

Round & Keywayed Bore Details & Codes

Metric mm	Inch fraction	Inch decimal	Round bore code	Metric keys		Inch keys		Keywayed bore code
				Key size w x h	K	Key size w x h	K	
1	—	0.0394	08	—	—	—	—	—
1.588	1/16	0.0625	10	—	—	—	—	—
2	—	0.0787	11	—	—	—	—	—
2.286	—	0.0900	12	—	—	—	—	—
3	—	0.1181	14	—	—	—	—	—
3.048	—	0.1200	15	—	—	—	—	—
3.175	1/8	0.1250	16	—	—	—	—	—
*3.969	5/32	0.1563	—	—	—	—	—	—
4	—	0.1575	18	—	—	—	—	—
4.763	3/16	0.1875	19	—	—	—	—	—
5	—	0.1969	20	—	—	—	—	—
6	—	0.2362	22	—	—	—	—	—
6.350	1/4	0.2500	24	—	—	—	—	—
7	—	0.2756	25	2 x 2	8.00	—	—	P25
7.938	5/16	0.3125	27	—	—	1/8 x 1/8	0.3755	R27
8	—	0.3150	28	2 x 2	9.00	—	—	P28
9	—	0.3543	30	3 x 3	10.40	—	—	P30
9.525	3/8	0.3750	31	—	—	1/8 x 1/8	0.4380	R31
10	—	0.3937	32	3 x 3	11.40	—	—	P32
11	—	0.4331	33	4 x 4	12.80	—	—	P33
12	—	0.4724	35	4 x 4	13.80	—	—	P35
12.700	1/2	0.5000	36	—	—	1/8 x 1/8	0.5630	R36
13	—	0.5118	37	5 x 5	15.30	—	—	P37
14	—	0.5512	38	5 x 5	16.30	—	—	P38
15	—	0.5906	40	5 x 5	17.30	—	—	P40
15.875	5/8	0.6250	41	—	—	3/16 x 3/16	0.7160	R41
16	—	0.6299	42	5 x 5	18.30	—	—	P42
17	—	0.6693	43	5 x 5	19.30	—	—	P43
18	—	0.7087	45	6 x 6	20.80	—	—	P45
19	—	0.7480	46	6 x 6	21.80	—	—	P46
19.050	3/4	0.7500	47	—	—	3/16 x 3/16	0.8410	R47
20	—	0.7874	48	6 x 6	22.80	—	—	P48
22	—	0.8661	49	6 x 6	24.80	—	—	P49
22.225	7/8	0.8750	50	—	—	1/4 x 1/4	0.9930	R50
24	—	0.9449	51	8 x 7	27.30	—	—	P51
25	—	0.9843	52	8 x 7	28.30	—	—	P52
25.400	1	1.0000	53	—	—	1/4 x 1/4	1.1180	R53
28	—	1.1024	54	8 x 7	31.30	—	—	P54
28.575	1-1/8	1.1250	55	—	—	5/16 x 1/4	1.2400	R55
30	—	1.1811	56	8 x 7	33.30	—	—	P56
31.750	1-1/4	1.2500	57	—	—	5/16 x 1/4	1.3580	R57
32	—	1.2598	58	10 x 8	35.30	—	—	P58
34.925	1-3/8	1.3750	59	—	—	3/8 x 1/4	1.4830	R59
35	—	1.3780	60	10 x 8	38.30	—	—	P60
38	—	1.4961	61	10 x 8	41.30	—	—	P61
40	—	1.575	63	12 x 8	43.30	—	—	P63
50	—	1.969	70	14 x 9	53.8	—	—	P70
50.800	—	2.000	71	—	—	1/2 x 1/2	2.224	R71
55	—	2.165	73	16 x 10	59.3	—	—	P73
60	—	2.362	75	18 x 11	64.4	—	—	P75
63.500	2-1/2	2.500	77	—	—	5/8 x 5/8	2.778	R77
65	—	2.559	78	18 x 11	69.4	—	—	P78

All shaft mounted products in this catalogue can be specified with inch and/or metric bore diameters. A standard range of sizes is listed for each product. Where physical dimensions permit, keyways may be specified at extra cost.

For the sake of uniformity and avoidance of errors when ordering, bore diameters are designated with a 2-digit number which forms part of the order code. Please note that only the bore diameters listed for each product in the product pages are standard.

To specify a **keywayed** bore, prefix the 2-digit number with a 'P' for metric keyways or an 'R' for an inch keyway.

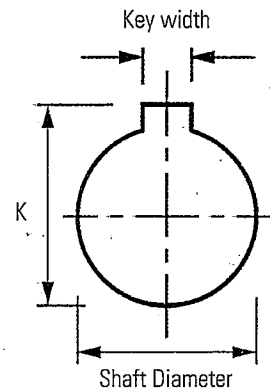
Standard keyways are machined to 2 specifications:

Bore codes prefixed 'P' denote a metric keyway conforming to ISO 773/774 (BS 4235 Pt. 1).

Bore codes prefixed 'R' denote an inch keyway conforming to BS 46 Pt. 1.

In most cases, keyways prefixed 'R' are compatible with AGMA 9002-A86 but can differ in the depth of the key seat.

All Huco couplings are RoHS compliant.



Note that our tooling produces a key seat classified as 'nominal' being a nominal clearance on standard keys

Order Codes

Combine the COUPLING REF in Main Product Tables with BORE REFS in Standard Bores Table. Please identify both bores e.g.

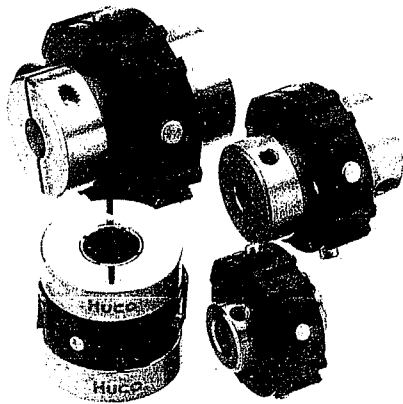
706.19.1924

Coupling ref.

Ø B1 ref.

Ø B2 ref.

*Not manufactured. Nearest alternative 4mm. Intermediate size available on request



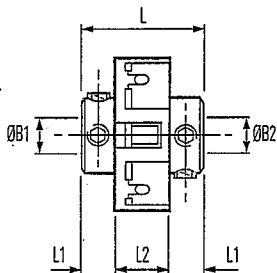
Materials & Finishes

- 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)

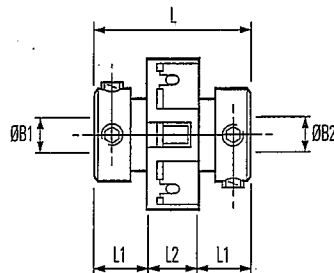
Temperature Range

-20°C to +60°C

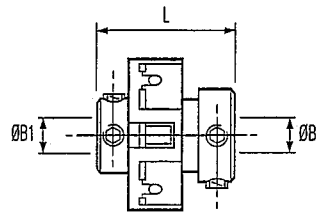
Set screw hubs



Ref. 201
Small bores



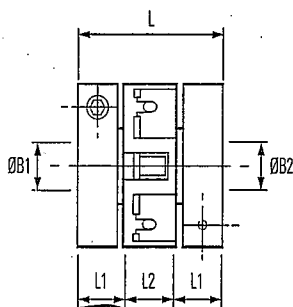
Ref. 203
Large bores



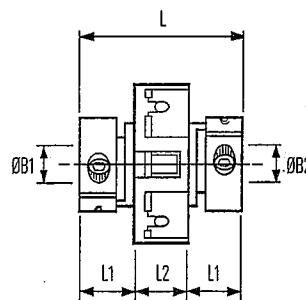
Ref. 221 (not listed in main table).
Combines large & small bores.
See explanatory note on facing page

Coupling ref. 221	
Size	L
18	16.7
27	22.3
34	28.0
41	33.3

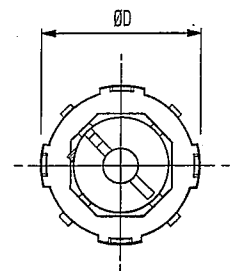
Clamp hubs



Ref. 207
Collet hub & ring clamp

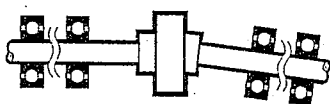


Ref. 205, 206
Integral leaf clamp



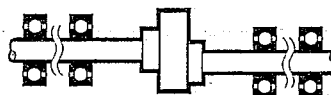
Typical

Installation



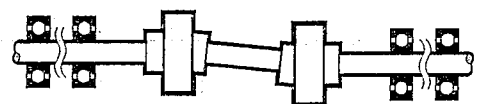
right

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.

DIMENSIONS & ORDER CODES

Coupling Size	Set Screw Hubs	Clamp Hubs	ØD	L	L1	L2	ØB1, ØB2 max	Fasteners		Moment of inertia kgm ² x 10 ⁻³	Mass kg x 10 ⁻³	
								Screw	Wrench			
COUPLING REF												
18	201.18	-	18.0	14.2	4.6		5	M3	0.94	1.5	20	7
	203.18	-	19.1	19.1	7.0	5.1	6.35	4-40	2.33	2.0	55	11
27	201.27	-	27.0	19.1	6.1		8	M3	0.94	1.5	91	16
	203.27	-	28.0	25.4	9.3	6.9	10	M3	2.43	2.5	220	26
34	201.34	-	34.0	25.2	8.1		10	M4	2.27	2.0	165	17
	203.34	-	33.7	30.7	10.9	8.9	12.7	4-40	2.33	2.0	183	20
41	201.41	-	41.0	28.4	8.6		12.7	M4	2.27	2.0	476	30
	203.41	-	41.4	38.1	13.5	11.2	16	M5	4.62	2.5	550	40
70	203.70	-	70.0	74.0	28.5	17.0	22	M6	7.60	3.0	7315	189
	205.70	-	69.0	74.0	28.5	17.0	22	M6	19.3	5.0	7315	189

- 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 6)
 - 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.
 - ⑧ Momentary values.
- ‡ Ref. 207 only. Insert both bore codes in place of ‡.

PERFORMANCE AT 20°C

Coupling Size	Peak torque Nm	Max compensation @ 3000 r.p.m.		Torsional		Axial		Static break torque Nm
		Angular deg	Radial mm	Rate deg / Nm	Stiffness Nm / rad	Max loading ±N	Stiffness N / mm	
18	0.3		0.2	2.3	25	19	155	0.9
27	1.7		0.2	0.6	92	31	350	5.0
34	2.5	2	0.25	0.4	146	34	300	7.5
41	3.5		0.25	0.19	299	39	250	10.5
70	12.0		0.25	0.19	1300	75	540	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 6 for details

STANDARD BORES

Coupling size	ref.	ØB1, ØB2 +0.03/-0mm																			
		3	3.175	4	4.763	5	6	6.350	7.938	8	9.525	10	12	12.700	14	15.875	16	18	19	19.05	20
18	201.18	•	•	•	•	•															
	203.18						•	•													
27	201.27	•	•	•	•	•	•	•													
	203.27								•	•											
34	201.34						•	•													
	203.34										•	•									
41	201.41						•	•													
	203.41												•	•							
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*		257		259			260					261

Diameters for which a bore adaptor is shown can be adapted to smaller shaft sizes. See page 60 for details.
*Note that adaptor 254 is dedicated to coupling ref. 201.27. Use adaptor 255 for all other 8mm diameters.