

DG COUPLING ELEMENTS

High quality elements to match original manufacturers couplings, commonly used in imported heavy construction & earthmoving plant eg, excavators, cranes, dozers, forklifts etc.
Komatsu, Kobelco, Hitachi, Kato, Tadano.



DG/4-30 DG/4-30CB



DG/40-140 DG/40-140CB



DG/30 - 110HAL OR H

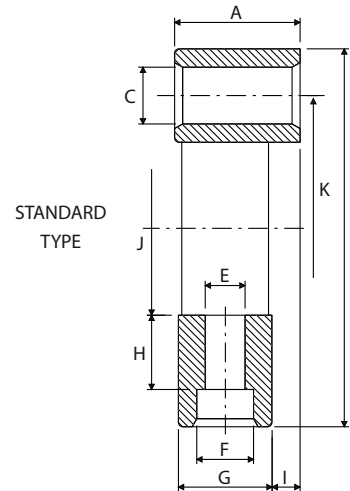
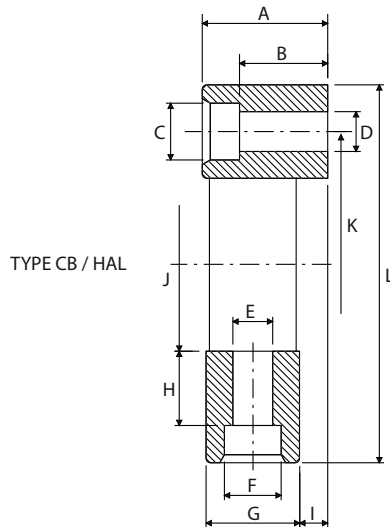
FLEXIBLE COUPLINGS & REPLACEMENT ELEMENTS

ORDER CODE

Rubber Element Type	
Sd. (thru hole)	Counter Bore Hole
DG/4	DG/4CB
DG/8	DG/8CB
DG/16	DG/16CB
DG/25	DG/25CB
DG/30	DG/30CB
DG/50	DG/50CB
DG/140	DG/140CB

Hytrel Element Type	
Element C/W insert	Element Only
DG/30HAL	
DG/40HAL	
DG/50HAL	
DG/110HAL	
DG/140HAL	DG/140H

STD., CB & HAL TYPE COUPLING ELEMENTS



NOTE: Type Std. & CB = Black rubber type
Type HAL = White Hytrel type

All dimensions in mm.
All torques in Nm.

Type Std./CB/HAL	A	B	C	D	E	F	G	H	I	J	K Spacing	L	Nominal Torque	Max Torque
4	28	17	13.5	8.5	8.5	13.5	24	18.5	4	45	80/3 x 120°	100	50	125
8	32	20.5	16.5	10.5	10.5	16.5	28	20.5	4	60	100/3 x 120°	120	100	280
16	42	23.5	18.5	12.5	12.5	18.5	36	25.2	6	70	125/3 x 120°	150	200	560
25	46	26	21.5	14.5	14.5	21.5	40	27	6	85	140/3 x 120°	170	315	875
30	58	34.5	24.5	16.5	16.5	24.5	50	34.5	8	100	165/3 x 120°	200	500	1400
40	50	29.5	24.5	16.5	16.5	24.5	47.5	29	4	85	140/4 x 90°	170	600	1600
50	58	34.5	24.5	16.5	16.5	24.5	50	34.5	8	100	165/4 x 90°	200	700	2100
110	56	37	26	18.5	18.5	26	53	37	8	100	180/4 x 90°	230	1200	2500
140	70	45.5	30.5	20.5	20.5	30.5	62	47	8	125	215/4 x 90°	260	1700	4900



ADAPTIVE RUBBER ELEMENT COUPLINGS FOR HYDRAULIC PUMPS & GENERAL USE

POWER RATINGS MATCHED TO APPLICATION.

The coupling design features a very flexible element for power transfer, ensuring maximal torque capacity, with dampening of shock loads and excellent misalignment capacity. The element works well in harsh environments resulting in long life cycles.

BROAD APPLICATION VERSATILITY.

The steel hub design permits ease of modification to suit specialized or challenging applications. The coupling range suits a large range of shaft sizes from 16mm (5/8") to 57mm (2 1/4") in popular splines and round bores. Specials can also be made to order.

STANDARD SPLINED OR ROUND BORE SHAFT CONNECTIONS.

The DG Coupling range suits most splined shaft connections for hydraulic pumps and motors including imperial and metric sizes. Splined hubs use our popular CLAMPLOCK lateral or axial positive locking mechanisms eliminating the spline wear associated with unlocked spline connections.

Standard bore sizes using taperlock bushes are available in imperial and metric sizes to suit hydraulic pumps and motors and IEC electric motor shaft standards.

MAXIMUM MISALIGNMENT TOLERANCES.

Axial Displacement.

The element locates the hubs on the shafts. However, up to +/- 2mm axial displacement is tolerated at 1000rpm .

Radial Misalignment.

Between 2mm @ 3000rpm and up to a total of 5mm at 1000 rpm.

SPEED: Consult factory for speeds exceeding 4000 RPM.

Angular Misalignment.

The total angular misalignment is 2° at 1400 rpm. This is speed dependent .

Ordering Information

To order a DG flexible coupling

1. Select the element size that will suit the torque output from the driving shaft. eg electric motor.
2. Select the flange and the hub sizes from the tables above. Ideally, the hub size will fit onto the smallest shaft.
3. The complete coupling will comprise of 3 ordered parts. The flange, the element and the hub.

Example

To couple an electric motor to a hydraulic pump. The electric motor is 90L IEC frame 4 pole motor. Power rating is 1.5 kW at 1440 rpm. Shaft size is 24mm with a 8mm key.

The pump is an SAE B pump with input shaft of 13T 16/32DP spline, nom. OD 7/8"

1. From page 43, use the formula to convert kW into torque. ie $T = (1.5 \times 9549) / 1440 = 10 \text{ Nm}$. The required element will therefore be a DG/8CB.
2. For the smallest shaft, being the 13T spline, use the hub part DG8HB03
3. For the electric motor, shaft size 24mm, use the flange part DG8FL74



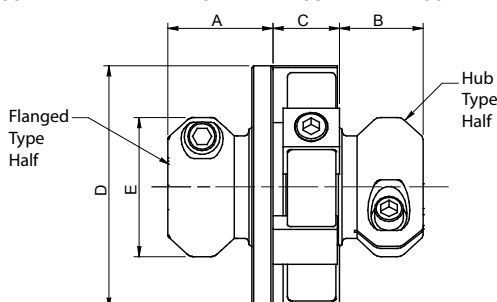
DG8 Spline to spline coupling

PERFORMANCE SPECIFICATIONS.

SERIES	Continuous Torque	Maximum Torque	Intermittent Torque
DG8	100 Nm 83 ft lbs	250 Nm 183 ft lbs	157 Nm 116 ft lbs
DG25	315 Nm 250 ft lbs	800 Nm 590 ft lbs	475 Nm 350 ft lbs
DG50	700 Nm 466 ft lbs	2000 Nm 1475 ft lbs	884 Nm 652 ft lbs

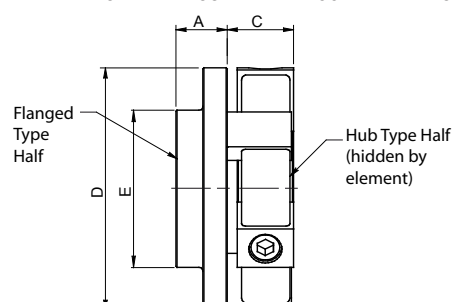
CLAMPLOCK STYLE SPLINED HALF DIMENSIONS.

SERIES	A	B	C	D	E
DG8	52	44.6	33	120	69
DG25	62	39	46	170	79
DG50	71	43	58	200	94



TAPERLOCK STYLE ROUND BORE DIMENSIONS.

SERIES	A	C	D	E
DG8	25.4	33	120	78
DG25	31.8	46	170	99
DG50	44.5	58	200	113



All dimensions in mm

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ADAPTIVE RUBBER ELEMENT COUPLINGS FOR HYDRAULIC PUMPS & GENERAL USE

DG8

Spline OD	No. of teeth	Spline Specification	Part Number Hub	Part Number Flange	Bore OD	Keyway	Part Number Hub	Part Number Flange
5/8"	9	ANSI 16/32 INV CL5	DG8HB01	DG8FL01	7/8"	1/4"	DG8HB14	DG8FL14
7/8"	13	ANSI 16/32 INV CL5	DG8HB03	DG8FL03	1"	1/4"	DG8HB15	DG8FL15
1"	15	ANSI 16/32 INV CL5	DG8HB04	DG8FL04	1 1/4"	5/16"	DG8HB24	DG8FL24
1 1/4"	14	ANSI 12/24 INV CL5	DG8HB06	DG8FL06	24	8	DG8HB74	DG8FL74
					25	8	DG8HB26	DG8FL26

Rubber Element Part Number **DG/8CB**

DG25

Spline OD	No. of teeth	Spline Specification	Part Number Hub	Part Number Flange	Spline OD	No. of teeth	Spline Specification	Part Number Hub	Part Number Flange
7/8"	13	ANSI 16/32 INV CL5	DG25HB03	DG25FL03	30	14	DIN 5480 2 MOD INV	DG25HB10	-
1"	15	ANSI 16/32 INV CL5	DG25HB04	DG25FL04	35	16	DIN 5480 2 MOD INV	DG25HB11	-
1"	6	SAE B Straight	DG25HB05	DG25FL05	36	8	DIN 5462 INV	DG25HB115	-
1 1/4"	14	ANSI 12/24 INV CL5	DG25HB06	DG25FL06	40	18	DIN 5480 2 MOD INV	-	DG25FL41
1 3/8"	6	SAE B Straight	DG25HB33	DG25FL33	45	21	DIN 5480 2 MOD INV	-	DG25FL42
1 3/8"	21	ANSI 16/32 INV CL5	DG25HB07	DG25FL07					
1 1/2"	14	ANSI 10/20 INV CL5	-	DG25FL36					
1 1/2"	17	ANSI 12/24 INV CL5	DG25HB32	-					
1 1/2"	23	ANSI 16/32 INV CL5	DG25HB43	DG25FL43					
1 3/4"	13	ANSI 8/16 INV CL5	DG25HB08	DG25FL08					
1 3/4"	27	ANSI 16/32 INV CL5	-	DG25FL09					

Bore OD	Keyway	Part Number Hub	Part Number Flange	Bore OD	Keyway	Part Number Hub	Part Number Flange
1 1/4"	5/16"	DG25HB24	DG25FL24	32	10	DG25HB80	DG25FL80
1 1/2"	3/8"	DG25HB60	DG25FL60	35	10	DG25HB50	DG25FL50
				38	10	DG25HB51	DG25FL51
				48	14	-	DG25FL55

Rubber Element Part Number **DG/25CB**

DG50

Spline OD	No. of teeth	Spline Specification	Part Number Hub	Part Number Flange	Spline OD	No. of teeth	Spline Specification	Part Number Hub	Part Number Flange
1 1/4"	14	ANSI 12/24 INV CL5	-	DG50FL06	40	18	DIN 5480 2 MOD INV	DG50HB41	DG50FL41
1 3/8"	21	ANSI 16/32 INV CL5	-	DG50FL07	45	21	DIN 5480 2 MOD INV	DG50HB42	DG50FL42
1 1/2"	14	ANSI 10/20 INV CL5	DG50HB36	-	55	26	DIN 5480 2 MOD INV	DG50HB47	DG50FL47
1 3/4"	13	ANSI 8/16 INV CL5	DG50HB08	DG50FL08	60	28	DIN 5480 2 MOD INV	DG50HB118	DG50FL118
1 3/4"	27	ANSI 16/32 INV CL5	DG50HB09	DG50FL09					
2"	15	ANSI 8/16 INV CL5	DG50HB37	DG50FL37					
2 1/4"	26	ANSI 12/24 INV CL5	DG50HB48	DG50FL48					
2 1/4"	17	ANSI 8/16 INV CL5	DG50HB96	DG50FL96					

Bore OD	Keyway	Part Number Hub	Part Number Flange	Bore OD	Keyway	Part Number Hub	Part Number Flange
1 1/2"	3/8"	DG50HB60	DG50FL60	32	10	DG50HB80	DG50FL80
1 3/4"	7/15"	DG50HB61	DG50FL61	38	10	DG50HB51	DG50FL51
2 1/4"	1/2"	-	DG50FL116	42	12	DG50HB53	DG50FL53
				48	14	DG50HB55	DG50FL55

Rubber Element Part Number **DG/50CB**

*OTHER SIZES ARE AVAILABLE UPON REQUEST. CONTACT OUR SALES OFFICE

† FOR SHAFT SIZES SEE HYDRAULIC MOTOR & PUMP STANDARDS-PAGE 20 & ELECTRIC MOTOR SIZES PAGE 21

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