

Slit Couplings

Set Screw, Short / Long

Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

MISUMI C-VALUE Slit Couplings

Set Screw, Long

Points of comparison between similar products | Max. Rotational Speed: 19,000~78,000rpm

Features: Because backlash is 0, it is suitable for applications where rotation accuracy is required.

Slit Set Screw

CPL (Aluminum - Long)
CPLS (Stainless Steel - Long)

CPS (Aluminum - Short)
CPSS (Stainless Steel - Short)

*d₁, d₂ Identical Diameter = d₁+0.5
 d₁, d₂ Different Diameters = Large Shaft Diameter + 0.5
 *When d₁ is 4mm or less and d₂ is 5mm or more, there are 3 set screws.
 *When both d₁ and d₂ are less than 4mm, there are 2 set screws.

Type	Material	Surface Treatment	Accessory
CPL, CPS	Aluminum Alloy	Clear Anodize	Set Screw
CPLS, CPSS	Stainless Steel	-	Set Screw

⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. 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.1061.

Points of comparison between similar products | Max. Rotational Speed: 10,000rpm

Similar products page P.1073

Features: Product quality and performance same as of the conventional products but at lower price. Replaceable from CPL.

GSASL

*d₁, d₂ Identical Diameter = d₁+0.5
 d₁, d₂ Different Diameters = Large Shaft Diameter

⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. When multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
 ⚠ Tolerances for d₁ and d₂ are values before slit machining.

TYPE	Material	Surface Treatment	Accessory
GSASL	Aluminum Alloy	Clear Anodize	Set Screw

Part Number	Type	D	d ₁	d ₂				L		ℓ		M (Coarse)	F	Unit Price				
				CPL	CPS	CPLS	CPSS	CPL	CPS	CPL	CPS			CPL	CPLS	CPS	CPSS	
CPL (Aluminum)	8	*2	*2	3				14	10	3.5	3.4	M2	1.7					
				*3														
		*4	*4	5				18.5	14	5	5.2	M2.5	2.5					
				*5														
		*5	*5	6				23	18	6.5	6.8	M3	3					
				*6														
	20	*6	*6	7				26	20	7.5	7.65	M3	3					
				*8														
		*8	*8	10				31	25	8.5	9.6	M4	4					
				*10														
		*10	*10	12				41	32	12	12.6	M4	6					
				*12														
40	*12	*12	14				56	-	17	-	M5	8.5						
			*14															
	*14	*14	16				-	-	-	-	-	-						
			*16															
	*16	*16	18				-	-	-	-	-	-						
			*18															

Part Number	Type	D	d ₁	d ₂				L	ℓ	Set Screw		F	Unit Price
				M (Coarse)	Tightening Torque (N·m)								
Set Screw GSASL	16	4	4	5			23	6.4	M3	0.7	3		
				8									
		20	5	6	8	10	26	7	M3	0.7	3		
												12	
		25	6	8	10	12	31	8	M4	1.7	4		
												14	
	32	8	10	11	12	41	11	M4	1.7	6			
											14		

Characteristic Values

Part Number	Type	D	Allowable Torque (N·m)	Max. Rotational Speed (rpm)	Moment of Inertia (kg·m ²)	Static Torsional Spring Constant (N·m/rad)	Lateral Misalignment (mm)	Allowable Angular Misalignment (°)	Allowable Axial Misalignment (mm)	Mass (g)
GSASL		16	0.5	10000	6.5x10 ⁻⁷	44	0.1	2	±0.4	9
		20	1		1.5x10 ⁻⁶	110				16
		25	2		4.2x10 ⁻⁶	215	27			
		32	4		1.6x10 ⁻⁵	420	64			

⚠ Static torsional spring constant, inertia moment, and mass values are for cases of maximum shaft diameter.
 ⚠ For the selection criteria and alignment procedures, see P.1061, 1062.

Ordering Example: **GSASL20 - 6 - 8**

Part Number - Shaft Bore Dia. d₁ - Shaft Bore Dia. d₂

⚠ CPS and CPSS are available in * marked sizes only.

Part Number	Type	D	Allowable Torque (N·m)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m ²)	Static Torsional Spring Constant (N·m/rad)	Lateral Misalignment (mm)	Angular Misalignment (°)	Allowable Axial Misalignment (mm)	Screw Tightening Torque (N·m)	Mass (g)		
CPL (Aluminum)	8	0.1	78000	1.2x10 ⁻⁸	25	0.10	2	±0.2	0.3	1.4			
		0.4	52000	8.3x10 ⁻⁸	45						0.5	3.7	
		0.5	39000	3.3x10 ⁻⁷	80						0.7	8.1	
	20	1	31000	9.0x10 ⁻⁷	170	0.15	2	±0.4	1.7	27			
		2	25000	2.6x10 ⁻⁶	380						1.7	60	
		4	19000	9.6x10 ⁻⁶	500						4	130	
CPLS (Stainless Steel)	8	0.2	78000	3.1x10 ⁻⁸	50	0.10	2	±0.2	0.3	3			
		0.3	52000	2.1x10 ⁻⁷	64						±0.3	0.5	9.3
		0.5	39000	8.4x10 ⁻⁷	85								
	20	1	31000	2.4x10 ⁻⁶	250	0.15	2	±0.4	1.7	71			
		2	25000	6.8x10 ⁻⁶	330						±0.5	1.7	160
		3.5	19000	2.6x10 ⁻⁵	850								

Part Number	Type	D	Allowable Torque (N·m)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m ²)	Static Torsional Spring Constant (N·m/rad)	Lateral Misalignment (mm)	Angular Misalignment (°)	Allowable Axial Misalignment (mm)	Screw Tightening Torque (N·m)	Mass (g)		
CPS (Aluminum)	8	0.1	78000	1.0x10 ⁻⁸	24	1	1	±0.1	0.3	1			
		0.4	52000	7.0x10 ⁻⁸	80						±0.2	0.7	7.4
		0.5	39000	2.8x10 ⁻⁷	180								
	20	1	31000	7.5x10 ⁻⁷	200	1	1	±0.2	1.7	60			
		2	25000	2.3x10 ⁻⁶	780						±0.2	1.7	50
		4	19000	8.0x10 ⁻⁶	1100								
CPSS (Stainless Steel)	8	0.2	78000	2.4x10 ⁻⁸	49	1	1	±0.1	0.3	2.7			
		0.3	52000	1.8x10 ⁻⁷	140						±0.1	0.7	7.8
		0.5	39000	7.2x10 ⁻⁷	240								
	20	1	31000	2.0x10 ⁻⁶	330	1	1	±0.2	1.7	32			
		2	25000	6.1x10 ⁻⁶	720						±0.2	1.7	63
		3.5	19000	2.1x10 ⁻⁵	1300								

Ordering Example: **CPL16 - 5 - 6**

Part Number - Shaft Bore Dia. d₁ - Shaft Bore Dia. d₂

⚠ CPSS does not allow eccentricity.

⚠ CPS does not allow eccentricity.