

Stainless Steel Linear Slides | IPWS



The IPWS series are high precision linear motion slides. Utilizing OptoSigma's extended contact bearings, they provide a high performance, cost effective platform for OEM applications.



Preload of Impulse Ways

Preload is set at the factory when the slide is assembled. The standard preload is very little to no preload. This allows the smoothest travel with minimum rolling friction. Optionally, they can be assembled with a higher preload for enhanced stiffness and load capacity.

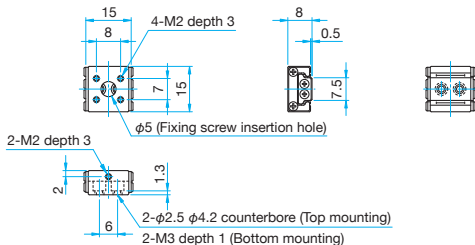
Type	Standard (Zero) Preload	Light Preload
Preload	+2 - -3	-2 - -4
Condition	<ul style="list-style-type: none"> ● Location or usage under only slight vibration ● Smooth travel ● Location or usage under a load in a specific direction 	<ul style="list-style-type: none"> ● Location or usage under slight vibration ● Location or usage under a slight prying load ● Location or usage under a complex load

Guide

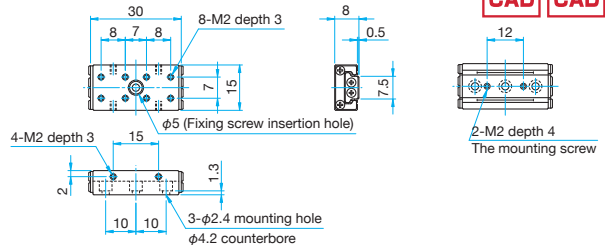
► Contact our sales team for information regarding alternative preloads.

Outline Drawing

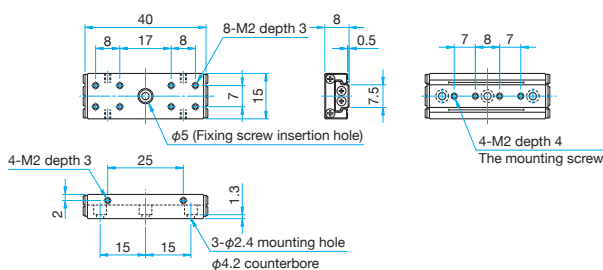
IPWS-F1515 Hexagonal socket head cap screw (stainless steel construction) M2×4...2 screws



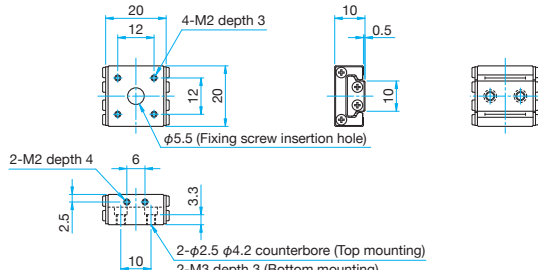
IPWS-F1530 Hexagonal socket head cap screw (stainless steel construction) M2×4...3 screws



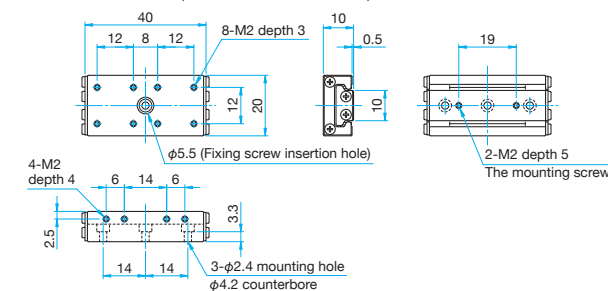
IPWS-F1540 Hexagonal socket head cap screw (stainless steel construction) M2×4...3 screws



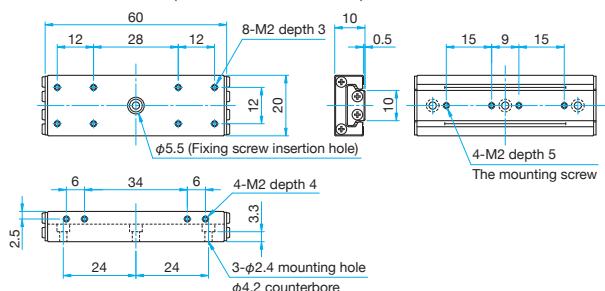
IPWS-F2020 Hexagonal socket head cap screw (stainless steel construction) M2×6...2 screws



IPWS-F2040 Hexagonal socket head cap screw (stainless steel construction) M2×6...3 screws



IPWS-F2060 Hexagonal socket head cap screw (stainless steel construction) M2×6...3 screws



Specifications

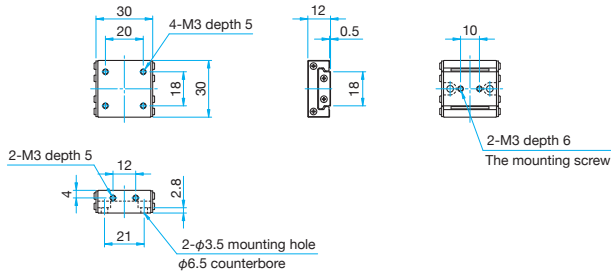
Part Number	METRIC	IPWS-F1515	IPWS-F1530	IPWS-F1540	IPWS-F2020	IPWS-F2040	IPWS-F2060
Stage Size [mm]		15×15	15×30	15×40	20×20	20×40	20×60
Axes of Travel		X axis					
Travel [mm]		±3	±9	±12	±4	±12	±18
Guide Method		Extended contact ball bearing guide					
Primary Material		SUS440C quench hardened					
Finish		None					
Max. Moment Capacity	Pitch [N·m]	0.4	1.2	1.8	0.7	1.8	3
	Roll [N·m]	0.8	2	2.8	1.6	2.7	4.2
	Yaw [N·m]	0.4	1.2	1.8	0.7	1.8	3
Parallelism [μm]		30	30	30	30	30	30
Running Parallelism [μm]		10	10	10	10	10	10
Weight [kg]		0.01	0.02	0.03	0.02	0.04	0.07

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- Ohters
- 15 × 15 mm
- 25 × 25 mm
- 40 × 40 mm
- 60 × 60 mm
- 65 × 65 mm
- 80 × 80 mm
- 100 × 100 mm
- 120 × 120 mm
- Others

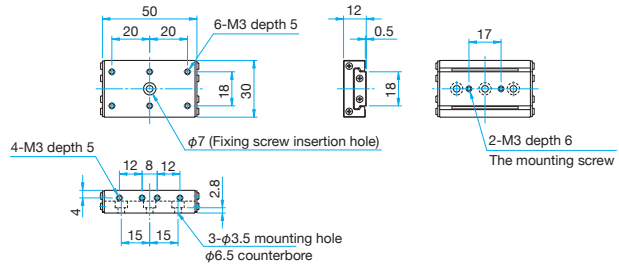


Outline Drawing

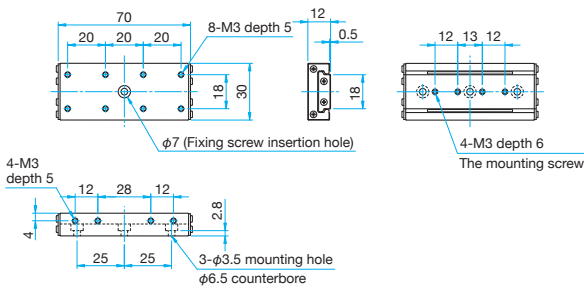
IPWS-F3030 Hexagonal socket head cap screw (stainless steel construction) M3×6...2 screws



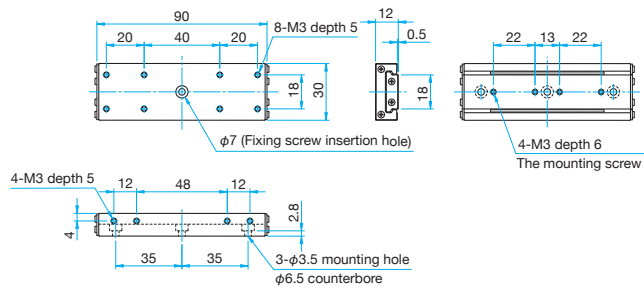
IPWS-F3050 Hexagonal socket head cap screw (stainless steel construction) M3×6...3 screws



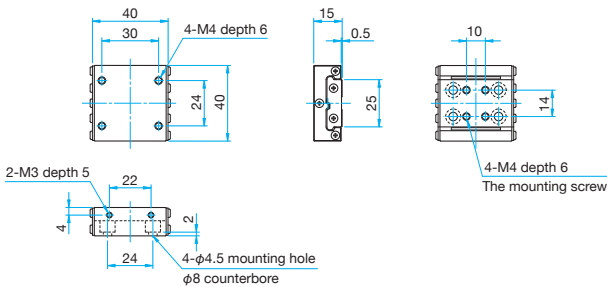
IPWS-F3070 Hexagonal socket head cap screw (stainless steel construction) M3×6...3 screws



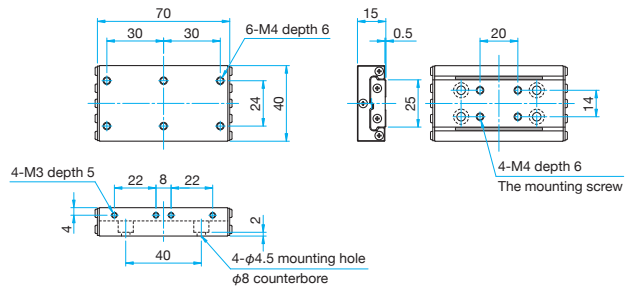
IPWS-F3090 Hexagonal socket head cap screw (stainless steel construction) M3×6...3 screws



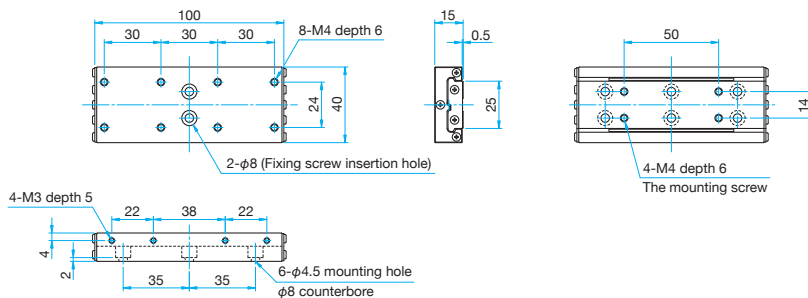
IPWS-F4040 Hexagonal socket head cap screw (stainless steel construction) M4×6...4 screws



IPWS-F4070 Hexagonal socket head cap screw (stainless steel construction) M4×6...4 screws



IPWS-F40100 Hexagonal socket head cap screw (stainless steel construction) M4×6...6screws



Specifications

Part Number	METRIC	IPWS-F3030	IPWS-F3050	IPWS-F3070	IPWS-F3090	IPWS-F4040	IPWS-F4070	IPWS-F40100
Stage Size [mm]		30×30	30×50	30×70	30×90	40×40	40×70	40×100
Axes of Travel		X axis						
Travel [mm]		±7	±14	±20	±27	±10	±20	±30
Guide Method		Extended contact ball bearing guide						
Primary Material		SUS440C quench hardened						
Finish		None						
Max. Moment Capacity	Pitch [N·m]	2	3.9	5.3	7.3	3.9	7.9	11.9
	Roll [N·m]	5.3	9.2	11.9	15.9	13.2	23.9	34.4
	Yaw [N·m]	2	3.9	5.3	7.3	3.9	7.9	11.9
Parallelism [μm]		30	30	30	30	30	30	30
Running Parallelism [μm]		10	10	10	15	10	10	15
Weight [kg]		0.07	0.12	0.16	0.21	0.15	0.26	0.38

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Crossed Roller

Dovetail

Lapping

V Groove Screw

Others

15 × 15 mm

25 × 25 mm

40 × 40 mm

60 × 60 mm

65 × 65 mm

80 × 80 mm

100 × 100 mm

120 × 120 mm

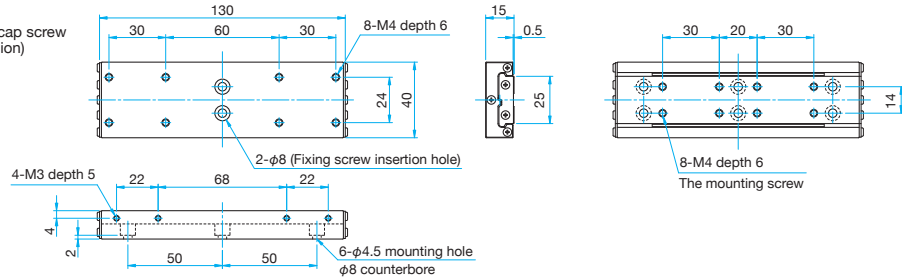
Others



Outline Drawing

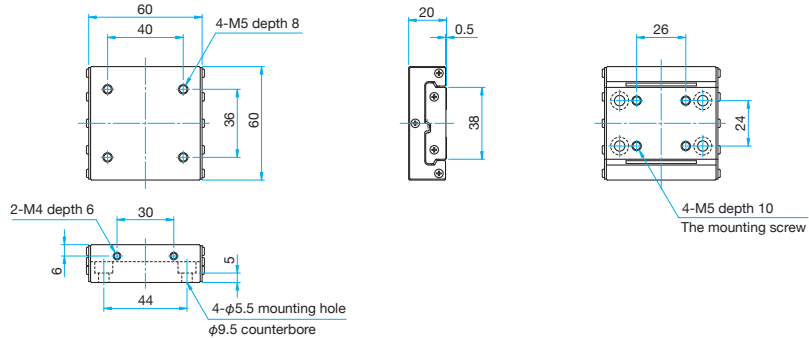
IPWS-F40130

Hexagonal socket head cap screw (stainless steel construction)
M4×6...6 screws



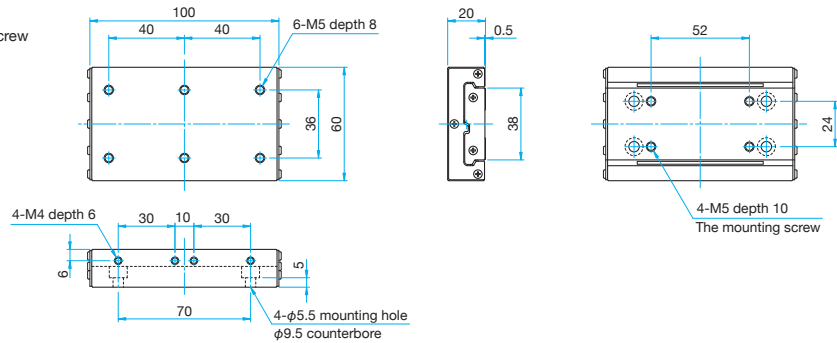
IPWS-F6060

Hexagonal socket head cap screw (stainless steel construction)
5×10...4 screws



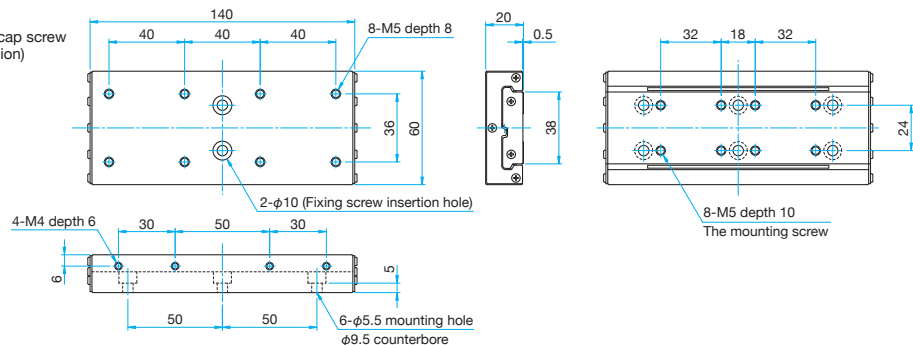
IPWS-F60100

Hexagonal socket head cap screw (stainless steel construction)
M5×10...4 screws



IPWS-F60140

Hexagonal socket head cap screw (stainless steel construction)
M5×10...6 screws



Specifications

Part Number	METRIC	IPWS-F40130	IPWS-F6060	IPWS-F60100	IPWS-F60140
Stage Size [mm]		40×130	60×60	60×100	60×140
Axes of Travel		X axis			
Travel [mm]		±37.5	±13	±30	±40
Guide Method		Extended contact ball bearing guide			
Primary Material		SUS440C quench hardened			
Finish		None			
Max. Moment Capacity	Pitch [N·m]	16.9	17.7	28.3	42.5
	Roll [N·m]	47.7	59.7	89.5	129
	Yaw [N·m]	16.9	17.7	28.3	42.5
Parallelism [μm]		50	30	30	50
Running Parallelism [μm]		15	10	15	15
Weight [kg]		0.5	0.47	0.78	1.1

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Others

15 × 15 mm

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Others