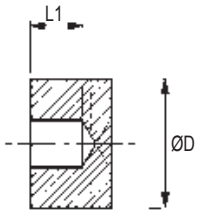
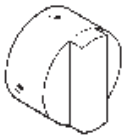
Blind hubs

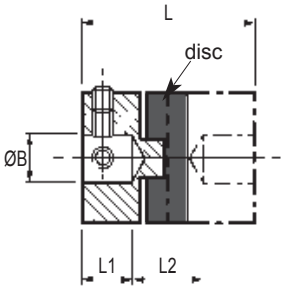


Controlled bore depth L1 provides a register when pre-assembling hubs to shafts

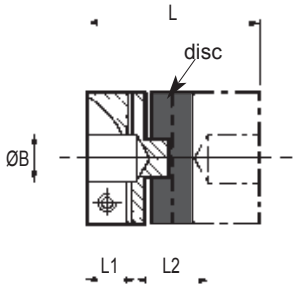


Set screw style

Clamp style

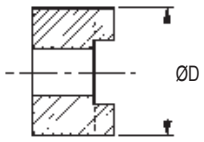


Refs. 232, 243
Set screw style



Refs. 234, 235, 245
Clamp style

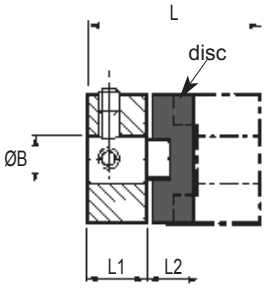
Thro' hubs



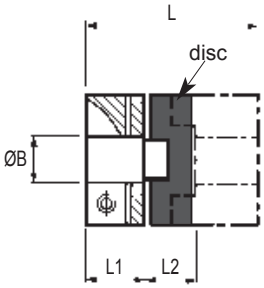
Thro' bores allow disc replacement without disturbing shaft alignment

Set screw style

Clamp style

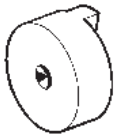


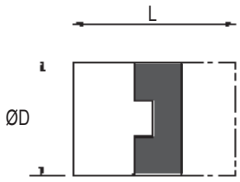
Refs. 450, 454
Set screw style



Refs. 452, 453, 456
Clamp style

Blank hubs





User-adaptable for special needs, e.g. fitting within tubes. Blank hubs are supplied centred with no provision for fastening. External dimensions identical with blind hubs.

Coupler size	Complete hub ref.	ØD	L
06	231.06.00	6.4	12.7
09	231.09.00	9.5	12.7
13	231.13.00	12.7	15.9
19	231.19.00	19.1	22.0
25	231.25.00	25.4	28.4
33	230.33.00	33.3	48.0
41	231.41.00	41.3	50.8

Standard discs (larger sizes are webbed)

Acetal – High torsional stiffness, good bearing properties, long backlash-free life.

Nylon 11 – Resilient, isolates noise & vibration. Performance approximately 25% that of acetal disc.

Thro' bored discs

Thro' bored discs allow shafts to near-butt, standard thro' hole diameter = ØD x 0.5. To order, add suffix 'T' to order code, eg., **236.25T**

Other thro' hole diameters are manufactured to order. Specify the disc ref. and thro' hole diameter. This should equal the larger shaft diameter + 2 x max radial error.

Note that thro' bored discs reduce torsional stiffness.

HOW TO ORDER

Combine the HUB REF in the Main Table with the BORE REF in the Standard Bores Table, e.g.

452H25.28

Hub ref.

Bore ref.

Order discs separately from the Main Table, e.g.

236.25

Disc ref.

ORDER 2 HUBS + 1 DISC PER COUPLER

HOW TO INSTALL

Correct installation is important for optimum operation. See *page 18* for details.

MAIN TABLE – DIMENSIONS & ORDER CODES

Coupler Type & Size		Set Screw Style	Clamp Style	ØD	L	[1] L1	[2] L2	ØB1 max	Fasteners			[4] Moment of inertia	[4] Mass	Acetal (black) standard	Nylon 11 (natural)
		HUB REF							Screw	[3] Torque Nm	Wrench mm	kgm² x 10⁻⁸	kg x 10⁻³	DISC REF	
Blind Hubs	06	232.06	–	6.4	12.7	3.8	5.1	3.18	M3	0.94	1.5	6	2.5	236.06	238.06
	09	232.09	–	9.5	12.7	3.8	5.1	5	M3	0.94	1.5	18	4	236.09	238.09
	13	232.13	–	12.7	15.9	4.3	7.3	6.35	M3	0.94	1.5	26	11	236.13	238.13
	19	232.19	–	19.1	22.0	6.3	9.4	8	M3	0.94	1.5	67	12	236.19	238.19
		–	235.19						4–40	2.33	2.0				
	25	232.25	–	25.4	28.4	8.6	11.2	12	M4	2.27	2.0	252	31	236.25	238.25
		–	234.25						M3	2.43	2.5				
	33	243.33	–	33.3	48.0	13.0	22.0	16	M4	2.27	2.0	1278	86	236.33	238.33
			245.33						M4	5.66	3.0				
	41	232.41	–	41.3	50.8	16.7	17.4	20	M5	4.62	2.5	3327	148	236.41	238.41
		–	234.41						M4	5.66	3.0				
Thro' Hubs	19	450H19	–	19.1	26.0	9.4	7.2	8	M4	2.27	2.0	59	13	236.19	238.19
		–	453H19						4–40	2.33	2.0				
	25	450H25	–	25.4	32.4	11.6	9.2	12	M5	4.62	2.5	252	31	236.25	238.25
		–	452H25						M3	2.43	2.5				
	33	454H33	–	33.3	48.0	15.0	18.0	16	M6	7.61	3.0	1133	74	236.33	238.33
		–	456H33						M4	5.66	3.0				
	41	450H41	–	41.3	50.8	17.8	15.3	20	M6	7.61	3.0	3177	142	236.41	238.41
		–	452H41						M4	5.66	3.0				
	50	450H50	–	50.0	59.6	20.6	18.4	25.4	M8	18.36	4.0	7550	208	236.50	–
		–	452H50						M5	11.40	4.0				
	57	450H57	–	57.1	78.0	28.4	21.2	30	M8	18.36	4.0	12410	361	236.57	–
		–	452H57						M6	19.34	5.0				

Materials & Finishes

Hub sizes 06 to 13:
Brass BS 2874 CZ121
Chromate & passivate finish

Hub sizes 19 to 57:
Al. Alloy 2011T3 and 2011T8
BS 4300/5 FC1

Fasteners:
Alloy steel, black oiled

Blind & blank hubs:
Alocrom finish

Thro' hubs:
Clear anodised finish

Torque discs:
Types 236 - Acetal (black)
Types 238 - Nylon 11 (natural)

Temperature Range

–20°C to +60°C

SERVICE FACTORS

Duty	Factor
Momentary	1
1 hr per day	2
3 hrs per day	4
6 hrs per day	6
12 hrs per day	8

(see note page 14)

PERFORMANCE (AT 20°C WITH STANDARD ACETAL DISC)

Coupler Size	[5] Peak torque Nm	[6] Max compensation @ 3000 r.p.m. Angular ± deg	Radial ± mm	Axial ± mm	[7] Torsional Rate deg / Nm	Stiffness Nm / rad	Static break torque Nm
06	0.06	0.5	0.1	0.05	5.7	10	0.7
09	0.21		0.1	0.05	1.9	30	2
13	0.5		0.1	0.05	0.88	65	4
19	1.7		0.2	0.1	0.50	115	10
25	4		0.2	0.1	0.28	205	13
33	9		0.2	0.15	0.093	615	53
41	17		0.25	0.15	0.048	1200	57
50	30		0.25	0.2	0.042	1375	95
57	44		0.25	0.2	0.022	2610	150

1. ***Blind hubs:*** Length of parallel bore ±0.2. Bores may terminate in 118° incl. angle.
   Thro' hubs: Max permissible hub penetration.
2. ***Blind hubs:*** Nominal distance between unchamfered shafts bottomed out to L1.
   Thro' hubs: Nominal distance between shafts with standard (unbored) disc.
3. Maximum recommended tightening torque *(see also next page under 'Clamp hubs')*
4. Values apply to complete couplers with max bores.
5. ***Peak torque***. Select a size where Peak Torque exceeds the application torque x service factor.
6. Couplers can provide up to ± (ØD x 0.1) radial compensation in extreme cases.
   Observe given values for maximum backlash-free life.
   Axial compensation is set on installation. *See next page for details.*
   Electrical isolation between shafts > 3kV.
7. Values apply at 50% peak torque with no misalignment, measured shaft-to-shaft with largest standard bores.
8. Thro' hubs can be provided with keyways or 'D' bores. See *page 4* for details.

STANDARD BORES[8]

Coupler Size	ØB +0.03/–0mm																								
	2	3	3.175	4	4.763	5	6	6.350	8	9.525	10	12	12.700	14	15	15.875	16	18	19	19.050	20	24	25	30
06	●	●	●																					
09		●	●	●	●	●																		
13		●	●	●	●	●	●	●																
19				●	●	●	●	●	●															
25							●	●	●	●	●	●												
33									●	●	●	●	●	●	●	●	●							
41										●	●	●	●	●	●	●	●	●	●	●				
50										●	●	●	●	●	●	●	●	●	●	●	●	●		
57												●	●	●	●	●	●	●	●	●	●	●	●	●
Bore ref.	11	14	16	18	19	20	22	24	28	31	32	35	36	38	40	41	42	45	46	47	48	51	52	56