



# Beam Couplings

- Multi-Beam
  - Single-Beam
  - Step-Beam
- **Torsionally rigid design**
  - **Zero backlash**
  - **No moving parts**
  - **Single beam simple coupling compatible with industry standard types**
  - **3-Beam single stage for increased torsional stiffness**
  - **6-Beam two stage for torsional stiffness and increased radial compliance**
  - **Step Beam for low inertia, electrical isolation, low cost**

Beam couplings will readily accommodate any combination of axial motion, angular and parallel misalignment.

The 3 start helical-cut design provides higher torque capability and reduced wind-up compared with single beam versions.

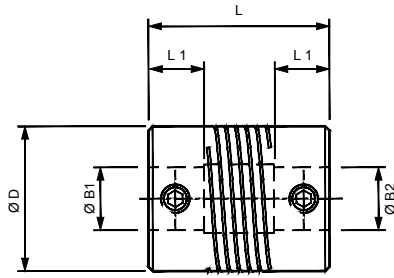
Multi-Beam is available in three standard materials: stainless steel, aluminium and acetal, for shaft diameters from 1mm to 38mm.



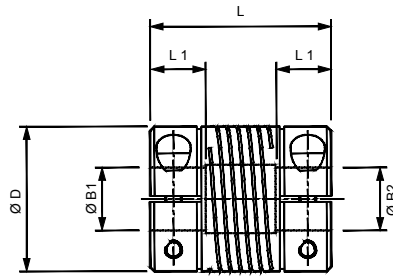
# Multi-Beam

## Stainless Steel Multi-Helix Flexible 3 Beam Couplings

Set Screw Hubs



Clamp Hubs



Materials & Finishes

**Couplings:** Stainless Steel 303 S31

**Fasteners:** Stainless Steel

Temperature Range

-40°F to +284°F

(-40°C to +140°C)

### 3-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	L1 in. (mm)	Bore Diameters			Mass kgx10-3	Fasteners				Angular Offset Deg.	Parallel Offset mm	Torsional Stiffness Nm/rad	Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Relieved	6	720.06	—	.25 (6.4)	0.5 (12.7)	.13 (3.2)	1.0	2.0	3.0	1.93	M2	—	0.7 (0.08)	.035 (0.9)	3	.003 (.07)	1.53	3.98 (0.45)
	9	720.09	—	.37 (9.5)	.56 (14.2)	.18 (4.5)	2.0	3.0	3.18	5.85	M2.5	—	2.0 (0.2)	.051 (1.3)	3	.004 (0.1)	16	4.43 (0.50)
		—	721.09	—	.37 (9.5)	.56 (14.2)	.18 (4.5)	2.0	3.0	3.18	5.85	—	M1.6	1.3 (0.15)				
	13	720.13	—	0.5 (12.7)	.75 (19.1)	.24 (6.0)	3.0	4.0	5.0	13.7	M3	—	2.8 (0.3)	.059 (1.5)	5	.005 (.127)	54	8.85 (1.0)
		—	721.13	—	0.5 (12.7)	.75 (19.1)	.24 (6.0)	3.0	4.0	5.0	13.7	—	M2	2.6 (0.3)				
	16	720.16	—	.63 (15.9)	.80 (20.3)	.26 (6.5)	3.0	4.0	6.35	22.9	M4	—	9.2 (1.0)	.079 (2.0)	5	.005 (.127)	81	15.9 (1.80)
		—	721.16	—	.63 (15.9)	.80 (20.3)	.26 (6.5)	3.0	4.0	6.35	22.9	—	M2.5	6.0 (0.6)				
	19	720.19	—	.75 (19.1)	.90 (22.9)	.26 (6.5)	4.0	4.76	8.0	35.9	M4	—	9.2 (1.0)	.079 (2.0)	5	.005 (.127)	143	23.9 (2.70)
		—	721.19	—	.75 (19.1)	.90 (22.9)	.26 (6.5)	4.0	4.76	8.0	35.9	—	M2.5	6.0 (0.6)				
	25	720.25	—	1.0 (25.4)	1.25 (31.8)	.35 (9.0)	5.0	6.0	10	92.2	M5	—	18.6 (2.1)	.098 (2.5)	5	.005 (.127)	175	53.1 (6.0)
—		721.25	—	1.0 (25.4)	1.25 (31.8)	.35 (9.0)	5.0	6.0	10	92.2	—	M3	10.6 (1.2)	.098 (2.5)				
32	720.32	—	1.25 (31.8)	1.75 (44.5)	.47 (12.0)	6.0	8.0	14	194	M6	—	33.2 (3.7)	0.12 (3.0)	5	.005 (.127)	378	88.5 (10.0)	
	—	721.32	—	1.25 (31.8)	1.75 (44.5)	.47 (12.0)	6.0	8.0	14	194	—	M4	25.2 (2.8)					0.12 (3.0)

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive.

### BORE SIZES 3-BEAM COUPLINGS

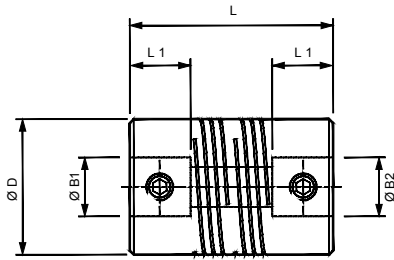
Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)														
	(1)	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)
6	○	●	●												
9		○	●	●											
13			○	○	●	●	●								
16			○	○	●	●	●	●	●						
19					○	●	●	●	●	●					
25							○	●	●	●	●	●			
32								○	○	●	●	●	●	●	●
Bore ref.	8	11	14	16	18	19	20	22	24	28	31	32	35	36	38

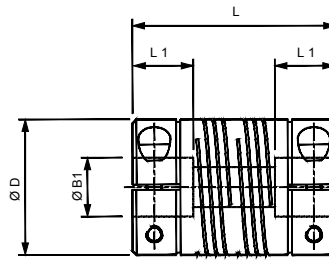
○ B1 only    ● B1 & B2

## Stainless Steel Multi-Helix Flexible 6 Beam Couplings Non-Relieved

### Set Screw Hubs



### Clamp Hubs



### Materials & Finishes

**Couplings:** Stainless Steel 303 S31

**Fasteners:** Stainless Steel

### Temperature Range

-40°F to +284°F

(-40°C to +140°C)

### 6-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	L1 in. (mm)	Bore Diameters			Mass kgx10-3	Fasteners				Angular Offset Deg.	Parallel Offset mm	Torsional Stiffness Nm/rad	Peak Torque lb.in (Nm)
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)				
09	702.09	—	0.4 (9.5)	0.77 (19.6)	0.21 (5.3)	2.0	4.0	4.76	7.0	M2.5	-	2.0 (0.23)	0.51 (1.3)	3.0	.002 (0.12)	5.4	13.3 (1.5)
	—	703.09								-	M1.6	1.3 (0.15)	0.59 (1.5)				
13	702.13	—	0.5 (12.7)	1.00 (25.4)	0.26 (6.5)	3.0	5.0	6.35	17.0	M3	-	2.8 (0.3)	0.59 (1.5)	5.0	.007 (0.17)	25	26.6 (3.0)
	—	703.13								-	M2	2.6 (0.3)	0.59 (1.5)				
16	702.16	—	0.63 (15.9)	1.00 (25.4)	0.26 (6.5)	3.0	6.0	8.0	28.0	M4	-	9.2 (1.0)	.079 (2.0)	5.0	.008 (0.2)	45	44.2 (5.0)
	—	703.16								-	M2.5	6.0 (0.68)	.079 (2.0)				
19	702.19	—	0.75 (19.1)	1.10 (28.0)	0.26 (6.5)	4.76	6.35	10.0	44.0	M4	-	9.2 (1.0)	.079 (2.0)	7.0	0.01 (0.25)	72	70.8 (8.0)
	—	703.19								-	M2.5	6.0 (0.68)	.079 (2.0)				
25	702.25	—	1.00 (25.4)	1.50 (38.1)	0.43 (11.0)	5.0	8.0	12.7	109	M5	-	18.6 (2.1)	.098 (2.5)	7.0	.015 (0.38)	170	141.6 (16.0)
	—	703.25								-	M3	10.6 (1.2)	.098 (2.5)				
32	702.32	—	1.25 (31.8)	2.25 (57.2)	0.63 (16.0)	8.0	10.0	19.0	262	M6	-	33.2 (3.7)	0.12 (3.0)	7.0	0.02 (0.5)	364	221.3 (25.0)
	—	703.32								-	M4	25.2 (2.8)	0.12 (3.0)				
38	702.38	—	1.50 (38.1)	2.63 (66.7)	0.71 (18.0)	8.0	12.0	22.0	443	M6	-	33.2 (3.7)	0.12 (3.0)	7.0	.024 (0.6)	634	318.6 (36.0)
	—	703.38								-	M5	51.8 (5.8)	0.16 (4.0)				
44	702.44	—	1.75 (44.5)	3.00 (76.2)	0.79 (20.0)	9.0	14.0	25.0	687	M6	-	33.2 (3.7)	0.11 (3.0)	7.0	.031 (0.8)	945	424.8 (48.0)
	—	703.44								-	M5	51.3 (5.8)	0.16 (4.0)				
51	702.51	—	2.00 (50.8)	3.75 (95.3)	0.98 (25.0)	10.0	16.0	28.0	1116	M8	-	80.0 (9.0)	0.16 (4.0)	7.0	0.35 (0.9)	1305	646.1 (73.0)
	—	703.51								-	M6	86.3 (9.7)	0.20 (5.0)				
57	702.57	—	2.25 (57.2)	5.12 (130)	1.26 (32.0)	10.0	20.0	32.0	1944	M8	-	80.0 (9.0)	0.16 (4.0)	7.0	.037 (0.95)	1755	902.8 (102.0)
	—	703.57								-	M6	86.3 (9.7)	0.20 (5.0)				
64	702.64	—	2.5 (63.5)	5.91 (150)	1.5 (38.0)	12.0	25.0	38.0	3234	M8	-	80.0 (9.0)	0.16 (4.0)	7.0	0.39 (1.0)	2340	1,239.0 (140.0)
	—	703.64								-	M8	212 (24.0)	0.24 (6.0)				

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive.

### BORE SIZES 6-BEAM COUPLINGS, NON-RELIEVED



Sizes indicated in parenthesis are metric (mm).

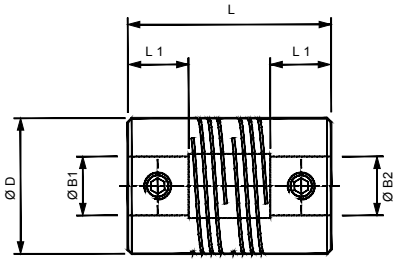
Coupling Size	ØB1, ØB2 +0.0012/-0 (+0.03mm/-0mm)																											
	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)	5/8"	(16)	(18)	(19)	3/4"	(20)	(24)	(25)	1"	(28)	(30)	1 1/4"	(32)	
9	○	○	○	●	●																							
13	○	○	○	○	○	●	●	●																				
16		○	○	○	○	○	●	●	●																			
19						○	○	○	●	●	●																	
25						○	○	○	○	●	●	●	●															
32									○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
38									○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
44										○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
51											○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
57												○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
64													○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bore ref.	11	14	16	18	19	20	22	24	28	31	32	35	36	38	41	42	45	46	47	48	51	52	53	54	56	57	58	

S = Setscrew only

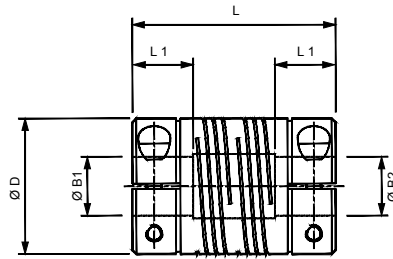
# Multi-Beam

## Stainless Steel Multi-Helix Flexible 6 Beam Couplings

Set Screw Hubs



Clamp Hubs



Materials & Finishes

**Couplings:** Stainless Steel 303  
S31

**Fasteners:** Stainless Steel

Temperature Range

-40°F to +284°F

(-40°C to +140°C)

### 6-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	L1 in. (mm)	Bore Diameters			Mass kgx10 <sup>-3</sup>	Fasteners				Angular Offset Deg.	Parallel Offset mm	Torsional Stiffness Nm/rad	Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Relieved	09	722.09	—	0.4 (9.5)	0.77 (19.6)	0.21 (5.3)	2.0	3.0	4.76	6.5	M2.5	-	1.7 (0.2)	0.51 (1.3)	3.0	.002 (0.12)	3.2	797 (0.9)
	—	723.09	—	—	—	—	—	—	—	—	-	M1.6	1.3 (0.15)	0.59 (1.5)	—	—	—	—
	13	722.13	—	0.5 (12.7)	1.00 (25.4)	0.26 (6.5)	3.0	4.0	6.35	15.0	M3	-	2.8 (0.32)	0.59 (1.5)	5.0	.007 (0.17)	15.0	16.82 (1.9)
	—	723.13	—	—	—	—	—	—	—	—	-	M2	2.6 (0.3)	0.59 (1.5)	—	—	—	—
	16	722.16	—	0.63 (15.9)	1.00 (25.4)	0.26 (6.5)	3.0	4.0	8	24.0	M4	-	9.2 (1.0)	.079 (2.0)	5.0	.008 (0.2)	27.0	30.09 (3.4)
	—	723.16	—	—	—	—	—	—	—	—	-	M2.5	6.0 (0.68)	.079 (2.0)	—	—	—	—
	19	722.19	—	0.75 (19.1)	1.10 (28.0)	0.26 (6.5)	4.76	5.0	10	37.0	M4	-	9.2 (1.0)	.079 (2.0)	7.0	0.01 (0.25)	43.0	42.48 (4.8)
	—	723.19	—	—	—	—	—	—	—	—	-	M2.5	6.0 (0.68)	.079 (2.0)	—	—	—	—
	25	722.25	—	1.00 (25.4)	1.50 (38.1)	0.43 (11.0)	5.0	6.0	12.7	99.0	M5	-	18.5 (2.1)	.098 (2.5)	7.0	.015 (0.38)	102	88.5 (10.0)
	—	723.25	—	—	—	—	—	—	—	—	-	M3	10.6 (1.2)	.098 (2.5)	—	—	—	—
	32	722.32	—	1.25 (31.8)	2.25 (57.2)	0.63 (16.0)	8.0	9.53	19.0	236	M6	-	33.2 (3.7)	0.12 (3.0)	7.0	0.02 (0.5)	218	115.1 (13.0)
	—	723.32	—	—	—	—	—	—	16.0	—	-	M4	51.8 (5.8)	0.12 (3.0)	—	—	—	—
	38	722.38	—	1.50 (38.1)	2.63 (66.7)	0.71 (18.0)	8.0	12.0	22.0	400	M6	-	33.2 (3.7)	0.12 (3.0)	7.0	.024 (0.6)	380	117.0 (20.0)
	—	723.38	—	—	—	—	—	—	19.0	—	-	M5	51.8 (5.8)	0.16 (4.0)	—	—	—	—
	44	722.44	—	1.75 (44.5)	3.00 (76.2)	0.79 (20.0)	9.0	14.0	25.0	523	M6	-	33.2 (3.7)	0.11 (3.0)	7.0	.031 (0.8)	567	239.0 (27.0)
	—	723.44	—	—	—	—	—	—	22.0	—	-	M5	51.3 (5.8)	0.16 (4.0)	—	—	—	—
51	722.51	—	2.00 (50.8)	3.75 (95.3)	0.98 (25.0)	10.0	16.0	28.0	996	M8	-	80.0 (9.0)	0.16 (4.0)	7.0	0.35 (0.9)	783	327.5 (37.0)	
—	723.51	—	—	—	—	—	—	26.0	—	-	M6	86.3 (9.7)	0.20 (5.0)	—	—	—	—	
57	722.57	—	2.25 (57.2)	5.12 (130)	1.26 (32.0)	10.0	20.0	32.0	1708	M8	-	80.0 (9.0)	0.16 (4.0)	7.0	.037 (0.95)	1053	442.5 (50.0)	
—	723.57	—	—	—	—	—	—	30.0	—	-	M6	86.3 (9.7)	0.20 (5.0)	—	—	—	—	
64	722.64	—	2.5 (63.5)	5.91 (150)	1.5 (38.0)	12.0	25.0	38.0	2300	M8	-	80.0 (9.0)	0.16 (4.0)	7.0	0.39 (1.0)	1400	757.3 (65.0)	
—	723.64	—	—	—	—	—	—	36.0	—	-	M8	212 (24.0)	0.24 (6.0)	—	—	—	—	

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive. ④ Torsional Stiffness values based on maximum bores, for smaller bore combinations the values are nearer the non-relieved type.

### BORE SIZES 6-BEAM COUPLINGS, RELIEVED

○ B1 only

● B1 & B2

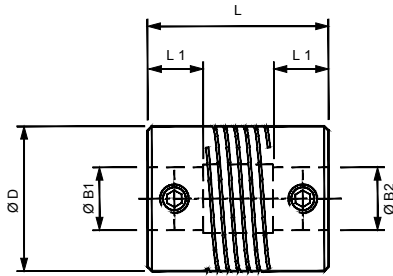
Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)																															
	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)	5/8"	(16)	(18)	(19)	3/4"	(20)	(24)	(25)	1"	(28)	(30)	1 1/4"	(32)					
9	○	●	●	●	●																											
13		○	○	●	●	●	●	●																								
16		○	○	●	●	●	●	●	●																							
19					○	●	●	●	●	●																						
25						○	●	●	●	●	●	●																				
32									○	●	●	●	●	●	●	●																
38									○	●	●	●	●	●	●	●	●	●	●	●												
44										○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
51															○	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
57																																
64																																
Bore ref.	11	14	16	18	19	20	22	24	28	31	32	35	36	38	41	42	45	46	47	48	51	52	53	54	56	57	58					

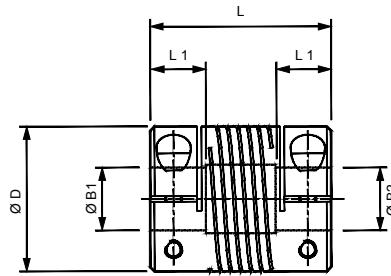
S = Setscrew only

## Aluminium Multi-Helix Flexible 3 Beam Couplings

### Set Screw Hubs



### Clamp Hubs



### Materials & Finishes

**Couplings:** Aluminium L168 or better

**Fasteners:** Alloy steel, black oiled

### Temperature Range

-40°F to +248°F

(-40°C to +120°C)

### 3-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	① L1 in. (mm)	Bore Diameters			Mass kgx10 <sup>-3</sup>	Fasteners				② Angular Offset Deg.	② Parallel Offset mm	Torsional Stiffness Nm/rad	③ Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Relieved	6	724.06	—	.25 (6.4)	0.5 (12.7)	.13 (3.2)	1.0	2.0	3.0	0.7	M2	—	1.7 (0.2)	.035 (0.9)	3.0	.003 (.07)	1.53	354 (0.40)
	9	724.09	—	.37 (9.5)	.56 (14.2)	.18 (4.5)	2.0	3.0	3.18	2.2	M2.5	—	4.8 (0.5)	.051 (1.3)	3.0	.004 (0.1)	5.4	354.02 (0.40)
		—	725.09	—	—	—	—	—	—	—	—	M1.6	—	.059 (1.5)				
	13	724.13	—	0.5 (12.7)	.75 (19.1)	.24 (6.0)	3.0	4.0	5.0	5.0	M3	—	8.0 (0.9)	.059 (1.5)	5.0	.005 (.127)	28.0	796.57 (0.90)
		—	725.13	—	—	—	—	—	—	—	—	M2	—	.059 (1.5)				
	16	724.16	—	.63 (15.9)	.80 (20.3)	.26 (6.5)	3.0	4.0	6.35	8.2	M4	—	19.5 (2.2)	.079 (2.0)	5.0	.005 (.127)	38.0	13.28 (1.50)
		—	725.16	—	—	—	—	—	—	—	—	M2.5	—	.079 (2.0)				
	19	724.19	—	.75 (19.1)	.90 (22.9)	.26 (6.5)	4.0	4.76	8.0	12.8	M4	—	19.5 (2.2)	.079 (2.0)	5.0	.005 (.127)	65.0	22.13 (2.50)
—		725.19	—	—	—	—	—	—	—	—	M2.5	—	.079 (2.0)					
25	724.25	—	1.0 (25.4)	1.25 (31.8)	.35 (9.0)	5.0	6.0	10	32.6	M5	—	40.7 (4.6)	.098 (2.5)	5.0	.005 (.127)	121	35.4 (4.0)	
	—	725.25	—	—	—	—	—	—	—	—	M3	—	.098 (2.5)					
32	724.32	—	1.25 (31.8)	1.75 (44.5)	.47 (12.0)	6.0	8.0	14	70	M6	—	67.3 (7.6)	0.12 (3.0)	5.0	.005 (.127)	238	53.1 (8.0)	
	—	725.32	—	—	—	—	—	—	—	—	M4	—	0.12 (3.0)					

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive.

### BORE SIZES 3-BEAM COUPLINGS

Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)														
	(1)	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)
6	○	●	●												
9		○	●	●											
13			○	○	●	●	●								
16				○	●	●	●	●	●						
19					○	●	●	●	●	●					
25							○	●	●	●	●	●			
32									○	○	●	●	●	●	●
<b>Bore ref.</b>	<b>8</b>	<b>11</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>22</b>	<b>24</b>	<b>28</b>	<b>31</b>	<b>32</b>	<b>35</b>	<b>36</b>	<b>38</b>

○ B1 only

● B1 & B2

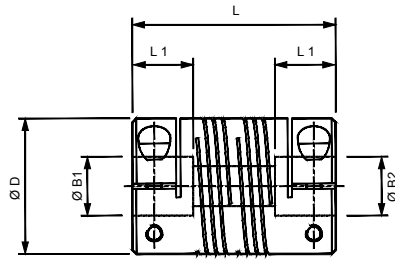
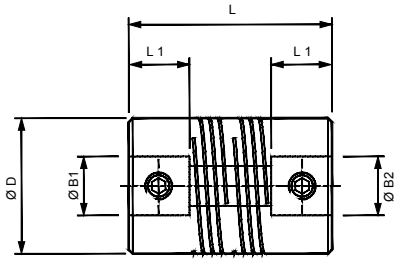


# Multi-Beam

## Aluminium Multi-Helix Flexible 6 Beam Couplings Non-Relieved

Set Screw Hubs

Clamp Hubs



Materials & Finishes

**Couplings:** Aluminium L168 or better

**Fasteners:** Alloy steel, black oiled

Temperature Range

-40°F to +248°F

(-40°C to +120°C)

### 6-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	Ø D in. (mm)	L in. (mm)	L1 in. (mm)	Bore Diameters			Mass kgx10-3	Fasteners				Angular Offset Deg.	Parallel Offset mm	Torsional Stiffness Nm/rad	Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Non-Relieved	09	706.09	—	0.4 (9.5)	0.77 (19.6)	0.21 (5.3)	2.0	4.0	4.76	2.85	M2.5	-	4.8 (0.55)	0.51 (1.3)	3.0	.002 (0.12)	1.8	8.85 (1.0)
		—	707.09									-	M1.6	2.6 (0.29)				
	13	706.13	—	0.5 (12.7)	.09 (22.9)	0.26 (6.5)	3.0	5.0	6.35	5.5	M3	—	8.0 (0.90)	0.59 (1.5)	5.0	.007 (0.17)	14.0	17.7 (2.0)
		—	707.13									-	M2	5.8 (0.66)				
	16	706.16	—	0.63 (15.9)	1.00 (25.4)	0.26 (6.5)	3.0	6.0	8	9.8	M4	—	22.1 (2.5)	.098 (2.5)	5.0	.008 (0.2)	27.0	30.09 (3.4)
		—	707.16									-	M2.5	11.5 (1.3)				
	19	706.19	—	0.75 (19.1)	1.04 (26.5)	0.26 (6.5)	4.76	6.35	10	14.0	M4	—	22.1 (2.5)	.098 (2.5)	7.0	0.01 (0.25)	46.0	46.9 (5.3)
		—	707.19									-	M2.5	11.5 (1.3)				
	25	706.25	—	1.00 (25.4)	1.50 (38.1)	0.43 (11.0)	5.0	8.0	12.7	38.0	M5	—	40.7 (4.6)	.098 (2.5)	7.0	.015 (0.38)	108	88.5 (10.0)
		—	707.25									-	M3	21.2 (2.4)				
	32	706.32	—	1.25 (31.8)	2.25 (57.2)	0.63 (16.0)	8.0	9.53	19.0	92.0	M6	—	67.3 (7.6)	0.12 (3.0)	7.0	0.02 (0.5)	225	132.8 (15.0)
		—	707.32						16.0			-	M4	49.6 (5.6)				
	38	706.38	—	1.50 (38.1)	2.63 (66.7)	0.71 (18.0)	8.0	12.0	22.0	154	M6	—	67.3 (7.6)	0.12 (3.0)	7.0	.024 (0.6)	315	194.7 (22.0)
		—	707.38						19.0			-	M5	97.4 (11.0)				
	44	706.44	—	1.75 (44.5)	3.00 (76.2)	0.79 (20.0)	9.0	14.0	25.0	239	M6	—	67.3 (7.6)	0.11 (3.0)	7.0	.031 (0.8)	459	265.5 (30.0)
		—	707.44						22.0			-	M5	97.4 (11.0)				
51	706.51	—	2.00 (50.8)	3.75 (95.3)	0.98 (25.0)	10.0	16.0	28.0	389	M8	—	159 (18)	0.16 (4.0)	7.0	0.35 (0.9)	666	354 (40.0)	
	—	707.51						26.0			-	M6	168 (19)					0.20 (5.0)
57	706.57	—	2.25 (57.2)	5.12 (130)	1.26 (32.0)	10.0	20.0	32.0	674	M8	—	159 (18)	0.16 (4.0)	7.0	.037 (0.95)	918	486.8 (55.0)	
	—	707.57						30.0			-	M6	168 (19)					0.20 (5.0)
64	706.64	—	2.5 (63.5)	5.91 (150)	1.5 (38.0)	12.0	25.0	38.0	1118	M8	—	159 (18)	0.16 (4.0)	7.0	0.39 (1.0)	1125	663.8 (75.0)	
	—	707.64						36.0			-	M8	407 (46)					0.24 (6.0)

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive.

### BORE SIZES 6-BEAM COUPLINGS, NON-RELIEVED

○ B1 only

● B1 & B2

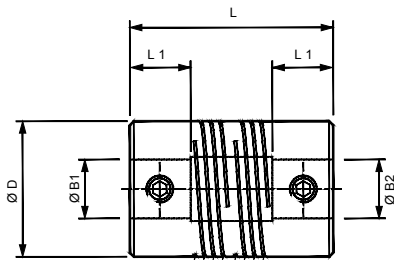
Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)																											
	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)	5/8"	(16)	(18)	(19)	3/4"	(20)	(24)	(25)	1"	(28)	(30)	1 1/4"	(32)	
9	○	○	○	●	●																							
13		○	○	○	○	●	●	●																				
16			○	○	○	○	○	●	●																			
19					○	○	○	○	●	●	●																	
25						○	○	○	○	●	●	●	●															
32									○	○	○	○	○	○	●	●	●	●										
38									○	○	○	○	○	○	○	○	○	○	○	○								
44										○	○	○	○	○	○	○	○	○	○	○	○	S	S					
51											○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
57												○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
64													○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Bore ref.	11	14	16	18	19	20	22	24	28	31	32	35	36	38	41	42	45	46	47	48	51	52	53	54	56	57	58	

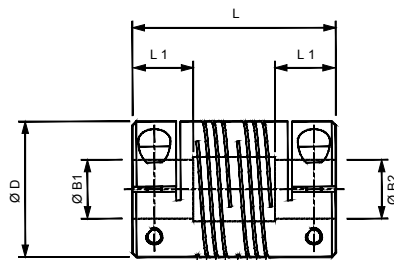
S = Setscrew only

## Aluminium Multi-Helix Flexible 6 Beam Couplings

### Set Screw Hubs



### Clamp Hubs



### Materials & Finishes

**Couplings:** Aluminium L168 or better

**Fasteners:** Alloy steel, black oiled

### Temperature Range

-40°F to +248°F

(-40°C to +120°C)

### 6-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	① L1 in. (mm)	Bore Diameters			Mass kgx10 <sup>-3</sup>	Fasteners				② Angular Offset Deg.	② Parallel Offset mm	④ Torsional Stiffness Nm/rad	③ Peak Torque lb.in (Nm)
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)				
Relieved	09	726.09 -	0.4 (9.5)	0.77 (19.6)	0.21 (5.3)	2.0	3.0	4.76	2.5	M2.5	-	4.8 (0.55)	0.51 (1.3)	3.0	.002 (0.12)	0.9	5.31 (0.6)
	-	727.09								-	M1.6	2.6 (0.29)	0.59 (1.50)				
	13	726.13 -	0.5 (12.7)	.09 (22.9)	0.26 (6.5)	3.0	4.0	6.35	5.0	M3	-	8.0 (0.9)	0.59 (1.5)	5.0	.007 (0.17)	7.0	11.5 (1.3)
	-	727.13								-	M2	5.8 (0.66)	0.59 (1.5)				
	16	726.16 -	0.63 (15.9)	1.00 (25.4)	0.26 (6.5)	3.0	4.0	8	8.6	M4	-	19.5 (2.2)	0.59 (1.5)	5.0	.008 (0.2)	13.5	17.7 (2.0)
	-	727.16								-	M2.5	11.5 (1.3)	.079 (2.0)				
	19	726.19 -	0.75 (19.1)	1.04 (26.5)	0.26 (6.5)	4.76	5.0	10	12.4	M4	-	19.5 (2.2)	.098 (2.5)	7.0	0.01 (0.25)	23.0	26.6 (3.0)
	-	727.19								-	M2.5	11.5 (1.3)	.079 (2.0)				
	25	726.25 -	1.00 (25.4)	1.50 (38.1)	0.43 (11.0)	5.0	6.0	12.7	35.0	M5	-	40.7 (4.6)	.098 (2.5)	7.0	.015 (0.38)	54	44.25 (5.0)
	-	727.25								-	M3	21.2 (2.4)	.098 (2.5)				
	32	726.32 -	1.25 (31.8)	2.25 (57.2)	0.63 (16.0)	8.0	9.53	19.0	84.0	M6	-	67.3 (7.6)	0.12 (3.0)	7.0	0.02 (0.5)	112	61.96 (7.0)
	-	727.32						16.0		-	M4	49.6 (5.6)	0.12 (3.0)				
	38	726.38 -	1.50 (38.1)	2.63 (66.7)	0.71 (18.0)	8.0	12.0	22.0	140	M6	-	67.3 (7.6)	0.12 (3.0)	7.0	.024 (0.6)	157	97.36 (11.0)
	-	727.38						19.0		-	M5	97.4 (11.0)	0.16 (4.0)				
44	726.44 -	1.75 (44.5)	3.00 (76.2)	0.79 (20.0)	9.0	14.0	25.0	218	M6	-	67.3 (7.6)	0.11 (3.0)	7.0	.031 (0.8)	229	132.7 (15.0)	
-	727.44						22.0		-	M5	97.4 (11.0)	0.16 (4.0)					
51	726.51 -	2.00 (50.8)	3.75 (95.3)	0.98 (25.0)	10.0	16.0	28.0	348	M8	-	159 (18)	0.16 (4.0)	7.0	0.35 (0.9)	333	177.0 (20.0)	
-	727.51						26.0		-	M6	168 (19)	0.20 (5.0)					
57	726.57 -	2.25 (57.2)	5.12 (130)	1.26 (32.0)	10.0	20.0	32.0	593	M8	-	159 (18)	0.16 (4.0)	7.0	.037 (0.95)	459	247.8 (28.0)	
-	727.57						30.0		-	M6	168 (19)	0.20 (5.0)					
64	726.64 -	2.5 (63.5)	5.91 (150)	1.5 (38.0)	12.0	25.0	38.0	1198	M8	-	159 (18)	0.16 (4.0)	7.0	0.39 (1.0)	560	336.6 (38.0)	
-	727.64						36.0		-	M8	407 (46)	0.24 (6.0)					

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive. ④ Torsional Stiffness values based on maximum bores, for smaller bore combinations the values are nearer the non-relieved type.

### BORE SIZES 6-BEAM COUPLINGS, RELIEVED

○ B1 only

● B1 & B2

Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)																															
	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)	5/8"	(16)	(18)	(19)	3/4"	(20)	(24)	(25)	1"	(28)	(30)	1 1/4"	(32)					
9	○	●	●	●																												
13		○	○	●	●	●	●	●																								
16			○	○	●	●	●	●	●																							
19					○	●	●	●	●	●																						
25						○	●	●	●	●	●	●	●																			
32									○	●	●	●	●	●	●	●	●															
38									○	●	●	●	●	●	●	●	●	●	●	●												
44										○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
51											○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
57											○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
64											○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Bore ref.	11	14	16	18	19	20	22	24	28	31	32	35	36	38	41	42	45	46	47	48	51	52	53	54	56	57	58					

S = Setscrew only

# Multi-Beam

## Acetal Multi-Helix Flexible 3 Beam Couplings

Set Screw Hubs

Clamp Hubs

Materials & Finishes

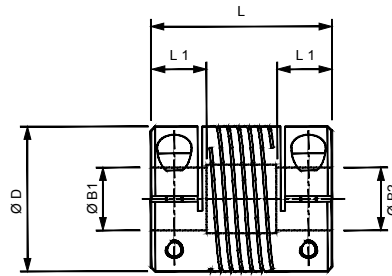
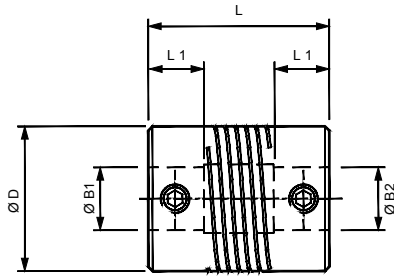
**Couplings:** Acetal (natural)

**Fasteners:** Stainless Steel

Temperature Range

-4°F to +140°F

(-20°C to +60°C)



### 3-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	① L1 in. (mm)	Bore Diameters			Mass kgx10-3	Fasteners				② Angular Offset Deg.	② Parallel Offset mm	Torsional Stiffness Nm/rad	③ Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Relieved	13	728.13	-	0.50 (12.7)	.750 (19.1)	0.24 (6.0)	3.0	4.0	5.0	2.9	M3	-	2.8 (0.3)	.059 (1.5)	5.0	.005 (.127)	1.9	2.12 (0.24)
		-	729.13									-	M2	2.0 (0.2)				
	16	728.16	-	0.63 (15.9)	0.80 (20.3)	0.26 (6.5)	3.0	4.0	6.0	4.9	M4	-	9.2 (1.0)	.079 (2.0)	5.0	.005 (.127)	2.7	3.10 (0.35)
		-	729.16									-	M2.5	4.5 (0.5)				
	19	728.19	-	0.75 (19.1)	0.90 (22.9)	0.26 (6.5)	4.0	4.76	8.0	7.5	M4	-	9.2 (1.0)	.079 (2.0)	5.0	.005 (.127)	4.0	5.66 (0.64)
		-	729.19									-	M2.5	4.5 (0.5)				
25	728.25	-	1.0 (25.4)	1.25 (31.8)	0.35 (9.0)	5.0	6.0	10.0	19.0	M5	-	18.6 (2.1)	.098 (2.5)	5.0	.005 (.127)	11	12.39 (1.40)	
	-	729.25									-	M3	8.0 (0.9)					.098 (2.5)
32	728.32	-	1.25 (31.8)	1.75 (44.5)	0.47 (12.0)	6.0	8.0	14.0	44.0	M6	-	33 (3.7)	0.12 (3.0)	5.0	.005 (.127)	21	22.13 (2.50)	
	-	729.32									-	M4	18.9 (2.1)					0.12 (3.0)

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive.

### BORE SIZES 3-BEAM COUPLINGS

Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)												
	(1)	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)
13			○	○	●	●	●						
16			○	○	●	●	●						
19					○	●	●	●	●	●			
25							○	●	●	●	●	●	
32								○	○	●	●	●	●
Bore ref.	8	11	14	16	18	19	20	22	24	28	31	32	35

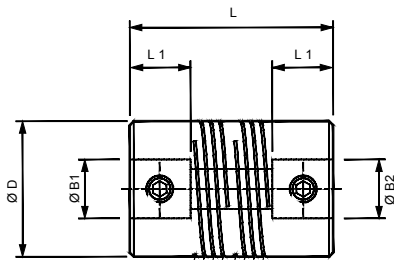
○ B1 only

● B1 & B2

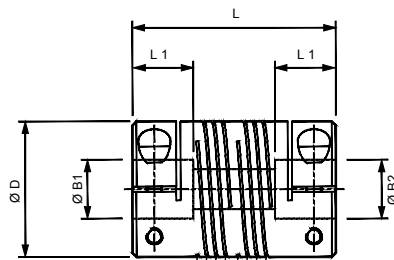


## Acetal Multi-Helix Flexible 6 Beam Couplings Non-Relieved

### Set Screw Hubs



### Clamp Hubs



### Materials & Finishes

**Couplings:** Acetal (natural)  
**Fasteners:** Stainless Steel

### Temperature Range

-4°F to +140°F  
 (-20°C to +60°C)

### 6-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	① L1 in. (mm)	Bore Diameters			Mass kgx10-3	Fasteners				② Angular Offset Deg.	② Parallel Offset mm	④ Torsional Stiffness Nm/rad	③ Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Non-Relieved	13	710.13 -	-	0.50 (12.7)	0.9 (22.9)	0.26 (6.5)	3.0	5.0	6.0	3.2	M3	-	2.8 (0.3)	.059 (1.5)	5.0	.007 (0.17)	1.3	4.51 (0.51)
			711.13								-	M2	2.0 (0.2)	.059 (1.5)				
	16	710.16 -	-	0.63 (15.9)	1.00 (25.4)	0.26 (6.5)	3.0	6.0	8.0	5.4	M4	-	9.2 (1.0)	.079 (2.0)	5.0	.008 (0.2)	1.8	8.05 (0.91)
			711.16								-	M2.5	4.5 (0.5)	.079 (2.0)				
	19	710.19 -	-	0.75 (19.1)	1.04 (26.5)	0.26 (6.5)	4.0	6.35	9.53	8.0	M4	-	9.2 (1.0)	.079 (2.0)	7.0	0.01 (0.25)	2.7	11.5 (1.3)
			711.19								-	M2.5	4.5 (0.5)	.079 (2.0)				
	25	710.25 -	-	1.0 (25.4)	1.5 (38.1)	0.43 (11.0)	5.0	8.0	12.0	21.0	M5	-	18.6 (2.1)	.098 (2.5)	7.0	0.15 (0.38)	8.0	22.13 (2.5)
			711.25								-	M3	8.0 (0.9)	.098 (2.5)				
	32	710.32 -	-	1.25 (31.8)	2.25 (57.2)	0.63 (16.0)	6.0	10.0	16.0	51.0	M6	-	33 (3.7)	0.12 (3.0)	7.0	0.02 (0.5)	14.0	35.4 (4.0)
			711.32								-	M4	18.9 (2.1)	0.12 (3.0)				

- ① Length of supported bore.      ③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)  
 ② Max. compensation values are mutually exclusive.      ④ Torsional Stiffness values based on maximum bores, for smaller bore combinations the values are nearer the non-relieved type.

### BORE SIZES 6-BEAM COUPLINGS, NON-RELIEVED

Sizes indicated in parenthesis are metric (mm).

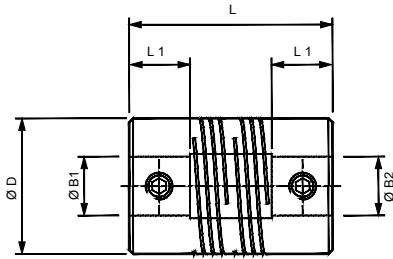
Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)															
	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)	5/8"	(16)
13		○	○	○	○	●	●									
16		○	○	○	○	○	●	●								
19					○	○	○	●	●	●						
25						○	○	○	●	●	●	●				
32									○	○	●	●	●	●	●	●
<b>Bore ref.</b>	<b>11</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>22</b>	<b>24</b>	<b>28</b>	<b>31</b>	<b>32</b>	<b>35</b>	<b>36</b>	<b>38</b>	<b>41</b>	<b>42</b>

○ B1 only      ● B1 & B2

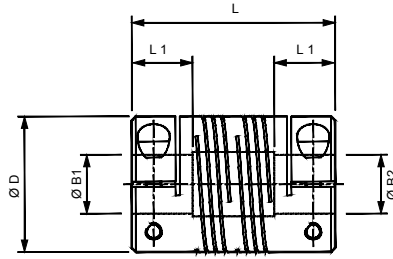
# Multi-Beam

## Acetal Multi-Helix Flexible 6 Beam Couplings

Set Screw Hubs



Clamp Hubs



Materials & Finishes

**Couplings:** Acetal (natural)

**Fasteners:** Stainless Steel

Temperature Range

-4°F to +140°F

(-20°C to +60°C)

### 6-BEAM COUPLINGS: DIMENSIONS & ORDER CODES

Coupling Type & Size	Set Screw Style	Clamp Type	ØD in. (mm)	L in. (mm)	① L1 in. (mm)	Bore Diameters			Mass kgx10-3	Fasteners				② Angular Offset Deg.	② Parallel Offset mm	Torsional Stiffness Nm/rad	③ Peak Torque lb.in (Nm)	
						Min B1	Min B2	Max B1 & B2		Set Screw	Cap Screw	Torque lbs.-in. (Nm)	Wrench in. (mm)					
Relieved	13	730.13	—	0.50 (12.7)	0.9 (22.9)	0.26 (6.5)	3.0	4.0	5.0	3.2	M3	-	2.8 (0.3)	.059 (1.5)	5.0	.007 (0.17)	0.5	2.83 (.32)
		—	731.13								-	M2	2.0 (0.2)	.059 (1.5)				
	16	730.16	—	0.63 (15.9)	1.00 (25.4)	0.26 (6.5)	3.0	4.0	6.35	5.4	M4	-	9.2 (1.0)	.079 (2.0)	5.0	.008 (0.2)	0.7	5.40 (.61)
		—	731.16								-	M2.5	4.5 (0.5)	.079 (2.0)				
	19	730.19	—	0.75 (19.1)	1.04 (26.5)	0.26 (6.5)	4.0	5.0	8.0	7.8	M4	-	9.2 (1.0)	.079 (2.0)	7.0	0.01 (0.25)	1.0	7.70 (.87)
		—	731.19								-	M2.5	4.5 (0.5)	.079 (2.0)				
	25	730.25	—	1.0 (25.4)	1.5 (38.1)	0.43 (11.0)	5.0	6.0	10.0	21.0	M5	-	18.6 (2.1)	.098 (2.5)	7.0	.015 (0.38)	3.2	14.80 (1.67)
		—	731.25								-	M3	8.0 (0.9)	.098 (2.5)				
	32	730.32	—	1.25 (31.8)	1.25 (31.8)	2.25 (57.2)	8.0	9.53	12.7	52.0	M6	-	33 (3.7)	0.12 (3.0)	7.0	0.02 (0.5)	5.6	21.1 (2.4)
		—	731.32								-	M4	18.9 (2.1)	0.12 (3.0)				

① Length of supported bore.

③ **Peak torque.** Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)

② Max. compensation values are mutually exclusive.

### BORE SIZES 6-BEAM COUPLINGS, RELIEVED

Sizes indicated in parenthesis are metric (mm).

Coupling Size	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)												
	(2)	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"
13		○	○	●	●	●							
16		○	○	●	●	●	●	●					
19					○	●	●	●	●				
25						○	●	●	●	●	●		
32									○	●	●	●	●
Bore ref.	11	14	16	18	19	20	22	24	28	31	32	35	36

○ B1 only    ● B1 & B2