064116-001 Item G
Per Spec Section 064116-2.3.B

Blum Functional Hardware

A complete system of hinges and drawer runners for cabinets and furniture

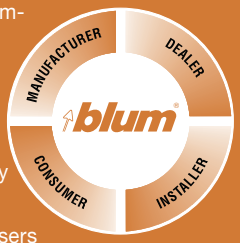
blum®

Julius Blum, Inc. is a leading manufacturer of functional hardware for the cabinet and furniture industry specializing in concealed hinges and drawer runner systems. Virtually all of the hardware needed to assemble and make casegoods functional are available within the wide range of lifetime guaranteed Blum products.

Blum's manufacturing and distribution complex in Stanley, North Carolina supplies the North American markets through a network of more than 150 dependable distributors. Wholly owned by the Blum family, the company was formed in 1952 by Julius Blum and is headquartered in Hoechst, Austria.

Global customer benefits

Product development at Blum considers all of the various customers who will come in contact with our products. With this "Global Customer Benefits" philosophy we strive to create advantages for all users from the cabinetmaker to the end consumer.



Julius Blum, Inc. is ISO 9001 certified which means that you are assured of consistent quality in every Blum product. Blum hardware is also backed with a lifetime guarantee. What's more they exceed the requirements of ANSI-BHMA standards for cycle life, static load and self-closing performance. Contact your local Blum representative for more details.

ISO 9001 CERTIFIED QUALITY SYSTEM

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Blum: The company behind the products

Blum's commitment to the American market is evident in our 400,000 sq. ft. manufacturing and distribution facility in Stanley, NC.

Administration building

Eight-story automated warehouse

State-of-the-art logistics center

Our large manufacturing and distribution facility provides our customers benefits such as quality tested and proven product, timely shipments and deliveries, and Blum's attention to detail and unmatched customer service.

Blum has a solution for every situation

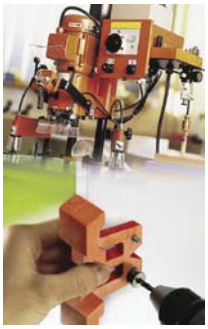
Concealed hinges that cover all the angles

Blum specializes in concealed hinges for the numerous different applications found in today's modern cabinetry. For kitchen cabinets, vanities, entertainment units, furniture, commercial casegoods or any other type of cabinet, Blum has a hinge product that will provide the finest function and durability you can buy.

Total access with Blum drawer runner systems

Blum products have evolved into the most feature-packed variety of drawer systems available for cabinets and furniture. Full extension runners and self-closing action are not only functions preferred by customers but they are now hidden underneath the drawer and out of view.

Machines and assembly aids that put it all together

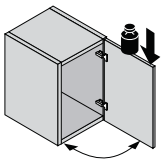


Blum has a comprehensive program of machinery and assembly aids that are dedicated to quick installation of Blum hardware into the wooden cabinet components. With the MINIPRESS and Blum hardware, any cabinet comes together with ease.

Our testing standards are based on real-life

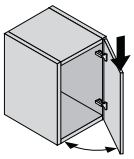
Dynamic load test

45 lb. extra weight applied for 50 opening and closing cycles.



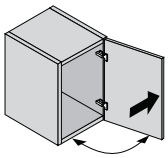
Static load test

65 lb. applied 10 times at 5 seconds each.



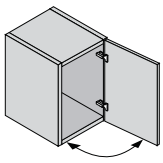
Over push test

10 lb. applied 10 times at 5 seconds each.



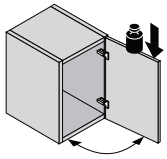
Cycle test

200,000 opening and closing cycles.



Cycle test with load

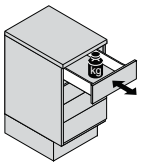
200,000 opening and closing cycles with 10 lb. extra.



All Blum hinges and mounting plates must pass these tests without showing a measurable reduction in performance or deviation in adjustment position.

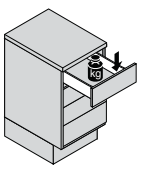
Cycle life / Dynamic load capacity test

100,000 open/close cycles with a total weight of 75 lb. on a 22" drawer.



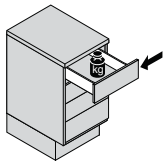
Static load capacity test

100 lb. applied to a half extended 22" drawer for 1 minute.



Side pressure test

A force of 33 lb. is applied ten times to a fully extended 22" drawer.



Blum drawer systems and drawer runners exceed ANSI/ BHMA requirements for a Grade 1 rating.

CLIP top concealed hinges

- **Exclusive “Spiral-Tech” depth adjustment**
- **Improved hinge arm and cup design**
- **Tool-free door to cabinet assembly and removal**
- **Self-closing and free-swing versions**
- **Improved stability and security**
- **Increased spring strength**

Outstanding design and function

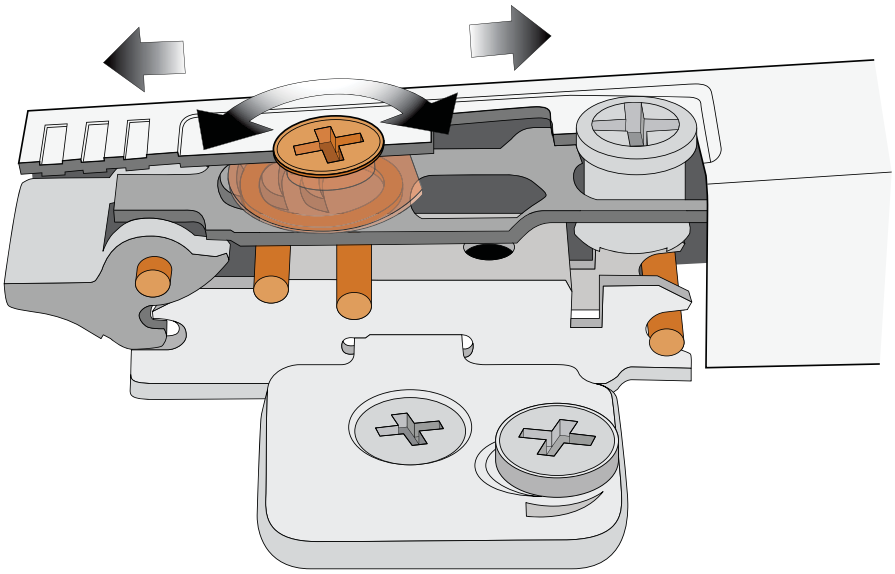
Since its introduction in 1985, Blum CLIP has become the industry standard for concealed cabinet hinges with tool-free attachment and removal. For over 16 years it has been preferred by companies whose reputation relies on dependable door function.

So, how do you make a great product better?

- First we modified the depth adjustment with a technique we call “Spiral-Tech”. One and three quarter revolutions of the screw creates 5mm (3/16") of adjustment without loosening and retightening a fixing screw.
- Second, we put a small flange around the perimeter of the cup for added strength and closed the bottom so you don’t see the door core material.
- Third, we made indentations in the arm to improve attachment comfort and we sculpted the cup lever to a sleek profile on the INSERTA cup attachment models.

These and other enhancements make CLIP top the most innovative, user friendly and attractive hinge Blum has ever made.

Meets ANSI/BHMA A156.9-2001 grade 2 requirements



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More Information is available on these Blum products:

- Blum Angled hinge program
- COMPACT concealed hinges for frame cabinets
- Concealed hinges: CLIP top, CLIP and MODUL
- Machines and assembly aids
- METABOX drawer system
- ORGA-LINE drawer dividing system
- POCKET DOOR hardware
- STANDARD drawer runners
- SOLO concealed runners
- TANDEM concealed runners
- TANDEMBOX drawer system

Julius Blum, Inc.
7733 Old Plank Rd.
Stanley, NC 28164
toll free 800-438-6788
local 704-827-1345
fax 704-827-0799
internet www.blum.com

ISO 9001 CERTIFIED QUALITY SYSTEM

The ultimate hardware system blum®

7005.11.02 © 2002 Printed in USA

CLIP top 170° hinges

064116-001
Item G per 064116-2.3.B.1

Features

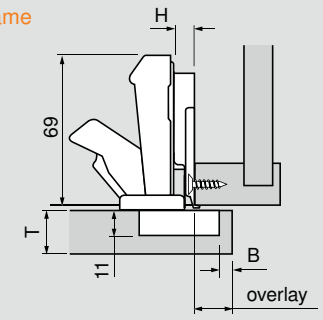
- 170° opening angle
- Three-dimensional adjustment
- Available with INSERTA tool-free attachment
- 130° angle restriction clip available (70.6103)
- All metal hinge, nickel-plated

Minimum reveal table						
3	0	0	0	0	0.2	2.2
4	0	0	0	0	0	1.4
5	0	0	0	0	0	0.9
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
B = boring dist.	16	18	19	20	22	24
	T = door thickness					

Thickness greater than 24 trial app. recommended

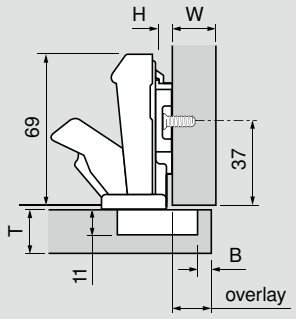
Overlay

Frame



NOTE: 175H6xxx or 175L6600.24 recommended

Panel



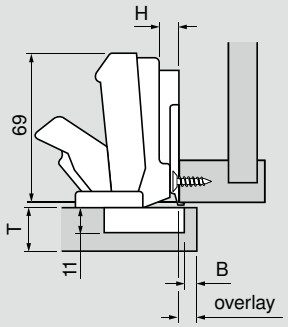
H	Overlay						P	S
0	14	15	16	17	18	19	1.5	65
3	11	12	13	14	15	16	4.5	68
4.5	9.5	10.5	11.5	12.5	13.5	14.5	6	69.5
6	8	9	10	11	12	13	7.5	71
9	5	6	7	8	9	10	10.5	74
	3	4	5	6	7	8	Fixed distance = 11	
	B = boring distance							

NOTE: 4.5 plate is only for use in face frame cabinets, 9 plate is only for panel cabinets

Straight-arm	Self close	Free swing
Screw-on	71T6550	70T6550
Press-in	71T6580	
INSERTA	71T6540B	70T6540B

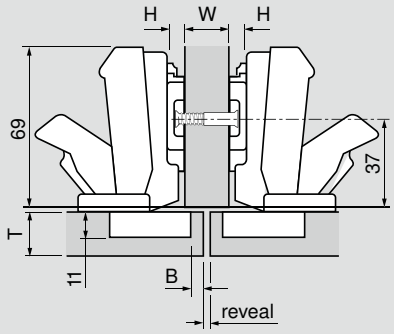
Partial/twin overlay

Frame



NOTE: 175H6xxx or 175L6600.24 recommended

Panel



H	Overlay						P	S
0	4.5	5.5	6.5	7.5	8.5	9.5	11	75
	3	4	5	6	7	8	Fixed distance = 1.5	
	B = boring distance							

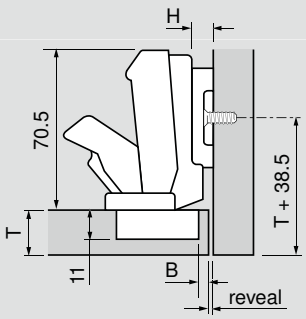
H	Reveal						W	P	S
0	7	5	3	1	—	—	16	11	75
	10	8	6	4	2	0	19		
	13	11	9	7	5	3	22		
	3	4	5	6	7	8			
	B = boring distance								

Half-cranked	Self close	Free swing
Screw-on	71T6650	70T6650
Press-in	71T6680	
INSERTA	71T6640B	

Inset

Inset application not possible with 170° hinges and the inset face frame adapter (175H5030.21)

Panel



H	Reveal						P	S
9	4.5	3.5	2.5	1.5	0.5	—	20	84
	3	4	5	6	7	8	Fixed distance = -7.5	
	B = boring distance							

Abbreviations		
H	=	Plate height
P	=	Door protrusion
S	=	Side arm protrusion
T	=	Door thickness
W	=	Side panel width

Half-cranked	Self close	Free swing
Screw-on	71T6650	70T6650
Press-in	71T6680	
INSERTA	71T6640B	

Per 064116-2.3.B.1

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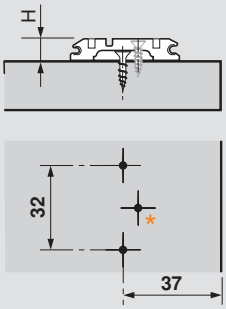
Cam adjustable wing mounting plates

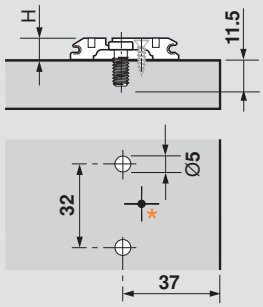
Wood screw



- Steel, nickel-plated
- Attached with #6 x 5/8" wood screws
- Cam height adjustment ±**2** mm

	Part no.
0 plate height (H)	**173H7100**
3 plate height (H)	**173H7130**

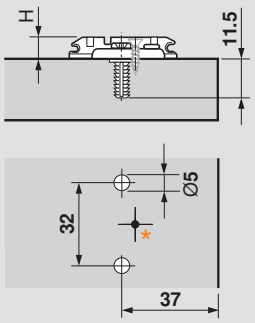
System screw



- Steel, nickel-plated
- Attached with #7 x 5/8" wood screws or Ø**5** x **13** mm system screws
- Cam height adjustment ±**2** mm

	Part no.
0 plate height (H)	**173H9100**
3 plate height (H)	**173H9130**

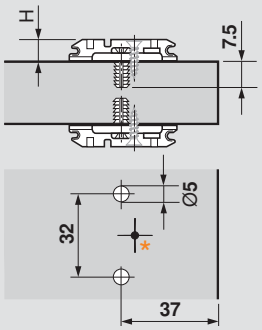
EXPANDO



- Steel, nickel-plated
- Attached with pre-mounted screws with EXPANDO dowels (618.1500)
- Cam height adjustment ±**2** mm

	Part no.
0 plate height (H)	**174H7100E**
3 plate height (H)	**174H7130E**

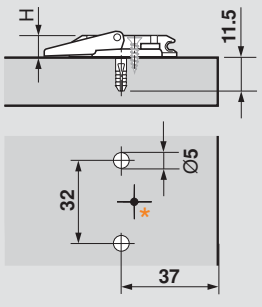
EXPANDO (twin application)



- Steel, nickel-plated
- Attached with pre-mounted screws with EXPANDO dowels for twin application (618.1500)
- Cam height adjustment ±**2** mm

	Part no.
0 plate height (H)	**174H710ZE**

INSERTA



- Steel (closing lever – zinc die-cast, nickel-plated)
- Tool-free assembly with INSERTA self-anchoring feature
- Cam height adjustment ±**2** mm

	Part no.
0 plate height (H)	**174H7100I**
3 plate height (H)	**174H7130I**

*Add additional wood screw if used with wide angled hinges

Per 064116-2.3.B.

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CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

DEVIN D GATES
SUBMITTED BY

064116-011
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

064116
SPECIFICATION SECTION / PARAGRAPH

MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

CRITICAL

ITEM BEING SUBMITTED (check only one)

- ○ Shop Drawings
- ○ Samples (_____ copies)
- ○ LEED Submittal
- ○ Certification / Qualifications
- ○ Record Documents
- ○ Product Data
- ○ Coordination Drawing
- ○ Calculations
- ○ Schedules
- ○ O&M Manuals
- ○ Other _____

ITEM BEING SUBMITTED FOR (check only one)

- ◉ Action
- ○ Information Only
- ○ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

DEVIN D GATES
REVIEWED BY

1/9/16
DATE

To be completed by Reviewer

06 4116-011
CANNON DESIGN SUBMITTAL NUMBER

1/9/17
RECEIVED DATE

- ◉ A. No Exceptions Taken
  No further review of submittal is required.
- ○ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ○ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ○ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ○ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ○ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS

○ See attached sheet(s) for additional comments

Lynn Grossman
Digitally signed by Lynn Grossman
DN: C=US, E=lgrossman@cannondesign.com, O=Cannon Design, CN=Lynn Grossman
Date: 2017.01.11 12:25:37-06'00'
REVIEWED BY

01.11.17
DATE