DYNAPRO

G*GRASS®

DYNAPRO SLIDE SYSTEM

The new generation of concealed undermount slides.
Elegant, comfortable, and precision engineered.

To create a product innovation is one thing.
To establish it is quite another. To successfully develop product innovations – that is our business.
Dynapro proves that.

Just a slight pull is all you need.

With a drawer slide as technically advanced as the Dynapro, you will find many enhanced features. One example is the ease in which the Dynapro pulls open – and naturally the closing action is just as sophisticated with the Grass Soft-close system.

DYNAPRO SLIDE SYSTEM

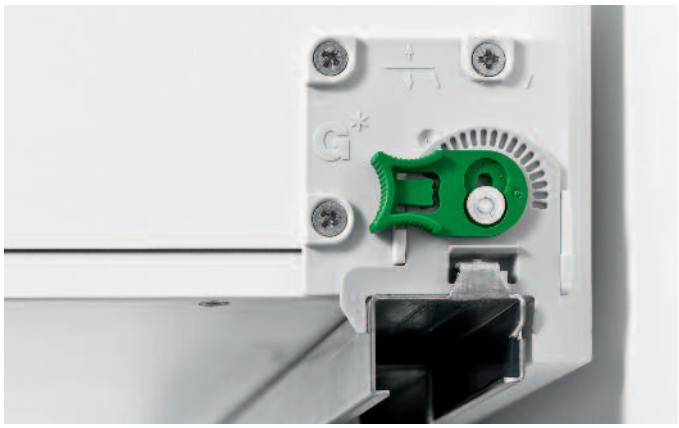
Efficient. Effective. Concealed. Dynapro, the new generation of undermount slides for wood drawers, combines intelligent features plus superb gliding action for today's modern cabinetry.

Synchronization achieves smooth operation without a sound.

In contrast to conventional undermount slide systems, Dynapro is the only slide that features a synchronization mechanism. This mechanical synchronization of each individual slide ensures enhanced comfort and movement without annoying sounds or resistance. The operating function of Dynapro remains unchanged even when moving heavy loads. Loads of up to 130 pounds present no problem for Dynapro. Abrasion-resistant nylon rollers ensure smooth and even operation.

3D adjustment option for perfect alignment: Height adjustment, Side adjustment, and Tilt adjustment.

Dynapro is the first undermount slide system to offer an integrated three-dimensional adjustment option. The drawer can be adjusted vertically, horizontally, and in the tilt angle. Dynapro is the first undermount slide that has incorporated a 3-dimensional adjustment that has long been a standard for drawer systems such as Nova Pro and DWD XP. Adjustments are simple operations and easily performed without the use of tools. In short, it just takes a few tweaks to achieve perfect alignment.



But it's not only the end user who benefits from these technical developments. For installers and cabinet manufacturers, Dynapro's precise drawer front alignment is a plus.
With operating comfort, stability, maximum adjustment, quiet operation, and increased carrying capacity, Dynapro provides what today's cabinet makers and end users want most.

Dynapro

Features and Benefits

Features

- Synchronization for smooth, silent operation
- Ridges on drawer member and front locking devices for immediate connection
- Support roller for uniform drawer front height
- 3-D adjustment - tilt, height, and side - is simple, tool free and easily accessible
- Easy to open with a low pull-out force
- Wide drawer member provides stability between cabinet and drawer member

- **Uniform height position of drawer front panel regardless of weight due to the support roller.**

- **Excellent running performance due to the world's first synchronization in concealed drawer slides.**

- **Superior stability provided by 31 mm wide drawer members. Suitable for drawer widths of up to 48".**

- **Ridges on the slide and front locking device connect immediately at installation for maximum connection between the drawer slide and front locking device.**

But it's not only the end user who benefits from these technical developments. For installers and cabinet manufacturers, Dynapro offers precise drawer front alignment due to the addition of the three dimensional adjustment feature.

Grass Dynapro

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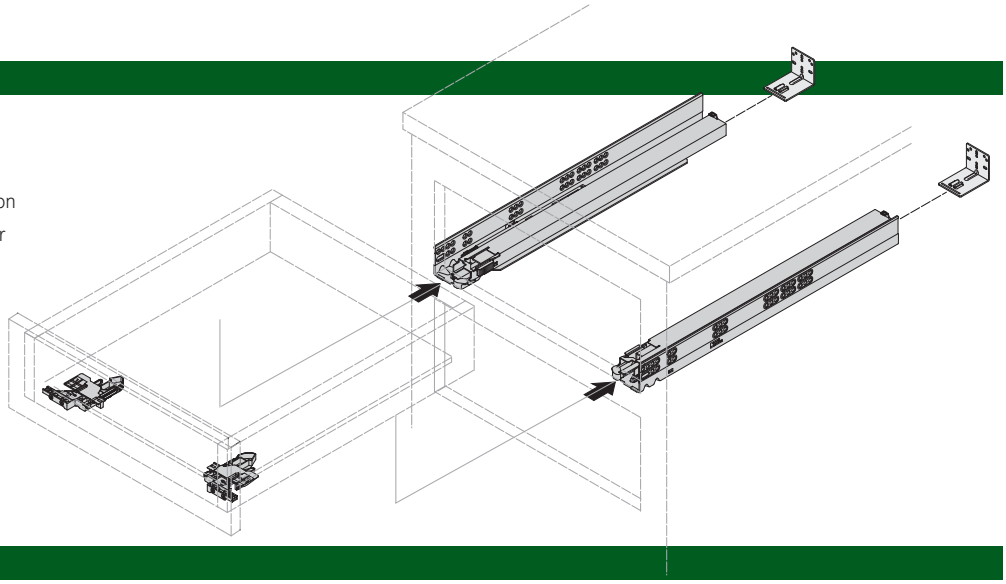
Technical information

for Dynapro

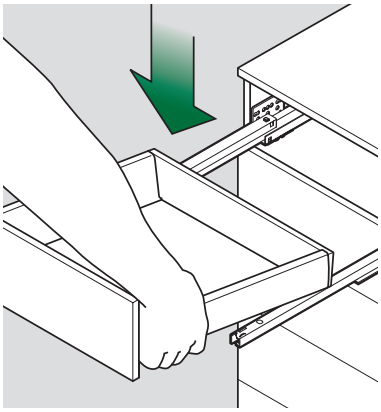
Dynapro Application

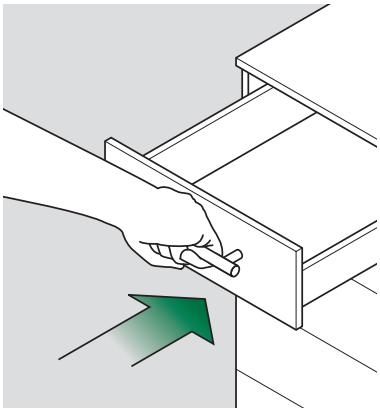
- For drawer material up to 5/8" (16 mm)
- For frameless or face frame application
- Use rear socket for face frame application
- Heavy duty slide must be blocked out for face frame application



Inserting the drawer

Place drawer on extended Dynapro slide and push in until it engages audibly

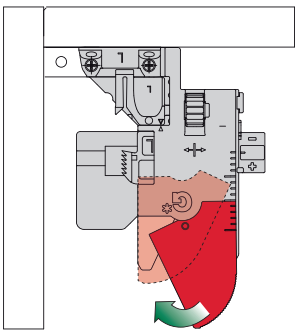




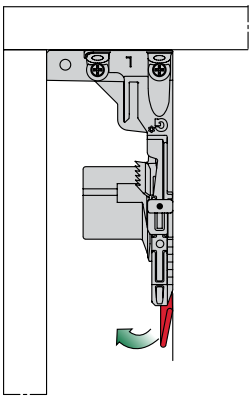
Disengaging the drawer

Pull the drawer out, squeeze the locking device levers and lift drawer from the slide.

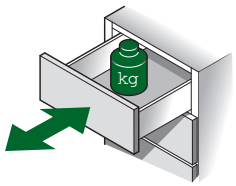
Front locking device



Narrow front locking device



Weight Capacities



Dynapro 2-D: 88 lbs dynamic load rating
Dynapro 3-D: 88 lbs dynamic load rating
Dynapro 3-D Heavy Duty: 132 lbs dynamic load rating
Dynapro exceeds BHMA Grade 1 testing requirements

Technical information

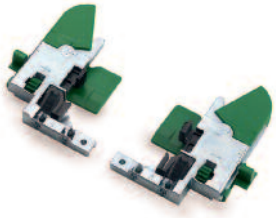
for Dynapro

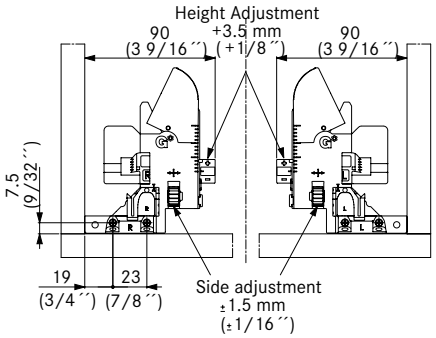
Front locking device

- For 2-dimensional and 3-dimensional drawers
- For standard width drawers
- For standard width inset drawers
- Minimum inside drawer width 180 (7 3/32")

Pre-drilling recommended
Ø2.5 mm (3/32")

Patent Pending

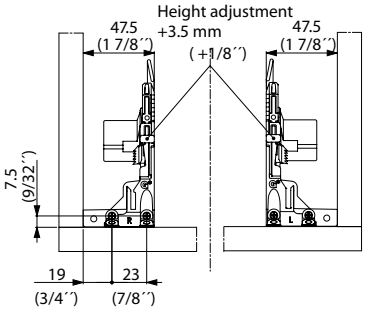




Narrow front locking device

- For 1-dimensional and 2-dimensional drawers
- For narrow and standard width drawers
- For narrow and standard width inset drawers
- Minimum inside drawer width 95 mm (3 3/4")

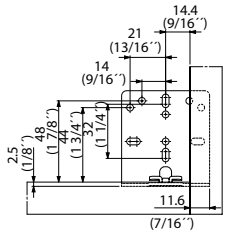
Pre-drilling recommended
Ø2.5 mm (3/32")



Rear mounting socket for 12" - 21" slides

- For 12" - 21" drawers
- For Face Frame application
- Heavy duty slide must be blocked out for Face Frame application

Pre-drilling recommended
Ø2.5 mm (3/32")

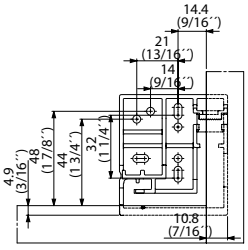


Rear mounting socket for 9" slide

- For 9" drawer
- For Face Frame application

Pre-drilling recommended
Ø2.5 mm (3/32")

Available Winter 2010

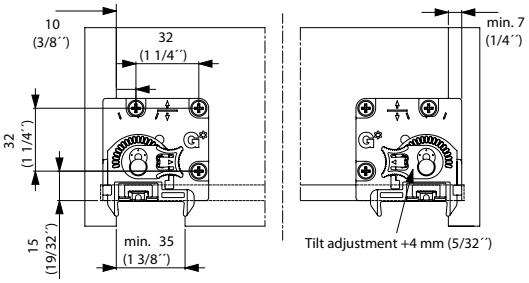


Adjustment adapter

- Provides tilt adjustment with Dynapro 3-D and Dynapro 3-D heavy duty
- Tilt adjustment +4 mm (5/32")
- For Frameless or Face Frame application

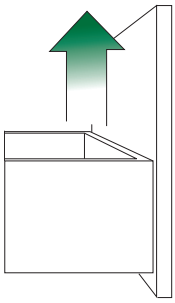
Pre-drilling recommended
Ø2.5 mm (3/32")

Patent Pending

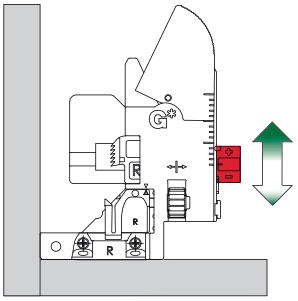


Height adjustment (max. +3.5 mm) — Dynapro

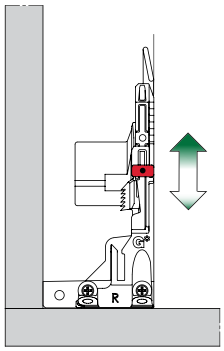
- 2-D and 3-D applications



Front locking device

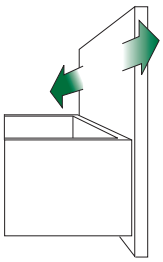


Narrow front locking device

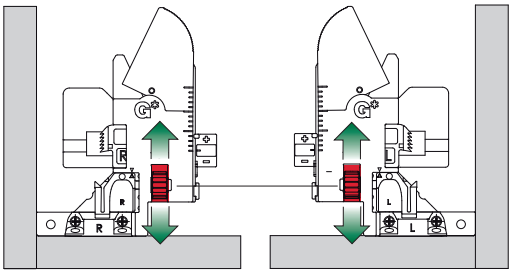


Side adjustment (max. ±1.5 mm) — Dynapro

- 2-D and 3-D applications

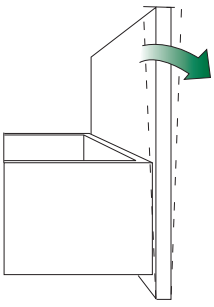


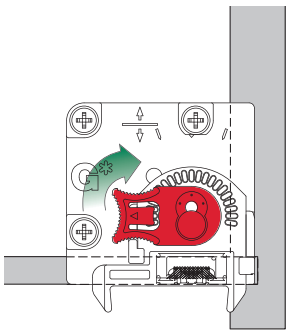
1 Adjust both wheels in the same direction
2 Disengage drawer
3 Attach drawer



Tilt adjustment (max. +4.0 mm) — Dynapro

- 3-D applications





Technical information

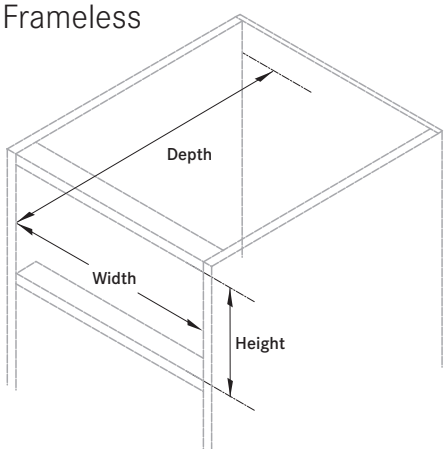
for Dynapro 2-D drawer slide

Installation Instructions

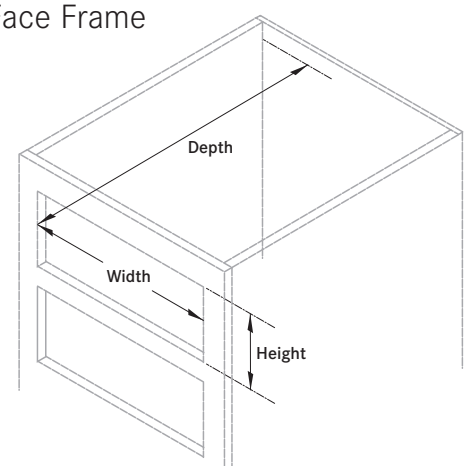
1. Determine the interior cabinet depth and choose the right slide.

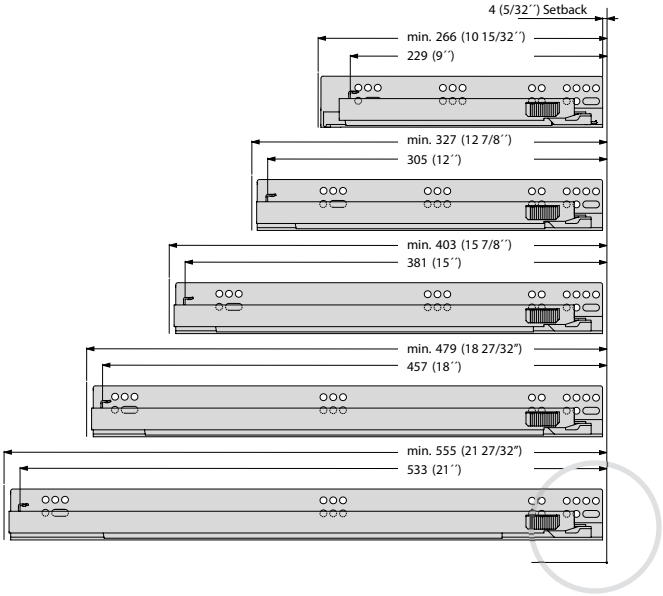
Measure from outside of the face frame or outside of the side panel to the cabinet back / cross stretcher. Refer to the charts below to choose the correct frameless or face frame slide. Drawer box length will correspond.

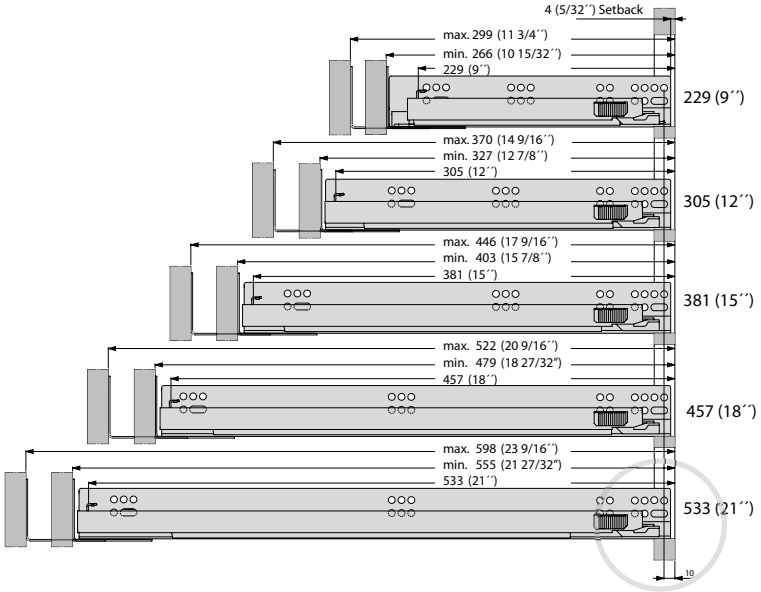
Frameless

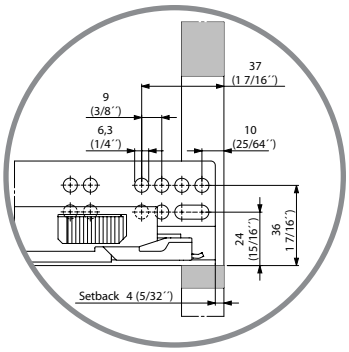


Face Frame









Note

Attaching the cabinet members:

The recommendations for screws are guidelines only.
Installers need to ensure that the cabinet wall is adequate.

Technical information

for Dynapro 2-D drawer slide

Installation Instructions continued

2. Prepare your drawer box

A Calculate the outside drawer box width (see chart at right)
Example: When using 16 mm (5/8”) drawer material, the formula is:
Inside cabinet width - 10 mm (3/8”)

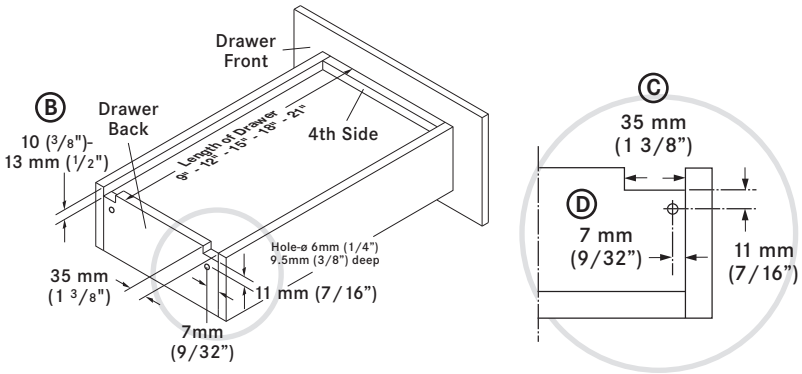
B The drawer bottom reveal is 10 mm (3/8”) to 13 mm (1/2”) deep.

C Drawer back notch = 35 mm (1 3/8”)

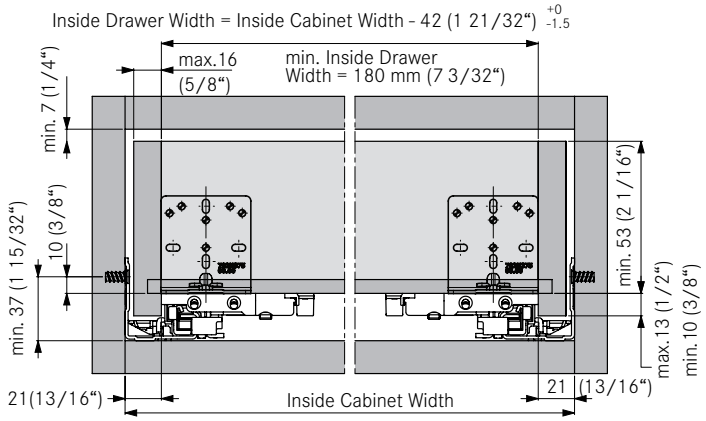
D Drill drawer hook hole. Use Dynapro drilling template or drill 6 mm (1/4”) diameter hole, 10 mm (3/8”) deep, 7 mm (9/32”) from outside edge and 11 mm (7/16”) from bottom of notch.

Ⓐ Calculation Outside Drawer Width

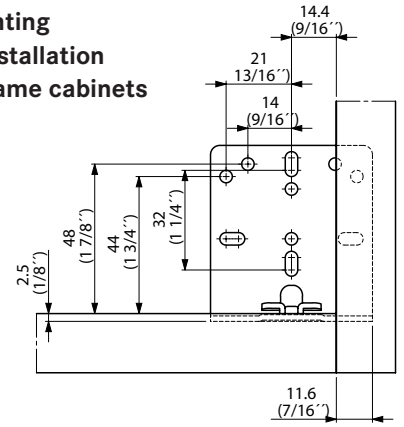
Drawer side thickness	16 (5/8")	15 (9/16")	14 (9/16")	13 (1/2")
Deduct from inside cabinet width	10 (3/8")	12 (1/2")	14 (9/16")	16 (5/8")



3. Layout your cabinet

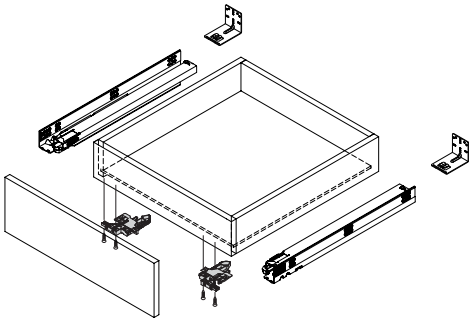


Rear mounting bracket Installation for face frame cabinets

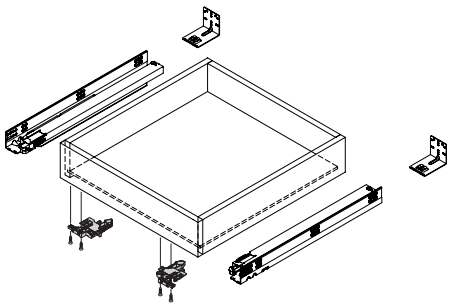


Pre-drilling recommended
Ø2.5 mm (3/32”)

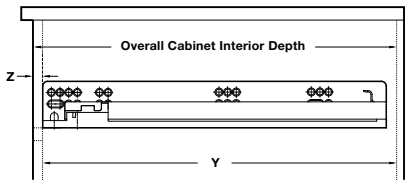
Four sided drawer overlay application with decorative drawer front



Interior drawer without decorative drawer front



Interior drawer measurements



Z = Set-back. Set-back = Decorative drawer front thickness plus 5 mm (3/16")
Y = Overall cabinet depth minus set-back

Technical information

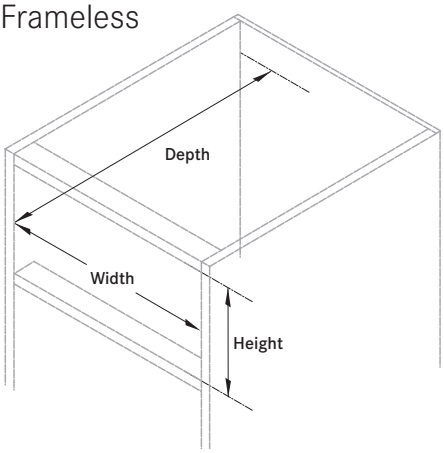
for Dynapro 3-D drawer slide

Installation Instructions

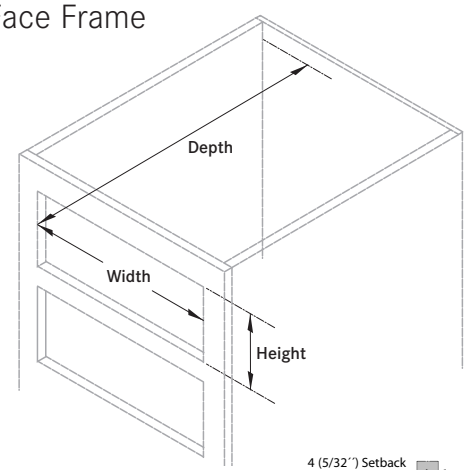
1. Determine the interior cabinet depth and choose the right slide.

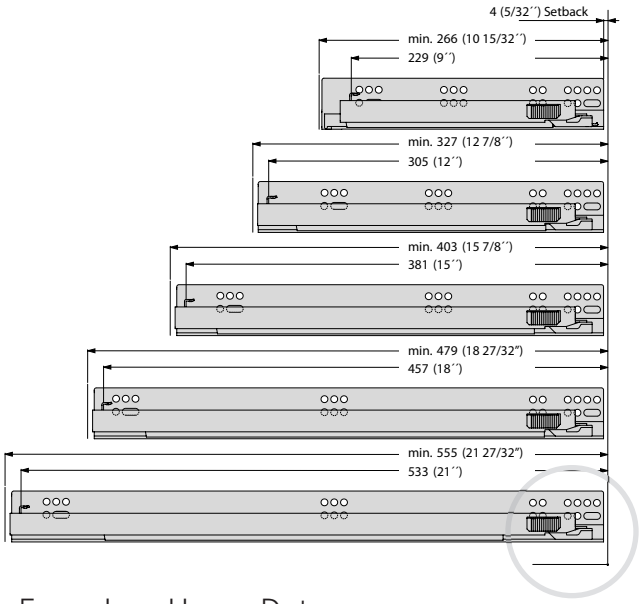
Measure from outside of the face frame or outside of the side panel to the cabinet back / cross stretcher. Refer to the charts below to choose the correct face frame or frameless slide. Drawer box length will correspond.

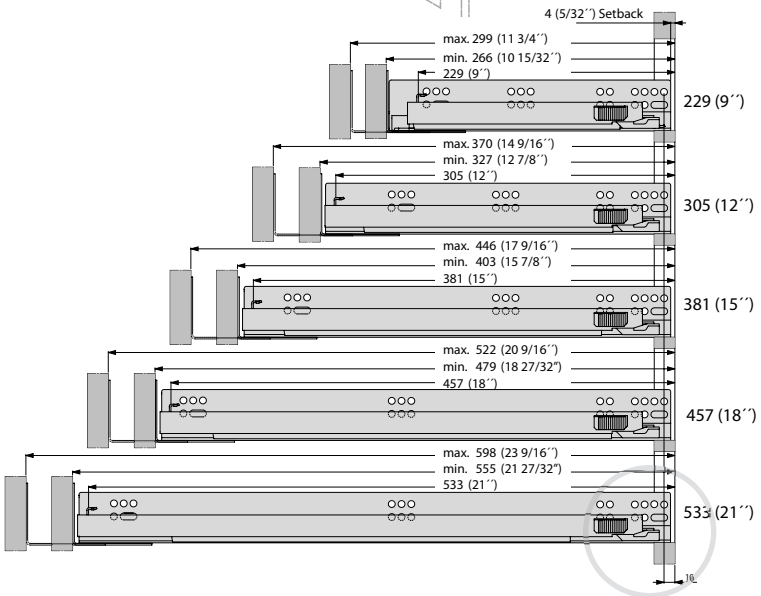
Frameless



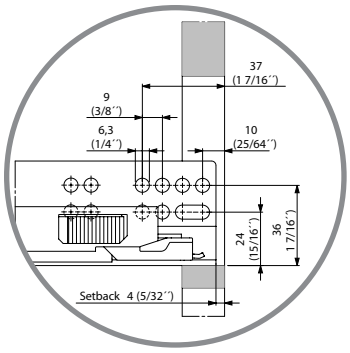
Face Frame

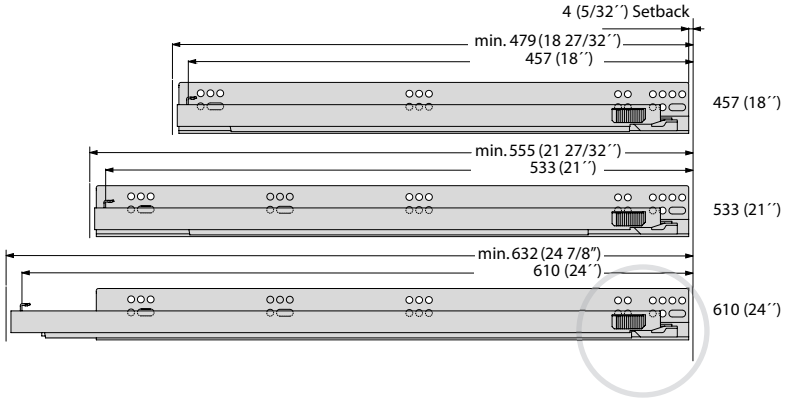






Frameless Heavy Duty





Note

Attaching the cabinet members:

The recommendations for screws are guidelines only.
Installers need to ensure that the cabinet wall is adequate.

Technical information

for Dynapro 3-D drawer slide

Installation Instructions continued

2. Prepare your drawer box

A Calculate the outside drawer box width (see chart at right)
Example: When using 16 mm (5/8") drawer material, the formula is:
Inside cabinet width minus 10 mm (3/8")

B The drawer bottom reveal is 10 mm (3/8") to 13 mm (1/2") deep.

C Drawer back notch = 35 mm (1 3/8")

Ⓐ Calculation Outside Drawer Width

Drawer side thickness	16 (5/8")	15 (9/16")	14 (9/16")	13 (1/2")
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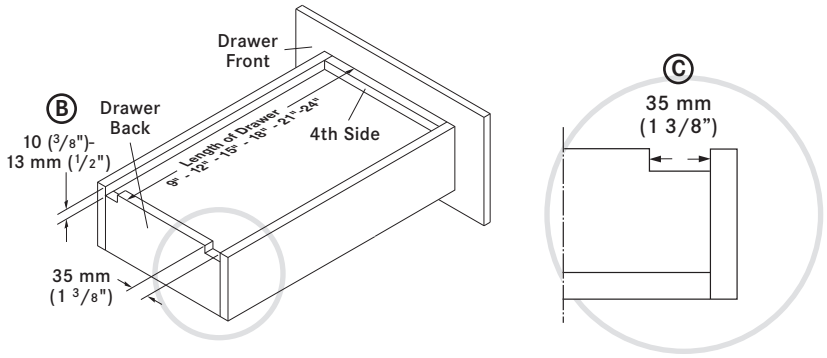
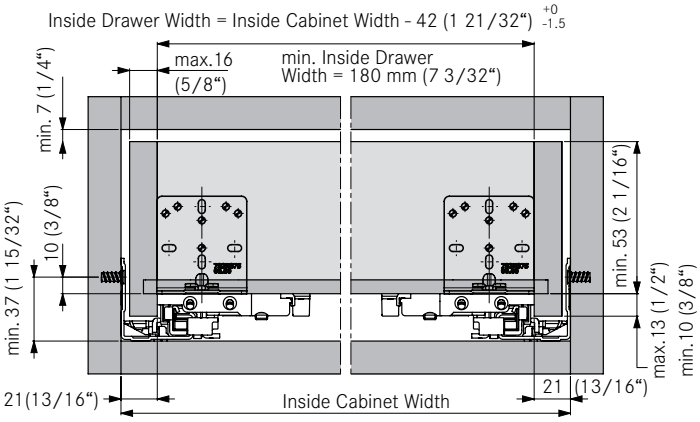
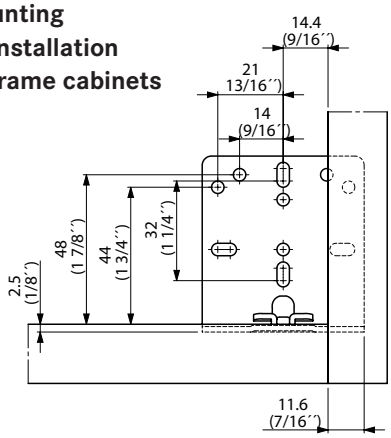


3. Layout your cabinet



Rear mounting bracket Installation for face frame cabinets

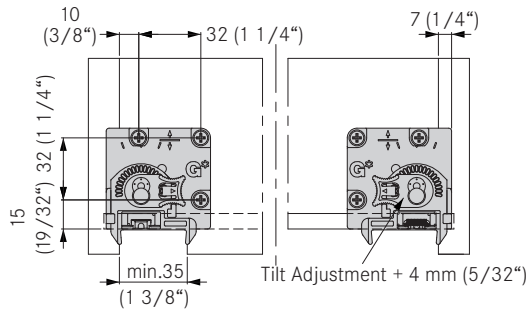


Pre-drilling recommended
Ø2.5 mm (3/32")

4. Install adjustment adapter

Pre-drilling recommended Ø2.5 mm (3/32").

Attach rear tilt adapters to back of drawer box. Adjust as needed.



Dynapro Full Extension Slide, 2-D, Frameless

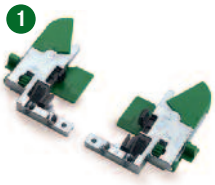
Integrated Soft-close

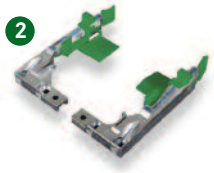
- Frameless application
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection to drawer slide and front locking device
- Integrated 2-dimensional adjustment for alignment
- Height adjustment + 3.5 mm
- Side adjustment ± 1.5 mm
- 88 lbs. load rating (40 kg)
- For 5/8" (16 mm) drawer material

Dynapro full extension slide, 88 lbs (40 kg)

Drawer length	Nominal length	Min Installation Depth	Item No.	PU
229 (9")	262 (10 5/16")	266 (10 15/32")	F130100733204	5
305 (12")	323 (12 23/32")	327 (12 7/8")	F130100734204	5
381 (15")	399 (15 23/32")	403 (15 7/8")	F130100735204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	F130100736204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	F130100737204	5

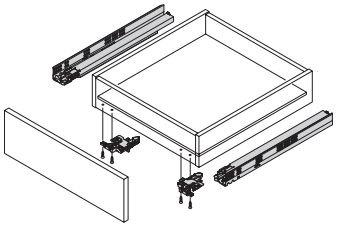
Locking devices



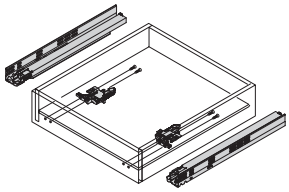


Description	Item No.	PU
(Please order separately)		
1 Front locking device, left	F134125000233	200
Front locking device, right	F134125001233	200
2 Narrow front locking device, left	F134100699233	200
Narrow front locking device, right	F134100700233	200

4-sided drawer



Inset drawer

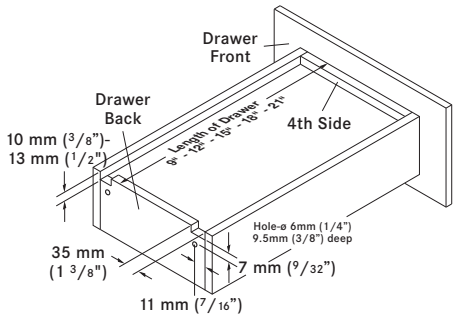


PU = Packaging Unit

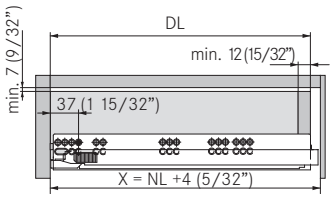
Dimensions in millimeters, fractional inch equivalents as noted.

Cabinet Type	Frameless
Drawer Material Thickness	(5/8") 16 mm
Dynamic Load	88 lbs. (40 kg)
Static Load	100 lbs. (45 kg)

Drawer Measurements

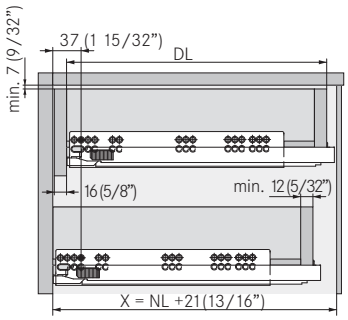


Drawer

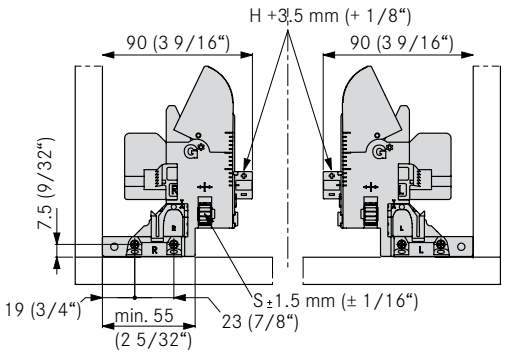


DL = drawer length
NL = nominal length
X = minimum installation depth

Inset drawer

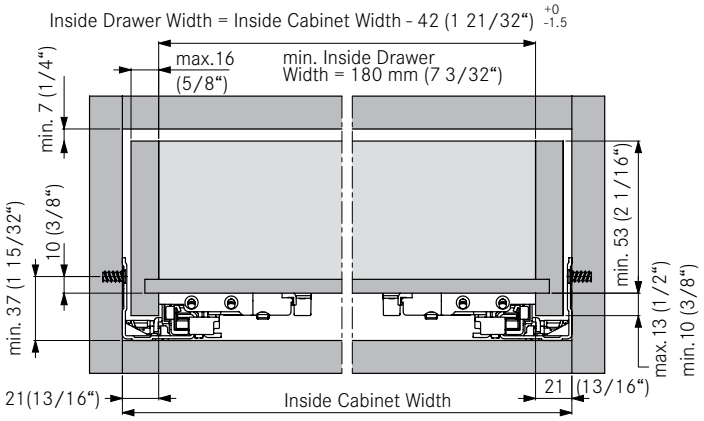


Front locking device installation

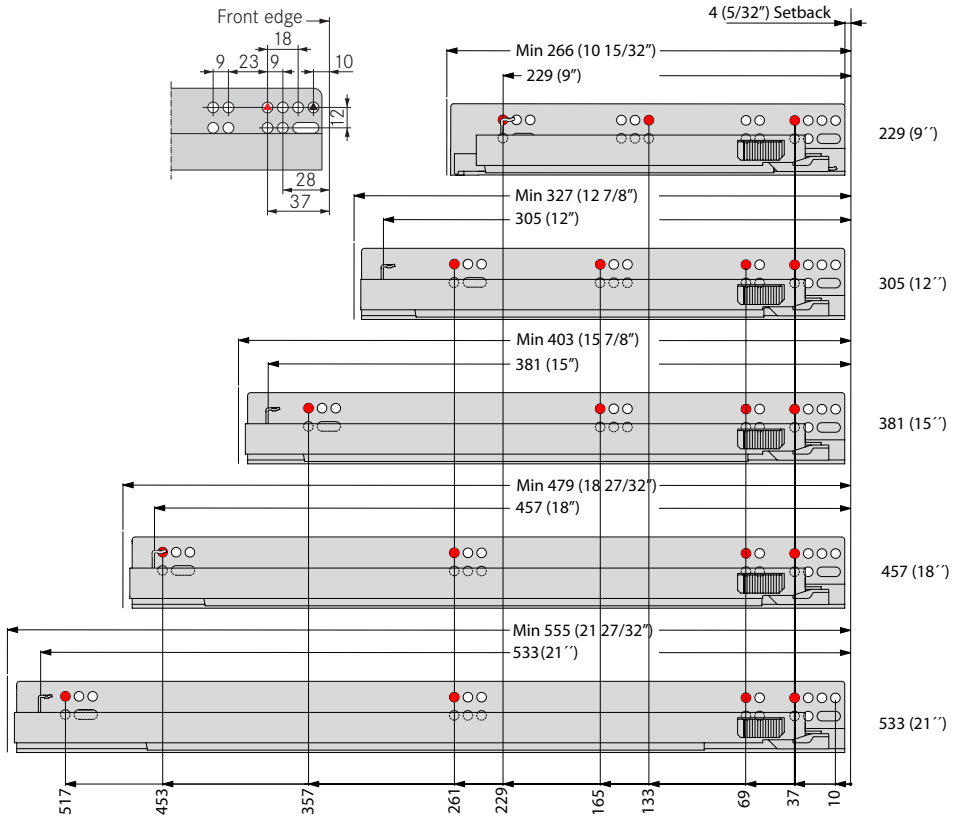


Pre-drilling recommended Ø2.5 mm (3/32")

Drawer installation dimensions



Cabinet member boring specifications



Pre-drilling recommended Ø2.5 mm (3/32").

IDW = inside drawer width
ICW = inside cabinet width
H = height adjustment
S = side adjustment
X = minimum installation depth

All dimensions in millimeters.

Dynapro Full extension slide, 2-D, Face Frame

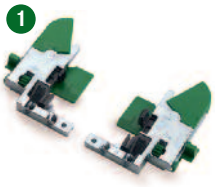
Integrated Soft-close

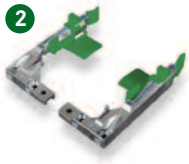
- Face frame application
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection to drawer slide and front locking device
- Integrated 2-dimensional adjustment for alignment
- Height adjustment + 3.5 mm
- Side adjustment ± 1.5 mm
- 88 lbs. load rating (40 kg)
- For 5/8" (16 mm) drawer material

Dynapro full extension slide, 88 lbs (40 kg)

Drawer length	Nominal length	Min Installation Depth	Max Installation Depth	Item No.	PU
229 (9")	262 (10 5/16")	283 (11 5/32")	299 (11 3/4")	F130100733204	5
305 (12")	323 (12 23/32")	327 (12 7/8")	370 (14 9/16")	F130100734204	5
381 (15")	399 (15 23/32")	403 (15 7/8")	446 (17 9/16")	F130100735204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	522 (20 9/16")	F130100736204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	598 (23 17/32")	F130100737204	5

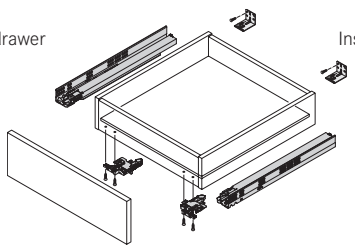
Locking devices and rear mounting sockets



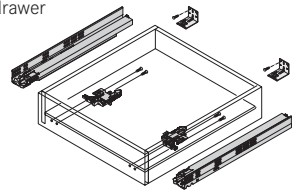


Description	Item No.	PU
(Please order separately)		
1 Front locking device, left	F134125000233	200
Front locking device, right	F134125001233	200
2 Narrow front locking device, left	F134100699233	200
Narrow front locking device, right	F134100700233	200
3 Rear mounting sockets, non-handed for 12"-21" slides	00443-40	25
4 Rear mounting socket, for 9" slide, left	00439-03	5
Rear mounting socket, for 9" slide, right	00440-03	5
Available Winter 2010		

4-sided drawer



Inset drawer

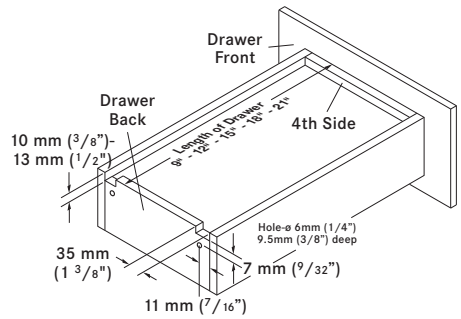


PU = Packaging Unit

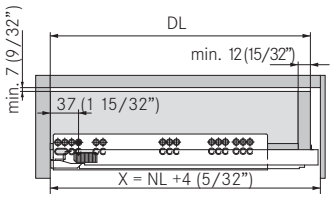
Dimensions in millimeters, fractional inch equivalents as noted.

Cabinet Type	Face Frame
Drawer Material Thickness	5/8" (16mm)
Dynamic Load	88 lbs. (40 kg)
Static Load	100 lbs. (45 kg)

Drawer Measurements

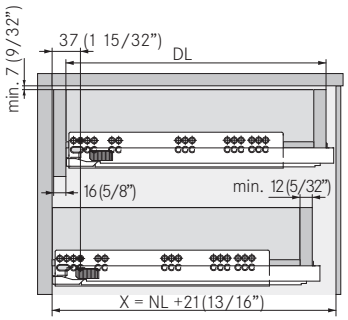


Drawer

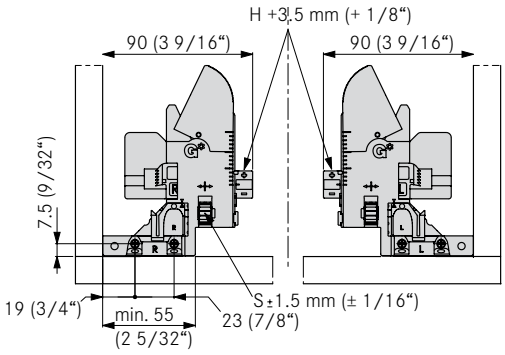


DL = drawer length
NL = nominal length
X = minimum installation depth

Inset drawer

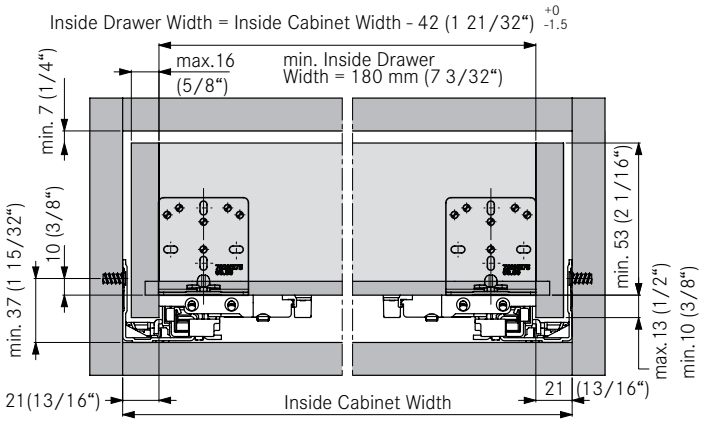


Front locking device installation



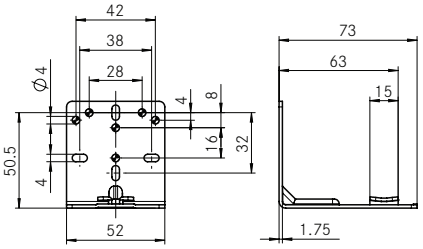
Pre-drilling recommended Ø2.5 mm (3/32")

Drawer installation dimensions



Rear mount socket installation

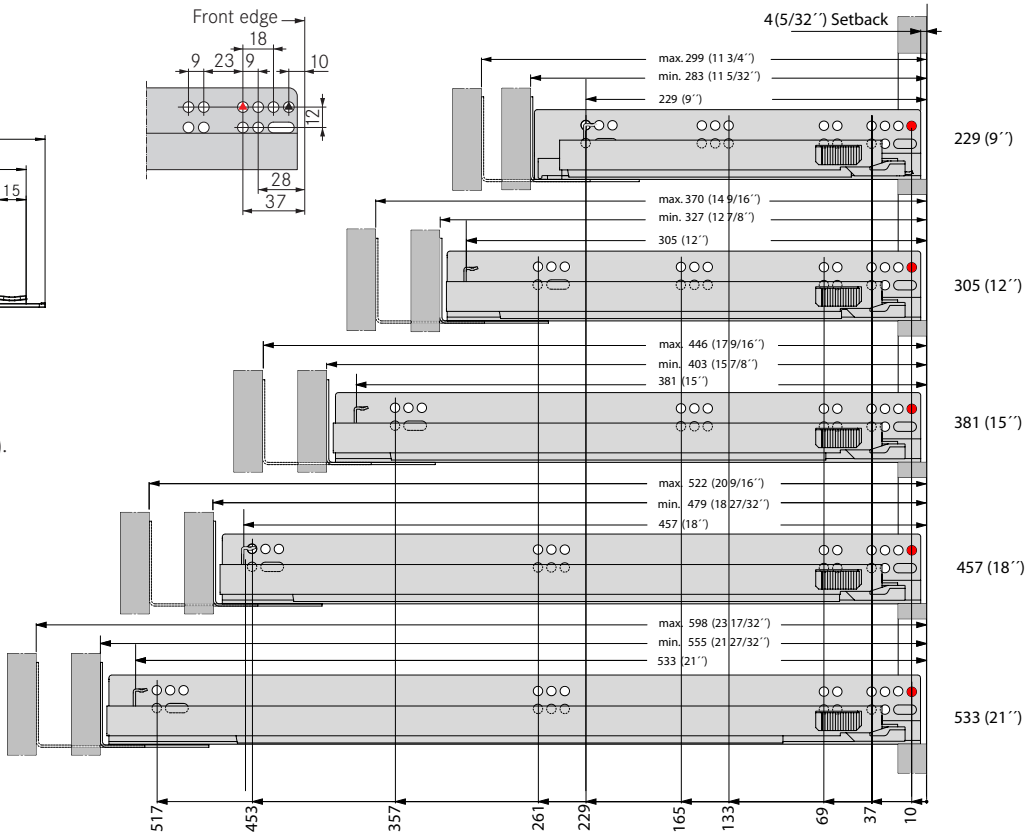
Rear socket for 12"-21" slides*



Pre-drilling recommended Ø2.5 mm (3/32").

IDW = inside drawer width
ICW = inside cabinet width
H = height adjustment
S = side adjustment
X = minimum installation depth

Cabinet member boring specifications



*For 9" Slide rear mount socket, please see page 6.

All dimensions in millimeters.

Dynapro Full Extension Slide, 3-D, Frameless

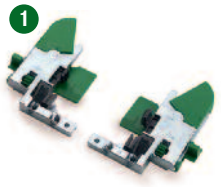
Integrated Soft-close with tilt adjustment

- Frameless application
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection drawer slide and front locking device
- Integrated 3-dimensional adjustment for alignment
- Height adjustment + 3.5 mm
- Side adjustment ± 1.5 mm
- Tilt adjustment + 4.0 mm
- 88 lbs. load rating (40 kg)
- For 5/8" (16 mm) drawer material

Dynapro full extension slide, 88 lbs. (40 kg)

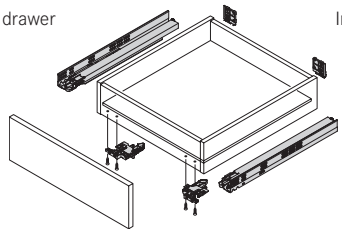
Drawer length	Nominal length	Min installation depth	Item No.	PU
229 (9")	262 (10 5/16")	266 (10 5/16")	F130100725204	5
305 (12")	323 (12 23/32")	327 (12 7/8")	F130100726204	5
381 (15")	399 (15 23/32")	403 (15 7/8")	F130100727204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	F130100728204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	F130100729204	5

Locking devices and tilt adjustment adapter

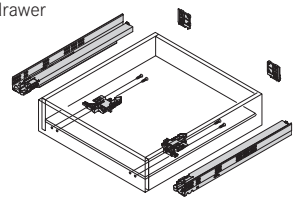


	Description	Item No.	PU
	(Please order separately)		
1	Front locking device, left	F134125000233	200
	Front locking device, right	F134125001233	200
2	Narrow front locking device, left	F134100699233	200
	Narrow front locking device, right	F134100700233	200
3	Adjustment adapter, left	F134125002233	200
	Adjustment adapter, right	F134125003233	200

4-sided drawer



Inset drawer

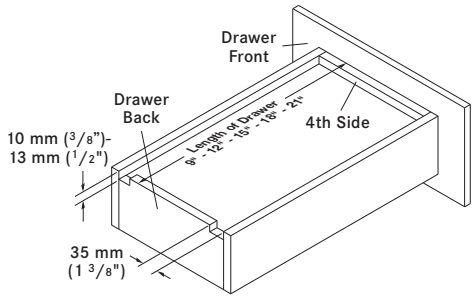


PU = Packaging Unit

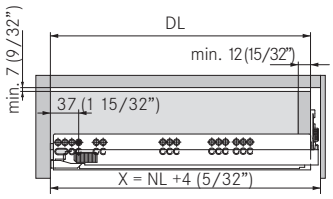
Dimensions in millimeters, fractional inch equivalents as noted.

Cabinet Type	Frameless
Drawer Material Thickness	5/8"(16mm)
Dynamic Load	88 lbs. (40 kg)
Static Load	100 lbs. (45 kg)
Adapter	Tilt Adjustment

Drawer measurements

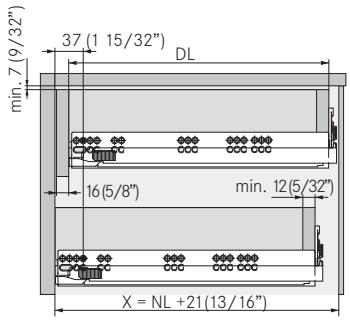


Drawer

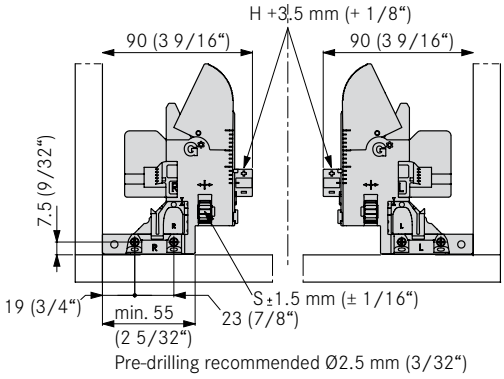


DL = drawer length
NL = nominal length
X = minimum installation depth

Inset drawer

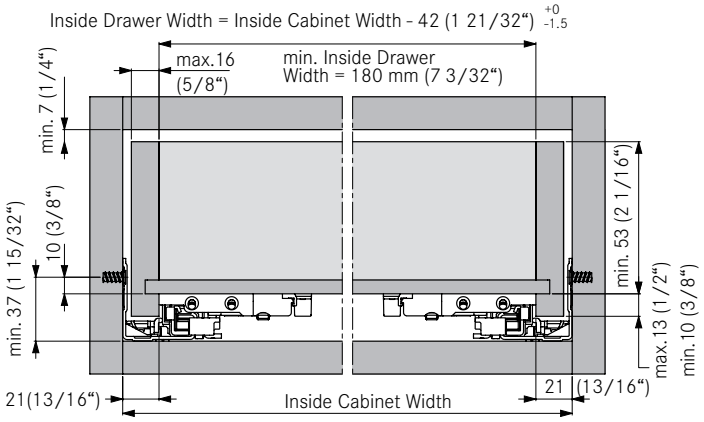


Front locking device installation

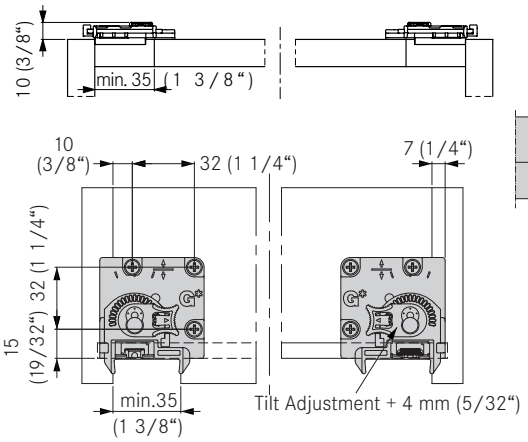


Pre-drilling recommended Ø2.5 mm (3/32")

Drawer installation dimensions

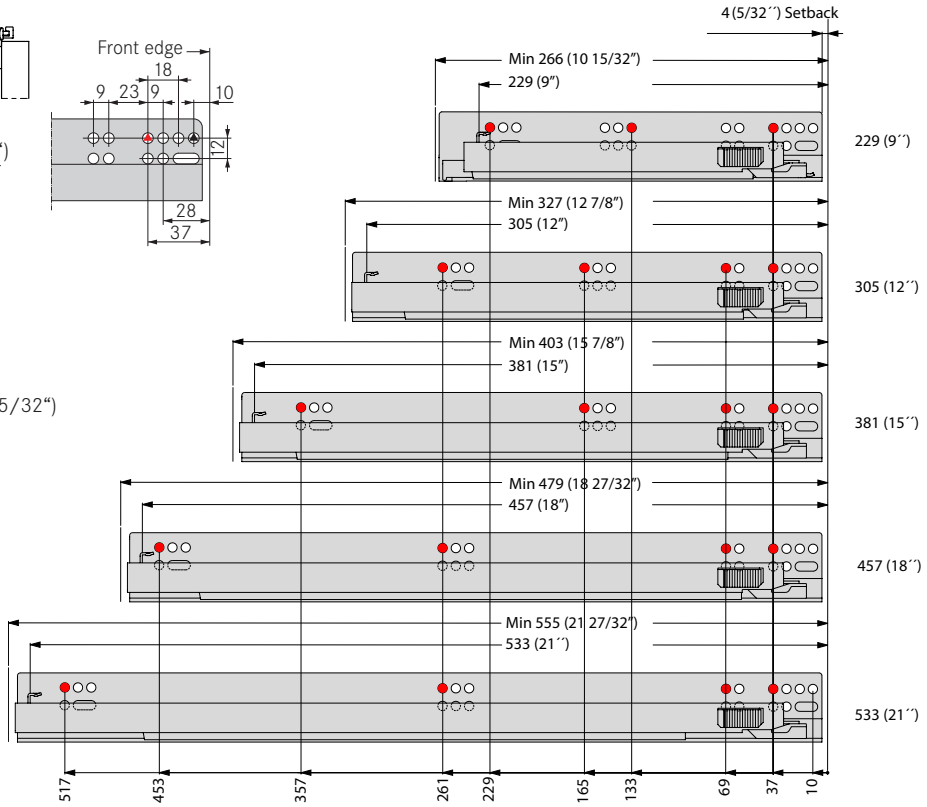


Adjustment adapter installation



Pre-drilling recommended Ø2.5 mm (3/32").

Cabinet member boring specifications



IDW = inside drawer width
ICW = inside cabinet width
H = height adjustment
S = side adjustment
X = minimum installation depth

All dimensions in millimeters.

Dynapro Full extension slide, 3-D, Face Frame

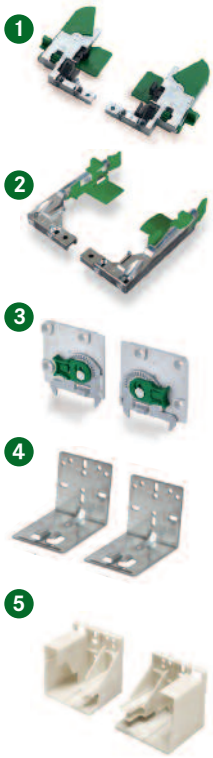
Integrated Soft-close with tilt adjustment

- Face frame application
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection to drawer slide and front locking device
- Integrated 3-dimensional adjustment for alignment
- Height adjustment + 3.5 mm
- Side adjustment ± 1.5 mm
- Tilt adjustment + 4.0 mm
- 88 lbs. load rating (40 kg)
- For 5/8" (16 mm) drawer material

Dynapro full extension slide, 88 lbs (40 kg)

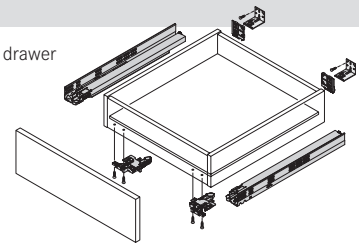
Drawer length	Nominal length	Min Installation Depth	Max Installation Depth	Item No.	PU
229 (9")	262 (10 5/16")	283 (11 5/32")	299 (11 3/4")	F130100725204	5
305 (12")	323 (12 23/32")	327 (12 7/8")	370 (14 9/16")	F130100726204	5
381 (15")	399 (15 23/32")	403 (15 7/8")	446 (17 9/16")	F130100727204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	522 (20 9/16")	F130100728204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	598 (23 17/32")	F130100729204	5

Locking devices and rear adjustment adapter

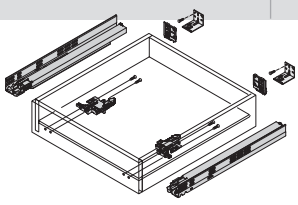


Description	Item No.	PU
(Please order separately)		
1 Front locking device, left	F134125000233	200
Front locking device, right	F134125001233	200
2 Narrow front locking device, left	F134100699233	200
Narrow front locking device, right	F134100700233	200
3 Adjustment adapter, left	F134125002233	200
Adjustment adapter, right	F134125003233	200
4 Rear mounting sockets, non-handed for 12"-21" slides	00443-40	25
5 Rear mounting socket for 9" slide, left	00439-03	5
Rear mounting socket for 9" slide, right	00440-03	5
Available Winter 2010		

4-sided drawer



Inset drawer

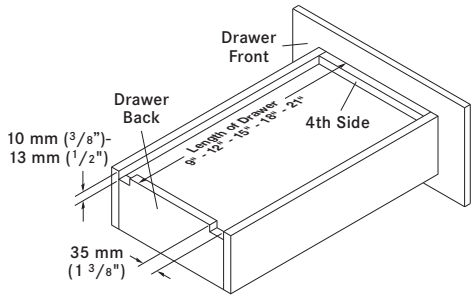


PU = Packaging Unit

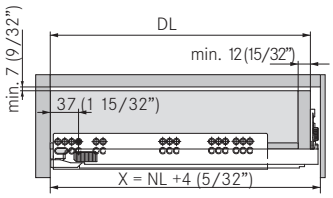
Dimensions in millimeters, fractional inch equivalents as noted.

Cabinet Type	Face Frame
Drawer Material Thickness	5/8" (16 mm)
Dynamic Load	88 lbs. (40 kg)
Static Load	100 lbs. (45 kg)
Adapter	Tilt Adjustment

Drawer Measurement

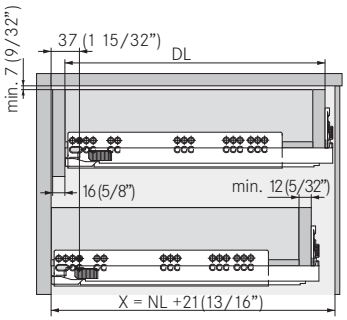


Drawer

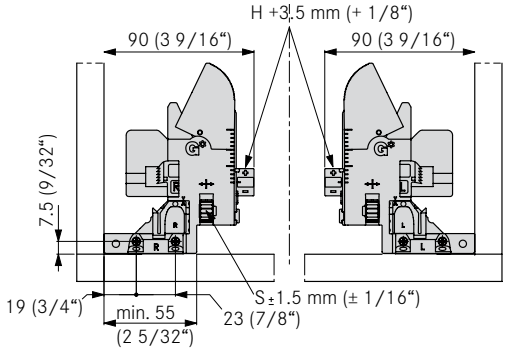


DL = drawer length
NL = nominal length
X = minimum installation depth

Inset drawer

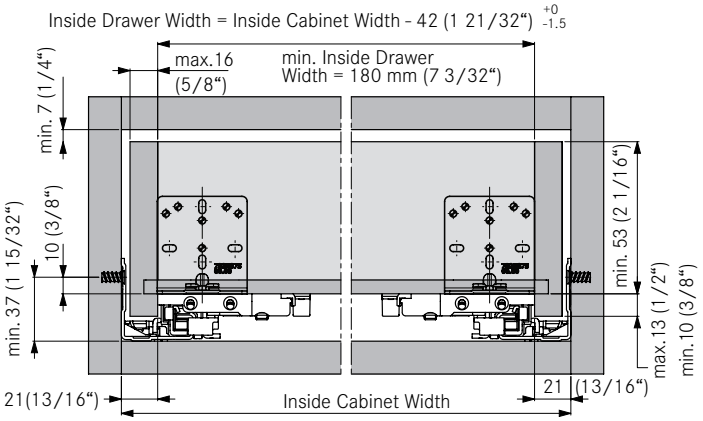


Front locking device installation

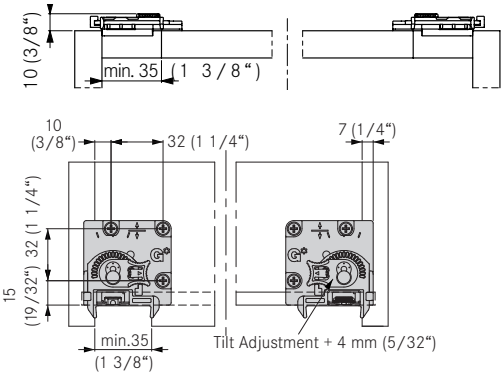


Pre-drilling recommended Ø2.5 mm (3/32")

Drawer Installation dimensions

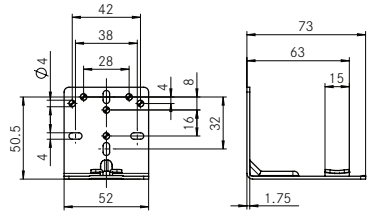


Adjustment adapter installation



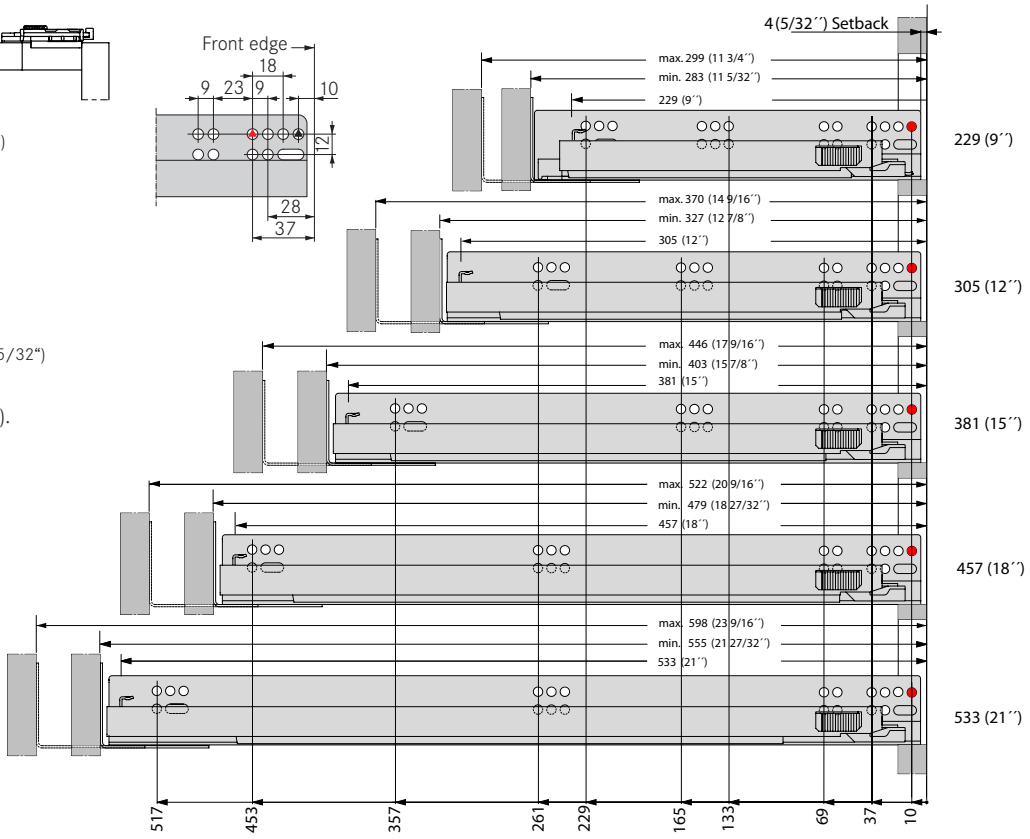
Pre-drilling recommended Ø2.5 mm (3/32").

Rear socket for 12"-21" slides



IDW = inside drawer width
ICW = inside cabinet width
H = height adjustment
S = side adjustment
X = minimum installation depth

Cabinet member boring specifications



For 9" Slide rear mount socket, please see page 6.

All dimensions in millimeters.

Dynapro Heavy Duty Slide, 3-D, Frameless

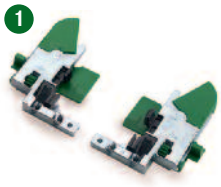
Integrated Soft-close with tilt adjustment

- Frameless application
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection to drawer slide and front locking device
- Integrated 3-dimensional adjustment for alignment
- Height adjustment + 3.5 mm
- Side adjustment ± 1.5 mm
- Tilt adjustment + 4.0 mm
- 132 lbs load rating (60 kg)
- For 5/8" (16 mm) drawer material

Dynapro full extension slide, 132 lbs (60 kg)

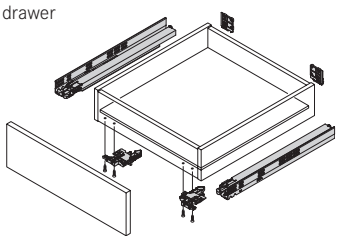
Drawer length	Nominal length	Min Installation Depth	Item No.	PU
457 (18")	475 (18 1/16")	479 (18 23/32")	F130100730204	5
533 (21")	551 (21 1/16")	555 (21 27/32")	F130100731204	5
610 (24")	628 (24 23/32")	632 (24 7/8")	F130100732204	5

Locking devices and adjustment adapter

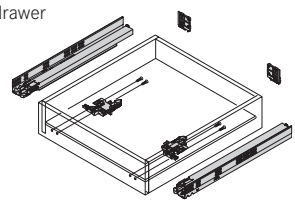


Description	Item No.	PU
(Please order separately)		
1 Front locking device, left	F134125000233	200
Front locking device, right	F134125001233	200
2 Adjustment adapter, left	F134125002233	200
Adjustment adapter, right	F134125003233	200

4-sided drawer



Inset drawer

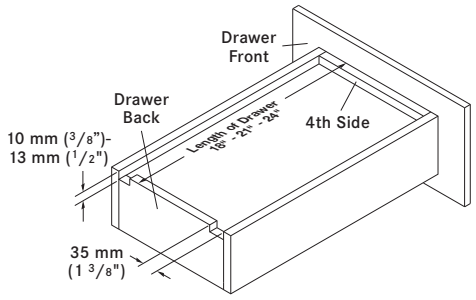


PU = Packaging Unit

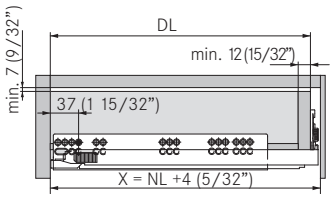
Dimensions in millimeters, fractional inch equivalents as noted.

Cabinet Type	Frameless
Drawer Material Thickness	5/8" (16 mm)
Dynamic Load	132 lbs. (40 kg)
Static Load	150 lbs. (45 kg)
Adapter	Tilt Adjustment

Drawer Measurments

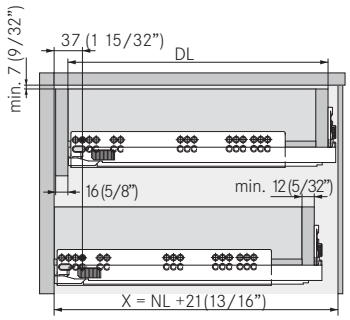


Drawer

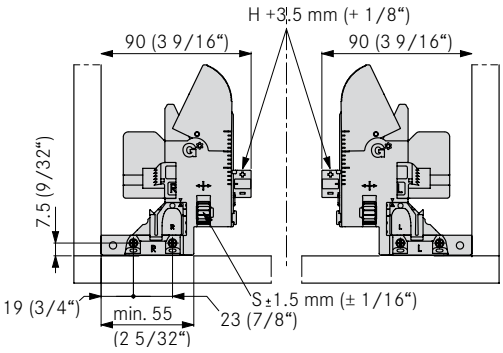


DL = drawer length
NL = nominal length
X = minimum installation depth

Inset drawer

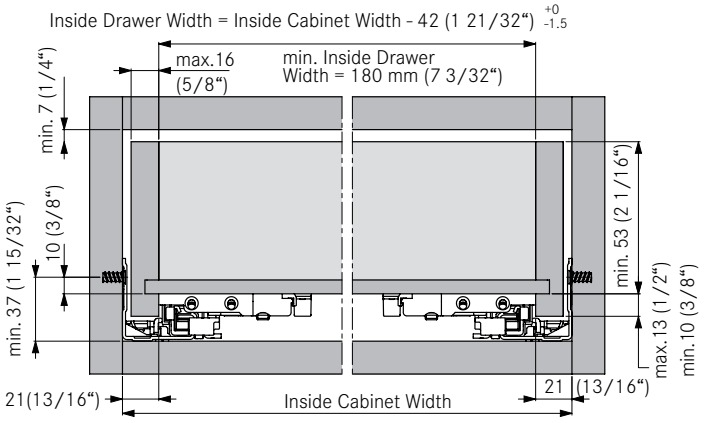


Front locking device installation

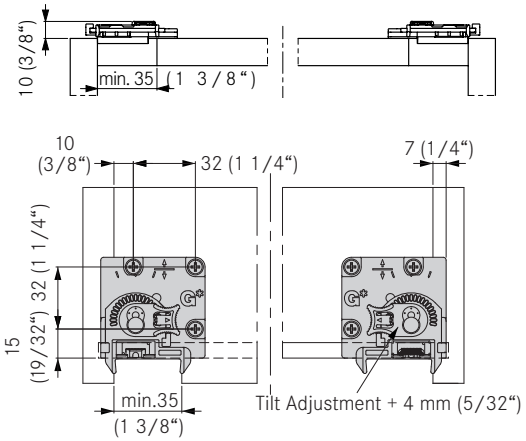


Pre-drilling recommended Ø2.5 mm (3/32").

Drawer installation dimensions

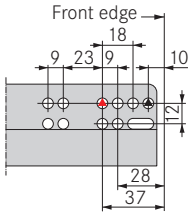


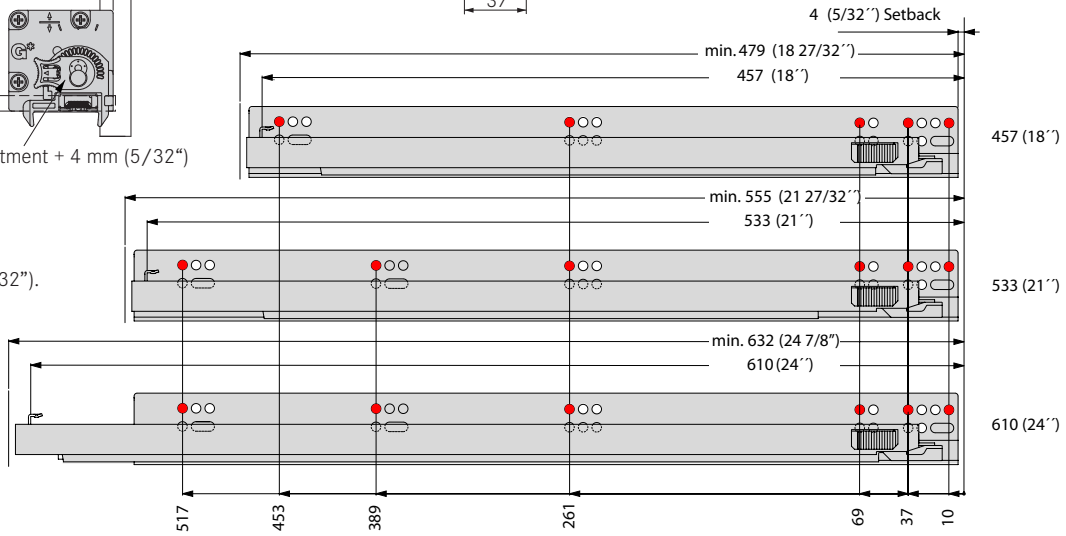
Adjustment adapter installation



Pre-drilling recommended Ø2.5 mm (3/32").

Cabinet boring specifications





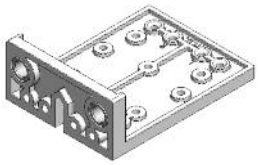
IDW = inside drawer width
ICW = inside cabinet width
H = height adjustment
S = side adjustment
X = minimum installation depth

All dimensions in millimeters.

Accessories and assembly aides

for Dynapro

Drilling template for drawer



Description	Item No.	PU
Drilling template	F146109874299	1

- For front locking device
- For narrow front locking device
- For drawer hole hook
- For adjustment adapter

Centering drill bit Ø 2.5 mm

The GRASS centering drill bit is used for pre-drilling countersink wood screws, Ø 2.5 mm

Description	Item No.	PU
Centering drill bit	35692-01	1

Pozidrive screwdriver

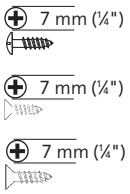
Pozidrive screwdriver for hinges and slides

Description	Item No.	PU
Pozidrive screwdriver	98000-01	1

PU = Packaging Unit

Wood screw, nickel plated

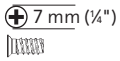
Steel, nickel plated
(Pozidrive No. 2)



Type		Item No.	PU
Panhead	Ø 6 x 5/8"	499.060.58.0015	500 pcs.
Flathead	Ø 6 x 5/8"	81001-43	500 pcs.
Flathead	Ø 6 x 3/4"	81003-43	500 pcs.

Wood screw, nickel plated

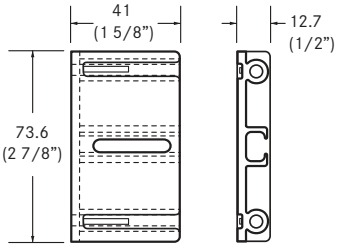
Steel, nickel plated
(Pozidrive No. 2)



Type		Item No.	PU
Euro Screw	Ø6.3 x 11mm (7/16")	499.360.61.1015	500 pcs.
Euro Screw	Ø6.3 x 13mm (1/2")	499.360.61.3015	500 pcs.

Inset Bracket for Dynapro

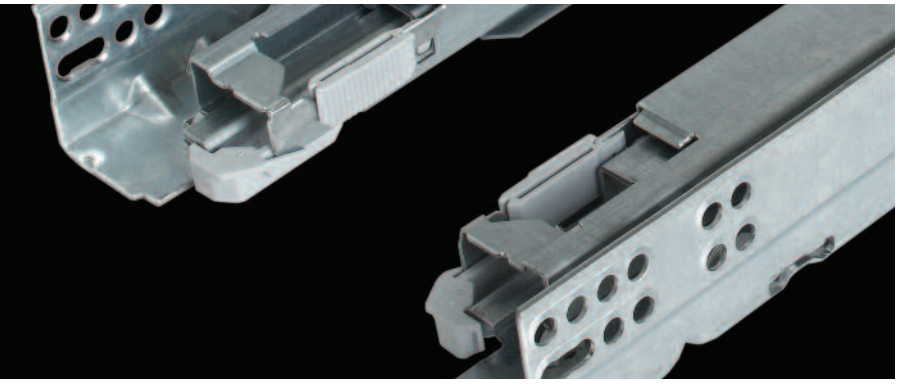
- For face frame inset applications when using Dynapro.
- Works with all inset applications
- Bracket mounts behind the face frame, minimum 12.7 mm (1/2") frame offset required
- Slide attaches easily with one screw
- Bracket includes guide markings for proper setback
- Polybagged with brackets, screws, and instructions



Description	Item No.	PU
Inset bracket set	13901-37	1
Inset bracket set	13901-08	50
Polybag includes:		
2 - Universal Inset Bracket ABS Brown		
2 - 8 X 32 Tapped Insert for Inset bracket		
4 - #7 X 2" mounting screws		
2 - #8 - 32 X 1/2" Machine Screw FHP		

DYNAPRO

PRECISION... IN MOVEMENT, DESIGN AND COMFORT



Precision plays an important role in cabinet and furniture design and it is our priority that hardware function intelligently.

Dynapro, the new undermount slide system, features the first completely synchronized mechanism for quiet operation, provides increased stability for wide drawers and sets new industry standards in load capacity.

DYNAPRO – precision in design NOW

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E-Mail: info@grassusa.com

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