

Steel Extended
Contact Bearing Stages

Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

OEM Slides

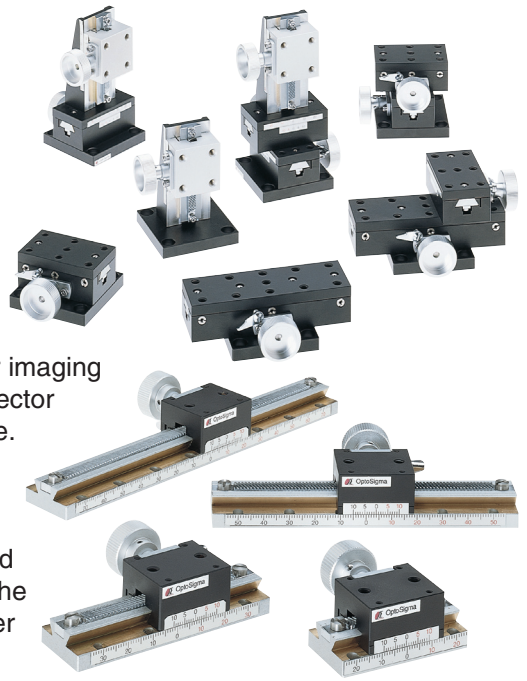
Accessories

Dovetail stages are so called because of the cross sectional shape of the slide. They have been used for many years as a simple and accurate form of linear bearing.

Rack and Pinion Dovetail Stages

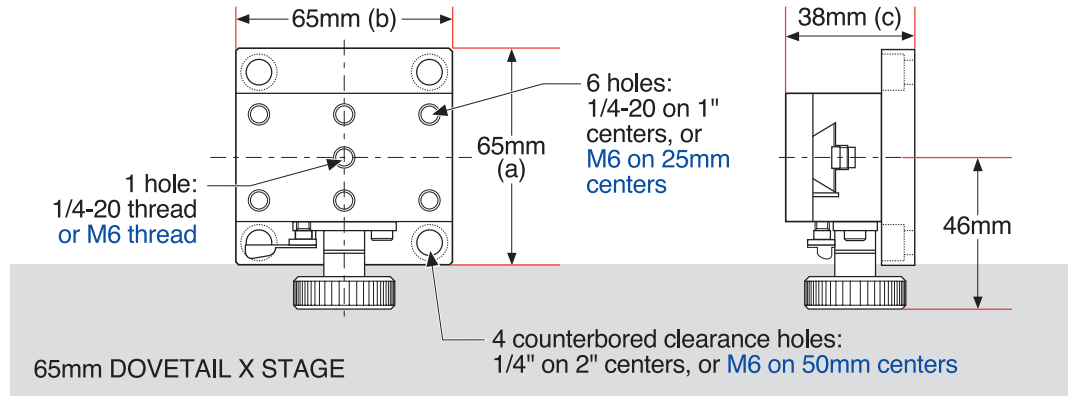
- Long, fast travel
- Rack & pinion drive
- Ideal for focus and field adjustment
- 65 and 25mm sizes provide up to 130mm of travel
- 1/4-20 (M6) hole pattern
- Lockable

When longer ranges of travel are required conventional stages may not be sufficient. For imaging applications it is often necessary to scan a detector over the field and focus volume of image space. These, long travel, dovetail stages provide the perfect solution. They may be driven by rack and pinion over a large distance without losing their alignment. The coarse drive enables rapid positioning of the stage. Once set in position the stage may be locked by means of a clamp lever so it will not move. If it is required to provide fine movement our conventional stages have compatible mounting holes and can be attached to these stages. The 65mm stages are compatible with 1/4inch or M6, industry standard, mounting patterns and are offered as X, XY and XYZ stages. The 25mm stages are compatible with our mini-system and are offered as linear stages of various travel ranges.

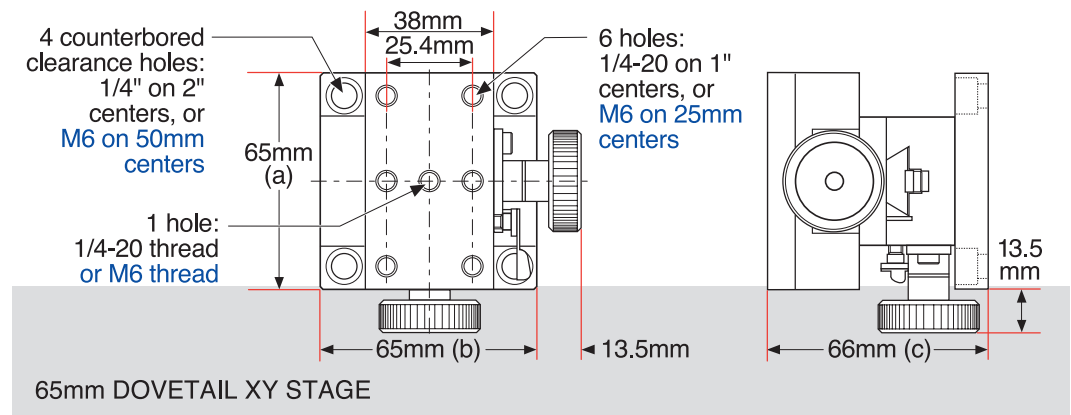


65mm Rack and Pinion Stages

Part No. 123-4710/4715



Part No. 123-4720/4725

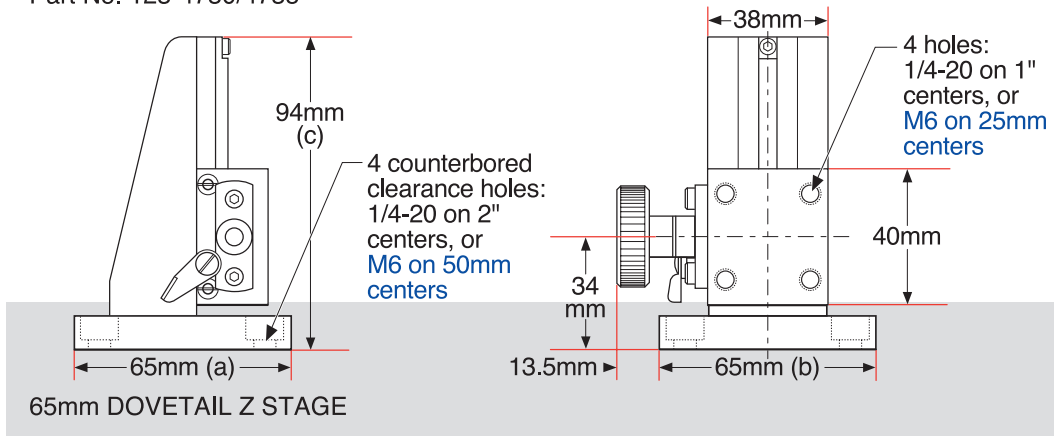


ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com

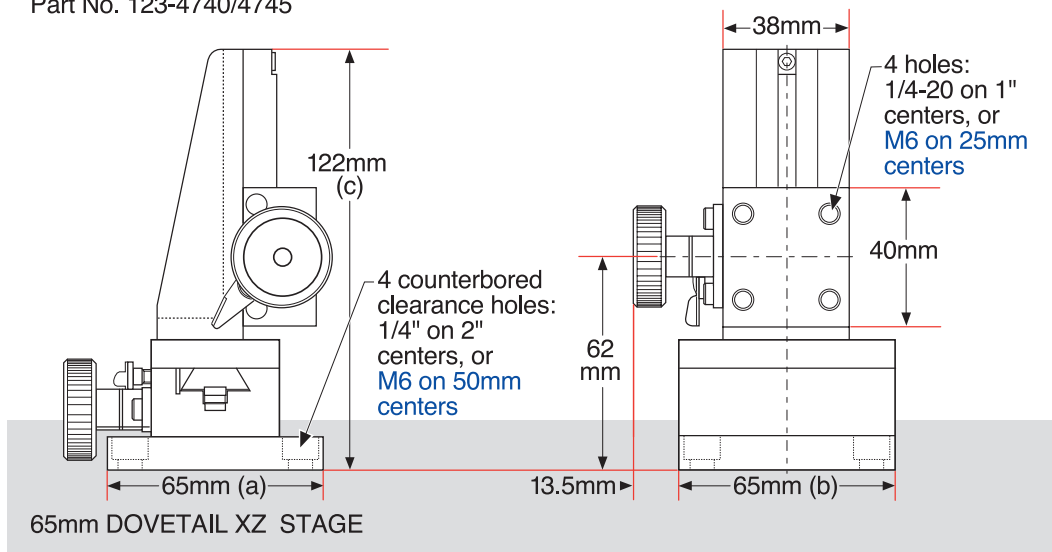


65mm Rack and Pinion Stages

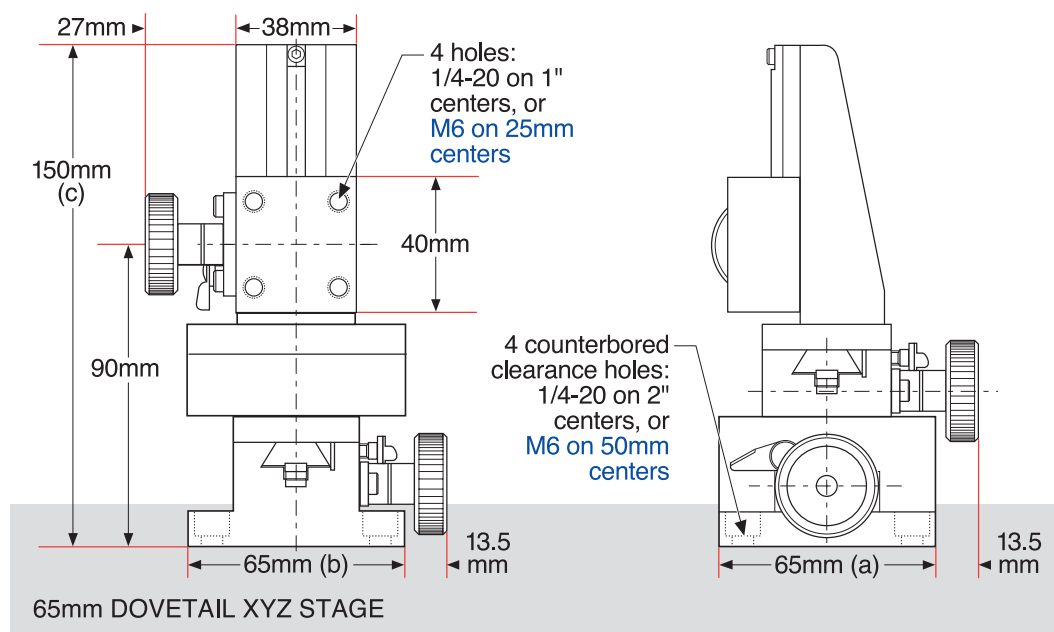
Part No. 123-4730/4735



Part No. 123-4740/4745



Part No. 123-4750/4755



Steel Extended Contact Bearing Stages

Steel Extended Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

OEM Slides

Accessories

ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com

Steel Extended
Contact Bearing Stages

Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

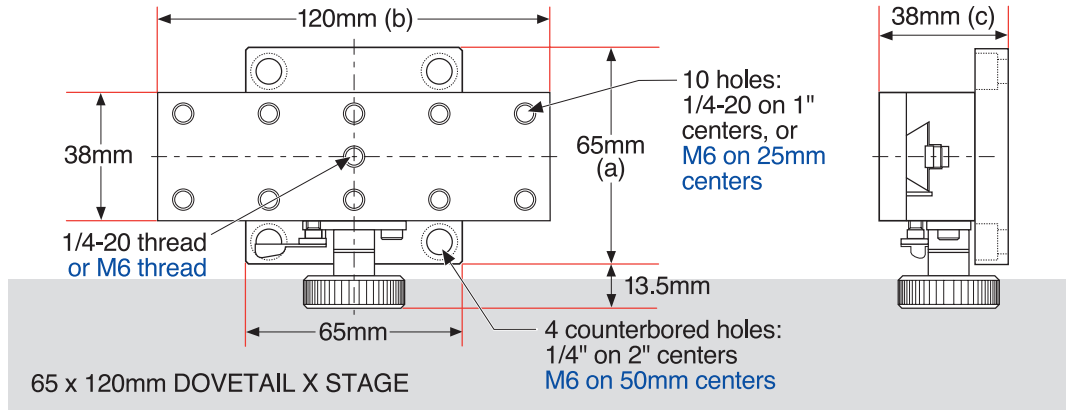
Tilt Platforms

OEM Slides

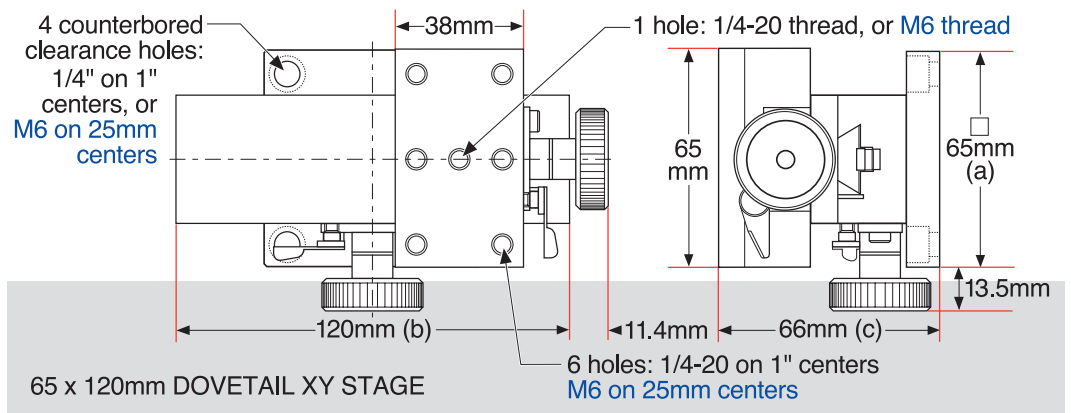
Accessories

65mm Rack and Pinion Stages

Part No. 123-4760/4765

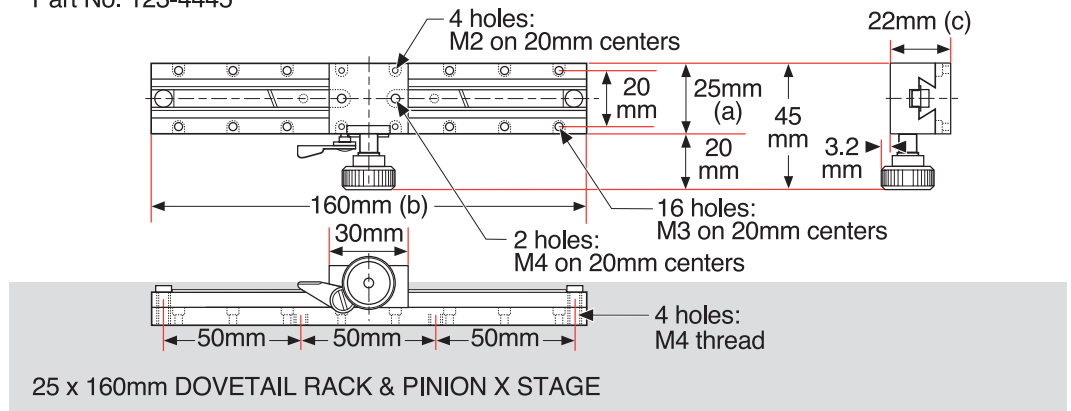


Part No. 123-4780/4785



25mm Rack and Pinion Stages

Part No. 123-4445

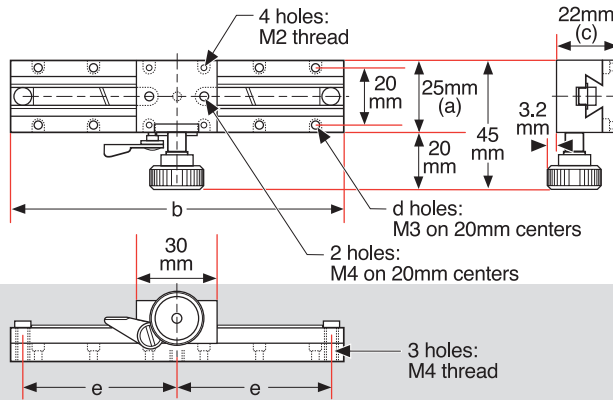


ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com



25mm Rack and Pinion Stages

Part No.	Dimensions (mm)			No. of Holes	Dim. e
	a	b	c		
123-4415	25	50	22	4	20
123-4425	25	80	22	8	35
123-4435	25	120	22	12	55



25mm DOVETAIL X STAGE

Specifications & Tolerances

- Dimensions: $\pm 0.2\text{mm}$
- Finish: Black anodized and black chrome
- Adjustment: 20mm/turn
- Sensitivity: 100 μm , 0.1mm
- Yaw: <30arcsec
- Material: Aluminum and brass
- Pitch: <1arcmin
- Straightness: 20 μm , 65mm stages
30 μm , 120mm stages
20 μm , 50mm stage
30 μm , 80mm stage
40 μm , 120mm stage
50 μm , 160mm stage

Rack and Pinion Dovetail Stages

Dimensions, a x b (mm)	Height, c (mm)	Motion	Travel (mm)	Load Capacity (kg)	Price	INCH	METRIC
						PART NUMBER	PART NUMBER
65 x 65	38	X	30	7.5		123-4710	123-4715
65 x 65	66	XY	30x30	7.5		123-4720	123-4725
65 x 65	94	Z	45	2.5		123-4730	123-4735
65 x 65	122	XZ	30x45	2.5		123-4740	123-4745
65 x 65	150	XYZ	30x30x45	2.5		123-4750	123-4755
65 x 120	38	X	80	5.0		123-4760	123-4765
65 x 120	66	XY	80x30	5.0		123-4780	123-4785
25 x 50	22	X	20	1.5		-	123-4415
25 x 80	22	X	50	1.5		-	123-4425
25 x 120	22	X	90	1.5		-	123-4435
25 x 160	22	X	130	1.5		-	123-4445

ORDERING & TECHNICAL SUPPORT
 (949) 851-5881
 FAX (949) 851-5058
 E-MAIL
sales@optosigma.com
 WEB
www.optosigma.com



Steel Extended
Contact Bearing Stages

Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

OEM Slides

Accessories

Preset Dovetail Stages

- Set and lock in position
- Hex-key adjusted
- Ideal for initial setup and OEM use
- X,Y,Z and all combinations
- 65, 40, 25 and 15mm footprints match other stages
- Lockable



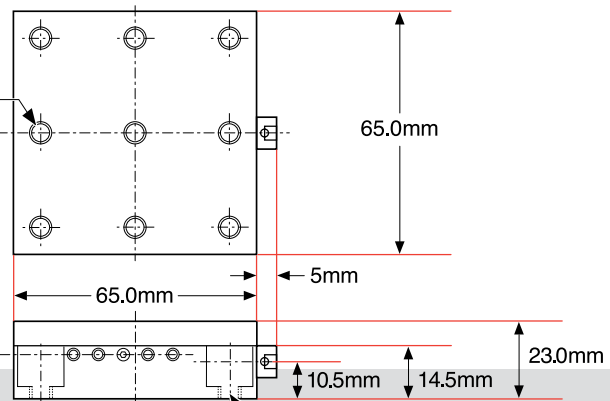
Initial alignment of an optical system requires many adjustments which should then be locked to prevent inadvertent use.

These preset stages utilize precision dovetail slides and are adjusted by means of a special key or Allen wrench. The vertical slides have a built-in thumb-wheel adjuster. Once set, the stages can be locked in place and the key removed to prevent inadvertent adjustment. X, Z, XY, XZ and XYZ combinations are offered in four footprint sizes which match our conventional stages. These are some of the most compact adjustment mechanisms available and they are ideally suited to OEM applications.

65mm Preset Dovetail Stages

Part No. 123-3530/3535

9 holes:
1/4-20 UNC on 1 inch centers
M6 on 25mm centers



65mm PRESET DOVETAIL STAGE X

3 counterbored clearance holes:
1/4-20 UNC on 2 inch centers
M6 on 50mm centers

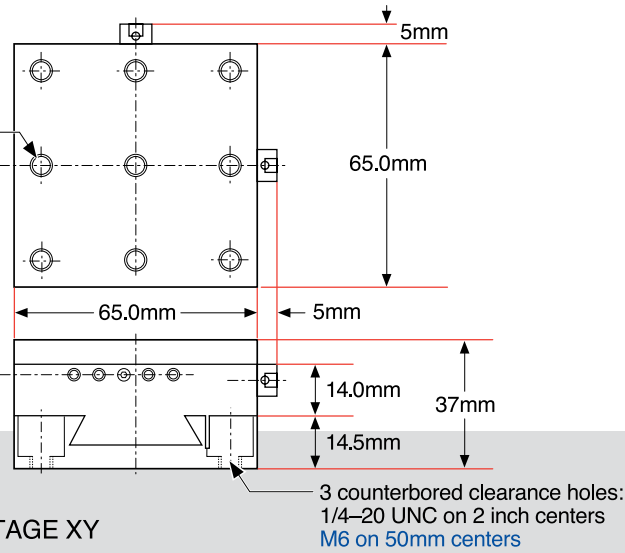
ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com

- Steel Extended Contact Bearing Stages
- Steel Extended Contact Bearing Stages
- Aluminum Stages
- Rotation Stages
- Goniometers
- Rack & Pinion Dovetail Stages
- Preset Dovetail Stages**
- Leadscrew Slides
- Tilt Platforms
- OEM Slides
- Accessories

65mm Preset Dovetail Stages

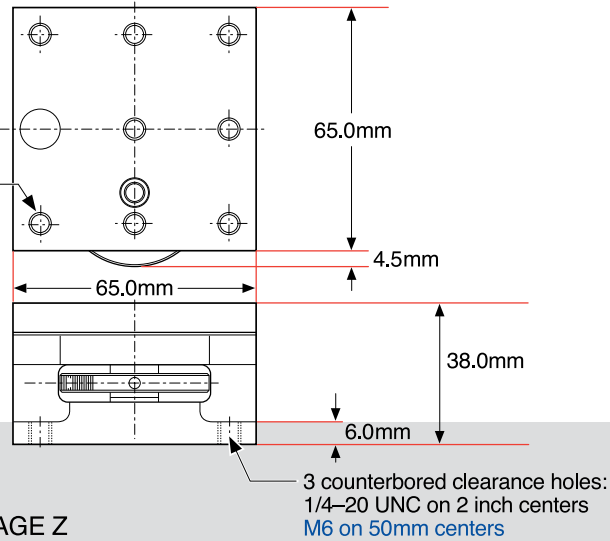
Part No. 123-3540/3545

9 holes:
1/4-20 UNC on 1 inch centers
M6 on 25mm centers



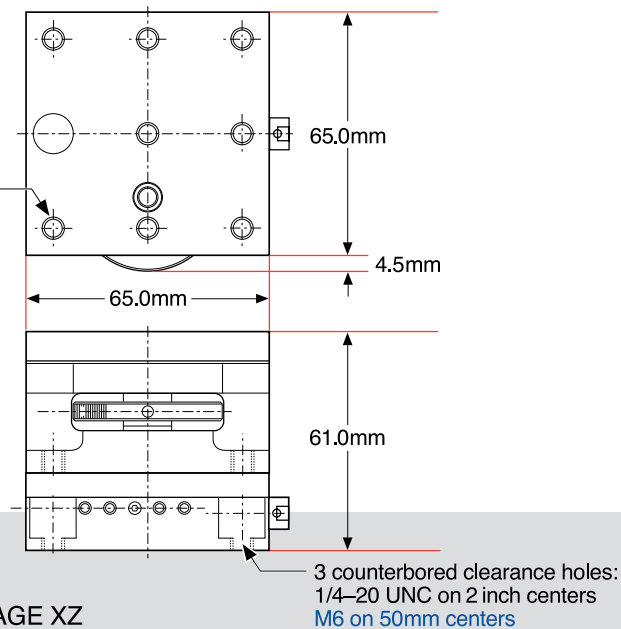
Part No. 123-3550/3555

8 holes:
1/4-20 UNC on 1 inch centers
M6 on 25mm centers



Part No. 123-3570/3575

8 holes:
1/4-20 UNC on 1 inch centers
M6 on 25mm centers



ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com



MANUAL POSITIONERS

Steel Extended
Contact Bearing Stages

Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

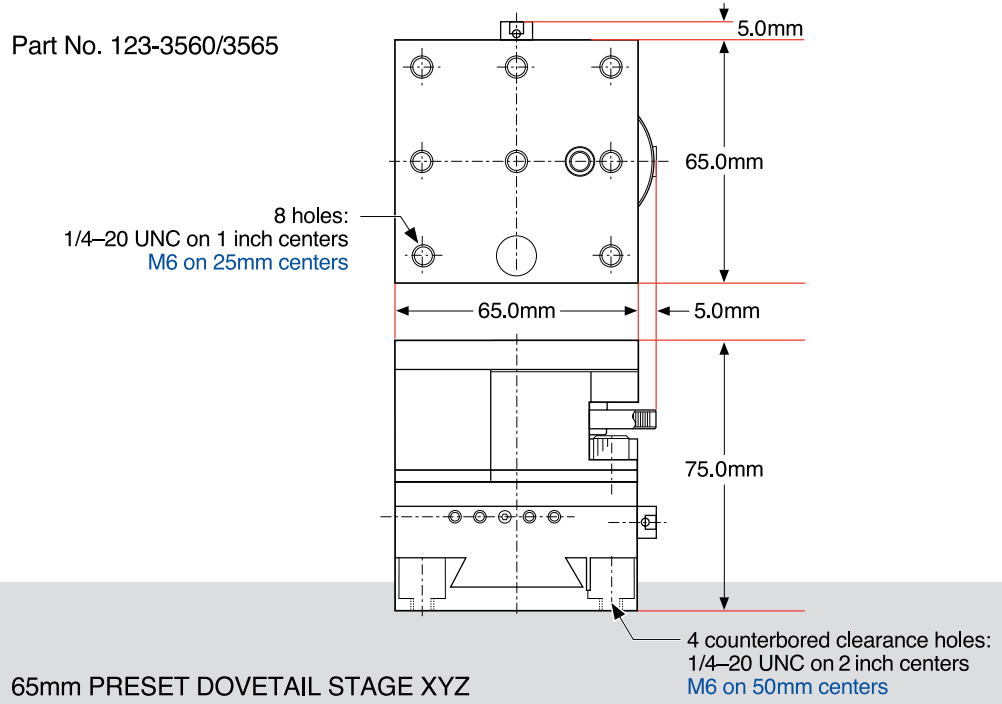
Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

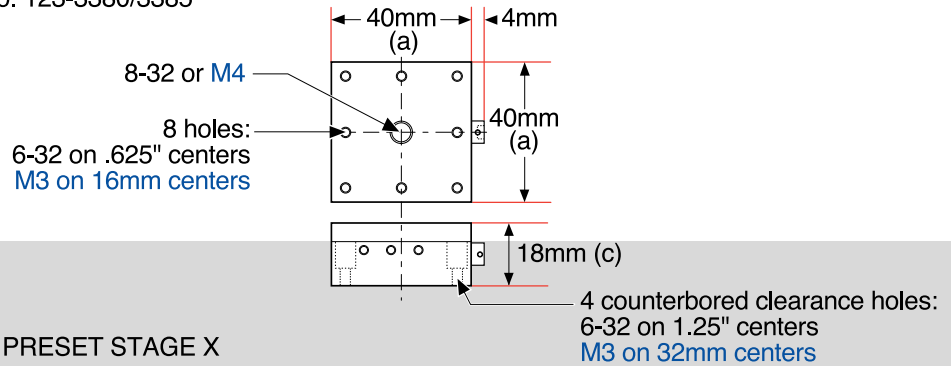
OEM Slides

Accessories

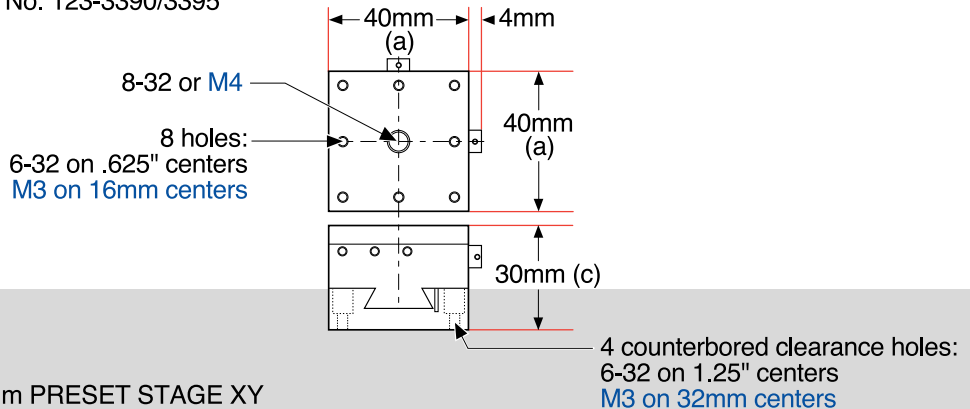


40mm Preset Dovetail Stages

Part No. 123-3380/3385



Part No. 123-3390/3395



ORDERING
&
TECHNICAL SUPPORT

(949) 851-5881
FAX (949) 851-5058

E-MAIL
sales@optosigma.com

WEB
www.optosigma.com



40mm Preset Dovetail Stages

Steel Extended
Contact Bearing Stages

Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

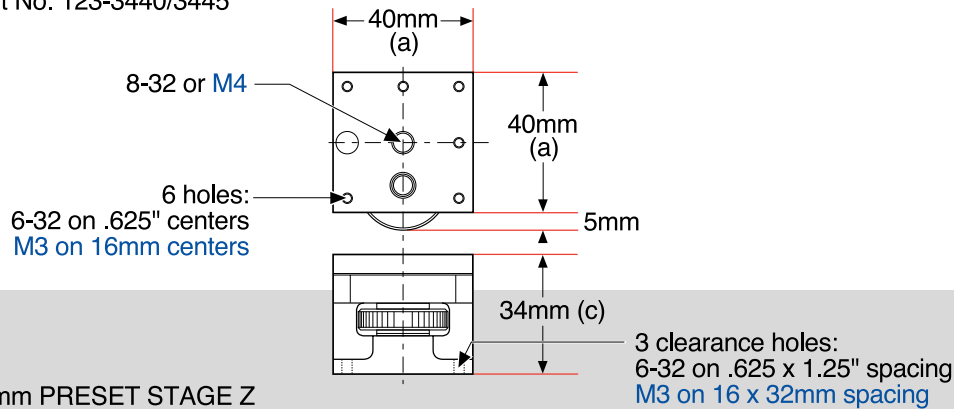
Leadscrew Slides

Tilt Platforms

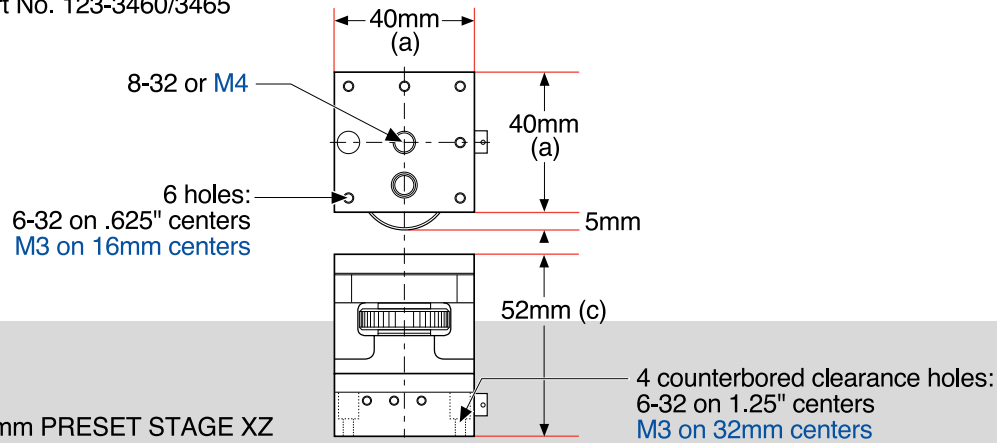
OEM Slides

Accessories

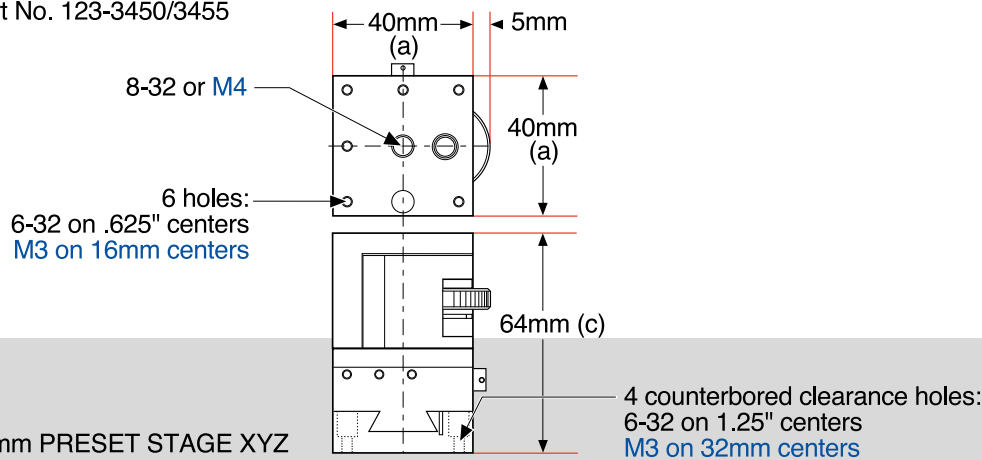
Part No. 123-3440/3445



Part No. 123-3460/3465



Part No. 123-3450/3455



ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com



Steel Extended
Contact Bearing Stages

Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

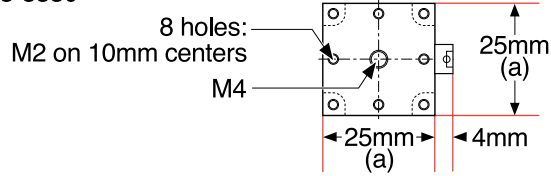
Tilt Platforms

OEM Slides

Accessories

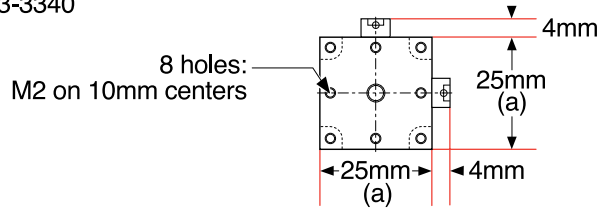
25mm Preset Dovetail Stages

Part No. 123-3330



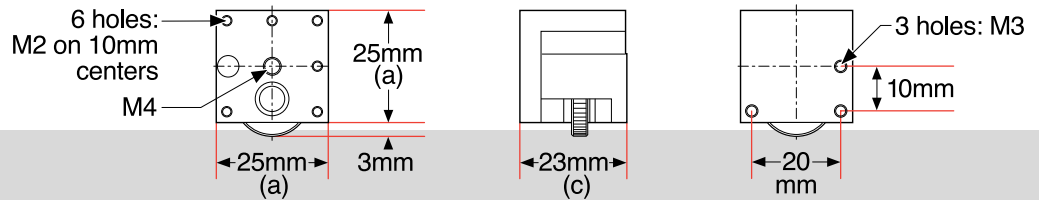
25mm PRESET STAGE X

Part No. 123-3340



25mm PRESET STAGE XY

Part No. 123-3350



25mm PRESET STAGE Z

ORDERING
&
TECHNICAL SUPPORT

(949) 851-5881
FAX (949) 851-5058

E-MAIL
sales@optosigma.com

WEB
www.optosigma.com

25mm Preset Dovetail Stages

Steel Extended
Contact Bearing Stages

Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

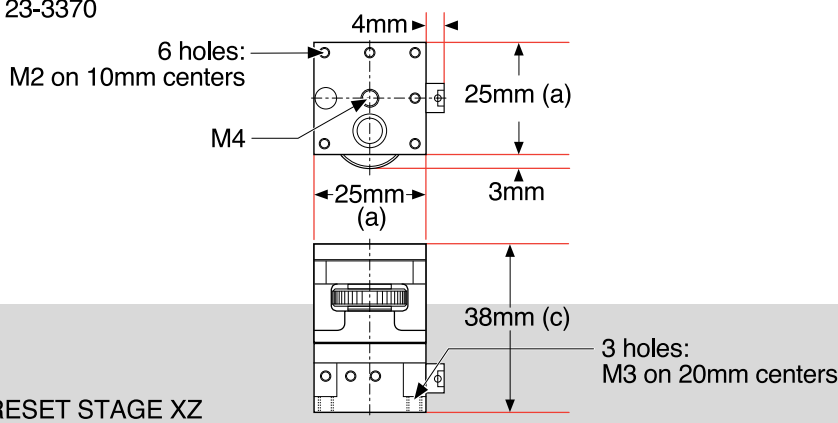
Leadscrew Slides

Tilt Platforms

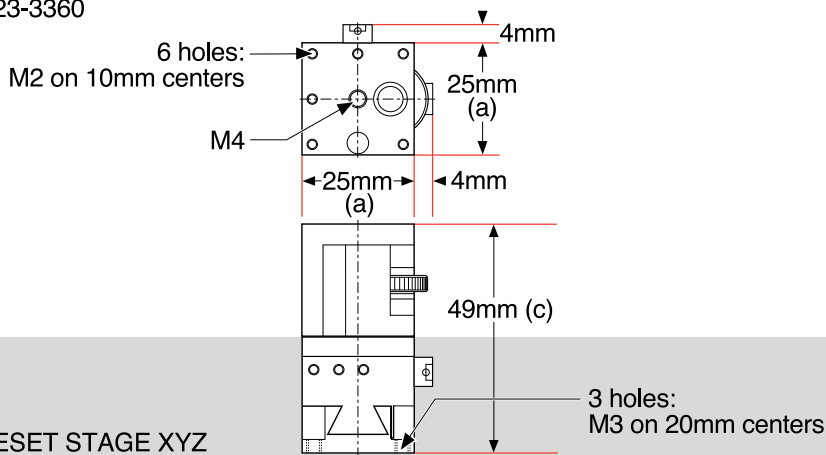
OEM Slides

Accessories

Part No. 123-3370

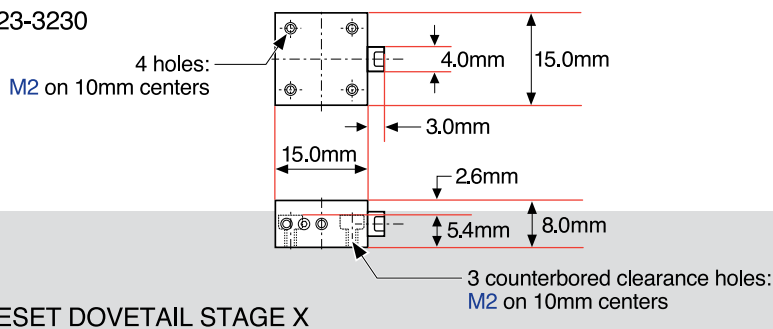


Part No. 123-3360



15mm Preset Dovetail Stages

Part No. 123-3230



ORDERING
&
TECHNICAL SUPPORT
(949) 851-5881
FAX (949) 851-5058
E-MAIL
sales@optosigma.com
WEB
www.optosigma.com



Steel Extended
Contact Bearing Stages

Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

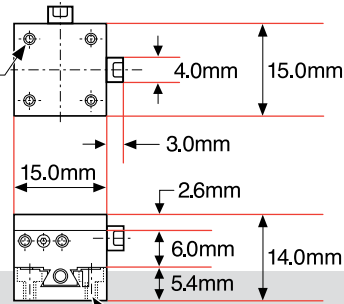
OEM Slides

Accessories

15mm Preset Dovetail Stages

Part No. 123-3240

4 holes:
M2 on 10mm centers

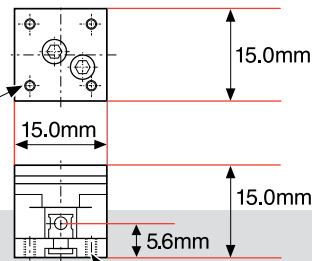


3 counterbored clearance holes:
M2 on 10mm centers

15mm PRESET DOVETAIL STAGE XY

Part No. 123-3250

4 holes:
M2 on 10mm centers

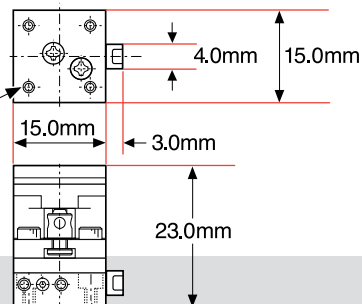


4 counterbored clearance holes:
M2 on 10mm centers

15mm PRESET DOVETAIL STAGE Z

Part No. 123-3270

4 holes:
M2 on 10mm centers



3 counterbored clearance holes:
M2 on 10mm centers

15mm PRESET DOVETAIL STAGE XZ

ORDERING
&
TECHNICAL SUPPORT

(949) 851-5881

FAX (949) 851-5058

E-MAIL

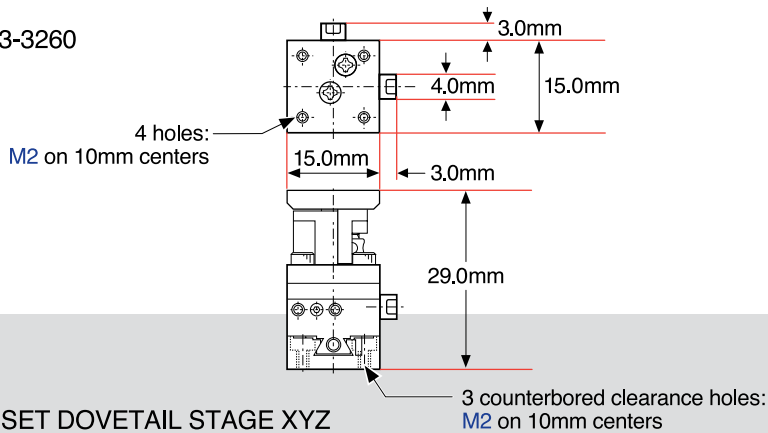
sales@optosigma.com

WEB

www.optosigma.com

15mm Preset Dovetail Stages

Part No. 123-3260



15mm PRESET DOVETAIL STAGE XYZ

- Steel Extended Contact Bearing Stages
- Steel Extended Contact Bearing Stages
- Aluminum Stages
- Rotation Stages
- Goniometers
- Rack & Pinion Dovetail Stages
- Preset Dovetail Stages**
- Leadscrew Slides
- Tilt Platforms
- OEM Slides
- Accessories

Specifications & Tolerances

Dimensions: $\pm 0.2\text{mm}$
 Straightness: $30\mu\text{m}$
 Sensitivity: $10\mu\text{m}$
 Material: Brass and Aluminum
 Finish: Black chrome and black anodized

Preset Dovetail Stages

Side, a (mm)	Height, c (mm)	Axes of Travel	Travel (mm)	Load Capacity (kg)	Price	PART NUMBER	
						INCH	METRIC
65	23	X	20	7.50	\$ 125.00	123-3530	123-3535
65	37	XY	20x20	7.50	\$ 195.00	123-3540	123-3545
65	38	Z	7	5.00	\$ 210.00	123-3550	123-3555
65	75	XYZ	20x20x7	5.00	\$ 405.00	123-3560	123-3565
65	61	XZ	20x7	5.00	\$ 335.00	123-3570	123-3575
40	18	X	14	5.00	\$ 90.00	123-3380	123-3385
40	30	XY	14	5.00	\$ 135.00	123-3390	123-3395
40	34	Z	5	1.50	\$ 150.00	123-3440	123-3445
40	64	XYZ	14x14x5	1.50	\$ 305.00	123-3450	123-3455
40	52	XZ	14x5	1.50	\$ 240.00	123-3460	123-3465
25	15	X	6	2.50	\$ 75.00	-	123-3330
25	26	XY	6	2.50	\$ 125.00	-	123-3340
25	23	Z	3	0.35	\$ 115.00	-	123-3350
25	49	XYZ	6x6x3	0.35	\$ 240.00	-	123-3360
25	38	XZ	6x3	0.35	\$ 190.00	-	123-3370
15	8	X	4	0.50	\$ 75.00	-	123-3230
15	14	XY	4x4	0.50	\$ 120.00	-	123-3240
15	15	Z	2	0.25	\$ 125.00	-	123-3250
15	29	XYZ	4x4x2	0.25	\$ 245.00	-	123-3260
15	23	XZ	4x2	0.25	\$ 200.00	-	123-3270

ORDERING & TECHNICAL SUPPORT
 (949) 851-5881
 FAX (949) 851-5058
 E-MAIL sales@optosigma.com
 WEB www.optosigma.com

