3.35	0.87-1.38	3.23	2.20	2.95	0.0005	1.77	0.0006	8xM6	0.35	0.63	0.11	4.25	0.35	2.17	0.45	3.94	0.07	1.65	8xM4	7	
400	4.53	4.33	3.94	1.26-1.77	3.82	2.76	3.54	0.0006	2.17	0.0007	8xM6	0.39	0.67	0.14	4.88	0.39	2.64	0.51	4.53	0.08	1.89	8xM5	8	
700	5.31	5.12	4.57	1.38-2.17	4.61	3.31	3.94	0.0006	2.56	0.0007	8xM8	0.47	0.81	0.16	5.55	0.47	2.87	0.55	5.12	0.09	2.09	8XM6	10	
1200	6.54	6.54	5.91	1.57-2.56	5.91	3.94	5.12	0.0007	3.35	0.0009	8xM10	0.59	1.81	0.21	7.28	0.63	2.99	0.63	6.69	0.10	3.66	8xM8	13	

Ordering Example: DXM/CL-FI

Type	Size	øDH ⁷	lb-in	Version	Functional principle
DXM/CL-FI	200	0.984	708	b	C

Torque range:

a or b

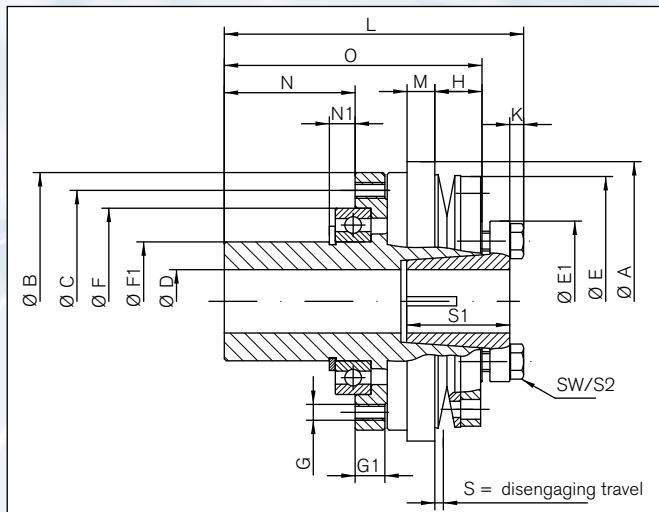
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/CL-FI long hub with flange – internal keyless locking device



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
- N_{max}** = max. rotational speed
- T_A** = Tightening torque of retaining screws
- J** = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N _{max} rpm	S2 T _A lb-in	Weight m lbs
	Version a	Version b	Version c					
		T _{KN} lb-in			J 10 ⁻³ lb-in ²			
50	44-111	89-221	177-443	786	308	4000	35.4	1.7
100	89-221	177-443	354-885	2017	786	3000	35.4	3.0
200	177-443	354-885	708-1770	5093	2188	2500	35.4	5.0
400	354-885	708-1770	1416-3541	10630	4478	2000	70.8	7.4
700	620-1549	1239-3098	2478-6196	25123	9058	1200	106	11
1200	1062-2655	2124-5311	4249-10622	105585	22867	800	221	26

Series DXM/CD double mounted

Multi-position re-engagement / single-position re-engagement -
backlash-free - Ball Detent

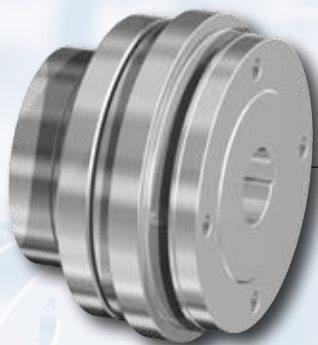
Characteristics

- Backlash-free safety coupling with a flange and robust, double ball bearing for the direct mounting sprockets, pulleys, gears, etc.
- Designed for higher loads

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability

Series DXM/CD double mounted



Series **DXM/CD-FK**

- With flange – parallel key
- Torque 44-10600 lb-in

Page 72



Series **DXM/CD-FI**

- With flange – Internal keyless locking device
- Torque 44-10600 lb-in

Page 74

Type DXM/CD-FK double mounted; with flange – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øF_{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
L	=	Total length
M	=	Clutch outer diameter
N	=	Hub mounting length
S	=	Release path at overload



Dimensions

Size	øA	øB	øC	øD ^{H7} min.- max	C1	øE	øF _{h5}	C2	G	G1	H	L	M	N	S	
				Inch					mm			Inch				
50	2.76	2.56	2.20	0.47-0.79	0.001	2.42	1.85	0.0004	8xM4	0.24	0.47	1.93	0.28	0.67	0.05	
100	3.35	3.15	2.80	0.59-0.98	0.001	2.64	2.44	0.0004	8xM5	0.28	0.53	2.36	0.31	0.91	0.06	
200	3.94	3.74	3.35	0.87-1.18	0.001	3.23	2.95	0.0005	8xM6	0.35	0.63	2.95	0.35	1.18	0.07	
400	4.53	4.33	3.94	1.10-1.57	0.001	3.82	3.54	0.0006	8xM6	0.39	0.67	3.23	0.39	1.34	0.08	
700	5.31	5.12	4.57	1.26-1.97	0.001	4.61	3.94	0.0006	8xM8	0.47	0.81	3.66	0.47	1.42	0.09	
1200	6.54	6.54	5.91	1.57-2.56	0.001	5.91	5.12	0.0007	8xM10	0.59	1.81	5.39	0.63	1.69	0.10	

Ordering Example:

DXM/CD-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/CD-FK	200	1.181	885	b	C

Torque range:

Functional principle:

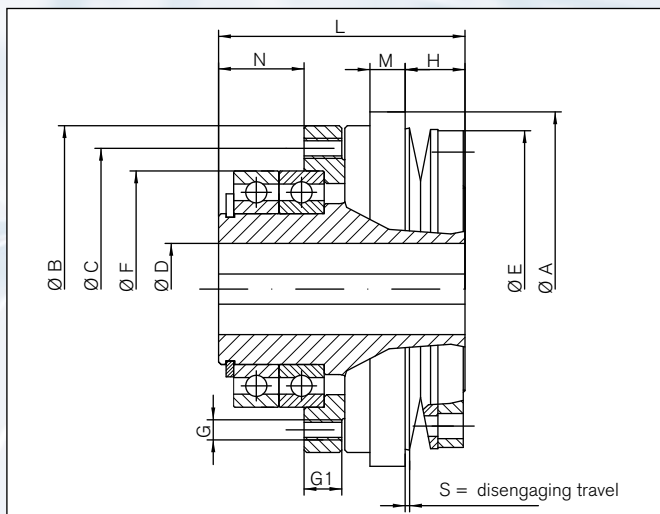
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/CD-FK double mounted; with flange – keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
J	=	Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N_{max} rpm	Weight m lbs
	Version a	Version b T_{KN} lb-in	Version c				
50	44-111	89-221	177-443	718	342	4000	1.6
100	89-221	177-443	354-885	1812	923	3000	2.7
200	177-443	354-885	708-1770	4649	2734	2500	4.7
400	354-885	708-1770	1416-3541	9502	5742	2000	6.9
700	620-1549	1239-3098	2478-6196	22388	10801	1200	10
1200	1062-2655	2124-5311	4249-10622	102543	29293	800	25

Type DXM/CD-FI double mounted; with flange – Internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
øF^{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
K	=	Screw head height
L	=	Total length
M	=	Clutch outer diameter
N	=	Hub mounting length
O	=	Overall clutch length
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Dimensions

Size	øA	øB	øC	øD ^{H7}	C1	øE	øE1	øF ^{h5}	C2	G	G1	H	K	L	M	N	O	S	S1	S2	SW
				min.- max																	
					Inch					mm					Inch					mm	Inch
50	2.76	2.56	2.20	0.39-0.79	0.001	2.42	1.50	1.85	0.0004	8xM4	0.24	0.47	0.11	2.20	0.28	0.31	1.93	0.05	1.34	6xM4	7
100	3.35	3.15	2.80	0.59-0.98	0.001	2.64	1.73	2.44	0.0004	8xM5	0.28	0.53	0.11	2.68	0.31	0.43	2.36	0.06	1.54	6xM4	7
200	3.94	3.74	3.35	0.87-1.38	0.001	3.23	2.20	2.95	0.0005	8xM6	0.35	0.63	0.11	3.27	0.35	0.55	2.95	0.07	1.65	8xM4	7
400	4.53	4.33	3.94	1.26-1.77	0.001	3.82	2.76	3.54	0.0006	8xM6	0.39	0.67	0.14	3.58	0.39	0.63	3.23	0.08	1.89	8xM5	8
700	5.31	5.12	4.57	1.38-2.17	0.001	4.61	3.31	3.94	0.0006	8xM8	0.47	0.81	0.16	4.09	0.47	0.71	3.66	0.09	2.09	8xM6	10
1200	6.54	6.54	5.91	1.57-2.56	0.001	5.91	3.94	5.12	0.0007	8xM10	0.59	1.81	0.21	5.98	0.63	0.83	5.39	0.10	3.66	8xM8	13

Ordering Example:

DXM/CD-FI

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/CD-FI	200	1.181	885	b	C

Torque range:

a or b

Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Technical drawing of a worm gear assembly in cross-section. The drawing shows a worm gear meshing with a gear. Key dimensions and labels include:

- L : Total length of the assembly.
- O : Distance from the front face to the center of the worm gear.
- N : Distance from the front face to the start of the meshing zone.
- M : Distance from the start of the meshing zone to the center of the worm gear.
- H : Distance from the center of the worm gear to the end of the meshing zone.
- K : Distance from the end of the meshing zone to the back face.
- $\varnothing B$, $\varnothing C$, $\varnothing F$, $\varnothing D$: Diameters of various components.
- $\varnothing E1$, $\varnothing E$, $\varnothing A$: Diameters of the housing and shaft.
- $S1$: Distance from the center of the worm gear to the start of the disengaging travel.
- G , $G1$: Distances related to the disengaging travel.
- $SW / S2$: Label for the disengaging travel mechanism.
- $S = \text{disengaging travel}$: Definition of the disengaging travel.

J = Moment of inertia

Series DXM/N(L)

Multi-position re-engagement / single-position re-engagement -
backlash-free - Ball Detent

Characteristics

- Backlash-free safety coupling with a flange hub and ball bearing for the direct mounting sprockets, pulleys, gears, etc.
- The torque is being transmitted backlash-free up to the disengagement point and goes down within milliseconds at overload
- Easily adjustable torque setting

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability



Series DXM/N(L)



Series
DXM/N-FK

- Short hub with flange – keyway hub
- Torque 440-4000 lb-in

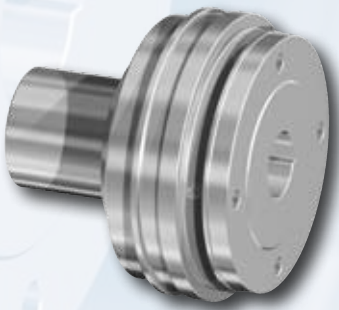
Page 78



Series
DXM/N-FI

- Short hub with flange – Internal keyless locking device
- Torque 440-4000 lb-in

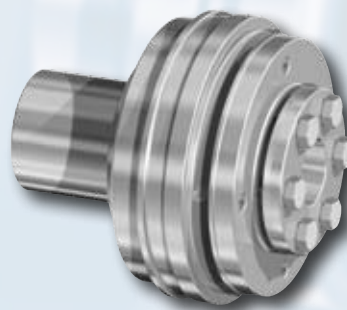
Page 80



Series
DXM/NL-FK

- Long hub with flange – keyway hub for use in wide driving elements or objects with small diameters
- Sleeve bearings, needle bearings and ball bearings are additionally suitable to support the driving element on long hubs
- Torque 440-4000 lb-in

Page 82



Series
DXM/NL-FI

- Long hub with flange – Internal keyless locking device for use in wide driving elements or objects with small diameters
- Sleeve bearings, needle bearings and ball bearings are additionally suitable to support the driving element on long hubs
- Torque 440-4000 lb-in

Page 84

Type DXM/N-FK short hub with flange – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øF^{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
N	=	Hub mounting length
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD ^{H7} min.- max	C1	øE	øF ^{h5}	C2	G	G1	H	H1	K	L	N	P	S
					Inch					mm					Inch			
5	1.77	x	1.57	1.38	0.24-0.43	0.001	1.46	1.18	0.0004	6xM3	0.20	0.28	x	x	0.94	0.18	x	0.03
15	1.97	x	1.85	1.65	0.31-0.63	0.001	1.65	1.46	0.0004	6xM3	0.20	0.37	x	x	1.14	0.20	x	0.04
30	2.56	x	2.36	2.09	0.35-0.79	0.001	2.24	1.85	0.0004	6xM4	0.24	0.37	x	0.04	1.30	0.24	x	0.05
60	3.15	2.95	3.03	2.72	0.47-0.79	0.001	2.48	2.44	0.0005	6xM5	0.28	0.40	0.59	0.05	1.61	0.31	0.30	0.06
100	3.74	3.54	3.54	3.15	0.59-0.98	0.001	3.23	2.68	0.0005	6xM6	0.30	0.43	0.69	0.12	1.85	0.39	0.30	0.07
200	4.33	4.13	4.17	3.54	0.87-1.38	0.001	4.06	3.15	0.0005	6xM6	0.33	0.50	0.78	0.22	2.05	0.39	0.31	0.08
450	5.12	4.92	4.92	4.41	1.26-1.77	0.001	4.69	3.94	0.0006	6xM8	0.37	0.58	0.93	0.22	2.32	0.39	0.35	0.09

Ordering Example:

DXM/N-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/N-FK	200	1.181	1062	b	C

Torque range:

Functional principle:

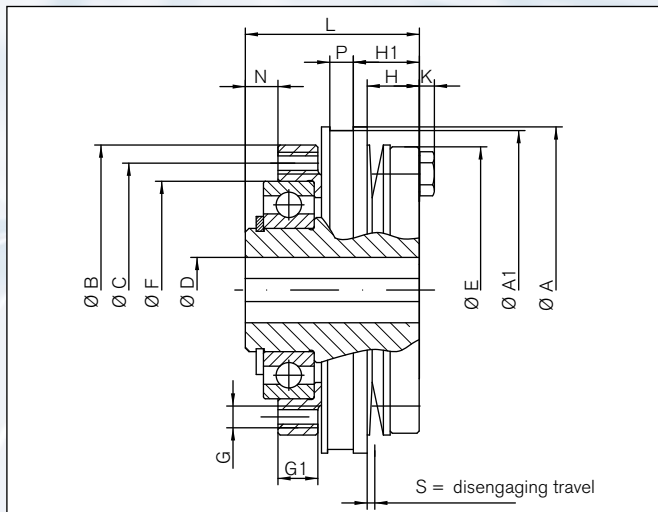
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/N-FK short hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN} = Disengagement torque
 N_{max} = Max. rotational speed
 J = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N_{max} rpm	Weight m lbs
	Version a	Version b T_{KN} lb-in	Version c				
5	6-12	12-23	18-34	85	27	4000	0.4
15	18-44	44-89	53-133	174	62	4000	0.6
30	35-88	71-177	106-266	615	205	4000	1.1
60	71-177	133-354	204-531	1572	615	4000	2.0
100	133-319	266-637	398-956	3999	1333	3000	3.6
200	266-664	531-1328	797-1992	9058	2632	2500	6.3
450	531-1328	1062-2655	1593-3983	20577	5913	2000	8.2

Type DXM/N-FI short hub with flange – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
øF_{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
N	=	Hub mounting length
O	=	Overall clutch length
P	=	Clutch groove width
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Dimensions

Size	øA	øA1	øB	øC	øD ^{H7}	C1	øE	øE1	øF _{h5}	C2	G	G1	H	H1	K	L	N	O	P	S	S1	S2	SW
					min.- max																		
					Inch						mm					Inch						mm	Inch
5	1.77	x	1.57	1.38	0.24-0.47	0.001	1.46	1.02	1.18	0.0004	6xM3	0.20	0.28	x	0.08	1.12	0.18	0.94	x	0.03	0.45	4xM3	5.5
15	1.97	x	1.85	1.65	0.31-0.59	0.001	1.65	1.18	1.46	0.0004	6xM3	0.20	0.37	x	0.08	1.36	0.20	1.14	x	0.04	0.61	4xM3	5.5
30	2.56	x	2.36	2.09	0.35-0.63	0.001	2.24	1.38	1.85	0.0004	6xM4	0.24	0.37	x	0.11	1.61	0.24	1.30	x	0.05	0.71	4xM4	7
60	3.15	2.95	3.03	2.72	0.47-0.79	0.001	2.48	1.54	2.44	0.0005	6xM5	0.28	0.40	0.59	0.11	1.93	0.31	1.61	0.30	0.06	0.91	6xM4	7
100	3.74	3.54	3.54	3.15	0.59-0.98	0.001	3.23	1.89	2.68	0.0005	6xM6	0.30	0.43	0.69	0.14	2.20	0.39	1.85	0.30	0.07	1.06	6xM5	8
200	4.33	4.13	4.17	3.54	0.87-1.38	0.001	4.06	2.40	3.15	0.0005	6xM6	0.33	0.50	0.78	0.16	2.44	0.39	2.05	0.31	0.08	1.14	6xM6	10
450	5.12	4.92	4.92	4.41	1.26-1.77	0.001	4.69	2.91	3.94	0.0006	6xM8	0.37	0.58	0.93	0.16	2.76	0.39	2.32	0.35	0.09	1.26	8xM6	10

Ordering Example: DXM/N-FI

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/N-FI	200	1.181	1062	b	C

Torque range:

a or b

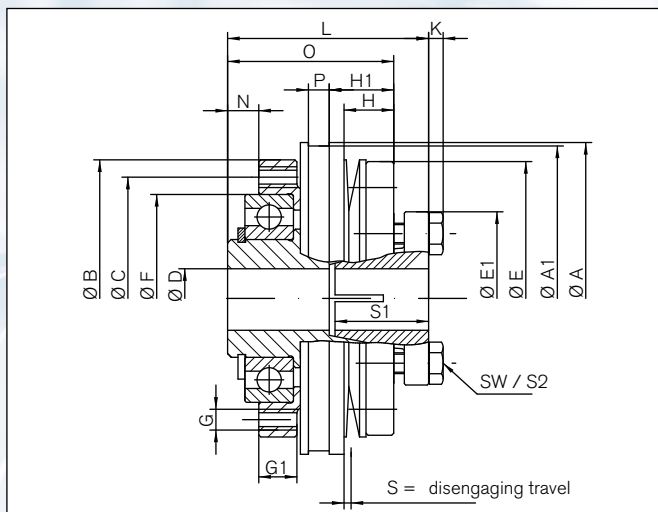
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/N-FI short hub with flange – internal keyless locking device



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
- N_{max}** = max. rotational speed
- T_A** = Tightening torque of retaining screws
- J** = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N _{max} rpm	S2 T _A lb-in	Weight m lbs
	Version a T _{KN}	Version b lb-in	Version c					
5	6-12	12-23	18-34	92	27	4000	8.9	0.4
15	18-44	44-89	53-133	185	62	4000	8.9	0.6
30	35-88	71-177	106-266	649	205	4000	26.6	1.2
60	71-177	133-354	204-531	1607	615	4000	26.6	2.1
100	133-319	266-637	398-956	3828	1333	3000	44.3	3.6
200	266-664	531-1328	797-1992	9331	2632	2500	84.1	6.7
450	531-1328	1062-2655	1593-3983	21192	5913	2000	84.1	8.7

Type DXM/NL-FK long hub with flange – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øF^{h5}	=	Centering diameter
øF1^{h6}	=	Hub outer diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
N	=	Hub mounting length
N1	=	Distance from flange to snap ring
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD ^{H7} min.- max	C1	øE	øF ^{h5}	C2	øF1 ^{h6}	C3	G	G1	H	H1	K	L	N	N1	P	S
						Inch						mm					Inch				
5	1.77	x	1.57	1.38	0.24-0.43	0.001	1.46	1.18	0.0004	0.67	0.0004	6xM3	0.20	0.28	x	x	1.57	0.83	0.12	x	0.03
15	1.97	x	1.85	1.65	0.31-0.63	0.001	1.65	1.46	0.0004	0.98	0.0005	6xM3	0.20	0.37	x	x	1.93	0.98	0.13	x	0.04
30	2.56	x	2.36	2.09	0.35-0.79	0.001	2.24	1.85	0.0004	1.18	0.0005	6xM4	0.24	0.37	x	1.00	2.28	1.22	0.17	x	0.05
60	3.15	2.95	3.03	2.72	0.47-0.79	0.001	2.48	2.44	0.0005	1.38	0.0006	6xM5	0.28	0.40	0.59	0.05	2.68	1.38	0.22	0.30	0.06
100	3.74	3.54	3.54	3.15	0.59-0.98	0.001	3.23	2.68	0.0005	1.57	0.0006	6xM6	0.30	0.43	0.69	0.12	3.03	1.57	0.27	0.30	0.07
200	4.33	4.13	4.17	3.54	0.87-1.38	0.001	4.06	3.15	0.0005	1.97	0.0006	6xM6	0.33	0.50	0.78	0.22	3.54	1.89	0.28	0.31	0.08
450	5.12	4.92	4.92	4.41	1.26-1.77	0.001	4.69	3.94	0.0006	2.56	0.0007	6xM8	0.37	0.58	0.93	0.22	4.29	2.36	0.30	0.35	0.09

Ordering Example:

DXM/NL-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/NL-FK	200	1.181	1062	b	C

Torque range:

a or b

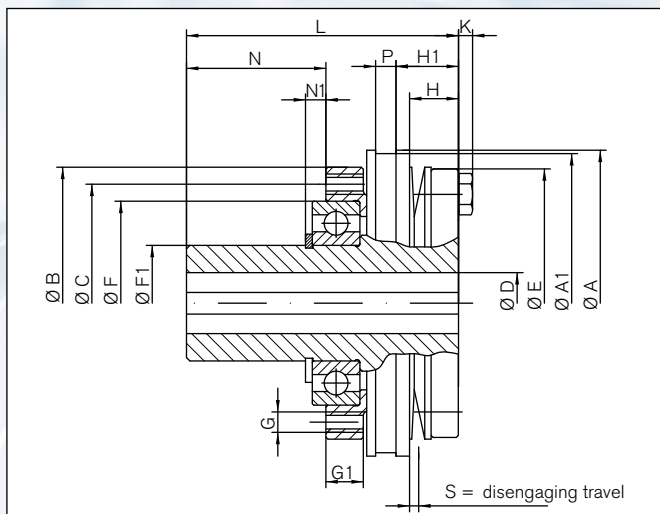
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/NL-FK long hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN} = Disengagement torque
 N_{max} = Max. rotational speed
 J = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N_{max} rpm	Weight m lbs
	Version a	Version b T_{KN} lb-in	Version c				
5	6-12	12-23	18-34	89	27	4000	0.4
15	18-44	44-89	53-133	188	62	4000	0.7
30	35-88	71-177	106-266	649	205	4000	1.3
60	71-177	133-354	204-531	1675	615	4000	2.3
100	133-319	266-637	398-956	4204	1333	3000	3.9
200	266-664	531-1328	797-1992	9536	2632	2500	7.2
450	531-1328	1062-2655	1593-3983	22491	5913	2000	10.6

Type DXM/NL-FI long hub with flange – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
øF^{h5}	=	Centering diameter
øF1^{h6}	=	Hub outer diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
N	=	Hub mounting length
N1	=	Distance from flange to snap ring
O	=	Overall clutch length
P	=	Clutch groove width
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Dimensions

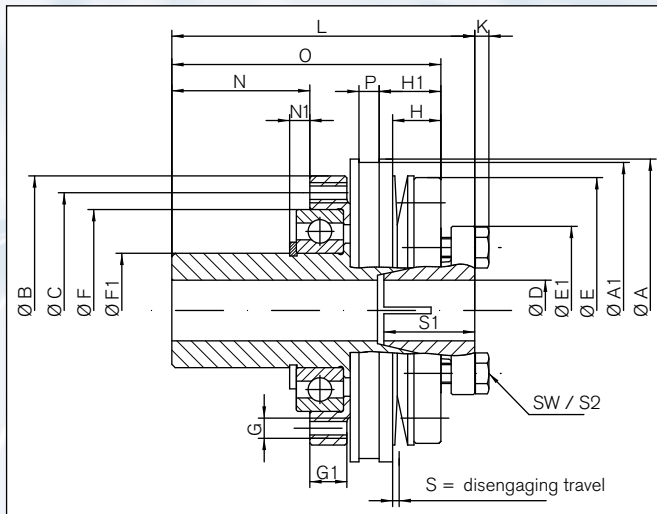
Size	øA	øA1	øB	øC	øD H7	C1	øE	øE1	øF h5	C2	øF1 h6	C3	G	G1	H	H1	K	L	N	N1	O	S	S1	S2	SW	
					min.- max																					
					Inch																					mm
5	1.77	x	1.57	1.38	0.24-0.47	0.001	1.46	1.02	1.18	0.0004	0.67	0.0004	6xM3	0.20	0.28	x	0.08	1.75	0.81	0.12	1.57	0.03	0.45	4xM3	5.5	
15	1.97	x	1.85	1.65	0.31-0.59	0.001	1.65	1.18	1.46	0.0004	0.98	0.0005	6xM3	0.20	0.37	x	0.08	2.15	0.98	0.13	1.93	0.04	0.61	4xM3	5.5	
30	2.56	x	2.36	2.09	0.35-0.63	0.001	2.24	1.38	1.85	0.0004	1.18	0.0005	6xM4	0.24	0.37	x	0.11	2.60	1.22	0.17	2.28	0.05	0.71	4xM4	7	
60	3.15	2.95	3.03	2.72	0.47-0.79	0.001	2.48	1.54	2.44	0.0005	1.38	0.0006	6xM5	0.28	0.40	0.59	0.11	2.99	1.38	0.22	2.68	0.06	0.91	6xM4	7	
100	3.74	3.54	3.54	3.15	0.59-0.98	0.001	3.23	1.89	2.68	0.0005	1.57	0.0006	6xM6	0.30	0.43	0.69	0.14	3.39	1.57	0.27	3.03	0.07	1.06	6xM5	8	
200	4.33	4.13	4.17	3.54	0.87-1.38	0.001	4.06	2.40	3.15	0.0005	1.97	0.0006	6xM6	0.33	0.50	0.78	0.16	3.94	1.89	0.28	3.54	0.08	1.14	6xM6	10	
450	5.12	4.92	4.92	4.41	1.26-1.77	0.001	4.69	2.91	3.94	0.0006	2.56	0.0007	6xM8	0.37	0.58	0.93	0.16	4.72	2.36	0.30	4.29	0.09	1.26	8xM6	10	

Ordering Example:

DXM/NL-FI

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/NL-FI	200	1.181	1062	b	C

Type DXM/NL-FI long hub with flange – internal keyless locking device



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
T_A = Tightening torque of retaining screws
J = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N _{max} rpm	S2 T _A lb-in	Weight m lbs
	Version a	Version b T _{KN} lb-in	Version c					
5	6-12	12-23	18-34	96	27	4000	8.9	0.4
15	18-44	44-89	53-133	198	62	4000	8.9	0.7
30	35-88	71-177	106-266	649	205	4000	27	1.4
60	71-177	133-354	204-531	1709	615	4000	27	2.4
100	133-319	266-637	398-956	4307	1333	3000	44	3.9
200	266-664	531-1328	797-1992	9810	2632	2500	84	7.6
450	531-1328	1062-2655	1593-3983	23106	5913	2000	84	11.1

Torque range:

Functional principle:

a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Series DXM/ND double mounted

Multi-position re-engagement / single-position re-engagement -
backlash-free - Ball Detent

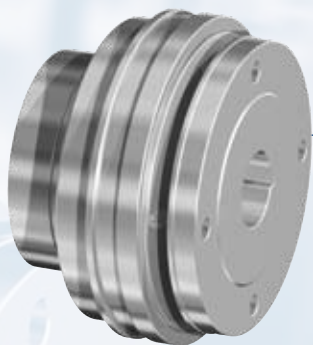
Characteristics

- Backlash-free safety coupling with a flange hub and robust, double ball bearing for the direct mounting sprockets, pulleys, gears, etc.
- For higher loads
- The torque is being transmitted backlash-free up to the disengagement point and goes down within milliseconds at overload
- Easily adjustable torque setting

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability

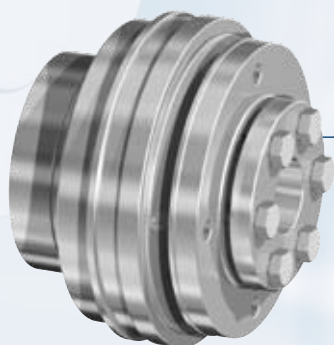
Series DXM/ND double mounted



Series DXM/ND-FK

- With flange – keyway hub
- Torque 440-4000 lb-in

Page 88



Series DXM/ND-FI

- With flange – Internal keyless locking device
- Torque 440-4000 lb-in

Page 90

Type DXM/ND-FK double mounted; with flange – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øF^{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
N	=	Hub mounting length
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øC	øD ^{H7} min.- max	C1	øE	øF ^{h5}	C2	G mm	G1	H	H1	K	L Inch	N	P	S
5	1.77	x	1.57	1.38	0.24-0.43	0.001	1.46	1.18	0.0004	6xM3	0.20	0.28	x	x	1.22	0.45	x	0.03
15	1.97	x	1.85	1.65	0.31-0.63	0.001	1.65	1.46	0.0004	6xM3	0.20	0.37	x	x	1.42	0.47	x	0.04
30	2.56	x	2.36	2.09	0.35-0.79	0.001	2.24	1.85	0.0004	6xM4	0.24	0.37	x	1.00	1.65	0.59	x	0.05
60	3.15	2.95	3.03	2.72	0.47-0.79	0.001	2.48	2.44	0.0005	6xM5	0.28	0.40	0.59	0.05	1.97	0.67	0.30	0.06
100	3.74	3.54	3.54	3.15	0.59-0.98	0.001	3.23	2.68	0.0005	6xM6	0.30	0.43	0.69	0.12	2.20	0.75	0.30	0.07
200	4.33	4.13	4.17	3.54	0.87-1.38	0.001	4.06	3.15	0.0005	6xM6	0.33	0.50	0.78	0.22	2.44	0.79	0.31	0.08
450	5.12	4.92	4.92	4.41	1.26-1.77	0.001	4.69	3.94	0.0006	6xM8	0.37	0.58	0.93	0.22	2.76	0.83	0.35	0.09

Ordering Example:

DXM/ND-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/ND-FK	200	1.181	1062	b	C

Torque range:

Functional principle:

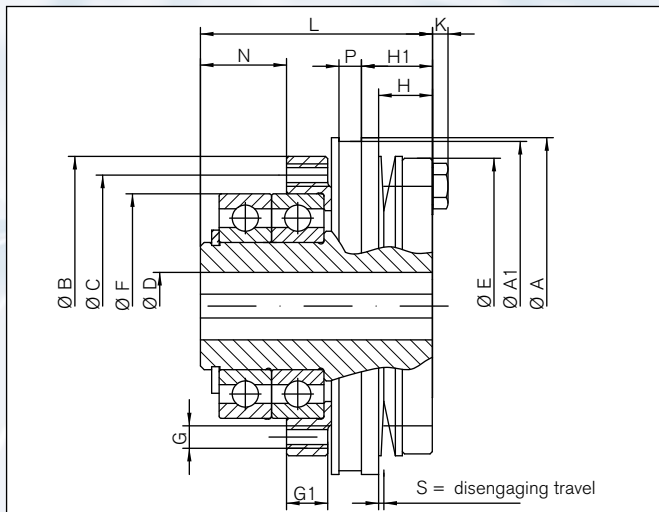
a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/ND-FK double mounted; with flange – keyway hub



Sectional view

Technical Data

- T_{KN} = Disengagement torque
 N_{max} = Max. rotational speed
 J = Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N_{max} rpm	Weight m lbs
	Version a	Version b T_{KN} lb-in	Version c				
5	6-12	12-23	18-34	89	27	4000	0.4
15	18-44	44-89	53-133	188	62	4000	0.6
30	35-88	71-177	106-266	684	205	4000	1.2
60	71-177	133-354	204-531	1709	615	4000	2.2
100	133-319	266-637	398-956	4238	1333	3000	3.8
200	266-664	531-1328	797-1992	9639	2632	2500	6.7
450	531-1328	1062-2655	1593-3983	23824	5913	2000	8.8

Type DXM/ND-FI double mounted; with flange – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter of clutch body
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
øF^{h5}	=	Centering diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Adjusting nut projection
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
N	=	Hub mounting length
O	=	Overall clutch length
P	=	Clutch groove width
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



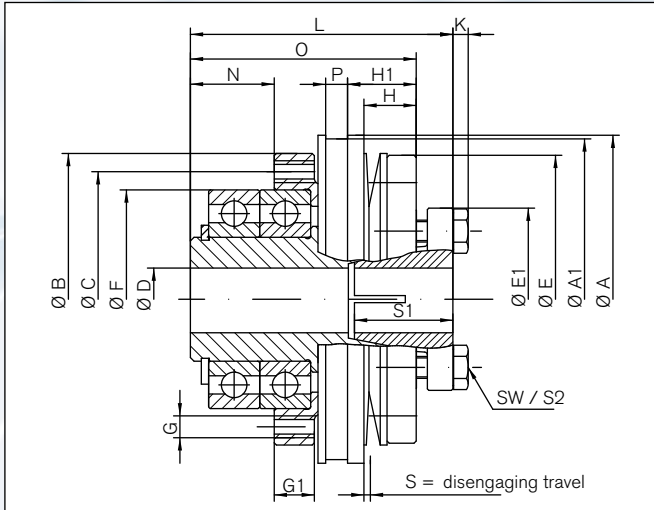
Dimensions

Size	øA	øA1	øB	øC	øD ^{H7}	C1	øE	øE1	øF ^{h5}	C2	G	G1	H	H1	K	L	N	O	P	S	S1	S2	SW
					min.-max																		
					Inch						mm					Inch						mm	Inch
5	1.77	x	1.57	1.38	6-12	0.001	1.46	1.02	1.18	0.0004	6xM3	0.20	0.28	x	0.08	1.22	0.45	1.22	x	0.03	0.45	4xM3	5.5
15	1.97	x	1.85	1.65	8-15	0.001	1.65	1.18	1.46	0.0004	6xM3	0.20	0.37	x	0.08	1.42	0.47	1.42	x	0.04	0.61	4xM3	5.5
30	2.56	x	2.36	2.09	9-16	0.001	2.24	1.38	1.85	0.0004	6xM4	0.24	0.37	x	0.11	1.65	0.59	1.65	x	0.05	0.71	4xM4	7
60	3.15	2.95	3.03	2.72	12-20	0.001	2.48	1.54	2.44	0.0005	6xM5	0.28	0.40	0.59	0.11	1.97	0.67	1.97	0.30	0.06	0.91	6xM4	7
100	3.74	3.54	3.54	3.15	15-25	0.001	3.23	1.89	2.68	0.0005	6xM6	0.30	0.43	0.69	0.14	2.20	0.75	2.20	0.30	0.07	1.06	6xM5	7
200	4.33	4.13	4.17	3.54	22-35	0.001	4.06	2.40	3.15	0.0005	6xM6	0.33	0.50	0.78	0.16	2.44	0.79	2.44	0.31	0.08	1.14	6xM6	10
450	5.12	4.92	4.92	4.41	32-45	0.001	4.69	2.91	3.94	0.0006	6xM8	0.37	0.58	0.93	0.16	2.76	0.83	2.76	0.35	0.09	1.26	8xM6	10

Ordering Example: DXM/ND-FI

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DXM/ND-FI	200	1.181	1062	b	C

Type DXM/ND-FI double mounted; with flange – internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
T_A	=	Tightening torque of retaining screws
J	=	Moment of inertia

Technical Data

Size	Torque adjustment range			Hub side	compression Flange side	N_{max} rpm	S2 T_A lb-in	Weight m lbs
	Version a	Version b	Version c					
		T_{KN} lb-in			J 10^{-3} lb-in ²			
5	6-12	12-23	18-34	89	27	4000	8.9	0.4
15	18-44	44-89	53-133	188	62	4000	8.9	0.6
30	35-88	71-177	106-266	684	205	4000	26.6	1.2
60	71-177	133-354	204-531	1709	615	4000	26.6	2.2
100	133-319	266-637	398-956	4238	1333	3000	44.3	3.8
200	266-664	531-1328	797-1992	9639	2632	2500	84.1	6.7
450	531-1328	1062-2655	1593-3983	23824	5913	2000	84.1	8.8

Torque range:

Functional principle:

a or b

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Series DXM/E

Multi-position re-engagement / single-position re-engagement -
backlash-free - Ball Detent

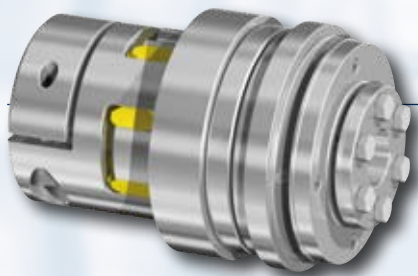
Characteristics

- Safety coupling, two-shaft version with an elastomeric spider as a flexible compensation element
- High damping characteristic
- Compensation of axial, radial and angular shaft misalignment

Advantages

- Backlash-free transmission of the torque
- Fast cut-off within 2-4 msec.
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Marginal residual friction after disengaging
- High durability

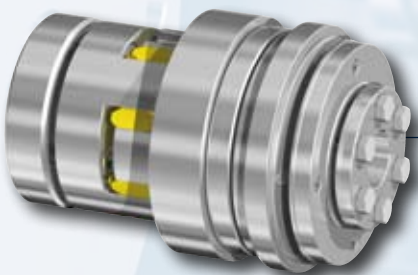
Series DXM/E



Series DXM/E-CI

- With clamping hub - Internal keyless locking device for easy assembly / disassembly
- Torque 440-10600 lb-in

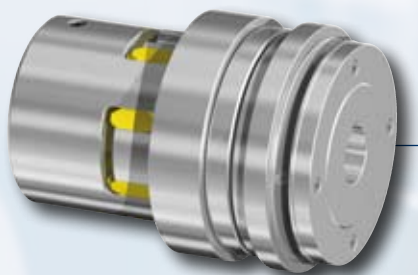
Page 94



Series DXM/E-OI

- With Shrink Disc[®] hub – Internal keyless locking device
- Torque 440-10600 lb-in

Page 96



Series DXM/E-KK

- With keyway hub - keyway hub
- Torque 440-10600 lb-in

Page 98

Type DXM/E-CI elastomeric spider with clamping hub – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øD1 H7	=	Bore diameter
øD2 H7	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
G	=	Screw
H	=	Adjusting nut projection
K	=	Screw head height
L	=	Total length
L1	=	Max. shaft Insertion depth
L2	=	Max. shaft Insertion depth
M	=	Clutch outer diameter
O	=	Overall clutch length
T	=	Basic dimension
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Technical Data

Size	Torque adjustment range			92 Shore A	98 Shore A	64 Shore D	axial	92 Shore A	98 Shore A	64 Shore D	
	Version a	Version b	Version c								
	T _{KN}	T _{KN}	T _{KN}								
	lb-in										
				Inch							
50	44-111	89-221	177-443	310-620	531-1062	664-1328	0.06	0.01	0.00	0.00	
100	89-221	177-443	354-885	841-1682	1151-2833	1770-3541	0.06	0.01	0.00	0.00	
200	177-443	354-885	708-1770	1682-3364	2877-5754	3585-7170	0.07	0.01	0.00	0.00	
400	354-885	708-1770	1416-3541	2346-4691	3983-7966	4957-9914	0.08	0.01	0.01	0.00	
700	620-1549	1239-3098	2478-6196	2744-5488	4647-9294	5798-11596	0.08	0.01	0.01	0.00	
1200	1062-2655	2124-5311	4249-10622	xxx	9206-18411	xxx	0.10	x	0.01	x	

Ordering Example:

DXM/E-CI

Type	Size	ØD1H7	ØD2H7	lb-in	Version	Functional principle
DXM/E-CI	200	0.984	0.787	708	b	C

Torque range:

a or b

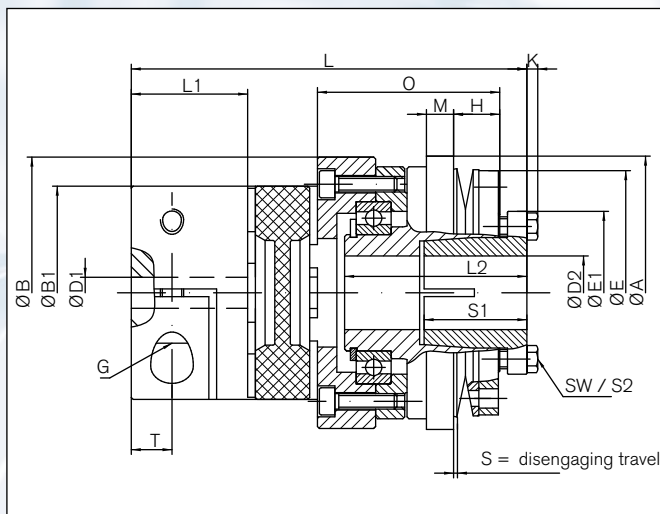
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/E-CI elastomeric spider with clamping hub – internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
T_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size	92 Shore øA ΔK _w (°)	angular 98 Shore øA ΔK _w (°)	64 Shore øD ΔK _w (°)	Hub side J 10 ⁻³	elastomer Spider side J lb-in ²	N _{max} rpm	G T _A lb-in	S2 T _A	Weight m lbs
50	1	0.9	0.8	718	1299	4000	35	53	2.6
100	1	0.9	0.8	1812	2837	3000	35	53	3.8
200	1	0.9	0.8	4751	7793	2500	35	93	6.7
400	1	0.9	0.8	9742	25567	2000	71	221	13
700	1	0.9	0.8	23448	48434	1200	106	266	20
1200	x	0.9	x	100594	147115	800	221	664	47

Dimensions

Size	øA	øB	øB1	øD1 ^{H7}	C1	øD2 ^{H7}	C2	øE	øE1	G	H	K	L	L1	L2	M	O	S	S1	S2	SW	T
				min.- max		min.- Max																
	Inch									mm	Inch									mm	Inch	
50	2.76	2.76	2.17	0.59-1.10	0.001	0.39-0.79	0.001	2.42	1.50	1xM6	0.47	0.11	4.02	1.18	1.85	0.28	1.85	0.05	1.34	6xM4	7	0.41
100	3.35	3.35	2.56	0.75-1.38	0.001	0.59-0.98	0.001	2.64	1.73	1xM8	0.53	0.11	4.72	1.38	2.20	0.31	2.24	0.06	1.54	6xM4	7	0.45
200	3.94	3.94	3.15	0.79-1.77	0.001	0.87-1.38	0.001	3.23	2.20	1xM8	0.63	0.11	5.75	1.77	2.64	0.35	2.72	0.07	1.65	8xM4	7	0.61
400	4.53	4.53	3.74	1.10-1.97	0.001	1.26-1.77	0.001	3.82	2.76	1xM10	0.67	0.14	6.26	1.97	2.87	0.39	2.91	0.08	1.89	8xM5	8	0.71
700	5.31	5.31	4.13	1.38-2.17	0.001	1.38-2.17	0.001	4.61	3.31	1xM12	0.81	0.16	7.17	2.20	3.39	0.47	3.43	0.09	2.09	8xM6	10	0.83
1200	6.54	6.89	5.31	1.77-3.15	0.001	1.57-2.56	0.001	5.91	3.94	1xM14	1.81	0.21	10.04	2.95	5.12	0.63	5.12	0.10	3.66	8xM8	13	-

Type DXM/E-OI elastomeric spider with outer Shrink Disc® connection – internal keyless locking device

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øD1 H7	=	Bore diameter
øD2 H7	=	Bore diameter
øE	=	Adjusting nut diameter
øE1	=	Locking device outer diameter
G	=	Screws
H	=	Adjusting nut projection
K	=	Screw head height
L	=	Total length
L1	=	Max. shaft Insertion depth
L2	=	Max. shaft Insertion depth
M	=	Clutch outer diameter
O	=	Overall clutch length
S	=	Release path at overload
S1	=	Shaft clamping length
S2	=	Screws
SW	=	Width across flats



Technical Data

Size	Torque adjustment range						axial	radial			
	Version a	Version b	Version c	92 Shore A	98 Shore A	64 Shore D		92 Shore A	98 Shore A	64 Shore D	
	T _{KN}	T _{KN}	T _{KN}	T _{KN}	T _{KN}	T _{KN}		ΔK _a	ΔK _r	ΔK _r	ΔK _r
				lb-in				Inch			
50	44-111	89-221	177-443	310-620	531-1062	664-1328	0.055	0.006	0.004	0.003	
100	89-221	177-443	354-885	841-1682	1151-2833	1770-3541	0.059	0.006	0.004	0.003	
200	177-443	354-885	708-1770	1682-3364	2877-5754	3585-7170	0.071	0.007	0.005	0.004	
400	354-885	708-1770	1416-3541	2346-4691	3983-7966	4957-9914	0.079	0.007	0.006	0.004	
700	620-1549	1239-3098	2478-6196	2744-5488	4647-9294	5798-11596	0.083	0.008	0.006	0.004	
1200	1062-2655	2124-5311	4249-10622	-	9206-18411	-	0.102	-	0.007	-	

Ordering Example: DXM/E-OI

Type	Size	ØD1H7	ØD2H7	lb-in	Version	Functional principle
DXM/E-OI	200	0.984	0.787	708	b	C

Torque range:

a or b

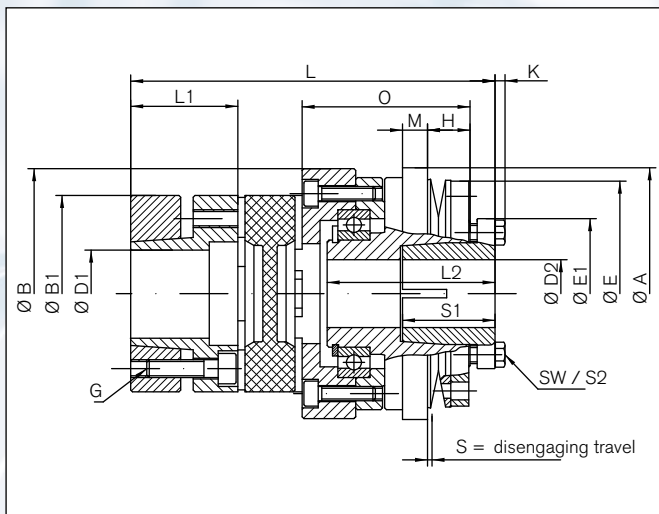
Functional principle:

C = Single position re-engagement (360)

D = Multiple position re-engagement

Lb-Ft = Torque required

Type DXM/E-OI elastomeric spider with outer Shrink Disc® connection – internal keyless locking device



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
T_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size	angular			Hub side	elastomer Spider side	N _{max} rpm	G	S2	Weight
	92 Shore A	98 Shore A	64 Shore D						
	ΔK _w (°)	ΔK _w (°)	ΔK _w (°)	J 10 ⁻³	J lb-in ²		T _A lb-in	m lbs	
50	1	0.9	0.8	718	1299	4000	35	53	2.6
100	1	0.9	0.8	1812	2837	3000	35	53	3.8
200	1	0.9	0.8	4751	7793	2500	35	93	6.7
400	1	0.9	0.8	9742	25567	2000	71	221	13
700	1	0.9	0.8	23448	48434	1200	106	266	20
1200	x	0.9	x	100594	147115	800	221	664	47

Dimensions

Size	øA	øB	øB1	øD1 H7 min.- max	C1	øD2 H7 min.- max	C2	øE	øE1	G	H	K	L	L1	L2	M	O	S	S1	S2	SW
				Inch						mm						Inch					
50	2.76	2.76	2.17	0.59-1.10	0.001	0.39-0.79	0.001	2.42	1.50	4xM5	0.47	0.11	4.02	1.18	1.85	0.28	1.85	0.05	1.34	6xM4	0.28
100	3.35	3.35	2.56	0.75-1.50	0.001	0.59-0.98	0.001	2.64	1.73	8xM5	0.53	0.11	4.72	1.38	2.20	0.31	2.24	0.06	1.54	6xM4	0.28
200	3.94	3.94	3.15	0.79-1.77	0.001	0.87-1.38	0.001	3.23	2.20	8xM6	0.63	0.11	5.75	1.77	2.64	0.35	2.72	0.07	1.65	8xM4	0.28
400	4.53	4.53	3.74	1.10-1.97	0.001	1.26-1.77	0.001	3.82	2.76	4xM8	0.67	0.14	6.26	1.97	2.87	0.39	2.91	0.08	1.89	8xM5	0.31
700	5.31	5.31	4.13	1.38-2.36	0.001	1.38-2.17	0.001	4.61	3.31	4xM8	0.81	0.16	7.17	2.20	3.39	0.47	3.43	0.09	2.09	8xM6	0.39
1200	6.54	6.89	5.31	1.77-2.95	0.001	1.57-2.56	0.001	5.91	3.94	4xM12	1.81	0.21	10.04	2.95	5.12	0.63	5.12	0.10	3.66	8xM8	0.51

Type DXM/E-KK elastomeric spider with keyway hub – keyway hub

Multi-position re-engagement / single-position re-engagement - backlash-free - Ball Detent

Dimensions

øA	=	Outer diameter of flange
øB	=	Outer diameter of clutch body
øB1	=	Metal bellows diameter
øD1^{H7}	=	Bore diameter
øD2^{H7}	=	Bore diameter
øE	=	Adjusting nut diameter
G	=	Screw
H	=	Adjusting nut projection
L	=	Total length
L1	=	Max. shaft Insertion depth
L2	=	Max. shaft Insertion depth
M	=	Clutch outer diameter
O	=	Overall clutch length
T	=	Basic dimension
S	=	Release path at overload



Technical Data

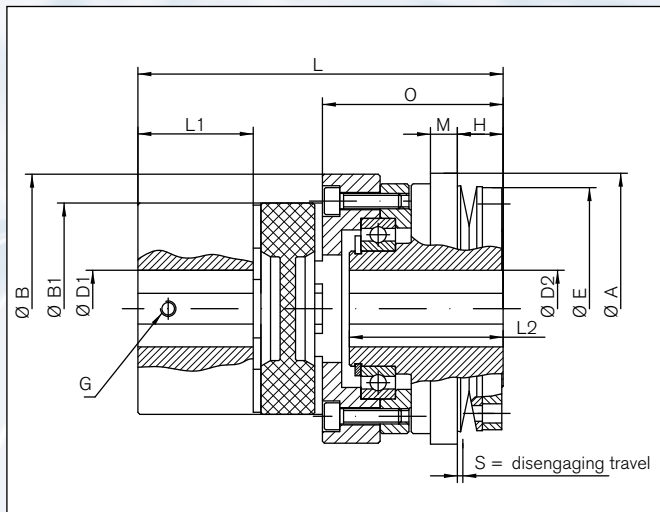
Size	Torque adjustment range						axial	radial			
	Version a	Version b	Version c	92 Shore A	98 Shore A	64 Shore D		92 Shore A	98 Shore A	64 Shore D	
	T _{KN}	T _{KN}	T _{KN}	T _{KN}	T _{KN}	T _{KN}		ΔK _a	ΔK _r	ΔK _r	ΔK _r
				lb-in				Inch			
50	44-111	89-221	177-443	310-620	531-1062	664-1328	0.06	0.01	0.00	0.00	
100	89-221	177-443	354-885	841-1682	1151-2833	1770-3541	0.06	0.01	0.00	0.00	
200	177-443	354-885	708-1770	1682-3364	2877-5754	3585-7170	0.07	0.01	0.00	0.00	
400	354-885	708-1770	1416-3541	2346-4691	3983-7966	4957-9914	0.08	0.01	0.01	0.00	
700	620-1549	1239-3098	2478-6196	2744-5488	4647-9294	5798-11596	0.08	0.01	0.01	0.00	
1200	1062-2655	2124-5311	4249-10622	-	9206-18411	-	0.10	-	0.01	-	

Ordering Example: DXM/E-KK

Type	Size	ØD1 ^{H7}	ØD2 ^{H7}	lb-in	Version	Functional principle
DXM/E-KK	200	0.984	0.787	708	b	C

Torque range: a or b
Functional principle: C = Single position re-engagement (360)
D = Multiple position re-engagement
Lb-Ft = Torque required

Type DXM/E-KK elastomeric spider with keyway hub – keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
T_A	=	Tightening torque of retaining screws
J	=	Moment of inertia
ΔK_r	=	Max. approved misalignment radial
ΔK_a	=	Max. approved misalignment axial
ΔK_w	=	Max. approved misalignment angular

Technical Data

Size	angular			Hub side	elastomer Spider side		G	Weight
	92 Shore A	98 Shore A	64 Shore D		J	J		
	ΔK _w (°)	ΔK _w (°)	ΔK _w (°)		10 ⁻³	lb-in ²	N _{max} rpm	m lbs
50	1	0.9	0.8	718	1094	4000	3	2.2
100	1	0.9	0.8	1743	2393	3000	3	4.6
200	1	0.9	0.8	4444	6289	2500	3	6.0
400	1	0.9	0.8	8990	26012	2000	6	14
700	1	0.9	0.8	21739	49631	1200	9	21
1200	x	0.9	x	97210	167862	800	18	47

Dimensions

Size	øA	øB	øB1	øD1 H7	C1	øD2 H7	C2	øE	G	H	L	L1	L2	M	O	S
				min.- max		min.- max										
				Inch					mm				Inch			
50	2.76	2.76	2.17	0.31-1.10	0.001	0.39-0.79	0.001	2.42	M5	0.47	3.74	1.18	1.57	0.28	1.85	0.05
100	3.35	3.35	2.56	0.39-1.50	0.001	0.59-0.98	0.001	2.64	M6	0.53	4.41	1.38	1.89	0.31	2.24	0.06
200	3.94	3.94	3.15	0.47-1.77	0.001	0.87-1.38	0.001	3.23	M8	0.63	5.43	1.77	2.32	0.35	2.72	0.07
400	4.53	4.53	3.74	0.55-2.17	0.001	1.26-1.77	0.001	3.82	M8	0.67	5.91	1.97	2.52	0.39	2.91	0.08
700	5.31	5.31	4.13	0.79-2.36	0.001	1.38-2.17	0.001	4.61	M8	0.81	6.73	2.20	2.95	0.47	3.43	0.09
1200	6.54	6.89	5.31	1.50-3.15	0.001	1.57-2.56	0.001	5.91	M10	1.81	9.45	2.95	4.53	0.63	5.12	0.10

Single-position re-engagement coupling

Characteristics

- Safety coupling for the mounting sprockets, pulleys, gears, etc.
- Easily adjustable torque setting
- Available as single-position re-engagement or activation single-position re-engagement coupling

Advantages

- Economic torque and force limiter
- Highly accurate repeatability
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Various functional principles, suitable for every application
- Easily adjustable torque setting
- High durability



Series DCM/S



Series
DCM/S-FK

- Safety coupling with flange and parallel key. The support for the driving element of the shaft has to be provided by the customer.

- Torque 50- 1400 lb-in

Page 102



Series
DCM/SL-FK

- Safety coupling with a long hub. Depending on the given application, the customer can decide freely on the support of the driving element. Can be used for wide driving elements

- Torque 50- 1400 lb-in

Page 106

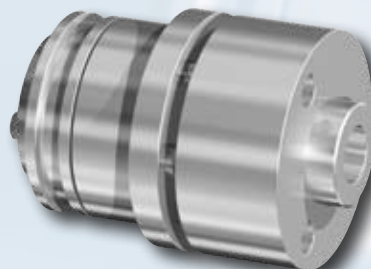


Series
DCM/SK-FK

- Safety coupling with a short supported hub at flange side and parallel key. With mounted bearing to fit simple symmetrical or slim driving elements. The customer does not need to provide any support for the driving element.

- Torque 50- 1400 lb-in

Page 104



Series
DCM/SE-KK

- Safety coupling with elastomeric spider. Elastomer coupling designed to connect two shafts. The elastic part of the coupling is designed as a plug-in element. This allows easy assembly and disassembly of the coupling.

- Torque 50- 1400 lb-in

Page 108

Type DCM/S-FK flange – keyway hub

Single position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Counterbore depth
N^{P9}	=	Groove width
N1	=	Groove depth
N2	=	Flange counterbore depth
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øC	øD ^{H7} min- max	CD	øF	G	G1	H	H1	K	L	L1	N ^{P9}	N1	N2	P	S
	Inch						mm						Inch					
50	2.165	1.969	1.890	0.3150-0.7874	+0.0007 -0	1.614	6xM5	0.256	0.217	0.295	x	1.516	1.358	0.236	0.122	0.157	0.354	0.047
100	3.228	2.835	2.756	0.4331-0.9843		2.362	6xM5	0.315	0.276	0.472	0.051	2.047	1.890	0.236	0.122	0.157	0.354	0.071
200	3.937	3.543	3.504	0.5906-1.3780		3.071	6xM6	0.394	0.276	0.551	0.118	2.402	2.205	0.315	0.142	0.197	0.354	0.079
400	4.724	4.409	4.134	0.748-1.772	+0.001 -0	3.583	6xM8	0.472	0.394	0.827	0.217	3.071	2.874	0.394	0.161	0.197	0.354	0.087
800	5.748	5.512	4.921	0.984-2.165		4.134	6xM10	0.630	0.433	1.063	0.217	3.917	3.661	0.472	0.161	0.256	0.354	0.098
1400	6.929	6.693	6.102	1.181-2.559		4.764	6xM12	0.669	0.472	1.299	0.217	4.469	4.213	0.551	0.181	0.256	0.354	0.118

Ordering Example:

DCM/S-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/S-FK	200	1.181	708	b	C

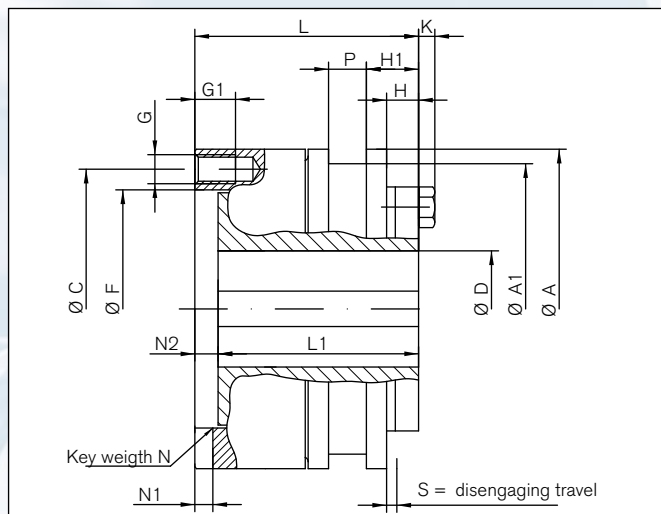
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/S-FK flange – keyway hub



Sectional view

Technical Data

- T_{KN} = Disengagement torque
 N_{max} = Max. rotational speed
 J = Moment of inertia

Technical Data

Size		Torque adjustment range			Version a	Version b	Version c	compression Flange side	Hub side	Weight
		Version a	Version b	Version c						
		T _{KN} lb-in								
	50	44-89	89-177	177-354	1430	710	350	0.31	0.34	1.1
	100	106-221	221-442	442-885	960	480	240	2.12	2.29	3.3
	200	221-442	442-885	887-1770	790	390	200	5.09	6.49	6.0
	400	442-885	887-1770	1770-3540	660	330	160	13	18	10
	800	885-1770	1770-3540	3540-7080	550	270	130	34	56	22
	1400	1549-3098	3098-6195	6195-12390	400	200	100	80	142	35

Type DCM/SK-FK flange – keyway hub

Single-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB_{h6}	=	Centering diameter
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øD1	=	Counterbore diameter
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Max. shaft insertion depth
N	=	Hub mounting length
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB _{h6}	CB	øC	øD ^{H7} min-max	CD	øD1	G	G1	H	H1	K	L	L1	N	P	S	
	Inch								mm		Inch								
50	2.165	1.969	1.496	+0	1.890	0.3150-0.7874	+0.0007 -0	0.827	6xM5	0.433	0.217	0.295	x	2.008	0.591	0.315	0.354	0.047	
100	3.228	2.835	1.969	-0.0006	2.756	0.4331-0.9843		1.024	6xM5	0.630	0.276	0.472	0.051	2.756	0.787	0.394	0.354	0.071	
200	3.937	3.543	2.362	+0	3.504	0.5906-1.3780	+0.001 -0	1.417	6xM6	0.591	0.276	0.551	0.118	3.071	0.984	0.472	0.354	0.079	
400	4.724	4.409	3.150	-0.0007	4.134	0.748-1.772		1.811	6xM8	0.787	0.394	0.827	0.217	3.780	1.181	0.472	0.354	0.087	
800	5.748	5.512	3.937	+0	4.921	0.984-2.165		2.205	6xM10	0.906	0.433	1.063	0.217	4.882	1.181	0.630	0.354	0.098	
1400	6.929	6.693	4.724	-0.001	6.102	1.181-2.559		2.598	6xM12	1.102	0.472	1.299	0.217	5.512	1.181	0.709	0.354	0.118	

Ordering Example:

DCM/SK-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/S-FK	200	1.181	708	b	C

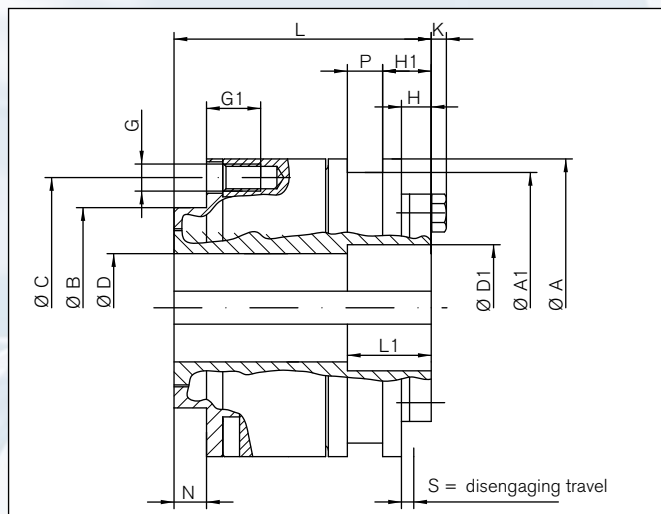
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/SK-FK flange – keyway hub



Sectional view

Technical Data

- T_{KN} = Disengagement torque
 N_{max} = Max. rotational speed
 J = Moment of inertia

Technical Data

Size		Torque adjustment range			Version a	Version b	Version c	compression Flange side	Hub side	Weight
		Version a	Version b	Version c						
		T _{KN} lb-in								
					N _{max} rpm			J lb-in ²	m LB	
	50	44-89	89-177	177-354	1430	710	350	0.41	0.38	1.5
	100	106-221	221-442	442-885	960	480	240	3.11	2.39	4.4
	200	221-442	442-885	887-1770	790	390	200	6.22	7.00	6.6
	400	442-885	887-1770	1770-3540	660	330	160	17	18	13
	800	885-1770	1770-3540	3540-7080	550	270	130	49	58	26
	1400	1549-3098	3098-6195	6195-12390	400	200	100	106	146	44

Type DCM/SL-FK long hub with flange – keyway hub

Single-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB_{f7}	=	Centering diameter
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øD1	=	Basic dimension
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Counterbore depth
L2	=	Length to bearing centerline
N P9	=	Groove width
N1	=	Groove depth
N2	=	Flange counterbore depth
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB _{f7}	CB	øC	øD ^{H7}	CD	øD1	øF	G	G1	H	H1	K	L	L1	L2	NP9	N1	N2	P	S
						min.- max.																
	Inch									mm	Inch											
50	2.165	1.969	1.102	-0.0008 -0.0016	1.890	0.3150-0.7874	+0.0007 -0	0.827	1.614	6xM5	0.256	0.217	0.295	x	2.598	0.984	1.083	0.236	0.122	0.157	0.354	0.047
100	3.228	2.835	1.496	-0.0010 -0.0020	2.756	0.4331-0.9843		1.024	2.362	6xM5	0.315	0.276	0.472	0.051	3.346	1.378	1.299	0.236	0.122	0.157	0.354	0.071
200	3.937	3.543	2.047	-0.0012 -0.0024	3.504	0.5906-1.3780	+0.001 -0	1.417	2.953	6xM6	0.394	0.276	0.551	0.118	3.937	1.772	1.535	0.315	0.142	0.197	0.354	0.079
400	4.724	4.409	2.559		4.134	0.748-1.772		1.811	3.563	6xM8	0.472	0.394	0.827	0.217	4.921	2.362	1.850	0.394	0.161	0.197	0.354	0.087
800	5.748	5.512	3.071	-0.0014 -0.0028	4.921	0.984-2.165		2.205	4.134	6xM10	0.630	0.433	1.063	0.217	5.984	2.362	2.067	0.472	0.161	0.256	0.354	0.098
1400	6.929	6.693	3.543		6.102	1.181-2.559		2.598	4.744	6xM12	0.669	0.472	1.299	0.217	6.732	2.362	2.264	0.551	0.181	0.256	0.354	0.118

Ordering Example:

DCM/SL-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/S-FK	200	1.181	708	b	C

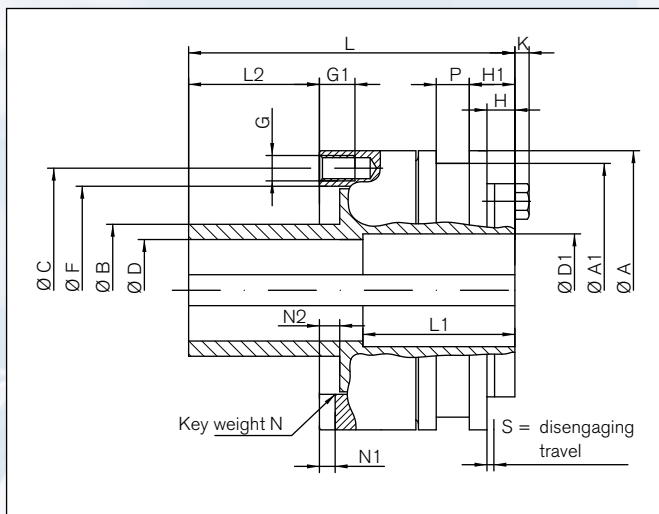
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/SL-FK long hub with flange – keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
J	=	Moment of inertia

Technical Data

Size	Torque adjustment range			Version a	Version b	Version c	compression Flange side	Hub side	Weight
	Version a	Version b	Version c						
	T_{KN} lb-in				N_{max} rpm			J lb-in ²	m lbs
50	44-89	89-177	177-354	1430	710	350	0.3	0.4	1.4
100	106-221	221-442	442-885	960	480	240	2.1	2.5	4.0
200	221-442	442-885	887-1770	790	390	200	4.9	7.3	7.5
400	442-885	887-1770	1770-3540	660	330	160	13	19	10
800	885-1770	1770-3540	3540-7080	550	270	130	34	60	26
1400	1549-3098	3098-6195	6195-12390	400	200	100	80	150	42

Type DCM/SE-KK elastomeric spider with keyway hub – keyway hub

Single-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter
øB1	=	Centering diameter
øD^{H7}	=	Bore diameter
øD1^{H7}	=	Bore diameter
øD2	=	Spider inside diameter
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Counterbore depth
L2	=	Max. shaft insertion depth
L3	=	Max. shaft insertion depth
N	=	Hub mounting length
N1	=	Distance from Flange to snap ring
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øB1	øD ^{H7}	CB	øD1 ^{H7}	CD	øD2	H	H1	K	L	L1	L2	L3	N	N1	P	S	S1
					min.- max.		min.- max.														
	Inch																				
50	2.165	1.969	3.150	1.969	0.3150-0.7874		0.4331-1.181		1.378	0.217	0.295	x	3.524	1.516	1.181	1.358	0.276	0.984	0.354	0.047	0.157
100	3.228	2.835	4.134	2.559	0.4331-0.9843	+0.0007 -0	0.4331-1.6535	+0.0007 -0	1.969	0.276	0.472	0.051	4.567	2.047	1.654	1.890	0.394	1.024	0.354	0.071	0.157
200	3.937	3.543	4.134	2.559	0.5906-1.3780		0.4331-1.6535		2.559	0.276	0.551	0.118	4.921	2.402	1.654	2.205	0.394	1.063	0.354	0.079	0.157
400	4.724	4.409	5.315	3.346	0.748-1.772		0.5118-2.3622		3.150	0.394	0.827	0.217	6.260	3.071	2.165	2.874	0.748	1.220	0.354	0.087	0.157
800	5.748	5.512	6.299	3.543	0.984-2.165	+0.001 -0	0.984-2.362	+0.001 -0	3.465	0.433	1.063	0.217	6.634	3.917	2.165	3.661	0.669	0.807	0.354	0.098	0.236
1400	6.929	6.693	7.795	4.528	1.181-2.559		1.181-2.953		4.331	0.472	1.299	0.217	8.327	4.469	3.228	4.213	1.378	0.886	0.354	0.118	0.236

Ordering Example:

DCM/SE-KK

Type	Size	øD ^{H7}	øD2 ^{H7}	lb-in	Version	Functional principle
DCM/SE-KK	200	1.181	0.984	708	b	C

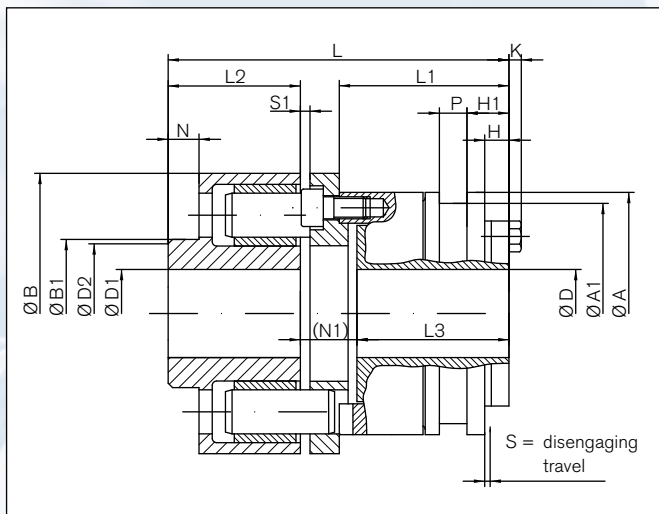
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/SE-KK elastomeric spider with keyway hub – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
J = Moment of inertia

Technical Data

Size		Torque adjustment range			Version a	Version b	Version c		elastomer Spider side	Hub side	Weight
		Version a	Version b	Version c							
		T _{KN} lb-in									
	50	44-89	89-177	177-354	1430	710	350	664	2.8	0.3	3.3
	100	106-221	221-442	442-885	960	480	240	1328	13	2.3	8.4
	200	221-442	442-885	887-1770	790	390	200	1328	15	6.5	11
	400	442-885	887-1770	1770-3540	660	330	160	2655	42	18	20
	800	885-1770	1770-3540	3540-7080	550	270	130	5310	88	56	33
	1400	1549-3098	3098-6195	6195-12390	400	200	100	10620	231	142	60

Multiple position re-engagement coupling

Characteristics

- Safety coupling for the mounting of sprockets, pulleys, gears, etc.
- Easily adjustable torque setting
- Available as multi-position re-engagement coupling

Advantages

- Economical torque and force limiter
- Highly accurate repeatability
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Various functional principles, suitable for every application
- Easily adjustable torque setting
- High durability

Series DCM/D



Series
DCM/D-FK

- Safety coupling with flange and parallel key
The support for the driving element of the shaft has to be provided by the customer.

- Torque 440-12400 lb-in

Page 112



Series
DCM/DL-FK

- Safety coupling with a long hub. Depending on the given application, the customer can decide freely on the support of the driving element. Can be used for wide driving elements

- Torque 440-12400 lb-in

Page 116

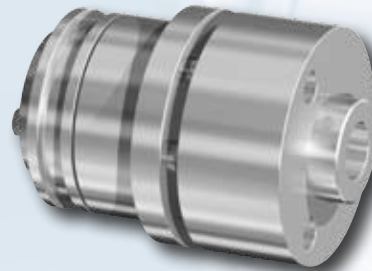


Series
DCM/DK-FK

- Safety coupling with a short supported hub and parallel key. With mounted bearing to fit simple symmetrical or slim driving elements. The customer does not need to provide any support for the driving element.

- Torque 440-12400 lb-in

Page 114



Series
DCM/DE-KK

- Safety coupling with elastomeric spider. Elastomer coupling designed to connect two shafts. The elastic part of the coupling is designed as a plug-in element. This allows easy assembly and disassembly of the coupling.

- Torque 440-12400 lb-in

Page 118

Type DCM/D-FK with flange – keyway hub

Multi-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Max. shaft Insertion depth
N^{P9}	=	Groove width
N1	=	Groove depth
N2	=	Flange counterbore depth
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øC	øD ^{H7} min- max	CD	øF	G	G1	H	H1	K	L	L1	N ^{P9}	N1	N2	P	S
				Inch			mm						Inch					
20	2.165	1.969	1.890	0.3150-0.7874	+0.0007 -0	1.614	6xM5	0.256	0.217	0.331	x	1.516	1.358	0.2362	0.122	0.157	0.354	0.055
50	3.228	2.835	2.756	0.4331-0.9843		2.362	6xM5	0.315	0.276	0.472	0.051	2.047	1.890	0.2362	0.122	0.157	0.354	0.091
100	3.937	3.543	3.504	0.5906-1.3780		3.071	6xM6	0.394	0.276	0.551	0.118	2.402	2.205	0.3150	0.142	0.197	0.354	0.102
200	4.724	4.409	4.134	0.748-1.772	+0.001 -0	3.583	6xM8	0.472	0.394	0.827	0.217	3.071	2.874	0.3937	0.161	0.197	0.354	0.102
400	5.748	5.512	4.921	0.984-2.165		4.134	6xM10	0.630	0.433	1.063	0.217	3.917	3.661	0.4724	0.161	0.256	0.354	0.146
700	6.929	6.693	6.102	1.181-2.559		4.764	6xM12	0.669	0.472	1.299	0.217	4.469	4.213	0.5512	0.181	0.256	0.354	0.181
1200	7.874	7.480	6.299	1.575-2.953		5.354	6xM12	0.748	0.433	1.496	0.630	4.685	4.409	0.6299	0.201	0.276	0.354	0.197

Ordering Example:

DCM/D-FK

Type	Size	ØD ^{H7}	lb-in	Version	Functional principle
DCM/D-FK	200	1.181	708	b	D

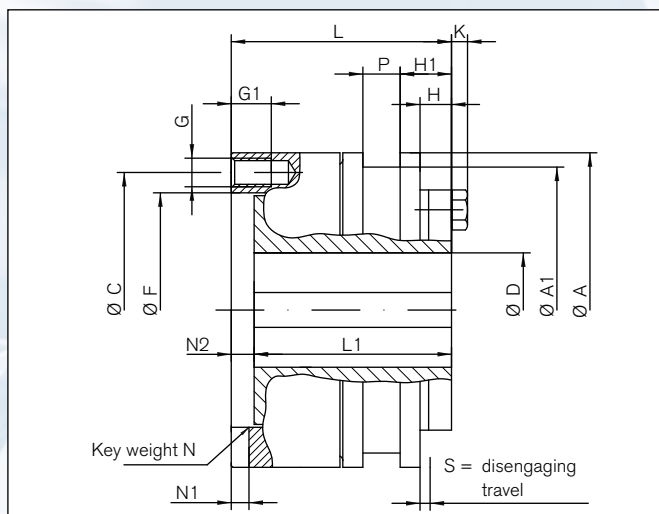
Torque range:

Functional principle:

a, b or c

always D = multiple position re-engagement

Type DCM/D-FK with flange – keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
J	=	Moment of inertia

Technical Data

Size	Torque adjustment range			Version a	Version b	Version c	compression Flange side	Hub side	Weight
	Version a	Version b	Version c						
	T_{KN} lb-in				N_{max} rpm			J lb-in ²	m lbs
20	22-44	44-89	89-177	4300	4300	2150	0.3	0.3	1.1
50	53-106	106-221	221-442	2880	2880	1440	2.1	2.3	3.3
100	106-221	221-442	442-885	2360	2360	1180	5.1	6.5	6.0
200	221-442	442-885	887-1770	2000	2000	1000	13	18	10
400	442-885	885-1770	1770-3540	1660	1660	830	34	56	22
700	770-1549	1549-3098	3098-6195	1360	1360	680	80	142	35
1200	1328-2655	2655-5310	5310-10620	1200	1200	600	135	263	46

Type DCM/DK-FK short supported hub with flange – keyway hub

Multi-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB h6	=	Centering diameter
øC	=	Pitch circle diameter
øD H7	=	Bore diameter
øD1	=	Counterbore diameter
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Overall clutch width
N	=	Hub mounting length
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB h6	CB	øC	øD H7 min- max	CD	øD1	G	G1	H	H1	K	L	L1	N	P	S
					Inch				mm					Inch				
20	2.165	1.969	1.4961	+0	1.890	0.3150-0.7874	+0.0007	0.827	6xM5	0.433	0.217	0.331	x	2.008	0.591	0.315	0.354	0.055
50	3.228	2.835	1.9685	-0.0006	2.756	0.4331-0.9843	-0	1.024	6xM5	0.630	0.276	0.472	0.051	2.756	0.787	0.394	0.354	0.091
100	3.937	3.543	2.3622	+0	3.504	0.5906-1.3780	-0	1.417	6xM6	0.591	0.276	0.551	0.118	3.071	0.984	0.472	0.354	0.102
200	4.724	4.409	3.1496	-0.0007	4.134	0.748-1.772	-0	1.811	6xM8	0.709	0.394	0.827	0.217	3.780	1.181	0.472	0.354	0.102
400	5.748	5.512	3.937	+0	4.921	0.984-2.165	+0.001	2.205	6xM10	0.906	0.433	1.063	0.217	4.882	1.181	0.630	0.354	0.146
700	6.929	6.693	4.724	-0.001	6.102	1.181-2.559	-0	2.598	6xM12	0.984	0.472	1.299	0.217	5.512	1.181	0.709	0.354	0.181
1200	7.874	7.480	5.118	+0	6.299	1.575-2.953	-0	2.992	6xM12	1.181	0.433	1.496	0.630	5.906	0.984	0.787	0.354	0.197

Ordering Example:

DCM/DK-FK

Type	Size	øD H7	lb-in	Version	Functional principle
DCM/DK-FK	200	1.181	708	b	D

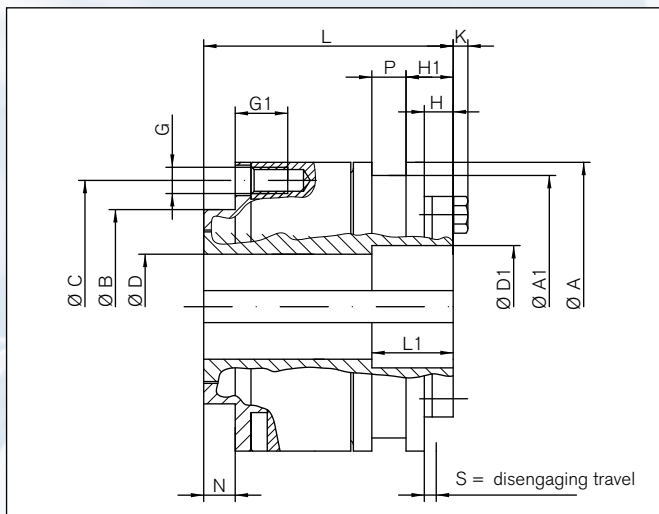
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/DK-FK short supported hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
J = Moment of inertia

Technical Data

Size		Torque adjustment range			Version a	Version b	Version c	compression Flange side	Hub side	Weight
		Version a	Version b	Version c						
		T _{KN} lb-in								
					N _{max} rpm			J lb-in ²		m lbs
	20	22-44	44-89	89-177	4300	4300	2150	0.41	0.38	1.5
	50	53-106	106-221	221-442	2880	2880	1440	3.11	2.39	4.4
	100	106-221	221-442	442-885	2360	2360	1180	6.22	7	6.6
	200	221-442	442-885	887-1770	2000	2000	1000	17	18	13
	400	442-885	885-1770	1770-3540	1660	1660	830	49	58	26
	700	770-1549	1549-3098	3098-6195	1360	1360	680	106	146	44
	1200	1328-2655	2655-5310	5310-10620	1200	1200	600	187	269	57

Type DCM/DL-FK long hub with flange – keyway hub

Multi-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB_{f7}	=	Centering diameter
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øD1	=	Counterbore diameter
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Overall clutch width
L2	=	Max. shaft insertion depth
N^{P9}	=	Groove width
N1	=	Groove depth
N2	=	Flange counterbore depth
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB _{f7}	CB	øC	øD ^{H7} min- max	CD	øD1	øF	G	G1	H	H1	K	L	L1	L2	N ^{P9}		N1	N2	P	S
					Inch					mm							Inch						
20	2.165	1.969	1.1024	-0.0008 -0.0016	1.890	0.3150-0.7874	+0.0007 -0	0.827	1.614	6xM5	0.256	0.217	0.315	x	2.598	0.984	1.083	0.2362	-0.0005 -0.0017	0.122	0.157	0.354	0.055
50	3.228	2.835	1.4961	-0.0010 -0.0020	2.756	0.4331-0.9843	+0.0007 -0	1.024	2.362	6xM5	0.315	0.276	0.472	0.051	3.346	1.378	1.299	0.2362	-0.0005 -0.0017	0.122	0.157	0.354	0.091
100	3.937	3.543	2.0472		3.504	0.5906-1.3780	+0.0007 -0	1.417	3.071	6xM6	0.394	0.276	0.551	0.118	3.937	1.772	1.535	0.3150	-0.0006 -0.0020	0.142	0.197	0.354	0.102
200	4.724	4.409	2.5591	-0.0012 -0.0024	4.134	0.748-1.772	+0.001 -0	1.811	3.563	6xM8	0.472	0.394	0.827	0.217	4.921	2.362	1.850	0.3937	-0.0007 -0.0024	0.161	0.197	0.354	0.102
400	5.748	5.512	3.0709		4.921	0.984-2.165	+0.001 -0	2.205	4.134	6xM10	0.630	0.433	1.063	0.217	5.984	2.362	2.067	0.4724	-0.0007 -0.0024	0.161	0.256	0.354	0.146
700	6.929	6.693	3.5433	-0.0014 -0.0028	6.102	1.181-2.559	+0.001 -0	2.598	4.744	6xM12	0.669	0.472	1.299	0.217	6.732	2.362	2.264	0.5512	-0.0007 -0.0024	0.181	0.256	0.354	0.181
1200	7.874	7.480	4.2520		6.299	1.575-2.953	+0.001 -0	2.992	5.354	6xM12	0.748	0.433	1.496	0.630	7.205	2.165	2.520	0.6299	-0.0007 -0.0024	0.201	0.276	0.354	0.197

Ordering Example:

DCM/DL-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/DL-FK	200	1.181	708	b	D

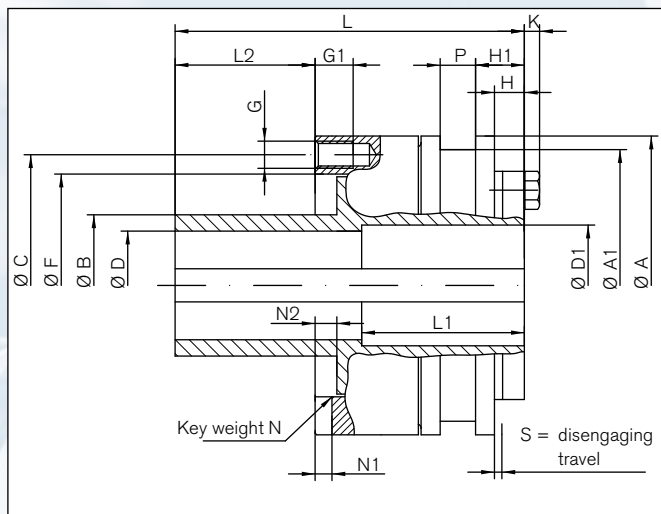
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/DL-FK long hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
J = Moment of inertia

Technical Data

Size		Torque adjustment range			Version a	Version b	Version c	compression Flange side	Hub side	Weight
		Version a	Version b	Version c						
		T _{KN} lb-in								
	20	22-44	44-89	89-177	4300	4300	2150	0.31	0.38	1.4
	50	53-106	106-221	221-442	2880	2880	1440	2.12	2.46	4.0
	100	106-221	221-442	442-885	2360	2360	1180	4.92	7.31	7.5
	200	221-442	442-885	887-1770	2000	2000	1000	13	19	13
	400	442-885	885-1770	1770-3540	1660	1660	830	34	60	26
	700	770-1549	1549-3098	3098-6195	1360	1360	680	80	150	42
	1200	1328-2655	2655-5310	5310-10620	1200	1200	600	135	282	56

Type DCM/DE-KK elastomeric spider with keyway hub – keyway hub

Multi-position re-engagement coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB	=	Outer diameter
øB1	=	Centering diameter
øD^{H7}	=	Bore diameter
øD1^{H7}	=	Bore diameter
øD2	=	Spider inside diameter
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Overall clutch width
L2	=	Max. shaft insertion depth
L3	=	Max. shaft insertion depth
N	=	Hub mounting length
N1	=	Distance from Flange to snap ring
P	=	Clutch groove width
S	=	Release path at overload



Dimensions

Size	øA	øA1	øB	øB1	øD ^{H7} min.- max.	CB	øD1 ^{H7} min.- max.	CD	D2	H	H1	K	L	L1	L2	L3	N	N1	P	S	S1
Inch																					
20	2.165	1.969	3.15	1.97	0.3150-0.7874	+0.0007 -0	0.4331-1.181	+0.0007 -0	1.38	0.22	0.31	x	3.52	1.52	1.18	1.36	0.28	0.98	0.35	0.06	0.16
50	3.228	2.835	4.13	2.56	0.4331-0.9843	+0.0007 -0	0.4331-1.6535	+0.0007 -0	1.97	0.28	0.47	0.05	4.57	2.05	1.65	1.89	0.39	1.02	0.35	0.09	0.16
100	3.937	3.543	4.13	2.56	0.5906-1.3780	+0.0007 -0	0.4331-1.6535	+0.0007 -0	2.56	0.28	0.55	0.12	4.92	2.40	1.65	2.20	0.39	1.06	0.35	0.10	0.16
200	4.724	4.409	5.31	3.35	0.748-1.772	+0.001 -0	0.5118-2.3622	+0.0007 -0	3.15	0.39	0.83	0.22	6.26	3.07	2.17	2.87	0.75	1.22	0.35	0.10	0.16
400	5.748	5.512	6.30	3.54	0.9843-2.165	+0.001 -0	0.984-2.362	+0.001 -0	3.46	0.43	1.06	0.22	6.63	3.92	2.17	3.66	0.67	0.81	0.35	0.15	0.24
700	6.929	6.693	7.80	4.53	1.181-2.362	+0.001 -0	1.181-2.953	+0.001 -0	4.33	0.47	1.30	0.22	8.33	4.47	3.23	4.21	1.38	0.89	0.35	0.18	0.24

Ordering Example:

DCM/DE-KK

Type	Size	øD ^{H7}	øD2 ^{H7}	lb-in	Version	Functional principle
DCM/DE-KK	200	1.181	0.984	708	b	D

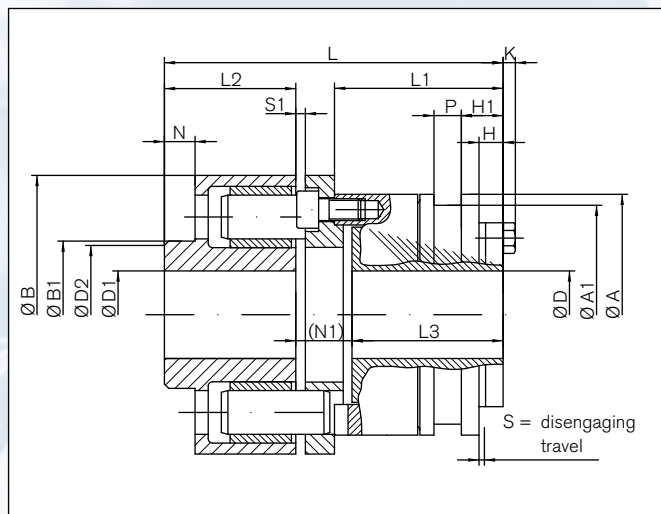
Torque range:

a, b or c

Functional principle:

always D = multiple position re-engagement

Type DCM/DE-KK elastomeric spider with keyway hub – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
- T_{KM}** = Nominal torque elastic coupling
- N_{max}** = Max. rotational speed
- J** = Moment of inertia

Technical Data

Size		Torque adjustment range			Version a	Version b	Version c	T _{KM} lb-in	elastomer Spider side	Hub side	Weight
		Version a	Version b	Version c							
		T _{KN} lb-in				N _{max} rpm			J lb-in ²		m lbs
	20	22-44	44-89	89-177	4300	4300	2150	664	2.77	0.34	3.3
	50	53-106	106-221	221-442	2880	2880	1440	1328	13	2.29	8.4
	100	106-221	221-442	442-885	2360	2360	1180	1328	15	6.49	11
	200	221-442	442-885	887-1770	2000	2000	1000	2655	42	18	20
	400	442-885	885-1770	1770-3540	1660	1660	830	5310	88	56	33
	700	770-1549	1549-3098	3098-6195	1360	1360	680	10620	231	142	60

Activation and interlocking coupling

Characteristics

- Safety coupling for the mounting of sprockets, pulleys, gears, etc.
- Easily adjustable torque setting
- Available as activation single-position re-engagement coupling or interlocking coupling

Advantages

- Economic torque and force limiter
- Highly accurate repeatability
- Signal delivery at overload
- Compact construction
- Low moment of inertia
- Various functional principles, suitable for every application
- Easily adjustable torque setting
- High durability

Series DCM/V



Series
DCM/V-FK

- Safety coupling with flange and parallel key. The support for the driving element of the shaft has to be provided by the customer.

- Torque 440-12400 lb-in

Page 122



Series
DCM/VK-FK

- Safety coupling with short supported hub and parallel key. With mounted bearing to fit simple symmetrical or slim driving elements. The customer does not need to provide any support for the driving element.

- Torque 440-12400 lb-in

Page 124

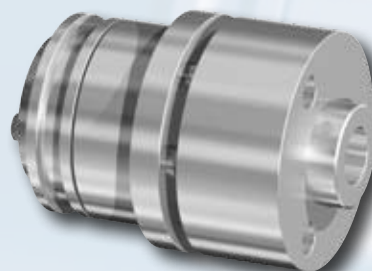


Series
DCM/VL-FK

- Safety coupling with long hub. Depending on the given application, the customer can decide freely on the support of the driving element. Can be used for wide driving elements

- Torque 440-12400 lb-in

Page 126



Series
DCM/VE-KK

- Safety coupling with elastomeric spider Elastomer coupling designed to connect two shafts. The elastic part of the coupling is designed as a plug-in element. This allows easy assembly and disassembly of the coupling.

- Torque 440-12400 lb-in

Page 128

Type DCM/V-FK with flange – keyway hub

Activation and interlocking coupling

Dimensions

øA	= Outer diameter of flange
øA1	= Locking device outer diameter
øC	= Pitch circle diameter
øD^{H7}	= Bore diameter
øF	= Flange inner diameter
G	= Thread depth
G1	= Max. thread depth
H	= Screws
H1	= Clamp hub screws
K	= Screw head height
L	= Total length
L1	= Length through the bore
N^{P9}	= Groove width
N1	= Groove depth
N2	= Flange counterbore depth
P	= Clutch groove width
S	= Release path at overload



DCM/M-AE

Technical Data Activation Coupling

Size	Torque adjustment range			N _{max} rpm	S LB	compression Flange side J lb-in ²	Hub side	Weight	
	Version a	Version b	Version c					m lbs	
		T _{KN} lb-in							
50	44-89	89-177	177-354	6000	0.087	0.3	0.3	0.02	
100	106-221	221-442	442-885	5000	0.118	2.1	2.3	0.06	
200	221-442	442-885	887-1770	4000	0.157	5.1	6.5	0.11	
400	442-885	887-1770	1770-3540	3500	0.197	13	18	0.19	
800	885-1770	1770-3540	3540-7080	3000	0.197	34	56	0.39	
1400	1549-3098	3098-6195	6195-12390	2300	0.236	80	142	0.63	

Ordering Example:

DCM/V-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/V-FK	200	1.181	708	b	F

Torque range:

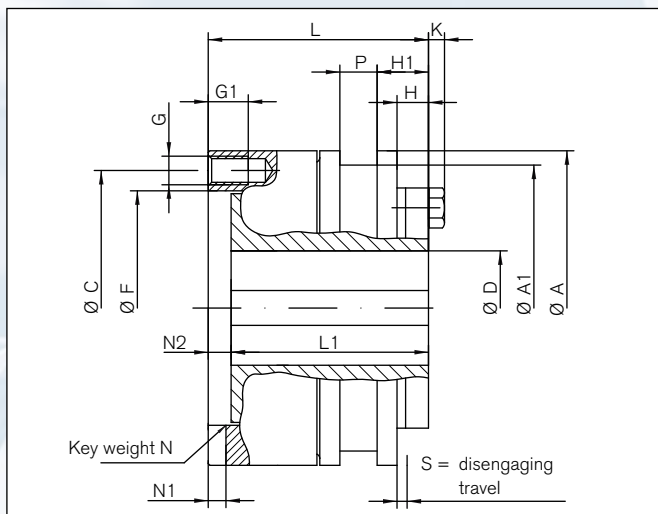
Functional principle:

a, b or c

F = Activation Coupling

S = Interlocking Coupling

Type DCM/V-FK with flange – keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
J	=	Moment of inertia

Technical Data Interlocking coupling

Size	Torque adjustment range			Version a	Version b	Version c	S	compression Flange side	Hub side	Weight
	Version a	Version b	Version c							
	T_{KN} lb-in						Inch		J lb-in ²	m lbs
50	44-89	89-177	177-354	57525	57525	38055	0.059	0.3	0.3	1.1
100	106-221	221-442	442-885	38055	38055	25665	0.079	2.1	2.3	3.3
200	221-442	442-885	887-1770	31683	31683	21240	0.098	5.1	6.5	6.0
400	442-885	887-1770	1770-3540	26550	26550	17700	0.098	13	18	10
800	885-1770	1770-3540	3540-7080	22125	22125	14160	0.118	34	56	22
1400	1549-3098	3098-6195	6195-12390	18143	18143	12036	0.157	80	142	35

Dimensions

Size	øA	øA1	øC	øD ^{H7} min- max	CD	øF	G	G1	H	H1	K	L	L1	NP ⁹	N1	N2	P
				Inch			mm					Inch					
50	2.165	1.969	1.890	0.3150-0.7874	+0.0007 -0	1.614	6xM5	0.256	0.217	0.331	x	1.516	1.358	0.236	0.122	0.157	0.354
100	3.228	2.835	2.756	0.4331-0.9843		2.362	6xM5	0.315	0.276	0.472	0.051	2.047	1.890	0.236	0.122	0.157	0.354
200	3.937	3.543	3.504	0.5906-1.3780		3.071	6xM6	0.394	0.276	0.551	0.118	2.402	2.205	0.315	0.142	0.197	0.354
400	4.724	4.409	4.134	0.748-1.772	+0.001 -0	3.563	6xM8	0.472	0.394	0.827	0.217	3.071	2.874	0.394	0.161	0.197	0.354
800	5.748	5.512	4.921	0.984-2.165		4.134	6xM10	0.630	0.433	1.063	0.217	3.917	3.661	0.472	0.161	0.256	0.354
1400	6.929	6.693	6.102	1.181-2.559		4.744	6xM12	0.669	0.472	1.299	0.217	4.469	4.213	0.551	0.181	0.256	0.354

Type DCM/VK-FK short supported hub with flange – keyway hub

Activation and interlocking coupling

Dimensions

øA	= Outer diameter of flange
øA1	= Locking device outer diameter
øB_{h6}	= Centering diameter
øC	= Pitch circle diameter
øD^{H7}	= Bore diameter
øD1	= Bore diameter
øF	= Flange inner diameter
G	= Thread depth
G1	= Max. thread depth
H	= Screws
H1	= Clamp hub screws
K	= Screw head height
L	= Total length
L1	= Counterbore depth
N	= Hub mounting length
P	= Clutch groove width
S	= Release path at overload



Technical Data Activation Coupling

Size	Torque adjustment range			N _{max} rpm	S Inch	compression Flange side	Hub side	Weight	
	Version a T _{KN}	Version b lb-in	Version c					J lb-in ²	m lbs
50.00	44-89	89-177	177-354	6000.00	0.087	0.4	0.4	1.5	
100.00	106-221	221-442	442-885	5000.00	0.118	3.1	2.4	4.4	
200.00	221-442	442-885	887-1770	4000.00	0.157	6.2	7.0	6.6	
400.00	442-885	887-1770	1770-3540	3500.00	0.197	17	18	13	
800.00	885-1770	1770-3540	3540-7080	3000.00	0.197	49	58	26	
1400.00	1549-3098	3098-6195	6195-12390	2300.00	0.236	106	146	44	

Ordering Example:

DCM/VK-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/VK-FK	200	1.181	708	b	F

Torque range:

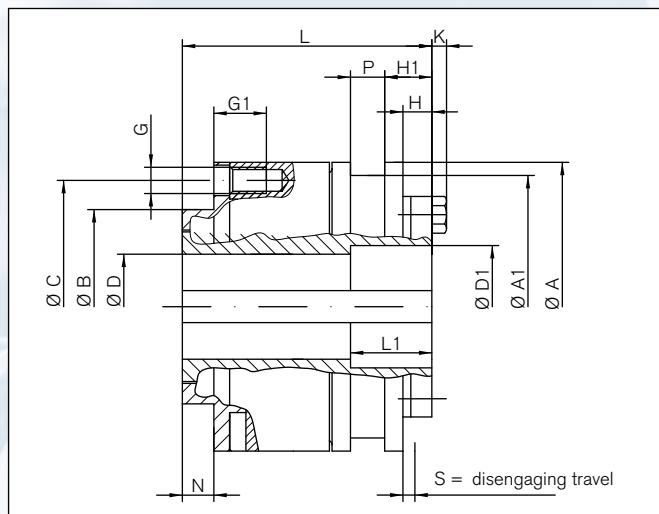
Functional principle:

a, b or c

F = Activation Coupling

S = Interlocking Coupling

Type DCM/VK-FK short supported hub with flange – keyway hub



Sectional view

Technical Data

- T_{KN}** = Disengagement torque
N_{max} = Max. rotational speed
J = Moment of inertia

Technical Data Interlocking coupling

Size		Torque adjustment range			Version a	Version b	Version c		compression Flange side	Hub side	Weight
		Version a	Version b	Version c							
		T _{KN} lb-in									
	50	44-89	89-177	177-354	57525	57525	38055	0.059	0.4	0.4	1.5
	100	106-221	221-442	442-885	38055	38055	25665	0.079	3.1	2.4	4.4
	200	221-442	442-885	887-1770	31683	31683	21240	0.098	6.2	7.0	6.6
	400	442-885	887-1770	1770-3540	26550	26550	17700	0.098	17	18	13
	800	885-1770	1770-3540	3540-7080	22125	22125	14160	0.118	49	58	26
	1400	1549-3098	3098-6195	6195-12390	18143	18143	12036	0.157	106	146	44

Dimensions

Size	øA	øA1	øB _{h6}	CB	øC	øD ^{H7} min-max	CD	øD1	G	G1	H	H1	K	L	L1	N	P
	Inch							mm			Inch						
50	2.165	1.969	1.496	+0	1.890	0.3150-0.7874	+0.0007 -0	0.827	6xM5	0.433	0.217	0.295	x	2.008	0.591	0.315	0.354
100	3.228	2.835	1.969	-0.0006	2.756	0.4331-0.9843		1.024	6xM5	0.630	0.276	0.472	0.051	2.756	0.787	0.394	0.354
200	3.937	3.543	2.362	+0	3.504	0.5906-1.3780	+0.001 -0	1.417	6xM6	0.591	0.276	0.551	0.118	3.071	0.984	0.472	0.354
400	4.724	4.409	3.150	-0.0007	4.134	0.748-1.772		1.811	6xM8	0.787	0.394	0.827	0.217	3.780	1.181	0.472	0.354
800	5.748	5.512	3.937	+0	4.921	0.984-2.165	+0.001 -0	2.205	6xM10	0.906	0.433	1.063	0.217	4.882	1.181	0.630	0.354
1400	6.929	6.693	4.724	-0.001	6.102	1.181-2.559		2.598	6xM12	1.102	0.472	1.299	0.217	5.512	1.181	0.709	0.354

Type DCM/VL-FK long hub with flange – keyway hub

Activation and interlocking coupling

Dimensions

øA	=	Outer diameter of flange
øA1	=	Locking device outer diameter
øB_{r7}	=	Centering diameter
øC	=	Pitch circle diameter
øD^{H7}	=	Bore diameter
øD1	=	Bore diameter
øF	=	Flange inner diameter
G	=	Thread depth
G1	=	Max. thread depth
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Counterbore depth
L2	=	Length to bearing centerline
N^{P9}	=	Groove width
N1	=	Groove depth
N2	=	Flange counterbore depth
P	=	Clutch groove width
S	=	Release path at overload



Technical Data Activation Coupling

Size	Torque adjustment range			N _{max} rpm	S IN	compression Flange side	Hub side	Weight	
	Version a	Version b	Version c			J lb-in ²		m lbs	
		T _{KN} lb-in							
50	44-89	89-177	177-354	6000	0.087	0.3	0.4	1.4	
100	106-221	221-442	442-885	5000	0.118	2.1	2.5	4.0	
200	221-442	442-885	887-1770	4000	0.157	4.9	7.3	7.5	
400	442-885	887-1770	1770-3540	3500	0.197	13	19	13	
800	885-1770	1770-3540	3540-7080	3000	0.197	34	60	26	
1400	1549-3098	3098-6195	6195-12390	2300	0.236	80	150	42	

Ordering Example:

DCM/VL-FK

Type	Size	øD ^{H7}	lb-in	Version	Functional principle
DCM/VL-FK	200	1.181	708	b	F

Torque range:

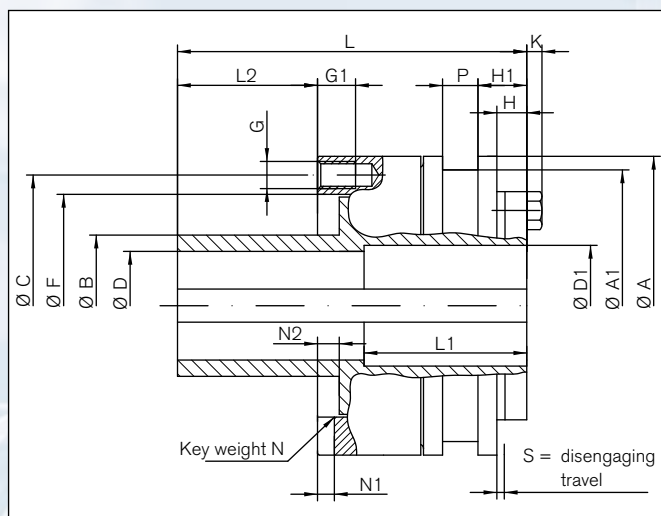
Functional principle:

a, b or c

F = Activation Coupling

S = Interlocking Coupling

Type DCM/VL-FK long hub with flange – keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	Max. rotational speed
J	=	Moment of inertia

Technical Data Interlocking coupling

Size		Torque adjustment range			Version a	Version b	Version c		compression Flange side	Hub side	Weight
		Version a	Version b	Version c							
		TKN lb-in									
	50	44-89	89-177	177-354	57525	57525	38055	0.059	0.3	0.4	1.4
	100	106-221	221-442	442-885	38055	38055	25665	0.079	2.1	2.5	4.0
	200	221-442	442-885	887-1770	31683	31683	21240	0.098	4.9	7.3	7.5
	400	442-885	887-1770	1770-3540	26550	26550	17700	0.098	13	19	13
	800	885-1770	1770-3540	3540-7080	22125	22125	14160	0.118	34	60	26
	1400	1549-3098	3098-6195	6195-12390	18143	18143	12036	0.157	80	150	42

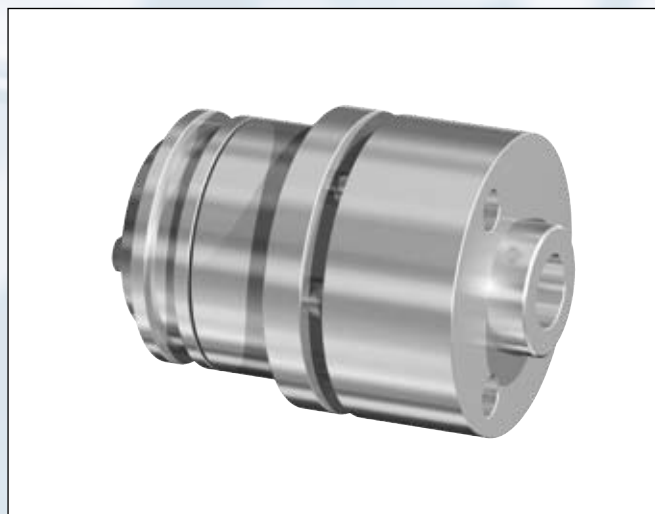
Size	øA	øA1	øB 17	CB	øC	øDH7	CD	øD1	øF	G	G1	H	H1	K	L	L1	L2	N P9	N1	N2	P
						min- max															
					Inch					mm						Inch					
50	2.165	1.969	1.102	-0.0008 -0.0016	1.890	0.3150-0.7874		0.827	1.614	6xM5	0.256	0.232	0.315	x	2.598	0.984	1.083	0.236	0.122	0.157	0.354
100	3.228	2.835	1.496	-0.0010 -0.0020	2.756	0.4331-0.9843	+0.0007 -0	1.024	2.362	6xM5	0.315	0.276	0.472	0.051	3.346	1.378	1.299	0.236	0.122	0.157	0.354
200	3.937	3.543	2.047		3.504	0.5906-1.3780		1.417	3.071	6xM6	0.394	0.276	0.551	0.118	3.937	1.772	1.535	0.315	0.142	0.197	0.354
400	4.724	4.409	2.559	-0.0012 -0.0024	4.134	0.748-1.772		1.811	3.563	6xM8	0.472	0.394	0.827	0.217	4.921	2.362	1.850	0.394	0.161	0.197	0.354
800	5.748	5.512	3.071		4.921	0.984-2.165	+0.001 -0	2.205	4.134	6xM10	0.630	0.433	1.063	0.217	5.984	2.362	2.067	0.472	0.161	0.256	0.354
1400	6.929	6.693	3.543	-0.0014 -0.0028	6.102	1.181-2.559		2.598	4.744	6xM12	0.669	0.472	1.299	0.217	6.732	2.362	2.264	0.551	0.181	0.256	0.354

Type DCM/VE-KK elastomeric spider with keyway hub

Activation and interlocking coupling

Dimensions

ϕA	=	Outer diameter of flange
$\phi A1$	=	Locking device outer diameter
ϕB	=	Outer diameter
$\phi B1$	=	Centering diameter
ϕD^{H7}	=	Bore diameter
$\phi D1^{H7}$	=	Bore diameter
$\phi D2$	=	Spider inside diameter
H	=	Screws
H1	=	Clamp hub screws
K	=	Screw head height
L	=	Total length
L1	=	Overall clutch width
L2	=	Max. shaft Insertion depth
L3	=	Max. shaft Insertion depth
N	=	Hub mounting length
N1	=	Distance from Flange to snap ring
P	=	Clutch groove width
S	=	Release path at overload



Technical Data Activation Coupling

Size	Torque adjustment range						elastomer	Hub side	Weight	
	Version a	Version b	Version c				Spider side			
		T _{KN} lb-in		N _{max} rpm	T _{KN} lb-in	S Inch		J lb-in ²	m lbs	
50	44-89	89-177	177-354	6000	664	0.087	2.8	0.3	3.3	
100	106-221	221-442	442-885	5000	1328	0.118	12.6	2.3	8.4	
200	221-442	442-885	887-1770	4000	1328	0.157	15	6.5	11	
400	442-885	887-1770	1770-3540	3500	2655	0.197	42	18	20	
800	885-1770	1770-3540	3540-7080	3000	5310	0.197	88	56	33	
1400	1549-3098	3098-6195	6195-12390	2300	10620	0.236	231	142	60	

Ordering Example: DCM/VE-KK

Type	Size	ϕD^{H7}	$\phi D2^{H7}$	lb-in	Version	Functional principle
DCM/VE-KK	200	1.181	0.984	708	b	F

Torque range:

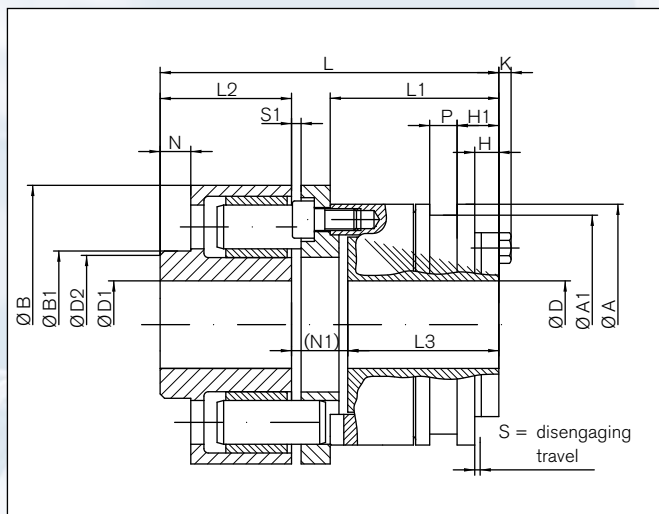
Functional principle:

a, b or c

F = Activation Coupling

S = Interlocking Coupling

Type DCM/VE-KK elastomeric spider with keyway hub



Sectional view

Technical Data

T_{KN}	=	Disengagement torque
N_{max}	=	max. rotational speed
J	=	Moment of inertia

Technical Data Interlocking coupling

Size		Torque adjustment range			Version a	Version b	Version c			elastomer Spider side	Hub side	Weight
		Version a	Version b	Version c								
		T _{KN} lb-in			N _{max} lb-in			T _{KN} lb-in	S Inch	J lb-in ²		m lbs
	50	44-89	89-177	177-354	57525	57525	38055	664	0.047	2.8	0.3	3.3
	100	106-221	221-442	442-885	38055	38055	25488	1328	0.071	13	2.3	8.4
	200	221-442	442-885	887-1770	31683	31683	20886	1328	0.079	15	6.5	11
	400	442-885	887-1770	1770-3540	26550	26550	17700	2655	0.087	42	18	20
	800	885-1770	1770-3540	3540-7080	22125	22125	14691	5310	0.098	88	56	33
	1400	1549-3098	3098-6195	6195-12390	18143	18143	12036	10620	0.118	231	142	60

Dimensions

Size	øA	øA1	øB	øB1	øD ^{H7} min-max	CB	øD1 ^{H7} min-max	CD	øD2	H	H1	K	L	L1	L2	L3	N	N1	P	S1
Inch																				
50	2.165	1.969	3.150	1.969	0.3150-0.7874	+0.0007 -0	0.4331-1.181	+0.0007 -0	1.378	0.217	0.295	x	3.524	1.516	1.181	1.358	0.276	0.984	0.354	0.157
100	3.228	2.835	4.134	2.559	0.4331-0.9843	+0.0007 -0	0.4331-1.6535	+0.0007 -0	1.969	0.276	0.472	0.051	4.567	2.047	1.654	1.890	0.394	1.024	0.354	0.157
200	3.937	3.543	4.134	2.559	0.5906-1.3780	+0.0007 -0	0.4331-1.6535	+0.0007 -0	2.559	0.276	0.551	0.118	4.921	2.402	1.654	2.205	0.394	1.063	0.354	0.157
400	4.724	4.409	5.315	3.346	0.748-1.772	+0.001 -0	0.5118-2.3622	+0.001 -0	3.150	0.394	0.827	0.217	6.260	3.071	2.165	2.874	0.748	1.220	0.354	0.157
800	5.748	5.512	6.299	3.543	0.984-2.165	+0.001 -0	0.984-2.362	+0.001 -0	3.465	0.433	1.063	0.217	6.634	3.917	2.165	3.661	0.669	0.807	0.354	0.236
1400	6.929	6.693	7.795	4.528	1.181-2.559	+0.001 -0	1.181-2.953	+0.001 -0	4.331	0.472	1.299	0.217	8.327	4.469	3.228	4.213	1.378	0.886	0.354	0.236

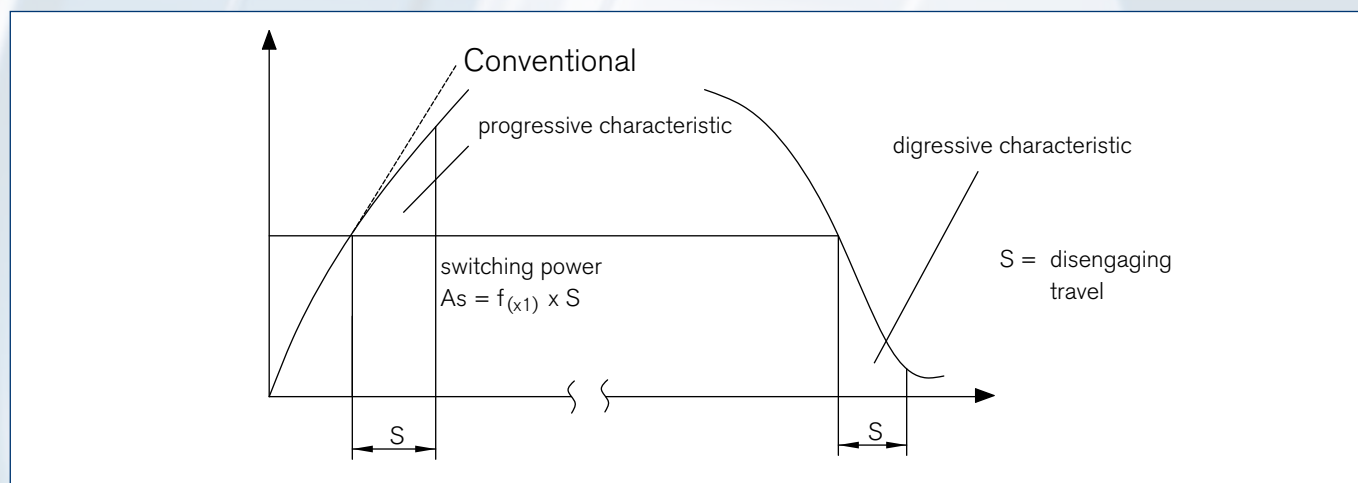
Technical Information

The principle of the spring-loaded form closure as an overload protection

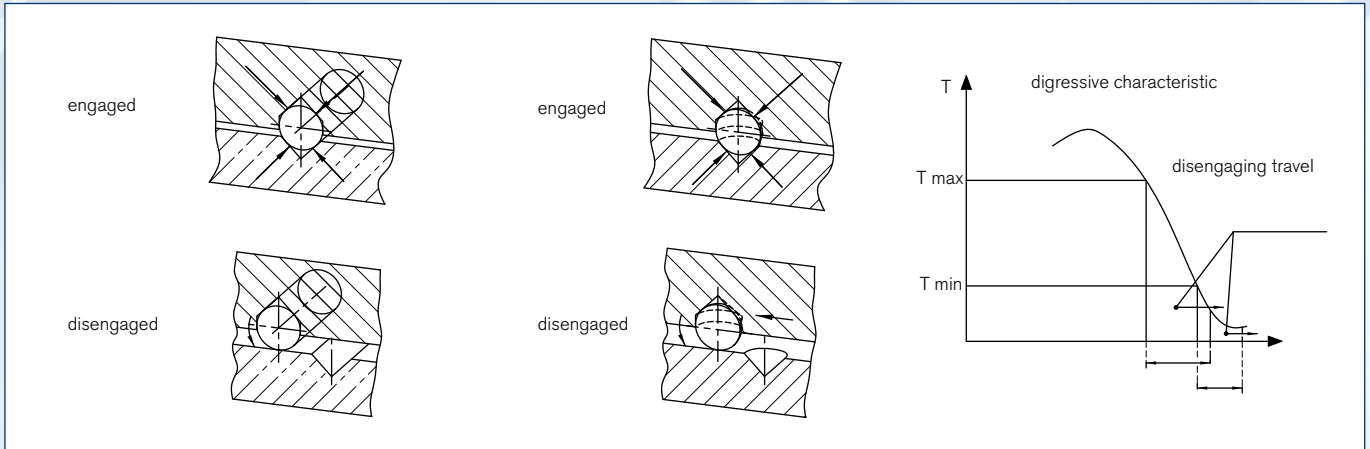
GERWAH® backlash-free safety couplings work as spring-loaded positive couplings. The special roller or ball guide guarantees a totally backlash-free transmission of the torque in both directions of rotation. The couplings are therefore especially suitable for use in speed and direction-controlled drives in conjunction with a closed control loop. Constant loading of the rollers and balls guarantees high system stiffness, which is important especially for modern servo drives. At the same time the roller or ball guides guarantee high reliability and switching frequencies when used with high dynamic servo drives.

In the event of an overload the rollers or balls move out of the guides (see figures 4 and 5). This results in an axial movement, which activates a proximity switch or limit switch that immediately makes contact to switch off the drive. To avoid damage to the safety coupling, the drive must be switched off immediately after an overload.

GERWAH® backlash-free safety couplings were developed for especially dynamic drives operated under constantly changing directions of rotation and under high acceleration. The safety couplings exclusively work with specially selected disk springs with a pronounced digressive characteristic. This advantage guarantees the shortest switching times (2 – 4 msec) and a low residual torque, less than 5% in a disengaged state. The coupling disengages immediately when the cut-out torque is exceeded. The torque drops immediately to a small residual value, typically 2 to 5%. The switching work of our couplings corresponds to only a fraction of that of conventional safety couplings with progressive characteristics. This is a decisive advantage because even ultra-short surges in speed are rendered harmless by the safety coupling.



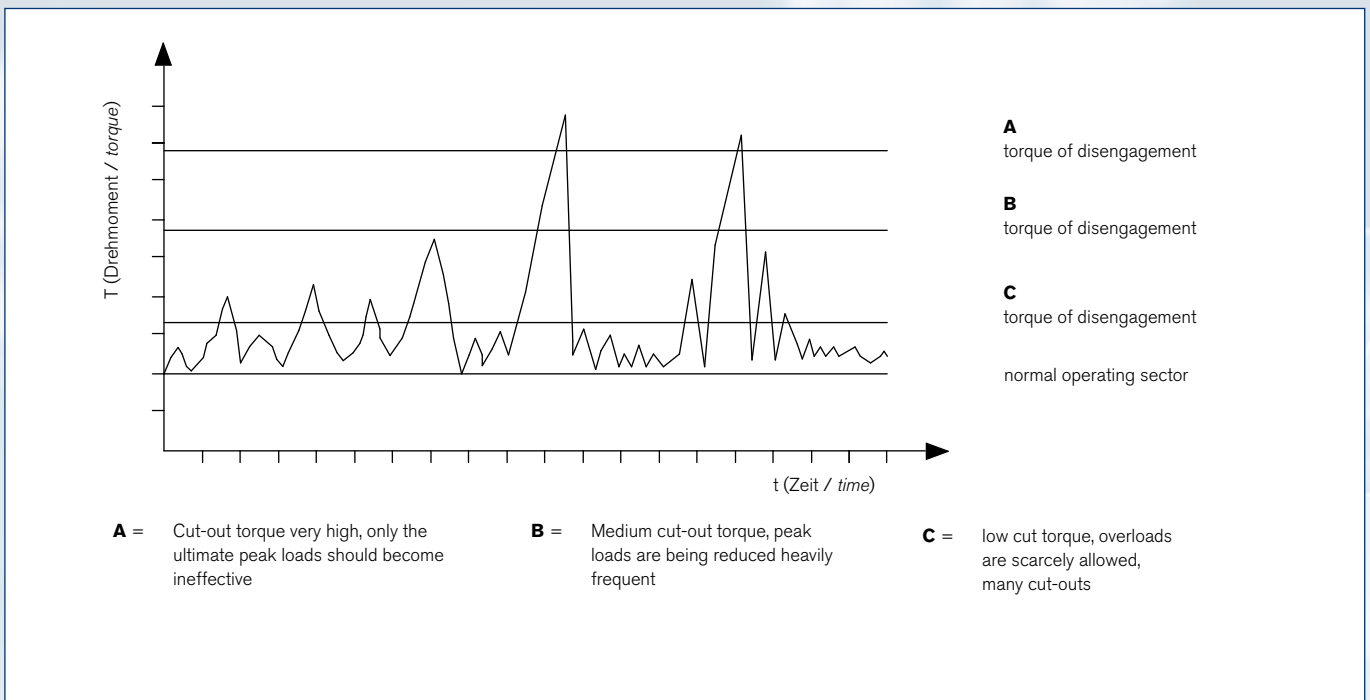
Technical Information



Dimensioning

The load limits of our backlash-free safety couplings were determined in extensive series of tests. Two torque ranges are specified for every size. Optimal selection from a technical and pricing point of view is therefore possible.

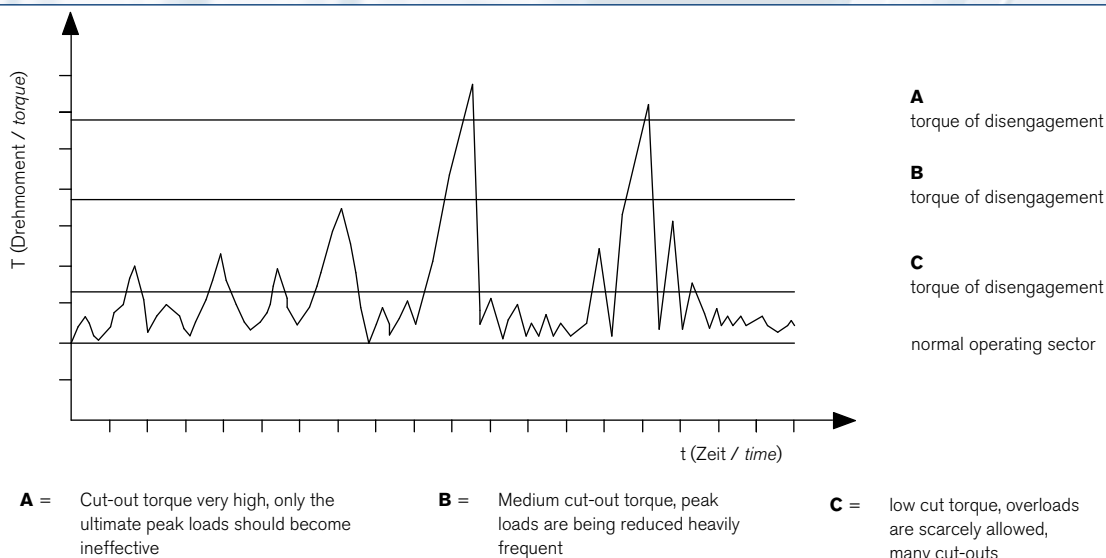
The cut-out torque defined by the user should lie approximately in the middle of the coupling's specified torque range. This allows correction of the cut-out torque, e.g. during startup.



Technical Information

Even large destructive forces have no chance!

When determining the disengaging torque of the safety coupling, short peaks of torque of the drive assembly as well as of the machine need to be taken into account. GERWAH® safety couplings have been developed for rapid interruption. We recommend paying special attention to the motor characteristics regarding the maximum acceleration torque. When using dynamic drives (servo motors), e.g. machine tools, we suggest to consider the influence of the moments of inertia. Since the acceleration torque in both positive and negative direction is usually much higher than the nominal torque, the sizing of the safety coupling and the disengaging torque level needs to be based on the maximum acceleration torque.



JMot = moment of inertia of motor
 JMash = moment of inertia of machine
 Tmax = max. acceleration torque
 TA = cut-off (disengaging torque) of coupling
 K = load or impact factor
 K = 1.5 (regular movements)
 K = 2 (irregular movements)
 K = 2.5 - 4 (shock loads) A load/impact factor of
 K = 1.5 - 2 should be applied to servo drives in machine tools. A higher load factor should be used for extreme applications.

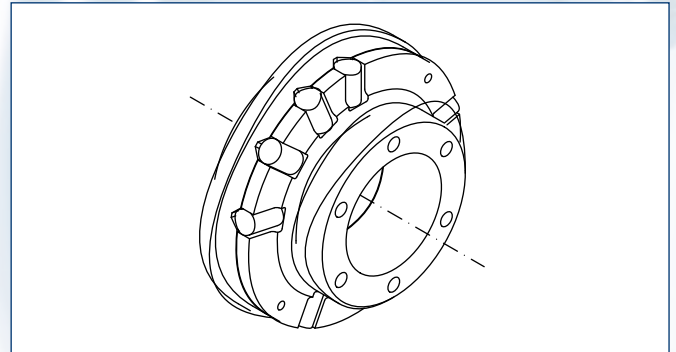
For couplings on highly dynamic drives the following dimensioning values have proven reliable. Generally, the following equation applies

$$T_A = K \times T_{\max} \times \frac{J_{\text{Mash}}}{J_{\text{Mot}} \times J_{\text{Mash}}} = [\text{lb-in}]$$

Technical Information

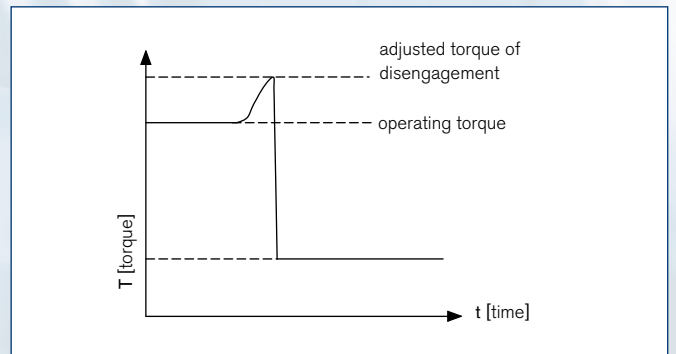
Functional principle, synchronizing engagement

The special indentation geometry for the cylinder rollers or balls only allows the coupling to resume operation after an overload in a particular position, e.g. after 360°. This system is used wherever synchronization after an overload is essential.
e.g. for feeding equipment, for transfer stations, for automation systems



Functional principle, continuous engagement

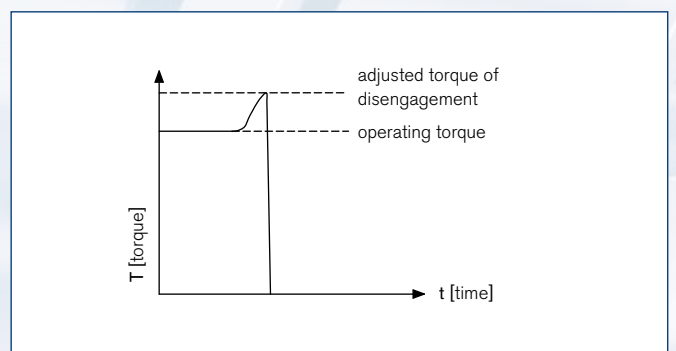
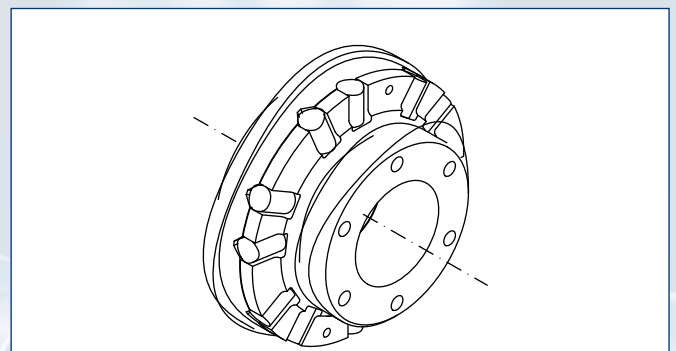
The indentation geometry for the cylinder rollers or balls is continuous. After an overload the safety coupling can resume operation in various positions. This system is used wherever synchronization after an overload is of no importance.



Functional principle activation single-position reengagement coupling

When the chosen limit is exceeded, the drive end and the output end will be separated automatically by the activation mechanism until the coupling re-engages.

The coupling can be reset with a re-engagement device or manually at the 360° angular position only after the overload has been removed.

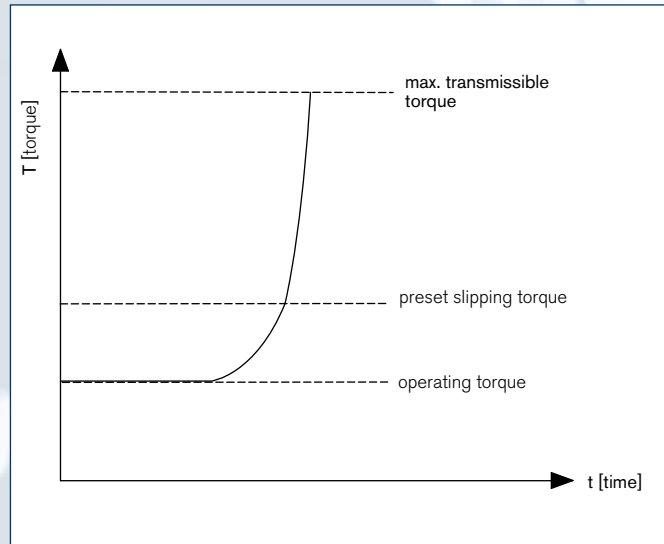


Functional principle activation re-engagement coupling

When the chosen limit is exceeded, the drive end and the output end will be separated automatically by the activation mechanism until the coupling re-engages. The re-engagement can be done by a re-engagement device or manually at any angular position only after the overload has been removed.

Functional principle interlocking coupling

The interlocking system is equipped with a limit switch which signals overloads without interrupting the transmission of the torque when the chosen maximum torque is exceeded.

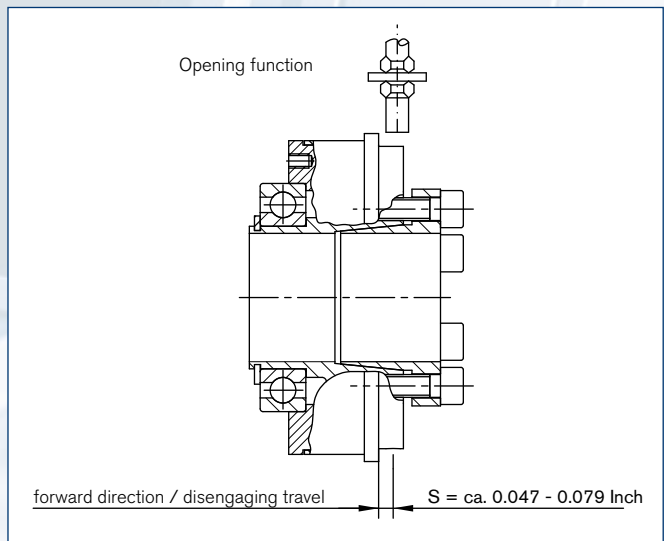


Proximity sensor as mechanical limit switch

Possible mechanical limit switch principles for all couplings of series DMK

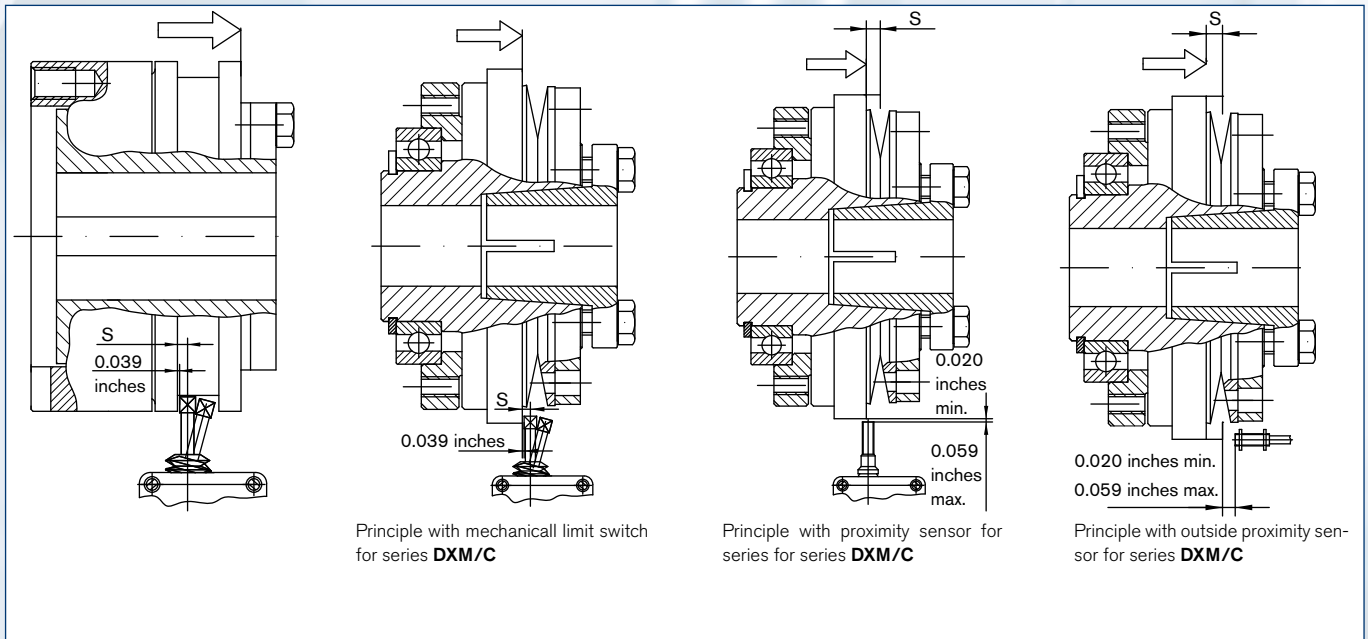
GERWAH® backlash-free safety couplings produce an axial movement (disengaging travel) of the outer cover or the ring in the event of an overload (see figure). This disengaging motion allows a proximity sensor or a mechanical limit switch to switch off the drive and simultaneously delivers an acoustical or optical signal.

Backlash-free safety couplings of series DMK are designed to allow direct mounting of a non-contact proximity switch or mechanical limit switch.

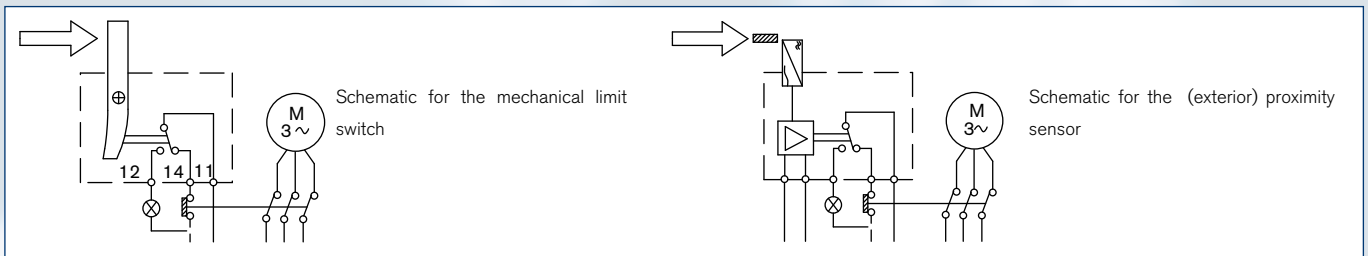


Technical Information

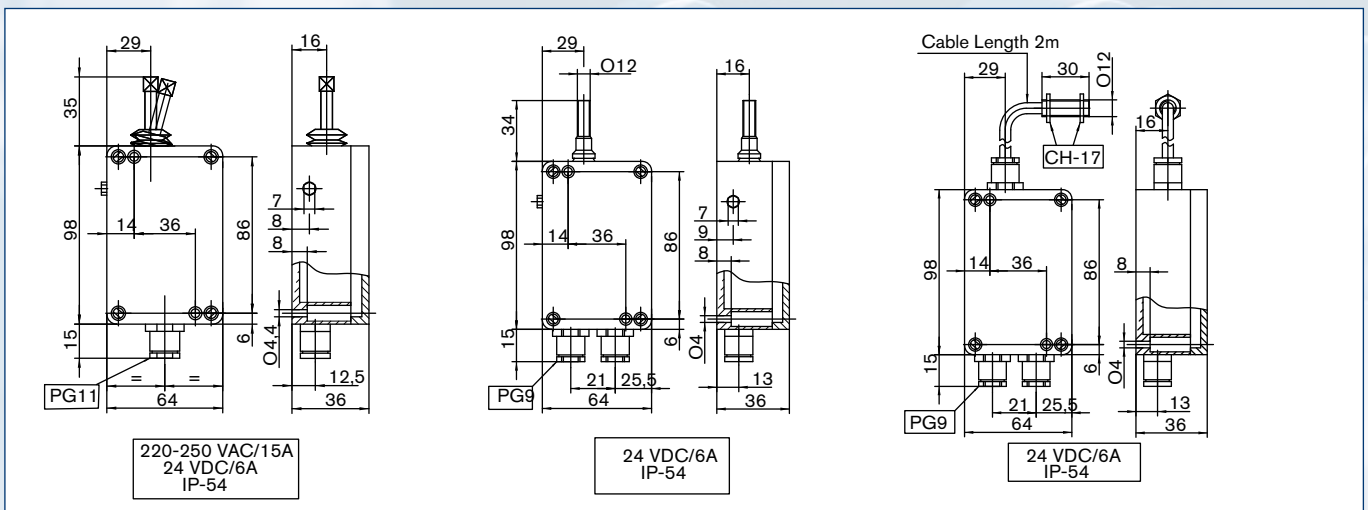
Possible mechanical limit switch principles for series DCK/M and DXK/M



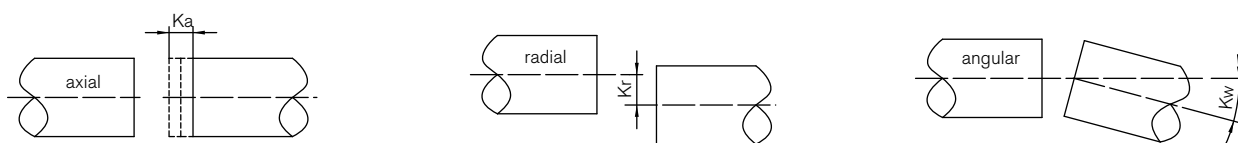
Electrical schematics



Limit switch dimensions - metric



Misalignments



Shaft alignment

Figure above shows the types of misalignment. Prior to mounting the coupling, both the coupling and the shafts must be aligned. The precision in aligning the shafts will determine the amount of reserves the coupling offers for compensation of misalignment occurring during operation. Well aligned shafts prolong the life cycle of the coupling and help reduce the noise level of the drive. When more than one type of misalignment occurs at once, each single type of misalignment must not reach the maximal value. Instead, they have to be balanced.

Assembly:

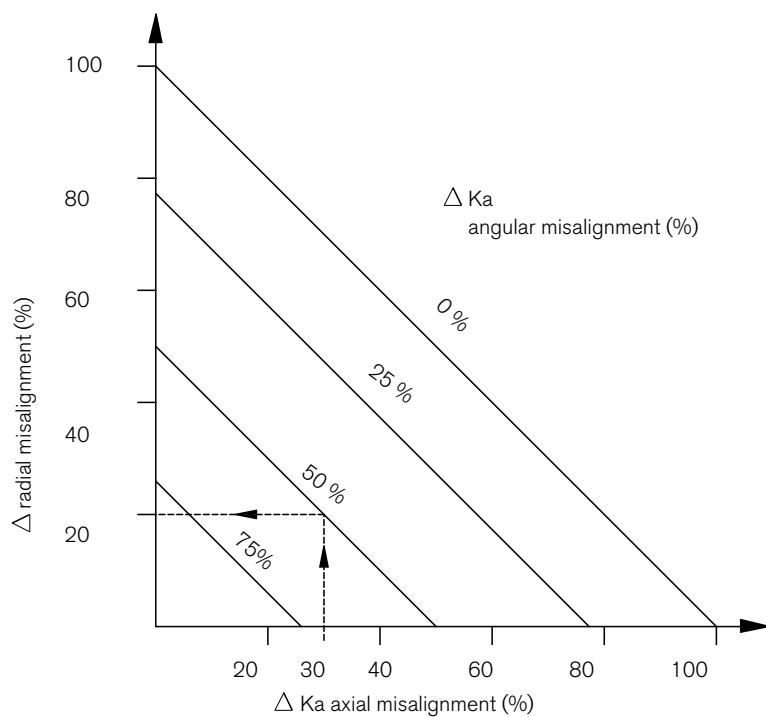
Clean and degrease shaft ends and coupling bores and check tolerances. The max. clearance between shaft and hubs must not exceed 0.0012 Inches.

Slide coupling hubs onto shaft ends, check axial installation dimensions and tighten locking screws according to the tightening torque values shown in the technical data pages.

Removal:

Loosen locking screws. When necessary, use the push-off threads to loosen the backlash free connection. Should the shaft/hub connection not come loose, use a rubber hammer, apply light taps. Please ask us for a detailed installation instruction or download from our website!

Technical Information



Misalignment - DMK/B				
Size	Bellows short / long	Misalignment		
		axial ΔK_a	radial ΔK_r	angular ΔK_α
		Inch	Inch	degree
30	4 / 6	0.4 / 0.5	0.1 / 0.2	1.0 / 1.5°
60	4 / 6	0.4 / 0.5	0.1 / 0.2	1.0 / 1.5°
150	4 / 6	0.4 / 0.5	0.2 / 0.2	1.0 / 1.5°
200	4 / 6	0.4 / 0.5	0.2 / 0.2	1.0 / 1.5°
300	4 / 6	0.4 / 0.5	0.2 / 0.2	1.0 / 1.5°
500	4 / 6	0.4 / 0.5	0.2 / 0.2	1.0 / 1.5°
800	6	0.5	0.2	1.0°
1200	6	0.5	0.2	1.0°

Misalignment - DMK/E					
Size	elastomer spider	shore scale	Misalignment		
			axial ΔK_a	radial ΔK_r	angular ΔK_α
			Inch	Inch	degree
30	98	A	-0.5	0.06	0.9°
60	98	A	-0.5	0.10	0.9°
150	98	A	-0.7	0.11	0.9°
300	98	A	-0.7	0.12	0.9°
500	98	A	-1.0	0.14	0.9°

Fax Inquiry

On this page you can explain the application of a safety coupling and we will propose our solution. Please send this page to:

USA and Mexico: **RINGFEDER POWER TRANSMISSION CORPORATION · FAX: +1 (201) 664-6053**

1. Application

Planned use of the coupling (machine, machine group or plant):

2. Type of Attachment (please tick/check)

☐ clamping hub ☐ Internal keyless locking device ☐ expanding hub ☐ hub with set screw
☐ flange mount ☐ Shrink Disc® connection ☐ Fanuc ☐ acc. customer request

3. Dimensions

length (Inch) bore D1 (Inch) keyway hub
 outer diameter (mm) bore D2 (Inch) keyway hub

4. Shaft Misalignment

axial (Inch) radial (Inch) angular (degree)

5. Drive

Drive power $P =$ Hp Input speed $n =$ rpm Nominal torque of the drive $Mt_{nom} =$ lb-in

Peak torque of the drive $Mt_{max} =$ lb-in disengagement torque requested lb-in

6. Anticipated Need

☐ Production ☐ Project ☐ Repair ☐ Number of items/p.a.

7. Environmental Influences

Temperature in the area of the coupling $Temp =$ °F Special materials (e.g. stainless steel)
Are there any impacts on the load side? ☐ no ☐ slight ☐ medium ☐ heavy

other, special influences

8. Mass Moment of Inertia

9. Target Price

On the drive side $JA =$ lb-in² On the driven side $J_L =$ lb-in² \$/each

Please send your offer to:

Company Attention
Address
Phone Fax
E-mail



Locking Devices



Locking Assemblies



Locking Elements



Shrink Discs®



Smart-Lock

Damping Technology



Friction Springs



DEFORM plus®
DEFORM plus® R



Fluid Elastomeric Damper

Special Solutions



Shaft Couplings



Locking Assemblies



Flange Couplings



Couplings



Magnetic Couplings



Metal Bellows Couplings



Servo-Insert Couplings



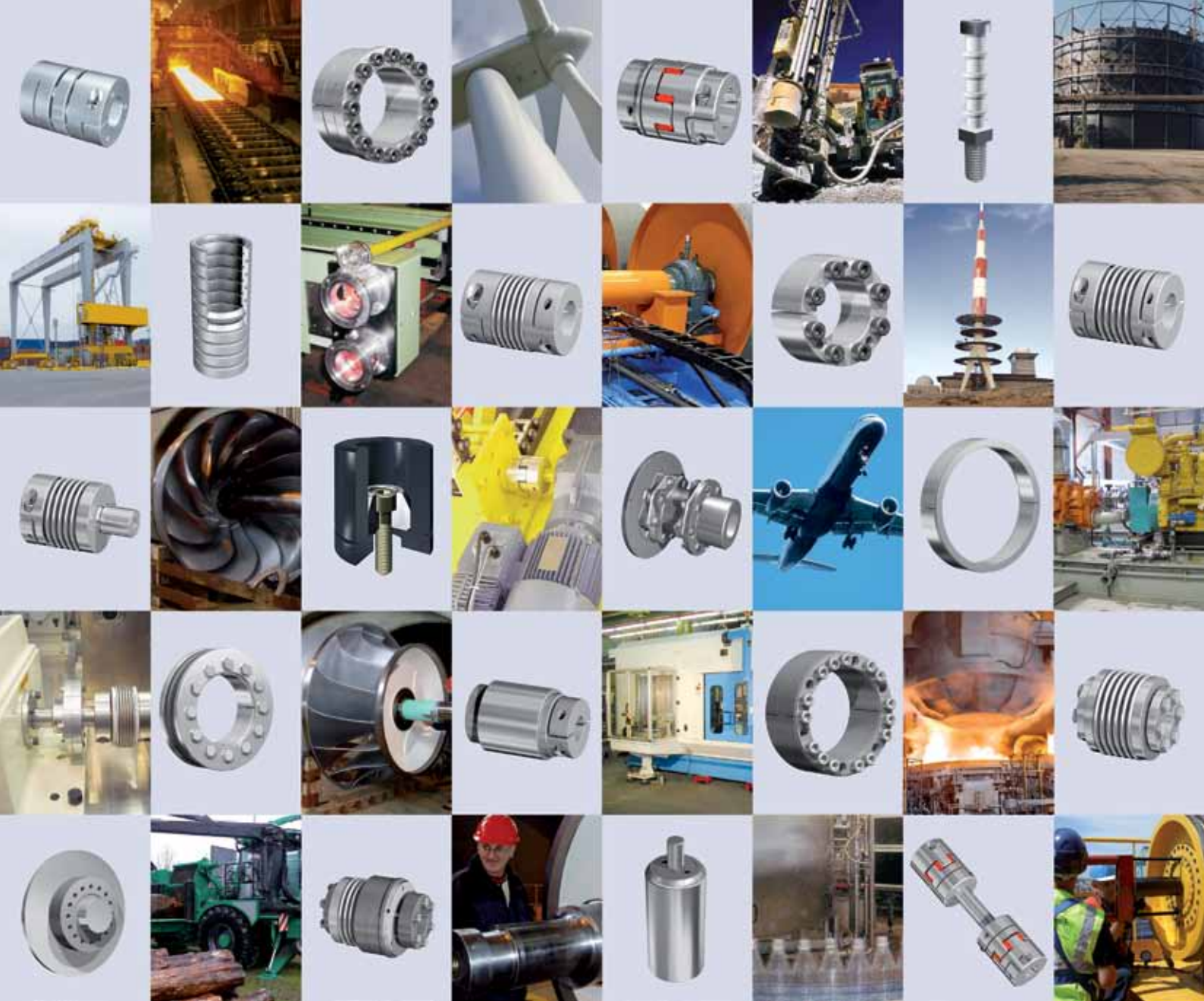
RING-flex® – torsionally
rigid Disc Couplings



Safety Couplings



Line Shafts



RINGFEDER POWER TRANSMISSION GMBH

- Oberschlesienstr. 15, D-47807 Krefeld, Germany
- Lützeltaler Str. 5a, D-63868 Großwallstadt, Germany · Phone: +49 (0) 6022 2204-0 · Fax: +49 (0) 6022 2204-11
E-mail: sales.international@ringfeder.com · E-mail: sales.international@gerwah.com

RINGFEDER POWER TRANSMISSION USA CORPORATION

165 Carver Avenue, P.O. Box 691 Westwood, NJ 07675, USA · Toll Free: +1 888 746-4333 · Phone: +1 201 666 3320
Fax: +1 201 664 6053 · E-mail: sales.usa@ringfeder.com · E-mail: sales.usa@gerwah.com

RINGFEDER POWER TRANSMISSION INDIA PRIVATE LIMITED

Plot No. 4, Door No. 220, Mount - Poonamallee Road, Kattupakkam, Chennai – 600 056, India
Phone: +91 (0) 44-2679-1411 · Fax: +91 (0) 44-2679-1422 · E-mail: sales.india@ringfeder.com · E-mail: sales.india@gerwah.com

KUNSHAN RINGFEDER POWER TRANSMISSION COMPANY LIMITED

German Industry Park, No. 508 Hengguanjiang Road, Zhangpu Town 215321, Kunshan City, P.R. China
Phone: +86 (0) 512-5745-3960 · Fax: +86 (0) 512-5745-3961 · E-mail: sales.china@ringfeder.com

RINGFEDER POWER TRANSMISSION

www.gerwah.com