OPERATOR INTERFACE

OPERATOR INTERFACE SOLUTIONS

Standard/Slim Pushbutton Boxes

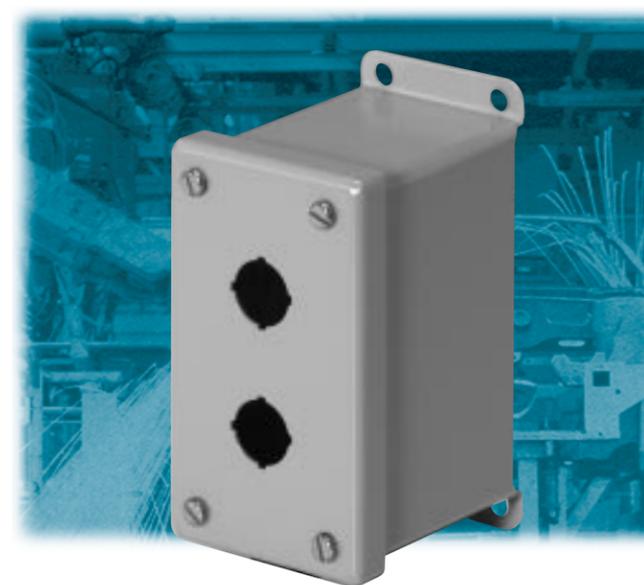## NEMA Rated Pushbutton Enclosures

These NEMA rated boxes are designed for indoor use to house pushbuttons, selector switches, pilot lights, etc., and to protect such equipment against dirt, dust, and spraying of water, oil or coolant.

Several models of these pushbutton enclosures can be mounted onto a Rittal Electromate column and base and used as an operator station.

Available In Stainless Steel

Pages NON 25-26

Configuration

- Continuously welded seams, finished smooth
- Poron strip gasket
- Standard pushbutton holes accept all brands of 30.5 mm "4-way" oil tight pushbuttons, switches, and pilot lights
- Captive plated screws to hold cover
- External mounting brackets

Technical Specifications

Material:
- *Enclosure/cover:* 14 gauge carbon steel

Finish/color:
- *Enclosure/cover:* polyester-urethane powder coat over phosphatized surfaces, inside and outside – ANSI 61 grey

Protection Ratings

NEMA Type ☐ ☐ ☐ ■ ■
 1 4 4X 12 13

Certifications/Approvals

Listings ■ ■ ☐ ☐
 UL CUL CSA TÜV

Technical Drawings

Pages . . . . .HMI 51-52

Standard Pushbutton Box				Accessories
Part No.	Outside dimensions (inches)			Oil tight hole seals
	H	W	D	
E 1PB	3.50	3.25	2.75	See accessories section
E 2PB	5.75	3.25	2.75	See accessories section
E 3PB	8.00	3.25	2.75	See accessories section
E 4PB	10.25	3.25	2.75	See accessories section
E 4SPB	7.25	6.25	3.00	See accessories section
E 5PB	12.50	3.25	2.75	See accessories section
E 6PBVL	14.75	3.25	2.75	See accessories section
E 6PB	9.50	6.25	3.00	See accessories section
E 8PB	20.25	3.25	2.75	See accessories section
E 9PB*	9.50	8.50	3.00	See accessories section

* Can be mounted to a Rittal Electromate column and base.

Slim Pushbutton Box				Accessories
Part No.	Outside dimensions (inches)			Oil tight hole seals
	H	W	D	
E 1PBSL	4.00	2.50	2.50	See accessories section
E 2PBSL	6.25	2.50	2.50	See accessories section
E 3PBSL	8.50	2.50	2.50	See accessories section
E 4PBSL	10.75	2.50	2.50	See accessories section
E 6PBSL*	16.25	2.50	2.50	See accessories section

* Add an additional 1" between pushbutton holes at center of enclosure.

Miniature Pushbutton Boxes

NEMA Rated Pushbutton Enclosures

These NEMA rated boxes are designed for indoor use to house pushbuttons, selector switches, pilot lights, etc., which mount in miniature "4-way" pushbutton holes, and to protect such equipment against dirt, dust, and spraying of water, oil or coolant.

Several models of these pushbutton enclosures can be mounted onto a Rittal Electromate column and base and used as an operator station.

Available In Stainless Steel

Page NON 27

Configuration

- Continuously welded seams, finished smooth
- Poron strip gasket
- Standard pushbutton holes accept all brands of 22.5 mm "4-way" oil tight pushbuttons, switches, and pilot lights
- Captive plated screws hold cover
- External mounting brackets

Technical Specifications

Material:
- *Enclosure/cover:* 14 gauge carbon steel

Finish/color:
- *Enclosure/cover:* polyester-urethane powder coat over phosphatized surfaces, inside and outside – ANSI 61 grey

Protection Ratings

NEMA Type ☐ ☐ ☐ ■ ■
 1 4 4X 12 13

Certifications/Approvals

Listings ■ ■ ☐ ☐
 UL CUL CSA TÜV

Technical Drawings

Page . . . . HMI 53

Pushbutton Box				Accessories
Part No.	Outside dimensions (inches)			Oil tight hole seals
	H	W	D	
E 1PBGM	3.25	2.75	3.50	See accessories section
E 2PBGM	5.13	2.75	3.50	See accessories section
E 3PBGM	7.00	2.75	3.50	See accessories section
E 4PBGM	8.88	2.75	3.50	See accessories section
E 6PBGM*	8.50	5.00	4.25	See accessories section

* Can be mounted to a Rittal Electromate column and base.

Extra Deep Pushbutton Boxes

NEMA Rated Pushbutton Enclosures

These NEMA rated boxes are designed for indoor use to house pushbuttons, selector switches, pilot lights, etc., and to protect such equipment against dirt, dust, and spraying of water, oil or coolant. Their extra depth accommodates stacked pushbutton units.

Several models of these pushbutton enclosures can be mounted onto a Rittal Electromate column and base and used as an operator station.

Available In Stainless Steel

Page NON 28

Configuration

- Continuously welded seams, finished smooth
- Poron strip gasket
- Standard pushbutton holes accept all brands of 30.5 mm "4-way" oil tight pushbuttons, switches, and pilot lights
- Captive plated screws hold cover
- External mounting brackets

Technical Specifications

Material:
- *Enclosure/cover:* 14 gauge carbon steel

Finish/color:
- *Enclosure/cover:* polyester-urethane powder coat over phosphatized surfaces, inside and outside – ANSI 61 grey

Protection Ratings

NEMA Type ☐ ☐ ☐ ■ ■
   1   4   4X   12   13

Certifications/Approvals

Listings ■ ■ ☐ ☐
   UL CUL CSA TÜV

Technical Drawings

Page . . . . .HMI 53

	Pushbutton Box			Accessories
Part No.	Outside dimensions (inches)			Oil tight hole seals
	H	W	D	
E 1PBXD	4.00	4.00	4.75	See accessories section
E 2PBXD	6.00	4.00	4.75	See accessories section
E 3PBXD	8.00	4.00	4.75	See accessories section
E 4PBXD	10.00	4.00	4.75	See accessories section
E 6PBXD*	9.50	6.25	4.75	See accessories section

* Can be mounted to Rittal Electromate column and base.

Sloping Front Pushbutton Boxes

NEMA Rated Pushbutton Enclosures

These NEMA rated boxes feature a slanted front and are designed for indoor use to house pushbuttons, selector switches, pilot lights, etc., and to protect such equipment against dirt, dust, and spraying of water, oil or coolant.

Several models of these pushbutton enclosures can be mounted onto a Rittal Electromate column and base and used as an operator station.

Configuration

- Continuously welded seams, finished smooth
- Poron strip gasket
- Standard pushbutton holes accept all brands of 30.5 mm "4-way" oil tight pushbuttons, switches, and pilot lights
- Captive plated screws hold cover
- External mounting brackets

Technical Specifications

Material:
- *Enclosure/cover:* 14 gauge carbon steel

Finish/color:
- *Enclosure/cover:* polyester-urethane powder coat over phosphatized surfaces, inside and outside – ANSI 61 grey

Protection Ratings

NEMA Type ☐ ☐ ☐ ■ ■
   1   4   4X   12   13

Certifications/Approvals

Listings ■ ■ ☐ ☐
   UL CUL CSA TÜV

Technical Drawings

Page . . . . .HMI 54

	Pushbutton Box			Accessories
Part No.	Outside dimensions (inches)			Oil tight hole seals
	H	W	D	
E 1PBA	3.50	3.25	4.88	See accessories section
E 2PBA	3.50	5.50	4.88	See accessories section
E 3PBA	3.50	7.75	4.88	See accessories section
E 4PBA	3.50	10.00	4.88	See accessories section
E 4SPBA	7.25	6.25	6.75	See accessories section
E 6PBA	7.25	8.50	6.75	See accessories section
E 9PBA	9.50	8.50	7.88	See accessories section

AP Desk Consoles

Desk Console System

Rittal's AP Series console system answers the need for variability, performance, safety, assembly, and aesthetics for operator interface applications. The AP design allows unlimited combinations of bottom, center, and top sections. Also available are complete, one-piece desk units. Their perfect design facilitates easy assembly and provides security and usability.

Universal Console System

The universal AP console is the newest addition to the AP family. It features a uni-body construction with an integrated 25 mm interior hole pattern for easy component installation. Available with or without an optional desk unit, it also features a full-sized mounting panel.

Configuration

- Doors front and rear on specific models
- Safety catches and cables secure open lid
- Mounting panel included
- Depth adjustable mounting panel for AP 2610600/2640600/2650600/2694600
- 2-part and 3-part cable entry panels
- Integrated mounting rails in center section
- Knife-edge design protects against liquid entry
- Maximum strength and stability through unibody construction
- E-coat primer and powder paint provide superior corrosion resistance
- Integrated grounding provisions
- Foamed-on gasket
- Modular bottom, center, and top sections allow a variety of combinations for specific applications
- Top sections are available in two heights and depths
- System installation holes (Univeral console) (25 mm spacing) PS
- Desk unit can be rotated 180° for either sloped or horizontal desk surface (Universal console)
- Full height mounting panel (Universal console)

Technical Specifications

Material:
- *Sheet steel housing:* 16 ga/1.5 mm
- *Doors and lids:* 14 ga/2 mm
- *Mounting panel:* 11 ga/3 mm, hot dipped galvanized zinc

Finish/color:
- *Housing, doors, and lids:* E-coat primed, powder painted, RAL 7032 pebble grey
- *Mounting panel:* Type M
- *Universal console trim:* RAL 5018 teal green

Protection Ratings

NEMA Type 1 4 4X 12 13

Certifications/Approvals

Listings UL CUL CSA TÜV

Technical Drawings

Pages . . . . .HMI 55-59

Enclosure / Mounting Panel

Part No.	Number Of Doors	H (in)	W (in)	D (in)	H (mm)	W (mm)	D (mm)	MP H (in)	MP W (in)	MP H (mm)	MP W (mm)
Bottom Section											
2600600[1]	1 f	26.38	31.50	15.75	670	800	400	23.62	28.15	600	715
2620600[2]	2 f	26.38	47.24	15.75	670	1200	400	23.62	43.90	600	1115
2610600[3]	1 f/1 r	26.38	31.50	19.69	670	800	500	20.94	27.64	532	702
2640600[4]	2 f/2 r	26.38	47.24	19.69	670	1200	500	20.94	43.39	532	1102
2650600[5]	2 f/2 r	26.38	62.99	19.69	670	1600	500	20.94	59.13	532	1502
Center Section											
2611200[1]	1	7.87	31.50	33.46	200	800	850	-	-	-	-
2641200[2]	1	7.87	47.24	33.46	200	1200	850	-	-	-	-
2613200[3]	1	7.87	31.50	37.40	200	800	950	-	-	-	-
2643200[4]	1	7.87	47.24	37.40	200	1200	950	-	-	-	-
2653200[5]	1	7.87	62.99	37.40	200	1600	950	-	-	-	-
Top Section											
2612600[1]	1 f	16.93	31.50	15.75	430	800	400	13.78	28.15	350	715
2642600[2]	1 f	16.93	47.24	15.75	430	1200	400	13.78	43.90	350	1115
2614600[3]	1 f/1 r	16.93	31.50	19.69	430	800	500	13.70	28.62	348	727
2644600[4]	1 f/1 r	16.93	47.24	19.69	430	1200	500	13.70	44.37	348	1127
2647600[3]	1 f/ 1 r	24.80	31.50	23.62	630	800	600	21.57	28.62	548	727
2648600[4]	1 f/1 r	24.80	47.24	23.62	630	1200	600	21.57	44.37	548	1127
2649600[5]	1 f/1 r	24.80	62.99	23.62	630	1600	600	21.57	60.12	548	1527
Desk Console System											
2666600	1 f	37.80	23.62	15.75/18.90	960	600	400/480	30.71	20.87	780	530
2668600	1 f	37.80	31.50	15.75/18.90	960	800	400/480	30.71	28.74	780	730
2670600	1 f	37.80	39.37	15.75/18.90	960	1000	400/480	30.71	36.61	780	930
2672600	1 f	37.80	47.24	15.75/18.90	960	1200	400/480	30.71	44.49	780	1130
Universal Console System											
2694600	2 f/1 r	51.18	23.62	16.42/19.76	1300	600	417/502	47.05	19.57	1195	497

Note: When specifying two or three-part consoles, please use the superscript number to match bottom, center and top sections.

Accessories

Part No.	Bases 4" high	Bases 8" high	Base castors	Console lid	Aluminum pencil ledge	Handles Ergoform-S	Handles Pushbutton	Inductive mouse (COM or PS/2)	Inductive mouse pad (COM)	Inductive mouse pad (PS/2)	Mouse pad support
Bottom Section											
2600600	2901200	2902200	4570000	2615200	-	-	2450000	2468000	-	-	-
2620600	2921200	2922200	4570000	2645200	-	-	2450000	2468000	-	-	-
2610600	2841200	2842200	4570000	2616200	-	-	2450000	2468000	-	-	-
2640600	2851200	2852200	4570000	2646200	-	-	2450000	2468000	-	-	-
2650600	2863200	2864200	4570000	2656200	-	-	2450000	2468000	-	-	-
Center Section											
2611200	-	-	-	2615200	2678000	-	-	6445000	6444000	6444500	2380000
2641200	-	-	-	2645200	2682000	-	-	6445000	6444000	6444500	2380000
2613200	-	-	-	2616200	2678000	-	-	6445000	6444000	6444500	2380000
2643200	-	-	-	2646200	2682000	-	-	6445000	6444000	6444500	2380000
2653200	-	-	-	2656200	-	-	-	6445000	6444000	6444500	2380000
Desk Console System											
2666600	2911200	2912200	4570000	-	2676000	2450000	2468000	6445000	6444000	6444500	2380000
2668600	2901200	2902200	4570000	-	2678000	2450000	2468000	6445000	6444000	6444500	2380000
2670600	2891200	2892200	4570000	-	2680000	2450000	2468000	6445000	6444000	6444500	2380000
2672600	2921200	2922200	4570000	-	2682000	2450000	2468000	6445000	6444000	6444500	2380000

Accessories

Part No.	Bases 4" high	Bases 8" high	Desk unit	Handles Ergoform-S	Handles Pushbutton insert	Inductive mouse (COM or PS/2)	Inductive mouse pad (COM)	Inductive mouse pad (PS/2)	Mouse pad support
Universal Console System									
2694600	2807200	2808200	2696200	2450000	2468000	6445000	6444000	6444500	2380000

Consoles, Pedestals and Bases

Carbon Steel Desk Units

These NEMA rated individual desk units are designed for indoor use to meet the requirements of most operator interface applications.

Control components such as meters, pushbuttons, pilot lights, and switches, can be mounted on the top-hinged control panel that slants 30° or 60°.

Pedestal and base assemblies allow the desk units to be floor mounted. Wiring connections can be made through the base, the vertical column or directly to the desk unit.

Available In Stainless Steel
Page NON 29

Configuration

Console:
- Continuously welded seams, finished smooth
- Poron strip gasket
- Control panel slants 30° or 60° and is attached with a continuous steel hinge at top and secured with captive screws

Pedestal/column:
- Removable, gasketed access plate in column body
- Urethane gasket

Base:
- Pre-punched holes to accept column
- Two formed channels welded to underside of base

Technical Specifications

Material:
- *Console/desk unit:* 14 gauge carbon steel
- *Pedestal/column:* 14 gauge carbon steel with 10 gauge steel mounting flange at each end
- *Base:* 12 gauge carbon steel

Finish/color:
- *All steel parts:* polyester-urethane powder coat over phosphatized surfaces, inside and outside – ANSI 61 grey

Protection Ratings

NEMA Type ☐ ☐ ☐ ■ ■
1 4 4X 12 13

Certifications/Approvals

Listings ■ ■ ☐ ☐
UL CUL CSA TÜV

Technical Drawings

Pages. . . . . HMI 60-61

Console			
Part No.	Outside dimensions (inches)		
	H	W	D
Consoles			
E 8C8	8.00	8.00	7.09
E 8C12	8.00	12.00	7.09
E 8C16	8.00	16.00	7.09
E 12C12	12.00	12.00	9.09
E 12C16	12.00	16.00	9.09
E 12C20	12.00	20.00	9.09
E 16C20	16.00	20.00	11.09
E 16C24	16.00	24.00	11.09
Pedestals			
E 44CCOL	4.00	4.00	-
E 66CCOL	6.00	6.00	-
Bases			
E 18SBASE	18.00	18.00	-
E 24SBASE	24.00	24.00	-

Series Operator Enclosures

Carbon Steel Freestanding Consoles

These NEMA rated freestanding steel operator consoles are designed for indoor use and meet the requirements of a variety of operator interface applications.

Control instruments such as pushbuttons, pilot lights, meters, switches, etc., can be mounted on the control panel that slants 16° (Series 9), 45° (Series 12) and 60° (Series 14). Optional console top and/or writing desk provide additional flexibility. Control equipment components can be mounted on removable sub-panels on the side and back walls inside the enclosure.

Configuration

- Continuously welded seams, finished smooth
- Urethane gasket
- Control panel slants (Series 9 slants 16°, Series 12 slants 45°, Series 14 slants 60°) and is attached with a continuous steel hinge at front and secured with captive screws
- Mechanical brace to hold control panel open to 90°
- 3-point latch with oil tight key locking handle
- Mounting panel provisions installed
- Print pocket included

Technical Specifications

Material:
- *Enclosure/door:* 14 gauge carbon steel

Finish/color:
- *Enclosure/door:* polyester-urethane powder coat over phosphatized surfaces, ANSI 61 grey outside and white inside
- *Optional mounting panels:* painted white

Protection Ratings

NEMA Type ☐ ☐ ☐ ■ ■
1 4 4X 12 13

Certifications/Approvals

Listings ■ ■ ☐ ☐
UL CUL CSA TÜV

Technical Drawings

Pages . . . . .HMI 62-64

Series 9 Console								
Part No.	Height	Width	Depth	Rear mounting panel	Rear mounting panel size		Side mounting panel	Side mounting panel size		Caster kit
E C924B	48.00	24.00	18.00	E 30P20	27.00	17.00	E 30P20	27.00	17.00	E C10C
E C936B	48.00	36.00	18.00	E 30P30	27.00	27.00	E 30P20	27.00	17.00	E C10C

Series 12 Console											
Body Catalog No.	Body Height	Top Height	Width	Rear mounting panel size		Top Catalog No.	Instrument panel		Access panel		Writing Desk Catalog No.	Caster Kit Catalog No.
E C12B	36.00	20.00	36.00	32.00	30.00	E C12T	19.19	35.19	20.19	32.19	E C12W	E C12C

Series 14 Console														
Body Part No.	Top Part No.	Body height	Top height	Width	Half Mounting Panel Part No.	Half mounting panel size		Full Mounting Panel Part No.	Full mounting panel size		Swingout Mounting Panel Part No.	Swingout mounting panel size		Writing Desk Part No.	Relay Rack Part No.	Caster Kit Part No.
						H	W		H	W		H	W			
E C14B	E C14T	50.00	16.00	24.00	E C14P2	22.00	17.00	E C14P3	42.50	17.00	E C14P1	22.00	18.13	E C14W	E C14R	E C12C
E C1436B	E C1436T	50.00	16.00	36.00	E C1436P2	22.00	29.00	E C1436P3	42.50	29.00	E C1436P1	22.00	30.13	E C1436W	E C14R	E C12C

PC Computer Enclosures

TS8 PC Enclosures

NEW! Check out the latest in enclosure technology with Rittal's latest TS-based PC enclosure. Based on the revolutionary TS8 16-fold frame, these PC enclosures feature two levels of installation in the vertical profile for increased space and internal mounting for component shelves and more.

Standard PC Freestanding Enclosures

PCs are important interfaces in today's computer-aided manufacturing environment. The Rittal PC computer enclosure houses monitor, CPU, keyboard, printer, and/or other components in one cabinet that is equally at home on the shop floor as in an office environment.

Standard PC ValuePack Enclosures

Designed to offer a pre-packaged PC solution, the Rittal PC ValuePack offers an enclosure that is based on standard components that can be ordered with just a single number.

PC Desktop/Pedestal Enclosures

The PC Desktop/Pedestal enclosure is a one piece unit designed to sit on a desk, table top or a pedestal.

Configuration

TS8 PC Enclosures
- All standard TS8 enclosure features
- Viewing door w/security glass
- Integrated pull-out keyboard w/mouse pad that can be pulled out left/right
- Vented monitor and component shelves prevent heat build-up

Standard PC Freestanding Enclosures
- Knife-edge design averts liquid away from gasket
- Easy access to interior components from all sides
- Integrated grounding provisions on all surfaces
- Time saving quick assembly method through the use of the .98"/25 mm hole pattern
- Foamed-on gasket
- Rear door
- Accepts up to 19" monitors (21" on select models)
- E-coat primer and powder paint provide superior corrosion resistance

PC ValuePack Enclosures
- Pre-installed climate control
- Pullout keyboard/integrated mouse pad
- Additional vented shelf
- Casters with brakes
- Powerstrip

Technical Specifications

TS8/Standard/ValuePack Enclosures
Material:
- *Body:* 16/1.5 mm sheet steel
- *Rear door:* 14 ga/2 mm sheet steel
- *Side walls:* 16 ga/1.5 mm sheet steel
- *Bottom front door:* 14 ga/2 mm sheet steel
- *Corner trim panels:* extruded aluminum
- *Monitor panel:* 3 mm security glass with 19" or 21" mask
- *Keyboard front panel:* plastic UL 94-VO

Finish/color:
- *Body:* E-coat primed, powder painted, RAL 7035 pebble grey
- *Corner trim panels:* powder painted, RAL 5018 teal green

PC Desktop/Pedestal Enclosures
Material:
- *Housing and rear door:* 16 ga/1.5 mm sheet steel
- *Viewing door:* aluminum with safety glass

Finish/color:
- *Body:* E-coat primed, powder painted, RAL 7035 pebble grey
- *Corner trim panels:* powder painted, RAL 5018 teal green

Protection Ratings

NEMA Type

1	4	4X	12	13
■	□	□	■	□

Certifications/Approvals

Listings

UL	CUL	CSA	TÜV
■	□	■	□

Technical Drawings

Pages . . . . .HMI 65-68

TS8 PC Enclosures

Part No.	Configuration	Keyboard storage	Availability	Exact outside dimensions inches H	W	D	mm H	W	D
8366000	Safety glass	Drawer	July 2001	63	24	25	1600	600	636
8366100	Safety glass	Fold-down	August 2001	63	24	25	1600	600	636
8368000	Safety glass	Drawer	September 2001	63	24	33	1600	600	836
8368100	Safety glass	Fold-down	September 2001	63	24	33	1600	600	836

Standard PC Freestanding Enclosures

Part No.	Configuration	Keyboard storage	Exact outside dimensions inches H	W	D	mm H	W	D
4603603	Solid front panel	Drawer	63	24	26	1600	600	650
4603604	Solid front panel	Console	63	24	26	1600	600	650
4603703	Safety glass	Drawer	63	24	26	1600	600	650
4603704	Safety glass	Console	63	24	26	1600	600	650
4603820	Solid front panel	Fold-down	63	24	26	1600	600	650
4603913	Safety glass	Drawer/Panel	63	24	26	1600	600	650
4603920	Safety glass	Fold-down	63	24	26	1600	600	650
4609703	Safety glass	Drawer	63	24	34	1660	600	850
4609920	Safety glass	Fold-down	63	24	34	1600	600	850
21" PC Enclosure								
4820210	Safety glass	Drawer	63	32	32	1600	800	800

PC ValuePack Enclosures

Part No.	Base PC enclosure	Climate Control method	Reference part number	Exact outside dimensions inches H	W	D	mm H	W	D
9968185	4603703	2400 BTU Air Conditioner	3262100	63	24	26	1600	600	650
9968186	4609703	2400 BTU Air Conditioner	3262100	63	24	34	1600	600	850
9968187	4603703	115 cfm Filter Fan w/Outlet	3325117/207	63	24	26	1600	600	650
9968188	4609703	115 cfm Filter Fan w/Outlet	3325117/207	63	24	34	1600	600	850

PC Desktop/Pedestal Enclosures

Part No.	Configuration	Keyboard storage	Exact outside dimensions inches H	W	D	mm H	W	D
4617703	Safety glass	Drawer	30	24	26	750	600	650
4617704	Safety glass	Console	30	24	26	750	600	650
4617913	Safety glass	Drawer/Panel	30	24	26	750	600	650
4617920	Safety glass	Fold-down	30	24	26	750	600	650

TS8 PC Enclosure Accessories

Part No.	TS/PC Base* *Available 11/2001	4" high base W	D	8" high base W	D	Tower PC Carriage Carriage	Installation kit	Extra shelf	Vented shelf* *Available 9/2001	Inductive mouse (COM or PS/2)	Inductive mouse pad (COM)	Inductive mouse pad (PS/2)
8366000	8800920	8601600	8601060	8602600	8602060	4641000	8612060	4642000	8800900	6444500	6444000	6445000
8366100	8800920	8601600	8601060	8602600	8602060	4641000	8612060	4642000	8800900	6444500	6444000	6445000
8368000	8800930	8601600	8601080	8602600	8602080	4641000	8612080	4642000	8800910	6444500	6444000	6445000
8368100	8800930	8601600	8601080	8602600	8602080	4641000	8612080	4642000	8800910	6444500	–	6445000

Standard PC Freestanding Enclosure Accessories

Part No.	Bases 4" high	Mobile	Reinforced castors	Mouse pad	Shelf	Tower PC Carriage Carriage	Installation Kit	Extra shelf	Inductive mouse (COM or PS/2)	Inductive mouse pad (COM)	Inductive mouse pad (PS/2)	Mouse pad support	Mouse holder
4603603	2813200	4640600	4634000	4614000	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4603604	2813200	4640600	4634000	-	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4603703	2813200	4640600	4634000	4614000	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4603704	2813200	4640600	4634000	-	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4603820	2813200	4640600	4634000	4613000	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4603913	2813200	4640600	4634000	4614000	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4603920	2813200	4640600	4634000	4613000	4629660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4609703	2846200	4640800	4634000	4614000	4619680	4641000	4377/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
4609920	2846200	4640800	4634000	4613000	4629680	4641000	4377/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
21" PC Enclosure													
4820210	2848200	2986200	4634000	included	–	4641000	7127035	4642000	6444500	6444000	6445000	2380000	2382000

PC ValuePack Enclosure Accessories

Part No.	Bases 4" high	Mobile	Reinforced castors	Mouse pad	Shelf	Tower PC Carriage Carriage	Installation Kit	Extra shelf	Inductive mouse (COM or PS/2)	Inductive mouse pad (COM)	Inductive mouse pad (PS/2)	Mouse pad support	Mouse holder
9968185	2813200	4640600	4634000	4614000	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
9968186	2846200	4640800	4634000	4614000	4619680	4641000	4377/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
9968187	2813200	4640600	4634000	4614000	4619660	4641000	4376/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000
9968186	2846200	4640800	4634000	4614000	4619680	4641000	4377/4183/4162/9962544	4642000	6444500	6444000	6445000	2380000	2382000

PC Desktop/Pedestal Enclosure Accessories

Part No.	Pedestals Without cable conduit	With cable conduit	Pedestal accessories Mounting bracket	Casters	Mouse pad	Shelf	Inductive mouse (COM or PS/2)	Inductive mouse pad (COM)	Inductive mouse pad (PS/2)	Mouse pad support	Mouse holder
4617703	6141000	6141100	6147000	6148000	4614000	4619660	6445000	6444000	6444500	2380000	2382000
4617704	6141000	6141100	6147000	6148000	-	4619660	6445000	6444000	6444500	2380000	2382000
4617913	6141000	6141100	6147000	6148000	4614000	4619660	6445000	6444000	6444500	2380000	2382000
4617920	6141000	6141100	6147000	6148000	4613000	4629660	6445000	6444000	6444500	2380000	2382000

VIP Flat Panel Enclosures

Flat Panel Enclosure System

Rittal's VIP 6000 operator interface system offers modular solutions for countless flat panel applications. The VIP is made-to-order in a variety of sizes and versions that can be adapted to your specific requirements.

Its contemporary design showcases control technology in an attractive package, as well as provides optimum ergonomics for the operator while keeping heat-sensitive electronic components cool.

The modular flat panel system is available with a keyboard housing or tray. The keyboard housing lets you integrate your own control panel and the keyboard tray accommodates most standard PC keyboards.

This efficient operator interface system also offers a wide variety of accessories including vertical and/or horizontal handle sets, clip boards, and may be combined with support arm systems CP-L, CP-XL, or CP-Vertical.

New Frame Bezel Designs

Two new frame bezel designs have been added to the current VIP wide frame bezel that will allow further customization of the VIP enclosures. The new narrow frame bezel enhances the aesthetics of the VIP and reduces the overall size of the VIP by almost 2". The new "combined" frame bezel has the same features of the narrow bezel plus integrated rubberized grips on the sides.

Configuration

- Three frame designs allow further customization
- Designed to be used with CP-L, CP-XL, or CP-Vertical pendant arm systems
- Mounting channels on all sides facilitate component installation
- The interior of the housing is accessible through either a hinged rear door or a screwed-on aluminum rear panel
- A mounting kit can be clipped-in to accommodate installation of a variety of control panel components and displays
- Colored plastic strips cover mounting screws and enhance the design of your product
- Cable duct for easy routing from enclosures to keyboard housing
- Enclosures can be ordered with, without, or a combination of cooling fins
- The enclosure front can be partitioned with optional cross mullion
- Optional accessories such as handles, clip-boards, and front panels are available

Technical Specifications

Material:
- *Housing and front frame:* extruded aluminum
- *Frame corner pieces:* zinc die-cast
- *Corner protection pieces for housing:* self-extinguishing plastic
- *Trim strips:* flexible plastic

Finish:
- *Housing frame:* natural anodized
- *Front frame and frame corner pieces:* textured enamel; RAL 7035 light grey
- *Trim strips:* RAL 5018 teal, RAL 5012 blue, RAL 4006 purple, RAL 7030 grey, RAL 3001 red, RAL 7024 graphite grey
- *Wide frame:* RAL 7035 light grey
- *Narrow frame:* RAL 7035 light grey
- *Combined frame:* RAL 7035 light grey with soft rubber coating (RAL 7024)

Protection Ratings

NEMA Type	■	□	□	■	□
	1	4	4X	12	13

Certifications/Approvals

Listings	■	■	□	□
	UL	CUL	CSA	TÜV

Technical Drawings

Pages . . . . .HMI 69-74

.009 Wide VIP 6000 Frame
Wide front frame of extruded aluminum sections and die-cast zinc corner pieces.

.209 Narrow VIP 6000 Frame
Narrow front frame of extruded aluminum sections and die-cast zinc corner pieces.

.109 Combined VIP 6000 Frame
Combination of narrow front frame top and bottom (made from extruded aluminum sections and die-cast zinc corner pieces), plus soft frame at the sides.

Determine The Panel Dimensions

It's so easy.

First determine the height and width of your planned operator panel and check the following installation criteria. If these criteria are met, you are ready to install directly in one of three VIP frames, customized to your dimensions. The dimensions of the selected operating housing (3.), the keyboard housing (4.) and the handle sets etc. are automatically tailored to match the frame. In exceptional cases to which other conditions apply, Rittal also has the answer.

1. 7 to 13 mm spacing of the fixing holes or bolts.
2. Front plate projection at sides with fixing holes at least 17 mm, and at sides without fixing holes at least 6 mm.
3. Front plate thickness variable, depending on the type of trim section.
4. **Installation depths:**

   Command panels = 155 mm, 185 mm, 295 mm, 328 mm, 438 mm.

   Command panels with **45 mm deep rear panel*** = 200 mm, 230 mm, 340 mm, 373 mm, 483 mm.

   Command panels **with 245 mm deep rear panel*** = 400 mm, 430 mm, 540 mm, 573 mm, 683 mm.

5. For versions with a hinged rear panel, the maximum installation depth is reduced by 27 mm in the vicinity of the lock.

* Other depths available on special request.
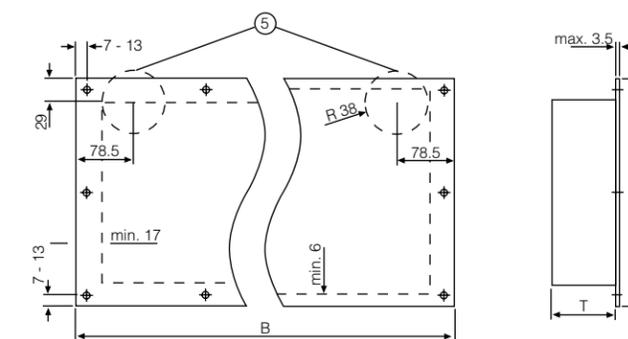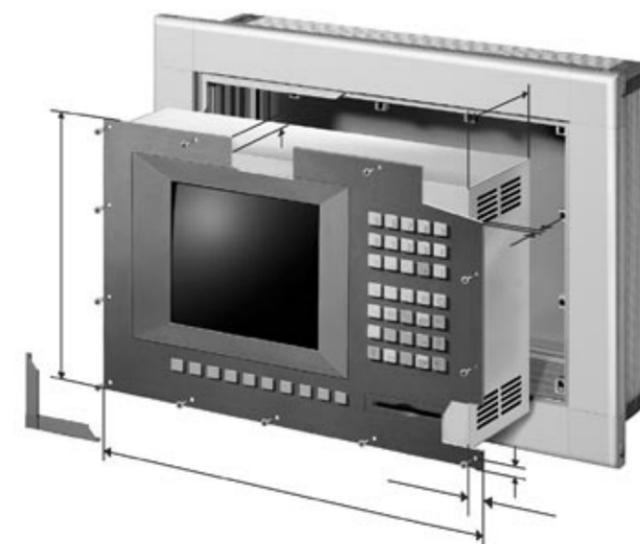
VIP 6000 Operator Enclosure Design

3.1 Operator Enclosure

Installation depth:

1 6.10"/155 mm
2 7.28"/185 mm – screw-on
3 7.28"/185 mm – hinged
4 11.61"/295 mm – screw-on
5 11.61"/295 mm – hinged
6 12.91"/328 mm – screw-on
7 12.91"/328 mm – hinged
8 17.24"/438 mm – screw-on
9 17.24"/438 mm – hinged
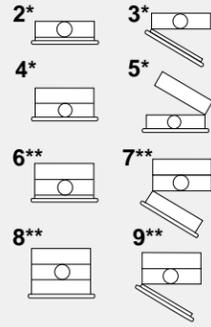
Example

The colored numbers identify the version we've selected for our example.

*Use CP-L support arm system
**Use CP-XL support arm system

View from the top. Other hinges available, if required.
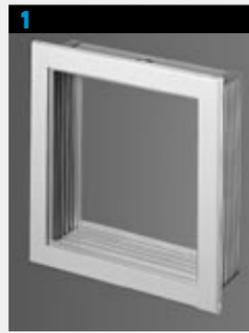
3.2 Cross Member/Sealing Bar

0 Without cross member or sealing bar
1 With one cross member
2 With one sealing bar
3 With two cross members
4 With two sealing bars
5 With one cross member and one sealing bar
6 With an adaptor plate*
7 With spacer and installation blanking plate above*[3)]
8 With spacer and installation blanking plate below*[3)]

*   Special request only—extended lead times.
[3)]   Only in connection with end trim

3.3 Cooling Fins

1 No fins
2 Fins on sides only
3 Fins all around
4 For aggressive cooling requirements.
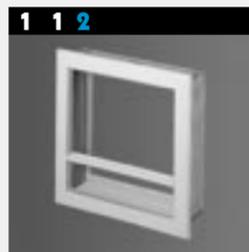
For units with installation depths of 7.28" and 12.91"/185 and 328 mm, the housing part that is attached to the front frame (approximately 35 mm) is available without fins only.

3.4 Types Of Trim Strips

1 Cover trim
2 End trim
3 Spacer trim
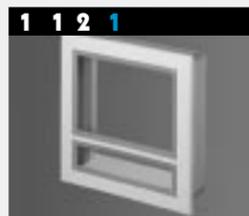
3.5 Trim Colors

1 Teal (similar to RAL 5018)
2 Light blue (similar to RAL 5012)
3 Bright red (similar to RAL 3001)
4 Purple (similar to RAL 4006)
5 Dark grey (similar to RAL 7030)
6 Graphite grey (similar to RAL 7024)

3.6 Support Arm Connection

0 Without connection
1 Connection at top
2 Connection at bottom
3 Connection at top and at bottom (includes one cover panel)

Two different support arm systems are available:

• CP 6500 is designed for enclosures with installation depths of 6.10", 7.28", and 11.61"/155, 185, and 295 mm.
• CP 6000 is designed for enclosures with installation depths 12.91" and 17.24"/328 and 438 mm.
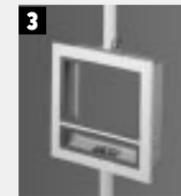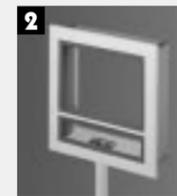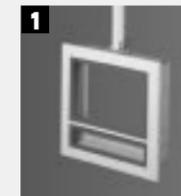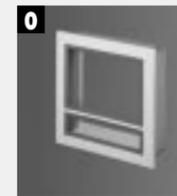
3.7 Cable Duct Connection
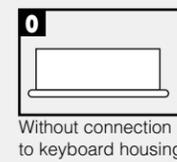
0 Without connection to keyboard housing
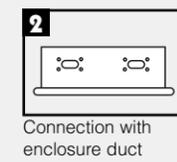
2 Connection with enclosure duct connector
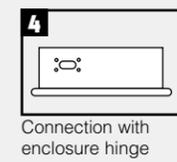
4 Connection with enclosure hinge connector
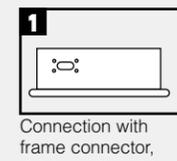
1 Connection with frame connector, rigid or adjustable
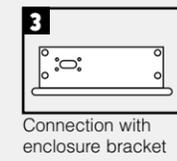
3 Connection with enclosure bracket connector

3.8 Rear Wall

1 Screw-on.**
2 Hinged, on longest side, lock with double bit insert.**
3 Expansion back plus 1.77"/45 mm* sheet steel, light grey (RAL 7035), hinged, integral screw lock.
4 Expansion back plus 9.64"/245 mm* aluminum, light grey (RAL 7035), screw-on.
5 Heavy-duty hinge for heavy installed equipment.**
6 Screw-fixed with built-in small VIP air conditioners. Recommended for Command Panel versions 3, 5, 7, 9. Condenser assembly, top left**
7 Screw-fixed with built-in small VIP air conditioners. Recommended for Command Panel versions 3, 5, 7, 9. Condenser assembly, top right**

*   Other depths and designs on request.
** Aluminium, natural anodized
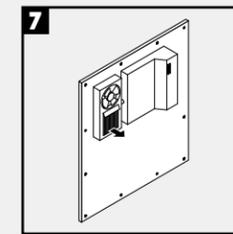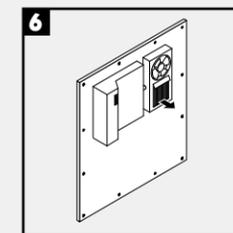
VIP 6000 Keyboard Housing Design

4.1 Keyboard Enclosure

1 Installation depth:
   4.13"/105 mm
2 Installation depth: 1.73"/44 mm
3 Keyboard lay-in tray, depth:
   1.06"/27 mm
4 Keyboard lay-in tray, depth
   1.06"/27 mm, with flexible
   cable tube connector

For standard keyboards. Without
trim. All keyboard housings are
custom made per your
component dimensions and
depending on your operator
enclosure specifications.
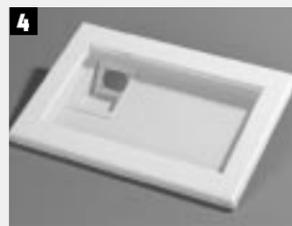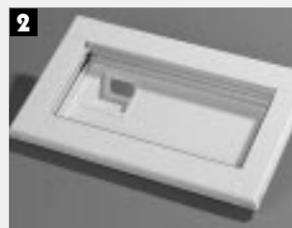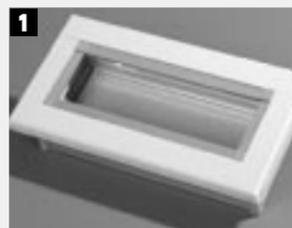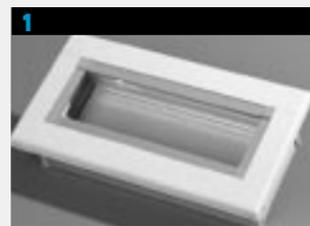
4.2 Types Of Trim Strips*

1 **Cover trim**
covers installation screws of front
panel – for front panels ≤ .
14"/3.5 mm thick.

2 **End trim**
covers gap between front panel
and frame profile – for all front
panel thicknesses.

3 **Spacer trim**
For components that must be
flush with frame profile.
For front panels with a thickness
of appr. 0.14"/3.5 mm.
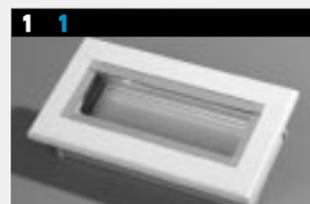
*No selection is available for
keyboard enclosure **3** and **4**.
Please indicate with an X in
this case.

4.3 Trim Colors*

1 Teal (similar to RAL 5018)
2 Light blue (similar to
   RAL 5012)
3 Red (similar to RAL 3001)
4 Purple (similar to RAL 4006)
5 Dark grey (similar to
   RAL 7030)
6 Graphite grey (similar to
   RAL 7024

Enclosure corner protection
pieces will also be supplied in
the specified color.

Other colors are available on
special request.

*No selection is available for key-
board enclosure **3** and **4**. Please
indicate with an X in this case.

Example

The colored numbers identify the
version we've selected for our
example.
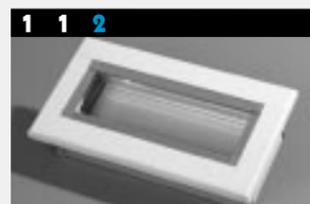
4.4 Frame Connector

1 Rigid, 120° angle
2 Adjustable from 75° to 210°,
   adjustable in 7.5° increments.
   Allows optimum ergonomic
   adjustment for each user.
3 Enclosure duct connector
4 Enclosure bracket connector
5 Frame hinge connector

Example

The colored numbers identify the
version we've selected for our
example.
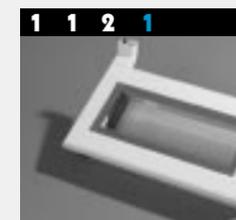
4.5 Cable Duct*

0 None
1 Rigid, light grey (RAL 7035)
   aluminum – for use with rigid
   frame coupling between
   operator enclosure and
   keyboard housing. Installation
   depth: 4.13"/105 mm
2 Flexible, light grey (RAL 7035)
   plastic – for use with rigid and
   flexible frame coupling
   between operator enclosure
   and keyboard housing.
   Installation depth:
   4.13" /105 mm, 1.73"/44 mm
   or 1.06"/27 mm
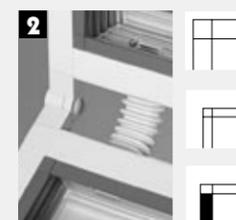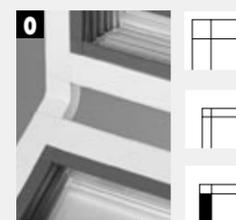
*No selection is available for
keyboard enclosure **3.** Please
indicate with an X in this case.

Part No.: 6392.009
Specification Numbers
For Operator Enclosure

1 1 2 1 2 2 1 2

Part No.: 6351.009
Specification Numbers
For Keyboard Housing

1 1 2 1 1

You can easily specify your complete VIP 6000
operator interface system just as we have
demonstrated in our example.

• Detailed dimensions for the components
  selected can be found on pages 69-74.

OPERATOR INTERFACE

VIP 6000 Ordering Guide...

It's Easy By Fax...

VIP 6000 Operator Housing

1. Select the frame
The frame type is determined from the Part No.

Wide frame   Narrow frame   Combination frame

0   **2**   **1**

Part No. CP

6 3 9 2 . ☐ 0 9

2. Enter the panel dimensions
Please state the number of front plates/panels used, their height (H) x width (W), and/or the manufacturer/model.

Top	Panel H x W	
	Supply panel ☐ Yes ☐ No Cutouts ☐ Yes ☐ No	
	Manufacturer/model	
Center	Panel H x W	
	Supply panel ☐ Yes ☐ No Cutouts ☐ Yes ☐ No	
	Manufacturer/model	
Bottom	Panel H x W	
	Supply panel ☐ Yes ☐ No Cutouts ☐ Yes ☐ No	
	Manufacturer/model	

4. Operator housing handles
Please select Part No. and location.

4.1 For operator housing CP 6392.009*
☐ Horizontal handle (one handle) Part No. 6101.009
   ☐ Top   ☐ Bottom   ☐ Both
☐ Vertical handle (1 set) Part No. 6102.009
   ☐ Default is left and right

4.2 For operator housing CP 6392.109/6392.209*
☐ Corner handle (1 set) Part No. 6107.000
   ☐ Top   ☐ Bottom   ☐ Both
☐ Straight 7U (12$^{1/4}$") handle (1 set) Part No. 6107.100
   ☐ Horizontal   ☐ Vertical   ☐ Both
☐ Straight 19" handle (1 set) Part No. 6107.200
   ☐ Horizontal   ☐ Vertical   ☐ Both

* Handle cannot be located on bottom of operator housing if keyboard is used.
Note: When using a VIP enclosure (Part No. CP 6392.009/6351.009) in conjunction with a CP-Vertical pendant arm system, you must order a CP 6392.009 horizontal handle. For VIP enclosures (Part No. CP 6392.109/.209 and CP 6531.109/.209) a specific CP-Vertical release handle must be ordered.

3. Determine the design of the operator housing
(see pages 69-70)
3.1 Installation depths

Installation depth 6.10"/155 mm	1
Installation depth 7.28"/185 mm	2
Installation depth 7.28"/185 mm, hinged	3
Installation depth 11.61"/295 mm	4
Installation depth 11.61"/295 mm, hinged	5
Installation depth 12.91"/328 mm	6
Installation depth 12.91"/328 mm hinged	7
Installation depth 17.24"/438 mm	8
Installation depth 17.24"/438 mm, hinged	9

3.2 Cross member/sealing bar

Without	0
1 cross mullion	1
1 sealing bar	2
2 cross mullions	3
2 sealing bars	4
1 cross mullion and 1 sealing bar	5
1 adaptor panel	6
1 spacer and 1 trim panel (top)	7
1 spacer and 1 trim panel (bottom)	8

3.3 Cooling fins

No fins	1
Fins at sides	2
Fins all round	3

3.4 Types of trim

Cover trim	1
End trim	2
Spacer trim	3

3.5 Trim colors

Turquoise (similar to RAL 5018)	1
Light blue (similar to RAL 5012)	2
Bright red (similar to RAL 3001)	3
Purple (similar to RAL 4006)	4
Stone (similar to RAL 7030)	5
Graphite grey (similar to RAL 7024)	6

3.6 Support arm connection

Without	0
Connection at top	1
Connection at bottom	2
Connection top and bottom (including a cover plate)	3

3.7 Connection to the keyboard housing

Without	0
For frame connectors	1
For enclosure duct connectors	2
For enclosure bracket connectors	3
For frame hinge connectors	4

3.8. Rear panel

Screw mount	1
Hinged	2
Hinged, with extra installation depth 1.77"/45 mm	3
Screw mount, with extra installation depth 9.65"/245 mm	4
With heavy-duty hinge	5
Small air conditioner (SK 3201.100) with condenser at the top left	6
Small air conditioner (SK 3202.100) with condenser at the top right	7

Please enter your design code numbers here
☐☐☐☐☐☐☐☐

VIP 6000 Keyboard Housing

1. Select the frame
The frame type is determined by the Part No.

Wide frame   Narrow frame   Combination frame

0   **2**   **1**

Part No. CP

6 3 5 1 . ☐ 0 9

2. Enter the panel dimensions
Please state the number of front plates/panels used, their height (H) x width (W), and/or the manufacturer/model.

Keyboard	Panel H x W	
	Supply panel ☐ Yes ☐ No Cutouts ☐ Yes ☐ No	
	Manufacturer/model	

4. Keyboard housing handles
Please select Part No. and location.

4.1 For keyboard housing CP 6351.009*
☐ Horizontal handle (one handle) Part No. 6101.009
   ☐ Bottom
☐ Vertical handle (1 set) Part No. 6102.009
   ☐ Default is left and right

**4.2 For keyboard housing CP 6351.109/6351.209***
☐ Corner handle (1 set) Part No. 6107.000
   ☐ Bottom
☐ Straight 7U (12$^{1/4}$") handle (1 set) Part No. 6107.100
   ☐ Horizontal
☐ Straight 19" handle (1 set) Part No. 6107.200
   ☐ Horizontal

* Handle cannot be located on bottom of operator housing if keyboard is used.
Note: When using a VIP enclosure (Part No. CP 6392.009/6351.009) in conjunction with a CP-Vertical pendant arm system, you must order a CP 6392.009 horizontal handle. For VIP enclosures (Part No. CP 6392.109/.209 and CP 6531.109/.209) a specific CP-Vertical release handle must be ordered.

3. Determine the design of the keyboard housing
(see pages 71-72)
3.1 Installation depths

Installation depth 4.14"/105 mm	1
Installation depth 1.73"/44 mm	2
Depth 1"/27 mm with cable grommet	3
Depth 1"/27 mm for flexible cable duct	4

3.2 Type of trim

Cover trim	1
End trim	2
Spacer trim	3

3.3 Trim colors

Turquoise (similar to RAL 5018)	1
Light blue (similar to RAL 5012)	2
Bright red (similar to RAL 3001)	3
Purple (similar to RAL 4006)	4
Stone (similar to RAL 7030)	5
Graphite grey (similar to RAL 7024)	6

3.4 Keyboard housing connector

Frame connector, rigid	1
Frame connector, adjustable	2
Housing duct connector	3
Enclosure bracket connector	4
Frame hinge connector	5

3.5 Cable ducts

Without	0
Rigid	1
Flexible	2

Please enter the Part No. of your keyboard housing here.
☐☐☐☐☐☐☐☐

☐ Modifications as per attached.

From:

Company _____

Address _____

City/State/ZIP _____

Telephone/Fax _____

Contact Person _____

Position/Department _____

Date/Signature _____

Optipanel HMI Enclosures

Smart HMI Solutions

Based on the design and construction of the popular Command Panel operator enclosure line, Rittal's new Optipanel is an ideal housing for applications where smaller enclosures need a special design. The Rittal Optipanel features an elegant, flat design for the utmost in HMI housings. The Optipanel operator housing can be customized exactly to the dimensions of your operator panel as well as other components.

Note: See panel installation criteria on page HMI 12.

Configuration

- Standard version in 3.9" installation depth for commonly used front panels (sized at 19" x 7U)
- Customized models also available for additional installation depths
- Configure to your specific application with housing, mullion, rear wall and keyboard housing
- Retaining clamps provide flexibility to install variety of standard operator interface display panels
- NEMA 12/IP 65 housing with a wide range of accessory options

Technical Specifications

Material:
- *Housing and front frame:* extruded aluminum
- *Frame corner pieces:* die-cast zinc
- *Corner protection pieces:* plastic, self extinguishing
- *Gasket trim strips:* extruded flexible plastic

Finish/color:
- *Housing frame:* natural anodized
- *Corner pieces:* powder coated RAL 7035 light grey, textured
- *Plastic parts:* RAL 7024 graphite grey

Protection Ratings

NEMA Type ▣ ☐ ▣ ☐
1   4   4X   12   13

Certifications/Approvals

Listings ▣* ▣* ☐ ☐
UL   CUL   CSA   TÜV

Technical Drawings

Pages . . . . .HMI 75-76

Enclosure							Mounting Area				
Part No.	NEMA rating	Exact outside dimensions						Usable mounting area			Usable depth	
		inches			mm			inches		mm		inches	mm
		H	W	D	H	W	D	H	W	H	W	D	D
6380000	1, 12	13.94	20.75	4.33	354	527	110	12.22	19.00	310.3	482.6	3.94	100

Accessories					
Part No.	Pendant arms and couplings	Aluminum front panel	Fixing hardware (panel)	Fixing hardware for O/I displays	Signal pillars
6380000	See accessories section	6028000	6050000	6058500	See accessories section

*Pending.

Optipanel Ordering Guide

Optipanel operator housing/keyboard housing CP 6382.009

The Optipanel configuration is built according to the following criteria:

1. Enter the panel/keyboard dimensions

Top	Panel H x W					
	Supply panel	☐ Yes	☐ No	Cutouts	☐ Yes	☐ No
	Manufacturer/ model					
Center	Panel H x W					
	Supply panel	☐ Yes	☐ No	Cutouts	☐ Yes	☐ No
	Manufacturer/ model					
Bottom	Panel H x W					
	Supply panel	☐ Yes	☐ No	Cutouts	☐ Yes	☐ No
	Manufacturer/ model					

Keyboard	Panel H x W					
	Supply panel	☐ Yes	☐ No	Cutouts	☐ Yes	☐ No
	Manufacturer/ model					

Simply copy, complete and fax to Rittal's Customer Service Team at (800) 477-4003.

From:

_____
Company

_____
Address

_____
City/State/ZIP

_____
Telephone/Fax

_____
E-mail

_____
Name

_____
Date/Signature

2. Optipanel design codes

After selecting a design number, use the "Design Code Number" box at bottom to configure your selection.

2.1 Installation depth of operator housing

Installation depth 2"/50 mm	1
Installation depth 4"/100 mm	2
Installation depth 6"/150 mm	3

2.2 Cross mullion

Without	0
With (one mullion per plate/panel seam)	1

2.3 Support arm connection

	For	
Without		0
Top connection	enclosure coupling	1
Bottom connection	CP 3525.100	2
Top & Bottom connection (cover plate included)	or CP 6525.600	3
Top connection	enclosure coupling	4
Bottom connection	CP 6525.000	5
Connection top & bottom (cover plate included)	or CP 6525.500 90* enclosure coupling CP 6526.000	6
Rear connection	enclosure coupling CP 6525.100 or CP 6525.600	7

2.4 Rear Wall

Screw-on	1
Hinged	2

2.5 Keyboard housing

Without	0
Center, installation depth 2"/50 mm	1
Center, installation depth 4"/100 mm	2

Please enter your Design Code Number:

3. Operator Housing Handles

3.1 For keyboard housings CP 6351.109/6351.209*

☐ Corner handle (1 set) Part No. 6107.000
   ☐ Bottom
☐ Straight 7U (12 1/4") handle (1 set) Part No. 6107.100
   ☐ Horizontal
☐ Straight 19" handle (1 set) Part No. 6107.200
   ☐ Horizontal

* Handle cannot be located on bottom of operator housing if keyboard is used.

Optipanel Enclosure Design

1.1 For Operator Housing CP 6382.009

Indicate the height (H), width (W) and depth (D) or the manufacturer/ type of the HMI device used. Please check for the installation criteria on the first page for further information.
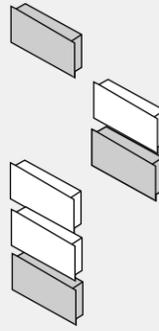
1.2 For Keyboard Housing

Indicate the height (H), width (W) and depth (D) of keyboard/panels or the manufacturer/ type of the keyboard used. Check the installation criteria on the first page for further information.
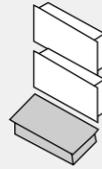
For Technical Questions/Order Placement:

Please copy the form on page HMI 20 and enter your **panel dimensions** and the **code** for your special configuration.

Configuration Example

The following is an example of an Optipanel configuration with the respective **code number** highlighted.

2.1 Operator housing

Installation depth 2"/50 mm

Installation depth 4"/100 mm

Installation depth 6"/150 mm

Configuration example: The following is an example of an Optipanel configuration with the respective code number highlighted.
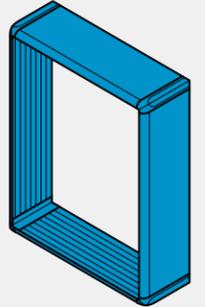
2.2 Front design

Without mullion

With mullion*

With sealing bar*

With spacer and installation panel on top**

With spacer and installation panel at the bottom**

* Indicate the number of individual sections. Example: 3 front panels in the operator housing = 2 panel joining points = 2 mullions/sealing bars in the configuration. Other configurations on request.

**Special request only. Extended lead times.
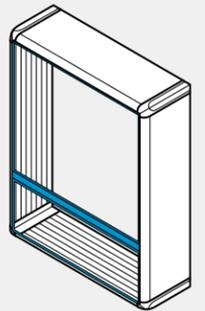
2.3. Support arm and floor stand connection

*Includes a cover plate to close unused cutouts.

Without connection

Top connection

Bottom connection

Connection top and bottom*

Top connection

Bottom connection

Connection top and bottom*

Rear connection, at the bottom**

Rear connection, on top**

for CP 6525.1X0, CP 6525.6X0

CP-L□
for enclosure coupling CP 6525.1X0, enclosure mount CP 6525.6X0
Valid only for installation depth (D) of 4 and 6"/100 and 150 mm

CP-L○
for enclosure coupling CP 6525.0X0, enclosure mount CP 6525.5X0, angle coupling CP 6525.0X0
Valid only for installation depth (D) of 6"/150 mm

**Coupling is supplied in RAL 7030.
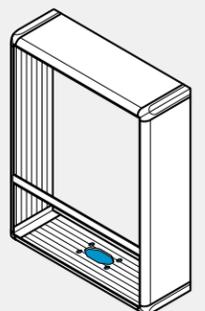
2.4. Rear wall

Aluminum, 0.12"/3 mm, natural anodized.

Note:

1) For support arm connection on rear side it is only possible to hinge on the opposite side of the support arm connection.
2) Cannot be used with installation depth of 2"/50 mm with keyboard housing.
3) Standard double bit lock insert is exchangeable for lock inserts 41 mm, version C, plastic thumbturn handle and T-handles, version C.
4) In the rear wall hinged model, the maximum installation depth is reduced by 1"/25 mm around lock.

Rear wall screwed-on

Rear wall is hinged on the longest side. Viewed from the rear, right or bottom hinged [1] [2] [3] [4].

2 1 2 1

Configuration example:
The following is an example of an Optipanel configuration with the respective code number highlighted.
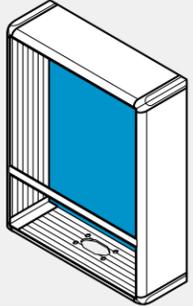
2.5. Keyboard housing

Width is independent from operator housing. The swivel angle is continuously adjustable from 80° to 155°.

Without keyboard housing
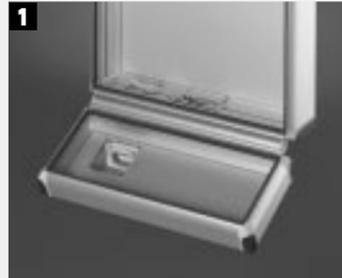
With keyboard housing of installation depth 2"/50 mm.

With keyboard housing of installation depth 4"/100 mm.

2 1 2 1 1
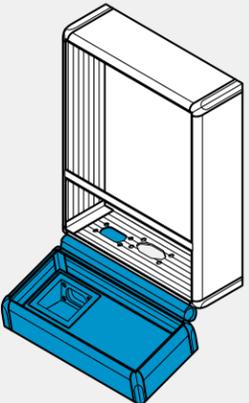
Additional parts needed:

Installation kit for mounting front plates, operator panels and keyboards into the operator or keyboard housings.

Optipanel configuration example:

The drawings on the right margin highlight the build-up of the Optipanel as various options are added. The photo, to the right, shows the final configuration along with the configuration code below. The configuration of the code number is shown in the following table.

2.1	**2**	Operator housing, installation depth of 4"/100 mm
2.2	**1**	With mullion
2.3	**2**	Support arm on the bottom
2.4	**1**	Screwed-on rear wall
2.5	**1**	With keyboard housing, installation depth of 2"/50 mm

You can easily define the dimensions and configuration of an operator housing in just a few steps.

Please provide the following pieces of information for RFQ or order:

1. Part No.: CP 6382.009
2. Dimensions and number of panels/front plates in the operator or keyboard housing, along with drawings for holes/cutouts.
3. Configuration code number

Operator/keyboard housing
Part No.: CP 6382.009
Configuration code number: **2 1 2 1 1**

CP Pendant Arm Enclosures

Operator Interface Enclosures

Rittal's CP Series was developed to meet the requirements of today's sophisticated control technology including:

- Dense packaging of sensitive components
- Direct accessibility, anywhere on the plant floor
- A high degree of flexibility and ergonomic adaptation to the work place.

Numerous models of operator interface enclosures and two pendant systems combine with an extensive range of support arms, journals, hinges, and connection components to cover virtually any operator interface situation.

The high degree of flexibility and ergonomic design provide unlimited variety for today's diverse work environment.

Configuration

- NEMA 1, 12/IP 54 or 55
- Various configurations for specific applications
- Enclosures can be used with CP-L support arm system (CP-XL can be used w/adaptor CP 6528000)
- Integrated handle grip and front panel
- Designed for small to medium sized HMI applications
- Enclosures include integrated roof reinforcement
- Aluminum front panel can be removed for easy installation of holes and cutouts

Technical Specifications

Material:
- *Enclosure, door:* 16 ga/1.5 mm sheet steel
- *Front panel:* 14 ga/2 mm aluminum
- *Handle grips:* aluminum

Finish:
- *Enclosure, door:* E-coat primed, painted, RAL 7035 light grey
- *Handle:* painted, RAL 7030 stone grey or 5018 teal

Protection Ratings

NEMA Type	■	□	□	■	□
	1	4	4X	12	13

Certifications/Approvals

Listings	■	□	■	□
	UL	CUL	CSA	TÜV

Technical Drawings

Page . . . . .HMI 79

Enclosure										Mounting Area								
Part No.	NEMA	Exact outside dimensions						Usable mounting area						Usable depth		
	rating	inches			mm			inches		mm			inches	mm	
		H	W	D	H	W	D	H	W	H	W	D	D	
Control Panel Enclosures/CP 6500 (CP-L) Series															
6540200	1, 12	7.9	11.8	6.1	200	300	155	5.91	9.84	150	250	5.91	150	
6534000	1, 12	7.9	11.8	7.1	200	300	180	6.11	8.94	155	227	6.62	168	
6535000	1, 12	11.8	11.8	7.1	300	300	180	10.05	8.94	255	227	6.62	168	
6536000	1, 12	11.8	15.7	7.1	300	400	180	10.05	12.88	255	327	6.62	168	
6537000	1, 12	15.7	11.8	7.1	400	300	180	13.99	8.94	355	227	6.62	168	
6538000	1, 12	15.7	15.7	7.1	400	400	180	13.99	12.88	355	327	6.62	168	
6531200	1, 12	11.81	14.96	9.21	300	380	234	9.84	12.99	250	330	8.07	205	
6530200	1, 12	14.96	14.96	9.21	380	380	234	12.99	12.99	330	330	8.07	205	
6533200	1, 12	14.96	23.62	9.21	380	600	234	12.99	21.65	330	550	8.07	205	
6532200	1, 12	19.69	19.69	9.21	500	500	234	17.72	17.72	450	450	8.07	205	

Accessories			
Part No.	Pendant arms and couplings	Signal pillars	Interface box
Control Panel Enclosures/CP 6500 (CP-L) Series			
6540200	See accessories section	See accessories section	-
6534000	See accessories section	See accessories section	-
6535000	See accessories section	See accessories section	2482000
6536000	See accessories section	See accessories section	2482000
6537000	See accessories section	See accessories section	2482000
6538000	See accessories section	See accessories section	2482000
6531000	See accessories section	See accessories section	2482000
6530000	See accessories section	See accessories section	2482000
6533000	See accessories section	See accessories section	2482000
6532000	See accessories section	See accessories section	2482000

OPERATOR INTERFACE

CP Pendant Arm Systems

Operator Interface And Support Arm Systems

Rittal's CP 6000 (CP-XL) Series pendant arm systems were developed to offer a high degree of flexibility and ergonomic adaptation to the work environment required by today's sophisticated control technology. A wide variety of enclosures, support arm systems, and accessories combine to satisfy virtually any operator interface need.

Configuration

- Self-tapping screws for easy and secure installation of the pendant arm system
- Support arm cover clips on to support arm for easy access to wiring
- Cable routing before/after installation is easy because one side of the support arm is open
- The enclosed portion of the support arm provides additional shielding
- Torsion resistant extruded aluminum support arms have high load bearing capacity and attractive styling
- Extruded aluminum support arms can be easily cut to a required length
- Enclosures can swivel 350° with couplings
- 90° elbow coupling secures connection between support arm sections and also allows easy cable routing
- Enclosure coupling can be used for top or bottom installation
- Couplings come with either plastic covers or rubber boots which can be removed for easy access to wiring
- Any CP or VIP enclosure can be used

Technical Specifications

Finish/color:
- *Arm:* RAL 7035 light grey
- *Couplings:* RAL 7030 stone grey

Protection Ratings

NEMA Type

1	4	4X	12	13
■	□	□	■	□

Certifications/Approvals

Listings

UL	CUL	CSA	TÜV
□	□	□	□

Unlimited Variety-CP 6000 (CP-XL)

Rittal's flexible CP 6000 pendant arm system offers many advantages over conventional support arm systems. With its extensive range of support arms, journals, and couplings, it offers a sophisticated solution for virtually every application.

Today's operator interface control systems guarantee optimal information exchange and user-friendliness, but at the same time, place increasing demands on the interface between the operator and machine.

Static load in N/lbf vs *Arm length in mm/inches*

A + B

C

1600/360
1300/292
800/180
650/146
550/124
400/90
0

0   1000/39   2000/79   3000/118
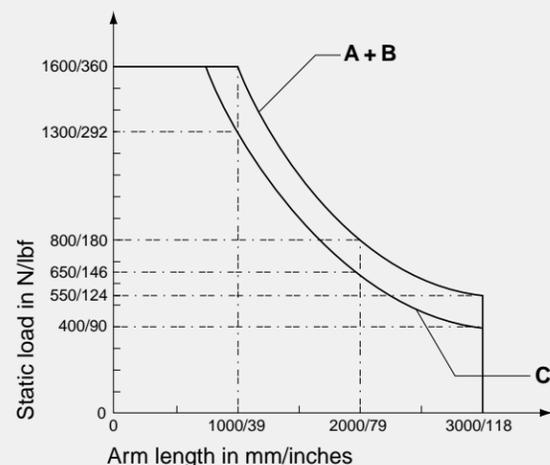
A: Open and solid support section

CP 6110000
CP 6160000
CP 6170000

Static Load

CP 6180000
CP 6140000

Static Load

B: Solid support section

CP 6110000
CP 6160000
CP 6170000

CP 6120000*

Static Load

CP 6180000
CP 6140000

Static Load
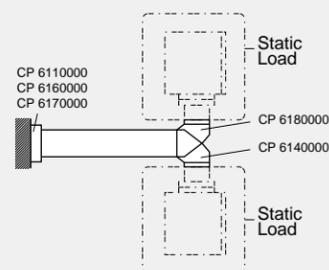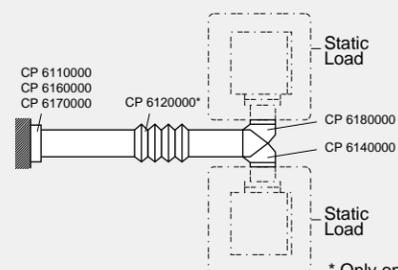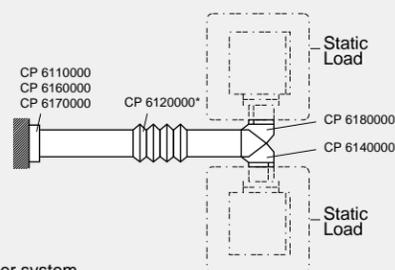
* Only once per system where possible!

C: Open support section

CP 6110000
CP 6160000
CP 6170000

CP 6120000*

Static Load

CP 6180000
CP 6140000

Static Load

These Are A Few Examples From A Wide Range Of CP 6000 (CP-XL) Possibilities
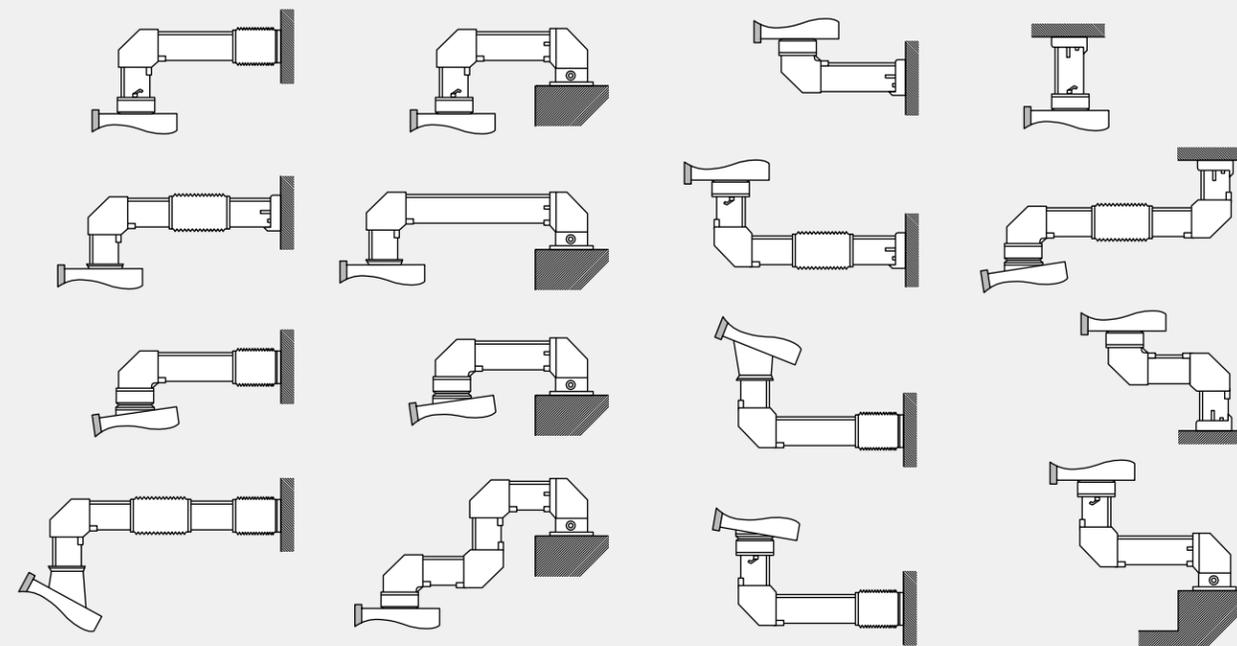
CP Pendant Arm Systems

Operator Interface And Support Arm Systems

Rittal's CP-L and CP-S Series pendant arm systems were developed to offer a high degree of flexibility and ergonomic adaptation to the work environment required by today's sophisticated control technology. A wide variety of enclosures, support arm systems, and accessories combine to satisfy virtually any operator interface need.

Configuration

- Self-tapping screws for easy and secure installation of the pendant arm system
- Torsion resistant extruded aluminum support arms have high load bearing capacity and attractive styling
- Extruded aluminum support arms can be easily cut to a required length
- Enclosures can swivel 350° with couplings
- 90° elbow coupling secures connection between support arm sections and also allows easy cable routing
- Enclosure coupling can be used for top bottom installation
- Couplings come with plastic covers which can be removed for easy access to wiring
- Any CP, VIP or Optipanel enclosure can be used

Technical Specifications

Finish/color:
- *Arm:* RAL 7035 light grey
- *Couplings:* RAL 7030 stone grey

Protection Ratings

NEMA Type	1	4	4X	12	13
	■	□	□	■	□

Certifications/Approvals

Listings	UL	CUL	CSA	TÜV
	□	□	□	□

CP-S Support Arm System   NEW!
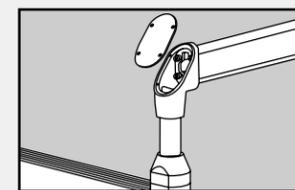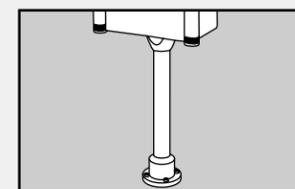
System Benefits
- Compact support arm system for small operator enclosures.
- Easy and fast mounting through set screws on the support arm components.
- The horizontal connection to the larger CP-L support arm system allows longer extension support arms.
- 2 color combinations enable an individual design adjustment to complement the Optipanel (RAL 9006 and RAL 7024) or for CP enclosures in sheet steel, painted (RAL 7035 and RAL 7030) or combined (RAL 7035/RAL 7024).

Mounting Examples

CP-S Support Arm System
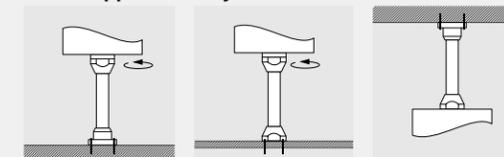
CP-S Support Arm System in combination with CP-L

CP-L
CP-S

CP-L
CP-S
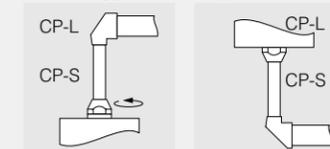
- The movable components have a maintenance-free sliding bearing and the angle rotation can be limited.

Angle adaptor 90°, the connection to the support arm system CP-L

For connection to:
- Intermediate hinge
- Wall-mounted hinge
- Top-mounted hinge
- Wall/base mounting

The permitted load for vertical construction is 800 N (179.8 lbf), 80kg (176.4 lbs) total weight. The permitted load corresponds to the CP-L load diagram.

Extensive Versatility-CP 6500 (CP-L)

The support arm system CP-L is designed for small and medium-sized command panels. It offers a whole range of connection and hinged parts, and hence a large number of possible applications.

This ensures optimum operation at the interface between man and machine. In other words, the CP-L support arm system provides perfect back-up for optimum information exchange and user friendly handling of graphical interactive control systems.

Permissable load depending on system configuration
Only one CP 6523 swivel hinge per system

Permissable static load in N/lbf (Enclosure + vertical support arm section) [N/lbf]

800/179
700/157
600/134
500/112
400/89
300/67
200/44
100/22
0

0   200/7.87   400/15.75   600/23.62   800/31.50   1000/39.37   1200/47.24   1400/55.12   1600/63.00   1800/70.87   2000/78.74

Arm length mm/inches

A
B
C
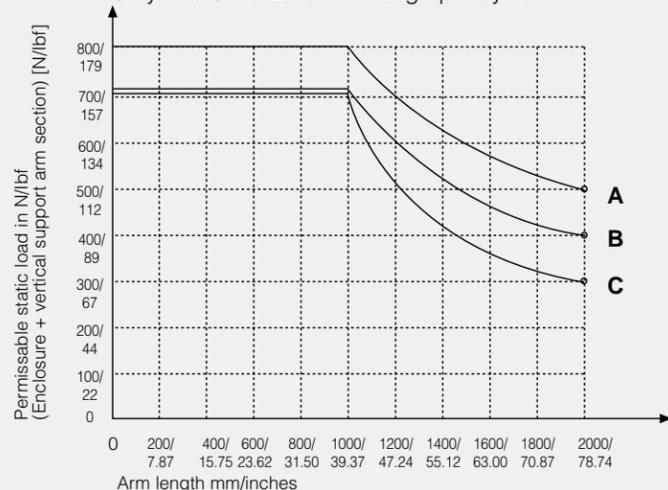
A. System Configuration (without hinge)

CP 6520
CP 6527
CP 6524
CP 6525
CP 6527
CP 6526
CP 6525
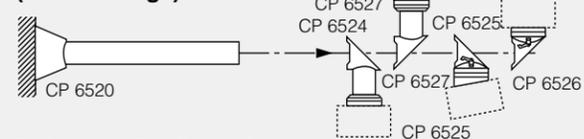
B. System Configuration (with one hinge)

CP 6523
CP 6520
CP 6527
CP 6524
CP 6525
CP 6527
CP 6526
CP 6522
CP 6525
CP 6521
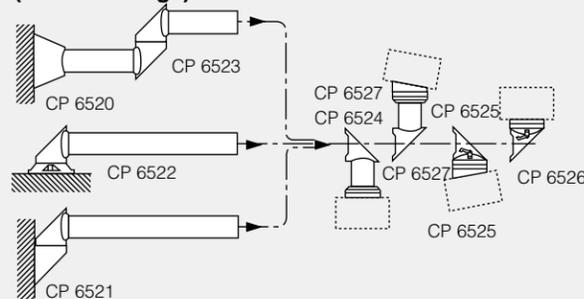
C. System Configuration (with two hinges)

CP 6522
CP 6523
CP 6527
CP 6524
CP 6525
CP 6527
CP 6526
CP 6523
CP 6521
CP 6525
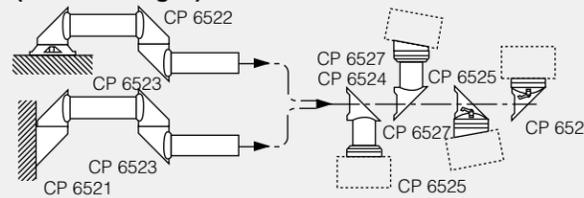
These Are A Few Examples From A Wide Range Of CP 6500 (CP-L) Possibilities
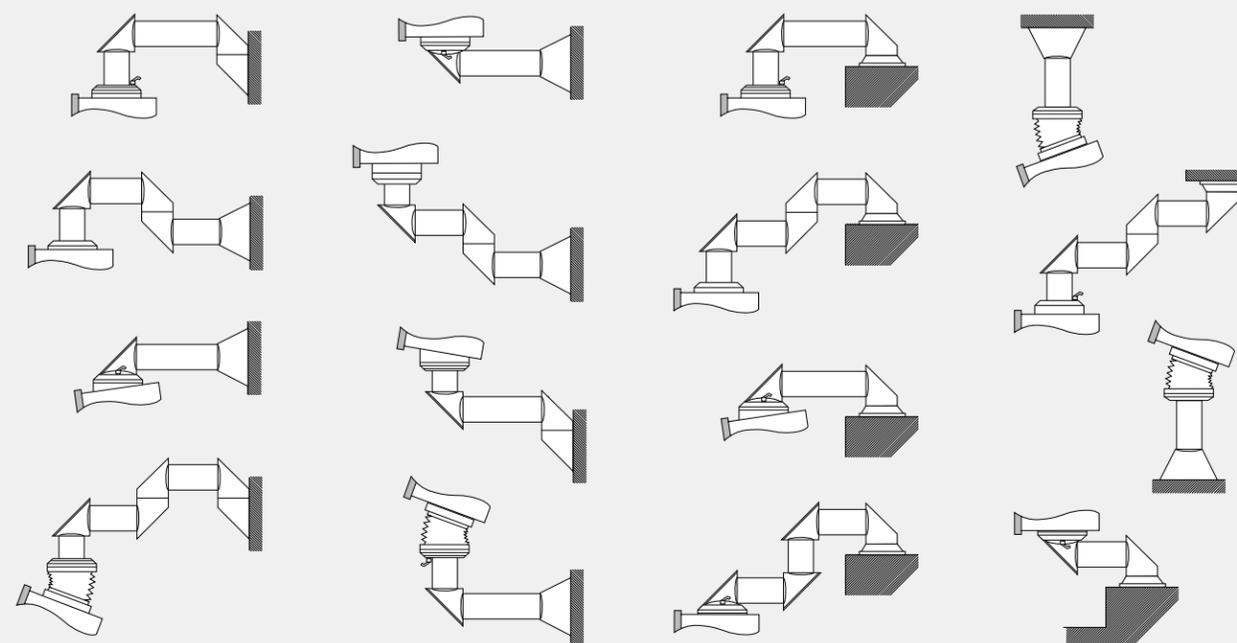
CP-Vertical Pendant Arm Systems
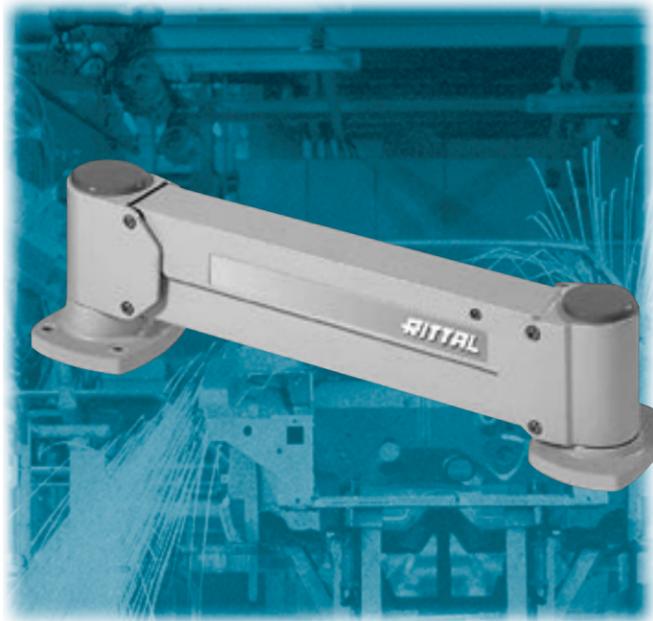
Smart HMI Solutions

Rittal's new operator-driven CP-Vertical pendant arm systems allow any operator to comfortably use a plant floor operator interface device, regardless of the operator's height. To adjust height, the operator merely activates a release mechanism and the interface can be effortlessly repositioned at a new height or moved out of the way. The pendant arm uses a gas spring counterbalancing system that can be easily user calibrated to each system's load that assists in moving and locking the interface device in the desired vertical position.

What's more is, this pendant arm system can be easily incorporated with the new Optipanel enclosures that are specifically designed for flat panel displays. The CP-V System is also ideal for all of Rittal's Command Panel (CP) enclosures.

Configuration

- **Sizes**
  CP-V   5" H x 3" W x 26" L
  CP-VL   5" H x 3" W x 31" L
  CP-VXL 5" H x 3" W x 39" L
- **Vertical travel**
  CP-V   13"
  CP-VL   23"
  CP-VXL 30"
- Adjusts to viewing height of each operator with simple motion
- Counterbalance can be adjusted by user for loads up to 100 lbs (depending on arm)
- 13", 23", or 30" of vertical adjustment
- Locks and unlocks with a convenient release mechanism
- Swivels at both ends
- Optional extensions and floor posts
- NEMA Type 4, 12 sealed cable passageway protects wiring
- Wallmount, machine top, post top or universal mounting options
- Universal mount incorporates the ability to post, wall, or machine mount CP-Vertical arm
- All arms can be easily reconfigured for inverted applications

Note: A release handle mechanism must be ordered for each arm

Technical Specifications

Material:
- Aluminum

- **Finish/color:**
  powder painted RAL 7035 light grey

Protection Ratings

NEMA Type	□	■	□	■	□
	1	4	4X	12	13

Certifications/Approvals

Listings	□	□	□	□
	UL	CUL	CSA	TÜV

Technical Drawings

Pages . . . . .HMI 77-78

Pendant Arm System

Part No.	Description	Max. load	Vertical travel T
9967987	Post top/CP-V	100 lbs.	13"
9967988	Post top/CP-VL	75 lbs.	23"
9967989	Post top/CP-VXL	50 lbs.	30"
9967993	Wallmount/CP-V	100 lbs.	13"
9967994	Wallmount/CP-VL	75 lbs.	23"
9967995	Wallmount/CP-VXL	50 lbs.	30"
9967996	Machine top/CP-V	100 lbs.	13"
9967997	Machine top/CP-VL	75 lbs.	23"
9967998	Machine top/CP-VXL	50 lbs.	30"
9967999	Universal mount/CP-V	100 lbs.	13"
9968000	Universal mount/CP-VL	75 lbs.	23"
9968001	Universal mount/CP-VXL	50 lbs.	30"

Accessories

Part No.	Description
9968002	6" Horizontal extension
9968003	12" Horizontal extension
9968004	18" Horizontal extension
9968005	24" Horizontal extension
9968006	18" Jointed extension arm
9968007	24" Jointed extension arm
9968008	4" Vertical extension piece
9968009	8" Vertical extension piece
9968010	12" Vertical extension piece
9968011	36" Floor post
9968012	74" Floor post
9968013	79" Floor post
9968014	Release handle W < 15[1][2]
9968015	Release handle W > 15[1][2]
9968016	Release handle for VIP wide bezel[1][2]

1 Must choose one release handle per arm.

2 W = overall enclosure width.

Each CP-Vertical Pendant Arm System Will Include The Following:

- CP-Vertical pendant arm that can be counterbalanced by the user based on load rating
- Mounting method (Post, Wallmount, Machine, Universal) will be attached to pendant arm
- A 4' release cable will be included
- Conversion wrench and instructions
- Hardware to attach enclosure to CP-Vertical arm

Note: Hardware to attach the CP-Vertical pendant arm to mounting surface is not provided.

Below Is A Step-By-Step Guide To Selecting A CP-Vertical Pendant Arm System:

1) Determine Maximum Load:*

Maximum load =   Weight of enclosure (lbs)

+ total weight of all components mounted ON or INSIDE of enclosure

Maximum load (lbs) = _____

* Load = Weight of enclosure + total weight of all components mounted inside enclosure

2) Determine Proper CP-Vertical Pendent Arm Based On Load:

Select a vertical travel based on your maximum load calculation from above.

Maximum Load Range (+0%)	CP-V 13" Vertical Travel	CP-VL 23" Vertical Travel	CP-VXL 30" Vertical Travel
0 to 50 lbs	Yes	Yes	Yes
51 to 75 lbs	Yes	Yes	No
76 to 100 lbs	Yes	No	No

3) Determine Mounting Method:

Based on the CP-Vertical Pendant Arm you selected (i.e. CP-V, CP-VL, CP-VXL) in step #2, select a mounting method that best fits your application.

Mounting method	CP-V 13" Vertical Travel	CP-VL 23" Vertical Travel	CP-VXL 30" Vertical Travel
	Part No.	Part No.	Part No.
Post top	**9967987**	**9967988**	**9967989**
Wallmount	**9967993**	**9967994**	**9967995**
Machine top	**9967996**	**9967997**	**9967998**
Universal*	**9967999**	**9968000**	**9968001**

CP 6000 (CP-XL) Accessories
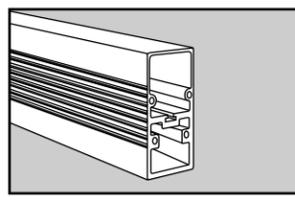
CP 6000 Support Arm

The basic component of a CP 6000 pendant arm system. Connection components are attached with self-tapping screws and make combinations of any desired length possible.

Configuration: bend- and torsion-resistant extruded aluminum complete with clip-on cover. Available in three different lengths.

Color: RAL 7035 light grey

Weight: support arm: 6.0 lbs/ft/9.05 kg/m

Cover: .3 lbs/ft/.45 kg/m.

CP 6000 Support Arm		
Length (inches/mm)	Packs of	Part No.
19.7/500	1	6050000
39.4/1000	1	6100000
78.7/2000	1	6200000
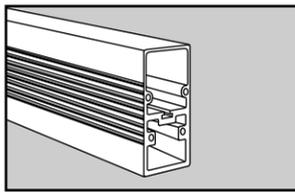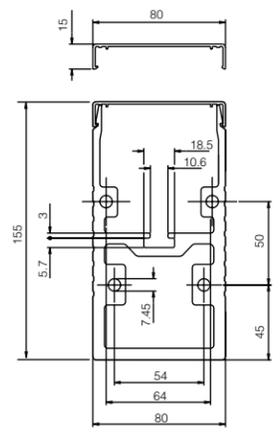
CP 6000 Support Arm, Solid

The solution for higher weight loads. Approximately 20% more loading capacity than the clip-on cover support arm version.

Color: RAL 7035 light grey

Weight: 23 lbs/10.3 kg

Solid CP 6000 Support Arm		
Length (inches/mm)	Packs of	Part No.
19.7/500	1	6050500
39.4/1000	1	6100500
70.7/2000	1	6200500
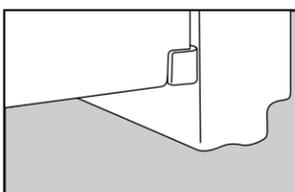
Adjustment Shim

Allows subsequent adjustment of CP support arms.

Material: sheet steel, zinc coated, yellow chromate.

Adjustment Shim		
	Packs of	Part No.
Adjustment shim	10	6205000
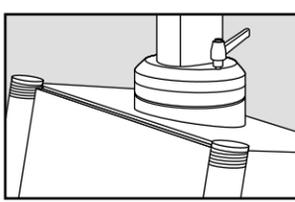
10° Tilting Adaptor

Tilts enclosure for increased user-friendliness; installed between housing and enclosure or 90° arm coupling.

Material: zinc diecast; comes with gaskets and installation hardware.
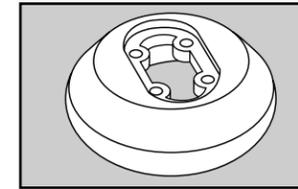
Color: RAL 7030 stone grey.

10° Tilting Adaptor		
Weight	Packs of	Part No.
2.6 lbs/1.2 kg	1	6023000
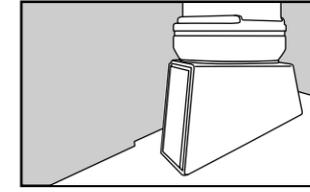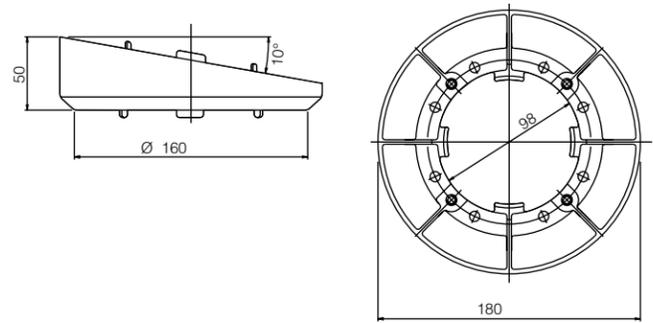
Tilting Adaptor 25°/60°

Installs between enclosure and CP 6130 enclosure coupling; tilts 25° or 60°.

Material: zinc diecast; comes with gaskets and installation hardware.

Color: RAL 7030 stone grey.

Tilting Adaptor 25°/60°		
Weight	Packs of	Part No.
8.4 lbs/3.8 kg	1	6150000
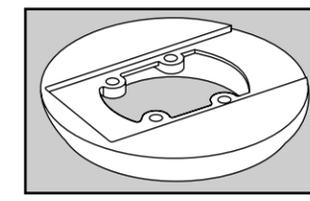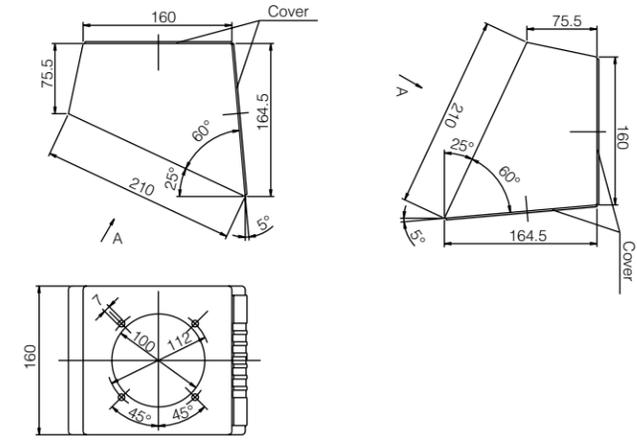
Fixed Enclosure Coupling

For fixed attachment of the enclosure in conjunction with 10° tilting adaptor (CP 6023000) and 25°/60° tilting adaptor (CP 6150000).

Configuration: Die-cast zinc; including gasket and installation hardware. Not suitable for use as a base point for a support arm system.

Color: RAL 7030 stone grey.

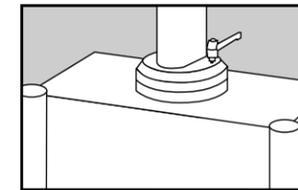| Fixed Enclosure Coupling		
Weight	Packs of	Part No.
2.4 lbs/1.1 kg	1	6130600
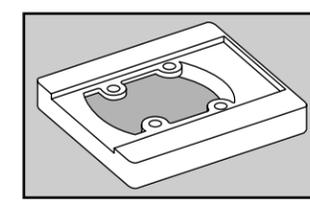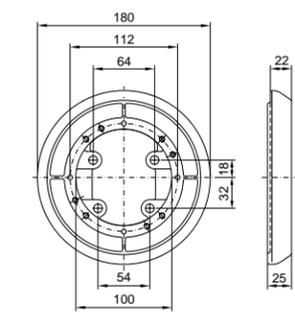
Fixed Enclosure Coupling

For rigid top or bottom mounting of enclosures to vertical support arms.

Configuration: zinc die-cast; includes gaskets and installation hardware.

Not suitable for use as base bracket for a support arm system.

Color: RAL 7030 stone grey.

Enclosure Coupling, Fixed		
Weight	Packs of	Part No.
3.1 lbs/1.4 kg	1	6130500
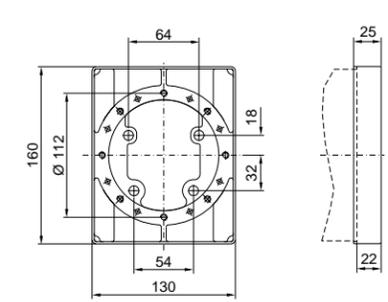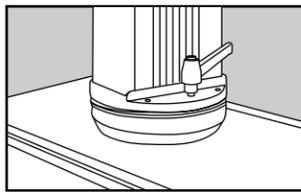
Enclosure Coupling

For top or bottom installation of enclosures to vertical support arms.
Material: zinc diecast; enclosure rotates infinitely through 350˚ and adjustable; maintenance-free bearing; includes gaskets and installation hardware. Not to be used as a support arm base bracket.
Color: RAL 7030 stone grey.

Enclosure Coupling		
Weight	Packs of	Part No.
7.7 lbs/3.5 kg	1	6130000
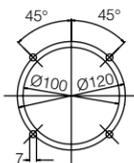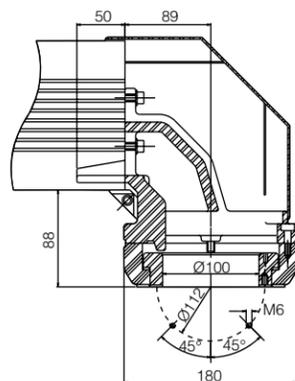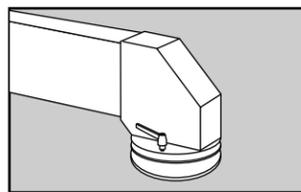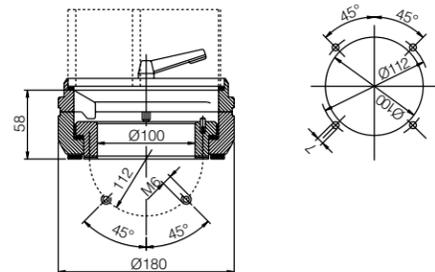
90˚ Enclosure Coupling

For top or bottom installation of enclosures to horizontal support arms without having to install an additional vertical support arm.
Material: spheroidal graphite iron and zinc diecast; rotates 180˚ and can be locked in place; maintenance-free bearing; plastic cover; gaskets and installation hardware. Not to be used as a support arm base bracket.
Color: RAL 7030 stone grey.

90° Enclosure Coupling		
Weight	Packs of	Part No.
12.1 lbs/5.5 kg	1	6040000
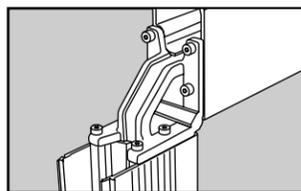
90˚ Arm Coupling

Connects vertical support arms to horizontal support arms.
Material: spheroidal graphite iron with protective plastic cover; gaskets and installation hardware.
Color: RAL 7030 stone grey.
US Patent No. 4,997,155
German Patent No. 38 05 422
European Patent No. 0 330 027
valid for FR, IT

90° Arm Coupling		
Weight	Packs of	Part No.
4.2 lbs/1.9 kg	1	6140000
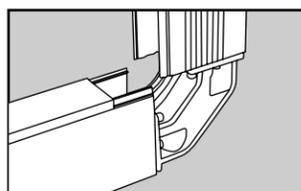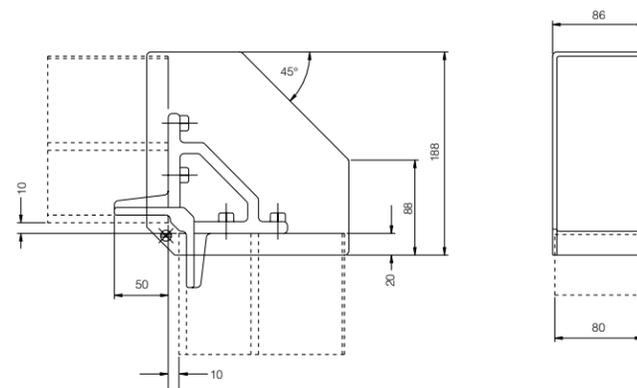
90˚ Arm Coupling (For Inverted Mounting)

Allows vertical support arm to be directed upwards from a lower, horizontal support arm at floor level which ensures trouble-free cable routing.
Material: spheroidal graphite iron with protective plastic cover; gaskets and installation hardware.
Color: RAL 7030 stone grey.

90° Arm Coupling		
Weight	Packs of	Part No.
7.0 lbs/3.2 kg	1	6180000
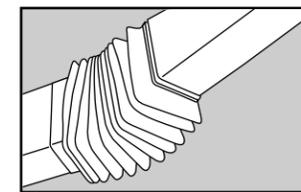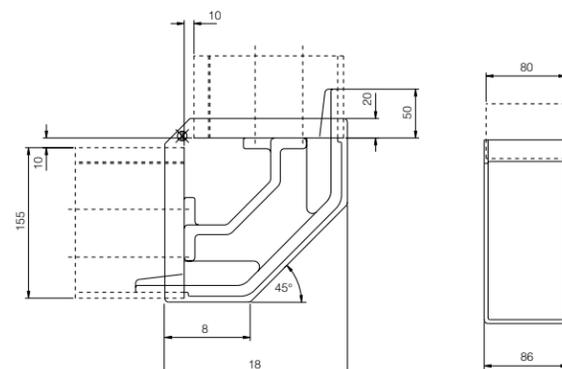
Intermediate Hinge

Connects horizontal suspension arms.
Material: spheroidal graphite iron; rotates 180°, includes bellows with zip fastener for easy access to cable duct; gaskets, and installation hardware.
Color: RAL 7030 stone grey.
US Patent No. 4,998,702
German Patent No. 38 05 424
European Patent No. 0 330 029
valid for FR, GB, IT

Intermediate Hinge		
Weight	Packs of	Part No.
13.4 lbs/6.1 kg	1	6120000
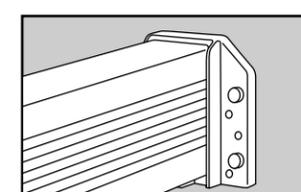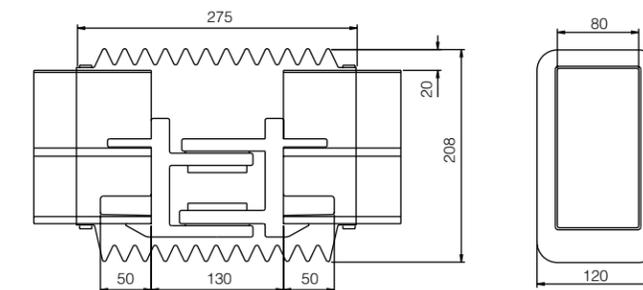
Wall/Base Bracket

Allows rigid mounting of the pendant arm system to vertical or horizontal surfaces.
Material: spheroidal graphite iron, includes gaskets and installation hardware.
Color: RAL 7030 stone grey.

Wall/Base Bracket		
Weight	Packs of	Part No.
7.9 lbs/3.6 kg	1	6160000
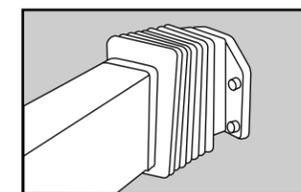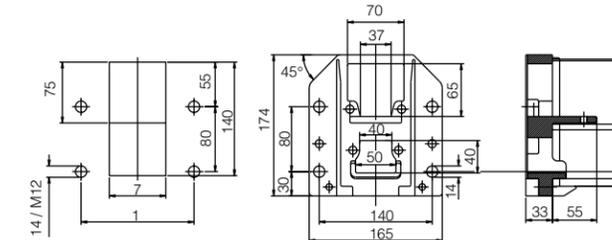
Vertical Hinge

For installation of a swiveling pendant arm system to vertical surfaces.
Material: spheroidal graphite iron; rotates 180°, includes bellows, gaskets, and installation hardware.
Color: RAL 7030 stone grey.

Vertical Hinge		
Weight	Packs of	Part No.
18.5 lbs/8.4 kg	1	6110000
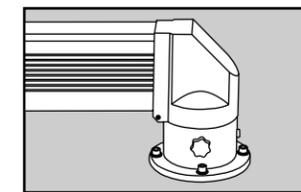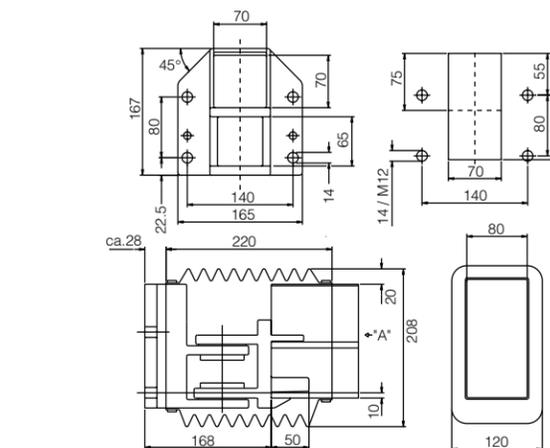
Horizontal Hinge

For installation of a swiveling pendant arm system to horizontal surfaces.
Material: steel and cast iron with plastic cover; maintenance free bearing, rotates 350°, with safety stop; includes gaskets and installation hardware.
Note: Not to be used as an enclosure coupling.
Color: RAL 7030 stone grey.

Horizontal Hinge		
Weight	Packs of	Part No.
24.2 lbs/11.0 kg	1	6170000
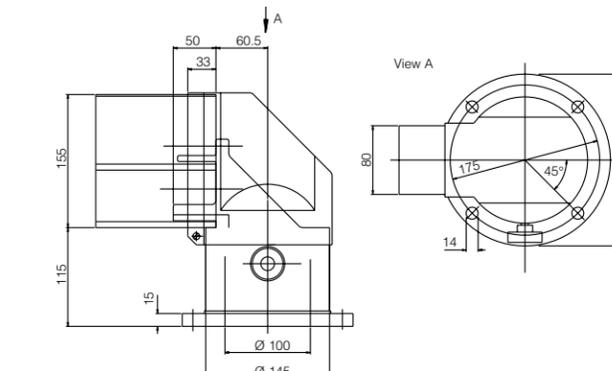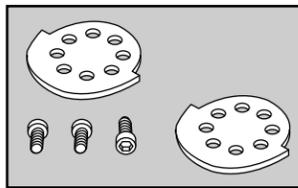
Rotational Limiter For CP-XL

Suitable for:
- Wall-mounted hinge CP 6110.000
- Intermediate hinge CP 6120.000

Configuration: 2 steel-washer, perforated, zinc-coated, chromated, including 3 cheese head screws for fixing.
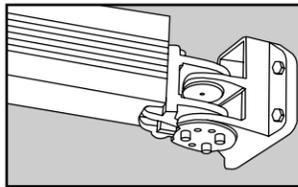
Rotational Limiter For CP-XL	
PU	Part No.
1 set	**6110100**

Adjustable swivel range:
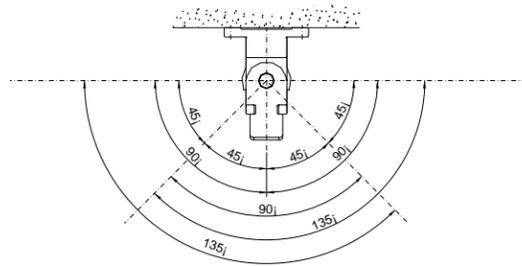
CP 6500 (CP-L) Accessories
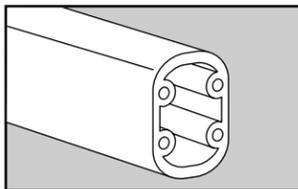
CP 6500 Support Arm

The basic component of the pendant arm system.

Material: Bend- and torsion-resistant extruded aluminum. Integrated holes for self-tapping screws make combinations up to any desired length possible.

Color: RAL 7035 light grey
Weight: 3.16 lbs/ft/4.7 kg/m.

CP 6500 Support Arm		
Length (inches/mm)	Packs of	Part No.
19.7/500	1	**6511000**
39.4/1000	1	**6513000**
78.7/2000	1	**6515000**
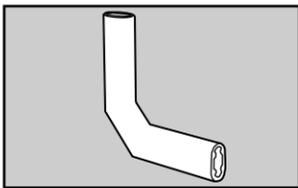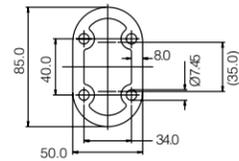
Support Arm Angle 90°, CP-L

The alternative for the assembling of compact support arm systems enables simplified mounting and improves the aesthetics, in particular in connection with the wall/ bottom mounting, small (CP 6520.5X0).

The support arm components are mounted on the angle through self-tapping screws, which means that the support profile can be cut to any required length.

Configuration: Torsionally stiff extruded aluminum section of high bending resistance.

Weight: 6.61 lbs/3 kg.

Support Arm Angle 90°, CP-L	
Color RAL	Part No.
7035 (light grey)	**6519000**
9006 (white-aluminum)	**6519010**

Available November 2001.
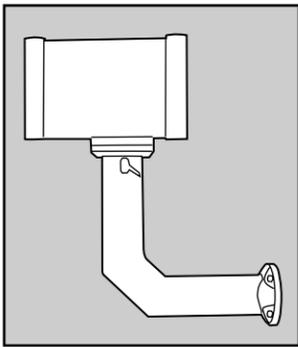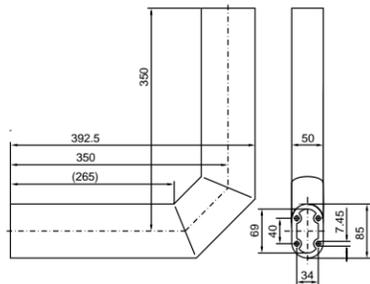
10° Tilting Adaptor

Tilts enclosure for increased operator friendliness; installed between housing and enclosure or 90° arm coupling.

Material: cast zinc; comes with gaskets and installation hardware.

Color: RAL 7030 stone grey.

10° Tilting Adaptor		
Weight	Packs of	Part No.
1.3 lbs/.6 kg	1	**6527000**
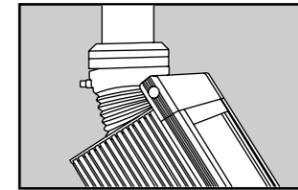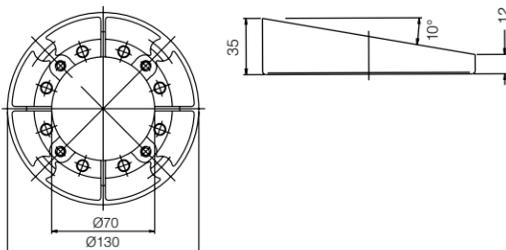
Tilt Adaptor +/-45° Adjustable

For flexible adjustment for optimum viewing angle of flat screen LCD displays. Can be mounted on pendant arm with a CP 6525 enclosure coupling or a CP 6526 90° enclosure coupling.

+/-45° Tilt Adaptor		
Weight	Packs of	Part No.
2.2 lbs/1.0 kg	1	**6529000**

Enclosure Coupling, Fixed

For fixed bottom mounting of enclosure to vertical support arm.

Configuration: zinc die-cast; includes gaskets and installation hardware. Cannot be used as a support base bracket.

Color: RAL 7030 stone grey.

Enclosure Coupling, Fixed		
Weight	Packs of	Part No.
1.8 lbs/0.8 kg	1	**6525500**

Enclosure Coupling, Rotating

For top or bottom installation of enclosure to vertical support arm.

Configuration: maximum rotation 350°. Not to be used as a support arm.

Color: RAL 7030 stone grey.

Enclosure Coupling		
Weight	Packs of	Part No.
3.3 lbs/1.5 kg	1	**6525000**
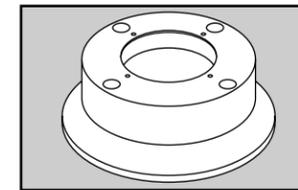
Connection Adaptor VIP 6000 on Support Arm System CP-XL

For connections between VIP 6000 Command Panels with support arm connection CP-L and support arm system CP-XL.

Design: Cast aluminum, including seal and assembly parts.

Color: RAL 7030 stone grey.
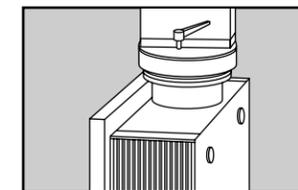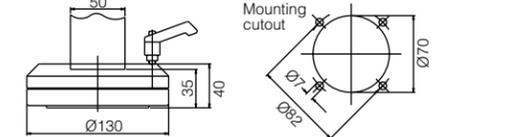
Connection Adaptor		
Weight	Packs of	Part No.
1.5 lbs/0.7 kg	1	**6528500**

90° Enclosure Coupling

For top or bottom installation of enclosure to vertical support arm.

Configuration: maximum rotation 350°. Not to be used as a base mounting bracket.

Color: RAL 7030 stone grey.
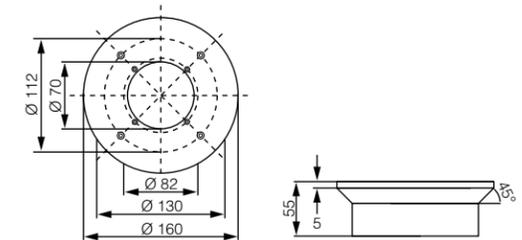
90° Enclosure Coupling		
Weight	Packs of	Part No.
3.3 lbs/1.5 kg	1	**6526000**
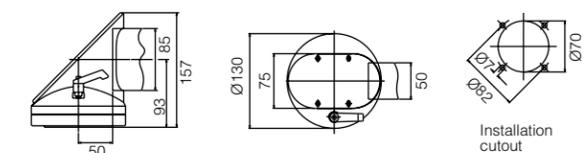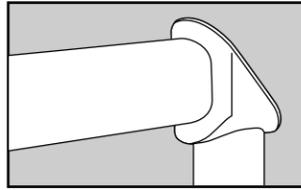
90° Arm Elbow

Connects horizontal and vertical support arms.

Color: RAL 7030 stone grey.

90° Arm Elbow		
Weight	Packs of	**Part No.**
1.1 lbs/.5 kg	1	**6524000**
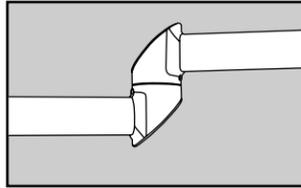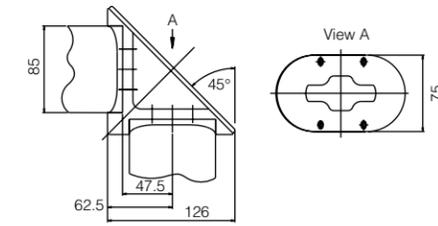
Intermediate Hinge

Connects horizontal suspension arms.

Configuration: maximum rotation 350°.

Color: RAL 7030 stone grey.

Intermediate Hinge		
Weight	Packs of	**Part No.**
5.5 lbs/2.5 kg	1	**6523000**
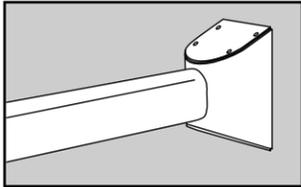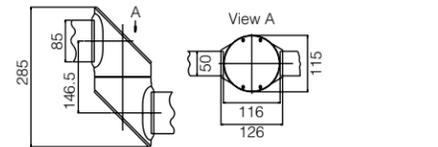
Wall/Base Mounting Bracket

For rigid installation of a stationary suspension arm system to a vertical or horizontal mounting surface.

Color: RAL 7030 stone grey.

Wall/Base Mounting Bracket		
Weight	Packs of	**Part No.**
3.5 lbs/1.6 kg	1	**6520000**
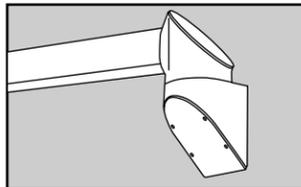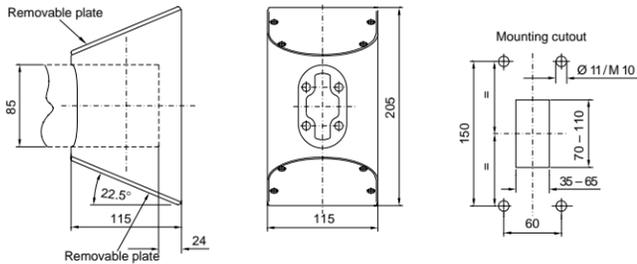
Vertical Hinge

For installation of a swiveling support arm system to a vertical mounting surface.

Configuration: maximum rotation 350°, can be locked in place.

Color: RAL 7030 stone grey.

Vertical Hinge		
Weight	Packs of	**Part No.**
6.2 lbs/2.8 kg	1	**6521000**
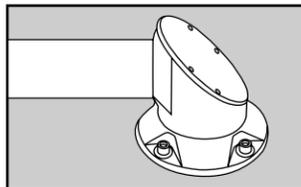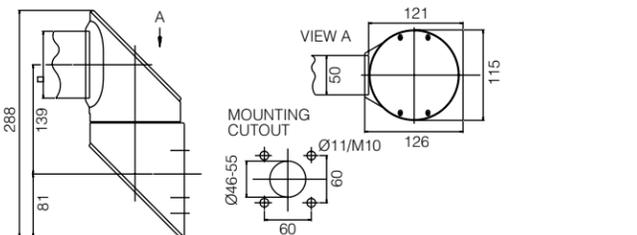
Horizontal Hinge

For installation of a swiveling support arm to a horizontal mounting surface. Ceiling installation possible.

Configuration: maximum rotation 350° not to be used as a coupling for enclosures.

Color: RAL 7030 stone grey.

Horizontal Hinge		
Weight	Packs of	**Part No.**
5.5 lbs/2.5 kg	1	**6522000**
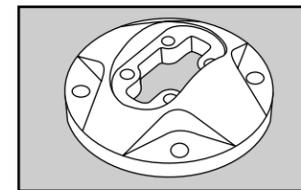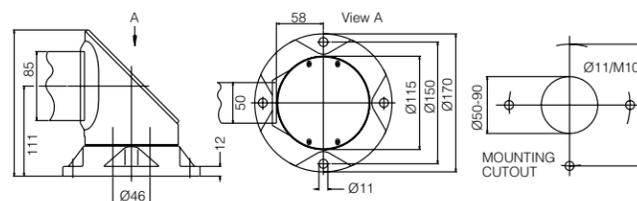
Wall/Floor Mount, Small

For fixed mounting of support arm systems on vertical and horizontal surfaces. Especially well suited for assembly of compact support arm systems with cable entry from the inside.

Description: aluminum die-cast, including gasketing and self-threading screws for CP-L support arm installation.

Color: RAL 7030 stone grey.

Note: standard screws may be used for the assembly of walls and floors.

Wall/Floor Mount, Small		
Weight	Packs of	**Part No.**
1.3 lbs/0.6 kg	1	**6520500**
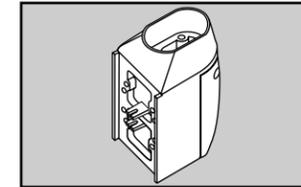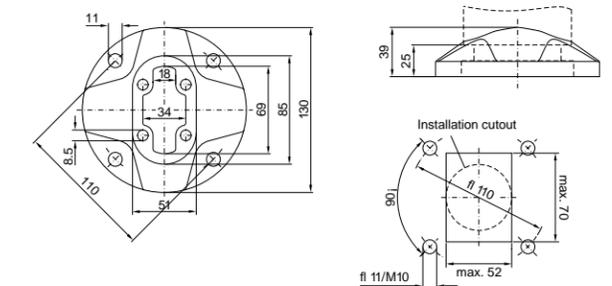
90° Angle Adaptor, (6000 to 6500) (CP-XL to CP-L)

A coupling between

• horizontal support rail CP-XL and

• vertical support rail CP-L when the configuration is chosen for standard or aesthetic reasons.

Description: aluminum die-cast, including gaskets and self-threading screws for mounting of CP-L/CP-XL support arm.

Color: RAL 7030 stone grey.

90° Angle Adaptor, CP-XL to CP-L		
Weight	Packs of	**Part No.**
3.3 lbs/1.5 kg	1	**6528100**
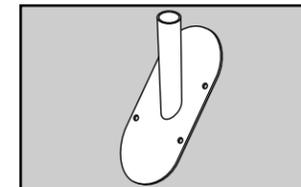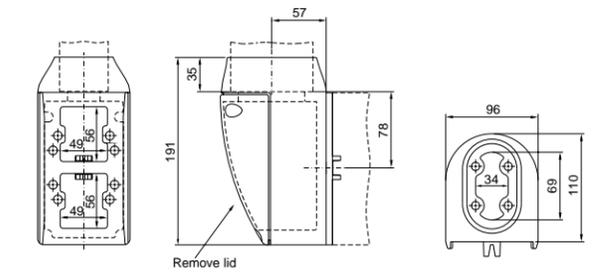
Mounting Component for Support Arm System

For attaching a signal pillar with connection component for conduit mounting onto support arm system CP-L. To fit angle piece CP 6524.000 and angle coupling CP 6526.000

Design: sheet steel

Color: RAL 7030 stone grey.

Mounting Component	
Mounting component	**Part No.**
For support arm system CP-L	**2375000**
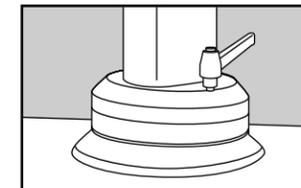
Connection Adaptor

Makes following, interchangeable connection options possible.

• Connect CP 6000 enclosure to CP 6500 support arm system.

• Connect CP 6500 enclosures to CP 6000 support arm system.

Material: cast aluminum; powder painted, RAL 7030 stone grey.

Connection Adaptor		
Weight	Packs of	**Part No.**
1.1 lbs/.5 kg	1	**6528000**
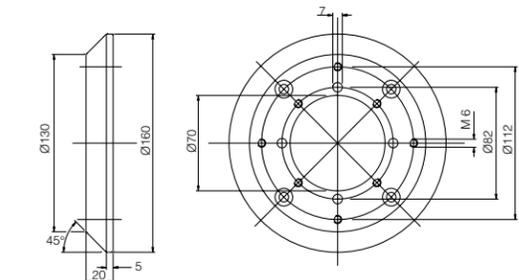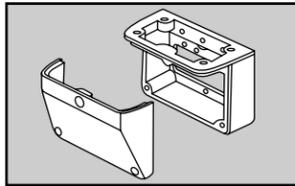
Connection Housing CP-L

For connection on the rear side of a command panel onto support arm system CP-L via:

- Enclosure mounting 4.72 x 2.56"/ 120 x 65 mm (CP 6525.6X0)
- Enclosure coupling 4.72 x 2.56"/ 120 x 65 mm (CP 6525.1X0)
- Tilting adaptor 10° 4.72 x 2.56"/ 120 x 65 mm (CP 6527.1X0)

The removable cover enables simplified cable entry.

Configuration: Cast-aluminum, including seal and assembly parts for mounting on the enclosure as well as two cable ties.

Weight: 1.32 lbs/ 0.6 kg.

Connection Housing CP-L	
Color RAL	Part No.
7030 (stone grey)	**6508000**
7024 (graphite grey)	**6508010**

Available October 2001
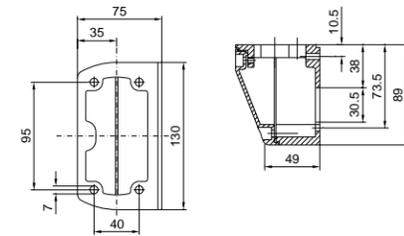
Optipanel Support Plate

For mounting on the enclosure profile. This enables the rear wall or door to be removed. This ensures easy access in case of service.

Configuration: Cast-aluminum, including seal and installation hardware.

Mounting possibilities

1. For retrofitting* on Optipanel: In combination with the required support plate (see above) the connection console will be screwed directly on the Optipanel enclosure profile. This ensures solid connection and enables to remove the rear wall and rear door.

   * The supply includes the connection housing and support plate as well as the rear wall and rear door with respective cutout, if they are selected per design code number.

2. For other enclosures for example:
- Junction boxes
- Cast aluminum enclosures:

   The connection console can be mounted:
   a) Directly and flush with the enclosure edge
   b) With spacer plate (available on request) on the rear wall of the enclosure. A reinforcement of the rear wall has to be tested for each individual case.

Optipanel Support Plate	
PU	Part No.
1 set	**6508100**

Available October 2001

Support arm component CP-L 4.72 x 2.56"/120 x 65 mm

Connection housing

Support plate (internal)

Support arm component CP-L 4.72 x 2.56"/120 x 65 mm

Connection housing

Support arm component CP-L 4.72 x 2.56"/120 x 65 mm

Connection housing

Spacer plate
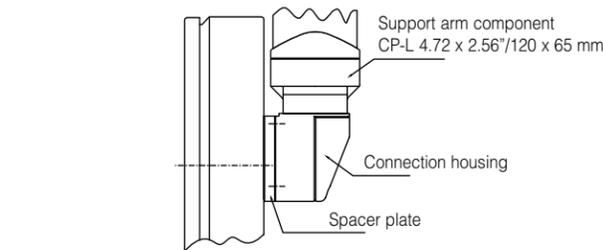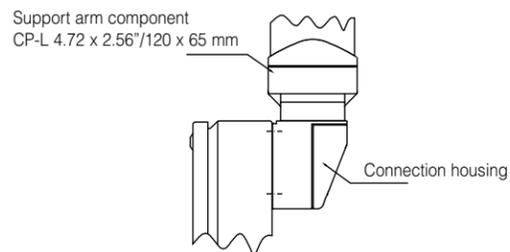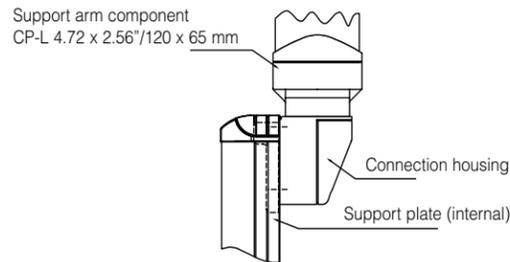
Mounting cutout
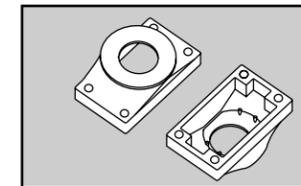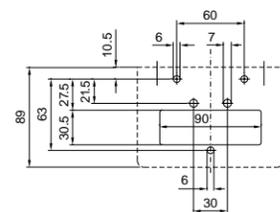
Connection Plate

with reinforcement plate

- Enables simplified attachment of the Command Panel on the support arm or pedestal.
- Easily attached from outside.
- More space for cable entry and clamping angle.

For mounting of:

- VIP 6000 [1]
- Optipanel [2]
- Sheet steel – Command Panel [3]

on (see Table A)

[1] From width of front plate 10.43"/ 265 mm. The CP-XL configuration not in connection with installation depth 6.10"/155 mm and 11.61"/295 mm.

[2] From width of front plate 11.61"/ 295 mm and installation depth 5.91"/150 mm.

[3] Attachment surface, minimum W x D = 11.81" x 5.32"/300 mm x 135 mm (e.g. operator door enclosure).

Note: The rectangle support arm cutout may be installed on request.

Material: Connection plate; cast aluminum.

Configuration: Including seal/ installation hardware.
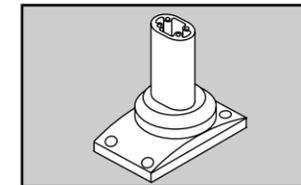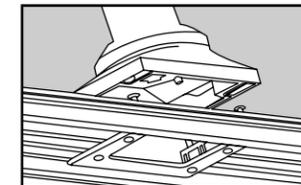
Mounting cutout CP-L/CP-XL
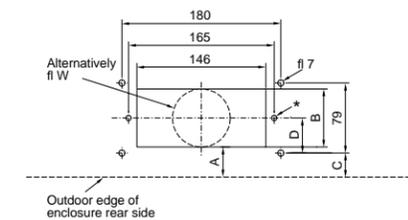
Ø 0.23"/6 mm only for sheet metal enclosures to fix the reinforcement plate.

Connection Plate				
With support arm connection	Color RAL	Weight		Part No.
		lbs	kg	
CP-XL	7030	1.76	0.8	**6528300**
CP-L	7030	1.54	0.7	**6528200**
CP-L	7024	1.54	0.7	**6528210**

Table A		
Support arm components	CP-L	CP-XL
Enclosure mounting	CP 65255X0	CP 6130600
Enclosure mounting	CP 65250X0	CP 6130000
Angle coupling	CP 65260X0	CP 6040000
Tilt adaptor 10°	CP 65270X0	-
Tilt adaptor +/- 45°	CP 65290X0	-

Table B					
	Installation depth		A	B	C
	inches	mm			
VIP 6000	6.10 to 7.28	155 to 185	32	81	30.5
VIP 6000	11.61 to 17.24	295 to 438	174.5	81	173
Optipanel	5.91	150	34	65.5	30.5
Sheet metal enclosures	-	-	*	86	*

Available October 2001

* Drillings/cutouts have to be located in the center of the reinforcement plate of the enclosure.

CP-L

fl 0.22"/0.39" deep
fl 5.5/10 mm deep

CP-XL

fl 0.22"/0.39" deep
fl 5.5/10 mm deep
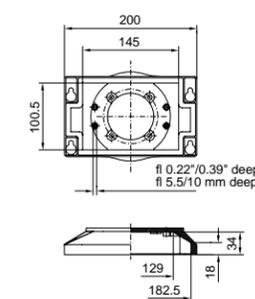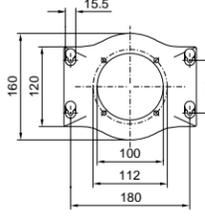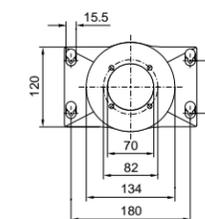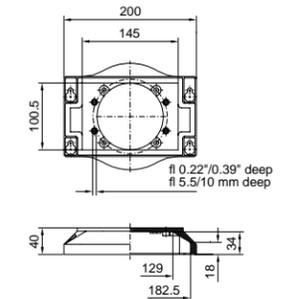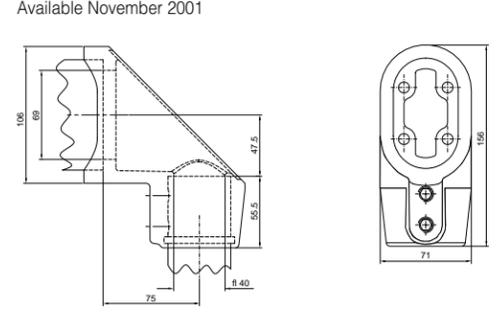
CP-S Accessories
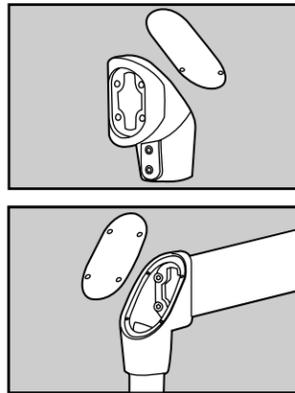
Angle Adaptor 90°, CP-L To CP-S

For the connection between
• Horizontal CP-L support profile and
• Vertical CP-S support profile.

Angle adaptor can be on top or bottom, if system is
• Suspended or
• Supporting.

The removable cover enables simplified cable entry.

Configuration: Cast aluminum, including seal and self-tapping screws for CP-L or set screws for CP-S support profile mounting.
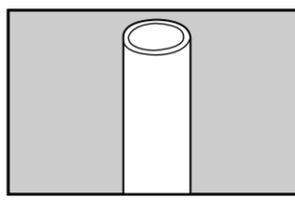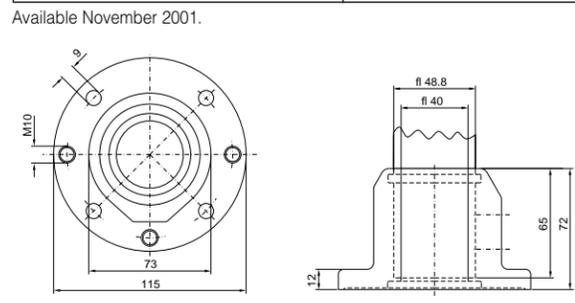**Weight:** 1.5 lbs/ 0.7 kg.

Angle Adaptor 90°	
Color RAL	Part No.
7030 (stone gray)	**6501080**
7024 (graphite gray)	**6501090**

Available November 2001

Support Profile CP-S

For assembling a support arm system. The connection components are mounted on the support profile through set screws, which means that the support profile can be cut to any required length.

Configuration: Steel tube, outer diameter 1.9"/48.3 mm, wall thickness 0.15"/4 mm.
Weight: 9.7 lbs/ft (4.4 kg/m).

Support Profile CP-S			
Length		Color RAL	Part No.
inches	mm		
19.7	500	7035 (light grey)	**6501000**
19.7	500	9006 (white-aluminum)	**6501010**
39.4	1000	7035 (light grey)	**6501020**
39.4	1000	9006 (white-aluminum)	**6501030**

Available November 2001.

Wall/Base Mounting Bracket CP-S

For rigid mounting of the support arm system on vertical or horizontal surfaces.

Configuration: Cast aluminum, including seal and two set screws for the support profile.
Weight: 1.32 lbs/0.6 kg.

Wall/Base Mounting Bracket CP-S	
Color RAL	Part No.
7030 (stone grey)	**6501100**
7024 (graphite grey)	**6501110**

Available November 2001.
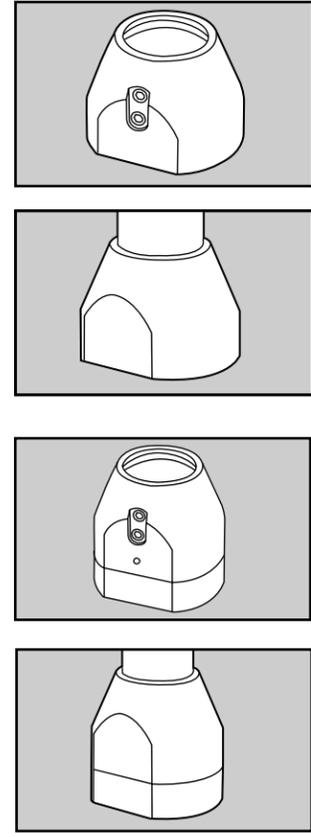
Enclosure/Base Bracket CP-S, Fixed

For rigid mounting:
• Of the enclosures onto the support arm,
• Of the support arms on a vertical or horizontal mounting surface (fasteners are internal).*

Configuration: Die-cast zinc, including seal and two set screws for the support profile.
* Maximum load capacity 400 N (89.9 lbf), 88.2 lbs/40kg total weight.
Weight: 2.65 lbs/1.2 kg.

Enclosure/Base Bracket CP-S, Fixed	
Color RAL	Part No.
7030 (stone grey)	**6501060**
7024 (graphite grey)	**6501070**

Available November 2001.

Enclosure Coupling CP-S, Rotating

For swivel mounting of the enclosure to the CP-S support arm system.

Two mounting cutout options are possible
a) Circular pattern
b) Rectangular pattern

Configuration: Die-cast zinc, including seal and assembly parts.
Rotation range approx. 350°, lockable. Not suitable for use as a base point for a support arm system.
Weight: 4.63 lbs/2.1kg.
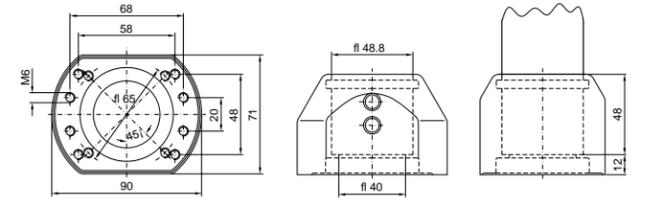
Enclosure Coupling CP-S, Rotating	
Color RAL	Part No.
7030 (stone grey)	**6501040**
7024 (graphite grey)	**6501050**

Available November 2001.
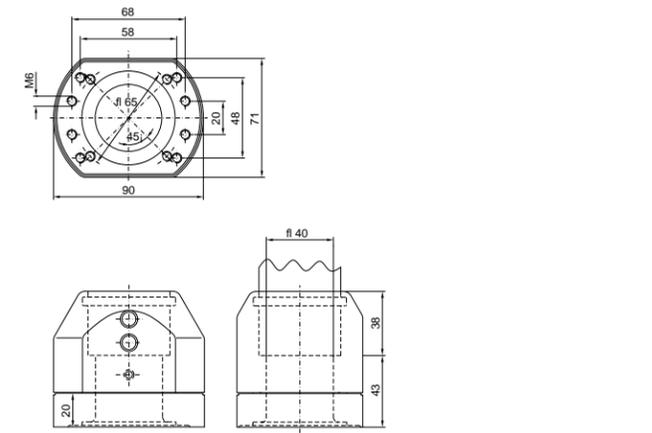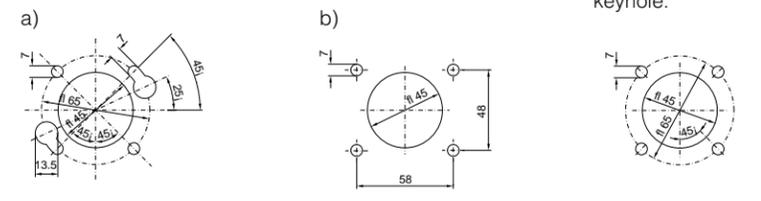
Mounting cutout options
a)
b)
same as cutout a), however without keyhole.

Possible for Optipanel with installation depth 4"/100 mm. Please indicate under 2.3 (see Optipanel ordering form) additional to the construction code number 1 to 3 the letter S.

Pedestal Accessories
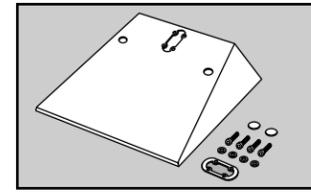
Pedestal Base, Small

With reinforcement bracket for the installation of support arm profile CP-L:
• rear with one hole for a standard M20 cable conduit connection.
• top with two holes (grommets included) for bottom floor mounting cross rail.

Small Pedestal Base	
PU	Part No.
1	**6143200**

Note: standard M8 screws are acceptable for bottom mounting.
Material: sheet steel 3/22"/2.5 mm
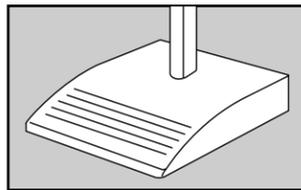**Color:** RAL 7035 light grey.
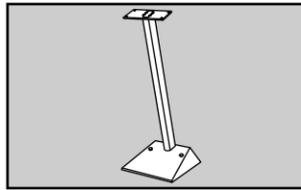
Enclosure Flange CP-L

For the rigid installation of:
• KL enclosures 1515.210 (HWD 150 x 360 x 80 mm)
• mounted inside as reinforcement plate for all appropriately sized enclosures (also E-boxes and compact AE enclosures) in conjunction with:
  - enclosure coupling CP 6525000
  - enclosure mount CP 6525500
  - tilted adaptor CP 6526000 to support arm CP-L.

Enclosure Flange CP-L	
PU	Part No.
1	**6143210**

With installation materials for enclosure and support arm plus 2 gaskets.
Material: sheet steel
Color: RAL 7035 light grey.
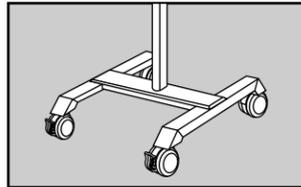
Mobile Pedestal For CP 6000 And CP 6500

Offers operator friendliness and installation flexibility for CP operator enclosure applications. All CP and similar operator enclosures can be mounted on the special coupling plate of the CP 6136.000 mobile pedestal. Large casters facilitate easy movement, even on uneven floors; the front casters feature brakes.

Mobile Pedestal For CP 6000 And CP 6500	
Pedestal with mounting plate	Part No.
for CP 6500	**6136500**
for CP 6000	**6136000**

The base allows for easy cable entry while cables can be routed through the support pillar.
Configuration: mobile base, with 4 casters, including two with

integral brakes; support pillar. Only for CP 6136.000: special coupling; installation hardware.
Color: RAL 7030/7035 grey
Casters: RAL 9005 black.

Pedestal/Platform

Provides a fixed, mobile pedestal mounting solution.
Standard configuration includes:
• knockouts for PG strain connector inserts
• integrated cable collecting angle
• knockout for concealed mounting of cable conduit adapters up to PG 36 or M 50.
With the following accessories:
• double wheel casters 7495.000
• leveling feet 4612.000

Pedestal/Platform		
For support arm	Color RAL	Part No.
CP 6500	7035	**6137535**
CP 6000	7035	**6137035**

• wallmounting bracket KL 1580.000 or 1590.000 the pedestal can be customized for any environment.
Material: sheet steel
Finish: powder painted: RAL 7030 stone grey or RAL 7035 light grey textured

Configuration: pedestal/floor plate with integrated reinforcement and installation cutout for CP 6000 or CP 6500 support arms; includes installation hardware for support arms.

Pedestal For Command Panel

Enclosure may be mounted via
• enclosure coupling CP 6525.500 (rigid).
• enclosure coupling CP 6525.000 (swivel).
Technical details:
Cast feet with holes for floor mounting.

Pedestal For Command Panel			
Height		Cable conduit	Part No.
inches	mm	adaptor	
39.37	1000	without	**6141000**
39.37	1000	with	**6141100**

Support tubes:
• oval, twin-walled cover, easily opened from the outside. Cables may then be routed behind the cover for protection.
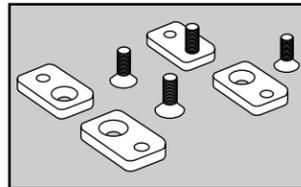
Base Mount For Pedestal For CP 6141 Enclosure

For secure mounting at the installation site.
• bracket is mounted to the pedestal with four countersunk screws in the existing threaded holes (M 12).
• bracket is mounted to the floor via through-holes (Ø11 mm), depending on the construction of the floor, with commercially available screws and dowels.

Base Mount For Pedestal	
Packs of	Part No.
1 set	**6147000**

Configuration: 4 base mounting brackets, 4 countersunk screws, M 12.
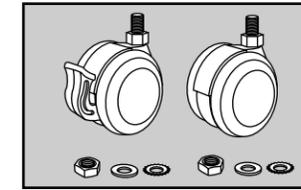
Twin Casters For CP 6141000/100 Enclosures

For mobile use, easy installation. For:
• pedestals CP 6141.000 and CP 6141.100.
• pedestal base plate CP 6137.030—CP 6137.535.
Load capacity per castor: 165 lbs/75 kg static load 2 twin casters with brake.

Twin Casters	
Packs of	Part No.
1 set	**6148000**

Overall height: 3.5"/90 mm
2 twin casters without brake
Color: black with grey wheels.
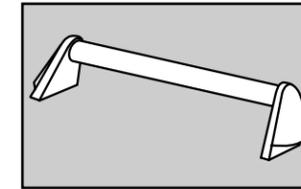
Foot Rest For CP 6141000/100

Packs of 2 connector pieces, 1 round tube.

Foot Rest		
For pedestal	Packs of	Part No.
CP 6141000	1 set	**6145100**
CP 6141100		
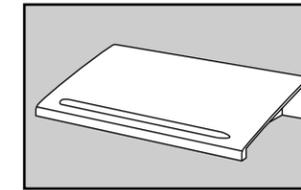
Trim Panel For CP 6141000/100

May be installed front and rear.

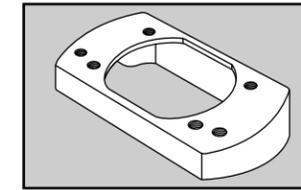| Trim Panel		
For pedestal	Packs of	Part No.
CP 6141000	1	**6144100**
CP 6141100		

Optipanel Accessories
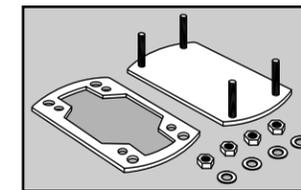
Cover Plate

To cover an unused support arm cutout.
Material: sheet steel, clear chromate.
Configuration: cover plate with gasket, including installation material.

| Cover Plate	
Support Arm Connection	Part No.
CP-L	**6505100**

10° Tiliting Adaptor CP-L

For installation between:
• enclosure coupling CP 6525.100 or
• enclosure coupling CP 6525.600 and housing.
Configuration: zinc die-cast; includes gasketing and installation materials. Not designed as a base for a support arm system.
Color: RAL 7030 stone grey.

| 10° Tilting Adaptor	
Weight	Part No.
1.10 lbs/0.5 kg	**6527100**
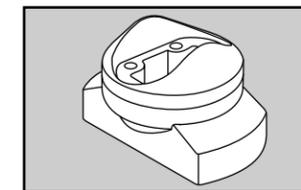
Enclosure Mount CP-L, Fixed

For fixed installation of enclosure to support arm CP-L. Can be mounted to the top or bottom of an enclosure.
Configuration: zinc die-cast; includes gasketing and installation materials. Not designed as a base for a support arm system.
Color: RAL 7030 stone grey.

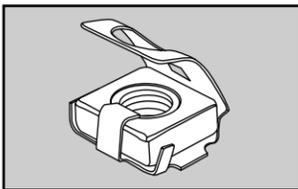| Enclosure Mount	
Weight	Part No.
2.20 lbs/1.0 kg	**6525600**
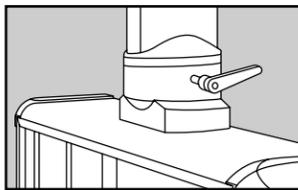
Enclosure Coupling CP-L, Rotating

Rotating mount of enclosure to CP-L. Top or bottom mount.

Configuration: zinc die-cast including gasketing and installation materials. Approximately 350° rotation. Not designed as a base for a support arm.
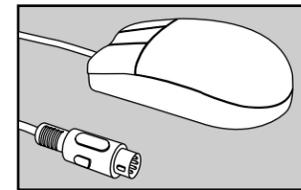
Color: RAL 7030 stone grey.

Enclosure Coupling	
Weight	Part No.
2.65 lbs/1.2 kg	**6525100**

M5 Springnut

For internal installation of components into Optipanel with depth of 4 and 6"/100 and 150 mm. Easy installation, the spring secures against undesired movement.

Material: steel, galvanized, chromated.

M5 Springnut	
Packs of	Part No.
50	**6108000**

General Accessories

Keyboard Drawer With Mouse Pad

19" front panel/3.5 U, for installation in:
- any sufficiently large space (door, side panel etc.).

The mouse pad is prepared to accept the inductive mouse pad NEMA 6/IP 67.

Technical specifications:
- space for keyboards up to H x W x D = 1.7" x 18.4" x 6.8" (42 x460 x170 mm)

Mouse pad:
- pulls out at the sides including mouse storage compartment for standard pads and prepared for NEMA 6/IP 67 mouse pad.

Keyboard Drawer With Mouse Pad			
Height	Width	Depth	Part No.
3.5 U	482.6 mm	251 mm	**6003000**

Front panel:
- folds out as a wrist support
- lockable, 3 mm double-bit insert may be exchanged for 27 mm inserts, version A, lock cylinder insert with lock no. 3524 E (SZ 2571.000).
- even with the drawer open, a high level of mechanical protection and shielding are retained.

Material:

Drawer housing: sheet steel, painted RAL 7035

Front panel: Aluminum, natural anodized

Configuration: keyboard drawer with mouse pad, including installation hardware and self-adhesive cable tie attachment.

Keyboard Drawer 19"/2U

Can be mounted in all VIP 6000 enclosures and 19" systems or on any sufficiently large surface (door, side wall, etc.). Its low weight (5.5 lbs/2.5 kg) makes it ideal for use in support arm systems because adequate room remains for cabling, even when the support arm is connected from below. It can also be locked with a 3524 E lock.

High mechanical protection and shielding is maintained, even when the drawer is open.

Technical data:
- Total available space: 15.35" x 1.26" x 5.47"/ 390 x 32 x 139 mm

Keyboard Drawer With Mouse Pad			
Height	Width	Depth	Part No.
2 U	19"/482.6 mm	5.90"/150 mm	**6002000**

- Drawer has 2.35"/60 mm high space on right for a mouse or trackball or for a 3 1/2" disk drive.
- When a mouse is used or when a 3 1/2" disk drive is installed, only enough space remains for an 11.2"/284 mm wide keyboard.

Material:

Frame: sheet steel, zinc-plated, chromated

Drawer housing and drawer: aluminum

Front panel and handle: aluminum, natural anodized

Configuration: Drawer housing with drawer, includes slides with stops for 'open' position, front panel with handles, gasket and installation hardware.

Note: For installation in VIP 6000 operator enclosures we recommend cross members that are required for partitioning.

NEMA 6/IP 67 Mouse/Mouse Pad

An ideal input device for all areas where heavy contamination is unavoidable, or where high standards of hygiene are crucial. Because the mouse detects positions inductively, there is no need for a trackball, and the housing is completely sealed with a protective film. This achieves a high protection category of IP 67/NEMA 6.

The mouse operates in conjunction with the inductive mouse pad IP 67 and is available for connection to either a COM or a PS/2 interface.

Material:

Mouse pad: plastic PBT

Mouse: plastic ABS

Color:

Mouse pad: similar to RAL 7032 grey

Mouse: similar to RAL 7032 grey

Technical specifications:

NEMA 6/IP 67 mouse

Mouse connector: DIN 7-pole

NEMA 6/IP 67 Mouse/Mouse Pad				
Part No.	Description	H x W x D inches	H x W x D mm	Packs of
6444000	Inductive mouse pad IP 67 COM interface	8 x 10 x .6	205 x 250 x 15	1
6444500	Inductive mouse pad IP 67 PS/2 interface	8 x 10 x .6	205 x 250 x 15	1
6445000	Mouse IP 67 for COM and PS/2 interface	-	-	1

Mouse pad COM interface
Mouse pad—PC connection: 9-pole D-SUB socket DIN 5-pole connector

Mouse pad PS/2 interface
Mouse pad -PC connection: PS/2 connector

Temperature range:
32°F to 131°F/0°C to 55°C

Power consumption: < 20 mA

Pad size (H x W x D): 8" x 10" x .6"/205 x 250 x 15 mm

IP 67/NEMA 4
Cable lengths: 2,000 mm
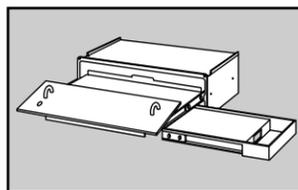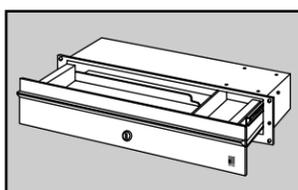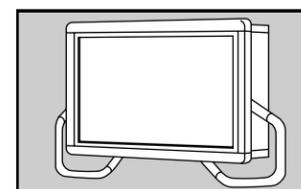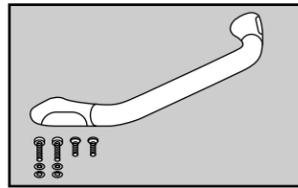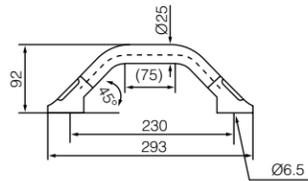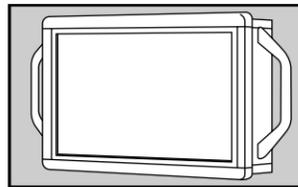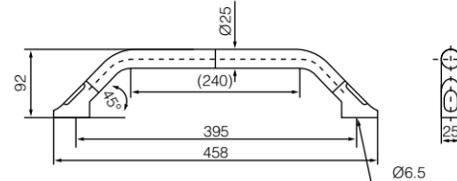Runs under DOS, Windows 3.1/3.11, Windows 95/98, Windows NT
Ratings: IP 67/NEMA 4.

Mouse Pad Tray

Is mounted on vertical handles of keyboard housings for accommodation of SM 6444.000 and SM 6444.500 IP 67 mouse pads. The slope of the mouse pad tray is infinitely adjustable. Installation requires drilling two installation holes in the handle grip brackets.

Material: sheet steel, chromated

Configuration: mouse pad tray, installation hardware.

Mouse Pad Tray		
Description	Packs of	Part No.
Mouse pad tray	1	**2381000**
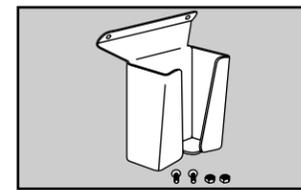
Mouse Holder

Fits Rittal mouse pad trays to ensure safe storage of a standard mouse or the Rittal SM 6445.000 IP 67 mouse.

Material: sheet steel, chromated

Configuration: mouse holder, installation hardware.

Mouse Holder	
Packs of	Part No.
1	**2382000**
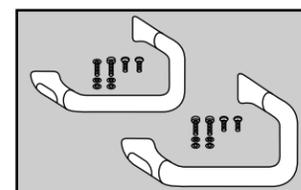
Corner Handle

Supply includes: Packs of 4 handle holders, 2 handle tubes, assembly parts.

Corner Handle	
Packs of	Part No.
1 set	**6107000**

Mounting on enclosure corner

Ø 6.5
163
131.5
131.5
45°
92
(85)
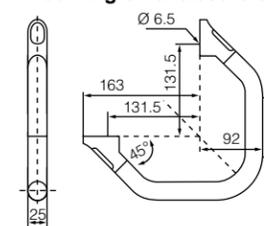
Mounting on straight surfaces (90° rotation of handle holder)

153
25
217
Ø 6.5
45°
132
153

U Handle

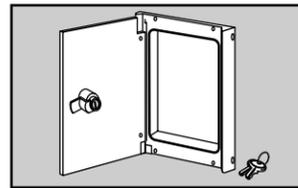**Supply includes:** packs of 2 handle holders, 1 handle tube, assembly parts.

U Handle		
For front panel dimensions	Packs of	Part No.
7 U	1 set	6107100
19"/482.6 mm	1 set	6107200

CP 6107100 Mounting on straight surfaces (for front panel size 7U)

**CP 6107200 Mounting on straight surfaces for 19"/482.6 mm**

Interface Box

The Rittal interface box provides secure accommodation for all standard computer ports, disk drives and sockets. The lockable metal cover provides a high mechanical load-bearing capacity, protects against unauthorized access and ensures an increased shielding effect for the installed equipment.

Material:
Frame: extruded aluminum section
Mounting tray: sheet steel, 1.5 mm
Cover: aluminum, 3.0 mm

Interface Box	
	Part No.
No socket	2482000

Surface finish:
Frame and mounting tray: powder coated in RAL 7035 light grey
Cover: natural anodized

Supply includes: frame with hinged cover, cam with lock insert no. 3524 E, mounting tray including seal and installation hardware.
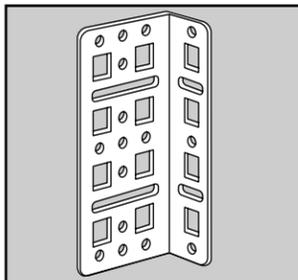
Mounting Bracket/ Mounting Plate

For universal interior installation. Allows for installation of additional Rittal accessories and customer supplied components.

Material: sheet steel, zinc plated, passivated

Supply includes:
4 mounting brackets or mounting plates 12 self-tapping screws M5 x 10 mm

Additional accessories: screws for attaching to the screw channels of the VIP 6000 command panel, Part No. 2504000 (M5 x 10 mm), packs of 500.

Mounting bracket/Mounting plate	
	Part No.
Mounting bracket	4597000
Mounting plate	4532000

Mounting plate

Mounting bracket
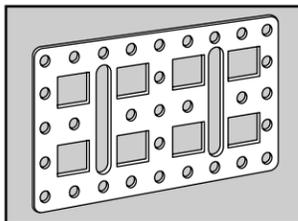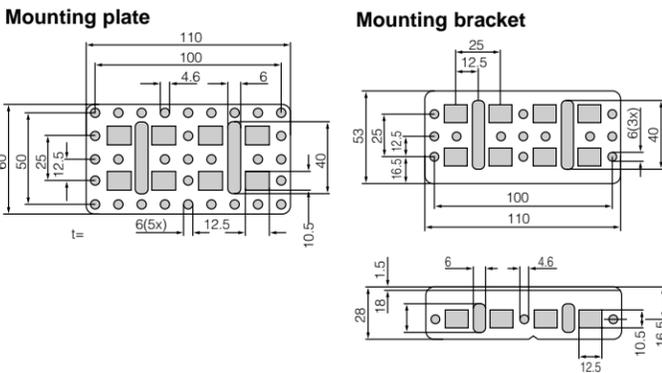
Door Stop For VIP 6000

To secure the open panel.
• For mounting at the bottom.
• The installation height is only reduced by 10 mm.
• Opening angle adjustable up to approx. 120°

Material: sheet steel, zinc plated, passivated.

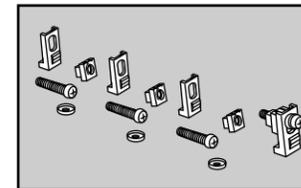| Door Stop For VIP 6000	
	Part No.
Stay	6045000
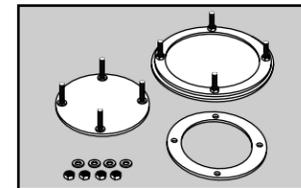
Cover Plate

For secure sealing of an unused support arm connection in the enclosure (CP-L, CP-XL).

Material: sheet steel, clear chromate

Configuration: cover plate with gasket, including installation hardware.

Cover Plate		
Support arm connection	Packs of	Part No.
CP 6000	1	6505000
CP 6500	1	6505500

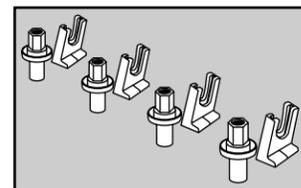## Mounting Kit

For installation of:
• aluminum front panels
• control panels
• keyboards
in keyboard trays and keyboard housings.
Packs of 30, including clip-in clamps, cage nuts, screws, washers.

Mounting Kit	
Thread	Part No.
M4	6058000
M5	6053000

For installation of control panels with studs, only clip-in clamps are needed.
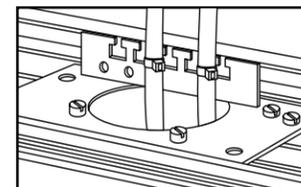
Mounting Kit For Threaded Bolts

for fastening
• aluminum front panels
• control panels
• keyboards
to VIP 6000 operator and keyboard housings with threaded bolts.

Mounting Kit	
Thread	Part No.
M4	6058500
M5	6053500

Cable Clamping Bracket For Operator Housing

To fit support arm cutout CP-L and CP-XL. Cable clamping optionally via:
• cable clamps
• cable ties for quick assembly SZ 2597.000
• commercially available cable ties.
Bracket height = 25 mm with fitted 40 mm C rail.

Cable Clamping Bracket	
	Part No.
Cable clamping bracket	6052000

Material: sheet steel, zinc plated, passivated.

Supply includes: 1 cable clamping bracket, 1 C rail 2 self-tapping screws M5 x 10 mm.
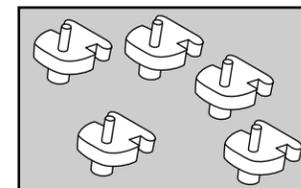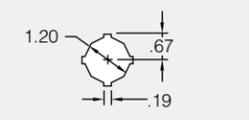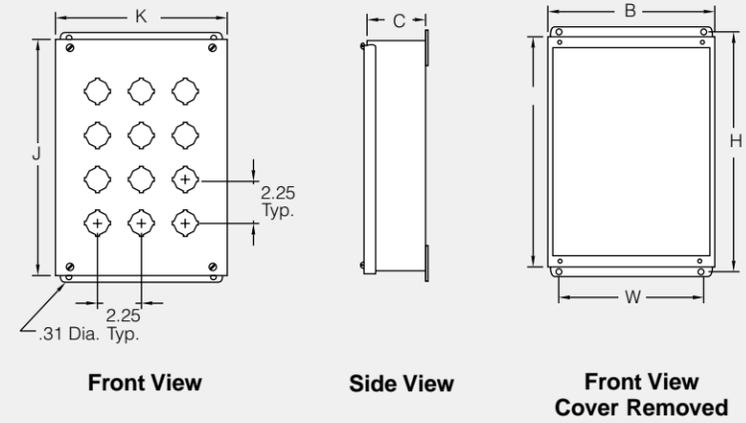
Cable Tie Fastener

For all commercially available cable ties up to a width of 4.8 mm. The fastener is inserted into the screw channel and fixed by hammering down the split rivet.
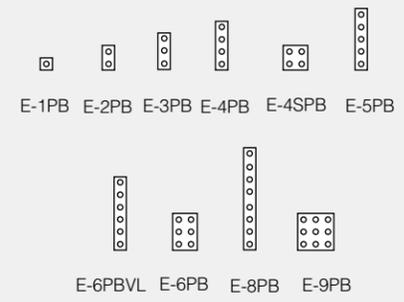
Material: polyamide 6.6

Cable Tie Fastener	
Packs of	Part No.
100	6059000

Technical Specifications
Standard Pushbutton Boxes

Front View　**Side View**　**Front View Cover Removed**

Standard 4-Way Keyed Pushbutton Hole Detail

E-1PB　E-2PB　E-3PB　E-4PB　E-4SPB　E-5PB

E-6PBVL　E-6PB　E-8PB　E-9PB

Hole Arrangement Centered On Cover

Pushbutton Box							
Part No.	Outside dimensions (inches)			Mounting centers		Cover size	
	H	W	D	H	W	J	K
E 1PB	3.50	3.25	2.75	4.00	2.38	3.81	3.56
E 2PB	5.75	3.25	2.75	6.25	2.38	6.06	3.56
E 3PB	8.00	3.25	2.75	8.50	2.38	8.31	3.56
E 4PB	10.25	3.25	2.75	10.75	2.38	10.56	3.56
E 4SPB	7.25	6.25	3.00	7.75	5.38	7.56	6.56
E 5PB	12.50	3.25	2.75	13.00	2.38	12.81	3.56
E 6PBVL	14.75	3.25	2.75	15.25	2.38	15.06	3.56
E 6PB	9.50	6.25	3.00	10.00	5.38	9.81	6.56
E 8PB	20.25	3.25	2.75	20.75	2.38	20.56	3.56
E 9PB*	9.50	8.50	3.00	10.00	7.63	9.81	8.81

* Can be mounted to a Rittal Electromate column and base.

Technical Specifications
Slim Pushbutton Boxes

Front View　**Side View**　**Front View Cover Removed**

Standard 4-Way Keyed Pushbutton Hole Detail
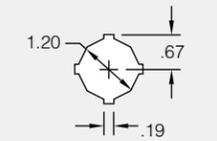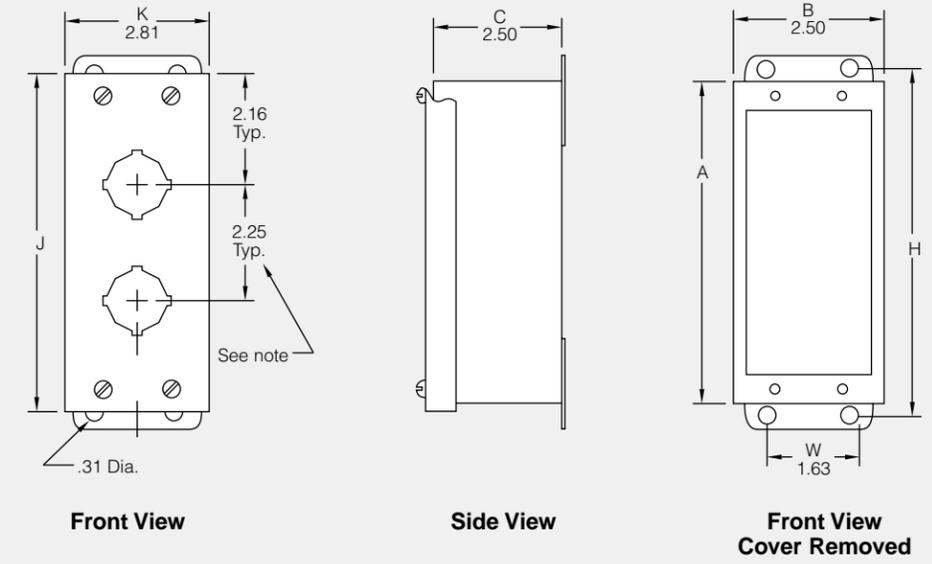
E-1PBSL　E-2PBSL　E-3PBSL　E-4PBSL　E-6PBSL

Hole Arrangement Centered On Cover

Pushbutton Box							
Part No.	Outside dimensions (inches)			Mounting centers		Cover size	
	H	W	D	H	W	J	K
E 1PBSL	4.00	2.50	2.50	4.50	1.63	4.31	2.81
E 2PBSL	6.25	2.50	2.50	6.75	1.63	6.56	2.81
E 3PBSL	8.50	2.50	2.50	9.00	1.63	8.81	2.81
E 4PBSL	10.75	2.50	2.50	11.25	1.63	11.06	2.81
E 6PBSL*	16.25	2.50	2.50	16.75	1.63	16.56	2.81

* Add an additional 1" between pushbutton holes at center of enclosure.

Technical Specifications

Miniature Pushbutton Boxes
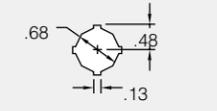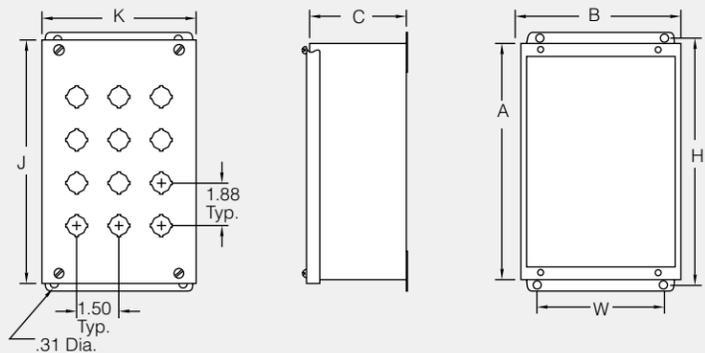
Front View Cover Assembled

Side View

Front View Cover Removed

Standard 4-Way Keyed Pushbutton Hole Detail

E-1PBGM E-2PBGM E-3PBGM E-4PBGM E-6PBGM

Hole Arrangement Centered On Cover

Pushbutton Box							
Part No.	Height	Width	Depth	Mounting centers		Cover size	
	A	B	C	H	W	J	K
E 1PBGM	3.25	2.75	3.50	3.75	1.88	3.56	3.06
E 2PBGM	5.13	2.75	3.50	5.63	1.88	5.44	3.06
E 3PBGM	7.00	2.75	3.50	7.50	1.88	7.31	3.06
E 4PBGM	8.88	2.75	3.50	9.38	1.88	9.19	3.06
E 6PBGM*	8.50	5.00	4.25	9.00	4.13	8.81	5.31

* Can be mounted to a Rittal Electromate column and base.
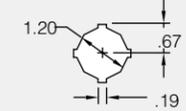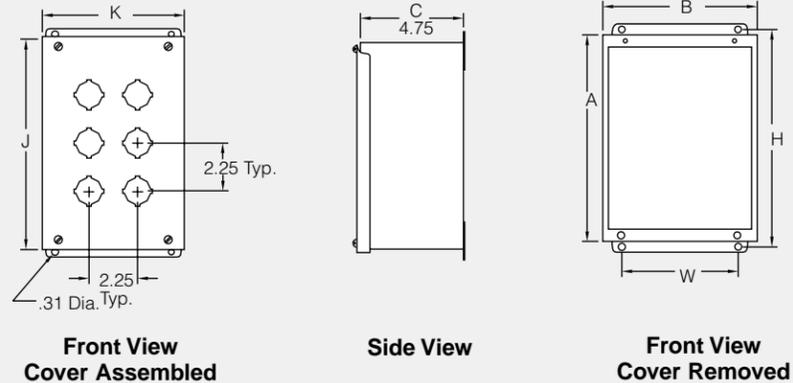
Extra Deep Pushbutton Boxes

Front View Cover Assembled

Side View

Front View Cover Removed

Standard 4-Way Keyed Pushbutton Hole Detail

E-1PBXD E-2PBXD E-3PBXD E-4PBXD E-6PBXD

Hole Arrangement Centered On Cover

Pushbutton Box							
Part No.	Height	Width	Depth	Mounting centers		Cover size	
	A	B	C	H	W	J	K
E 1PBXD	4.00	4.00	4.75	4.50	3.13	4.31	4.31
E 2PBXD	6.00	4.00	4.75	6.50	3.13	6.31	4.31
E 3PBXD	8.00	4.00	4.75	8.50	3.13	6.31	4.31
E 4PBXD	10.00	4.00	4.75	10.50	3.13	10.31	4.31
E 6PBXD*	9.50	6.25	4.75	10.00	5.38	9.81	6.56

* Can be mounted to Rittal Electromate column and base.

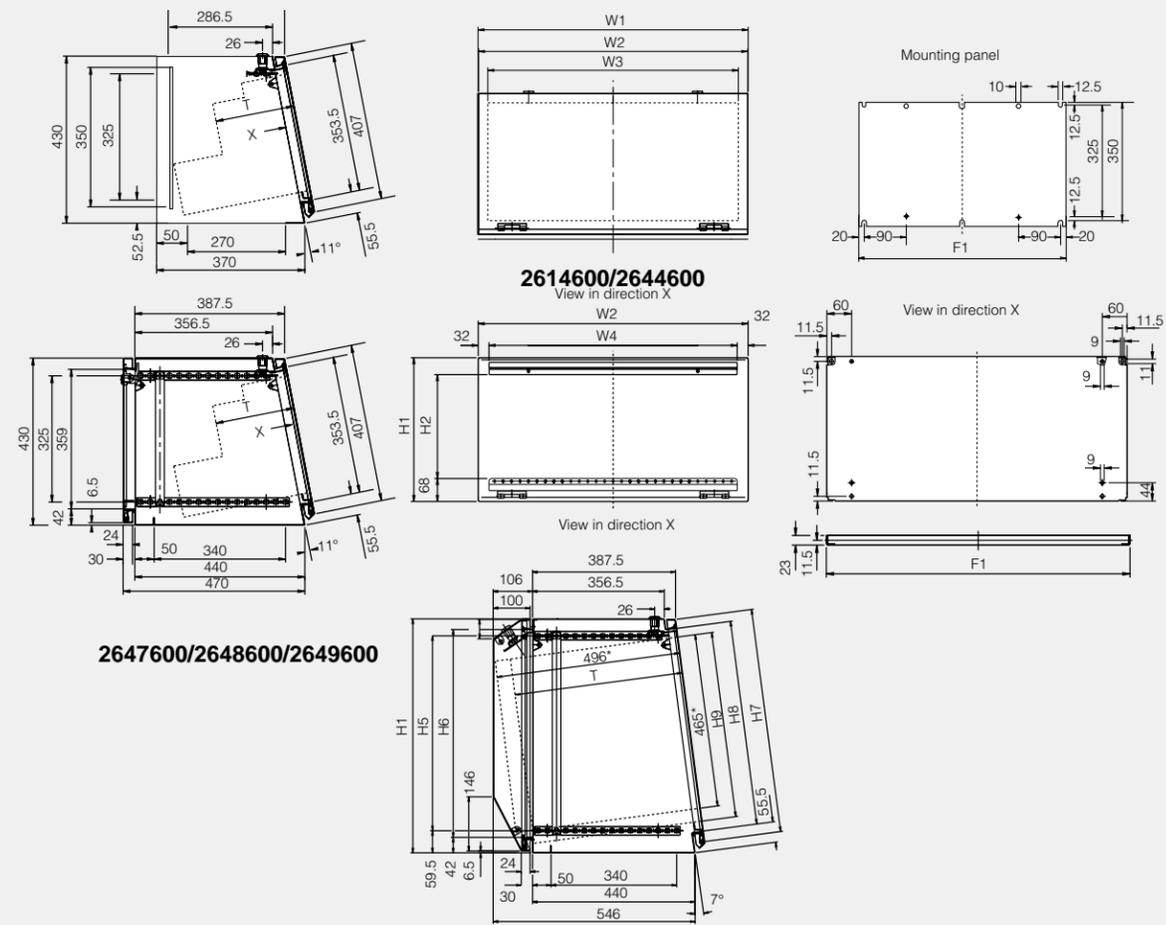## Technical Specifications

Sloping Front Pushbutton Boxes

Section X-X

Side View

Cover Detail

E-1PBA E-2PBA E-3PBA E-4PBA E-4SPBA E-6PBA E-9PBA
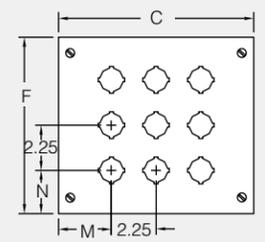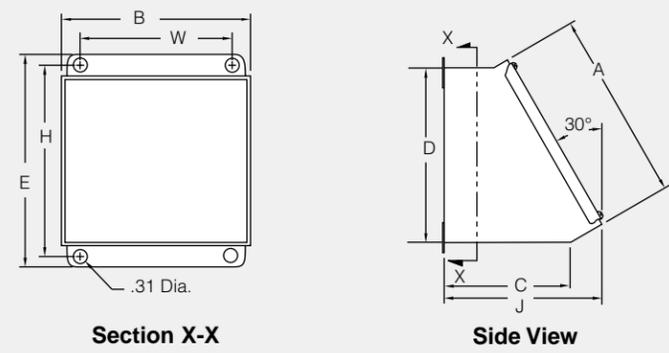
Hole Arrangement
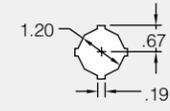
Standard 4-Way Keyed Pushbutton Hole Detail

Pushbutton Box												
Part No.	Outside dimensions (inches)			Height of base	Overall height	Mounting centers		Cover size		Hole location		
	H	W	D	D	E	H	W	F	G	M	N	J
E 1PBA	3.50	3.25	4.88	3.53	4.53	4.03	2.38	3.81	3.56	1.78	1.91	3.38
E 2PBA	3.50	5.50	4.88	3.53	4.53	4.03	4.63	3.81	5.81	1.78	1.91	3.38
E 3PBA	3.50	7.75	4.88	3.53	4.53	4.03	6.88	3.81	8.06	1.78	1.91	3.38
E 4PBA	3.50	10.00	4.88	3.53	4.53	4.03	9.13	3.81	10.31	1.78	1.91	3.38
E 4SPBA	7.25	6.25	6.75	6.78	7.78	7.28	5.38	7.56	6.56	2.16	2.66	5.25
E 6PBA	7.25	8.50	6.75	6.78	7.78	7.28	7.63	7.56	8.81	2.16	2.66	5.25
E 9PBA	9.50	8.50	7.88	8.75	9.75	9.25	7.63	9.81	8.81	2.16	2.66	6.38

OPERATOR INTERFACE

Technical Specifications
AP Desk Consoles, Bottom Section

2600600/2610600

2620600/2640600/2650600

2600600/2620600

2610600/2640600/2650600

Enclosure						
Height (H1)	inches	26.38	26.38	26.38	26.38	26.38
	mm	670	670	670	670	670
Width (W1)	inches	31.50	31.50	47.24	47.24	62.99
	mm	800	800	1200	1200	1600
Depth (D)	inches	15.75	19.69	15.75	19.69	19.69
	mm	400	500	400	500	500
Part No.		2600600	2610600	2620600	2640600	2650600
W3		724	724	1124	1124	1524
W4		-	-	1100	1100	1500
W5		-	-	525	525	725
F1		715	702	1115	1102	1502
No. doors		1	1	2	2	2
Weight	lbs	95.7	115.5	137.5	165.2	211.5
	kg	43.5	52.5	62.5	75.0	96.0

Technical Specifications
AP Desk Consoles, Center Section

2613200/2643200/2653200

Inside View Of Lid

2611200/2641200

Inside View Of Lid

Enclosure						
Height	inches	7.87	7.87	7.87	7.87	7.87
	mm	200	200	200	200	200
Width (W1)	inches	31.50	31.50	47.24	47.24	62.99
	mm	800	800	1200	1200	1600
Depth	inches	15.75	19.69	15.75	19.69	19.69
	mm	400	500	400	500	500
Part No.		2611200	2613200	2641200	2643200	2653200
W2		797	797	1197	1197	1597
W3		742	742	1142	1142	1542
W4		640	640	1040	1040	1440
W5		660	660	1060	1060	1460
W6		560	560	960	960	1360
W7		700	700	1100	1100	1500
W8		733	733	1133	1133	1533
W9		500	500	900	900	2 x 650
Weight	lbs	56.1	67.3	78.1	93.7	116.2
	kg	25.5	30.6	35.5	42.6	52.8

Technical Specifications

AP Desk Consoles, Top Section

2612600/2642600

Mounting panel

2614600/2644600

View in direction X

View in direction X

2647600/2648600/2649600

Enclosure								
Height	inches	16.93	16.93	16.93	16.93	24.80	24.80	24.80
	mm	430	430	430	430	630	630	630
Width (W1)	inches	31.50	31.50	47.24	47.24	31.50	47.24	62.99
	mm	800	800	1200	1200	800	1200	1600
Depth	inches	15.75	19.69	15.75	19.69	23.62	23.62	23.62
	mm	400	500	400	500	600	600	600
Part No.		2612600	2614600	2642600	2644600	2647600	2648600	2649600
H1		422	422	422	422	622	622	622
H2		304	304	304	304	504	504	504
H3		-	-	-	-	623.5	623.5	623.5
H4		-	-	-	-	548	548	548
H5		-	-	-	-	525	525	525
H6		-	-	-	-	559	559	559
H7		-	-	-	-	607	607	607
H8		-	-	-	-	550	550	550
H9		-	-	-	-	500	500	500
W2		797	797	1197	1197	797	1197	1597
W3		742	742	1142	1142	742	1142	1542
W4		733	733	1133	1133	733	1133	1533
W5		-	-	-	-	732	1132	1532
W6		-	-	-	-	500	900	1300
T rotatable, 3HU		300	300	300	300	300	500	500
T rotatable, 6HU		195	195	195	195	195	395	395
T rotatable, max. height		110	110	110	110	310	310	310
T fixed, max. height		300	430	300	430	455	455	455
F1		715	727	1115	1127	727	1127	1527
G1		-	348	-	348	548	548	548
Weight	lbs	49.5	67.3	88.0	105.6	105.1	141.68	190.9
	kg	22.5	30.6	40.0	48.0	47.8	64.4	86.8

Technical Specifications

AP Desk Console Systems

2670600/2672600

Not for AP 2670600

2666600/2668600

2666600/2668600/2670600/2672600

No hinge for AP 2666.600/ AP 2668.600
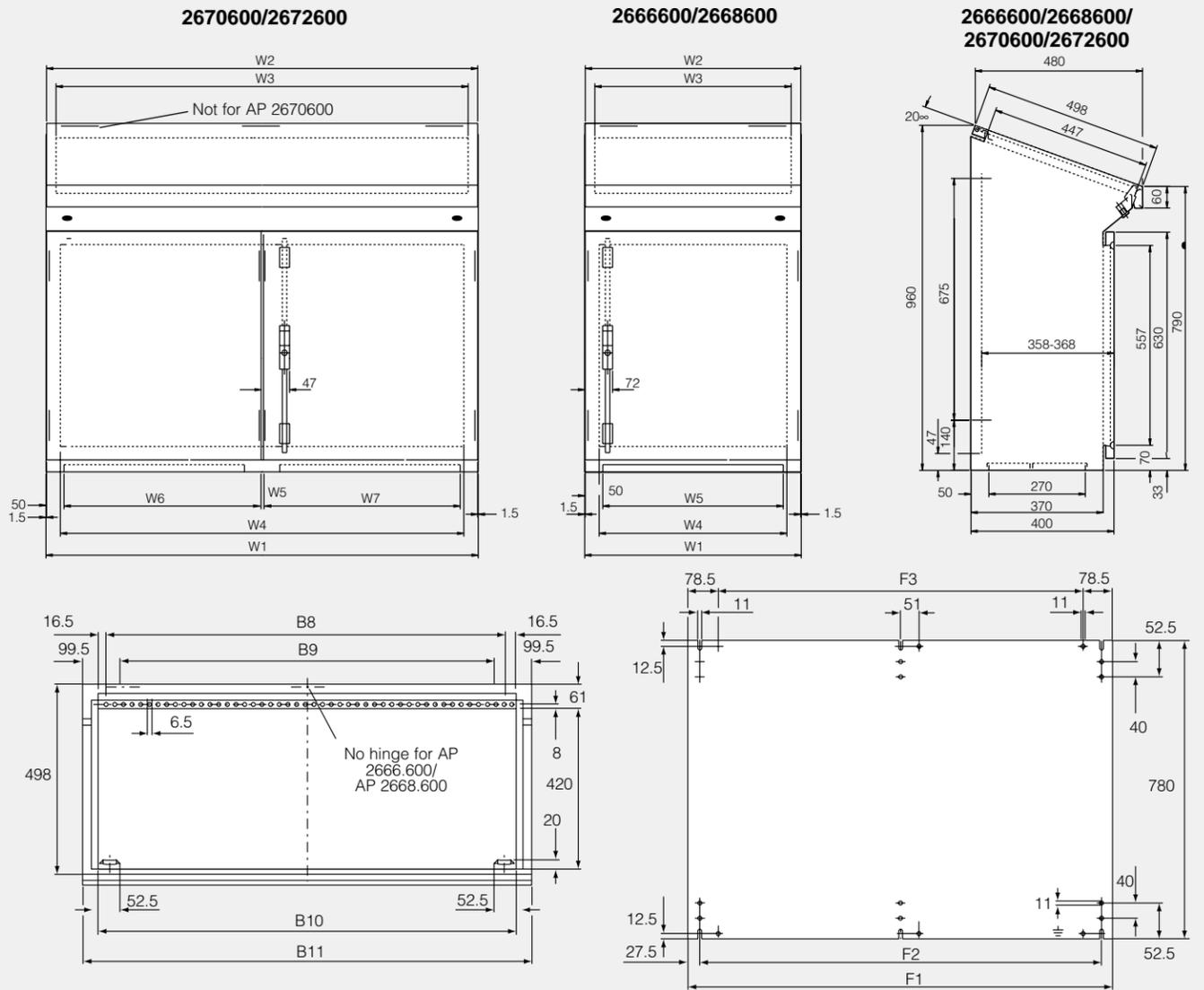
Enclosure					
Height	inches	37.80	37.80	37.80	37.80
	mm	960	960	960	960
Width (W1)	inches	23.62	31.50	39.37	47.24
	mm	600	800	1000	1200
Depth	inches	15.75/18.90	15.75/18.90	15.75/18.90	15.75/18.90
	mm	400/480	400/480	400/480	400/480
Part No.		2666600	2668600	2670600	2672600
W2		597	797	997	1197
W3		544	744	944	1144
W4		524	724	924	1124
W5		500	700	900	1100
W6		-	-	495	595
W7		-	-	497	597
W8		500	700	900	1100
W9		398	598	798	998
W10		535	735	935	1135
W11		597	797	997	1197
F1		530	730	930	1130
F2		475	675	875	1075
No. doors		1	1	2	2
Weight	lbs	113.3	137.5	174.9	198.0
	kg	51.5	62.5	79.5	90.0

Technical Specifications

AP Universal Console Systems
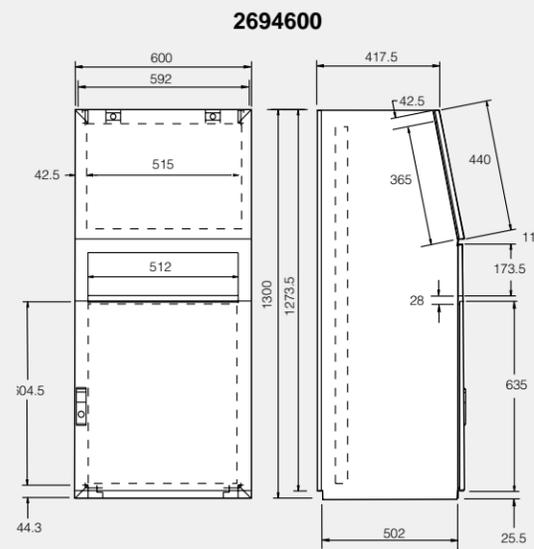
2694600

Desk Unit
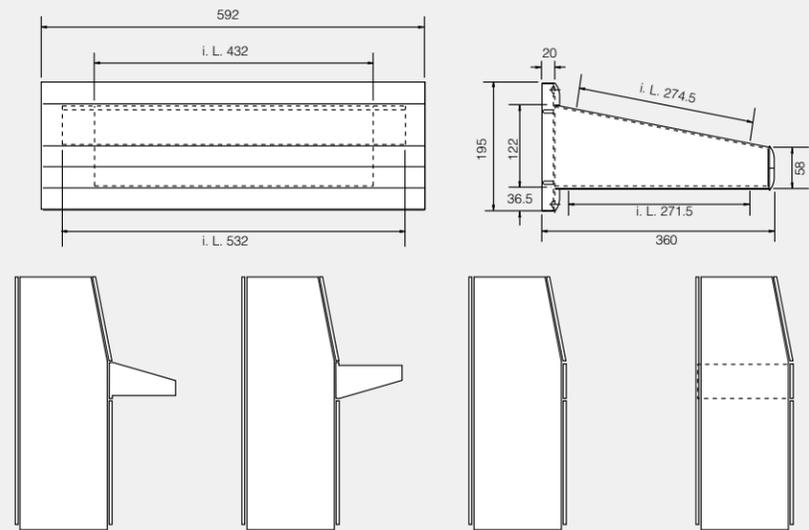
AP 2694 + 2696   AP 2694 + 2696   AP 2694 + MC 4702   AP 2694 + MC 4757

Console		
Part No.	Dimensions H x W x D	Version
2694600	51.18" x 23.62" x 19.69"	Top lid,
	1300 x 600 x 500 mm	shorted front door

Technical Specifications

Consoles, Pedestals and Bases
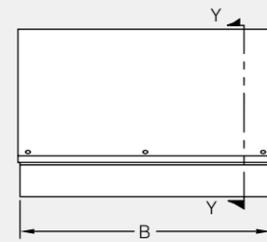
Front View
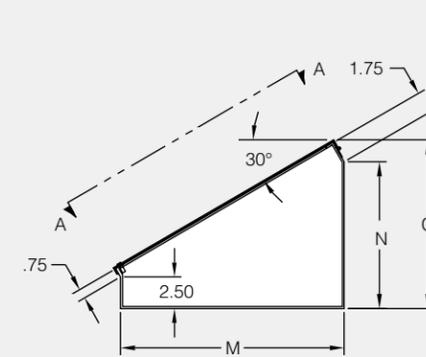
Section Y-Y
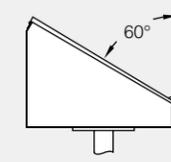
Section Y-Y
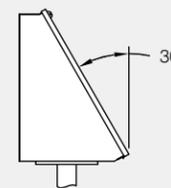
Console can be positioned at either 60° or 30° angle
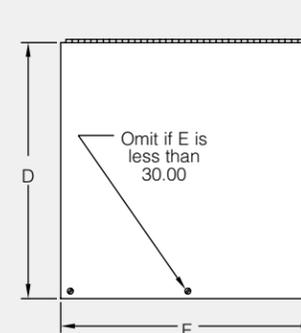
View A-A
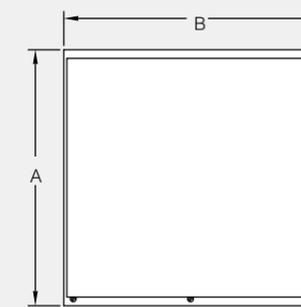
View A-A
(with cover removed)

Console						
Part No.	Outside dimensions (inches)			Cover size		
	H	W	D	D	E	M	N
	A	B	C				
E 8C8	8.00	8.00	7.09	8.31	8.31	7.44	5.63
E 8C12	8.00	12.00	7.09	8.31	12.31	7.44	5.63
E 8C16	8.00	16.00	7.09	8.31	16.31	7.44	5.63
E 12C12	12.00	12.00	9.09	12.31	12.31	10.91	7.63
E 12C16	12.00	16.00	9.09	12.31	16.31	10.91	7.63
E 12C20	12.00	20.00	9.09	12.31	24.31	10.91	7.63
E 16C20	16.00	20.00	11.29	16.31	70.31	14.38	9.63
E 16C24	16.00	24.00	11.09	16.31	24.31	14.38	9.63

Technical Specifications
Consoles, Pedestals and Bases
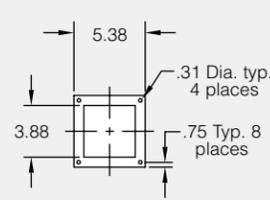
4x4 Top Column Flange
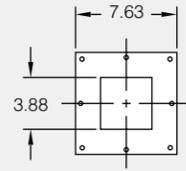
4x4 Bottom Column Flange See Base For Hole Locations
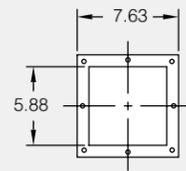
6x6 Bottom Column Flange See Base For Hole Locations
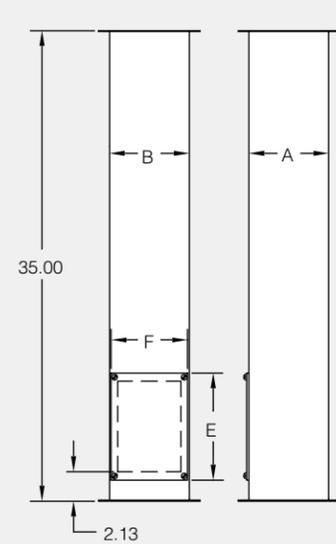
Column
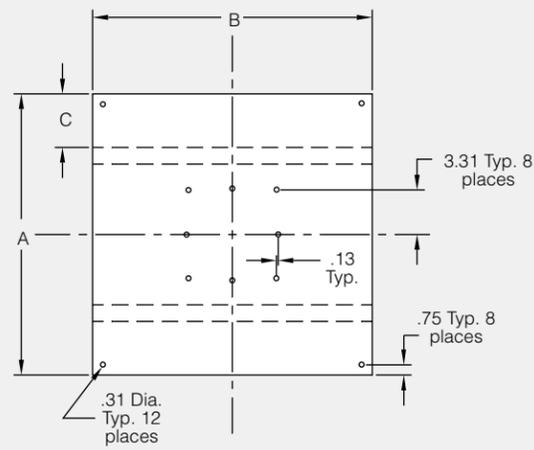
Base Top View

Base End View

Pedastal				
Part No.	Outside dimensions (inches)		Cover plate	
	A	B	E	F
E 44CCOL	4.00	4.00	7.00	3.75
E 66CCOL	6.00	6.00	7.75	5.75

Base			
Part No.			Stiffener location
	A	B	E
E 18SBASE	18.00	18.00	3.00
E 24SBASE	24.00	24.00	5.00

Technical Specifications
Series 9 Operator Enclosures
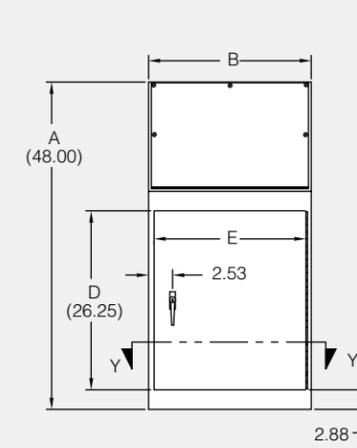
Front View
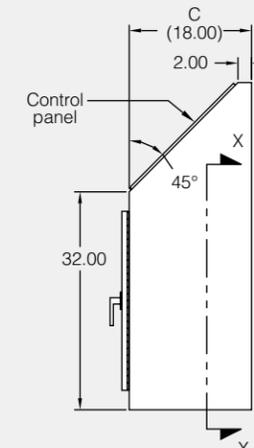
Side View
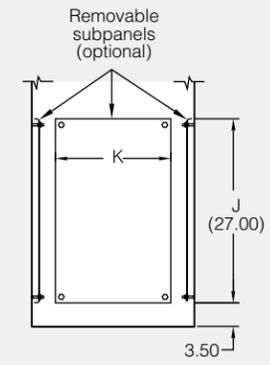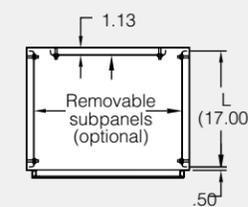
Section X-X

Section Y-Y
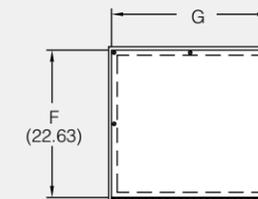
Control Panel Detail

Console												
Part No.	H	W	D	Door size panel		Control panel		Rear mounting panel	Rear mounting panel size		Side mounting	Side mounting panel size		Caster kit
	A	B	C	D	E	F	G		J	F		J	L	
E C924B	48.00	24.00	18.00	26.25	22.38	23.19	23.19	E 30P20	27.00	17.00	E 30P20	27.00	17.00	E C10C
E C936B	48.00	36.00	18.00	26.25	34.38	22.63	35.19	E 30P30	27.00	27.00	E 30P20	27.00	17.00	E C10C

Technical Specifications

Series 12 Operator Enclosures

Front View   **Side View**   **Section X-X**

Instrument Panel   **Control Panel**   **Access Panel**

**Single Door
Detail A**

**Double Door
Detail B**
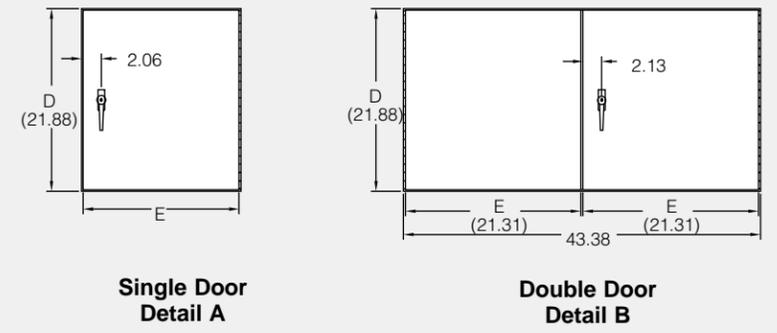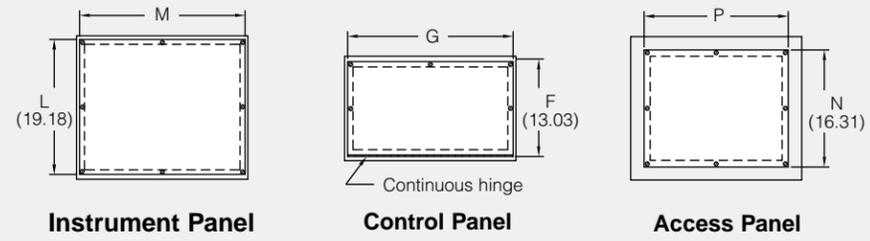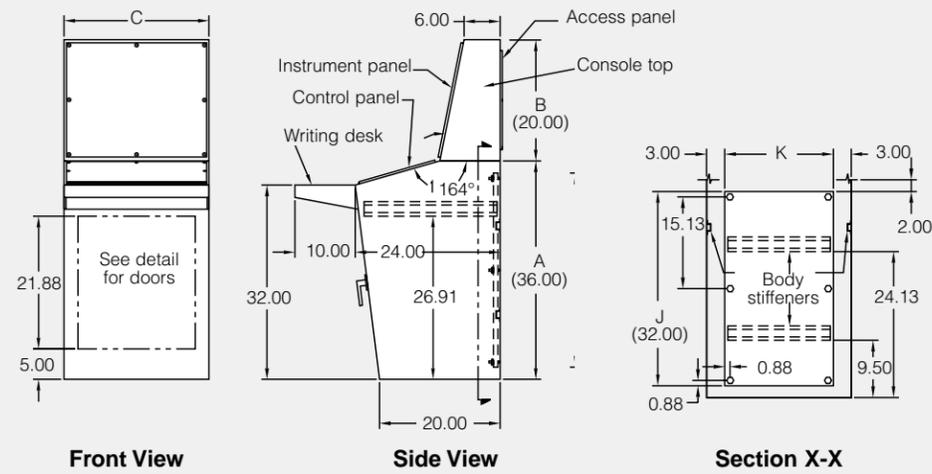
Console													
Body Catalog No.	Body height	Top height	Width	Door size		Control panel		Rear mounting panel size		**Top Catalog No.**	Instrument panel		Access panel
	A	B	C	D	E	F	G	J	K		L	M	N	P
E C12B	36.00	20.00	36.00	21.88	31.94	13.03	35.19	32.00	30.00	**E C12T**	19.19	35.19	20.19	32.19

Technical Specifications

Series 14 Operator Enclosures

Front View   **Side View**   **Back View**

Control Panel

**Section X-X
(Half Panels Installed)
Panel and panel
mounting hardware
shown are optional**

**Section X-X
(Half Panels Installed)
Panel and panel
mounting hardware
shown are optional**

**Section View Showing
Half And Full Panels**
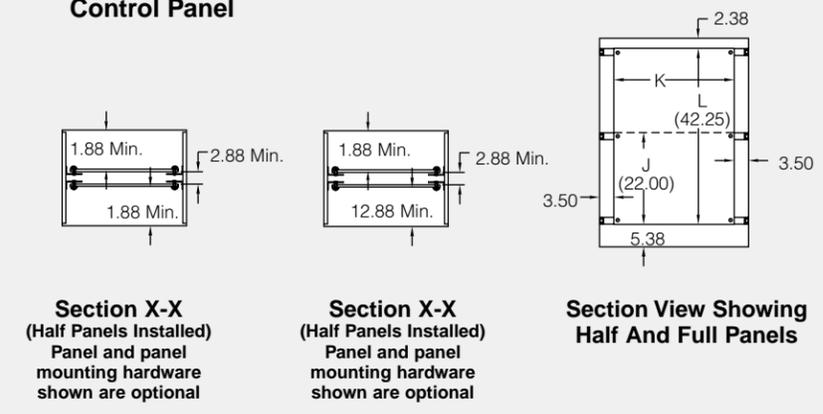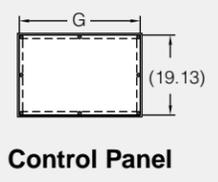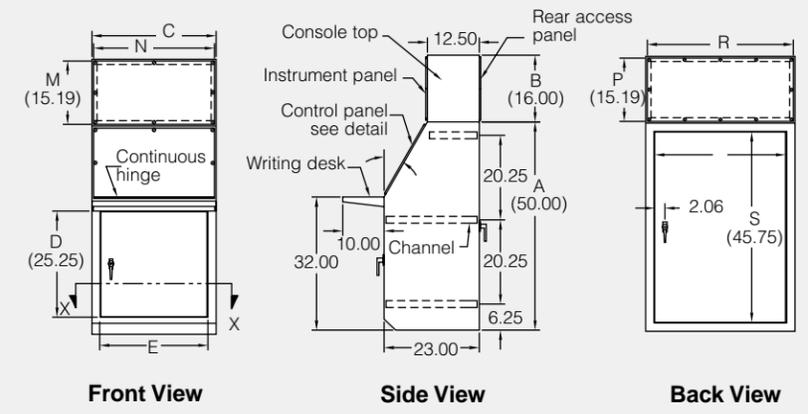
Console									
Body Part No.	**Top Part No.**	Body height	Top height	Width	Front door size		Control panel size		**Half Mounting Panel Part No.**	Half mounting panel size	
		A	B	C	D	E	F	G		J	K
E C14B	**E C14T**	50.00	16.00	24.00	25.25	19.59	19.13	23.19	**E C14P2**	22.00	17.00
E C1436B	**E C1436T**	50.00	16.00	36.00	25.25	31.59	19.13	35.19	**E C1436P2**	22.00	29.00

Console (Continued)											
Full Mounting Panel Part No.	Full mounting panel size		**Swingout Mounting Panel Part No.**	Swingout mounting panel size		Instrument panel size		Access panel size		Full rear door size	
	L	K				M	N	P	R	S	T
E C14P3	42.50	17.00	**E C14P1**	22.00	18.13	15.19	23.19	15.19	23.19	45.75	19.59
E C1436P3	42.50	29.00	**E C1436P1**	22.00	30.13	15.19	35.19	15.19	35.19	45.75	31.59

Technical Specifications
TS8 PC Enclosures

8366000/8368000
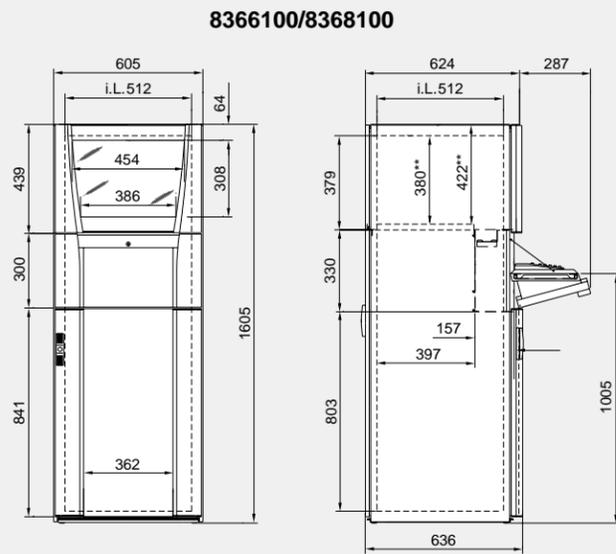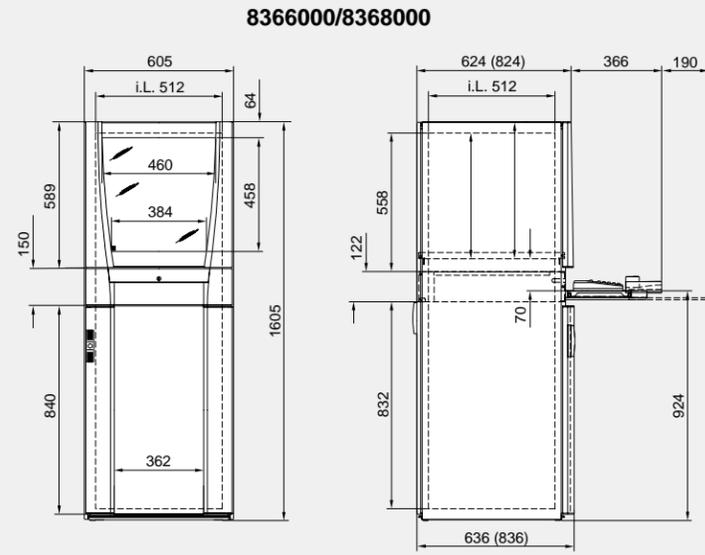
8366100/8368100

Part No.	Exact outside dimensions					
	inches			mm		
	H	W	D	H	W	D
8366000	63	24	25	1600	600	636
8366100	63	24	25	1600	600	636
8368000	63	24	33	1600	600	836
8368100	63	24	33	1600	600	836

Technical Specifications
Standard PC Freestanding Enclosures

With Keyboard Drawer
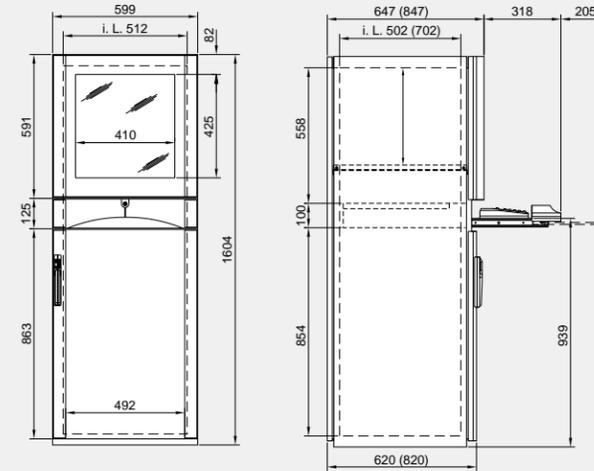
With Keyboard Shelf
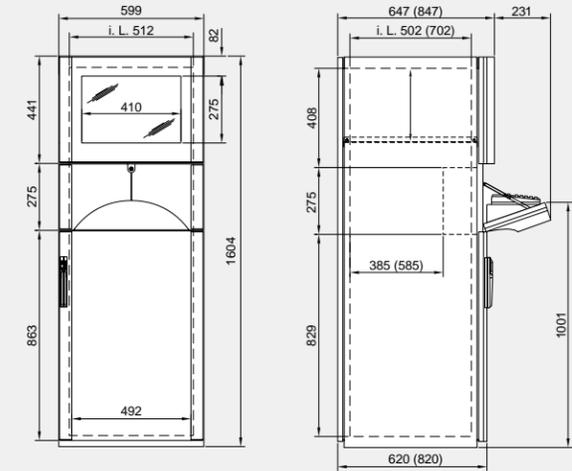
With Console
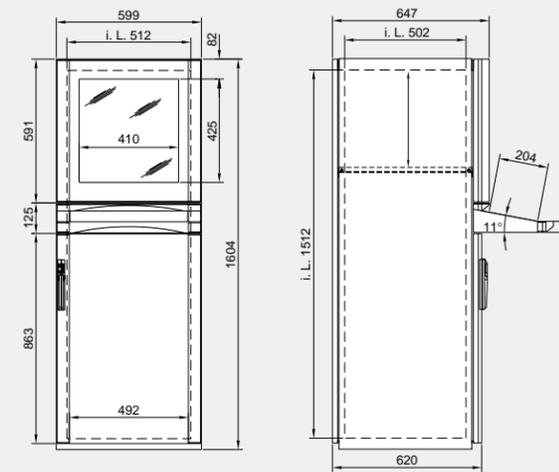
With Drawer/Panel
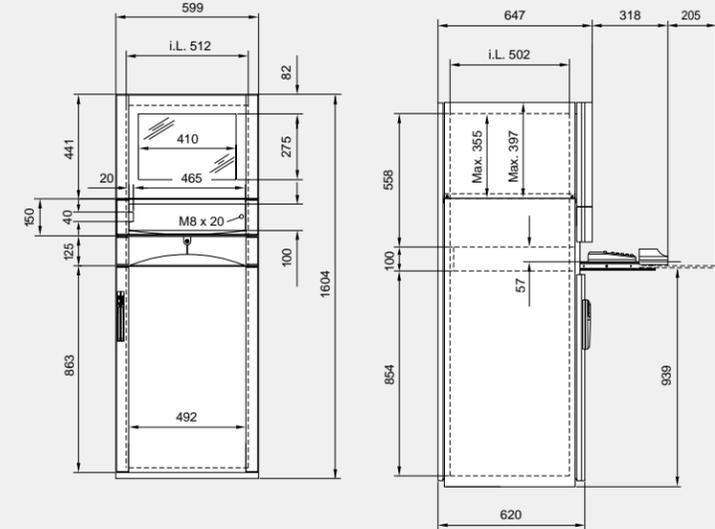
i.L. = available space
HU = available installation height (1HU = 1.75")

Front installation	Packs of	With keyboard drawer (including keyboard bracket)	With keyboard shelf	With console	With keyboard drawer (including keyboard bracket)	With keyboard shelf	With drawer/panel
Part No.	1	4603703*	4603920	4603704	4609703**	4609920	4603913
H inches/mm	-	62.99"/1600 mm	62.99"/1600 mm	62.99"/1600 mm	62.99"/1600 mm	62.99"/1600 mm	62.99"/1600 mm
W inches/mm	-	23.62"/600 mm	23.62"/600 mm	23.62"/600 mm	23.62"/600 mm	23.62"/600 mm	23.62"/600 mm
D inches/mm	-	25.59"/650 mm	25.59"/650 mm	25.59"/650 mm	35.83"/910 mm	33.46"/850 mm	25.59"/650 mm

* Information for PC ValuePack Part Nos. 9968185 and 9968187 as well.

** Information for PC ValuePack Part Nos. 9968186 and 9968188 as well.

Technical Specifications
Standing PC Freestanding Enclosures

With Keyboard Drawer

With Keyboard Shelf
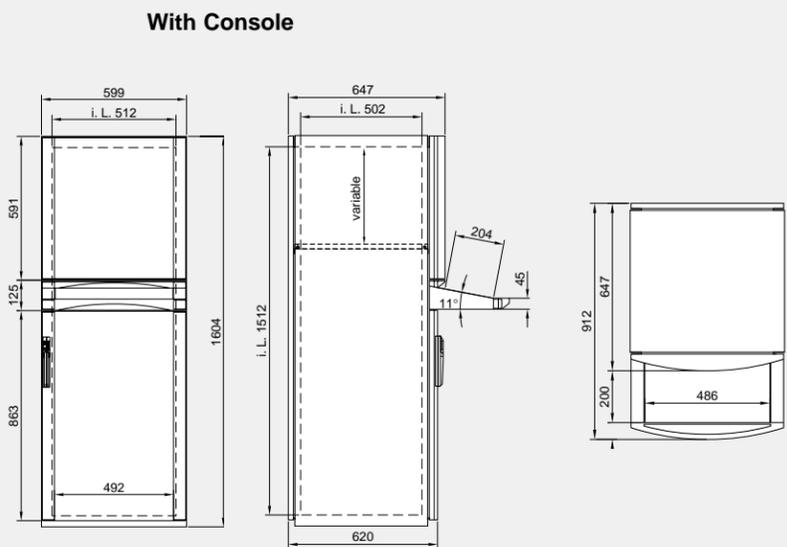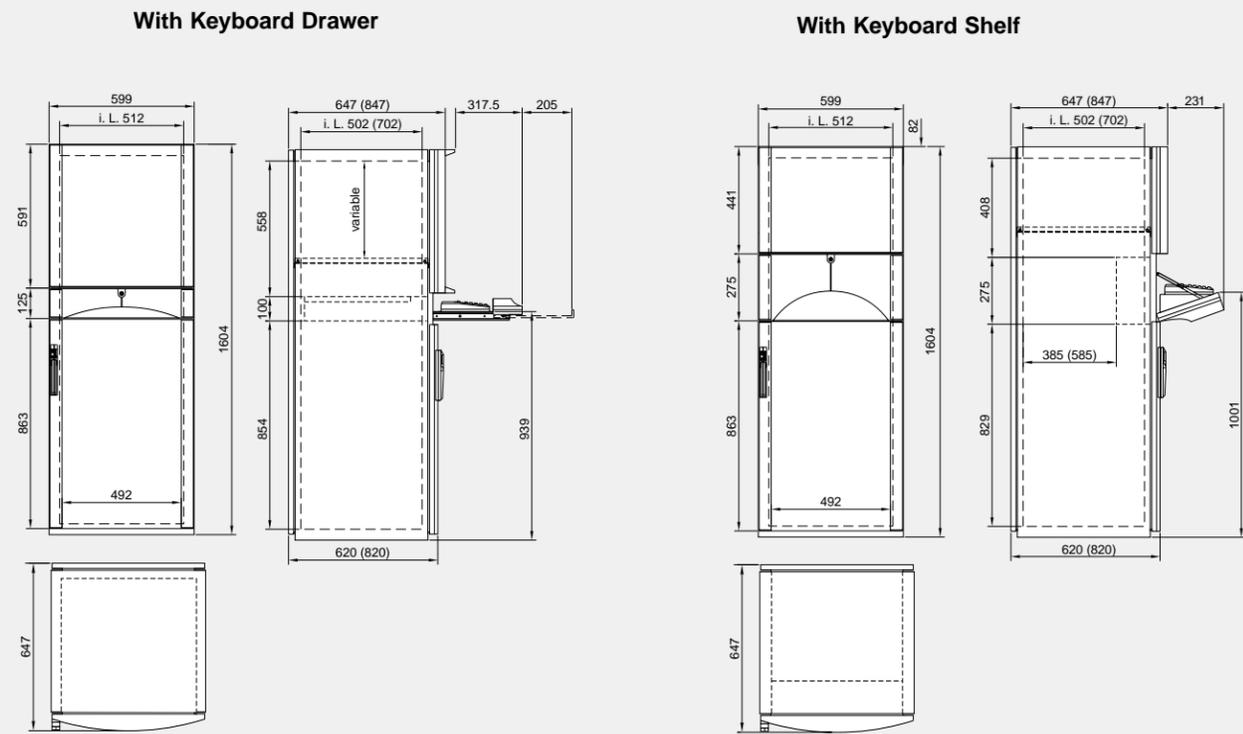
With Console

Enclosure			
Front installation	With keyboard drawer	With keyboard shelf	With console
Part No.	**4603603**	**4603820**	**4603604**
H (inches/mm)	63.0/1600	63.0/1600	63.0/1600
W (inches/mm)	23.6/600	23.6/600	23.6/600
D (inches/mm)	25.6/650	25.6/650	25.6/35.8 (650/910)

Technical Specifications
PC Desktop/Pedestal Enclosures
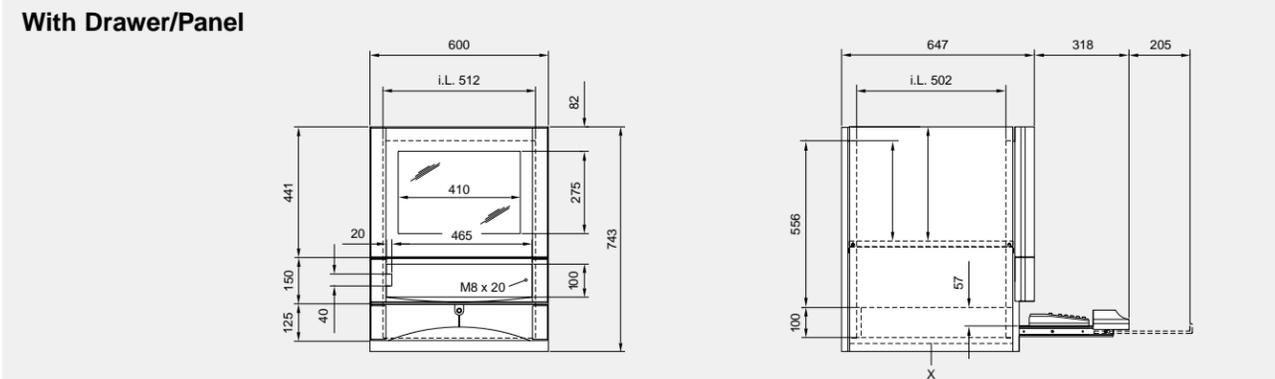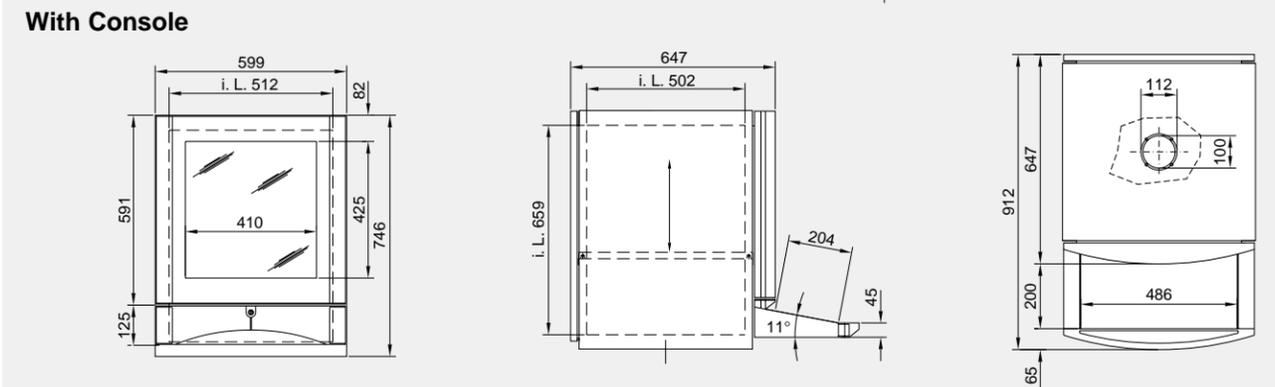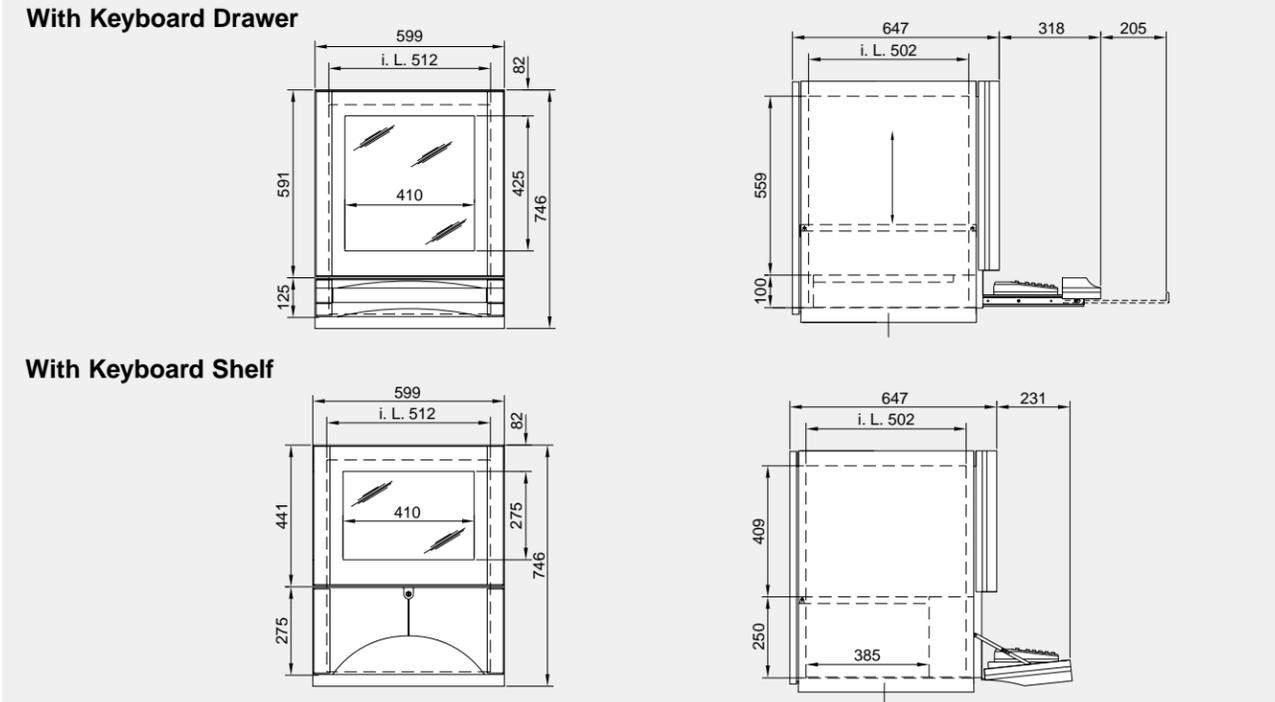
With Keyboard Drawer

With Keyboard Shelf

With Console

With Drawer/Panel

Enclosure					
Front installation	Packs of	With keyboard drawer	With keyboard shelf	With console	With drawer/panel
Part No.	1	**4617703**	**4617920**	**4617704**	**4617913**
H (inches/mm)	-	29.53"/750 mm	29.53"/750 mm	29.53"/750 mm	29.53"/750 mm
W (inches/mm)	-	23.62"/600 mm	23.62"/600 mm	23.62"/600 mm	23.62"/600 mm
D (inches/mm)	-	25.59"/650 mm	25.59"/650 mm	25.59"/650 mm	25.59"/650 mm

Technical Specifications

VIP Command Panel

Front frame, wide

Narrow

Combined

Support arm connections
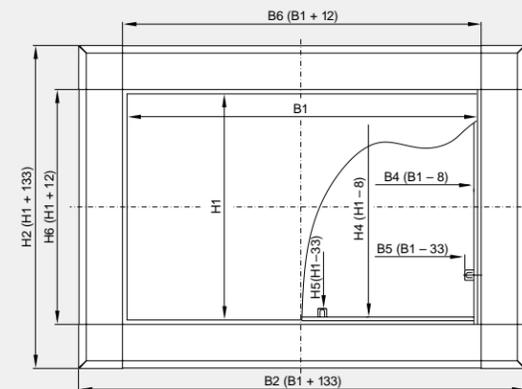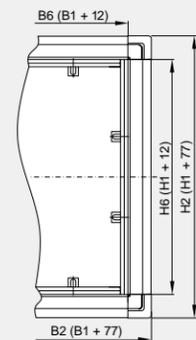
CP-L (CP 6500)
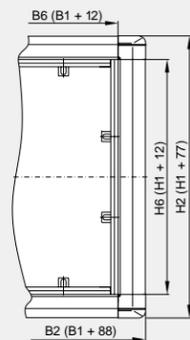
CP-XL (CP 6000)

1 Installation depth 6.10"/155 mm, screw-on
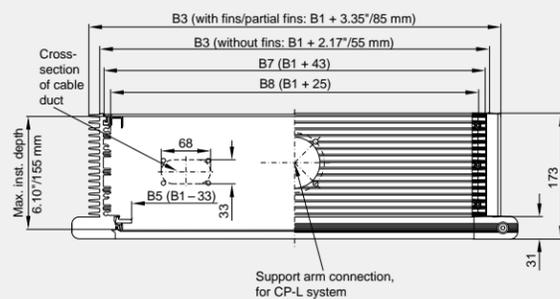
2 Installation depth 7.28"/185 mm, screw-on

Dimensions in brackets refer to narrow and combined front frames

3 Installation depth 7.28"/185 mm, hinged

A = Max. installation space for hinged housings

Height dimensions:
H1 = Height of front panel
H2 = Overall height
H3 = Enclosure height
 (with fins: H1 + 85;
 without fins: H1 + 55)
H4 = Clearance height between
 the enclosure sections
H5 = Clearance height between
 the retaining claws
H6 = Clearance height between
 the front frames
H7 = Height of rear panel
 (H1 + 43)
H8 = Clearance frame, height
 (H1 + 25)

Width dimensions:
B1 = Width of front panel
B2 = Overal width
B3 = Housing width
B4 = Clearance width between
 the enclosure sections
B5 = Clearance width between
 the retaining claws of
 the assembly parts
B6 = Clearance width between
 the front frames
B7 = Width of rear panel
B8 = Clearance frame, width

Technical Specifications

VIP Command Panel

4 Installation depth 11.61"/295 mm, screw-on

5 Installation depth 11.61"/295 mm, hinged

Dimensions in brackets refer to narrow and combined front frames
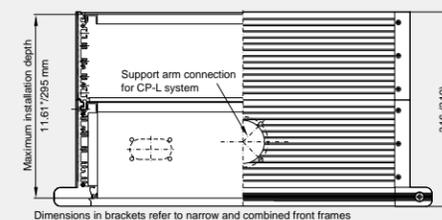
6 Installation depth 12.91"/328 mm, screw-on

7 Installation depth 12.91"/328 mm, hinged

Dimensions in brackets refer to narrow and combined front frames
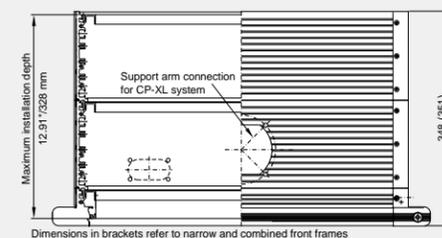
8 Installation depth 17.24"/438 mm, screw-on
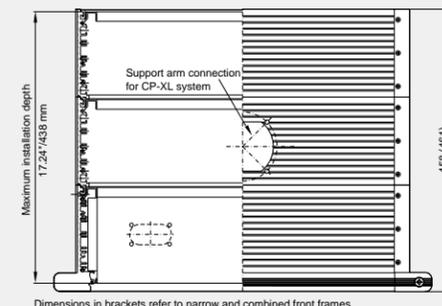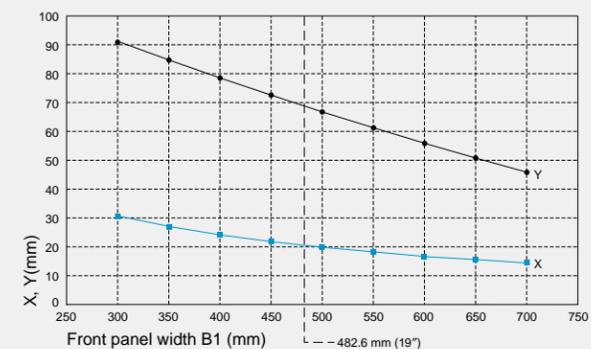
9 Installation depth 17.24"/438 mm, hinged

Dimensions in brackets refer to narrow and combined front frames
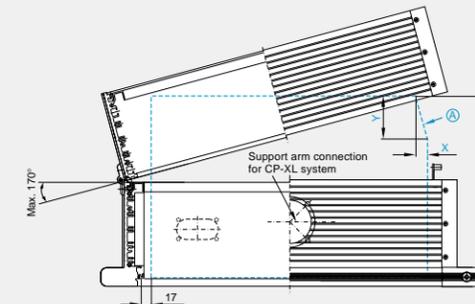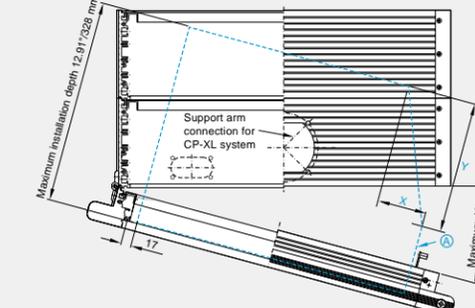
Calculating the swivel mounting space (versions 3 and 5)
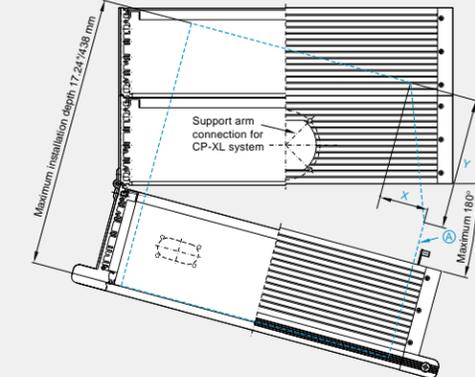
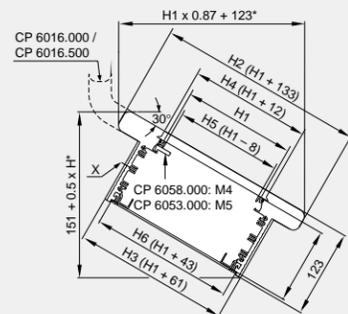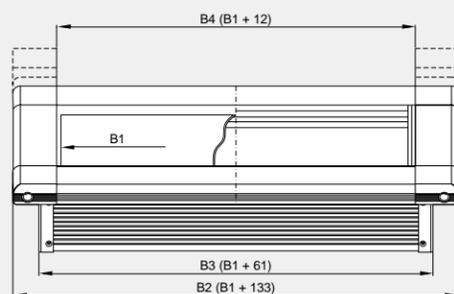**Calculating the swivel mounting space (versions 7 and 9)**
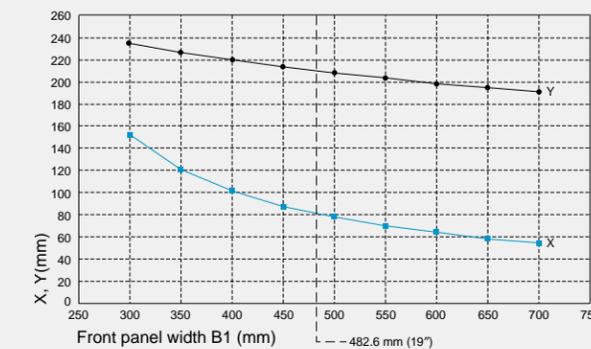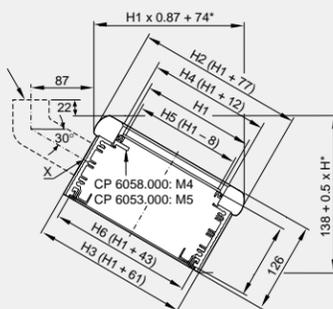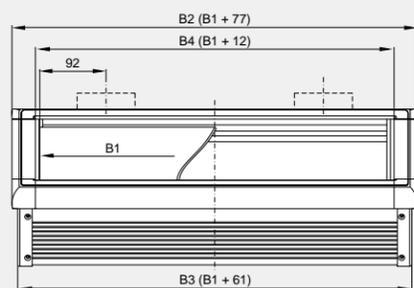
Technical Specifications

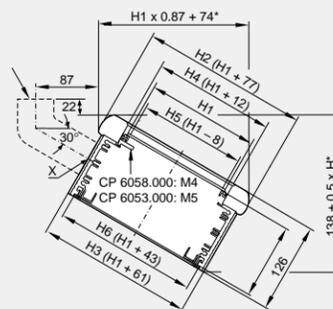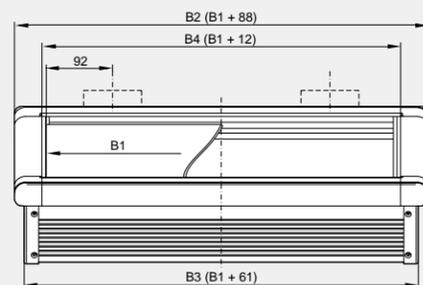**VIP Keyboard Housing**
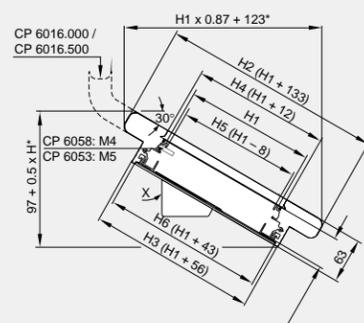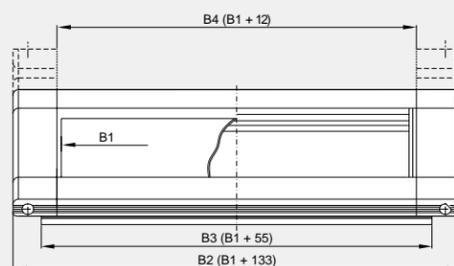
1 Installation depth 105 mm

Front frame, wide

Narrow

Combined

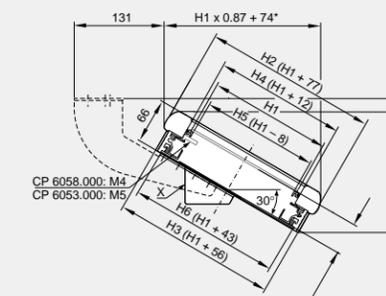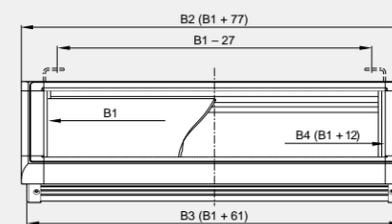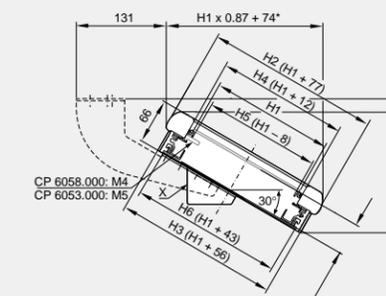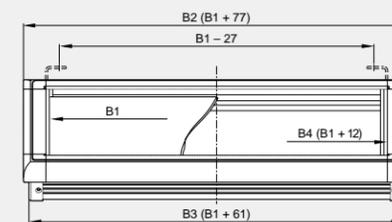**2 Installation depth 44 mm**

Front frame, wide

Technical Specifications

VIP Keyboard Housing

Narrow

Combined

3 Depth 27 mm

Wide front frame, with cable entry
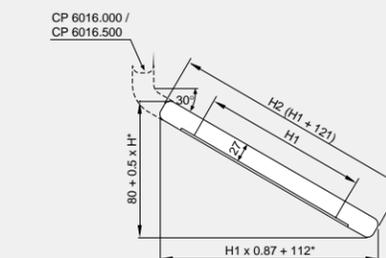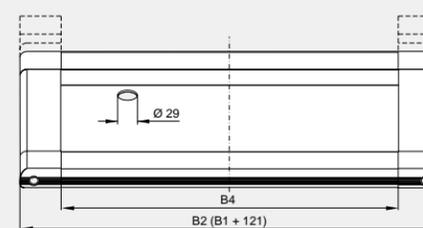
4 Depth 27 mm

Wide front frame, for cable tube, flexible
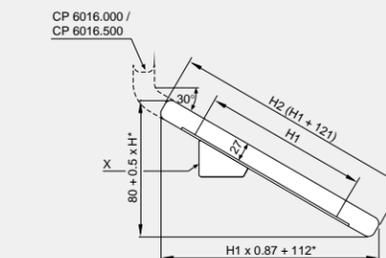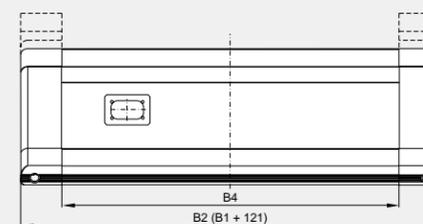
X = Cross-section of cable tube connection
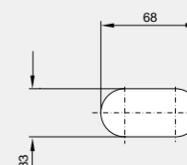
Height dimensions:
H1 = Height of front panel
H2 = Overall height
H3 = Enclosure height
H4 = Clearance height between the front frames
H5 = Clearance height between the enclosure sections
H6 = Height of rear panel

Width dimensions:
B1 = Width of front panel
B2 = Overal width
B3 = Housing width
B4 = Clearance width between the front frames

* applies for angles of 30° to the horizontal

Technical Specifications

VIP Command Panel

Cross member

Front panel 1

H1 Top

H1 Bottom

Front panel 2

Cross mullion
CP 6015000

Sealing bar

Front panel 1

Sealing Bar
CP 6015000

H1 Top

H1 Bottom

Front panel 2

Keyboard connection for wide front frame

Frame connector, rigid, for any keyboard housing

Frame connector, adjustable, for any keyboard housing

CP 6351.009

CP 6351.009

Keyboard connection for narrow or combination front frame

Frame connector hinged for keyboard housing: installation depth 4.13"/105 mm + 1.73"/44 mm

Housing tunnel connector keyboard housing: installation depth 4.13"/105 mm

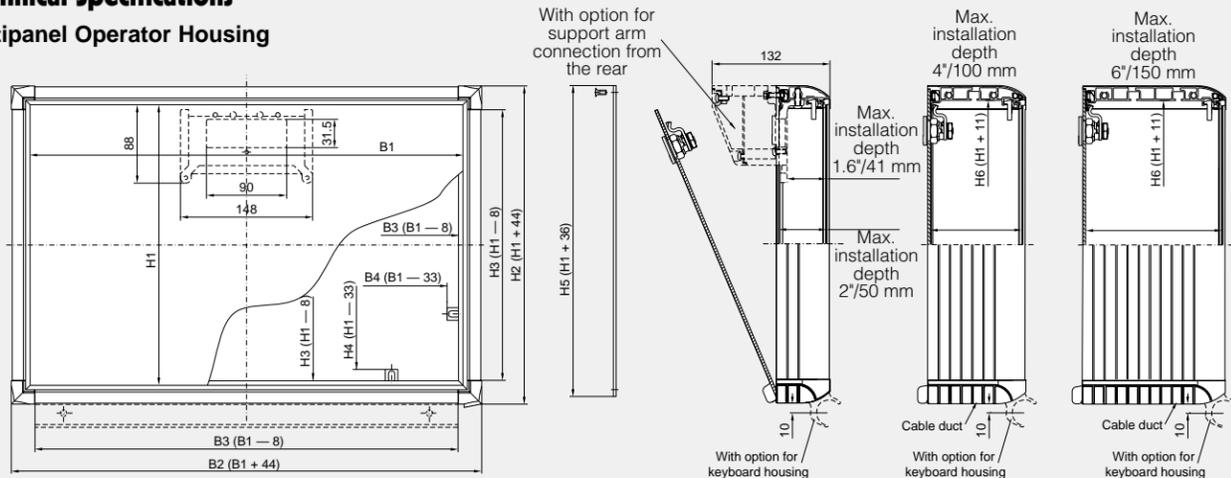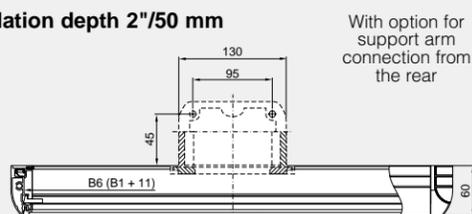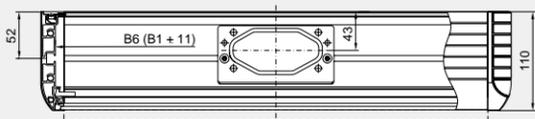Housing arm connector for keyboard housing: installation depth 1.73"/44 mm

---

Front panel fixed from the inside

Cover trim
Lower front panel, covered screws

B1/H1
6   17   6.5

Maximum .14"/3.5 mm

End trim
Lower front panel

B1/H1
6

Variable

Spacer trim
Level front panel

B1/H1
6

Maximum .14"/3.5 mm

Installation kit:
M5: CP 6053500
M4: CP 6058500

Front panel fixed from the outside

6   17   6.5

Maximum .14"/3.5 mm

6

Variable

6

Maximum .14"/3.5 mm

Installation kit:
M5: CP 6053000
M4: CP 6058000
M6: CP 6053000/6058000
      + EL 2092200
      + screws M6 x 25

Technical Specifications

VIP Command Panel

Minimum front panel width (B1)

dependant on
- Installation depth of operator housing
- Connection of operator/keyboard housing
- Location of the pendant arm connection

Dimensions in inches/mm		Installation depth of operator housing (see 3.1)				
		6.10/155	7.28/185	11.61/295	12.91/328	17.24/438
Connection to the keyboard housing (see 3.7)	Position of the carrying arm connector (see 3.6)	**1** / **3**	**2**	**4** / **5**	**6** / **7**	**8** / **9**
		Minimum front panel width				
0 none	**0** to **3** top or bottom	169	265	169	265	
1 Frame connector or **4** Frame hinged connector	**1** top	169	265	169	265	
	2 and **3** bottom	339*	445*	339*	445*	265
2 Housing cable connector	**1** top	189	265	189	265	
	2 and **3** bottom	339	445	339	445	
3 Housing arm connector	**1** top	169	265	169	265	
	2 and **3** bottom	397*	445*	397*	445*	

*Lesser front panel widths for asymmetrical pendant arm configurations are possible by request.

Installation Components Load Limits In Lbs/N

F_1
110/500

F_2
99/450

F_3
39.6/180 (33/150)

F_2
70.4/320

F_3
28.6/130 (22/100)

F_2
70.4/320

F_2
77/350

F_4
33/150 (26.4/120)

F_2
66/300

F_4
33/150 (26.4/120)

F1 = 110/500

F1 = 110/500

F1 = 110/500 (103.4/470)

F_5
11/50

F1 = 110/500 (103.4/470)

F1 = 110/500 (103.4/470)

F_5
11/50

F1 = 110/500 (103.4/470)

F_5
11/50

F_3
39.6/180 (33/150)

F_2

F_4

F_3
28.6/130 (22/100)

F_2

F_4

F_3

F_2

F_4

F_3

F_2

F_4

F1 = 132/600 (125.4/570)

F1 = 132/600 (125.4/570)

F_5
11/50

F1 = 132/600 (125.4/570)

F1 = 132/600 (125.4/570)

F_5
11/50

Installation Weight Limit:
F_1 = total weight, F_2 = housing (with support arm),
F_3 = front part, F_4 = rear part, F_5 = keyboard housing

Values in parenthesis are for hinged version (operator housing). Housings for higher weights by request only.

Technical Specifications

Optipanel Operator Housing

With option for support arm connection from the rear

Max. installation depth 4"/100 mm

Max. installation depth 6"/150 mm

Max. installation depth 1.6"/41 mm

Max. installation depth 2"/50 mm

Cable duct

With option for keyboard housing

Installation depth 2"/50 mm

With option for support arm connection from the rear

Installation depth 4"/100 mm

Channel for installation of M5 spring nut

Installation depth 6"/150 mm

Channel for installation of M5 spring nut

Support arm cutouts

CP-L□ for installation depths 4"/100 mm or 6"/150 mm

CP-L○ for installation depth 6"/150 mm

For mounting of:
- CP 6525.1x0
- CP 6525.6x0

For mounting of:
- CP 6525.0x0
- CP 6525.5x0
- CP 6526.0x0

Height dimensions:
H1=Height of front panel
H2=Total height
H3=Clearance between enclosure profiles
H4=Clearance between the retaining clamps
     of installation kit
H5=Height of rear wall
H6=Clearance for mounting (trim-to-trim), height

Width dimensions:
W1=Width of front panel
W2=Total width
W3=Clearance between enclosure profiles
W4=Clearance between the retaining clamps
     of installation kit
W5=Width of rear wall (W1 + 36 mm)
W6=Clearance for mounting (trim-to-trim), width

Front panel, screwed-on

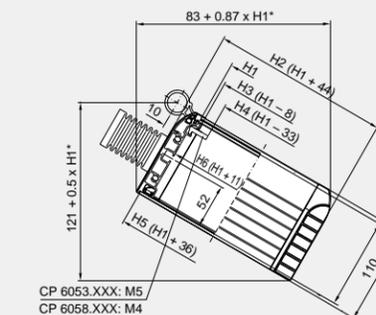From inside
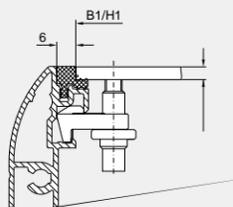
From outside

Cross mullion

Technical Specifications

Optipanel Keyboard Housing
Installation depth 2"/50 mm

* valid for 30° tilt to horizontal

CP 6053.XXX: M5
CP 6058.XXX: M4
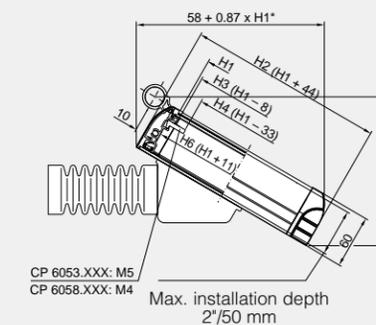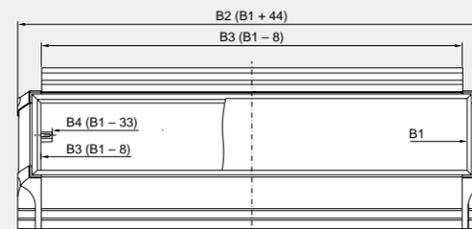
Max. installation depth 2"/50 mm

Installation depth 4"/100 mm

* valid for 30° tilt to horizontal

CP 6053.XXX: M5
CP 6058.XXX: M4
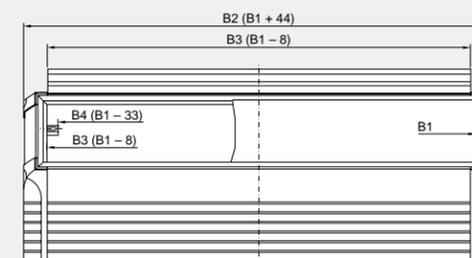
Max. installation depth 4"/100 mm

Cross section cable duct connection
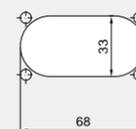
Keyboard housing connection

Frame hinge connector


Tilt angle continuously adjustable from 80° to 155°
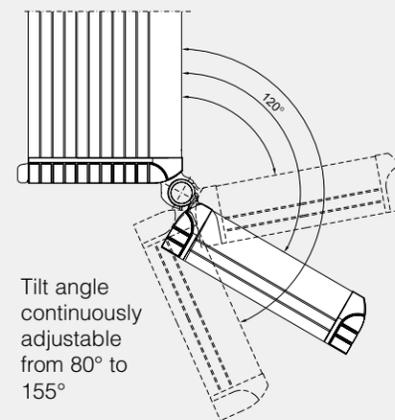
Minimum width of front panel (W1):
depending on
- installation depth of operator housing
- with or without keyboard housing
- position of support arm connection

2.5 Keyboard housing	2.3 Position of support arm connection	Installation depth of operator housing		
		2"/50 mm	4"/100 mm	6"/150 mm
		Minimum width of front panel (mm)		
0 without	0 to 8 top, bottom or rear side	160 (265)	150	150
1 and 2 with	1 4 7 8 top or from the rear side			
	2 3 5 6 bottom	378*	339*	339*

() Bracket values:
Only for configuration hinged rear wall version **2** and rear connection version **7** and **8** .
* Smaller width of front panels by asymmetric support arm connection is possible on request.

Technical Specifications
**CP-Vertical Pendant Arm Systems**

INVERTED
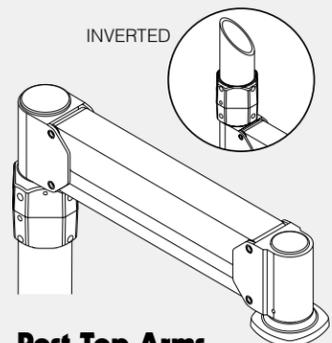
Post Top Arms
Attaches to a plain end 3.5" OD tube or pipe. Cables exit through tube.
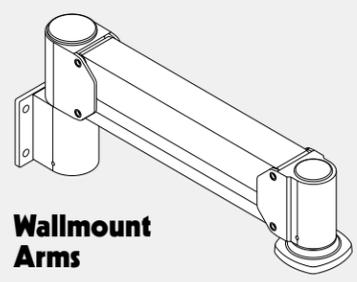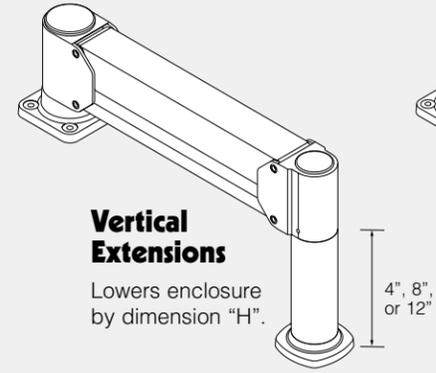
Wallmount Arms
Attaches to a vertical surface with 5.3" H x 6.0" W mounting plate with 4 (.5") Ø hole pattern on 4.75" H x 3.50" W centers. 2.0" Ø hole through center for cable exit. 2.5" NPS threaded opening as alternate cable exit.
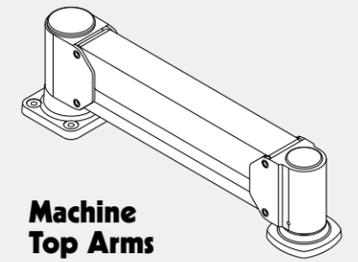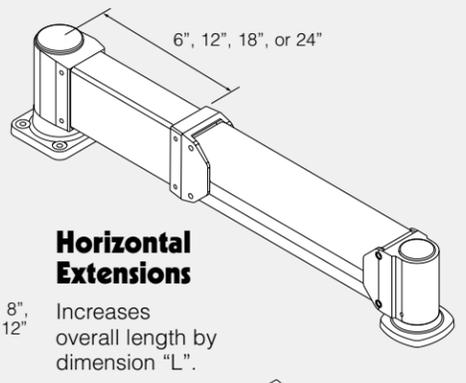
Machine Top Arms
Attaches to horizontal surface with 5" x 5" mounting plate with 4 (.37") Ø hole pattern on 3.54" centers. 1.5" Ø hole through center for cable exit.
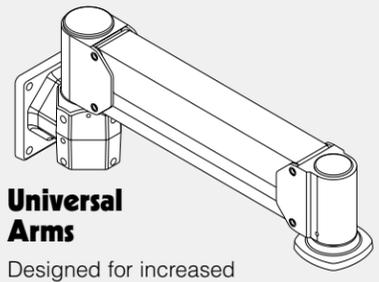
Universal Arms
Designed for increased flexibility. Mounting method can be easily configured based on user requirements.
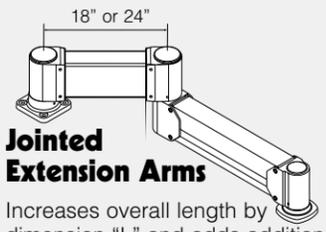
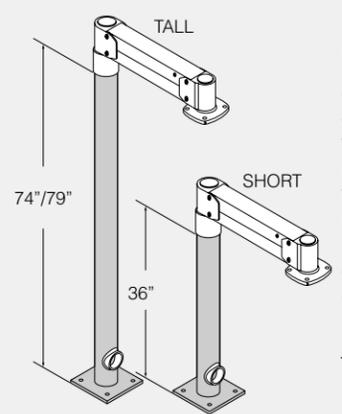### Vertical Extensions
Lowers enclosure by dimension "H".

4", 8", or 12"

Horizontal Extensions
Increases overall length by dimension "L".

6", 12", 18", or 24"

UNIVERSAL AS MACHINE TOP

UNIVERSAL AS WALLMOUNT

UNIVERSAL AS POST TOP

Jointed Extension Arms
Increases overall length by dimension "L" and adds additional swivel joint, providing in-out motion.

18" or 24"

Floor Posts
36", 74", or 79" tall, 3.5" x .25" OD post with square base plate. 1.5" NPT female coupling near base can be used for cable entry. Post can be easily shortened. **Note:** *When using jointed extension arms, a 79" tall post should be used.*

TALL

SHORT

74"/79"

36"

CP-Vertical Pendant Arm Specifications									
Part No.	Description	Max. load	Vertical travel T	T1	T2	T3	Length (L)	Height (H)	Base plate
9967987	Post top / CP-V	100 lbs	13"	–	–	5.6"	22.25"	–	–
9967988	Post top / CP-VL	75 lbs	23"	5.9"	17.1"	6.3"	28"	–	–
9967989	Post top / CP-VXL	50 lbs	30"	7.4"	22.6"	8.7"	35"	–	–
9967993	Wallmount / CP-V	100 lbs	13"	–	–	5.6"	22.25"	–	–
9967994	Wallmount / CP-VL	75 lbs	23"	5.9"	17.1"	6.3"	28"	–	–
9967995	Wallmount / CP-VXL	50 lbs	30"	7.4"	22.6"	8.7"	35"	–	–
9967996	Machine top / CP-V	100 lbs	13"	–	–	5.6"	22.25"	–	–
9967997	Machine top / CP-VL	75 lbs	23"	5.9"	17.1"	6.3"	28"	–	–
9967998	Machine top / CP-VXL	50 lbs	30"	7.4"	22.6"	8.7"	35"	–	–
9967999	Universal mount / CP-V	100 lbs	13"	–	–	5.6"	22.25"		
9968000	Universal mount / CP-VL	75 lbs	23"	5.9"	17.1"	6.3"	28"		
9968001	Universal mount / CP-VXL	50 lbs	30"	7.4"	22.6"	8.7"	35"	–	–

Technical Specifications
CP-Vertical Pendant Arm Systems

CP-Vertical Travel

CP-V

5"

T3

T TRAVEL

3.5"

LENGTH L

CP-VL/CP-VXL

5"

T1

HORIZONTAL

T TRAVEL

T3

T2

3.0"
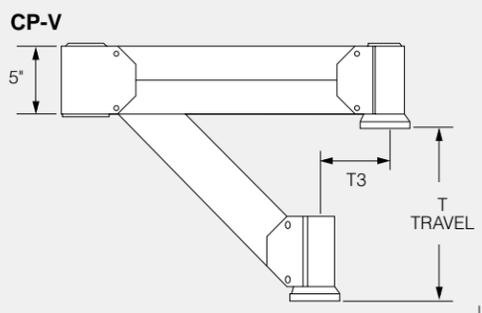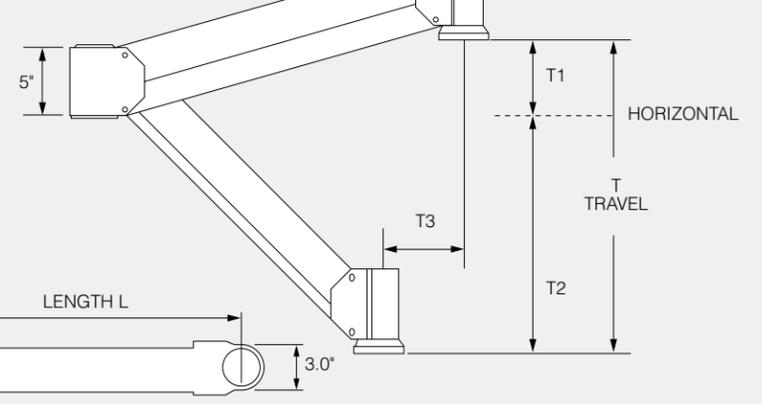
CP-Vertical Mounting Dimensions

Machine Top Universal Mounting
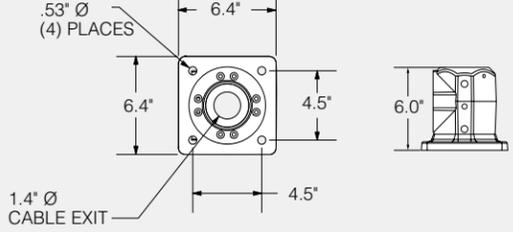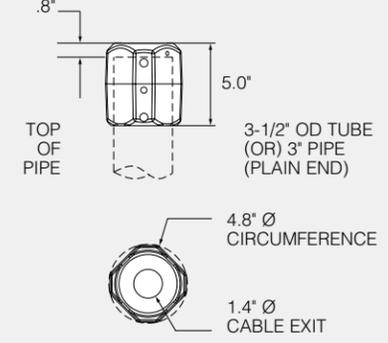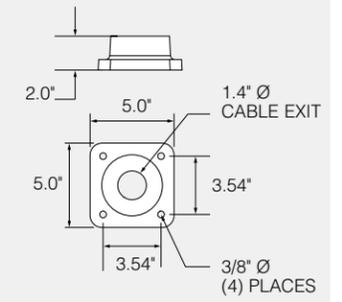
.53" Ø (4) PLACES

6.4"

6.4"

4.5"

4.5"

6.0"

1.4" Ø CABLE EXIT

Wallmount Universal Mounting

.53" Ø (4) PLACES

6.4"

6.4"

4.5"

3.5"

COVER PLATE

4.5"

5.75"

1.4" Ø CABLE EXIT

Post Universal Mounting

.8"

TOP OF PIPE

5.0"

3-1/2" OD TUBE (OR) 3" PIPE (PLAIN END)

Post Top Mounting

.8"

5.0"

TOP OF PIPE

3-1/2" OD TUBE (OR) 3" PIPE (PLAIN END)

4.8" Ø CIRCUMFERENCE

1.4" Ø CABLE EXIT

Machine Top Mounting

2.0"

5.0"

1.4" Ø CABLE EXIT

5.0"

3.54"

3.54"

3/8" Ø (4) PLACES

Wallmount Mounting

1.4" Ø CABLE EXIT

6.0"

4.0"

5.3"

3.5"

.53" Ø (4) PLACES

4.75"

2.2"

2-1/2" NPT ALTERNATE CABLE EXIT (THREADED CAP SUPPLIED)

Floor Post Plates

12"

12"

10"

.68" Ø (4) PLACES

10"

3" Ø ALTERNATE CABLE ACCESS

8"

8"

8"

6"

6"

.50" Ø (4) PLACES

3" Ø ALTERNATE CABLE ACCESS

Enclosure Mounting Coupling

M6

4.5"

3.23"

4.41"

1.82" Ø CABLE PASSAGE
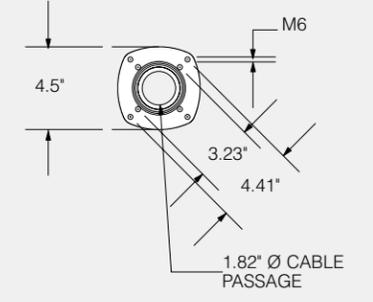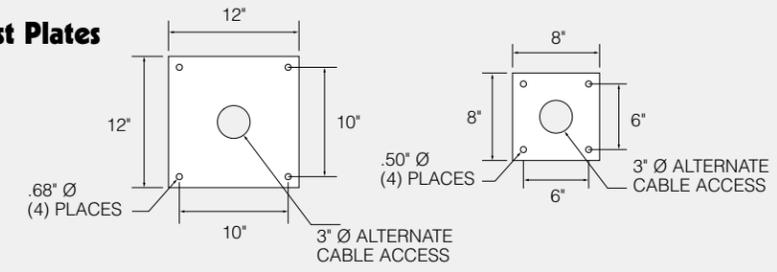
Technical Specifications

CP Pendant Arm Enclosures

6534000-6538000
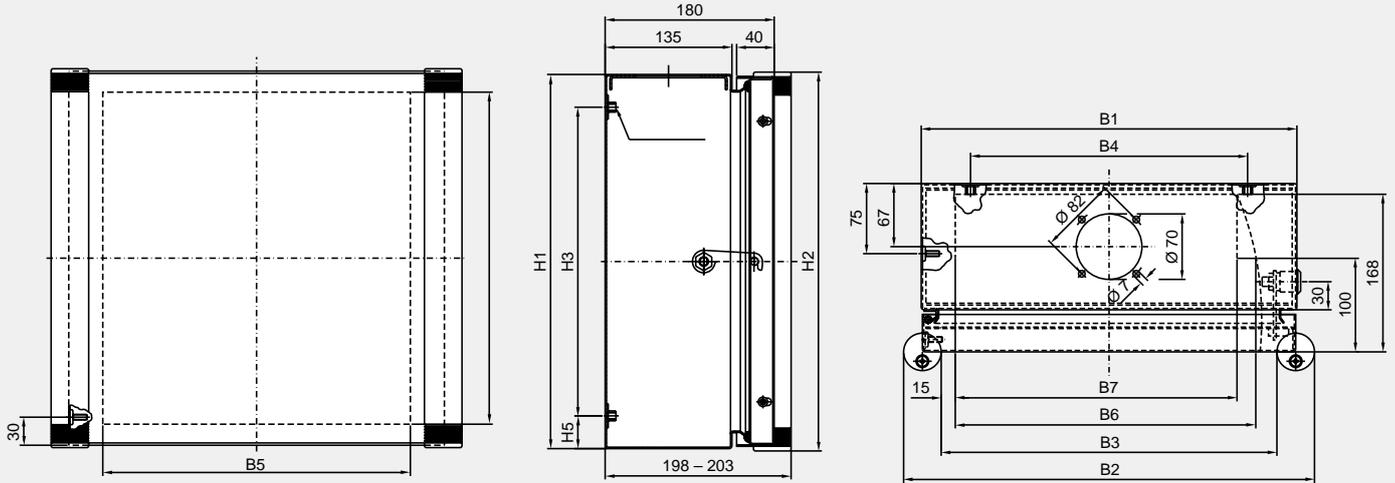
6530200-6533200/6540200
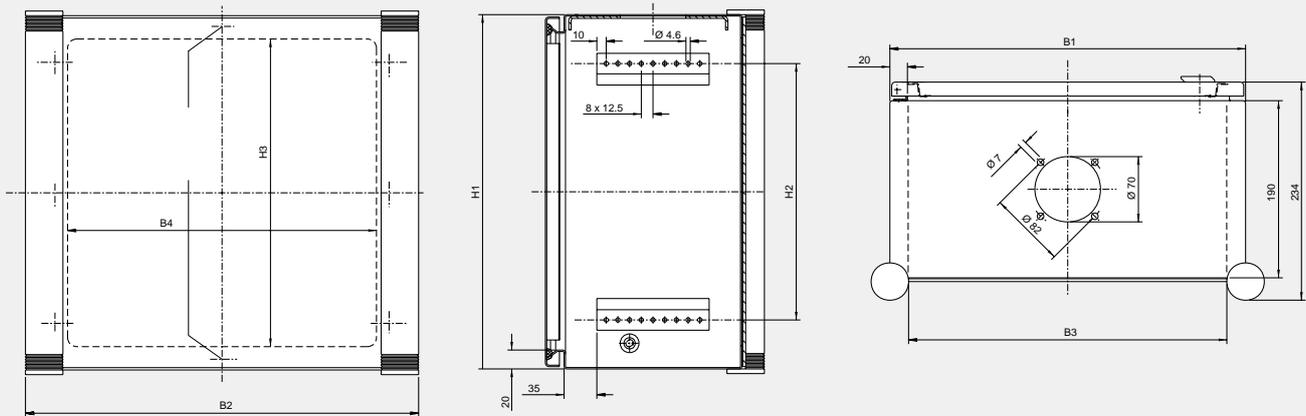
Enclosure										
Part No.	Height dimensions				Width dimensions				Depth	Weight	
	H1	H2	H3	H4	B1	B2	B3	B4	D	lbs	kg
6540200	200	250	52.5	95	300	250	340	260	155	9.9	4.5
6534000	200	205	122	155	300	338	258	260	180	22.0	10.0
6535000	300	305	250	255	300	338	258	215	180	26.2	11.9
6536000	300	305	250	255	400	438	358	295	180	29.1	13.2
6537000	400	405	350	355	300	338	258	215	180	29.1	13.2
6538000	400	405	330	355	400	438	358	295	180	30.8	14.0
6531200	300	250	62.5	175	380	330	420	340	210	22.3	10.1
6530200	380	330	52.5	275	380	330	420	340	210	18.3	8.3
6533200	380	330	52.5	275	600	550	640	560	210	32.9	14.9
6532200	500	450	62.5	375	500	450	540	460	210	28.7	13.0

Dimensions in millimeters (mm) unless otherwise indicated.