

CvE MONITOR®
ACCESS

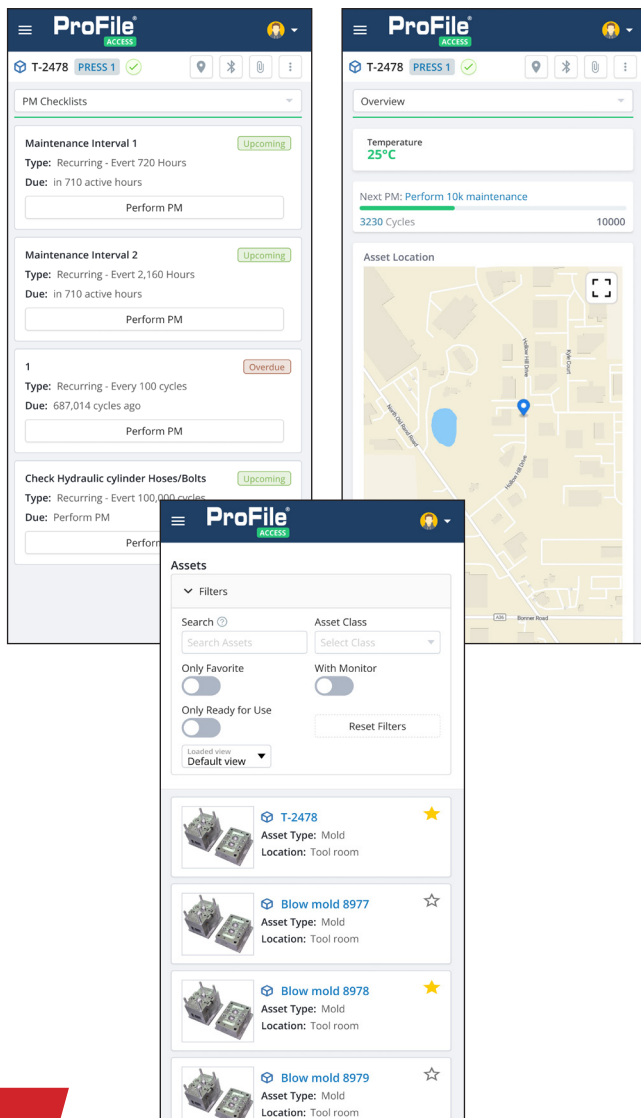
APPLICATION GUIDELINES

- Progressive's CvE Access Monitor tracks tool activity, allowing users to view the tool's cycle count on the display while also wirelessly sending data to the cloud.
- The QR code and unique serialization on every Monitor aligns to a specific tool via ProFile.
- ProFile App connects to the CvE-AC via Bluetooth to generate reports for key metrics including Preventive Maintenance. Tool Locations, Activities, Efficiency, Cycle Time, and Parts per Hour and user alerts can be set.
- Utilizes the ProFile web account with no annual subscription required.
- Display orientation can change on the device for either A side or B side installation.
- Water resistant with an ingress protection rating of IP52.
- Maximum temperature: 190°F (90°C).
- Includes two replaceable batteries.

CATALOG NUMBER	DESCRIPTION
CvE-AC	CvE Access Monitor including #8-32 x 2" SHCS (2) and M4 x 50mm SHCS (2). Refer to page F-2 for additional mounting options.

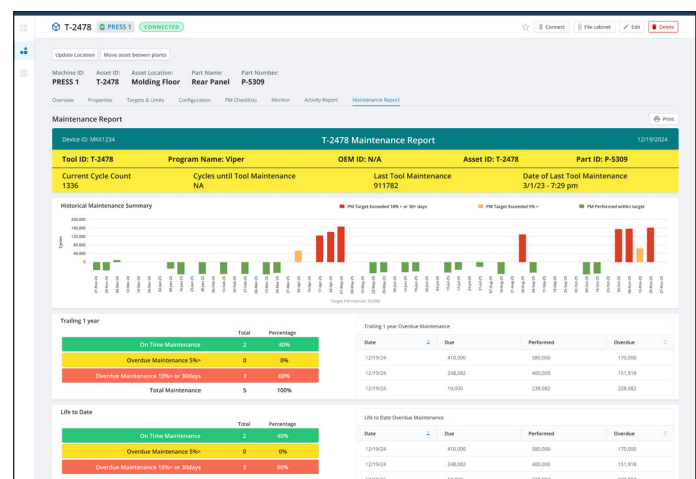
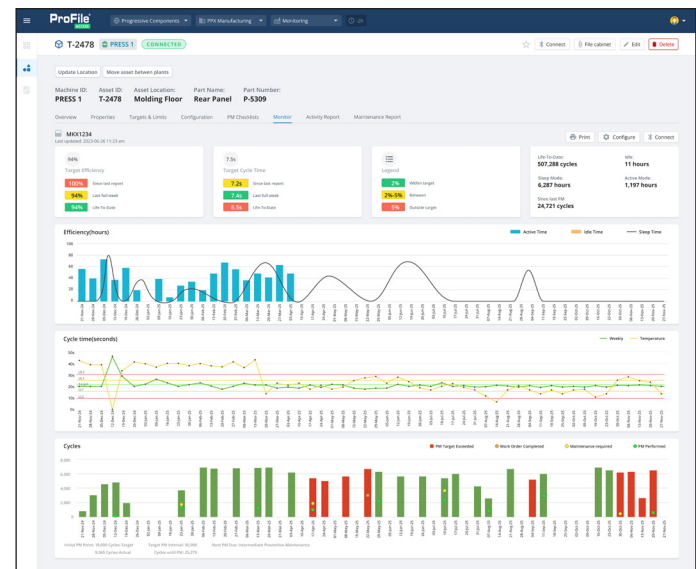
CvE MOBILE ACCESS

- The ProFile App is available for iOS and Android.



CvE WEB ACCESS

- Using any browser, access the same tooling data.





CVe MONITOR®

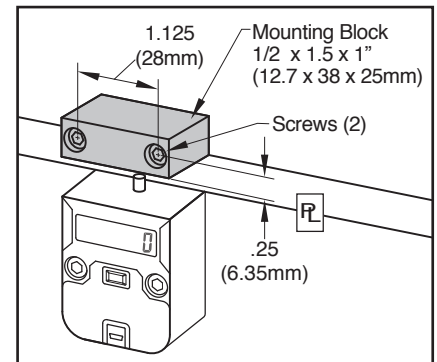
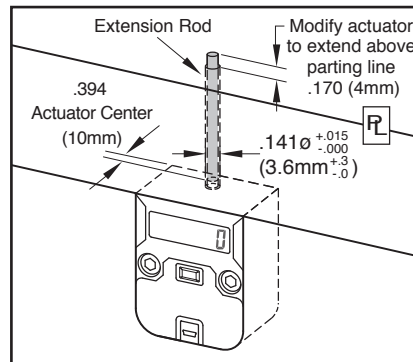
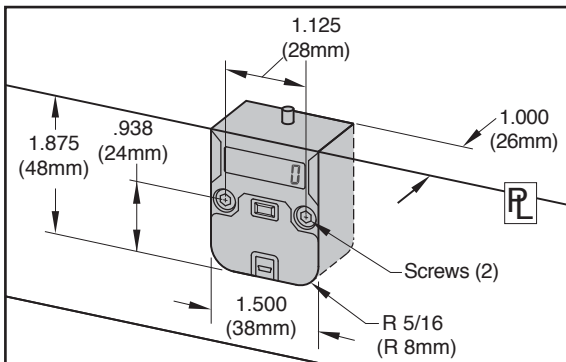
ONDEMAND MOLD MONITORING

APPLICATION GUIDELINES

- Progressive's OnDemand CVe Monitor tracks tool activity, allowing users to view data on the display or from comprehensive reports using the free PC-based OnDemand application.
- 7-digit LCD display with a push button to move through the display modes.
- 16GB flash drive included for file storage. Replaceable battery.
- Water resistant with an ingress protection rating of IP52.
- Maximum temperature: 190°F (90°C). For protection against higher temperatures, refer to the Insulators available on pages F-10 and F-14.
- Dimensional compatibility with Progressive's mechanical CounterViews.
- Mini USB connectivity for data retrieval with cables sold separately on page F-8.
- Cover Plates for protection are sold separately on page F-15.



MOUNTING OPTIONS



CATALOG NUMBER	DESCRIPTION
CVE	CVe Monitor including #8-32 x 1" SHCS (2) and M4 x 25mm SHCS (2)

CATALOG NUMBER	DESCRIPTION
CVE-INT	Internal Extension Rod (8"/200mm)
CVE-EXT	External Mounting Block including #8-32 x 1" SHCS (2) and M4 x 25mm SHCS (2)

To Order:

- For installation below parting line (rails as shown in the center graphic above), order the CVE and CVE-INT.
- For installation outside of the mold (right graphic), order the CVE and CVE-EXT.

ON-MOLD DISPLAY MODES

Each device is provided at -25 cycles to allow for mold set up and initialization of the CVe Monitor. Once it reaches zero (0), all timers and data will reset on the monitor. During production, users can press the button on the front of the monitor and review the following information on the display:

Cycle Count

Total cycles for the life of the mold is presented on the main screen.



Efficiency Percentage

The percentage of time that the mold has been actively cycling vs being idle.



Cycle Time

Since the first production cycle, cycle time for the life of the mold.



Efficiency Percentage-Recent

The percentage of time the mold has been active in the past 500 cycles.



Cycle Time-Recent

Cycle time for the past 500 cycles is shown in seconds.



Cycle Count Reset

Press and hold button to reset separate counter to 0 for interim monitoring of cycles.



Mold Temperature

View current temperature experienced by the monitor (°C) by pressing button twice.



Flash Drive

Utilize the 16GB flash drive by connecting the CVe to a PC/Tablet with an industry-standard mini USB cable, sold on page F-8.



CVe MONITOR®

ONDEMAND MOLD MONITORING

Once data is initialized using the complimentary OnDemand software (from procomps.com/cve-ondemand), users can choose to be alerted to the following sets of conditions for the OnDemand CVE Monitor.

Preventive Maintenance

During initialization, Preventive Maintenance (PM) checkpoints are entered and saved onto the OnDemand CVE Monitor. If a PM checkpoint is exceeded, the monitor enters the PM alert mode and displays both a wrench icon and PM Due as shown at right.



When PM is performed and entered via OnDemand or by the in-mold actuation/button push combination, the next checkpoint for the PM will be written. If no PM is performed, the OnDemand CVE Monitor will remain in PM alert mode until the user performs all PMs whose thresholds have been exceeded.

Cycle Time

During initialization, the target cycle time can be written to the monitor using OnDemand. Any variation greater than 2% from the target will enter the alert mode and display the clock icon as shown at right. When the cycle time returns to within 2% of the target, the alert is removed.



Efficiency

During initialization, the target efficiency can be written to the monitor using OnDemand. Any variation greater than 2% from the target will enter the alert mode and display the percentage (%) icon as shown at right. When the efficiency returns to within 2% of the target, the alert is removed.



Low Battery

The OnDemand CVE Monitor has a battery life of approximately 4 years in typical molding environments where temperatures are controlled. (The battery is 1/2AA lithium non-rechargeable with 3.6V.) When the battery reaches a specified level, the display will show a battery icon as shown at right, and the replacement kit can be ordered separately below.



RETROFITTING

Users can view additional data by double-clicking the button on the monitor.

Retrofit CVE for CounterView Tools

During initialization, molders can start the cycle count with the tool's actual cycle count from an existing CounterView or known cycles from maintenance records. Once entered, the user can see the total cycles for the tool, which includes the count of the cycles from the counter and those run with the CVE Monitor.



In the graphic at right, the tool had 1,000,000 cycles on it originally, but ran 507,288 after the OnDemand CVE Monitor was installed.



CABLES AND CONNECTIVITY

Using a USB cable, users can connect the OnDemand CVE Monitor to their computer or tablet and view data in OnDemand, outlining the reason for the report generation. Notes can be included and user information is recorded for historical reference. More details about OnDemand are on the following pages.



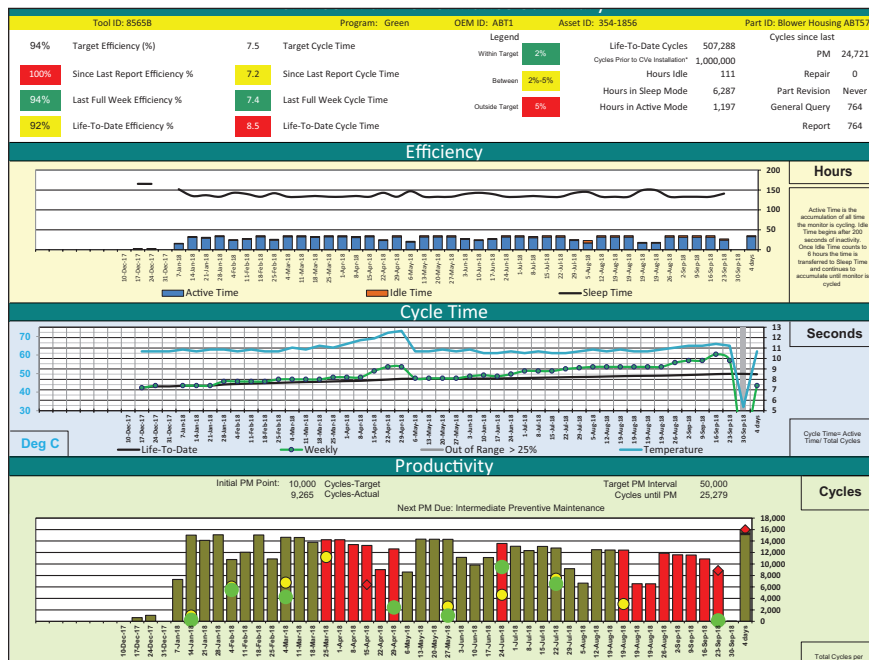
OnDemand Activity Log [Software Version 3.1.0/2.6.1/3.1.9]									
Cve Initialize Date	November 23, 2017	December 17, 2017							
Device ID	OK1234	OK1234							
Tool ID	85658	85658							
Blower Housing	Blower Housing	Blower Housing							
Part ID	ABT57	ABT57							
Program Name	Mocha	Mocha							
Customer	Crimson Fan	Crimson Fan							
Target Efficiency%	N/A	94%							
Target Cycle Time	N/A	7.5							
Initial PM Point	50000	50000							
Target PM Interval	100000	100000							
Cycles Prior to Cve Installation*	1000000	1000000							
OEM ID	N/A	ABT1							
ASSET ID	N/A	0356-5686							
Reason for connecting CVE Monitor									
Date/Time	Battery	Cycles	OD User	Conn. By	Company	Destination	REV	PM	Notes
October 4, 2018	OK	507,288	INIECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	Y	N/A Replaced damaged core pin in cavity 4
October 4, 2018	OK	506,524	INIECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	N	N/A Data Pull
September 19, 2018	OK	491,274	INIECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	N	N/A Pulled from production for mold operational issues. It is being sent for evaluation and rework
September 19, 2018	OK	482,567	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
June 28, 2018	OK	364,001	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
May 31, 2018	OK	314,856	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
April 28, 2018	OK	260,002	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
April 4, 2018	OK	211,563	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
March 22, 2018	OK	193,268	INIECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	Y	N/A 3 cavities are shutdown. Pulled for evaluation and repair
February 7, 2018	OK	106,235	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
January 10, 2018	OK	58,725	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Full PM
December 17, 2017	OK	9,265	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	Y	N/A Initial mold inspection. There is no wear or damage to mold follow initial run. Targets are set. Mold is released for production
November 23, 2017	OK	0	MOLDHOU1	Chuck Louse	Mold House	Crimson@crimson.com	N	N	N/A Mold is completed and released for sampling

CATALOG NUMBER	DESCRIPTION
CVEL-DATA9	USB 2.0 to Type B Mini 9 Foot, Right-Angle Cable
CVEL-DATA9S	USB A to Type B Mini 9 Foot, Straight Cable
CVE-USB-15	USB 2.0 to Type B Mini, 15 Foot, Common Straight Cable
CVE-REPLKIT	Battery Replacement Kit for the CVE Monitor

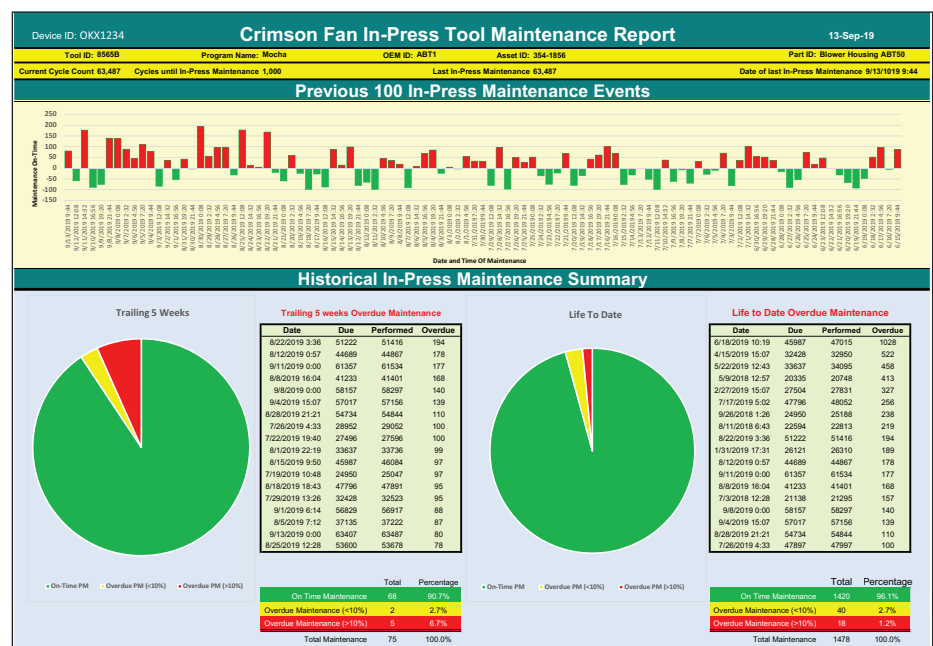


Drive comprehensive reporting using data from the Cve Monitors. Availability for the specific version Cve Monitor is outlined below, but both applications have the following features:

- When the Cve is initialized, users can identify their tool and align all reports with the device serial number which is tracked throughout the application.
 - Ten languages supported: English, German, Mandarin, Spanish, French, Italian, Japanese, Korean, Portuguese and Thai. Reports are generated in the chosen language.
 - Users can view statistics on a particular tool, review productivity for preventive maintenance (PM), as well as other actual data compared to targets established by the molder.
 - Users can also view weekly cycle time and maximum mold temperature tracking with variances over time.
 - Both the PC-based software and the App are free of charge but must be utilized with the specific Cve Monitor version that supports the interface.
- Utilize the PC-based system and cables available on the previous page.
- Download from procomps.com/cve-ondemand.



Users initialize the Cve Monitor using the PC-based OnDemand program and can set their targets accordingly.

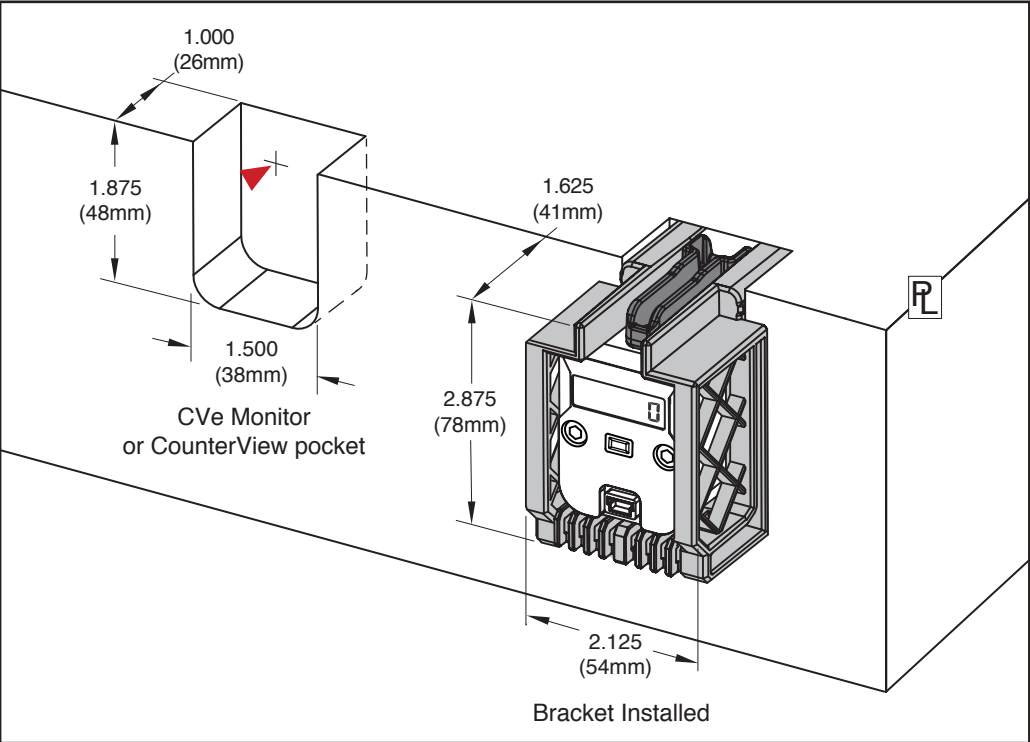


Standard reports show variances between actual and target data, and the reports can be emailed to stakeholders for analysis.

INSULATOR BLOCKS
RETROFIT BRACKET



CAD insertion point



M Vdydyne

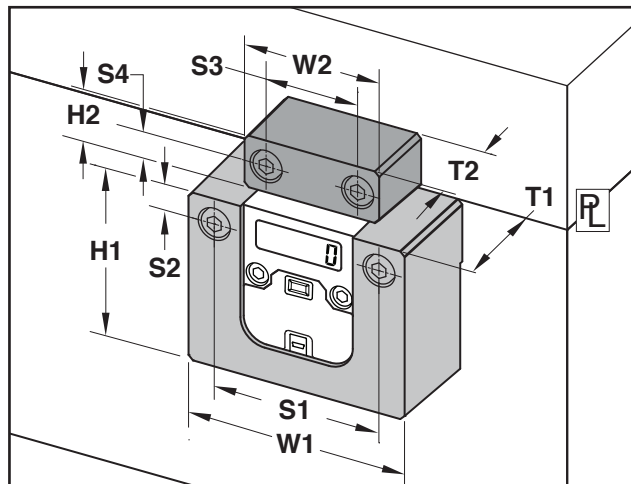
CATALOG NUMBER	DESCRIPTION
CV-BRACKET	Inch version with screws: (2) #8-32 x 1-1/2
CVMM-BRACKET	Metric version with screws: (2) M4-.7 x 35mm

APPLICATION GUIDELINES

- Maximum temperature: 410°F (210°C).
- The Inch or Metric Insulator Block assembly sits in the pocket as shown above, and utilizes the screw locations from the square CounterView sold on page F-12 or the OnDemand CVe Monitor sold on page F-7.
- The Bracket can be installed on the cavity or core half of the tool. For use with OnDemand CVe Monitors using the ProFile system, mount to the stationary half for optimal cable routing. The Bracket can be utilized with the Real-Time or Access CVe Monitors sold on page F-2 and F-6, but the monitors will protrude 1" outside of the tool.
- The CVe Monitor or CounterView are actuated via a Striker which is attached to the Insulator Bracket as a single unit. No preload adjustment is required.

INSULATOR BLOCKS

EXTERNAL MOUNT



APPLICATION GUIDELINES

- Maximum temperature: 360°F (180°C).
- Installation can be on the cavity or core half of the tool. For use with ProFile, mount to the stationary half for optimum cable routing.
- The Insulator Block accepts the screws from the S-Series CounterView sold on page F-12 or the OnDemand Cve Monitor sold on page F-7. Can be utilized with the Real-Time and Access Cve Monitors sold on page F-2 and F-6, but they will protrude outside of the block.

M Vdyne

CATALOG NUMBER	DESCRIPTION	HI	WI	TI	SI	S2	H2	W2	T2	S3	S4
CV-BLK	Inch version with screws: (2) 1/4-20 x 1-1/8 (Actuator) (2) 1/4-20 x 1-1/2 (Block)	2.37	3.00	1.37	2.25	.50	.75	2.00	1.00	1.00	.37
CVMM-BLK	Metric version with screws: (2) M6-1.0 x 30 (Actuator) (2) M6-1.0 x 40 (Block)	60	76	35	57	12.5	19	50	25	25.5	9.5

R-SERIES COUNTERVIEW INSULATOR BLOCK

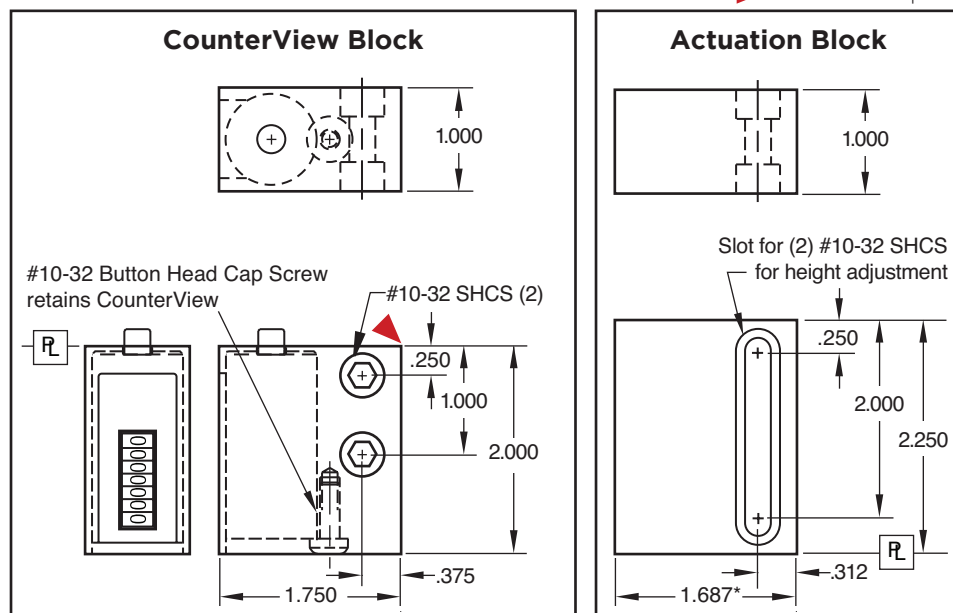
► CAD insertion point



M A36 S Black Oxide

CATALOG NUMBER	DESCRIPTION
CVRA-100	CounterView Attachment Block Set (Includes Screws)

R-Series CounterViews are sold separately on page F-13.



Note: The width of the Actuation Block is smaller by 1/16" to allow for clearance if the CounterView Block is recessed into the mold.