

Universal / Lateral Offset Couplings



Materials & Finishes

Hub sizes 18 & 27: Brass BS 2874 CZ121

Hub sizes 34, 41 & 70: Al. Alloy 2014 T6
Irridite NCP

Fasteners: Alloy steel, black oiled

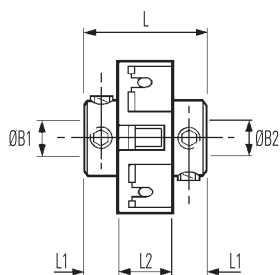
Clamp rings (sizes 18 & 27): Al. Alloy 2014 T6
Irridite NCP

Torque rings, all sizes: Acetal (black)

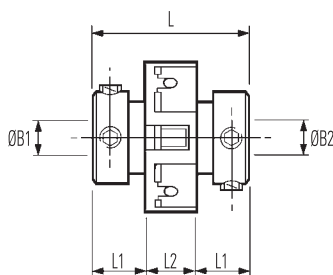
Temperature Range

-20°F to +140°F (-20°C to +60°C)

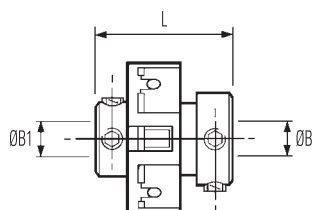
Set screw hubs



Ref. 201
Small bores



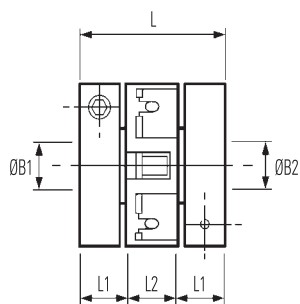
Ref. 203
Large bores



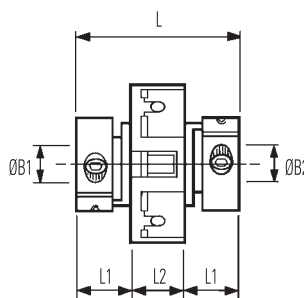
Ref. 221 (not listed in main table).
Combines large & small bores.
See explanatory note on facing page

Coupling ref. 221	
Size	L in. (mm)
18	0.66 (16.7)
27	0.88 (22.3)
34	1.10 (28.0)
41	1.31 (33.3)

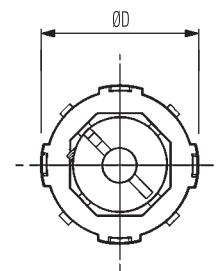
Clamp hubs



Ref. 207
Collet hub & ring clamp

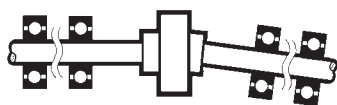


Ref. 205
Integral leaf clamp



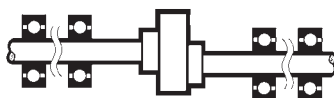
Typical

Installation



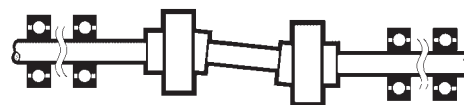
right

Up to 10° angular offset,
depending on type



right

Up to 1mm radial offset for
extreme misalignments



wrong

Standard Uni-Lats cannot be used in pairs.
Special versions are available for use in this mode.
Please enquire.

Uni-Lat

Universal / Lateral Offset Couplings

DIMENSIONS & ORDER CODES

Coupling Size	Set Screw Hubs	Clamp Hubs	ØD in. (mm)	L in. (mm)	① L1 in. (mm)	② L2 in. (mm)	ØB1, ØB2 max in. (mm)	Fasteners			④ Moment of inertia kgm ² x 10 ⁻⁸	④ Mass kg x 10 ⁻³
								Screw	③ Torque lb.-in. (Nm)	Wrench in. (mm)		
COUPLING REF												
18	201.18	—	.71 (18.0)	.56 (14.2)	.18 (4.6)	0.20 (5.1)	0.20 (5)	M3	0.94	0.06 (1.5)	20	7
	203.18	—	.75 (19.1)	0.28 (7.0)	0.25 (6.35)							
	—	207.18 ‡ 218	0.75 (19.1)				M2.5	1.32	0.08 (2.0)	55	11	
27	201.27	—	1.10 (28.0)	.75 (19.1)	0.24 (6.1)	0.27 (6.9)	0.31 (8)	M3	0.94	0.06 (1.5)	91	16
	203.27	—	1.0 (25.4)	0.37 (9.3)	0.39 (10)							
	—	207.27 ‡ 218					M3	2.43	0.10 (2.5)	220	26	
34	201.34	—	1.33 (33.7)	.99 (25.2)	0.32 (8.1)	0.35 (8.9)	0.38 (10)	M4	2.27	.08 (2.0)	165	17
	203.34	—	1.21 (30.7)	0.43 (10.9)	0.5 (12.7)							
	—	205.34					M2.5	1.32		183	20	
41	201.41	—	1.63 (41.4)	1.12 (28.4)	0.34 (8.6)	0.44 (11.2)	0.5 (12.7)	M4	2.27	.08 (2.0)	476	30
	203.41	—	1.5 (38.1)	0.53 (13.5)	0.63 (16)							
	—	205.41					M5	4.62	0.10 (2.5)	550	40	
70	203.70	—	1.14 (69.0)	2.91 (74.0)	1.12 (28.5)	0.67 (17.0)	0.87 (22)	M6	7.60	0.12 (3.0)	7315	189
	—	205.70										

- ① Length of supported thro' bore. Shafts must not penetrate beyond L1 when in operation.
- ② Nominal distance between shafts inserted to L1.
- ③ Maximum recommended tightening torque.
- ④ Values apply with max bores.
- ⑤ Peak torque. Select a size where Peak Torque exceeds the application torque x service factor. (see page 4)
- ⑥ Couplings can provide up to 1mm radial and 10° angular compensation (5° for ref. 207) when required. Observe given values for maximum backlash-free life. Electrical isolation between shafts > 3kV for all models when offset ≤5°.
- ⑦ Values apply at 50% peak torque with no misalignment, measured shaft-to-shaft with largest standard bores.

‡ Ref. 207 only. Insert both bore codes in place of ‡.

PERFORMANCE AT 20°C

Coupling Size	⑤ Peak torque lb.-in. (Nm)	⑥ Max compensation @ 3000 rpm		⑦ Torsional		Axial		Static break torque lb.-in. (Nm)
		Angular deg	Radial in. (mm)	Rate deg / Nm	Stiffness Nm / rad	Max loading ±N	Stiffness N / mm	
18	2.66 (0.3)	2	.008 (0.2)	2.3	25	19	6.10	7.97 (0.9)
27	15.1 (1.7)		.008 (0.2)	0.6	92	31	350	44.3 (5.0)
34	22.1 (2.5)		.010 (0.25)	0.4	146	34	300	66.4 (7.5)
41	31.0 (3.5)		.010 (0.25)	0.19	299	39	250	92.9 (10.5)
70	106 (12.0)		.010 (0.25)	0.19	1300	75	540	602 (68)

Coupling ref. 221

By specifying ref. 221 (not listed in tables, see diagram facing page) you can combine the bores coded for ref. 201 with those coded for ref. 203,

eg., 221.27.2432 specifies Size 27 with Ø6.35 x 10 bores.

IMPORTANT

Load capacity depends on application conditions: **see page 4** for details

STANDARD BORES

Sizes indicated in parenthesis are metric (mm).

Coupling size	ref.	ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)																				
		(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	5/16"	(8)	3/8"	(10)	(12)	1/2"	(14)	5/8"	(16)	(18)	(19)	3/4"	(18)	
18	201.18	•	•	•	•																	
	203.18						•	•														
	207.18	•	•	•	•	•	•	•														
27	201.27	•	•	•	•	•	•	•	•													
	203.27									•	•											
	207.27					•	•	•		•	•	•										
34	201.34						•	•		•	•	•										
	203.34												•	•								
	206.34						•	•	•	•	•	•										
41	201.41						•	•		•	•	•	•									
	203.41														•	•	•					
	205.41						•	•		•	•	•	•									
70	203.70												•	•	•	•	•	•	•	•	•	
	205.70												•	•	•	•	•	•	•	•	•	
Bore ref.		14	16	18	19	20	22	24	27	28	31	32	35	36	38	41	42	45	46	47	48	
Corresponding bore adaptor						251		253		254* 255		257		259			260					261

Diameters for which a bore adaptor is shown can be adapted to smaller shaft sizes. See page 58 for details.

*Note that adaptor 254 is dedicated to coupling ref. 201.27. Use adaptor 255 for all other 8mm diameters.