

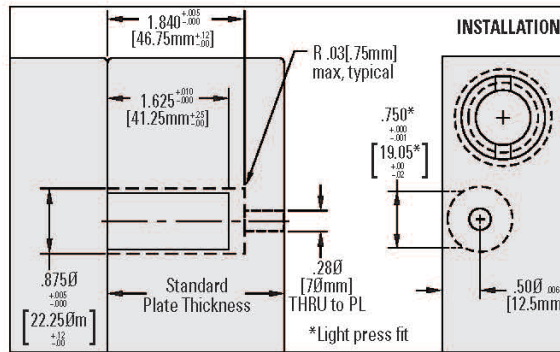
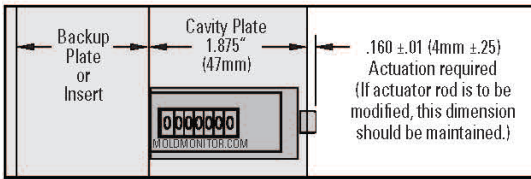
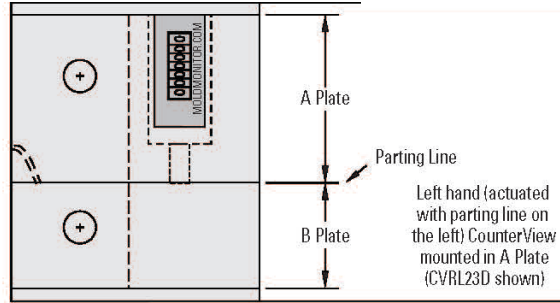
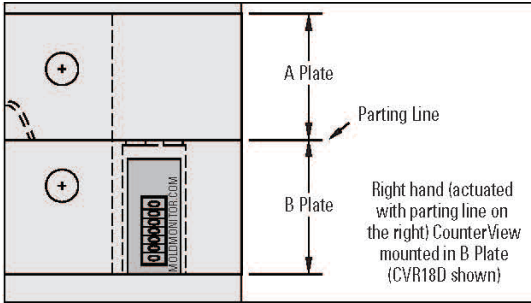


DME CYCLE COUNTER

R-Series

General Description

The DME Cycle Counter R-Series accurately monitors mold operation, validates process monitoring data, and assists mold maintenance procedures. With a maximum operating temperature of 250°F (121°C), this precise unit has a non-resettable, mechanical, 7-digit counter and a glass-filled nylon housing for rugged durability.



The R-Series can be installed in the A or B plates with a minimum thickness of 1.875" (47mm). Larger plates utilize a threaded rod (included with each) that is pre-machined to the appropriate length for standard plate thicknesses to provide consistent actuation.

Parting Line at Left



Each R-Series Counter includes the actuator. All except CVR18D and CVRL18D require attachment of the actuator rod to the threaded unit.

Parting Line at Right



INCH Standard

ITEM NUMBER	NOMINAL PLATE THICKNESS
CVRL18D	1.875
CVRL23D	2.375
CVRL28D	2.875
CVRL33D	3.375
CVRL38D	3.875
CVRL43D	4.375
CVRL83D	8.375

METRIC Standard

ITEM NUMBER	NOMINAL PLATE THICKNESS
CVRL56D	56
CVRL66D	66
CVRL76D	76
CVRL96D	96

INCH Standard

ITEM NUMBER	NOMINAL PLATE THICKNESS
CVR18D	1.875
CVR23D	2.375
CVR28D	2.875
CVR33D	3.375
CVR38D	3.875
CVR43D	4.375
CVR83D	8.375

METRIC Standard

ITEM NUMBER	NOMINAL PLATE THICKNESS
CVR56D	56
CVR66D	66
CVR76D	76
CVR96D	96

DME Cycle Counter Replacement Actuator Rods

INCH Standard

ITEM NUMBER	ROUND CV ROD LENGTH
RCV23	0.5"
RCV28	1.0"
RCV33	1.5"
RCV38	2.0"
RCV43	2.5"
RCV83	6.5"

METRIC Standard

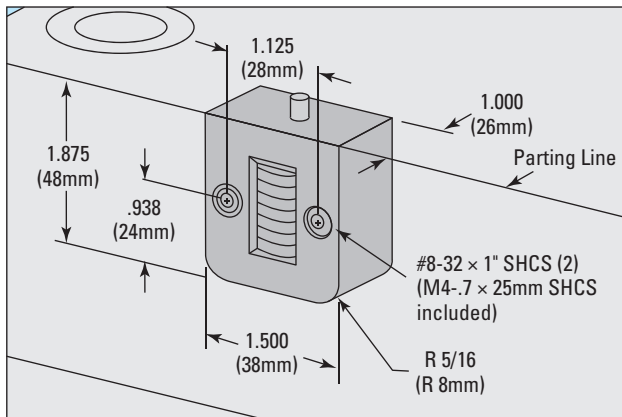
ITEM NUMBER	ROUND CV ROD LENGTH
RCV56	8.38mm
RCV66	18.39mm
RCV76	28.37mm
RCV96	48.38mm

DME CYCLE COUNTER

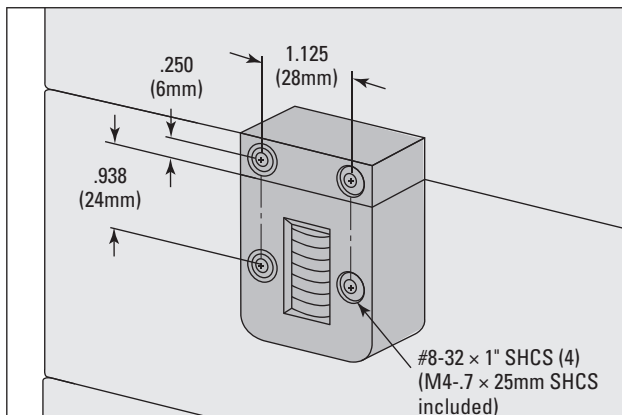
CCPL300/CCEM300 Series

General Description

The DME Cycle Counter accurately monitors mold operation, validates process monitoring data, and assists mold maintenance procedures. With a maximum operating temperature of 320°F (160°C), this precise device uses a non-resettable, mechanical, 7-digit counter to record the number of times a mold closes. Easily mountable to accommodate changeovers for different mold insert heights, the unit's counting mechanism relies on a sensor that detects when the mold has closed. Each mold cycle triggers the counting mechanism to increase the count on the display.



PARTING LINE MOUNT	
Parting line mount makes unit easily visible.	
CCPL300	INCH / METRIC Standard



EXTERNAL MOUNT	
Pocket machining not necessary. Designed specifically for retrofit applications.	
CCEM300	INCH / METRIC Standard

Benefits

- Positively monitors mold activity
- Confirms process monitoring data
- Maximizes mold maintenance procedures
- Glass-filled nylon housing for rugged durability



COUNTERVIEW® MOLD COUNTER

CVe Monitor®

General Description

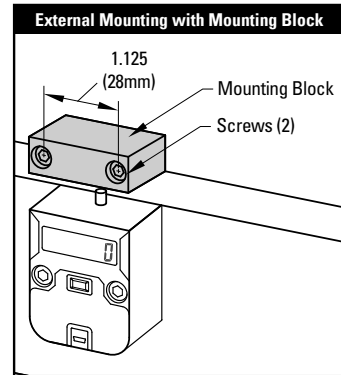
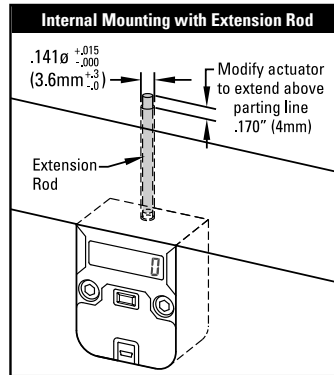
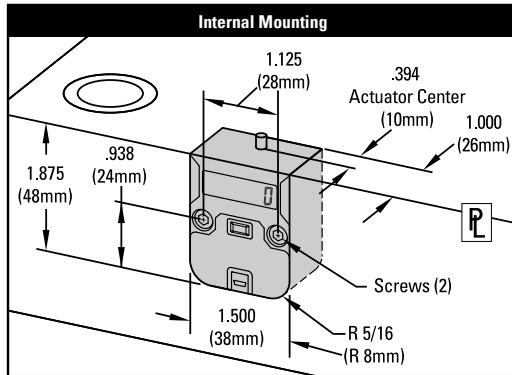
Expanding beyond the capabilities of the R-Series and 100/200 Series, the new CVe Monitor v2 tracks mold activity, allowing users to view the data on the display or from comprehensive reports using OnDemand software or the new CVe System.



Benefits

- 7-digit LCD display with a push button to move through the display modes
- 4GB flash drive for file storage and 4+ year battery life
- Water resistant with an ingress protection rating of IP52
- Maximum temperature: 190° F (90° C)
- Dimensional compatibility with mechanical CounterViews.

Mounting Options



How to order:

- For installation below parting line (i.e. rails as shown in center drawing above), order (1) CVENTID or CVENTMD
- For installation outside of the mold (right drawing) order (1) CVEMBID or CVEMBMD

ITEM NUMBER	DESCRIPTION	MOUNTING STYLE	SCREWS (2)
CVEPLID	CVe Inch	Parting Line	#8-32 x 1" SHCS
CVEPLMD	CVe Metric	Parting Line	M4 x 25mm SHCS
CVENTID	CVe Inch (with 8" rod)	Extension (Includes 8" rod)	#8-32 x 1" SHCS
CVENTMD	CVe Metric (with 203mm rod)	Extension (Includes 203mm rod)	M4 x 25mm SHCS
CVEMBID	CVe Inch (with Mounting Block)	Parting Line	#8-32 x 1" SHCS
CVEMBMD	CVe Metric (with Mounting Block)	Parting Line	M4 x 25mm SHCS

REPLACEMENT PARTS	
ITEM NUMBER	DESCRIPTION
CVEINT	Internal Extension Rod (8"/203mm) including a hex key for CVe Monitor set screw removal
CVEXT	External Mounting Block including #8-32 x 1" SHCS (2)
CVEXT2	External Mounting Block including M4x25mm SHCS (2)

On-Mold Display Modes

Each device is provided at -25 cycles to allow for mold setup and initialization of the CVe Monitor. Once it reaches zero, 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:



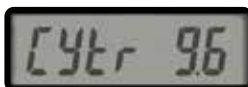
Cycle Count

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



Cycle Time

Since the first production cycle, the cycle time is shown in seconds for the life of the mold.



Cycle Time - Recent

Cycle time for the past 25,000 cycles.



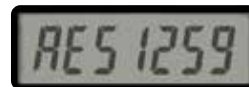
Efficiency Percentage

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



Efficiency Percentage - Recent

The percentage of time the mold has been active in the past 25,000 cycles.



Cycle Count Reset

A separate counter that can be reset to zero for interim monitoring of cycles when pressed and held.



Users can utilize the 4GB flash drive on the CVe Monitor by connecting the device to a PC using an industry-standard mini USB cable (see next page). Users press the button to get to the flash drive mode and then the storage area is represented on the PC by a new drive letter.

CVe Monitor is a registered trademark of AST Technology. Patents granted and pending for AST Technology.

CounterView® Mold Counter
CVe Monitor®



COUNTERVIEW® MOLD COUNTER

CVe Monitor®

Alert Mode

Once data is initialized using the OnDemand software, users will be alerted to different modes on the device:

Preventive Maintenance

During initialization, the initial preventive maintenance point and the PM interval is entered and saved onto the CVe Monitor. Then, when the PM is within 10% of the initial point, the display will flash "PM Due" as shown at right. Users can then 'snooze' the alert by holding for 2 seconds, returning it to Total Cycles.



When a PM is performed using OnDemand software and noted as such, the date/time will be written to the CVe Monitor and then the alert is stopped until reaching 10% of the next PM point. If no PM is performed, the CVe Monitor will continue to alert the user until snoozed or the PM is ultimately recorded.

Low Battery

The CVe Monitor has a battery life of approximately 4.5 years in typical molding environments where temperatures are controlled. When the battery is within 6 months of its expected end of life, the display will flash as shown at right. Users can then 'snooze' the alert by holding for 2 seconds, returning it to the Total Cycles. The alert will appear every 30 days as a reminder to transfer the stored data to a new CVe Monitor.

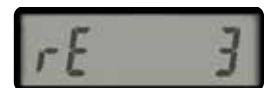


Retrofitting and Removal

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

Retrofit CVe for CounterView Tools

During initialization, users 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 screen at right, the tool had 1,000,000 cycles on it originally, but ran 507,288 cycles after the CVe Monitor was installed.



Removal Monitoring

When the CVe Monitor is removed from the tool for any reason (i.e. cleaning) the pins on the back of the device will record an event of its removal. After viewing the retrofit number above, the display will move into the screen shown at right, designating the number of times the monitor was removed from the mold.



OnDemand Activity Log [Software Version 2.0/2.0.1/2.2]											
Site Instance Date:	May 27, 2013	June 20, 2013									
Device ID:	MXX1234	MXX1234									
Tool ID:	30000	30000									
Blowet Housing:	Blowet Housing	Blowet Housing									
Part ID:	AB123	AB123									
Program Name:	Mocha	Mocha									
Customer:	Citizen Farm	Citizen Farm									
Target Efficiency %:	N/A	94%									
Target Cycle Time:	N/A	7.5									
Initial PM Point:	30000	30000									
Target PM Interval:	100000	100000									
Cycles Prior to C/e Installation*	0	0									
CEM ID:	N/A	AB123									
Asset ID:	N/A	3000-3000									
Reason for connecting CVe Monitor											
Date/Time	Battery	Cycles	OD User	Conn. By	Company	Destination	Dr	Pr	St	Al	Notes
April 7, 2014	OK	507,188	AB123	Wade Pfo	Injection Tech	citizenfarm.com					Rebuilt damaged core pin in cavity 4
April 7, 2014	OK	506,524	AB123	Wade Pfo	Injection Tech	citizenfarm.com					Daily PM
March 23, 2014	OK	495,274	AB123	Wade Pfo	Injection Tech	citizenfarm.com					Pushed from production for world operational issues. It is being sent for installation and repair.
March 20, 2014	OK	482,567	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM Cycle #3 was shut off
December 30, 2013	OK	344,063	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM
December 2, 2013	OK	314,896	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM
October 30, 2013	OK	240,063	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM Cycle #2 was shut off
October 6, 2013	OK	211,563	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM
September 23, 2013	OK	193,348	AB123	Wade Pfo	Injection Tech	citizenfarm.com					3 cavities are shut down. Pushed for evaluation and repair.
August 11, 2013	OK	106,235	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM
July 14, 2013	OK	58,725	MXX1234	Chuck Lauer	World House	citizenfarm.com					Full PM
June 20, 2013	OK	6,269	MXX1234	Chuck Lauer	World House	citizenfarm.com					total mold inspection. There is no wear or damage to mold following initial run. Targets are set. Mold is released for production.
May 27, 2013	OK	0	MXX1234	Chuck Lauer	World House	citizenfarm.com					Mold completed and released for printing.

Above: OnDemand software allows users to view data and keep a record of reports run, outlining the reason for the report generation including PM, general queries, revision changes, and repairs. Notes can be included and OnDemand records the person generating the document for accurate history.

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