



G*GRASS®

VIONARO DRAWER SYSTEM

The slim line drawer system manufactured of top quality material combines with the Dynapro slide system. Functional technology meets perfect form.







The simple clean design of the new Vionaro brings truth to the statement, “Less is More.”

Maximum reduction means using the least possible to make the most possible.

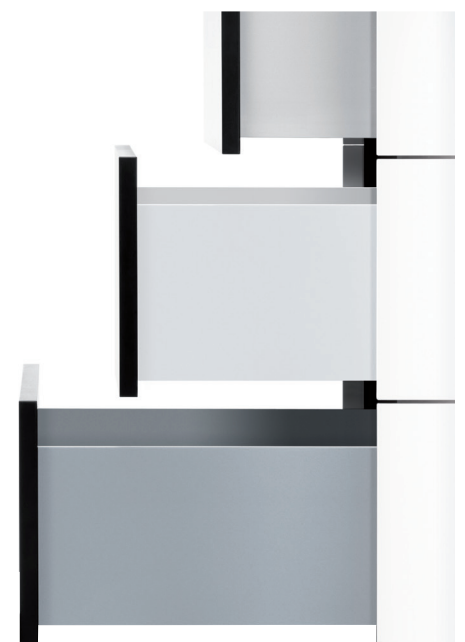
Whether it is in the kitchen, the bath, or the living room the concise shape, slim design, and top quality material of the Vionaro drawer makes your cabinetry classic. The perfectly designed drawer sides are formed from a single piece of high quality steel using cutting-edge laser technology. The side heights are offered in 89mm, 121mm, 185mm and 249mm in White, Silver Grey, and Graphite. Inset front panels and cross divider rails are offered for complete drawer organization.

Vionaro is cleverly attached to the Dynapro undermount drawer systems so it offers everything the Dynapro has: high load capacity, synchronized movement, low pull-out force, and 4 dimensional adjustment. Previously the Dynapro

was only used with wood drawers but now it is a multi-functional drawer system that is ideal for modern cabinetry.

For a handle-free opening the Vionaro also works with Sensomatic, Grass' electro-mechanical opening system and Tipmatic push to open mechanism. With a light touch anywhere on the drawer front, the drawer automatically opens.

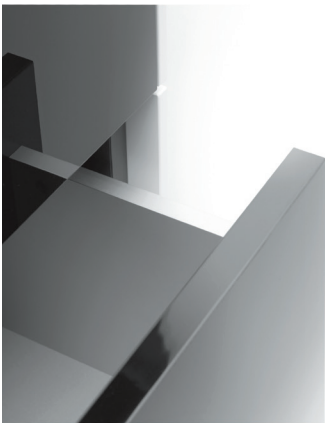
With GRASS' Soft-closing system, each drawer is pulled closed with a soft and gentle motion.



VIONARO DRAWER SYSTEM

Classic. Clean. Concealed.

Vionaro, the new generation of double-wall drawers, combines with Dynapro for a system so advanced, yet stylish.



reddot award 2014
winner

**Design, attention to detail,
precise movement, and quality –
virtually no other drawer system
achieves such a perfect form.**

When you open the innovative Vionaro drawer you will find a slim-line designer inspired drawer. Sides of just 13mm (1/2") made from materials of the highest quality offer a drawer with the ultimate in storage space design.

The Vionaro drawer sides rest on top of the proven Dynapro concealed slide system turning Dynapro into a multi-functional system. This combination results in a complete drawer system

that meets the highest design aspirations. Vionaro now has everything that Dynapro has: a full extension concealed slide with outstanding running performance, a high load carrying capacity and a low pull-out force.

Vionaro becomes the complete drawer system for modern cabinetry. Vionaro features a strong connection to the drawer front offering height, tilt and side adjustment on the drawer sides and depth adjustment from the drawer slide. The soft-close action brings the Vionaro drawer to a gentle quiet close.

With the addition of Sensomatic, the electronic opening system, it becomes possible to create large, handle-free drawers that open with a gentle push on the front.

Vionaro is the proud winner of the 2014 reddot award judged on functionality, innovation, quality and ecological compatibility. Vionaro – functional technology with perfect form.

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	Dynapro 16 Tipmatic Face Frame & Frameless 2-Dimensional <ul style="list-style-type: none"> • Integrated Tipmatic • Full extension • For drawers without pulls 	<ul style="list-style-type: none"> • Height adjustment (max. + 3.5mm) 	28
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Features and Benefits

Vionaro

Features



- 90° straight corners and sides
- Slim 13mm width side
- Integrated height and side adjustment, tilt adjustment at back
- Tool free assembly
- Works exclusively with Dynapro
- Maximum drawer width 48"
- For frame and frameless cabinetry

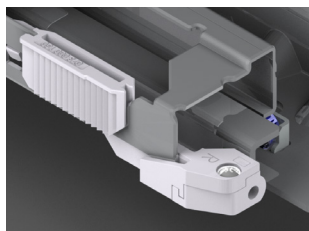
Dowel attachment
for fixing bracket
(10mm Ø)

Side Adjustment
±1.5mm

Front panel release

Height adjustment
±2.5mm / - 1.5mm

4D depth adjustment
optional add-on



Cleats on the slide

connect immediately with front locking device at installation for maximum connection between the drawer slide and front locking device.

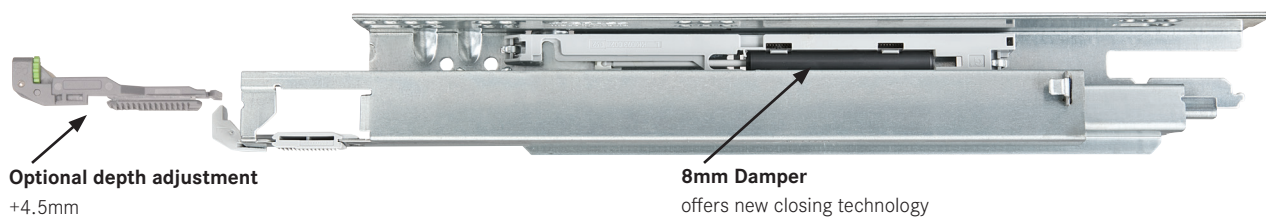
Dynapro's synchronization allows drawers to move quietly and without any resistance. Even under a load capacity of up to 88 pounds the exceptional running performance remains unchanged.

Features and Benefits

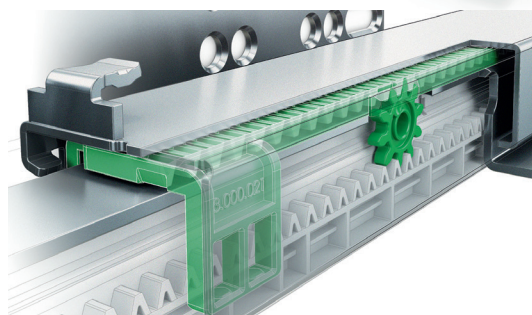
Dynapro

Features

- Wear resistant nylon rollers ensure quiet and precise running characteristics
- Easy to open with a low pull out force
- Support roller for uniform drawer front height
- 88 lb dynamic load for Dynapro 2D and 3D standard slides and Dynapro Tipmatic
- 132 lb dynamic load for Dynapro 3D Heavy Duty Slides
- Dynapro slide is interchangeable with Vionaro and wood drawers
- Full Extension with Soft-closing action
- Unique and integrated liquid damper
- 8mm damper offers new closing technology



Sensomatic
for handle-free drawers (Page 30)

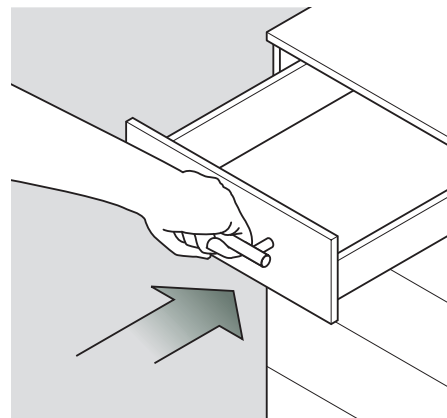
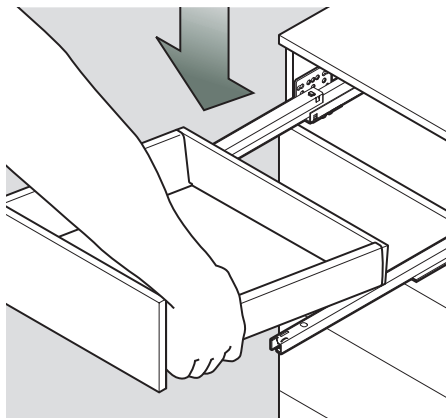
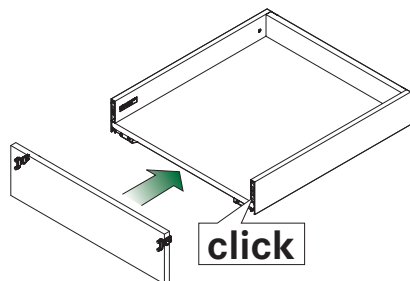


Technical Information

Vionaro

Attaching Drawer Front and Inserting Drawer

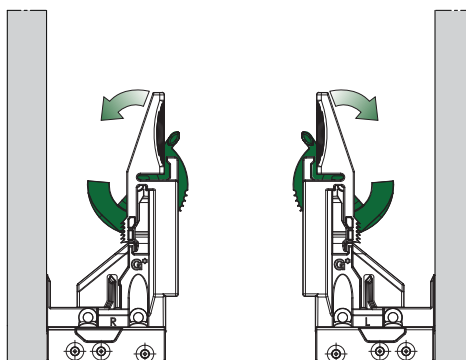
Place drawer on extended Dynapro slide and push in until it engages audibly



Removing the Drawer

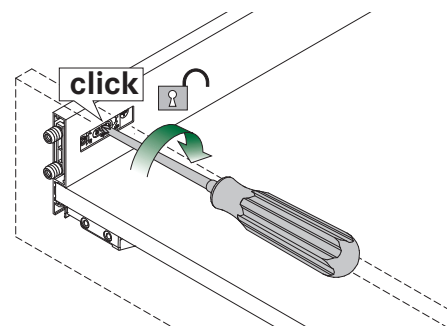
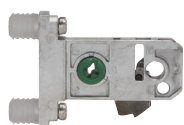
Pull the drawer out, squeeze the locking device levers and lift drawer from the slide.

Use #6x 5/8" screws for mounting

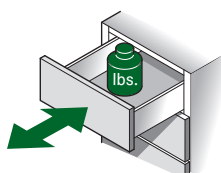


Removing the Drawer Front

Use a pozidrive #2 screwdriver to release and on all adjustments.



Weight Capacities per Pair of Slides



Dynapro 2D, 3D, and Tipmatic: 88 lb dynamic load rating; 100 lb static load rating

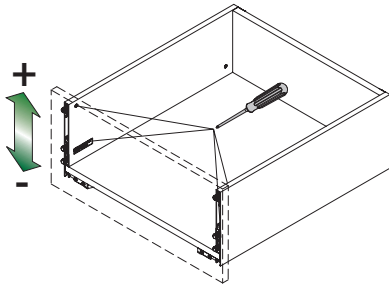
Dynapro 3D Heavy Duty: 132 lb dynaminc load rating; 150 lb static load rating

Dynapro meets and exceeds the minimum requirements of ANSI/BHMA 156.9 Standard, Grade 1

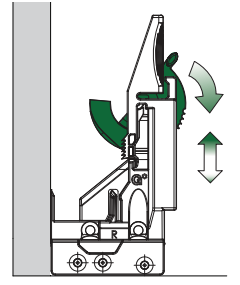
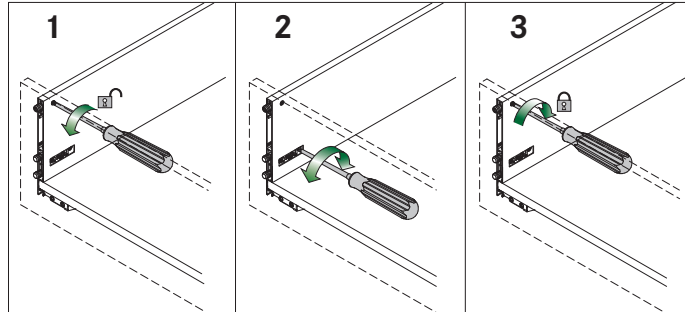
Height Adjustment (max. +2.5 / -1.5mm)

Vionaro

Dynapro Front Locking Device



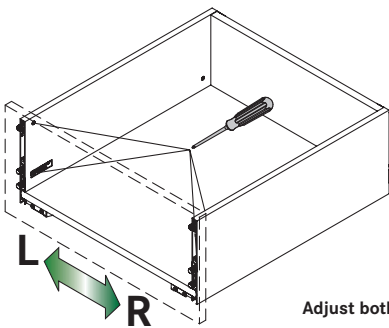
Adjust both sides



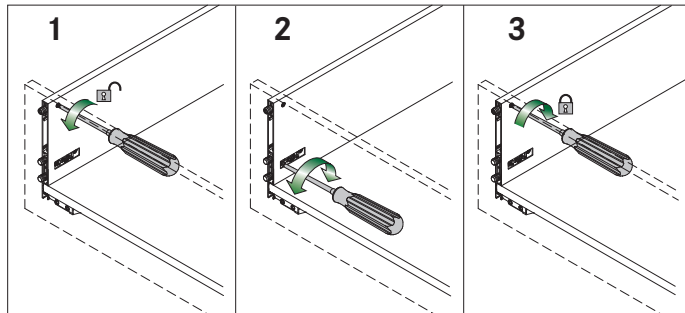
Front locking device with flange

Side Adjustment (max. ± 1.5 mm)

Vionaro

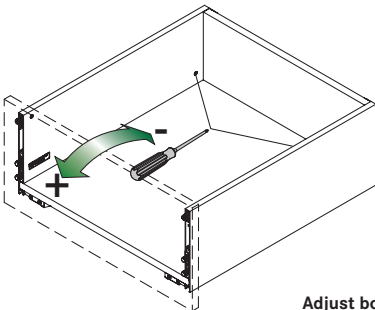


Adjust both sides

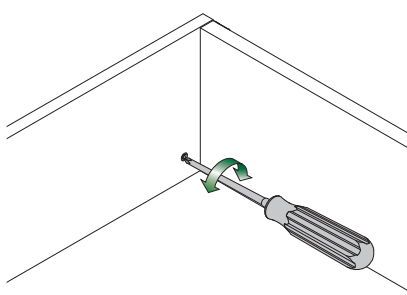


Tilt Adjustment (max. +2.5 / -1.5mm)

Vionaro



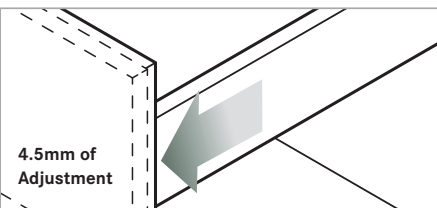
Adjust both sides



Depth Adjustment (+4.5mm forward)

Dynapro 16 2D and 3D

3D Adapter Set

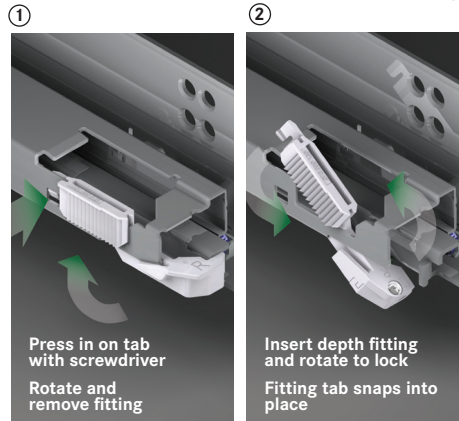


Adjust Left and Right adjustment screws simultaneously in opposite directions



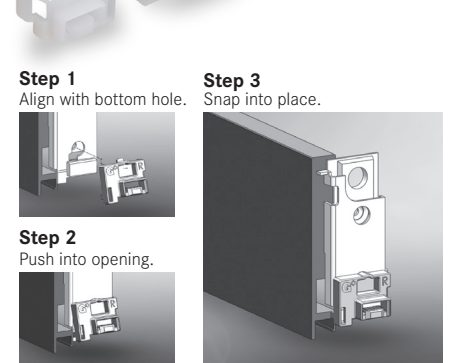
Removal Insertion

Screwdriver is required for removal of the standard fitting.



Removal Insertion

Position rear adapters at the back of each Vionaro drawer side as shown.



Vionaro H89, 89mm (3 1/2") side height

13mm slimline drawer for Dynapro 16



- Cubist design with 90° angles
- Slimline 13mm (1/2") side width
- 3 dimensional adjustment
- Integrated side and height adjustment, tilt angle adjustment at back
- Plus and minus adjustments for all dimensions
- Bottom panel is cut to size without notching
- Tool-free front assembly
- For frame and frameless cabinetry
- Compatible with Dynapro 2D undermount slides
- Compatible with Dynapro 3D undermount slides using 3D adapter set

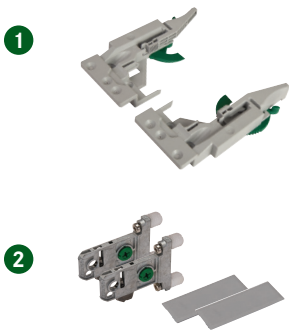
Vionaro H89



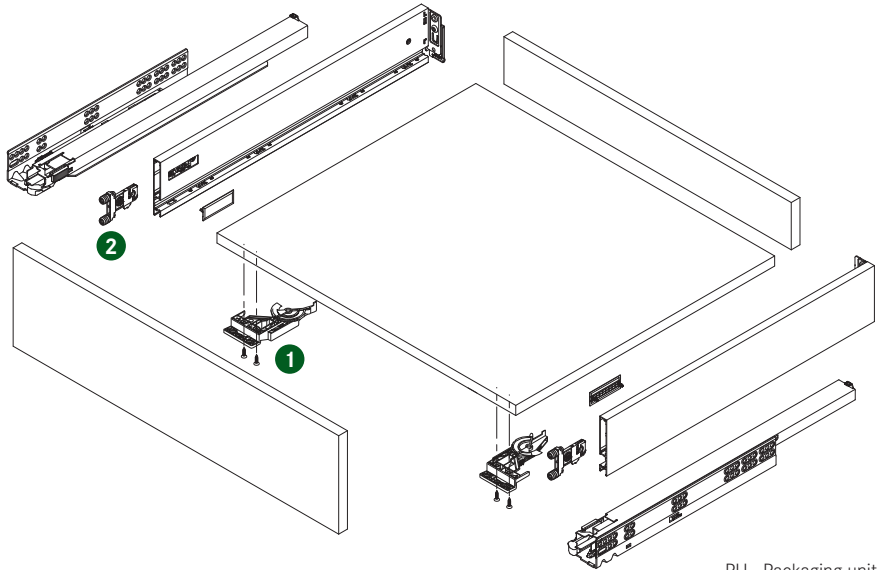
Drawer Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
381 (15")	F135121403 211	F135121303 211	F135121353 211	10
457 (18")	F135121406 211	F135121306 211	F135121356 211	10
533 (21")	F135121409 211	F135121309 211	F135121359 211	10

Note: See pages 24-29 for compatible Dynapro Slides and 3D adapter set

Front Locking Devices and Adapter Sets



Description		Item No.	PU
(Must order separately)			
Front locking device with flange, left		F134116420233	200
Front locking device with flange, right		F134116421233	200
Front locking device with flange, set		F134116422204	5
Adapter Set for 89mm height	White	F136135095517	50
Adapter set includes:	Silver Grey	F136106491517	50
2 Front connectors with 10mm dowels	Graphite	F136106492517	50
2 Interior cover caps			

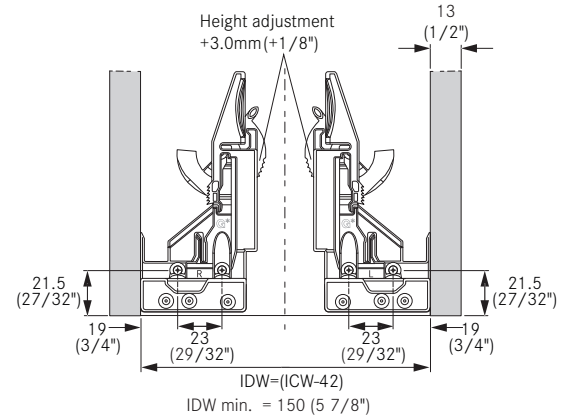
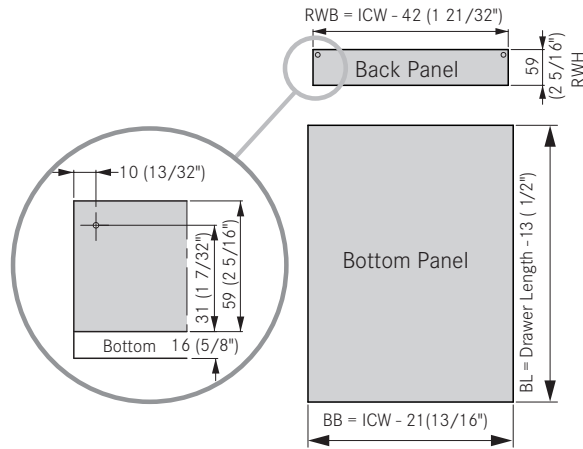


PU - Packaging unit

Drawer height	89mm (3 1/2")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

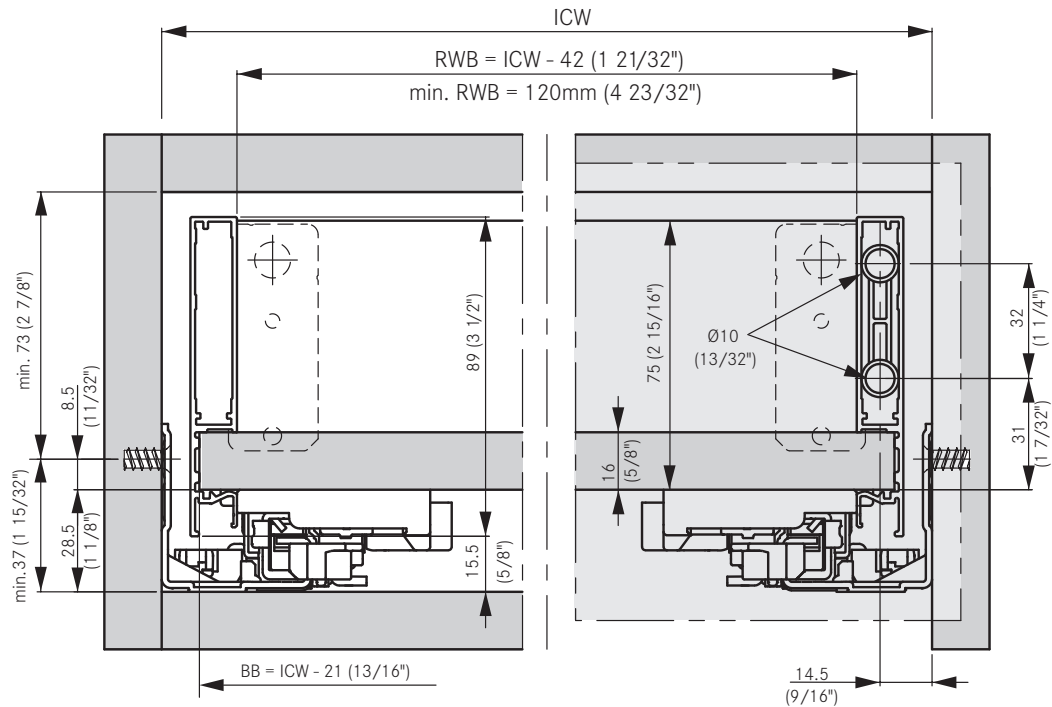
Drawer Back and Bottom Measurements

Front Locking Device Position



Legend

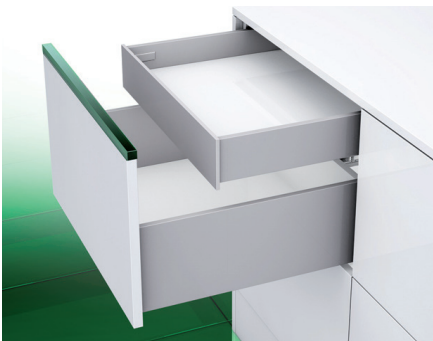
Drawer Measurements



BB = bottom panel width
BL = bottom panel length
ICW = inside cabinet width
IDW = inside drawer width
RWB = back panel width
RWH = back panel height

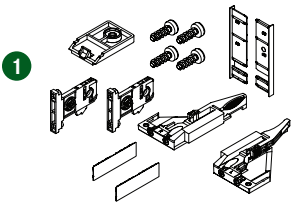
Vionaro H89 Inset Drawer System

Inset front panel and accessory set



- Color-coordinated aluminum front panel profile
- 89mm (3 1/2") side height
- Cubist design with 90° angles
- Slimline 13mm (1/2") side width
- Bottom panel is cut to size without notching

Vionaro H89 Inset Drawer and Accessory Set



Description	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
H89 Inset Drawer Accessory Set	F136100279517	F136100277517	F136100278517	50

Accessory set consists of:

- 1a

2 - Cover Cap
- 1b

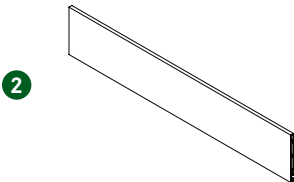
1 - Front Locking Device Set, left/right
- 1c

2 - Front Connector
- 1d

4 - Front Connector Screws
- 1e

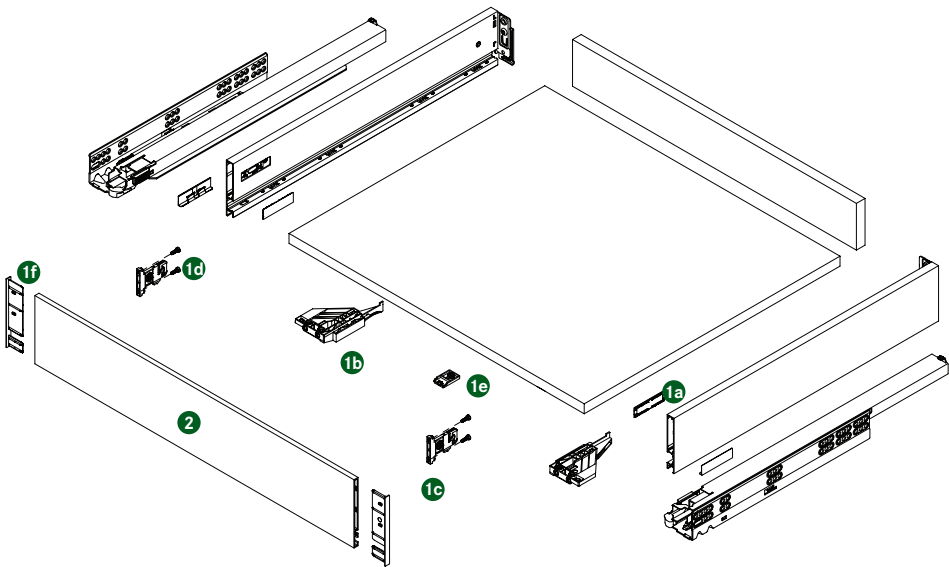
1 - Front Bottom Connector
- 1f

2 - End cap



Description/Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
H89 Inset Front Panel				
1160 (45 11/16")	F136120569507	F136122619507	F136120538507	10

H89 inset front panels can be cut to length. One side is pre-drilled and a drilling template is provided for the other side for accurate installation. Assembly instructions for the accessory set are included with each panel.

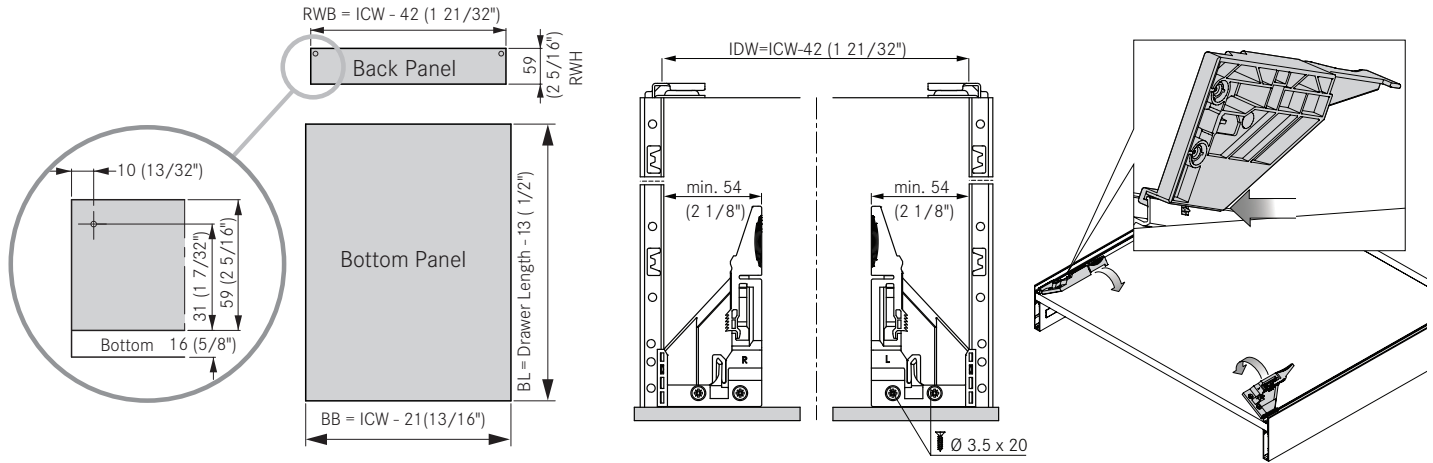


PU - Packaging unit

Drawer height	89mm (3 1/2")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

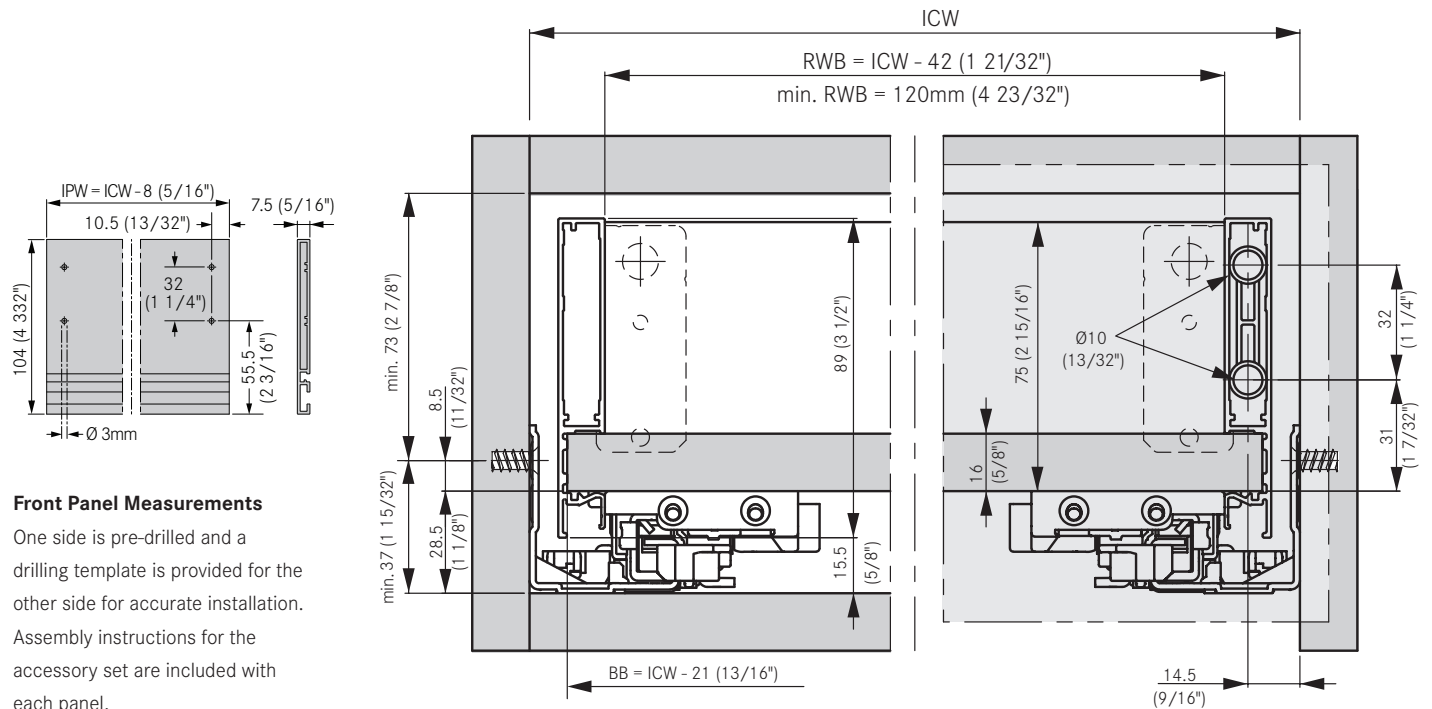
Inset Drawer Back and Bottom Measurements

Front Locking Device Position and Installation



Front Panel Measurements

Drawer Measurements



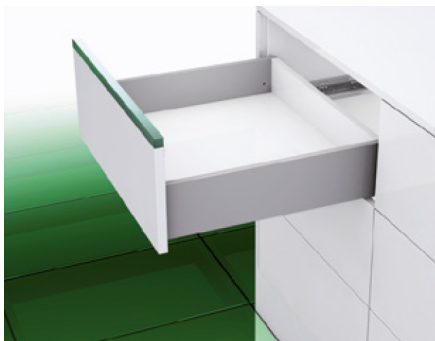
Front Panel Measurements

One side is pre-drilled and a drilling template is provided for the other side for accurate installation. Assembly instructions for the accessory set are included with each panel.

BB = bottom panel width
BL = bottom panel length
ICW = inside cabinet width
IDW = inside drawer width
IPW = inside panel width
RWB = back panel width
RWH = back panel height

Vionaro H121, 121mm (4 3/4") side height

13mm slimline drawer for Dynapro 16



- Cubist design with 90° angles
- Slimline 13mm (1/2") side width
- 3 dimensional adjustment
- Integrated side and height adjustment, tilt angle adjustment at back
- Plus and minus adjustments for all dimensions
- Bottom panel is cut to size without notching
- Tool-free front assembly
- For frame and frameless cabinetry
- Compatible with Dynapro 2D undermount slides
- Compatible with Dynapro 3D undermount slides using 3D adapter set

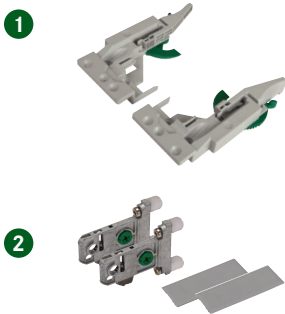
Vionaro H121



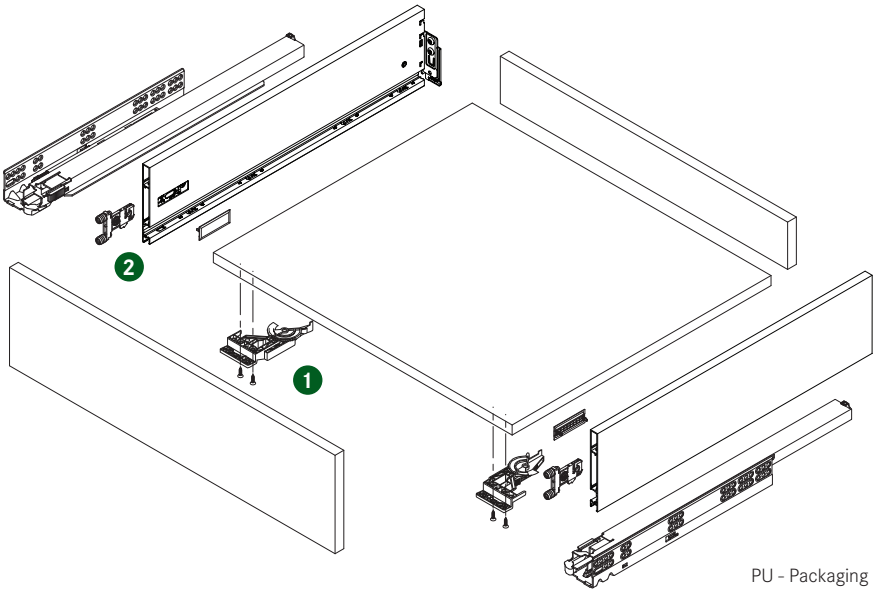
Drawer Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
381 (15")	F135135041207	F135135050207	F135135059207	10
457 (18")	F135135044207	F135135053207	F135135062207	10
533 (21")	F135135047207	F135135056207	F135135065207	10

Note: See pages 24-29 for compatible Dynapro Slides and 3D adapter set

Front Locking Devices and Adapter Set



Description		Item No.	PU
(Must order separately)			
1 Front locking device with flange, left		F134116420233	200
Front locking device with flange, right		F134116421233	200
Front locking device with flange, set		F134116422204	5
2 Adapter Set for 89mm height*	White	F136135095517	50
(*89mm Adapter Sets are used with H121 Vionaro)	Silver Grey	F136106491517	50
Adapter set includes:	Graphite	F136106492517	50
2 Front connectors with 10mm dowels, 2 Interior cover caps			

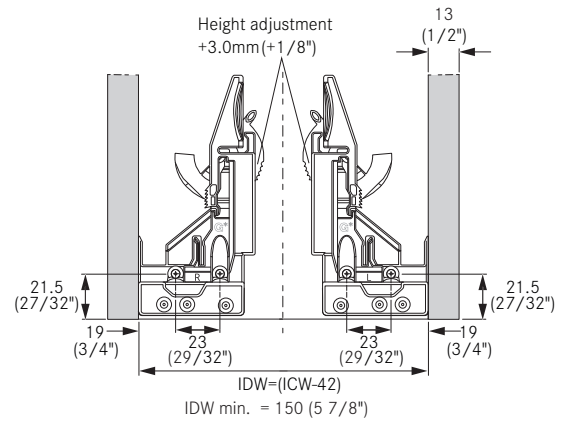
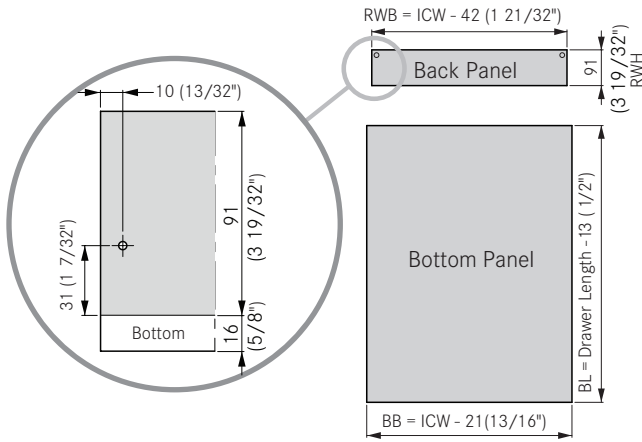


PU - Packaging unit

Drawer height	121mm (4 3/4")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

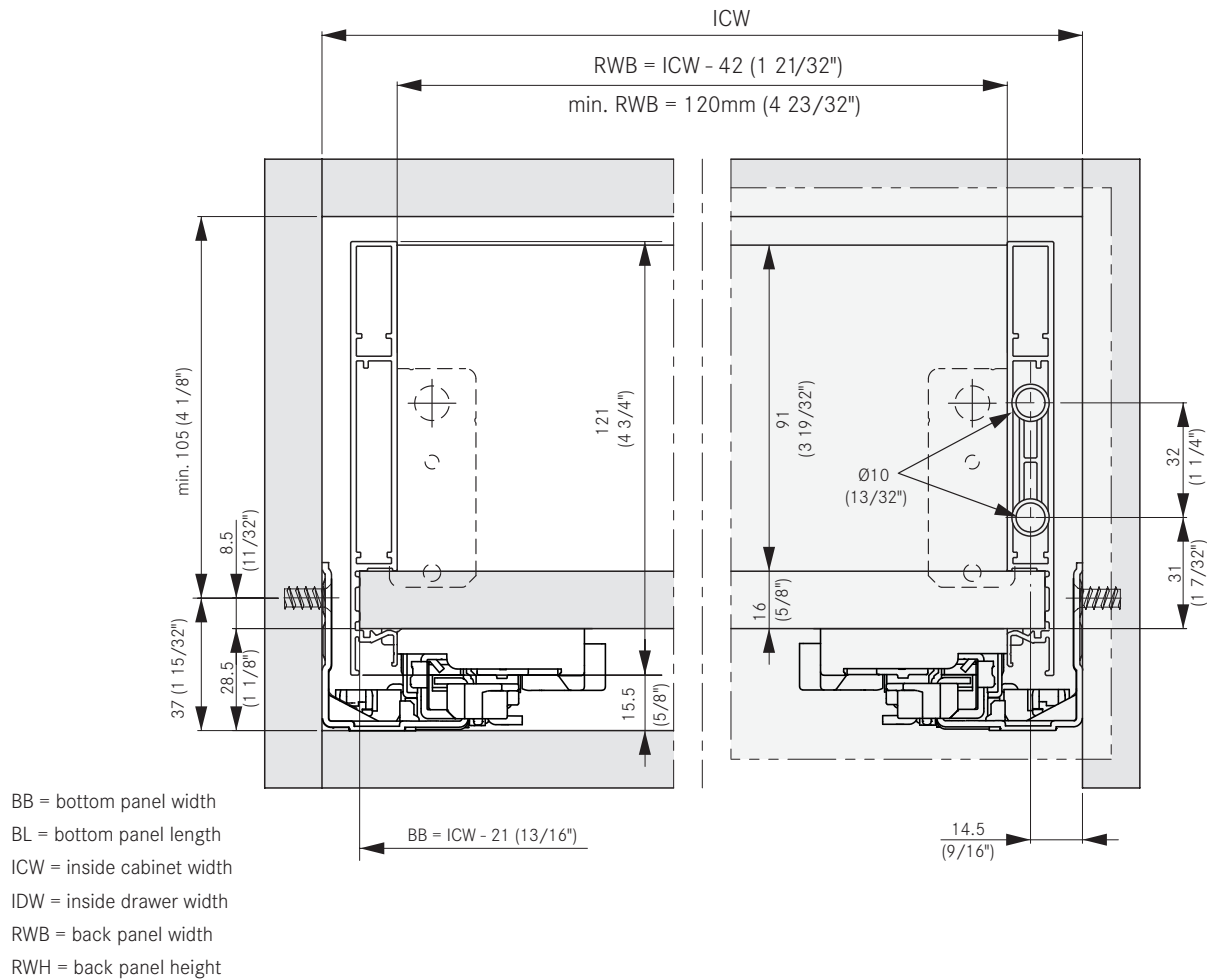
Drawer Back and Bottom Measurements

Front Locking Device Position



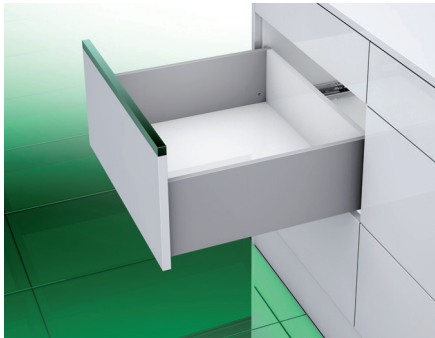
Legend

Drawer Measurements



Vionaro H185, 185mm (7 1/4") side height

13mm slimline drawer for Dynapro 16



- Cubist design with 90° angles
- Slimline 13mm (1/2") side width
- 3 dimensional adjustment
- Integrated side and height adjustment, tilt angle adjustment at back
- Plus and minus adjustments for all dimensions
- Bottom panel is cut to size without notching
- Tool-free front assembly
- For frame and frameless cabinetry
- Front adapter with stabilizer ensures maximum stability on tall fronts
- Compatible with Dynapro 2D undermount slides
- Compatible with Dynapro 3D undermount slides using 3D adapter set

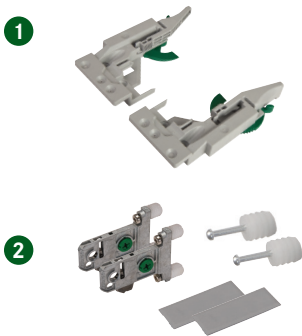
Vionaro H185



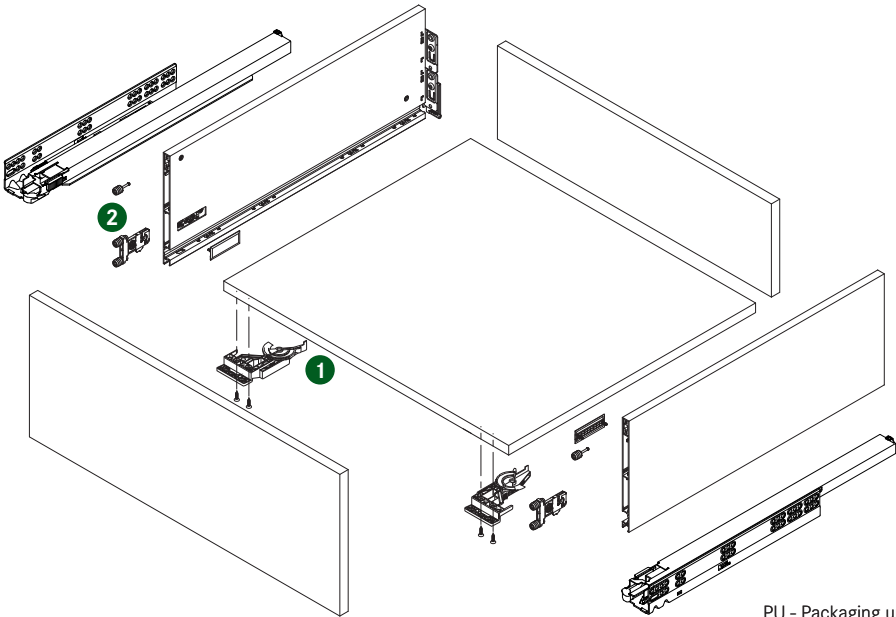
Drawer Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
381 (15")	F135121603207	F135121503207	F135121553207	5
457 (18")	F135121606207	F135121506207	F135121556207	5
533 (21")	F135121609207	F135121509207	F135121559207	5

Note: See pages 24-29 for compatible Dynapro Slides

Locking Devices



Description		Item No.	PU
(Must order separately)			
1 Front locking device with flange, left		F134116420233	200
Front locking device with flange, right		F134116421233	200
Front locking device with flange, set		F134116422204	5
2 Adapter Set for 185mm height	White	F136135096517	50
Adapter set includes:	Silver Grey	F136106493517	50
2 Front connectors with 10mm dowels	Graphite	F136106494517	50
2 Interior cover caps, 2 Front stabilizers with 8mm dowels			

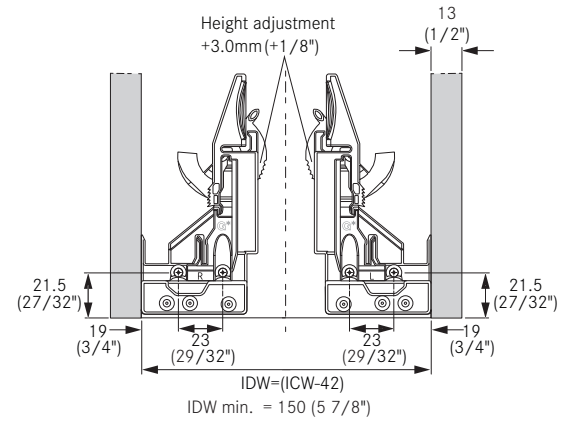
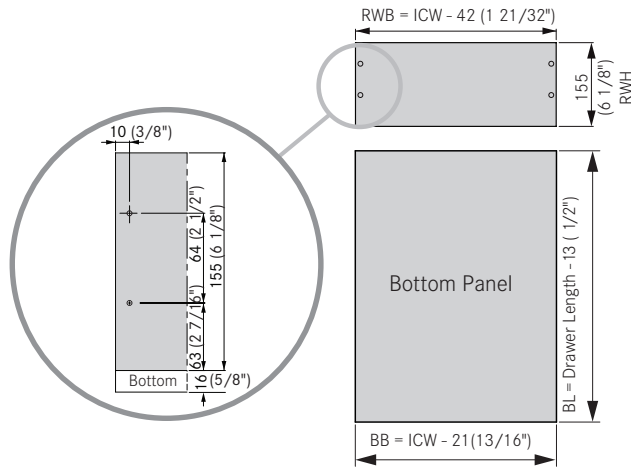


PU – Packaging unit

Drawer height	185mm (7 1/4")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

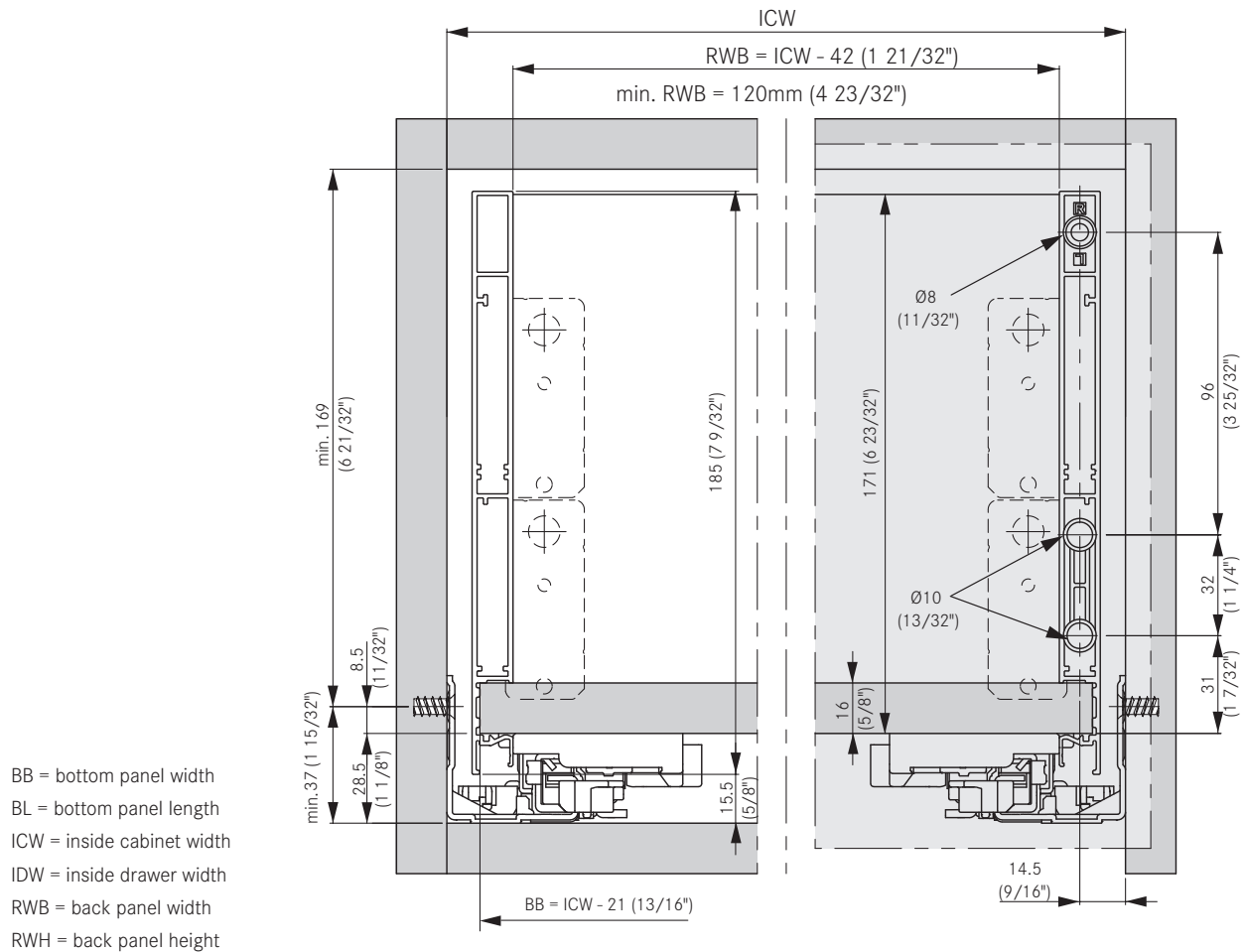
Drawer Back and Bottom Measurements

Front Locking Device Position and Installation



Legend

Drawer Measurements



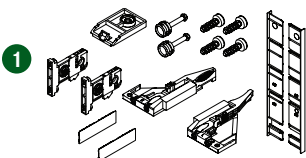
Vionaro H185 Inset Drawer System

Inset front panel and accessory set



- Color-coordinated aluminum front panel profile
- 185mm (7 1/4") side height
- Cubist design with 90° angles
- Slimline 13mm (1/2") side width
- Bottom panel is cut to size without notching

Vionaro H185 Inset Drawer and Accessory Set



Description	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
H185 Inset Drawer Accessory Set	F136100320517	F136100318517	F136100319517	50

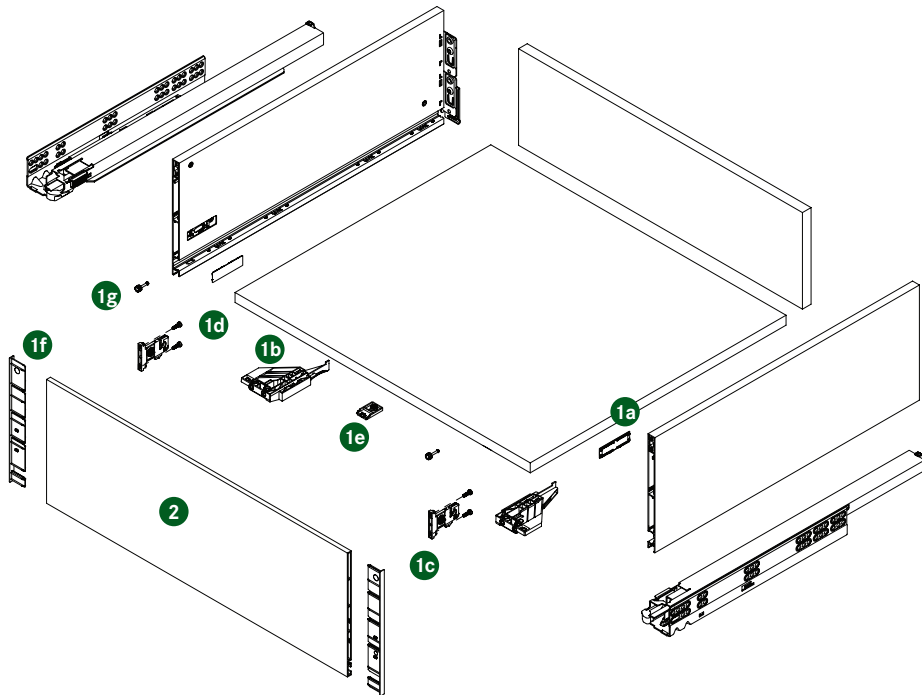
Accessory set consists of:

- 1a 2 - Cover Cap
- 1b 1 - Front Locking Device Set, left/right
- 1c 2 - Front Connector
- 1d 4 - Front Connector Screws
- 1e 1 - Front Bottom Connector
- 1f 2 - End cap
- 1g 2 - Front Stabilizer with 8mm dowel



Description/Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
H185 Inset Front Panel				
1160 (45 11/16")	F136120589507	F136122669507	F136120539507	10

H185 inset front panels can be cut to length. One side is pre-drilled and a drilling template is provided for the other side for accurate installation. Assembly instructions for the accessory set are included with each panel.

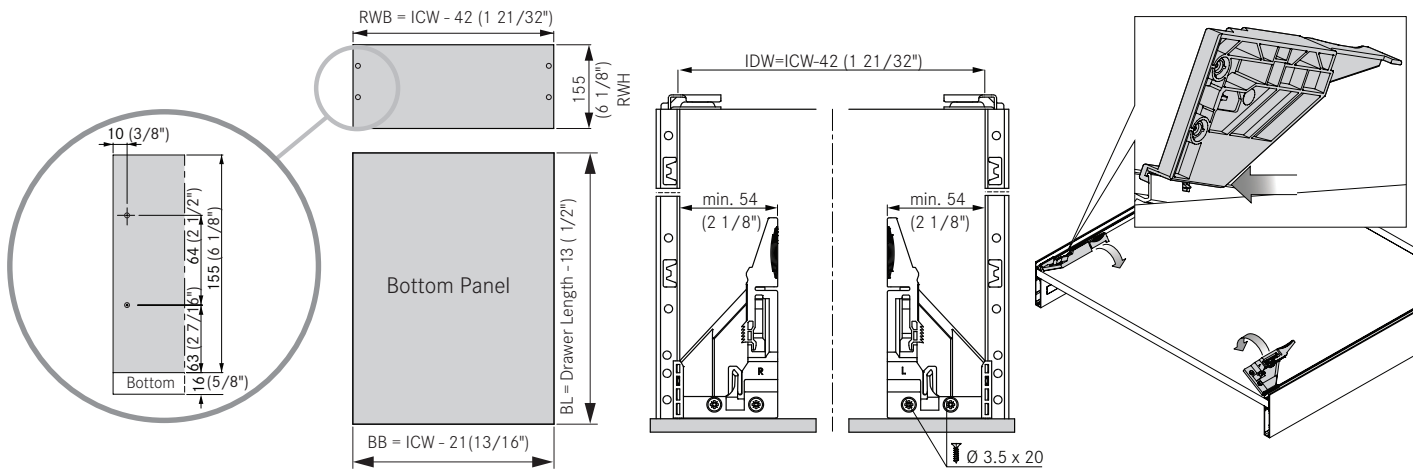


PU - Packaging unit

Drawer height	185mm (7 1/4")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

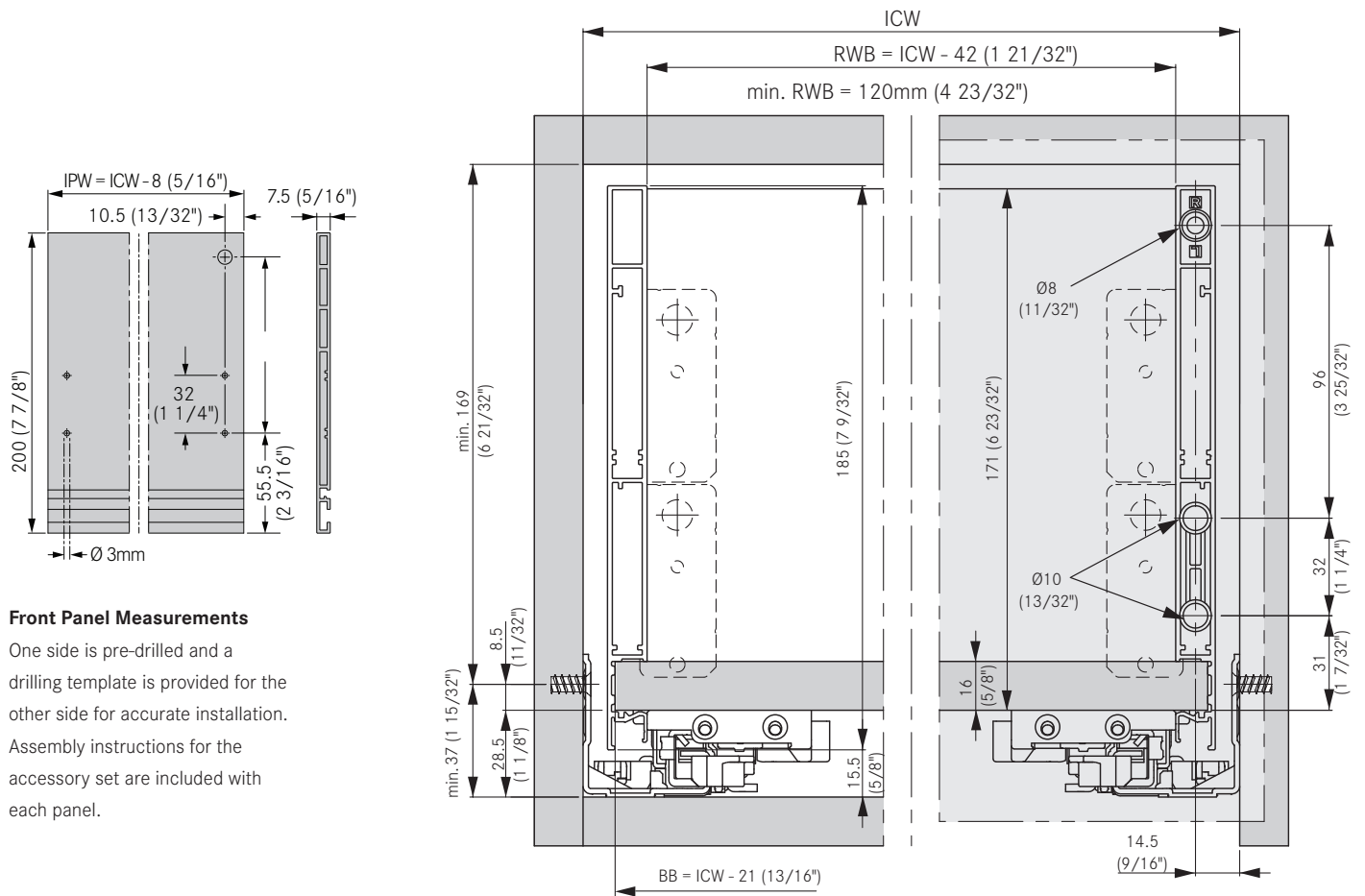
Inset Drawer Back and Bottom Measurements

Front Locking Device Position and Installation



Front Panel Measurements

Drawer Measurements



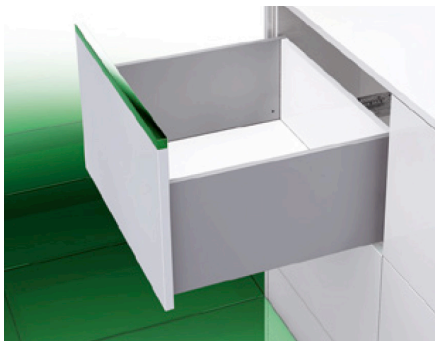
Front Panel Measurements

One side is pre-drilled and a drilling template is provided for the other side for accurate installation. Assembly instructions for the accessory set are included with each panel.

BB = bottom panel width
 BL = bottom panel length
 ICW = inside cabinet width
 IDW = inside drawer width
 RWB = back panel width
 RWH = back panel height

Vionaro H249, 249mm (9 3/4") side height

13mm slimline drawer for Dynapro 16



- Cubist design with 90° angles
- Slimline 13mm (1/2") side width
- 3 dimensional adjustment
- Integrated side and height adjustment, tilt angle adjustment at back
- Plus and minus adjustments for all dimensions
- Bottom panel is cut to size without notching
- Tool-free front assembly
- For frame and frameless cabinetry
- Front adapter with stabilizer ensures maximum stability on tall fronts
- Compatible with Dynapro 2D undermount slides
- Compatible with Dynapro 3D undermount slides using 3D adapter set

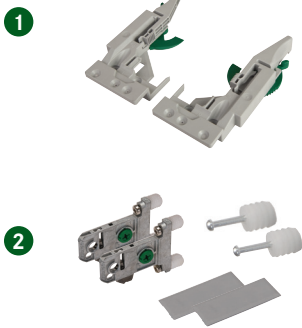
Vionaro H249



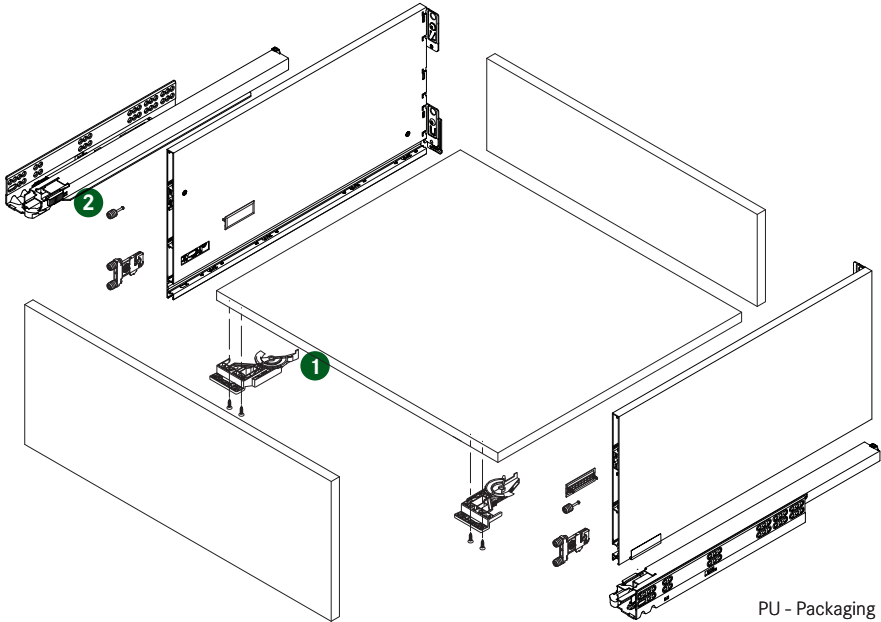
Drawer Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
381 (15")	F135135068207	F135135077207	F135135086207	5
457 (18")	F135135071207	F135135080207	F135135089207	5
533 (21")	F135135074207	F135135083207	F135135092207	5

Note: See pages 24-29 for compatible Dynapro slides and 3D adapter set

Front Locking Devices and Adapter Set



Description		Item No.	PU
(Must order separately)			
Front locking device with flange, left		F134116420233	200
Front locking device with flange, right		F134116421233	200
Front locking device with flange, set		F134116422204	5
Adapter Set for 185mm height*	White	F136135096517	50
(*185mm Adapter Sets are used with H249 Vionaro)	Silver Grey	F136106493517	50
Adapter Set includes:	Graphite	F136106494517	50
2 Front Connectors with 10mm dowels			
2 Interior cover caps, 2 Front stabilizers with 8mm dowels			

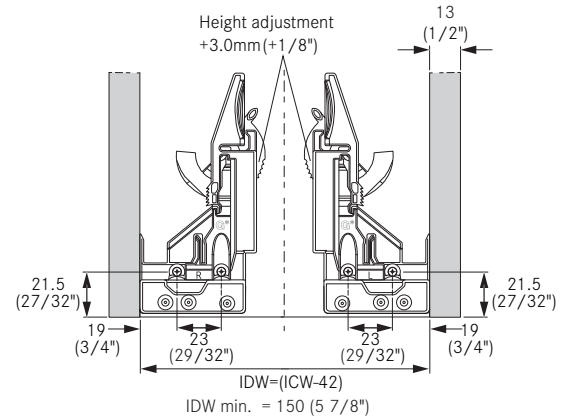
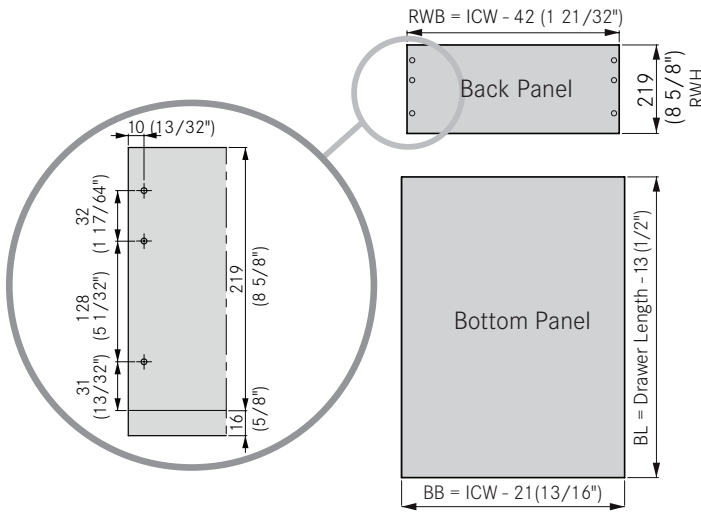


PU - Packaging unit

Drawer height	249mm (9 3/4")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

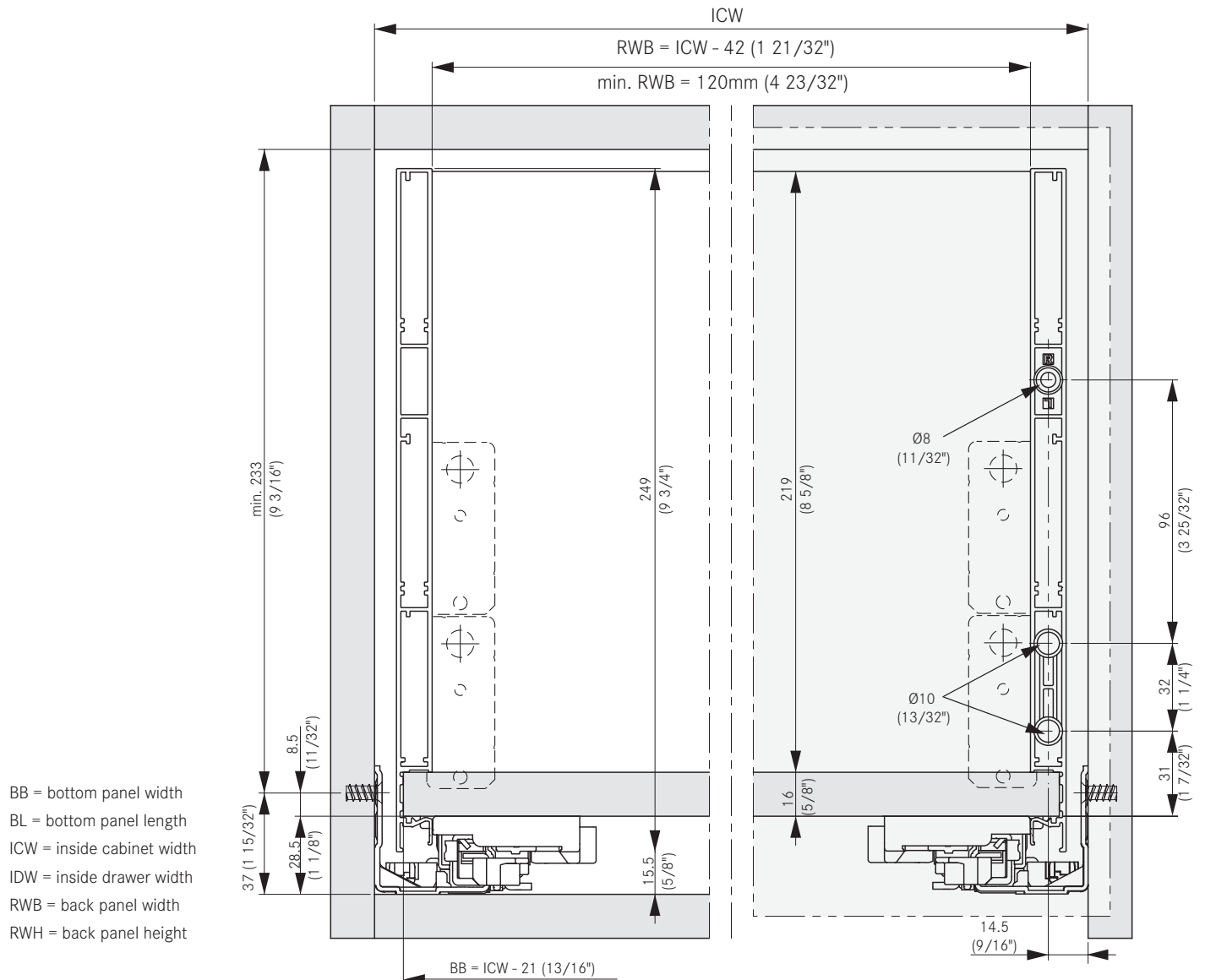
Drawer Back and Bottom Measurements

Front Locking Device Position and Installation



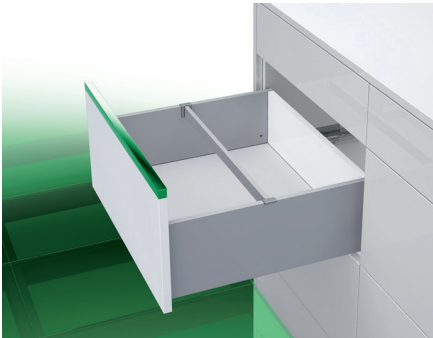
Legend

Drawer Measurements



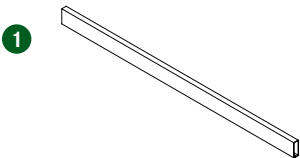
Vionaro Cross-divider

Railing System



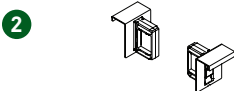
- Cross-divider for all Vionaro drawers
- Simple installation by mounting on the drawer side
- Can be retrofitted at any time
- Tool-free adjustment

Vionaro Cross-divider, can be cut to length

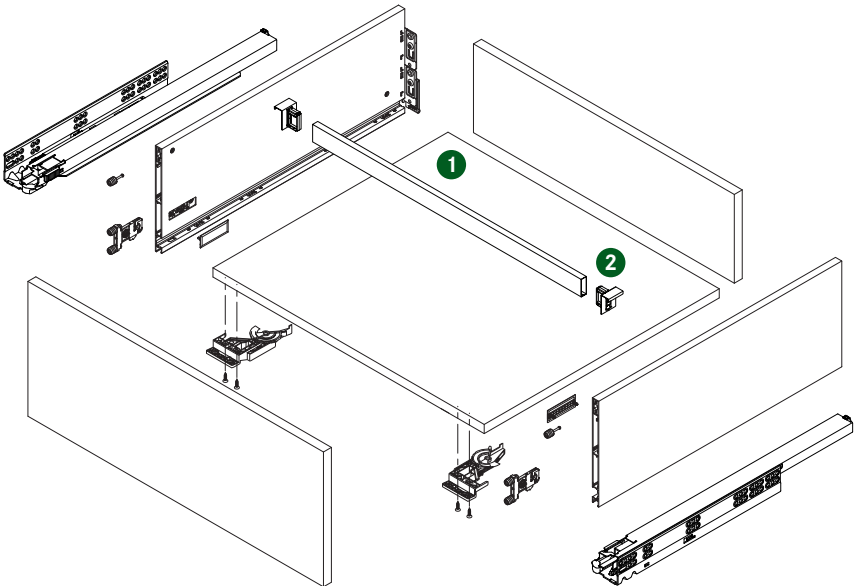


Description	Length	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
Cross-divider	1124 (44 1/4")	F136107417 507	F136107415 507	F136107416 507	10

Holder for Cross-divider



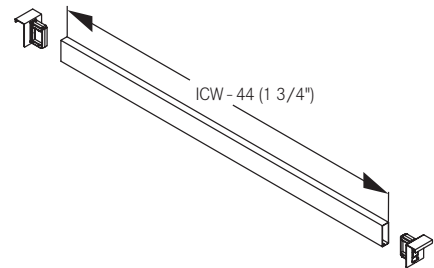
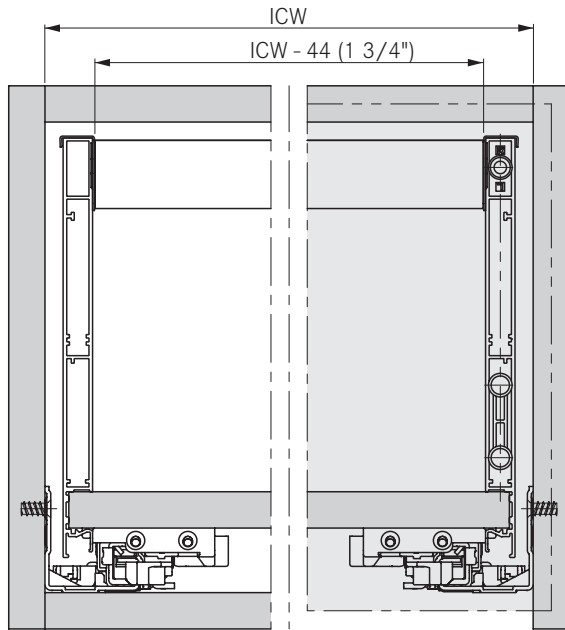
Description	Item No. White	Item No. Silver Grey	Item No. Graphite	PU
Holder for Cross-divider	F136107481 533	F136107479 533	F136107480 533	200



PU – Packaging unit

Installation Dimensions

Cutting Dimensions for Cross-divider



ICW = inside cabinet width

Dynapro 16, Full Extension Slide, 2D

Integrated Soft-close with 2-dimensional adjustment



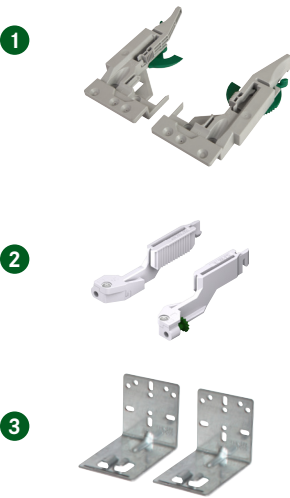
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection to drawer slide and front locking device
- Integrated 2-dimensional adjustment for alignment
- Height adjustment + 3.5mm with front locking device and ±1.5mm via Vionaro
- Side adjustment via Vionaro Drawer
- Depth adjustment +4.5mm (optional)
- 88 lb load rating (40 kg)
- For frame and frameless cabinetry

Dynapro 16 Full Extension Slides, 88 lb (40 kg) and 132 lb (60 kg)



Drawer Length	Nominal length	Min Installation Depth	Item No.	PU
381 (15")	399 (15 23/32")	403 (15 7/8")	F130135015 204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	F130135016 204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	F130135019 204	5

Front Locking Devices, Rear Mounting Brackets, and Adjustment Adapters



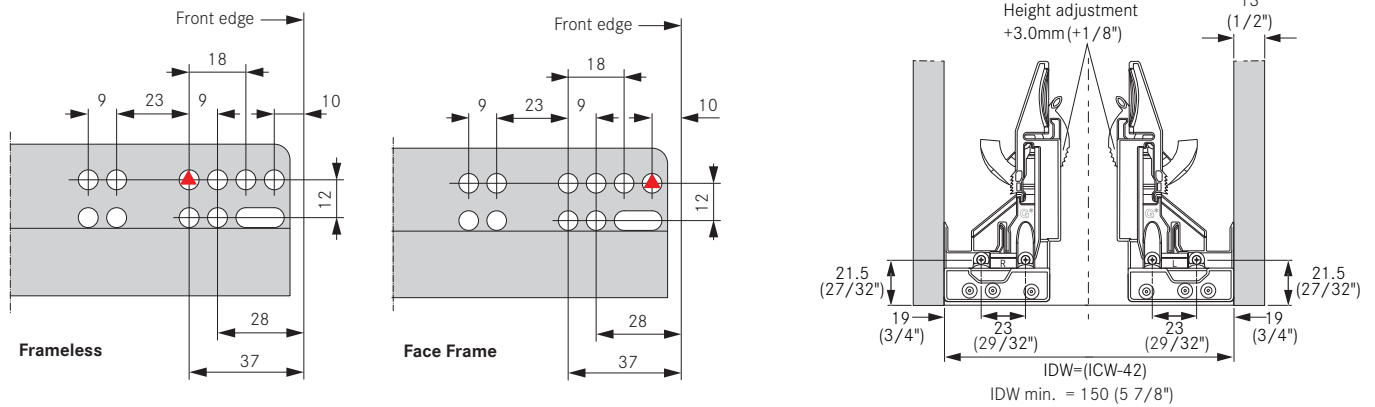
Description	Item No.	PU
(Must order separately)		
1 Front locking device with flange, left	F134116420 233	200
Front locking device with flange, right	F134116421 233	200
Front locking device with flange, set	F134116422 204	5
2 Depth adjuster for drawer front, left and right set	F134101002 104	5
3 Rear mounting brackets, non-handed for 12"-21" slides	7950.VE300	300
	7950.VE20	20

PU – Packaging unit

Drawer Material Thickness	16mm (5/8")
Standard Dynamic Load	88 lb (40 kg)
Static Load Standard	100 lb (45 kg)

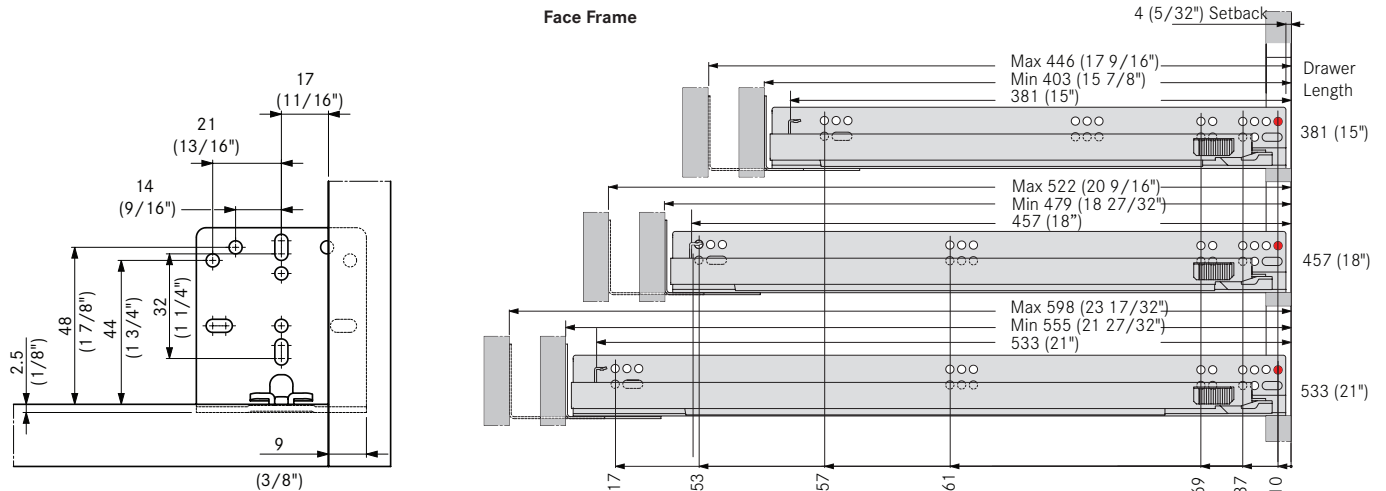
Mounting Position for Front Cabinet Profile

Front Locking Device Position



Rear Bracket for Face Frame

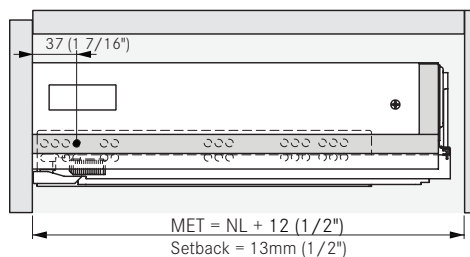
Cabinet Boring Specifications



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

Note: The recommendations for screw placement are guidelines only. Installers need to ensure that the cabinet wall is adequate.

Minimum Installation Depth for Inset Drawers



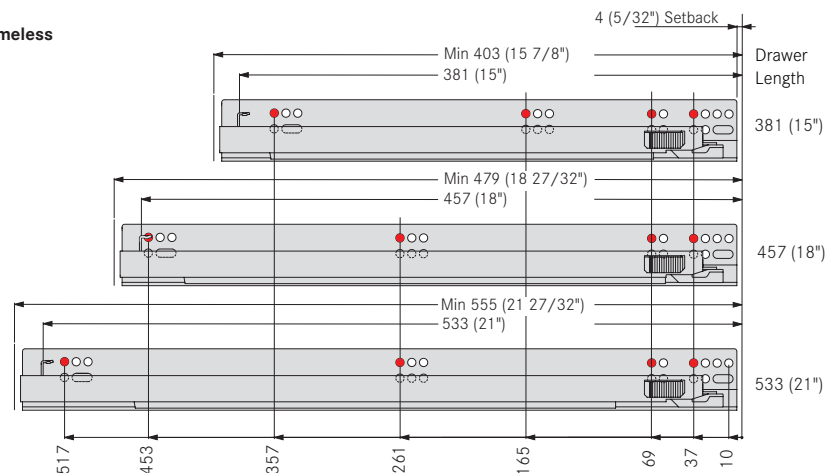
ICW = inside cabinet width

IDW = inside drawer width

MET = Minimum installation depth

NL = Nominal length

Frameless



Dynapro 16, Full Extension Slide, 3D

Integrated Soft-close with 3-dimensional adjustment



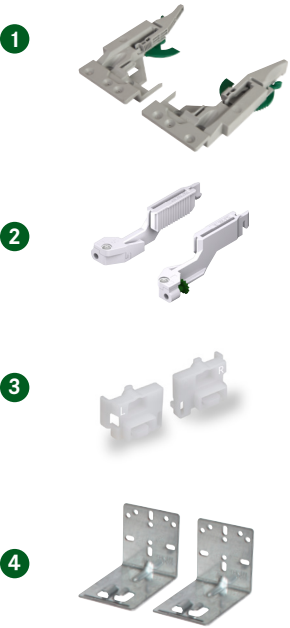
- Full extension with a synchronized mechanism
- Soft-close damping system
- Maximum connection to drawer slide and front locking device
- Integrated 3-dimensional adjustment for alignment
- Height adjustment + 3.5mm with front locking device and ±1.5mm via Vionaro
- Side and tilt adjustment via Vionaro Drawer
- Depth adjustment +4.5mm (optional)
- 88 lb load rating (40 kg) and 132 lb load rating (60 kg)
- For frame and frameless cabinetry
- Compatible with Dynapro 3D undermount slides using 3D adapter set

Dynapro 16 Full Extension Slides, 88 lb (40 kg) and 132 lb (60 kg)



Drawer Length	Nominal length	Min Installation Depth	Item No.	PU
381 (15")	399 (15 23/32")	403 (15 7/8")	F130135005 204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	F130135006 204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	F130135007 204	5
Heavy Duty, Full Extension Slides, 132 lb (60 kg)				
457 (18")	475 (18 11/16")	479 (18 27/32")	F130135008 204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	F130135009 204	5

Front Locking Devices, Rear Mounting Brackets, and Adjustment Adapters



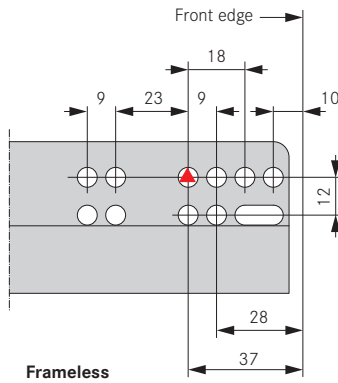
Description	Item No.	PU
(Must order separately)		
1 Front locking device with flange, left	F134116420 233	200
Front locking device with flange, right	F134116421 233	200
Front locking device with flange, set	F134116422 204	5
2 Depth adjuster for drawer front, left and right set	F134101002 104	5
3 Vionaro 3D adapter set, left and right	00199-03	5
(Required to use 3D Dynapro with Vionaro drawers)		
4 Rear mounting brackets, non-handed for 12"-21" slides	7950.VE300	300
	7950.VE20	20

PU - Packaging unit

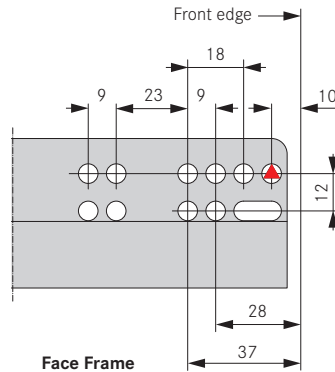
Drawer Material Thickness	16mm (5/8")
Standard Dynamic Load	88 lb (40 kg)
HD Dynamic Load	132 lb (60 kg)
Static Load Standard/HD	100 lb (45 kg) 150 lb (45 kg)

Mounting Position for Front Cabinet Profile

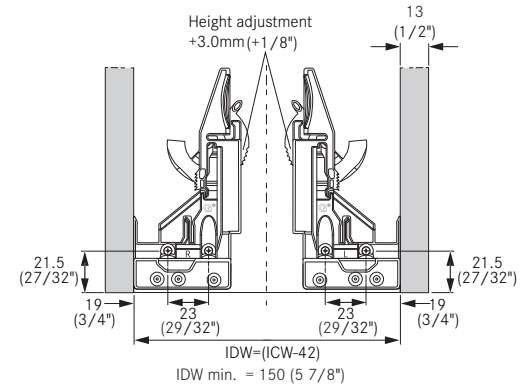
Front Locking Device Position



Frameless

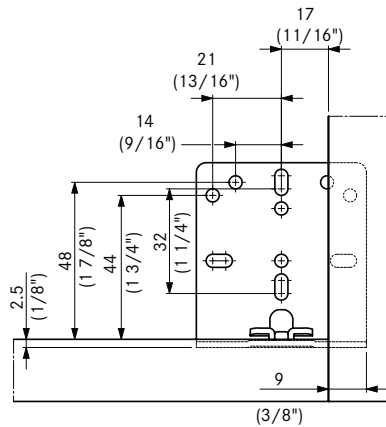


Face Frame



Rear Bracket for Face Frame

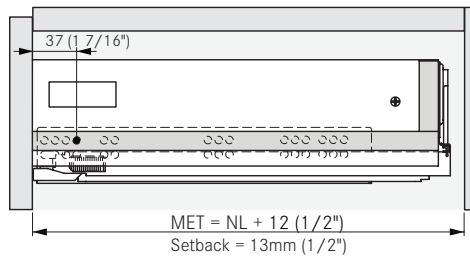
Cabinet Boring Specifications



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

Note: The recommendations for screw placement are guidelines only. Installers need to ensure that the cabinet wall is adequate.

Minimum Installation Depth for Inset Drawers



ICW = inside cabinet width

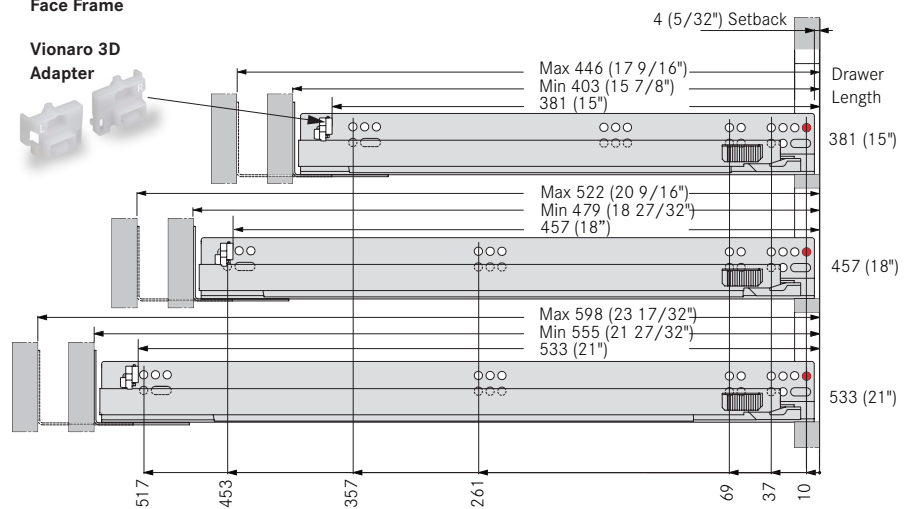
IDW = inside drawer width

MET = Minimum installation depth

NL = Nominal length

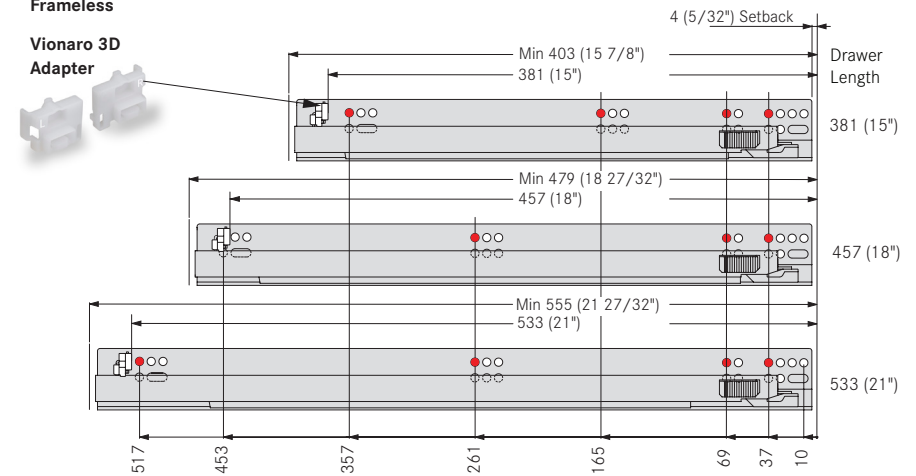
Face Frame

Vionaro 3D Adapter



Frameless

Vionaro 3D Adapter



Note: Vionaro 3D Adapter Set is required when using Dynapro 3D slides with Vionaro drawer sides.

Dynapro 16, Tipmatic

Tipmatic Full Extension with 2-dimensional adjustment



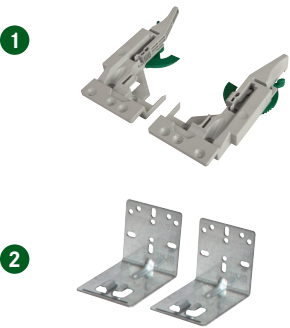
- Integrated Tipmatic
- Full extension with a synchronized mechanism
- Designed for drawers without pulls
- For face frame and frameless applications
- Secure and smooth operation even if drawer is pulled open
- Maximum connection to drawer slide and front locking device
- Integrated 2-dimensional adjustment for alignment
- Height adjustment + 3.5mm with front locking device and ±1.5mm via Vionaro
- Side adjustment via Vionaro Drawer
- 88 lb load rating (40 kg)
- Drawer widths should not exceed 26" wide

Dynapro 16 Tipmatic Full Extension Slide, 88 lb (40 kg)



Drawer Length	Nominal Length	Min Installation Depth	Item No.	PU
381 (15")	399 (15 23/32")	403 (15 7/8")	F130116432 204	5
457 (18")	475 (18 11/16")	479 (18 27/32")	F130116433 204	5
533 (21")	551 (21 11/16")	555 (21 27/32")	F130116434 204	5

Front Locking Devices and Rear Mounting Brackets

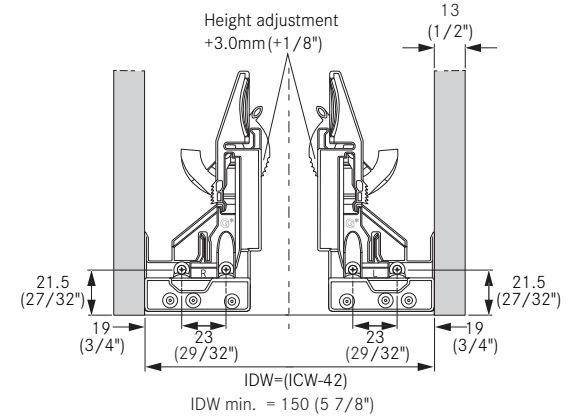
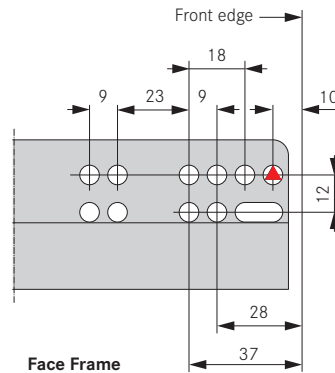
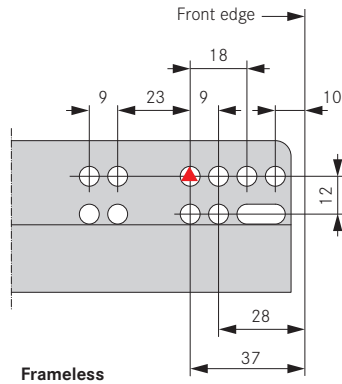


Description	Item No.	PU
(Must order separately)		
1 Front locking device with flange, left	F134116420 233	200
Front locking device with flange, right	F134116421 233	200
Front locking device with flange, set	F134116422 204	5
2 Rear mounting brackets, non-handed for 12"-21" slides	7950.VE300	300
	7950.VE20	20

Drawer Material Thickness	16mm (5/8")
Dynamic Load	88 lb (40 kg)
Static Load	100 lb (45 kg)

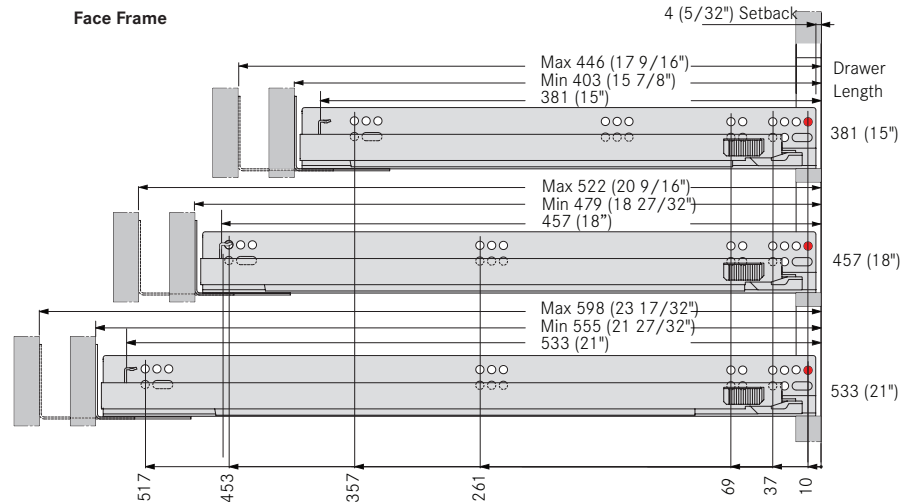
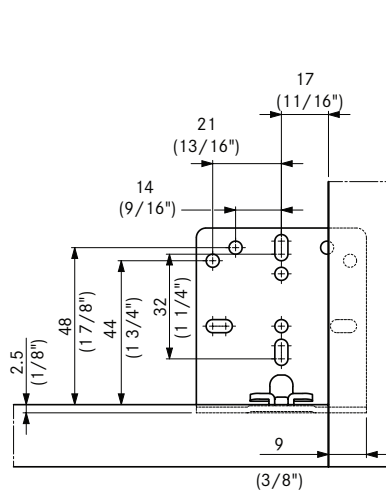
Mounting Position for Front Cabinet Profile

Front Locking Device Position

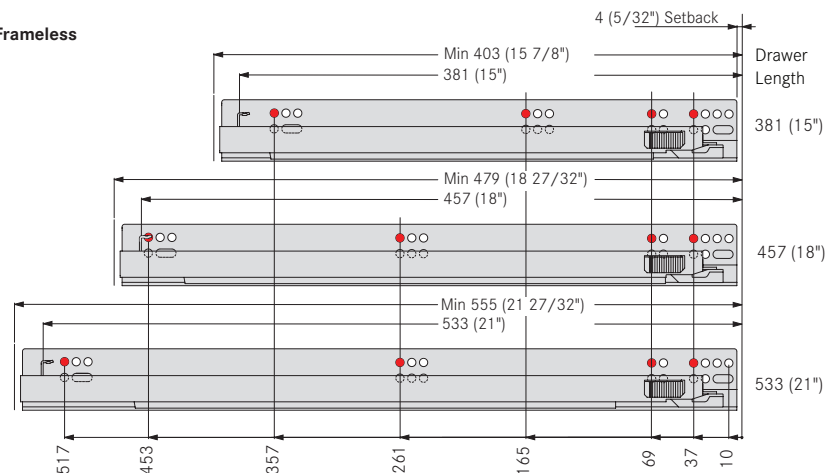


Rear Bracket for Face Frame

Cabinet Boring Specifications



Frameless

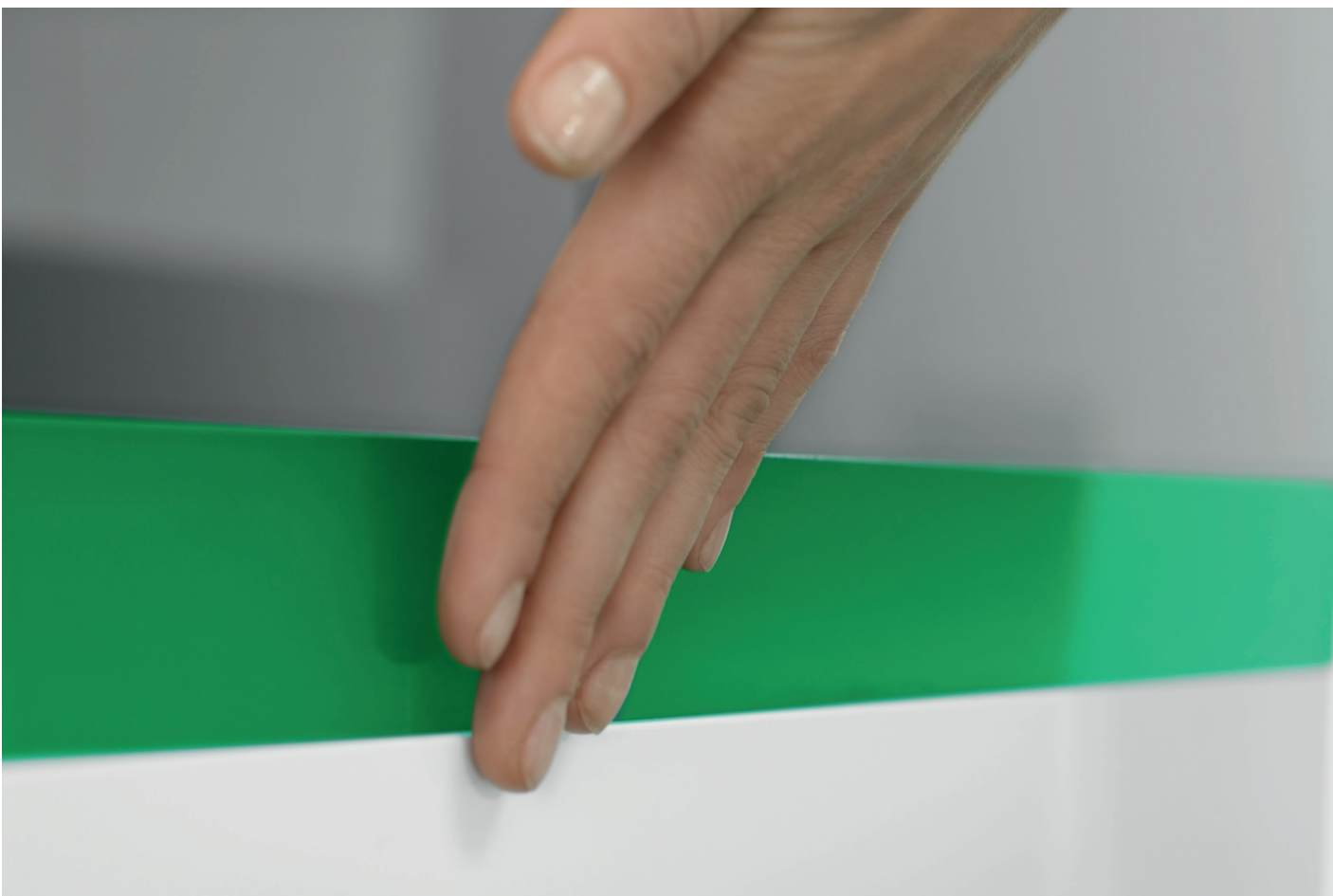


Pre-drilling recommended $\varnothing 2.5\text{mm}$ (3/32").

Note: The recommendations for screw placement are guidelines only. Installers need to ensure that the cabinet wall is adequate.

ICW = inside cabinet width

IDW = inside drawer width



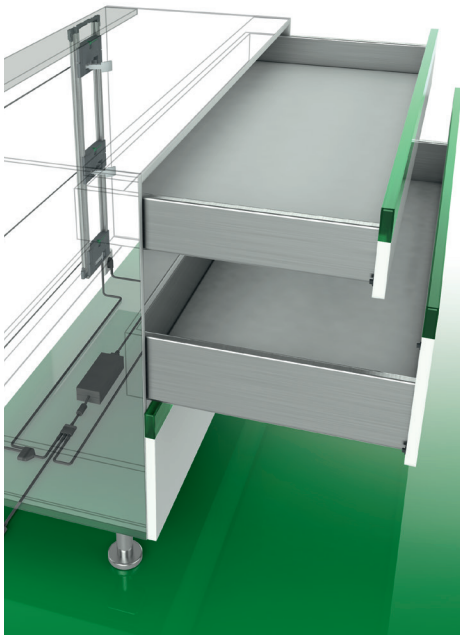
Sensomatic combines handle-free opening
with the ever popular Soft-closing action

**Just tap anywhere on the drawer front and
the drawer opens automatically.**

The Sensomatic is an electro-mechanical opening
system that works with the Dynapro slide system.
A simple installation process creates a superior
drawer system.



Versatile, Efficient, Exciting:
 Lightly touch the front panel and the
 drawers will open as if by magic.
 Fully automatic, electrically powered.



SENSOMATIC OPENING SYSTEM

Sensomatic, an electro-mechanical opening system that can be activated by a light touch anywhere on the surface of the drawer front. At the touch, the drawers glide open in one smooth motion.

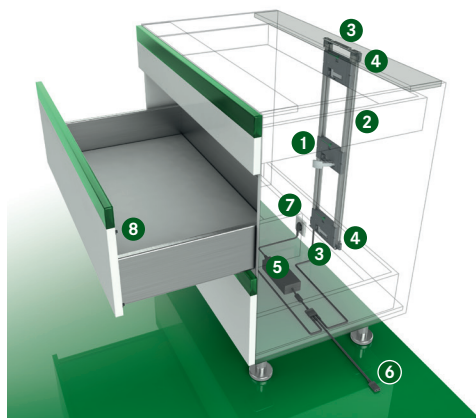
With the touch-sensitive Sensomatic device all you need is a gentle touch anywhere on the drawer front to automatically open the drawers. The action is steady, precise and ingenious. The perfect movement for today's functional requirements.

Sensomatic is extremely efficient in regard to power consumption and occupied space. The Sensomatic needs only one drive unit for cabinet widths up to 47" (1200mm) regardless of the weight. Accessories such as wire baskets, trash can receptacles, or roll out trays can be fitted with the Sensomatic system without modification. It has never been easier to open a drawer and - never easier to close a drawer.

Sensomatic together with Soft-close offers all the advantages of handle free opening with the elegance and functionality of a soft-closing action. These functions together guarantee your operating convenience at the highest level.

Sensomatic for Vionaro/Dynapro

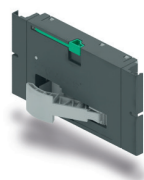
Standard cabinet with horizontal wooden stretcher



Sensomatic is an electro-mechanical opening system that can be activated by a light touch.

- Sensomatic works with any Dynapro drawer design
- Activated by a light touch anywhere on the drawer front
- One drive unit for cabinets widths up to 47" (1200mm)
- Soft-closing action pulls the drawer closed
- Ideal for accessories such as wire baskets, waste bins or roll-out trays
- Full extension for maximum access to drawer contents

1 Opening Unit



	Item No.	PU
For Dynapro	F121100268607	10

PU - 10 Pieces, individually packaged

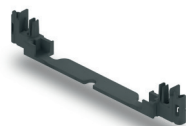
2 Frame Sides, Including Frame Side Cable



Length	Item No.	PU
750mm	F121100285207	10
1170mm	F121100286207	10

PU - 10 Pairs

3 Frame Connector



	Item No.	PU
Frame connector	F121100282211	20

4 Fixing Bracket



	Item No.	PU
Fixing bracket	F121100270211	1

5 Power Supply Unit



	Item No.	PU
Power supply unit	F121100269607	10

PU = 10 pieces, individually packaged

One power supply operates up to 30 opening units

6 Connection Cable with 2-way-adapter



Length	Item No.	PU
1000mm	F121100289207	10
1600mm	F121100290207	10
2000mm	F121100291207	10

7 Power Cord, 1.8 m (6')



Type of plug	Item No.	PU
Power cord (USA, CA)	69760-04	10

8 Spring-loaded Front Bumper



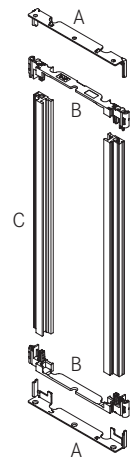
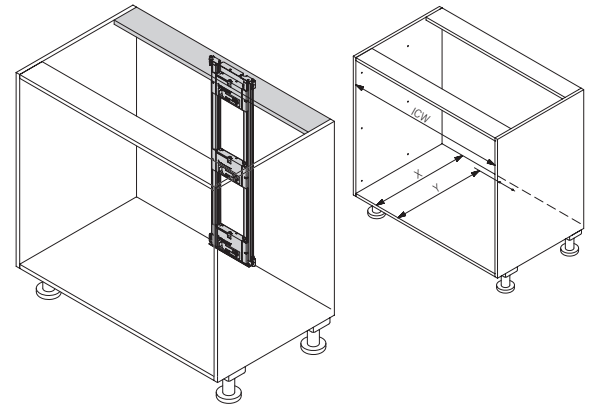
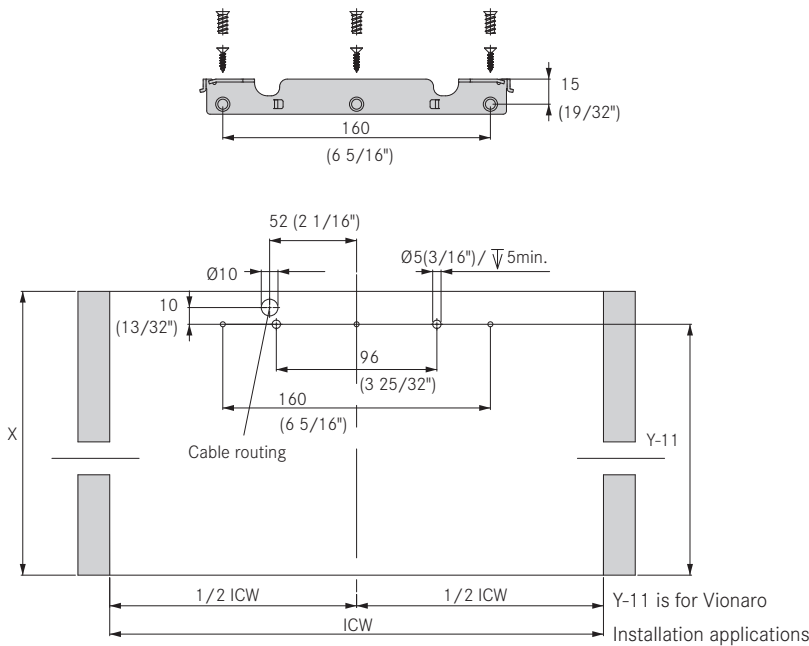
Ø 5mm	Item No.	PU
Front gap 2.2mm	F121100294223	100
Front gap 3mm	F121100295223	100

Ø 8mm	Item No.	PU
Front gap 2.2mm	F121100297223	100
Front gap 3mm	F121100298223	100

PU - Packaging unit

Mounting Dimensions

Fixing brackets positioned at top and bottom



Mounting dimensions Dynapro	X	Y	Min ICW
Wood back panel	NL + 15 (19/32'')	NL	273 (10 3/4'')

Legend

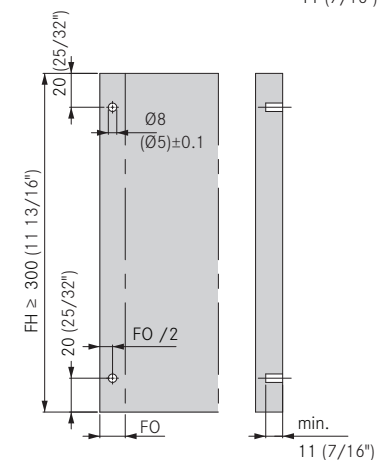
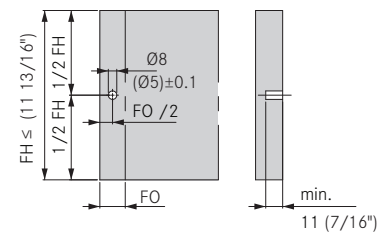
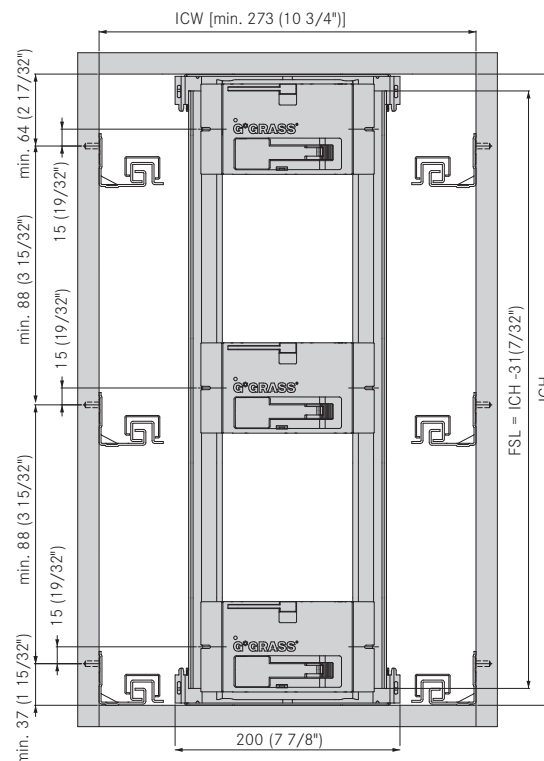
Position of Opening Unit for Dynapro

Position of Front Bumper

X = min. installation depth
Y = depth of hole pattern
ICW = inside cabinet width
A = Fixing bracket used at top and bottom
B = Frame connector
C = Frame sides
NL = nominal length of cabinet slide

FH = front height
FO = front overlay

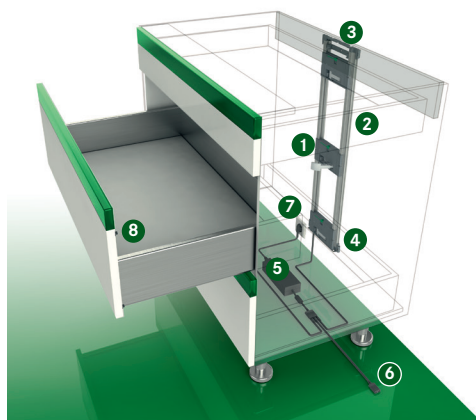
ICH = Inside cabinet height
FSL = Frame side length



Do not drive in or glue front bumpers

Sensomatic for Vionaro/Dynapro

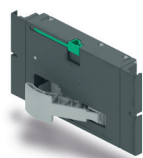
Standard cabinet with vertical wooden stretcher



Sensomatic is an electro-mechanical opening system that can be activated by a light touch.

- Sensomatic works with any Dynapro drawer design
- Activated by a light touch anywhere on the drawer front
- One drive unit for cabinets widths up to 47" (1200mm)
- Full extension for maximum access to drawer contents
- Soft-closing action pulls the drawer closed
- Ideal for accessories such as wire baskets, waste bins or roll-out trays

1 Opening Unit



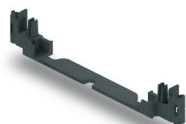
	Item No.	PU
For Dynapro	F121100268607	10
PU - 10 Pieces, individually packaged		

2 Frame Sides, including Frame Side Cable



Length	Item No.	PU
750mm	F121100285207	10
1170mm	F121100286207	10
PU - 10 Pairs		

3 Frame Connector



	Item No.	PU
Frame connector	F121100282211	20

4 Fixing Bracket



	Item No.	PU
Fixing bracket	F121100270211	1

5 Power Supply Unit



	Item No.	PU
Power supply unit	F121100269607	10
PU = 10 pieces, individually packaged		
One power supply operates up to 30 opening units		

6 Connection Cable with 2-way-adaptor



Length	Item No.	PU
1000mm	F121100289207	10
1600mm	F121100290207	10
2000mm	F121100291207	10

7 Power Cord, 1.8 m (6')



Type of plug	Item No.	PU
Power cord (USA, CA)	69760-04	10

8 Spring-loaded Front Bumper



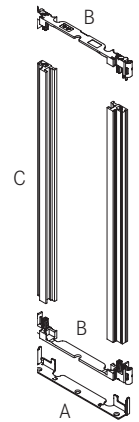
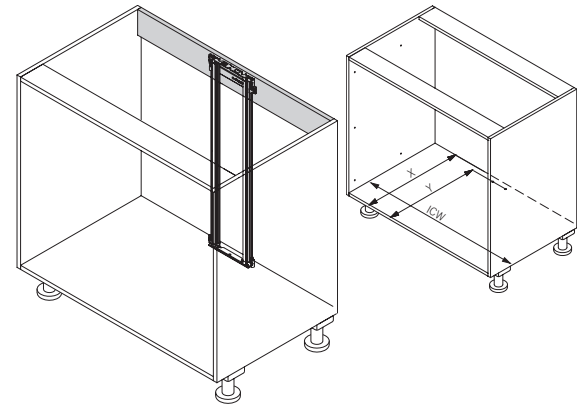
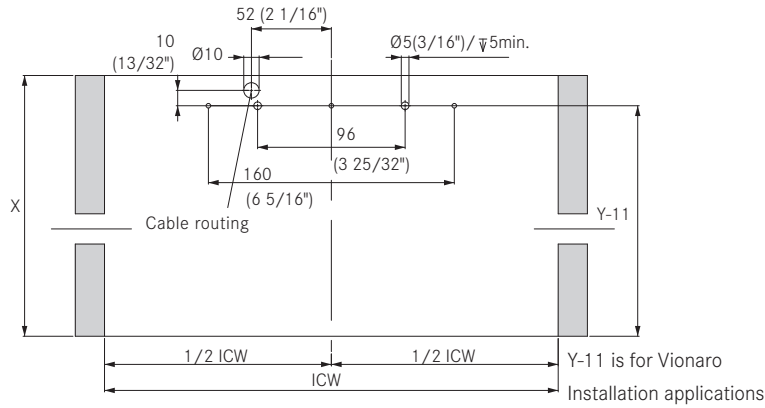
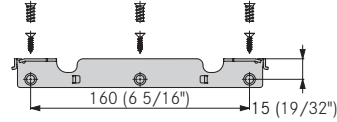
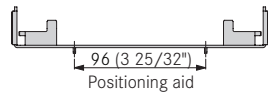
Ø 5mm	Item No.	PU
Front gap 2.2mm	F121100294223	100
Front gap 3mm	F121100295223	100

Ø 8mm	Item No.	PU
Front gap 2.2mm	F121100297223	100
Front gap 3mm	F121100298223	100

PU - Packaging unit

Mounting Dimensions

Fixing bracket positioned at bottom



Mounting dimensions Dynapro	X (inside)	Y	Min ICW
Wood back panel	NL + 15 (19/32")	NL	273 (10 3/4")

Legend

Position of Opening Unit for Dynapro

Position of Front Bumper

X = min. installation depth

Y = depth of hole pattern

ICW = inside cabinet width

A = Fixing bracket used at bottom

B = Frame connector

C = Frame sides

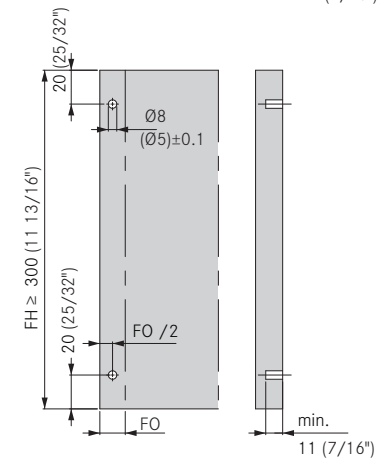
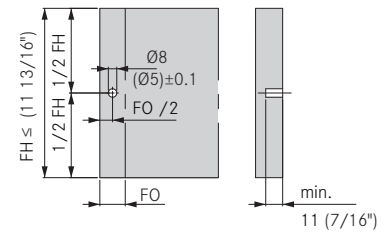
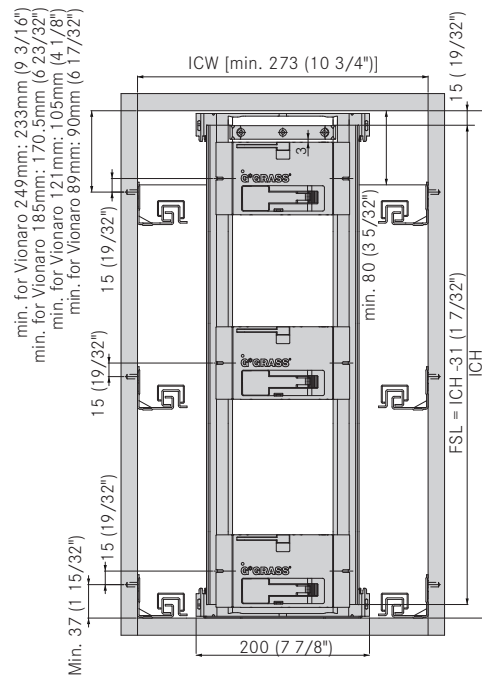
NL = nominal length of cabinet slide

FH = front height

FO = front overlay

ICH = Inside cabinet height

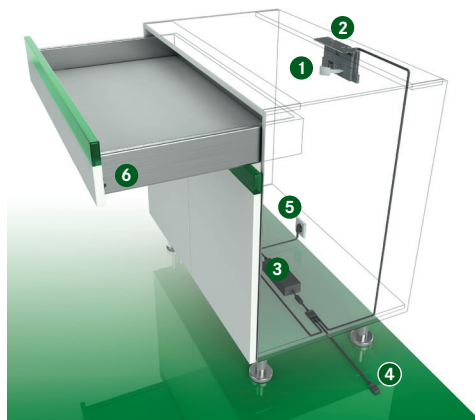
FSL = Frame side length



Do not drive in or glue front bumpers

Sensomatic for Vionaro/Dynapro

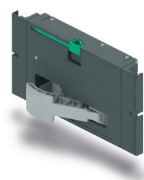
Single drawer with top mounting



Sensomatic is an electro-mechanical opening system that can be activated by a light touch.

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- Activated by a light touch anywhere on the drawer front
- One drive unit for cabinets widths up to 47" (1200mm)
- Full-extension for maximum access to drawer contents
- Soft-closing action pulls the drawer closed
- Ideal for accessories such as wire baskets, waste bins or roll-out trays

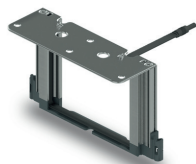
1 Opening Unit



	Item No.	PU
For Dynapro	F121100268 607	10

PU - 10 Pieces, individually packaged

2 Frame for Top Assembly



	Item No.	PU
Height 120mm (4 23/32")	F121100272 207	10

3 Power Supply Unit



	Item No.	PU
Power supply unit	F121100269 607	10

PU = 10 pieces, individually packaged. One power supply operates up to 30 opening units

4 Connection Cable with 2-way-adapter



Length	Item No.	PU
600mm	F121100288 207	10
1000mm	F121100289 207	10
1600mm	F121100290 207	10
2000mm	F121100291 207	10

5 Power Cord, 1.8 m (6')



Type of plug	Item No.	PU
Power cord (USA, CA)	69760-04	10

6 Spring-loaded Front Bumper



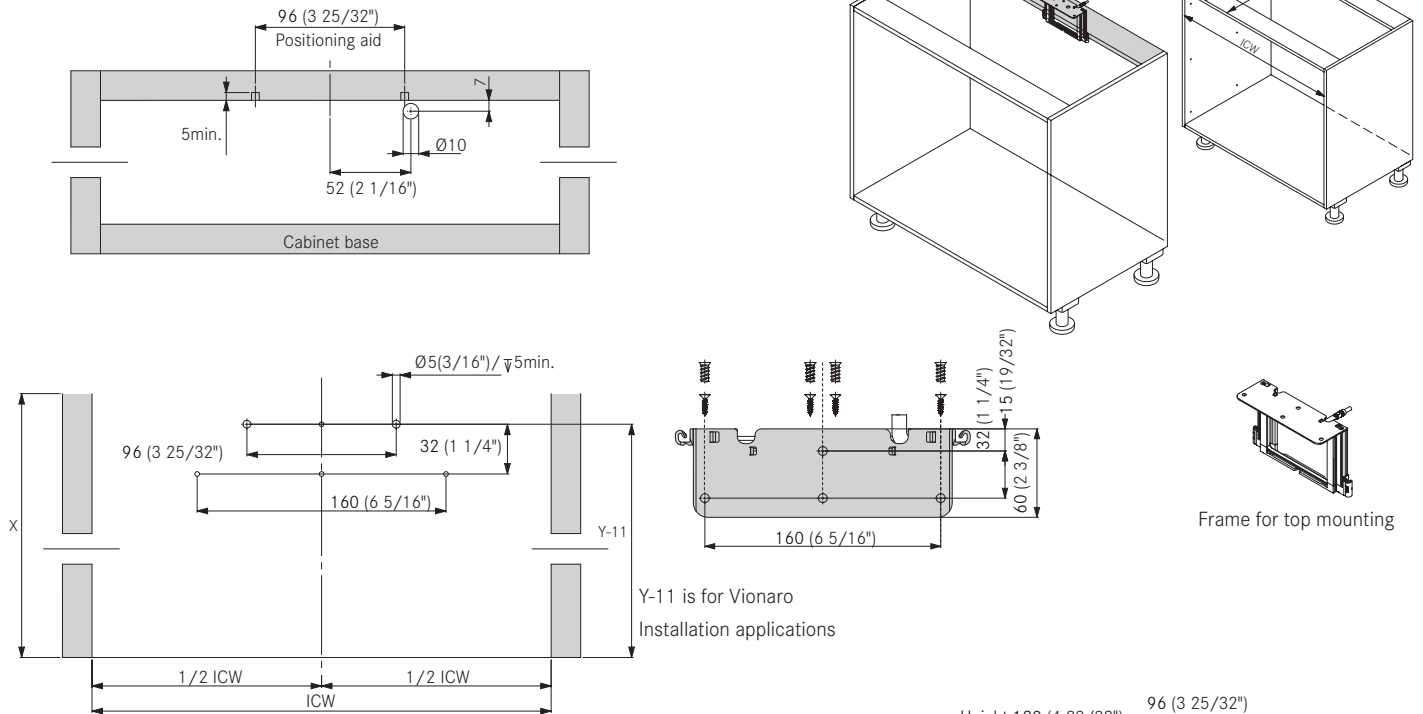
Ø 5mm	Item No.	PU
Front gap 2.2mm	F121100294 223	100
Front gap 3mm	F121100295 223	100

Ø 8mm	Item No.	PU
Front gap 2.2mm	F121100297 223	100
Front gap 3mm	F121100298 223	100

PU - Packaging unit

Mounting Dimensions

Back wall cabling



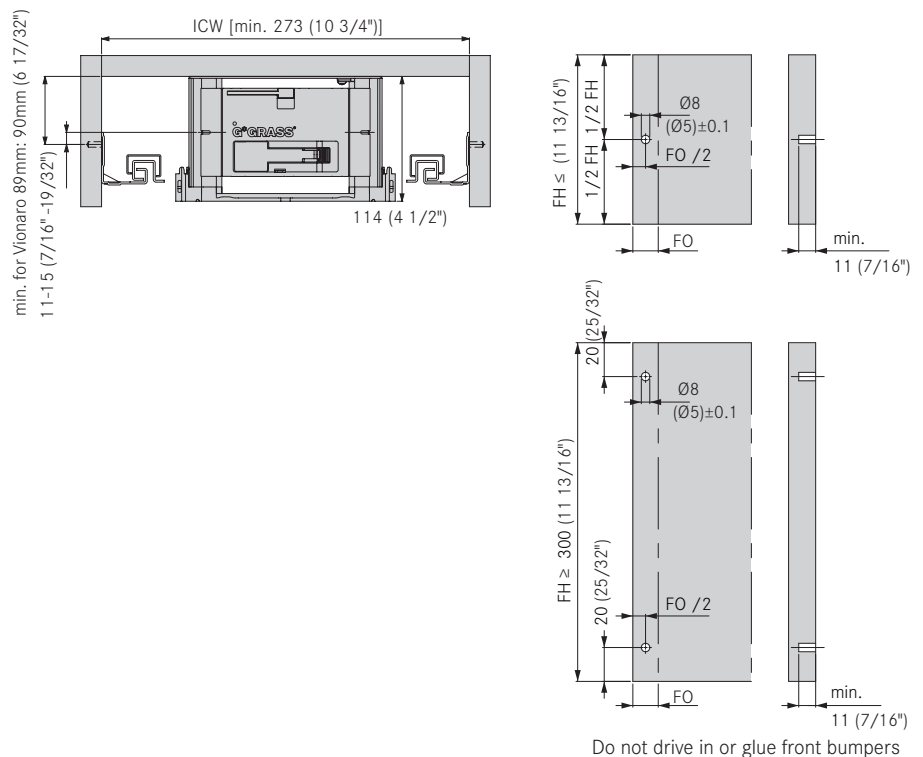
Mounting dimensions Dynapro	X (inside)	Y	Min ICW
Wood back panel	NL + 15 (19/32")	NL	273 (10 3/4")

Legend

Position of Opening Unit for Dynapro

Position of Front Bumper

Height 120 (4 23/32")



X = min. installation depth

Y = depth of hole pattern

ICW = inside cabinet width

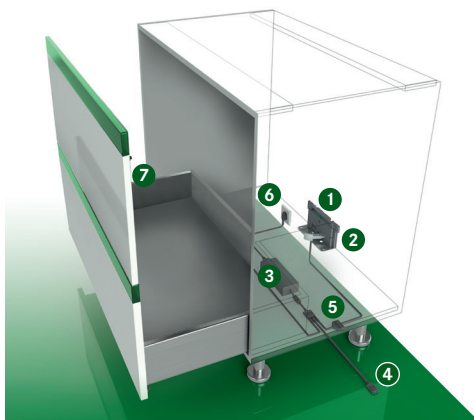
NL = nominal length of cabinet slide

FH = front height

FO = front overlay

Sensomatic for Vionaro/Dynapro

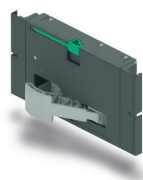
Waste bin cabinet with bottom panel frame mounting



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- Full-extension for maximum access to drawer contents
- Soft-closing action pulls the drawer closed
- Ideal for accessories such as wire baskets, waste bins, or roll-out trays

1 Opening Unit



	Item No.	PU
For Dynapro	F121100268607	10

PU - 10 Pieces, individually packaged

2 Base Frame



	Item No.	PU
for Dynapro	F121100271207	10

3 Power Supply Unit



	Item No.	PU
Power supply unit	F121100269607	10

PU = 10 pieces, individually packaged
One power supply operates up to 30 opening units

4 Connection Cable with 2-way-adapter



Length	Item No.	PU
1000mm	F121100289207	10
1600mm	F121100290207	10
2000mm	F121100291207	10

5 4-way-adapter



Type of plug	Item No.	PU
4-way-adapter	F121100293207	10

6 Power Cord, 1.8 m (6')



Type of plug	Item No.	PU
Power cord (USA, CA)	69760-04	10

7 Spring-loaded Front Bumper



Ø 5mm	Item No.	PU
Front gap 2.2mm	F121100294223	100
Front gap 3mm	F121100295223	100

Ø 8mm	Item No.	PU
Front gap 2.2mm	F121100297223	100
Front gap 3mm	F121100298223	100

Sensomatic Kit



Set includes:

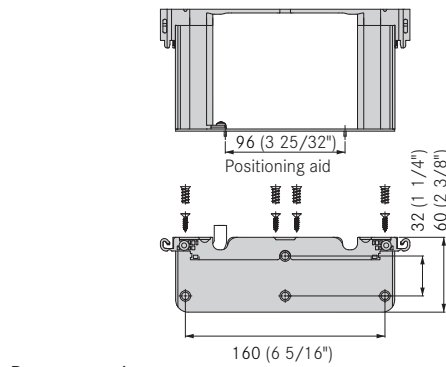
Opening unit: 1 Power cord: 1
Base frame: 1 Front bumpers: 4
Power supply unit : 1 (F121100294223)

	Item No.	PU
For Dynapro	F121100697201	1

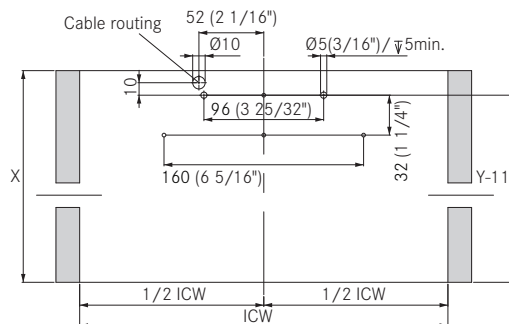
PU = 1 set

PU - Packaging unit

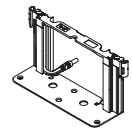
Mounting Dimensions



Base mounting



Y-11 is for Vionaro
Installation applications



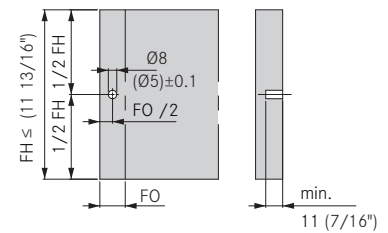
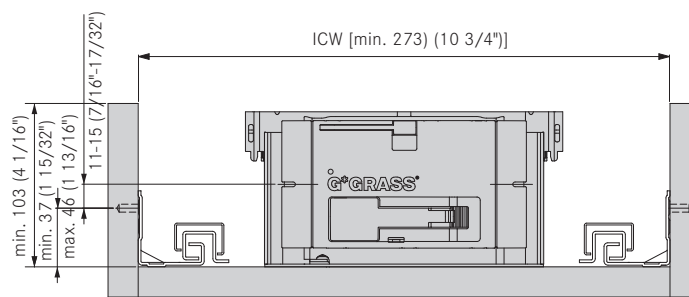
Base frame

Mounting dimensions Dynapro	X (inside)	Y	Min ICW
Wood back panel	NL + 15 (19/32")	NL	273 (10 3/4")

Legend

Position of Opening Unit for Dynapro

Position of Front Bumper



X = min. installation depth

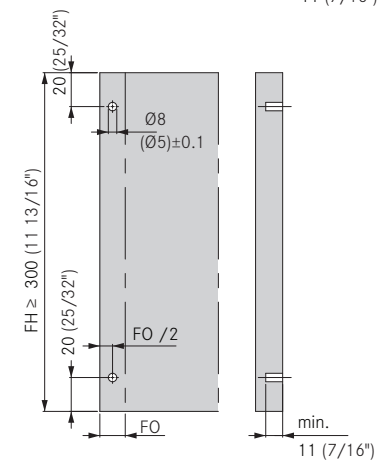
Y = depth of hole pattern

ICW = inside cabinet width

NL = nominal length of cabinet slide

FH = front height

FO = front overlay



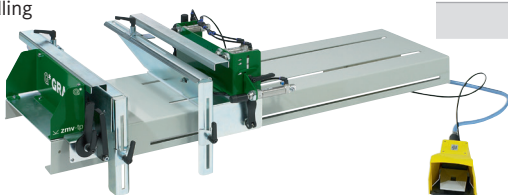
Do not drive in or glue front bumpers

Accessories and Assembly Aids

Vionaro

Tecmator

- Pneumatic table-top device for Vionaro
- The ZMV-TP can be used to assemble drawers for external cabinet widths of up to 1200mm
- Easy and straightforward handling
- Sturdy construction
- For small series production
- Pneumatic control system
- High performance



Description	Item No.	PU
Tecmator ZMV-TP2 1200	F146116212299	1

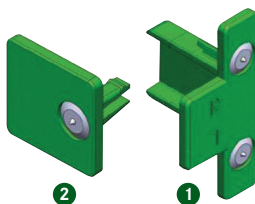
Note: Product lead time approximately 14 weeks

Marking Jig

For exact marking of the drilled holes for the Vionaro front adapter

1 set contains:

- 1 marking jig for front connector
- 1 marking jig for front stabilizer



Description	Item No.	PU
Marking jig	F146100545513	1

Drilling Jig

Front drilling jig for Vionaro front adapter



Description	Item No.	PU
Drilling jig	F146100562201	1

Punching Tool for Vionaro Front Stabilizer



Description	Item No.	PU
Front stabilizer punching tool	F146116216299	1

Punching Tool for Vionaro Bottom Spike



Description	Item No.	PU
Bottom spike punching tool	F146116217299	1

Drill Bits for Aluminum Front Pull Outs



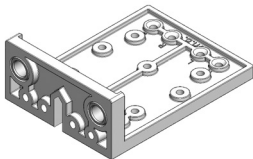
Description	Item No.	PU
Drill bit, 3mm, RH, for Vionaro	00156-01	1
Drill bit, 8mm, RH, for Vionaro	00158-01	1

PU - Packaging unit

Dynapro

Drilling Template for Drawer

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



Description	Item No.	PU
Drilling template	F146109874299	1

Centering Drill Bit Ø 2.5mm

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



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

Screws

Euro Screw, Nickel-plated



Description	Item No.	PU
Euro Screw 11mm (7/16") Pozi	499.360.61.1015	500
Euro Screw 13mm (1/2") Pozi	499.360.61.3015	500

Wood Screw, Nickel-plated



Description	Item No.	PU
#6 x 5/8" FHP, NI	81001-43	500
#6 x 3/4" FHP, NI	81003-43	500

PU - Packaging unit

Notes



GRASS America Inc.
1202 NC Highway 66 South
Kernersville, NC 27284

Phone: 1-800-334-3512
Fax: 1-800-525-8406

Website: www.grassusa.com
E-mail: info@grassusa.com

www.grassusa.com

GRASS Canada Inc.
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Toronto, ON M1X 1C5

Phone: 1-800-461-4975
Fax: 1-416-335-5907

Internet: www.grasscanada.com
E-Mail: info@grasscanada.com

