

15" SLOW SCAN LCD PANEL MOUNT MONITOR

29LP151A71UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

HIGH QUALITY, SLOW SCAN LEGACY SYSTEM REPLACEMENTS

The 29LP151A571UN/3 Series of 15" LCD monitors has been designed primarily for Slow Scan Legacy Systems as replacements for CRT monitors. They utilize a modern XGA TFT panel and a KME-designed Analog-Digital interface board. All elements, including a toughened glass protection screen, have been packaged in a compact metal housing.

By special development of our own Signal Recognition and Scaling software, and access to an extensive library of older signal timings gained from 30+ years of CRT monitor manufacturing, KME has created a Multiscan ("Universal") flat panel monitor with unique 15kHz to 60kHz display capabilities. Some common Slow Scan Signal timings are factory pre-set. (see table below) New ones may be added on request. Other signals, which are close to those listed, will give a display but some adjustment may be necessary for full screen performance. The final settings can be easily stored for future use.

SOLUTIONS FOR SLOW SCAN MONITORS

- > **Specially designed for slow scan signals**
Accepts signal types CGA, EGA & all VESA standards up to SXGA. TTL, analog & interlaced signals accepted
- > **Deep dimming capability**
KME have developed a deep dimming solution for the slow scan range which provides smooth consistent dimming 100% to 0%.
- > **Inputs**
All monitors have BNC, 9-D & 15-D connectors
- > **Rugged metal construction with good stability**
The LCD monitor has been designed with solidity, being housed in a compact metal construction with a toughened glass protection screen.



H. kHz	V. Hz	Pixels		H. kHz	V. Hz	Pixels
15.625	50	714 * 288		15.63	50	560 * 275
15.63	60	808 * 238		15.72	60	564 * 240
15.72	60	508 * 240		15.72	60	604 * 240
15.72	60	640 * 200		16.10	50	564 * 304
16.276	70	640 * 220		16.79	70	577 * 215
17.85	50	508 * 338		21.83	60	640 * 350
20.65	50	640 * 384		24.78	60	640 * 384



15" SLOW SCAN LCD PANEL MOUNT MONITOR

29LP151A71UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Electrical Description		Mechanical Description	
TFT Characteristics:		Dimensions:	Weight: 6.5Kg
Type:	AM Colour TFT	Input:	15D BNC x5, 9D
Max Resolution:	1024 x 768 pixels	Housing	Painted aluminium
Active Display Area:	304 x 228 mm	User Controls:	Front Mounted
No. Colours:	16 million	On Screen buttons	Brightness, Contrast, H/V Position & Size, Frequency, Frequency Fine
Contrast Ratio:	450:1 typical		
Brightness:	250cd/m ² typical		
Viewing Angles (at CR>10):	130 o H, 110 o V		
Backlight Life:	50,000 hours typical		
Clock Rate:	112MHz max		
Sync. Type/Level:	Separate H&V (+/-ve) TTL or Composite (-ve) TTL or Sync-on-Green (-ve) 0.3V		
Signal Sync:	Analog RGB 0.7-1.0Vp-p or TTL RGB >2.75Vp-p		
Synchronisation Range:			
Horizontal scan:	15-60kHz		
Vertical scan:	40-100Hz		
Power Supply:	90-260V 50/60Hz Power Pack inside base		
Power Consumption:	35W Max	Part Numbers:	
Environmental:		Panel Model:	29LP151A71UN/1
Storage Temp:	-20 to 60°C		
Operating Temp:	0 to 50°C		
Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trademarks acknowledged.			

19.0" SLOW SCAN LCD PANEL MOUNT MONITOR

29LP1901A51UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

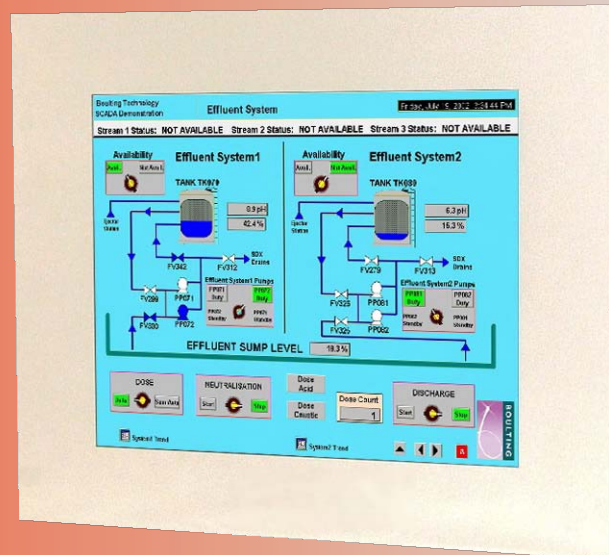
HIGH QUALITY, SLOW SCAN LEGACY SYSTEM REPLACEMENTS

The 29LP1901A51UN/3 Series of 19.0" LCD monitors has been designed primarily for Slow Scan Legacy Systems as replacements for 20"/21" CRT monitors. They utilize a modern SXGA TFT (1280 x 1024 pixels) panel and a KME-designed Analog-Digital interface board. All elements, including a toughened glass protection screen, have been packaged in a compact metal housing. (Dimensions are compatible with previous 18.1" series).

By special development of our own Signal Recognition and Scaling software, and access to an extensive library of older signal timings gained from 30+ years of CRT monitor manufacturing, KME has created a Multiscan ("Universal") flat panel monitor with unique 15kHz to 80kHz display capabilities. Some common Slow Scan Signal timings are factory pre-set. (see table on next page) New ones may be added on request. Other signals, which are close to those listed, will give a display but some adjustment may be necessary for full screen performance. The final settings can be easily stored for future use.

SOLUTIONS FOR SLOW SCAN MONITORS

- > **Specially designed for slow scan signals**
Accepts signal types CGA, EGA & all VESA standards up to SXGA. TTL, analog & interlaced signals accepted
- > **Deep dimming capability**
KME have developed a deep dimming solution for the slow scan range which provides smooth consistent dimming 100% to 0%.
- > **Inputs**
All monitors have BNC, 9-D & 15-D connectors
- > **Rugged metal construction with good stability**
The LCD monitor has been designed with solidity, being housed in a compact metal construction with a toughened glass protection screen.



19.0" SLOW SCAN LCD PANEL MOUNT MONITOR

29LP1901A51UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Electrical Description		Mechanical Description						
TFT Characteristics:	Type:	AM Colour TFT	Dimensions:		Monitor:	483 x 400 x 63 mm		
	Max Resolution:	1280 x 1024 pixels			Weight:	9kg approx		
	Active Display Area:	376 x 301 mm	Input:		9D, 15D, BNC x 5			
	Response Time:	15ms average, typical	Housing		Painted Steel			
	Contrast Ratio:	1000:1 typical	User Controls:		Front mounted			
	Brightness:	250cd/m ² typical	On Screen buttons		Brightness, Contrast, Auto set-up Disable, H/V Position, Clock, Clock Phase and Priority			
	Viewing Angles (at CR>10):	178 ° / 178° with CR _≥ 10	Slow Scan Support: (see table examples below)		Pre-programmed Analog or TTL inputs in 15-40kHz range			
	Backlight Life:	50,000 hours typical						
	No. Colours:	16 million	H.kHz	V.Hz	Pixels	H.kHz	V.Hz	Pixels
Video Signal:		Analog RGB 0.7-1.0Vp-p Or TTL >2.75Vp-p	15.625	50	714*288	15.63	50	560*275
Signal Sync:		Separate H & V (+/ve) TTL or Composite (-ve) TTL or Sync- on - Green (-ve) 0.3V	15.63	60	808*238	15.72	60	564*240
Synchronisation Range:	Horizontal scan:	15 to 80kHz	15.72	60	508*240	15.72	60	604*240
	Vertical scan:	40 to 100Hz	15.72	60	640*200	16.10	50	564*304
Clock Rates:		150MHz	16.276	70	640*220	16.79	70	577*215
Display modes:	VESA Support:	640 x 480 VGA 800 x 600 SVGA 1024 x 768 XGA 1280 x 1024 SXGA (recommended)	17.85	50	508*338	21.83	60	640*350
			20.65	50	640*384	24.78	60	640*384
Power Supply:	AC Version:	115/230V 50/60Hz Power Pack inside base 12V Option						
Power Consumption:		50W (Max)	Part Numbers:					
Environmental:	Storage Temp:	-20 to 60°C			AC Version:	29LP1901A51UN/3		
	Operating Temp:	0 to 50°C			DC Version:	29LP1901E51UN/3 (12Vdc)		

Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trademarks acknowledged.

19.0" SLOW SCAN LCD PANEL MOUNT MONITOR

29LP1901A51UN/x

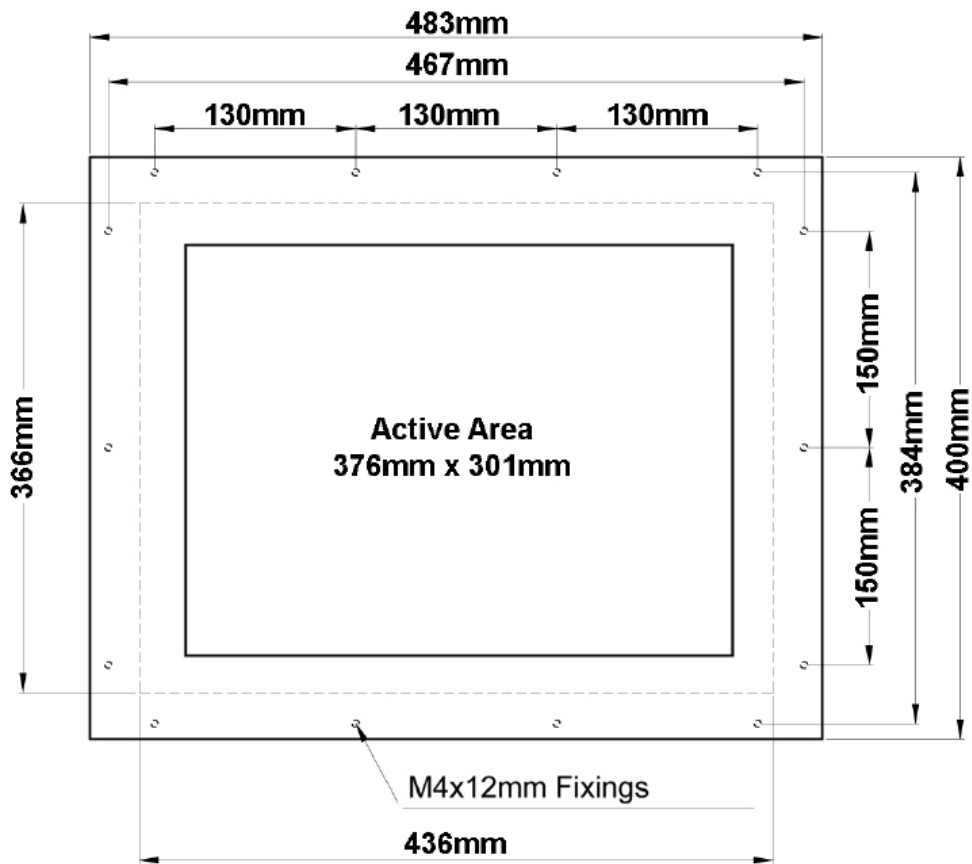
DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

SIDE VIEW



FRONT VIEW



Design Notes:

1. Panel /Rack Metal Thickness is 3mm

(Not to Scale)

15.0" RACK MOUNT LCD MONITOR

29LR151A71UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

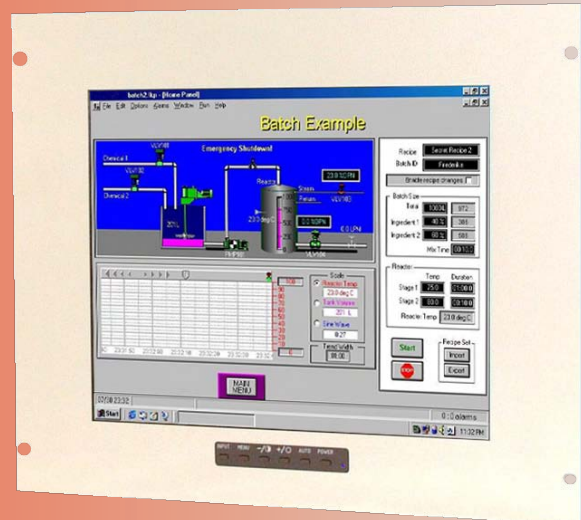
RACK MOUNT LCD MONITORS

KME has developed a comprehensive range of Rack mountable LCD Monitors for Industrial applications. Our philosophy is quite simple – we use LCD monitor Heads (29LM series) from our existing flat-panel industrial monitor range and integrate them with metal panels to industry-standard dimensions.

Rack Mount Monitors have a full range of controls at the front and standard spaced holes for 19" rack mounting. As a general rule Rack mounted monitors are normally supplied finished in RAL 7035. We know that there will be occasions when this standard range is not exactly suited to all customer requirements – and we remain willing to customise colours or dimensions to market demands.

SOLUTIONS FOR RACK MOUNT MONITORS

- > Standard 19" Equipment Rack Dimensions
- > Painted in RAL 7035 (other colours available)
- > Adjustment Controls at the front
- > High grade Chrome handles available as option
- > Toughened Non-Glare Safety Glass



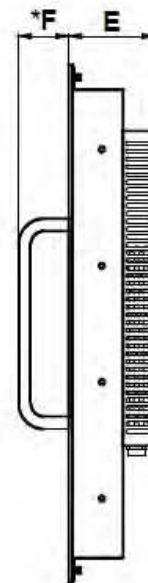
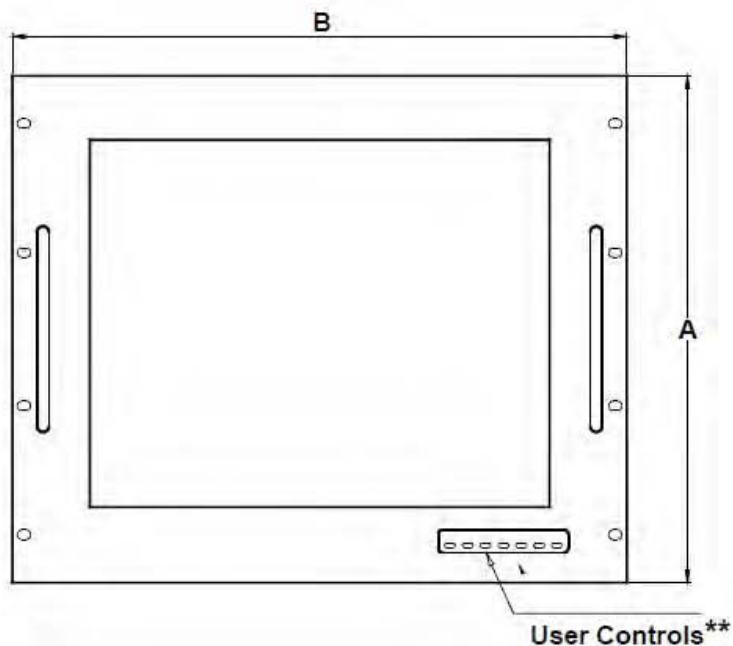
15.0" RACK MOUNT LCD MONITOR

29LR151A71UN/X

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

FRONT VIEW

SIDE VIEW



Design Notes:

1. 1. Rack Colour is normally RAL 7035.
2. 2. Rack Metal Thickness is 3mm

* Handles fitted by request – not standard

** Controls on certain monitors are in the centre
(Controls at the rear on 12" monitors)

(Not to Scale)

	RACK MOUNT			
Dimensions (mm)	12.1"	15.0"	17.0"	19.0"
A	266 (6U)	355 (8U)	399 (9U)	399 (9U)
B	483	483	483	483
E	58	63	N/A	69
F	40	40	N/A	40

19" RACK MOUNT LCD MONITOR

29LR1901A51UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

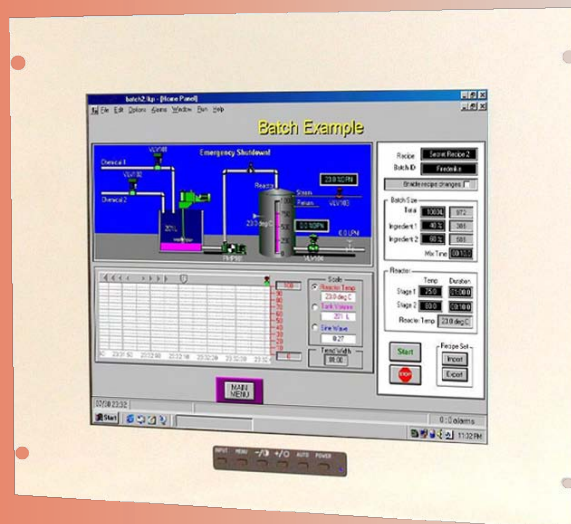
RACK MOUNT LCD MONITORS

KME has developed a comprehensive range of Rack mountable LCD Monitors for Industrial applications. Our philosophy is quite simple – we use LCD monitor Heads (29LM series) from our existing flat-panel industrial monitor range and integrate them with metal panels to industry-standard dimensions.

Rack Mount Monitors have a full range of controls at the front and standard spaced holes for 19" rack mounting. As a general rule Rack mounted monitors are normally supplied finished in RAL 7035. We know that there will be occasions when this standard range is not exactly suited to all customer requirements – and we remain willing to customise colours or dimensions to market demands.

SOLUTIONS FOR RACK MOUNT MONITORS

- > Standard 19" Equipment Rack Dimensions
- > Painted in RAL 7035 (other colours available)
- > Adjustment Controls at the front
- > High grade Chrome handles available as option
- > Toughened Non-Glare Safety Glass



19" RACK MOUNT LCD MONITOR

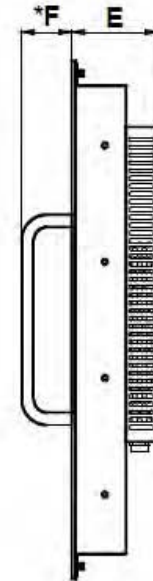
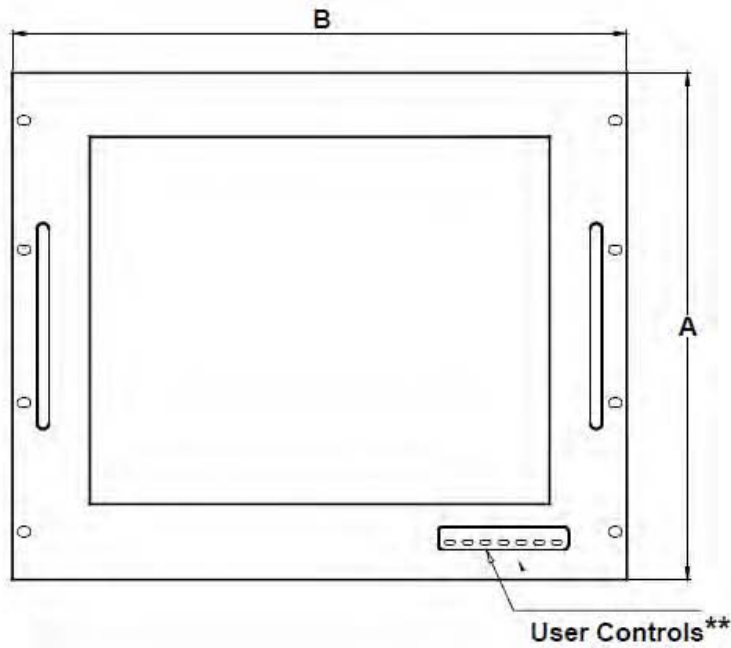
29LR1901A51UN/X

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

FRONT VIEW

SIDE VIEW



Design Notes:

1. 1. Rack Colour is normally RAL 7035.
2. 2. Rack Metal Thickness is 3mm

* Handles fitted by request – not standard

** Controls on certain monitors are in the centre
(Controls at the rear on 12" monitors)

(Not to Scale)

	RACK MOUNT			
Dimensions (mm)	12.1"	15.0"	17.0"	19.0"
A	266 (6U)	355 (8U)	399 (9U)	399 (9U)
B	483	483	483	483
E	58	63	N/A	69
F	40	40	N/A	40

8.4" LCD CHASSIS REPLACEMENT FOR 10" CRT

29LV081A71UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Electrical Description	
TFT Characteristics:	
Type:	AM colour TFT
No. of colours:	256k
Max resolution:	800 x 600 pixels
Active display area:	170.4 x 127.8mm
Brightness:	350cd/m ²
Backlight life:	50,000 hours
Contrast ratio:	500:1 typical
Viewing angles:	120°H, 100°V
Input connectors:	15-pin HD female
Video Signal:	Analog RGB 0.7Vp-p OR TTL RGB > 2.75Vp-p (via special TTL accessory cable)
Signal Sync:	Separate H&V (+/-ve) TTL OR Composite(-ve) TTL OR Sync-on- green (-ve) 0.3V
Synchronisation Range:	Horizontal scan: 15kHz - 60kHz Vertical scan: 40-100Hz
Multiscan Support:	640 x 480 VGA 800 x 600 SVGA + pre-programmed timings in 15-30kHz range
Power Supply:	90 - 260V AC DC option available
Clock rate:	80MHz max
Power Consumption:	25W max
Physical / Environmental	
Front Panel:	Black painted aluminium
Dimensions (approx):	246.6 x 191.4 x 68.5mm
Weight:	2.5kg approx
Operating Temp:	0 to 50°C
Storage Temp:	-20 to 60°C
Part Numbers:	
Model Number:	29LV081A71UN/1
Optional Model:	29LV081E71UN/1 (12V DC)

Note: The Active Display Area on a 10" Colour CRT is typically 175 x 130 mm. On the 8.4" TFT it is 170.4 x 127.8mm maximum.



- For 10" colour CRT monitor replacement
- Front plate to suit 10" CRT fixing lug
- Original CRT chassis stays in place
- Analogue & TTL video inputs
- Non-standard legacy signals easily programmed
- Non glare acrylic for TFT protection
- Optional touchscreen integration

The 29LV081A71UN/1 Industrial LCD monitor has been designed as replacement for 10" CRT monitors now that supplies of 10" CRTs are difficult to obtain.

KME has designed a rugged LCD monitor module, of minimum width, to match the dimensions of many 10" CRT monitor chassis. When the CRT is removed from the existing chassis metalwork the LCD monitor (mounted on a metal panel with fixing holes to match the CRT Lugs) can be fitted in place.

A wide range of signal timings from 15kHz up to SVGA standard, including CGA & EGA legacy signals can be accepted by the LCD monitor. Set-up controls for finetuning of the display are located at the rear of the monitor. Once set, no further adjustments should be required, and the last setting is stored in memory.

Accessory cables for 9D-15D and RCA-15D are available, as are special cables for non-standard interfaces.

Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trademarks acknowledged.



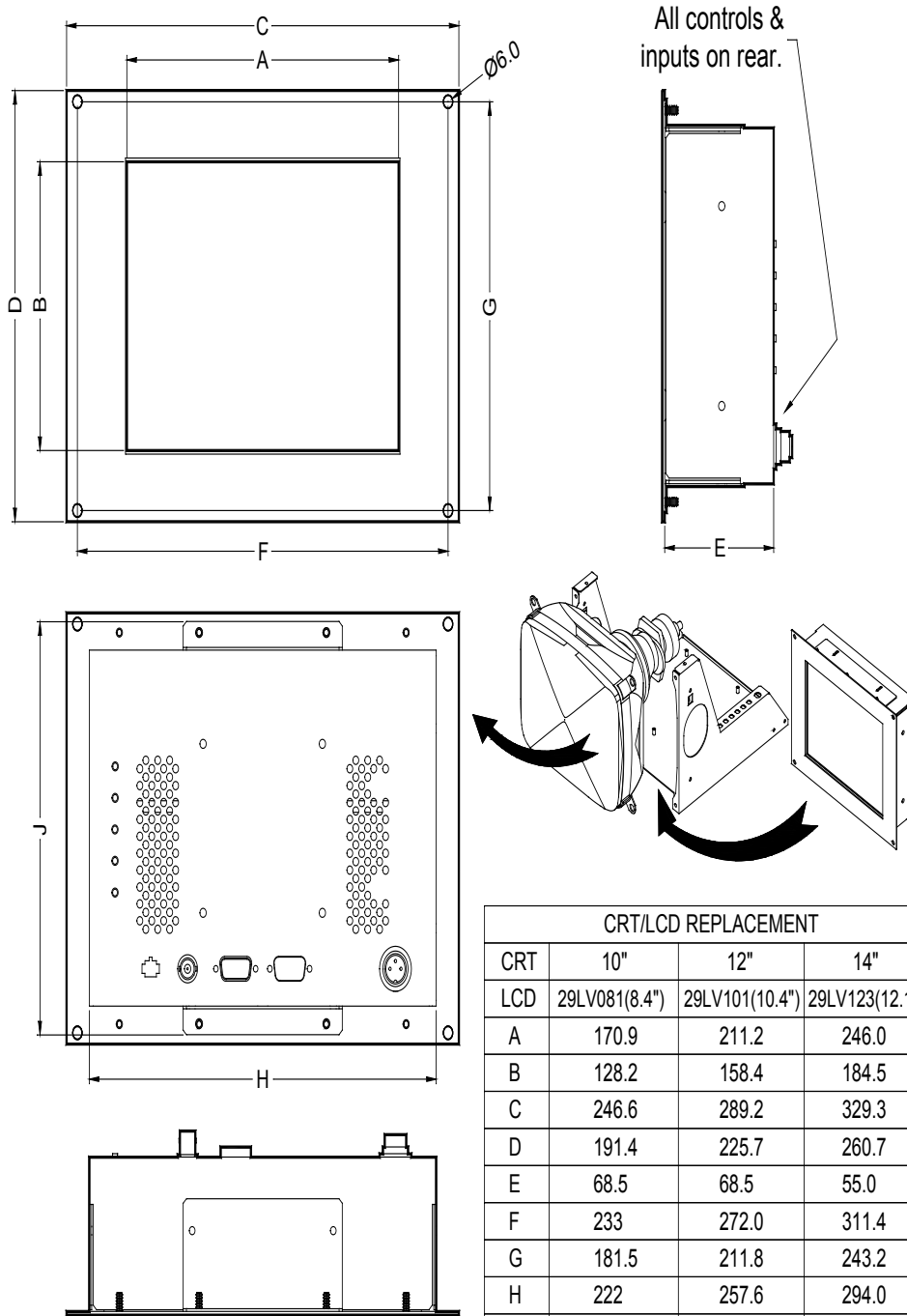
8.4" LCD CHASSIS REPLACEMENT

DATASHEET

FOR 10" CRT

29LV081A71UN/x

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.



All dimensions in Millimetres
(Not to scale)

10.4" LCD CHASSIS REPLACEMENT FOR 12" CRT

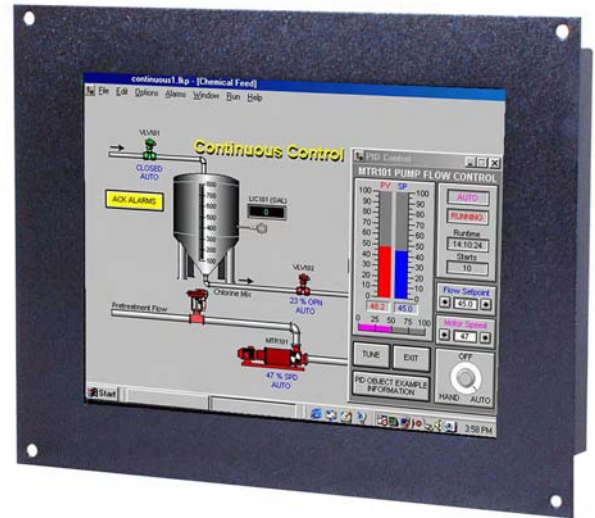
29LV101A71UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Electrical Description	
TFT Characteristics:	
Type:	AM colour TFT
No. of colours:	256k
Max resolution:	800 x 600 pixels
Active display area:	211.2 x 158.4 mm
Brightness:	400cd/m ²
Backlight life:	50,000 hours
Contrast ratio:	500:1 typical
Viewing angles:	120°H, 100°V
Input connectors:	5 x BNC 75R 15-pin HD Female
Video Signal:	Analog RGB 0.7Vp-p OR TTL RGB > 2.75Vp-p (via special TTL accessory cable)
Signal Sync:	Separate H&V (+/-ve) TTL OR Composite(-ve) TTL OR Sync-on- green (-ve) 0.3V
Synchronisation Range:	Horizontal scan: 15kHz - 60kHz Vertical scan: 40-100Hz
Multiscan Support:	640 x 480 VGA 800 x 600 SVGA + pre-programmed timings in 15-30kHz range
Power Supply:	90 - 260V AC DC option available
Clock rate:	80MHz max
Power Consumption:	25W max
Physical / Environmental	
Front Panel:	Black painted aluminium
Dimensions (approx):	289.2 x 225.7 x 68.5mm
Weight:	3kg approx
Operating Temp:	0 to 50°C
Storage Temp:	-20 to 60°C
Part Numbers:	
Model Number:	29LV101A71UN/3
Optional Model:	29LV101E71UN/3 (12V DC)

Note: The Active Display Area on a 12" Colour CRT is typically 225 x 169mm. On the 10.4" TFT it is 211 x 158mm maximum.



- For 12" colour CRT monitor replacement
- Front plate to suit 12" CRT fixing lug
- Original CRT chassis stays in place
- Analogue & TTL video inputs
- Non-standard legacy signals easily programmed
- Non glare acrylic for TFT protection
- Optional touchscreen integration

The 29LV101A71UN/3 Industrial LCD monitor has been designed as replacement for 12" CRT monitors now that supplies of 12" CRTs are difficult to obtain.

KME has designed a rugged LCD monitor module, of minimum width, to match the dimensions of many 12" CRT monitor chassis. When the CRT is removed from the existing chassis metalwork the LCD monitor (mounted on a metal panel with fixing holes to match the CRT Lugs) can be fitted in place.

A wide range of signal timings from 15kHz up to SVGA standard, including CGA & EGA legacy signals can be accepted by the LCD monitor. Set-up controls for finetuning of the display are located at the rear of the monitor. Once set, no further adjustments should be required, and the last setting is stored in memory.

Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trademarks acknowledged.

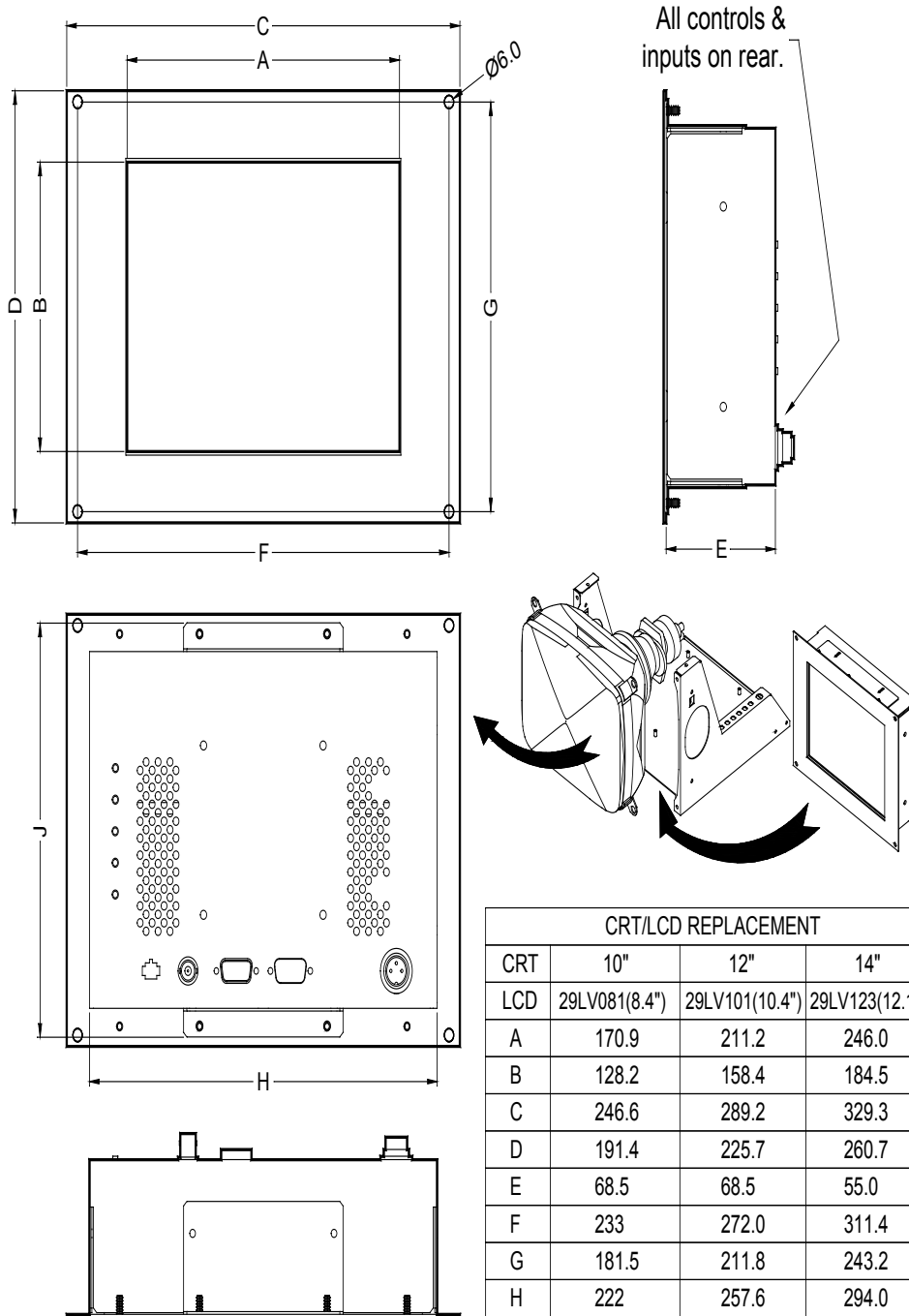


10.4" LCD CHASSIS REPLACEMENT

DATASHEET

FOR 12" CRT 29LV101A71UN/x

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.



CRT/LCD REPLACEMENT			
CRT	10"	12"	14"
LCD	29LV081(8.4")	29LV101(10.4")	29LV123(12.1")
A	170.9	211.2	246.0
B	128.2	158.4	184.5
C	246.6	289.2	329.3
D	191.4	225.7	260.7
E	68.5	68.5	55.0
F	233	272.0	311.4
G	181.5	211.8	243.2
H	222	257.6	294.0
J	183.5	221.9	238.0

All dimensions in Millimetres
(Not to scale)

12.1" LCD CHASSIS REPLACEMENT FOR 14" CRT

29LV123A71UN/x

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Electrical Description	
TFT Characteristics:	
Type:	AM colour TFT
No. of colours:	256k
Max resolution:	800 x 600 pixels
Active display area:	246 x 184.5 mm
Brightness:	400cd/m ²
Backlight life:	50,000 hours
Contrast ratio:	500:1 typical
Viewing angles:	140°H, 110°V
Input connectors:	5 x BNC 75R 15-pin HD Female
Video Signal:	Analog RGB 0.7Vp-p OR TTL RGB > 2.75Vp-p (via special TTL accessory cable)
Signal Sync:	Separate H&V (+/-ve) TTL OR Composite(-ve) TTL OR Sync-on- green (-ve) 0.3V
Synchronisation Range:	Horizontal scan: 15kHz - 60kHz Vertical scan: 40-100Hz
Multiscan Support:	640 x 480 VGA 800 x 600 SVGA + pre-programmed timings in 15-30kHz range
Power Supply:	90 - 260V AC DC option available
Clock rate:	80MHz max
Power Consumption:	30W max
Physical / Environmental	
Front Panel:	Black painted aluminium
Dimensions (approx):	340 x 268 x 55mm
Weight:	3.8kg approx
Operating Temp:	0 to 50°C
Storage Temp:	-20 to 60°C
Part Numbers:	
Model Number:	29LV123A71UN/1
Optional Model:	29LV123E71UN/1 (12V DC)



- For 14" colour CRT monitor replacement
- Front plate to suit 14" CRT fixing lug
- Original CRT chassis stays in place
- Analogue & TTL video inputs
- Non-standard legacy signals easily programmed
- Non glare acrylic for TFT protection
- Optional touchscreen integration

The 29LV121A71UN/1 Industrial LCD monitor has been designed as replacement for 14" CRT monitors now that supplies of 14" CRTs are difficult to obtain.

KME has designed a rugged LCD monitor module, of minimum width, to match the dimensions of many 14" CRT monitor chassis. When the CRT is removed from the existing chassis metalwork the LCD monitor (mounted on a metal panel with fixing holes to match the CRT Lugs) can be fitted in place.

A wide range of signal timings from 15kHz up to SVGA standard, including CGA & EGA legacy signals can be accepted by the LCD monitor. Set-up controls for finetuning of the display are located at the rear of the monitor. Once set, no further adjustments should be required, and the last setting is stored in memory.

Note: The Active Display Area on a 14" Colour CRT is typically 260 x 195mm. On the 12.1" TFT it is 246 x 184.5mm.

Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trademarks acknowledged.



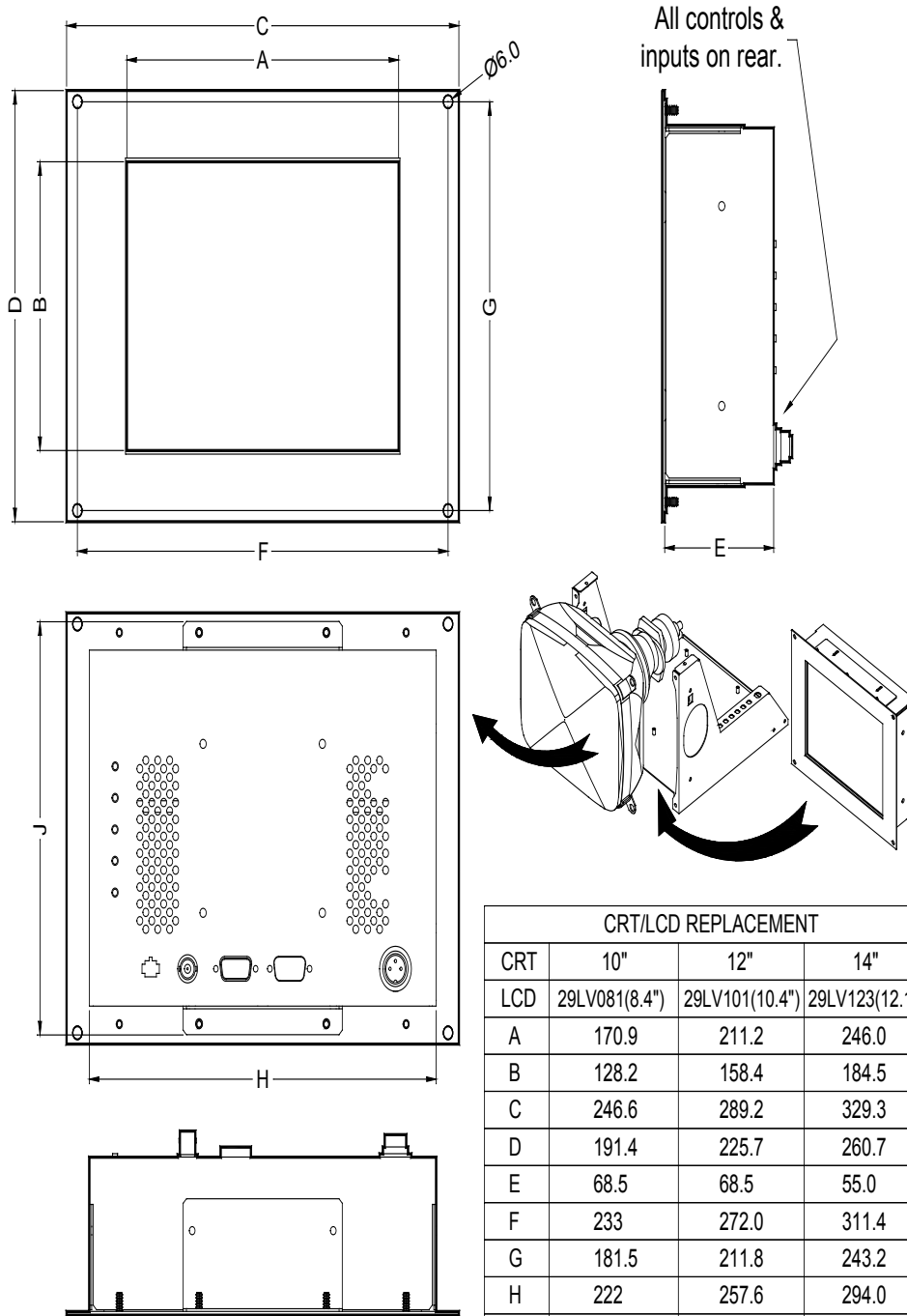
12.1" LCD CHASSIS REPLACEMENT

DATASHEET

FOR 14"CRT

29LV123A71UN/x

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.



All dimensions in Millimetres
(Not to scale)

12.1" LCD CHASSIS REPLACEMENT FOR 14"CRT

29LV123A61MY

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Electrical Description	
TFT Characteristics:	
Type:	AM colour TFT
No. of colours:	256k
Max resolution:	800 x 600 pixels
Active display area:	246 x 184.5 mm
Brightness:	400cd/m ²
Backlight life:	50,000 hours
Contrast ratio:	500:1 typical
Viewing angles:	140°H, 110°V
Input connectors:	5 x BNC 75R 15-pin HD Female
Video Signal:	Analog RGB 0.7Vp-p
Signal Sync:	Separate H&V (+/-ve) TTL
Synchronisation Range:	
Horizontal scan:	15kHz - 60kHz
Vertical scan:	40-100Hz
Multiscan Support:	640 x 480 VGA 800 x 600 SVGA + pre-programmed timings in 15-30kHz range
Power Supply:	90 - 260V AC DC option available
Clock rate:	80MHz max
Power Consumption:	30W max
Physical / Environmental	
Front Panel:	Black painted aluminium
Dimensions (approx):	340 x 268 x 55mm
Weight:	3.8kg approx
Operating Temp:	0 to 50°C
Storage Temp:	-20 to 60°C
Part Numbers:	
Model Number:	29LV123A61MY
Optional Model:	29LV123E61MY (12V DC)



- For 14" colour CRT monitor replacement
- Front plate to suit 14" CRT fixing lug
- Original CRT chassis stays in place
- Analogue & TTL video inputs
- Non-standard legacy signals easily programmed
- Non glare acrylic for TFT protection
- Optional touchscreen integration

The 29LV123A61MY Industrial LCD monitor has been designed as replacement for 14" CRT monitors now that supplies of 14" CRTs are difficult to obtain. The monitor has been designed for industrial applications that require a compact, SVGA compatible monitor with good viewability.

KME has designed a rugged LCD monitor module, of minimum width, to match the dimensions of many 14" CRT monitor chassis. When the CRT is removed from the existing chassis metalwork the LCD monitor (mounted on a metal panel with fixing holes to match the CRT Lugs) can be fitted in place.

Set-up controls for finetuning of the display are located at the rear of the monitor. Once set, no further adjustments should be required, and the last setting is stored in memory.

Note: The Active Display Area on a 14" Colour CRT is typically 260 x 195mm. On the 12.1" TFT it is 246 x 184.5mm

Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trademarks acknowledged.



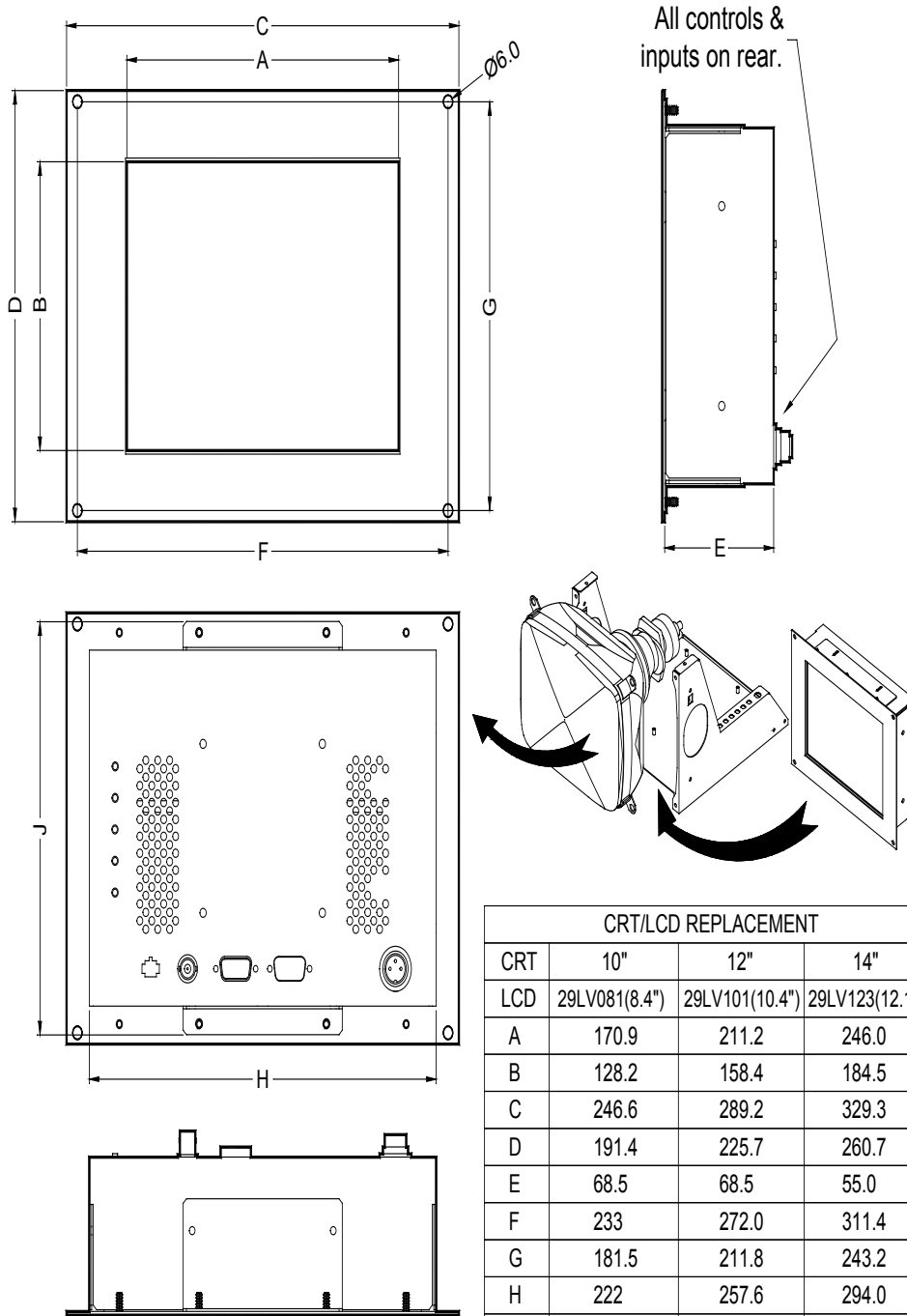
12.1" LCD CHASSIS REPLACEMENT

DATASHEET

FOR 14" CRT

29LV123A61MY

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.



All dimensions in Millimetres
(Not to scale)