

Strut Clamps

Overview

Round Strut Clamp

Overview

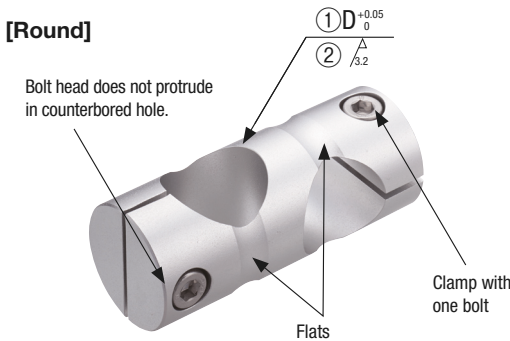
Strut Clamp Type Selection Chart

Type		Shape	Features	Fastening	Page		
					Round Hole	Square Hole	
Perpendicular	Strut Clamps used to cross two posts	Round Equal Dia., Perpendicular Configuration	Round type enabling easy clamping and reducing costs	Screw Fastening	P2163	-	
		Standard	Most popular Pitch Configurable Type also included in product lineup	Knob / Clamp Lever	P2166	-	
				Screw Fastening	P2164-2169	P2181	
		Split	Post-assembly mounting onto posts built-in structures	Screw Fastening	P2171	-	
		T-Shaped Split	Space-saving one-sided post	Screw Fastening	P2171	-	
Rotation	Post angles adjustable	Screw Fastening	P2173 P2174	-			
Parallel	Two parallel posts fixable	Standard	Parallel posts fixed	Screw Fastening	P2172	-	
Tapped	Direct device mounting via tapped holes	Vertical	Standard	Knob / Clamp Lever	P2175 P2176	-	
				Screw Fastening	P2177	P2182	
		Parallel	Split	Post-assembly mounting onto posts in structures Used for mounting objects perpendicular to posts	Screw Fastening	P2179	-
			Standard	Horizontal device mounting onto post	Knob / Clamp Lever	P2175 P2176	-
Screw Fastening	P2178	P2182					
Arm / Bar	Mounting onto perpendicular strut clamps as guides	Arm	Post in circumferential rotations via arm mounted onto Strut Clamps	Screw Fastening	P2184	-	
		Bar	Round Bar as Conveyor Guides	Screw Fastening	P2184	-	
Adjustment Mechanism	By mounting below the clamp, fine manual adjustments are possible up to 5mm.	Adjustment Mechanism	By mounting below the clamp, fine manual adjustments of cameras and beam sensors are possible.	Screw Fastening	P2170	-	

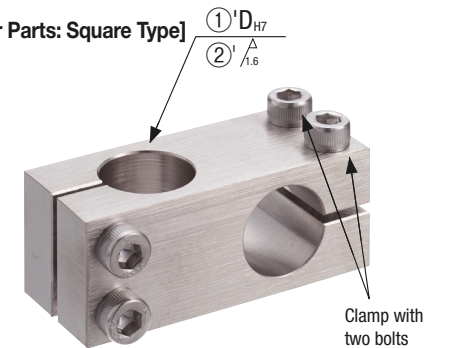
* Products of the same shape include various sizes such as Standard Type and Compact Type. See each product page for details.
* Strut Clamps with Knob and Clamp Lever are suitable for frequent setup changes through manual fastening.

Features of Round Strut Clamp

[Round]



[Similar Parts: Square Type]



Point 1 Modified in Specification to meet Clamp use in Middle Accuracy, and realized Lower Costs by changing the Manufacturing Process

[Round]

① Shaft bore tolerance	0~+0.05
② Shaft Bore Surface Roughness	Ra3.2
⇒ Fitting Accuracy between Shaft and Shaft Bore	Middle Accuracy

☞ For mating, g6 ~ f8 shaft tolerances are recommended.

[Similar Parts: Square Type]

① Shaft bore tolerance	H7
② Shaft Bore Surface Roughness	Ra1.6
⇒ Fitting Accuracy between Shaft and Shaft Bore	High Accuracy

☞ For mating, g6 shaft tolerance is recommended.

⇒ **Maximum of 44% Price Reduction compared to Similar Parts (Square Type)**

Point 2 Re-design of the shape and standards to more easily Clamping Post

A round type is free from the corner's thickness, as opposed to similar parts (square type), and is easily clamped with the flats provided around the shaft bore.

So, a round strut clamp is capable of providing a firm clamp force even with one bolt to ensure highly efficient workability!!

Maximum Load Test

Tighten shafts and strut clamps by standard tightening torque [N·m], and conduct a maximum load test to observe the moment that the shaft and strut clamp start to move.

		Round	Square
		Max. Load (kN)	Max. Load (kN)
EN 1.1191 Equiv. Shaft Bore Dia. Ø20	Bolt Type	M5-20 (Single Clamp)	M6-25 (Double Clamps)
	Vertical Load	12.63	13.12
	Rotation Load	0.96	0.97
Aluminum Alloy Shaft Bore Dia. Ø10	Bolt Type	M4-10 (Single Clamp)	M5-15 (Single Clamp)
	Vertical Load	10.59	8.26
	Rotation Load	0.72	0.58

☞ Maximum Load (kN) values shown are for reference only, and not guaranteed ones.

⇒ **Equiv. to square type, or provides more clamp force**

Point 3 Selection of 3 Steps: Material, Surface Treatment, and Shaft Hole Dia.! A total of 28 standards is offered for selection.

Shaft Bore Dia.	C-KDST (EN 1.1191 Equiv. + Black Oxide)	C-MDKT (EN 1.1191 Equiv. + Electroless Nickel Plating)	C-ALKD (Aluminum Alloy + Black Anodize)	C-HLKD (Aluminum Alloy + Clear Anodize)
6	-	●	●	●
8	●	●	●	●
10	●	●	●	●
12	●	●	●	●
15	●	●	●	●
20	●	●	●	●
25	●	●	●	●
30	●	●	-	-

☞ For details about round strut clamps, refer to P2163