VDO FATRON™ FAMILY
LED VIDEO BLADE WITH 20MM PIXEL PITCH

HIGHLIGHTS

- The perfect expansion of your creative VDO toolbox for exciting 3D stage setups

- Extensive range of field-exchangeable diffusers and lenses for a great variety of looks

- Easy setup, mapping and configuration via P3 System Controller

- Complete range of rigging accessories available

OVERVIEW

Your creative VDO toolbox just got bigger, more dynamic and way more flexible, making your P3 System Controller even more versatile.

VDO Fatron 20 is a 20 mm pixel pitch outdoor-rated LED video batten with an extensive range of optical accessories for a wide variety of looks that allows you to seriously play with creativity in 3D stage designs. Easy video-mapping and creative mix 'n' match with other Martin LED video products via the P3 System Controller. It uses the same integrated power and data cabling as VDO Sceptron and VDO Dotron, making installation a breeze. Be creative.

KEY MESSAGES

EASY INFRASTRUCTURE

The VDO Fatron products can be controlled via the Martin P3 protocol for easy mapping and integration with other Martin P3-enabled products onto the same control system. For smaller or pure lighting applications, the VDO Fatron also accepts direct RDM/DMX input. Or get the best of both worlds and feed DMX into the Martin P3 System Controller, offering real-time switching between DMX control and video mapping using P3 Switch.

VARIETY OF LOOKS

A range of 8 different "clip on" diffusers plus 1 lens enables many different looks to be created from the same fixture, adding greatly to its versatility. Off course the fixture can also be used without diffuser or lens installed.

RIGGING FLEXIBILITY

An extensive range of rigging accessories makes it possible to use the VDO Fatron virtually anywhere, and combine multiple fixtures into creative designs. Couplers, floorstands, brackets, spigot adapters and more are available.

MIX AND MATCH

Unlock even more creative possibilities by combining the VDO Fatron with VDO Sceptron and VDO Dotron. All products use the same cabling infrastructure and rigging accessories, allowing them to be combined in various shapes and designs. A perfect creative toolbox with matched colors.

VDO FATRON™ FAMILY
LED VIDEO BLADE WITH 20MM PIXEL PITCH

FEATURES

- Supported by integrated power and data processor (P3 PowerPort 1500, P3 PowerPort 1000 IP or DMX PowerPort 375) and simple cabling system

- Combined power and data cabling (compatible with other products such as VDO Sceptron and VDO Dotron)

- DMX Control

- P3 Control with VideoMapping

- Hybrid DMX + P3 Control (toggle in real-time between DMX, PixelMapping and VideoMapping using P3 Switch channel)

- Extensive range of built-in effects

- Intuitive mapping and addressing via P3 System Controller

- Fully brightness and color calibrated for optimal consistency between products (colors matched with VDO Sceptron and VDO Dotron)

- Pixel-level brightness and color calibrated for a completely homogenous look

- High-quality 16-bit per color image processing technology

- 20 mm pixel pitch

- 500 cd per meter calibrated

- 1500 lumen per meter calibrated

- 8 different diffuser options plus 1 lens option (all field-exchangeable)

- IP65 rated for outdoor use

- Versatile rigging accessories

- Available in two lengths: 1000 mm and 320 mm

ORDERING INFORMATION

- VDO Fatron 20, 320mm, in cardboard box: .... P/N 90357691

- VDO Fatron 20, 1000mm, in cardboard box .... P/N 90357692

- Flightcase for 15 x VDO Fatron 320 mm / 5 x VDO Fatron 1000 mm .... P/N 91515045

- Flightcase Extender for 15 x VDO Fatron 320 mm / 5 x VDO Fatron™1000 mm .... P/N 91515046

RELATED ITEMS

- Martin P3 PowerPort 1500 .... P/N 90721040

- Martin P3 PowerPort 1000 IP Rental .... P/N 90721070

- Martin DMX PowerPort 375 .... P/N 90721094

- Martin IP66 PSU 240 W External Power Supply .... P/N 90760330

- Martin P3-050 System Controller .... P/N 90721090

- Martin P3-150 System Controller .... P/N 90721015

- Martin P3-300 System Controller .... P/N 90721060

- Martin P3-PC System Controller ...... Free Download on martin.com

VDO FATRON™ FAMILY
LED VIDEO BLADE WITH 20MM PIXEL PITCH

ACCESSORIES

- Magnetic Test Tool, set of 10 .... P/N 91610139

HARDWARE

- VDO Sceptron/Fatron Sliding Brackets, set of 10........ P/N 91610123

- Low Profile VDO Sceptron/Fatron Half Coupler .... P/N 91611790

- VDO Sceptron/Fatron Linear Coupler .... P/N 91611843

- VDO Sceptron/Fatron Spigot Adapter,
  28 mm (1.1 in.)... P/N 91611791

- VDO Sceptron/Fatron Floorstands, set of two .... P/N 91611792

- Super Lightweight Half
  Coupler Rigging Clamp, black..................................... P/N 91602018

- VDO Fatron Curving Coupler .... P/N 91610164

- Safety Cable, SWL 60 kg,
  BGV C1 / DGUV 17, black .... P/N 91604006

- Safety Cable, SWL 60 kg,
  BGV C1 / DGUV 17, silver .... P/N 91604007

OPTICAL 320MM

- VDO Fatron Flat Diffuser, 320 mm .... P/N 91611809

- VDO Fatron Flat Smoked Diffuser, 320 mm .... P/N 91611811

- VDO Fatron Round Diffuser, 320 mm........................... P/N 91611813

- VDO Fatron Round Smoked Diffuser, 320 mm .... P/N 91611815

- VDO Fatron Square Diffuser, 320 mm.......................... P/N 91611817

- VDO Fatron Square Smoked Diffuser, 320 mm .... P/N 91611819

- VDO Fatron 20 NoBlend Diffuser, 320 mm .... P/N 91611825

- VDO Fatron 20 NoBlend Smoked Diffuser, 320 mm.... P/N 91611827

- VDO Fatron 20 Lens Array Narrow, 320 mm .... P/N 91611831

OPTICAL 1000MM

- VDO Fatron Flat Diffuser, 1000 mm .... P/N 91611810

- VDO Fatron Flat Smoked Diffuser, 1000 mm............... P/N 91611812

- VDO Fatron Round Diffuser, 1000 mm......................... P/N 91611814

- VDO Fatron Round Smoked Diffuser, 1000 mm .... P/N 91611816

- VDO Fatron Square Diffuser, 1000 mm........................ P/N 91611818

- VDO Fatron Square Smoked Diffuser, 1000 mm .... P/N 91611820

- VDO Fatron 20 NoBlend Diffuser, 1000 mm .... P/N 91611826

- VDO Fatron 20 NoBlend
  Smoked Diffuser, 1000 mm... P/N 91611828

- VDO Fatron 20 Lens Array Narrow, 1000 mm .... P/N 91611832

BBD INPUT ADAPTERS:

- Power + Data Input Cable, 4-pin male XLR
  (for P3 PowerPort 1500 or DMX PowerPort 375)
  to female BBD, 0.25 m (9.8 in.).................................... P/N 91616046

- Power + Data Input Cable,
  5-pin male XLR (for DMX) + wire tails (for PSU)
  to female BBD, 0.25 m (9.8 in.).................................... P/N 91616048

- Power + Data Input Cable,
  5-pin male XLR (for DMX) + 4-pin male XLR (for P3 PowerPort)
  to female BBD, 0.25 m (9.8 in.).................................... P/N 91616049

- Power + Data Input Cable,
  5-pin male XLR (for DMX) + male Tripix type
  (for Martin IP66 PSU 240W)
  to female BBD, 0.25 m (9.8 in.).................................... P/N 91616050

BBD OUTPUT ADAPTERS:

- Power + Data Output Cable,
  male BBD to 4-pin female XLR, 0.25 m (9.8 in.) .... P/N 91616047

- DMX Lead-out Cable,
  male BBD to 5-pin female XLR, 0.25 m (9.8 in.) .... P/N 91616051
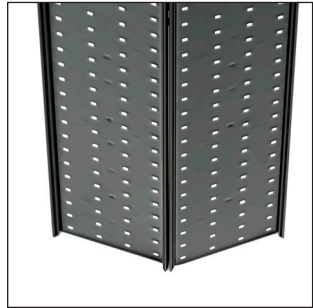
Martin®
by HARMAN

VDO FATRON™ FAMILY
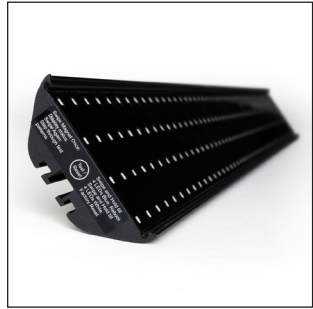## LED VIDEO BLADE WITH 20MM PIXEL PITCH

ACCESSORIES (CONTINUED)

BBD EXTENSION CABLES

- Power + Data Extension Cable, Rental Type,
  BBD to BBD, 1 m (3.3 ft.) .... P/N 91616041

- Power + Data Extension Cable, Rental Type,
  BBD to BBD, 2.5 m (8.2 ft.) .... P/N 91616024

- Power + Data Extension Cable, Rental Type,
  BBD to BBD, 5 m (16.4 ft.) .... P/N 91616042

- Power + Data Extension Cable, Rental Type,
  BBD to BBD, 10 m (32.8 ft.) .... P/N 91616043

- Power + Data Extension Cable, Rental Type,
  BBD to BBD, 25 m (82.1 ft.) .... P/N 91616044

- Power + Data Cable, Rental Type,
  100 m (328 ft.) bulk without connectors....................... P/N 91616045

CONNECTORS

- Power + Data Cable Connector, BBD, Male................. P/N 91611750

- Power + Data Cable Connector, BBD, Female .... P/N 91611751

- Blanking Caps for unused female
  BBD connectors, set of 10 .... P/N 91616052

Martin®
by HARMAN

VDO FATRON™ FAMILY
LED VIDEO BLADE WITH 20MM PIXEL PITCH

TECHNICAL SPECIFICATIONS

CONTROL AND PROGRAMMING

- **Control options** ....Martin P3 System Controller (via Martin P3 PowerPort) or DMX
- **Control resolution**..............................16-bit (P3) or 8-bit (DMX) control of each color
- **Protocol detection**.............................Automatic
- **Setting and addressing**......................Martin P3 System Controller or RDM-compliant controller
- **Color and intensity calibration**..........Pixel-level
- **DMX compliance** ....USITT DMX512-A
- **RDM compliance** ....ANSI/ESTA E1.20
- **Firmware update** ....Via Martin P3 System Controller
- **Control modes, direct DMX control** ....RGB, Basic, Segment and Pixel
- **DMX channels, direct DMX control** 3/10/19/37/55/157
- **Control modes, DMX via P3** ....P3 Intensity, P3 RGB, P3 Basic, P3 Hybrid and P3 PixelMap
- **DMX channels, DMX via P3**................Wide range of options from 1 to 603

CONTROL/USER INTERFACE

- **Device status**......................................Multi-color visual indication
- **Device test and reset** ....Magnetic pushbutton to call up local test patterns and reset device

OPTICS

Minimum LED lifetime: 50,000 hours (to >70% luminous output)*

*Figure obtained under manufacturer's test conditions

Diffuser/Lens Options:
- Open Front
- Flat Diffuser
- Flat Smoked Diffuser
- Round Diffuser
- Round Smoked Diffuser
- Square Diffuser (supplied standard with fixture)
- Square Smoked Diffuser
- NoBlend Diffuser
- NoBlend Smoked Diffuser
- Lens Array Narrow

All optical accessories are interchangeable and clip onto fixtures

PHOTOMETRIC DATA

- **Color resolution**.................................16 bits per color (48 bits per pixel)
- **Viewing angle** ....120˚ x 120˚ (half-peak)
- **Pitch (pixel center-to-center)** ....20.00 mm
- **Luminous intensity, calibrated mode** ....500 cd per meter
- **Luminous output, calibrated mode** ....1500 lumen per meter
- **Total output, calibrated mode** ....6250 nits (fixtures placed in continuous surface)
- **LED Array VDO Fatron 20 320mm** .....4 x 16
- **LED Array VDO Fatron 20 1000mm** ...4 x 50

VIDEO PROCESSING

- Brightness control
- Gamma correction and control
- Color temperature control
- Color space control
- Calibration processing
- Synchronization

SIGNAL PROTOCOL

- Martin P3 (via Martin P3 PowerPort) or DMX (direct)

CONSTRUCTION

Color...Matte black
Base ....Extruded aluminum profile
Protection rating...................................IP65
RoHS compliant

Martin®
by HARMAN

VDO FATRON™ FAMILY
LED VIDEO BLADE WITH 20MM PIXEL PITCH

TECHNICAL SPECIFICATIONS

INSTALLATION

Mounting..Channel for M6 captive nuts on back of profile

Mounting options ....M6 bolts, optional sliding bracket (accepts M12 bolt), half coupler, spigot adapter, linear coupler, parallel coupler, pivot coupler, curving coupler, floorstand

Orientation..Any

CONNECTIONS

Power and data input...............................6-pin custom (BBD) IP66-rated

Power and data thru ....6-pin custom (BBD) IP66-rated

Hot plugging compatible

ELECTRICAL

Nominal input voltage ....48 VDC +/- 4%

Power supply options...............................Martin P3 PowerPort 1500, Martin P3 PowerPort 1000 IP, Martin DMX PowerPort 375, Martin IP66 PSU 240W or generic 48 VDC PSU

Maximum power consumption, all LEDs at full intensity, VDO Fatron 20, 320 mm ....20 W

Maximum power consumption, all LEDs at full intensity, VDO Fatron 20, 1000 mm ....60 W

THERMAL

Cooling...Convection

Maximum ambient temperature (Ta max.) ....45° C (113° F)

Minimum ambient temperature (Ta min.)..-20° C (-4° F)

Maximum total heat dissipation, calculated, +/- 10%:

VDO Fatron 20, 320 mm ....70 BTU/hr

VDO Fatron 20, 1000 mm ....205 BTU/hr

APPROVALS

- EU safety: EN 60950-1, EN 60950-22, EN 62471
- EU EMC: EN 55024, EN 55032
- US safety: UL 60950-1, UL 60950-22
- US EMC: CFR Title 47 Part 15 Class A
- Canadian safety: CSA C22.2 No. 60950-1, No. 60950-22
- Canadian EMC: ICES-003 Class A
- Australia/NZ: RCM

VDO FATRON™ FAMILY
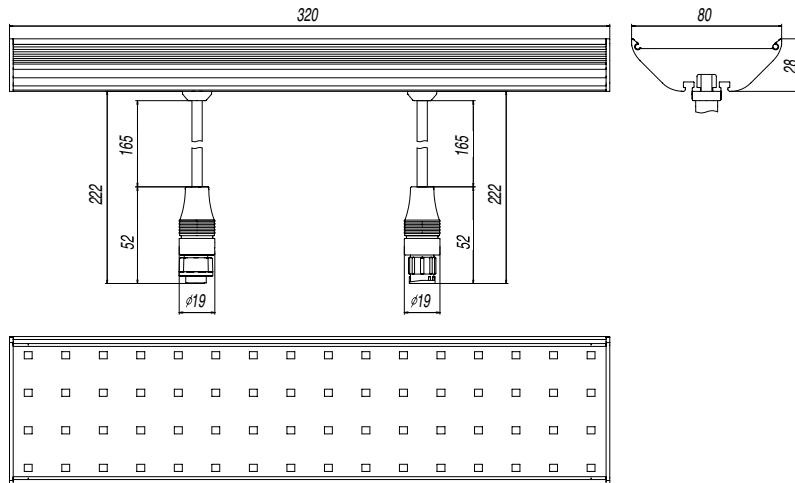## *LED VIDEO BLADE WITH 20MM PIXEL PITCH*

DIMENSIONS

PHYSICAL

VDO Fatron 20, 320 mm model:

Length	320 mm (12.6 in.)
Width	80 mm (3.15 in.)
Height without front	28 mm (1.10 in.)
Height with standard front (Square Diffuser)	48 mm (1.89 in.)
Weight without front	0.85 kg (1.9 lbs.)
Weight with standard front (Square Diffuser)	0.95 kg (2.1 lbs.)

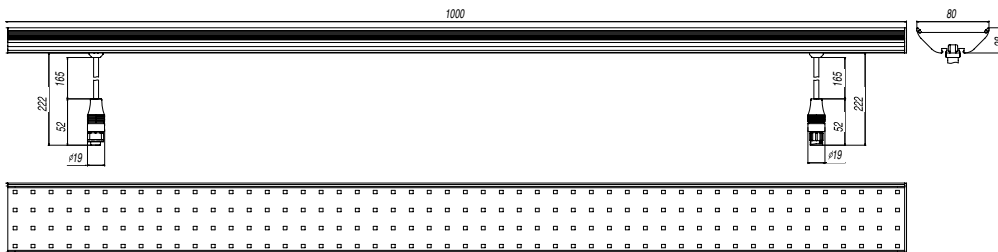**VDO Fatron 20, 1000 mm model:**

Length	1000 mm (39.4 in.)
Width	80 mm (3.15 in.)
Height without front	28 mm (1.10 in.)
Height with standard front (Square Diffuser)	48 mm (1.89 in.)
Weight without front	2.5 kg (5.6 lbs.)
Weight with standard front (Square Diffuser)	2.8 kg (6.2 lbs.)

Fatron 20, 320 mm

Fatron 20, 1000 mm

All dimensions are in mm

Martin® by HARMAN