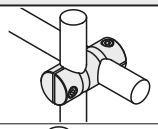
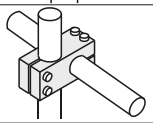
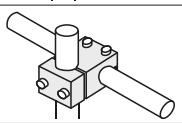
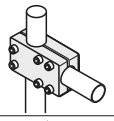
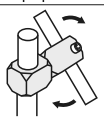
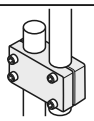
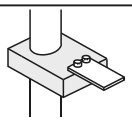
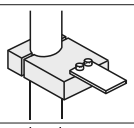
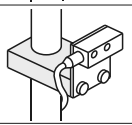
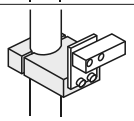
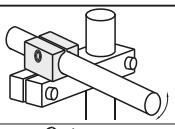
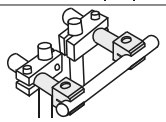
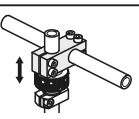
Strut Clamps
Overview

■Strut Clamp Type Selection Chart

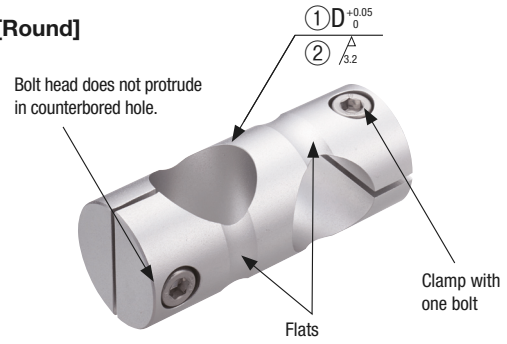
Type			Shape		Features	Fastening	Page	
							Round Hole	Square Hole
Perpendicular		Strut Clamps used to cross two posts	Round Equal Dia., Perpendicular Configuration		Round type enabling easy clamping and reducing costs	Screw Fastening	**P.2163**	-
			Standard		Most popular Pitch Configurable Type also included in product lineup	Knob / Clamp Lever	**P.2166**	-
						Screw Fastening	P.2164~2169	**P.2181**
			Split		Post-assembly mounting onto posts built-in structures	Screw Fastening	**P.2171**	-
			T-Shaped Split		Space-saving one-sided post	Screw Fastening	**P.2171**	-
			Rotation		Post angles adjustable	Screw Fastening	**P.2173 P.2174**	-
Parallel		Two parallel posts fixable	Standard		Parallel posts fixed	Screw Fastening	**P.2172**	-
Tapped	**Vertical**	Direct device mounting via tapped holes	Standard		Vertical device mounting on posts	Knob / Clamp Lever	**P.2175 P.2176**	-
						Screw Fastening	**P.2177**	**P.2182**
			Split		Post-assembly mounting onto posts in structures Used for mounting objects perpendicular to posts	Screw Fastening	**P.2179**	-
	Parallel		Standard		Horizontal device mounting onto post	Knob / Clamp Lever	**P.2175 P.2176**	-
						Screw Fastening	**P.2178**	**P.2182**
			Split		Post-assembly mounting onto posts in structures Used for mounting objects parallel to posts	Screw Fastening	**P.2179**	-
Arm / Bar		Mounting onto perpendicular strut clamps as guides	Arm		Post in circumferential rotations via arm mounted onto Strut Clamps	Screw Fastening	**P.2184**	-
			Bar		Round Bar as Conveyor Guides		**P.2184**	-
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	**P.2170**	-

* 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.

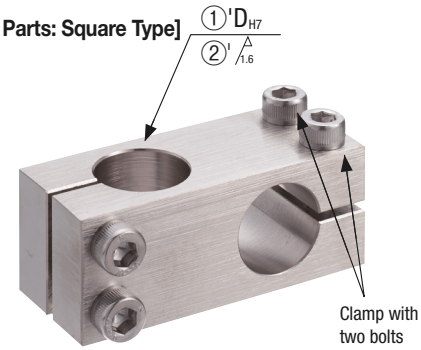
Round Strut Clamp
Overview

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)

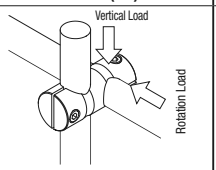
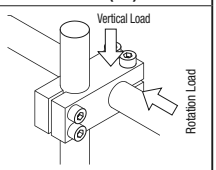
Point 2 Re-design of the shape and standards to more easily Clamping Post

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

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

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

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 P.2163