


Oldham Couplings

Blue Set Screw / Clamping, Green Short Clamping

Oldham Couplings

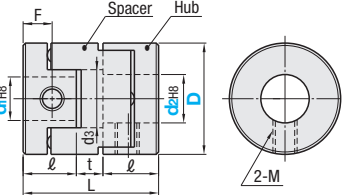
Blue Set Screw, Clamping / Green Short Clamping

Set Screw



RoHS10


CPO



Recommended Tolerance of Shaft Diameter: h7
 Operating Temperature: -20°C-80°C
 Each of the lateral, angular, and axial misalignments values shown below is the allowable value which is applicable only when lateral, angular or axial misalignment is generated individually. Therefore, when multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
 For the selection criteria and alignment procedures, see P.1093, 1138.

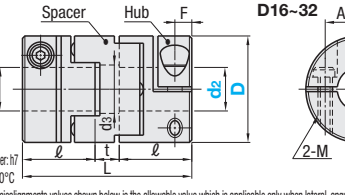
TYPE	Material	Surface Treatment
Hub	Aluminum Alloy	Clear Anodize
Spacer	Polycetal	-
Set Screw	SCM435	Black Oxide

Clamping



RoHS10


CPOC



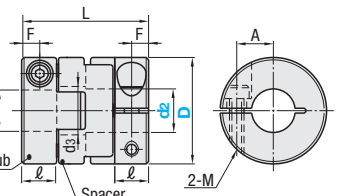
Recommended Tolerance of Shaft Diameter: h7
 Operating Temperature: -20°C-80°C
 Each of the lateral, angular, and axial misalignments values shown below is the allowable value which is applicable only when lateral, angular or axial misalignment is generated individually. Therefore, when multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
 For the selection criteria and alignment procedures, see P.1093, 1138.

Parts	Material	Surface Treatment
Hub	Aluminum Alloy	Clear Anodize
Spacer	Polycetal	-
Set Screw	SCM435	Black Oxide

Short Clamping



CPOCG (Short)



Recommended Tolerance of Shaft Diameter: h7
 Operating Temperature: -20°C-80°C
 Each of the lateral, angular, and axial misalignments values shown below is the allowable value which is applicable only when lateral, angular or axial misalignment is generated individually. Therefore, when multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
 For the selection criteria and alignment procedures, see P.1093, 1138.

Parts	Material	Surface Treatment
Hub	Aluminum Alloy	Clear Anodize
Spacer	Polycetal	-
Set Screw	SCM435	Black Oxide

Part Number Type	D	d1, d2 Selection (d1≤d2)										d3	L	ℓ	t	F	A	Set Screw / Clamp Screw		Unit Price
		3	4	5	6	6.35	8	9.525	10	12	14							M	Tightening Torque (N·m)	
CPO	16	3	4	5	6	6.35	8	9.525	10	12	14	7	18	7	4	3.5	M3	0.7		
	20	4	5	6	6.35	8	9.525	10	12	14	9	23	9	5	4.5	M4	1.7			
	25	5	6	6.35	8	9.525	10	12	14	14.5	33	13	7	6.5	M5	4				
	32	8	10	12	14	14.5	33	13	7	6.5	17	32	14	4	7	M6	7			
	*40	10	12	14	15	16	17	32	14	4	7									
CPOC	16	5	6	6.35	8	10	11	12	14	14.5	45	19	7	4.5	11	M4	2.5			
	20	6	6.35	8	10	11	12	14	14.5	45	19	7	4.5	11	M4	2.5				
	25	6.35	8	10	11	12	14	14.5	45	19	7	4.5	11	M4	2.5					
	32	8	10	11	12	14	14.5	45	19	7	4.5	11	M4	2.5						
	*40	10	11	12	14	15	16	17	50	23	4	7	13	M5	4					
CPOCG	12	3	4	5	6	6.35	7	8	10	11	12	14	6	14.9	5	2.5	M2	0.5		
	16	3	4	5	6	6.35	7	8	10	11	12	14	8	21	7	3.5	M2.5	1		
	20	4	5	6	6.35	7	8	10	11	12	14	14	27.2	8	4	9	M3	1.5		
	25	5	6	6.35	7	8	10	11	12	14	14	27.2	8	4	9	M3	1.5			
	32	8	10	11	12	14	14	27.2	8	10	11	12	14	18	33.3	10	5	11	M4	2.5

* The spacer of D40 is black.

Part Number Type	D	Allowable Torque (N·m)	Angular Misalignment (°)	Lateral Misalignment (mm)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m ²)	Mass (g)
CPO	16	0.7	1.0	31	39000	3.2x10 ⁻⁷	7	
	20	1.2	1.5	60	31000	1.0x10 ⁻⁶	14	
	25	2	2.0	140	25000	3.0x10 ⁻⁶	27	
	32	4.5	2.5	280	19000	9.5x10 ⁻⁶	50	
	40	9	3.0	540	15000	2.3x10 ⁻⁵	80	
CPOC	16	0.7	1.0	31	39000	5.8x10 ⁻⁷	12	
	20	1.2	1.5	60	31000	1.5x10 ⁻⁶	19	
	25	2	2.0	140	25000	4.4x10 ⁻⁶	36	
	32	4.5	2.5	280	19000	1.4x10 ⁻⁵	69	
	40	9	3.0	540	15000	4.1x10 ⁻⁵	130	
CPOCG	12	0.2	0.6	9	52000	7.1x10 ⁻⁸	3	
	16	0.4	1	30	39000	3x10 ⁻⁷	8	
	20	0.7	1.3	47	31000	7.4x10 ⁻⁷	13	
	25	1.2	1.5	85	25000	2.2x10 ⁻⁶	24	
	32	2.8	2	190	19000	7.3x10 ⁻⁶	48	

The allowable torque varies depending on temperature. See P.1138.

Part Number	Shaft Bore Dia. d1	Shaft Bore Dia. d2
CPO25	8	10
CPOC20	6	8
CPOCG16	3	5

Alterations	Part Number	Shaft Bore Dia. d1 (LDC)	Shaft Bore Dia. d2 (RDC)	Keyway
	CPO16	LDC4.5	RDC5.5	LK·RK
	CPOC25	6	10	RK3

Alterations


Spec.

1mm Increment
 Also applicable to 3.175, 4.5, 9.525, 12.7 or 15.875.
 (Ordering Code) LDC 3.175 RDC 7

Code	LDC (Left Shaft)	RDC (Right Shaft)	LK (Left Shaft)	RK (Right Shaft)
CPO	LDC	RDC	LK	RK
CPOC	LDC	RDC	LK	RK
CPOCG	LDC	RDC	LK	RK

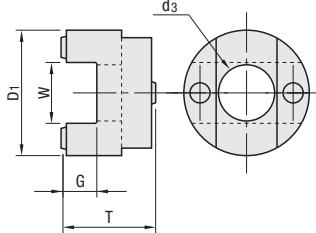
Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b x h
8·10	3	±0.0125	3x3
11·12	4	±0.0150	4x4
14·15·16	5	±0.0150	5x5

Spacer



RoHS10

CPOS CPOCGS




Material: Polycetal

Part Number Type	No.	D1	T	d3	W	G	Applicable Coupling	Unit Price
	16	16	12	7	8	4.5	CPO16·CPOC16	
	20	20	15	9	10	5.5	CPO20·CPOC20	
	25	25	18	11	12	6.5	CPO25·CPOC25	
	32	32	21	14.5	15	7.5	CPO32·CPOC32	
	40	40	18	17	19		CPO40·CPOC40	
CPOCGS								
	12	12	4.88	6	3.95	2.44	CPOCG12	
	16	16	6.96	8	4.95	3.48	CPOCG16	
	20	20	8.06	10	6.95	4.03	CPOCG20	
	25	25	11.18	14	8.95	5.59	CPOCG25	
	32	32	13.34	18	9.95	6.67	CPOCG32	

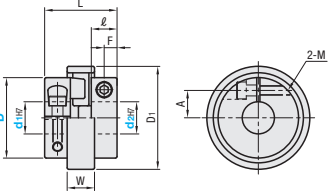
Ordering Example: Part Number CPOS20 (No. 40 spacers is black.)

Super Short Clamping



RoHS10

SCOC



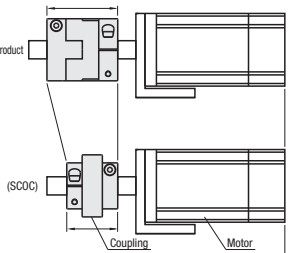
Operating Temperature: -20°C-80°C
 Tolerances for d1 and d2 are values before slit machining.
 Each of the lateral, angular, and axial misalignments values shown below is the allowable value which is applicable only when lateral, angular or axial misalignment is generated individually. Therefore, when multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
 For the selection criteria and alignment procedures, see P.1093, 1138.
 For installing, use Coupling O.A.L. as a reference.

Part Number Type	D	d1, d2 Selection (d1≤d2)										L	D1	W	ℓ	F	A	Clamp Screw		Unit Price
		3	4	5	6	6.35	7	8	10	M	Tightening Torque (N·m)									
SCOC	12	3	4	5	6	6.35	7	8	10	13.5	16	5.5	5	2.5	4	2	0.5			
	16	3	4	5	6	6.35	7	8	10	18	21.5	8	6.5	3.25	5.5	2.5	1.0			
	20	5	6	6.35	7	8	10	19	27	8.8	6.8	3.4	6.5	2.5	1.0					
	25	6	6.35	7	8	10	22.5	33.5	10.5	8	4	8.5	3	1.5						

Part Number Type	D	Allowable Torque (N·m)	Angular Misalignment (°)	Lateral Misalignment (mm)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m ²)	Mass (g)
SCOC	12	0.3	1.5	0.3	18	12000	0.1x10 ⁻⁶	4
	16	0.8	1.5	0.5	55	9000	0.42x10 ⁻⁶	9
	20	1.0	1.5	1.0	95	6000	1.05x10 ⁻⁶	15
	25	1.6	1.2	1.62	5000	3.04x10 ⁻⁶	28	

Part Number	Shaft Bore Dia. d1	Shaft Bore Dia. d2
SCOC25	8	10

Example



SCOC type are up to 17% shorter in length compared to the conventional products, and can contribute to space saving design.