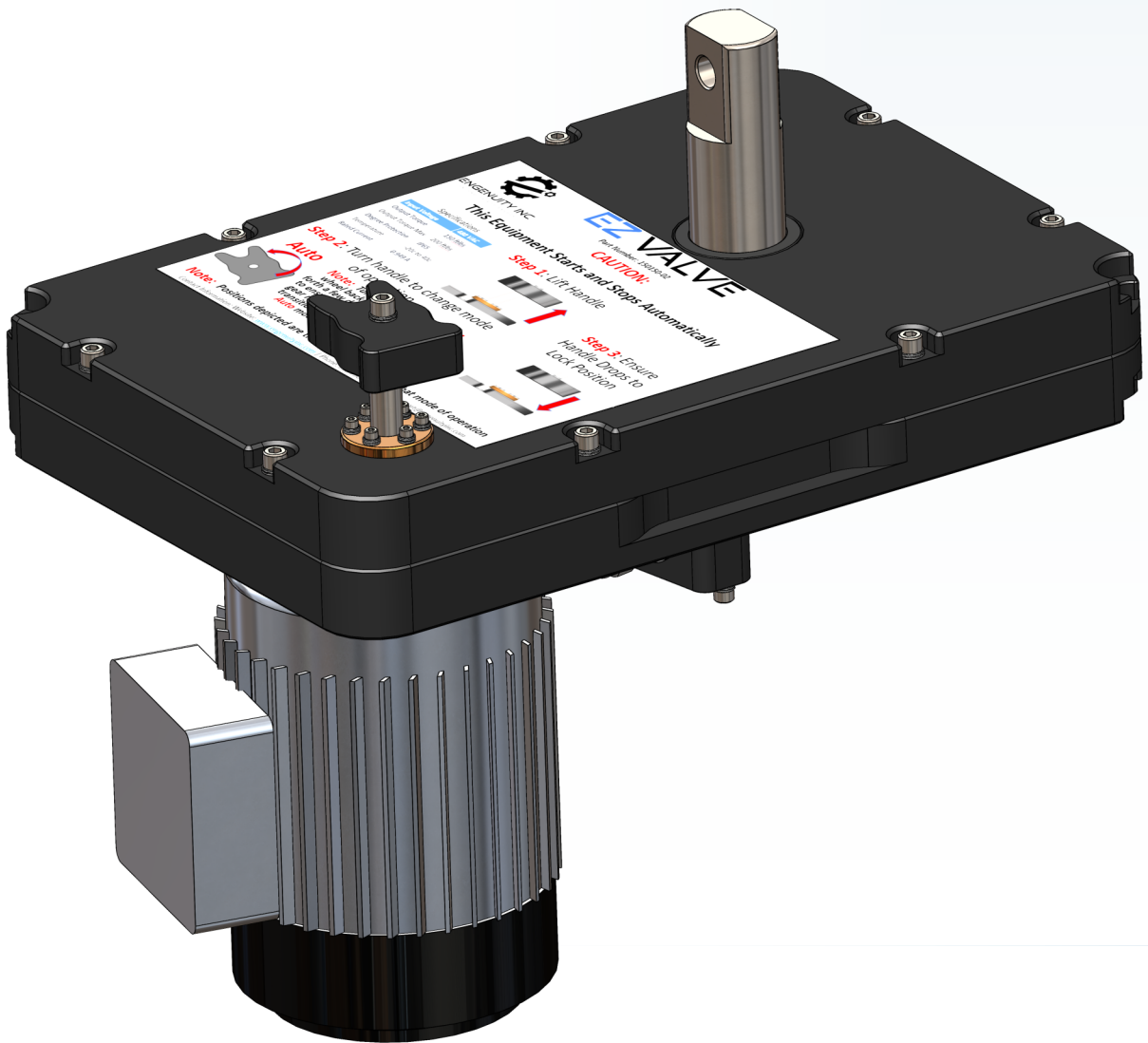




ENGENUITY INC
INGENUITY FOR ENERGY

EZ VALVE

EZ Valve is a revolutionary retrofittable actuator that integrates into a control automation package. This system provides real-time positioning and allows for fully automatic valve alignment. EZ Valve actuator has 3 modes of operation; automatic, manual, or manual while in automatic mode.



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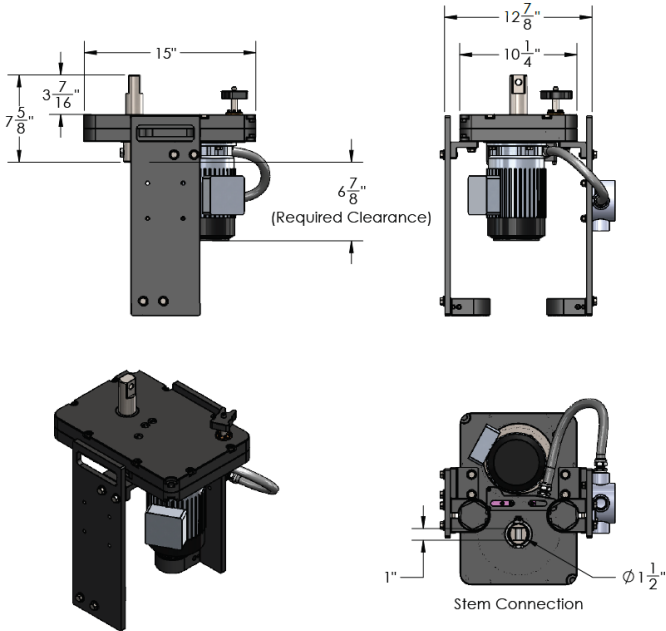


ENGENUITY INC
INGENUITY FOR ENERGY

EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Actuator Specifications (PN 150150-02)



Specification	Parameter
Input Voltage	460 VAC
HP	.5
Rated Current	.949
Output Torque	165 ft-lbs.
Max Output Torque	225 ft-lbs.
Operating Temp	-20c to 65c
Storage Temp	-40c to 85c
Protection	IP65
Class Location	C1D2 / Optional C1D1 / ATEX
Noise Level	50db
Service Factor	1.15
Dimensions	L15in x W10.25in x H12.25in
Weight	55 lbs.

Feature List

- Retrofittable hardware requires no modification of OEM components
- Integrates with BOPX software and EZ product lines
- Automatic and manual valve operation modes
- Real time confirmation of valve position onsite and remotely via monitoring center
- Reduces/eliminates exposure associated with Well Control Equipment pressure test
- Provides consistent repeatable valve alignment times and results
- Provides real time opening and closing torque values
- System alarm historian
- EZ Valve torque historian
- Real time valve state monitoring both in Automatic and Manual operation modes
- Follows manual hand wheel Open/Close position standards (Open inline with pipe) (Close 90deg with pipe)
- Configurable line ups for both pressure testing and operations, allowing single button operation to perform complete line up.

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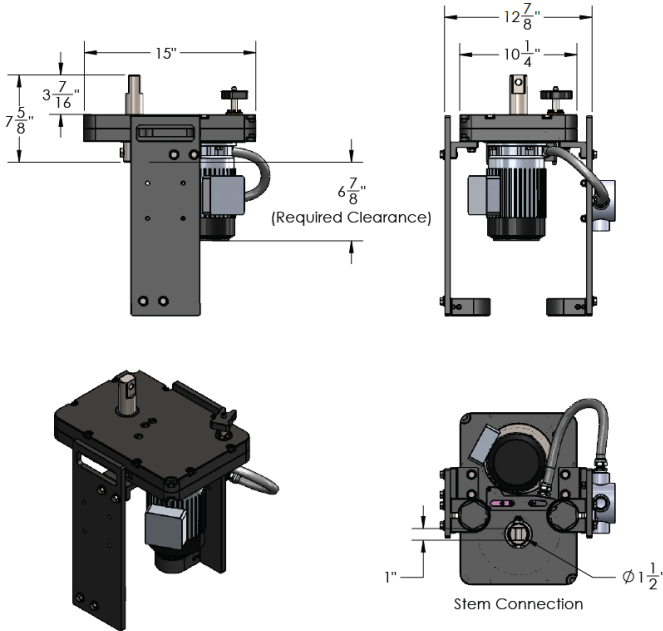


ENGENUITY INC
INGENUITY FOR ENERGY

EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Actuator Specifications (PN 150150-02)



Specification	Parameter
Input Voltage	460 VAC
HP	.75
Rated Current	.949
Output Torque	200 ft-lbs.
Max Output Torque	305 ft-lbs.
Operating Temp	-20c to 65c
Storage Temp	-40c to 85c
Protection	IP65
Class Location	C1D2 / Optional C1D1 / ATEX
Noise Level	50db
Service Factor	1.15
Dimensions	L15in x W10.25in x H12.25in
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Feature List

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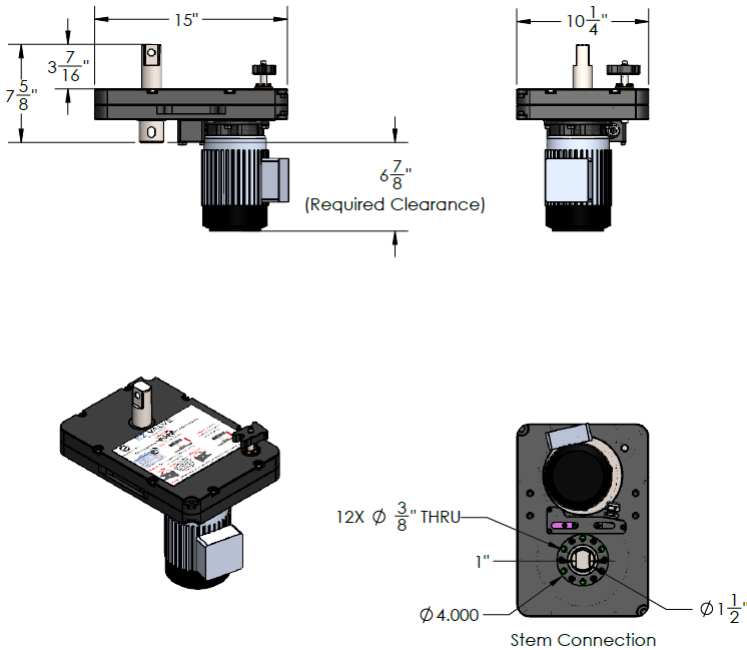


ENGENUITY INC
INGENUITY FOR ENERGY

EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Actuator Specifications (PN 150150-02)(Flange Mount)



Specification	Parameter
Input Voltage	460 VAC
HP	.5
Rated Current	.949
Output Torque	165 ft.-lbs.
Max Output Torque	225 ft.-lbs.
Operating Temp	-20c to 65c
Storage Temp	-40c to 85c
Protection	IP65
Class Location	C1D2 / Optional C1D1 / ATEX
Noise Level	50db
Service Factor	1.15
Dimensions	L15in x W10.25in x H12.25in
Weight	55 lbs.

Feature List

- Retrofittable hardware requires no modification of OEM components
- Integrates with BOPX software and EZ product lines
- Automatic and manual valve operation modes
- Real time confirmation of valve position onsite and remotely via monitoring center
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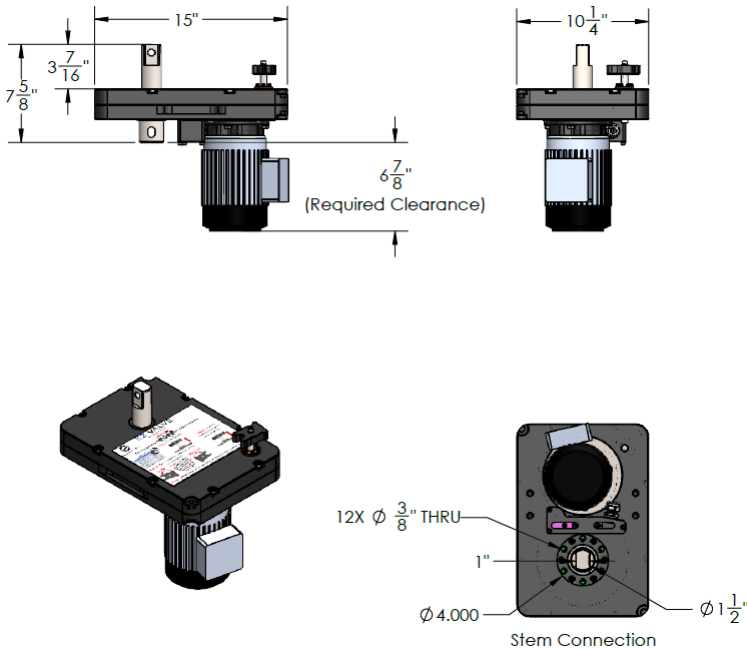


ENGENUITY INC
INGENUITY FOR ENERGY

EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Actuator Specifications (PN 150150-02)(Flange Mount)



Specification	Parameter
Input Voltage	460 VAC
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Operating Temp	-20c to 65c
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Protection	IP65
Class Location	C1D2 / Optional C1D1 / ATEX
Noise Level	50db
Service Factor	1.15
Dimensions	L15in x W10.25in x H12.25in
Weight	55 lbs.

Feature List

- Retrofittable hardware requires no modification of OEM components
- Integrates with BOPX software and EZ product lines
- Automatic and manual valve operation modes
- Real time confirmation of valve position onsite and remotely via monitoring center
- Reduces/eliminates exposure associated with Well Control Equipment pressure test
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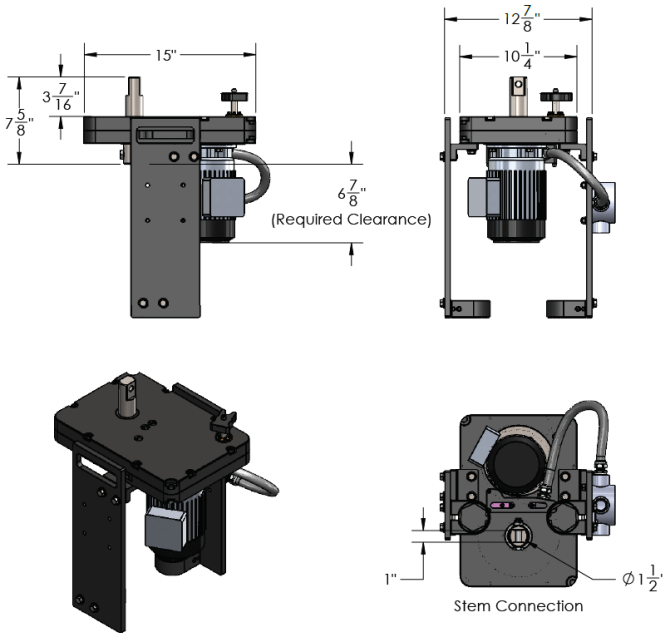


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EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Actuator Specifications (PN 150150-02)(Hi Torque)



Specification	Parameter
Input Voltage	460 VAC
HP	.75
Rated Current	2.5
Output Torque	310 ft-lbs.
Max Output Torque	450 ft-lbs.
Operating Temp	-20c to 65c
Storage Temp	-40c to 85c
Protection	IP65
Class Location	C1D2 / Optional C1D1 / ATEX
Noise Level	50db
Service Factor	1.15
Dimensions	L15in x W10.25in x H12.25in
Weight	65 lbs.

Feature List

- Retrofittable hardware requires no modification of OEM components
- Integrates with BOPX software and EZ product lines
- Automatic and manual valve operation modes
- Real time confirmation of valve position onsite and remotely via monitoring center
- Reduces/eliminates exposure associated with Well Control Equipment pressure test
- Provides consistent repeatable valve alignment times and results
- Provides real time opening and closing torque values
- System alarm historian
- EZ Valve torque historian
- Real time valve state monitoring both in Automatic and Manual operation modes
- Follows manual hand wheel Open/Close position standards (Open inline with pipe) (Close 90deg with pipe)
- Configurable line ups for both pressure testing and operations, allowing single button operation to perform complete line up.

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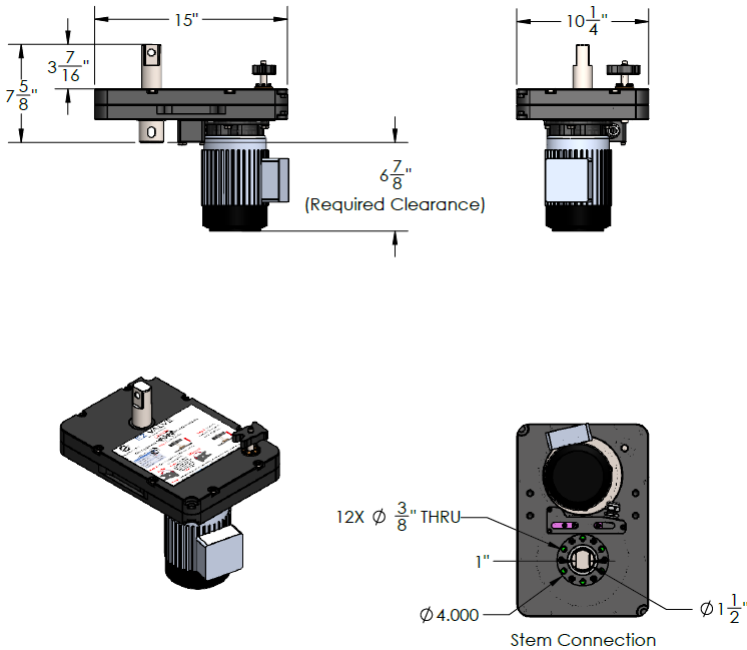


ENGENUITY INC
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EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Actuator Specifications (PN 150150-02)(Flange Mount)(Hi Torque)



Specification	Parameter
Input Voltage	460 VAC
HP	.75
Rated Current	2.5
Output Torque	310 ft-lbs.
Max Output Torque	450 ft-lbs.
Operating Temp	-20c to 65c
Storage Temp	-40c to 85c
Protection	IP65
Class Location	C1D2 / Optional C1D1 / ATEX
Noise Level	50db
Service Factor	1.15
Dimensions	L15in x W10.25in x H12.25in
Weight	65 lbs.

Feature List

- Retrofittable hardware requires no modification of OEM components
- Integrates with BOPX software and EZ product lines
- Automatic and manual valve operation modes
- Real time confirmation of valve position onsite and remotely via monitoring center
- Reduces/eliminates exposure associated with Well Control Equipment pressure test
- Provides consistent repeatable valve alignment times and results
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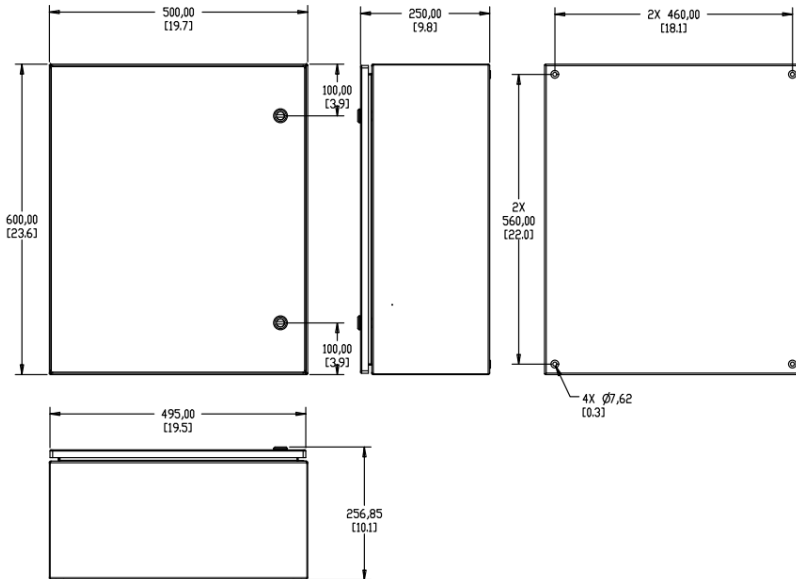


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EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Control Panel Specifications (PN 150557-02)



Specification	Parameter
Input Voltage	120/240 VAC
Amps	5 nominal, 10 inrush @ 120VAC
Construction	316L
Area Classification	NEC Div/Zone 2
Ingress Protection	IP 66 (Nema 4X)
Operation Temp	- 20°C to +50°C
Storage Temp	- 20°C to +60°C

Internal Components List

Quantity	Description
2 each	C1D2 Hybrid Controller/Data manager
1 each	Redundant C1D2 Power Supply
1 each	Network/Comms Package
1 each	C1D2 to C1D1 Barrier Package
1 each	C1D2 I/O Package

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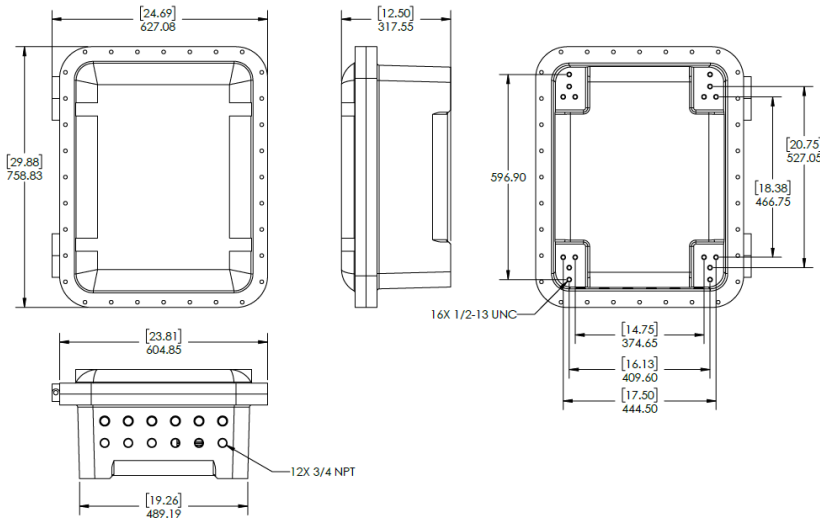


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INGENUITY FOR ENERGY

EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Drive Panel Specifications (PN 150558-02)



Specification	Parameter
Input Voltage	460-480 VAC (others available)
Amps	10 amps nominal
Construction	Aluminum
Explosion Protection	Explosion Proof
Ingress Protection	IP 66
Operation Temp	- 20°C to +50°C

Internal Components List

Quantity	Description
1 each	Redundant Valve Drive Set
1 each	Redundant Valve Contactor Set
1 each	Network/Comms Package

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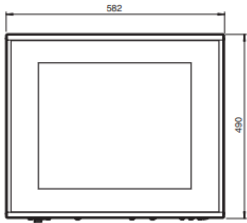


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EZ VALVE

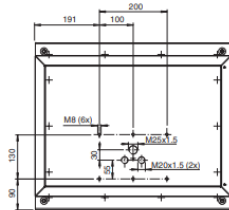
EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

HMI Specifications (PN 150612-02)



	A
Built-in panel 15"	229 mm
Built-in panel 19"	224 mm

Back view AG1 monitor housing for 15" and 19" VisuNet EX1 panel

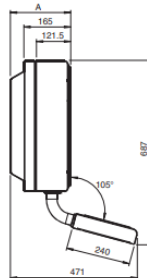
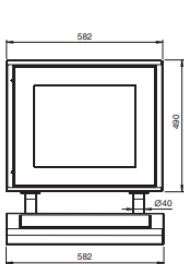


Bottom view AG1 monitor housing for 15" and 19" VisuNet Ex 1 panel



Mechanical specifications	
Degree of protection	IP66 (15" / 19") keyboard housing, optional: IP66 (on the back) , depending on mouse type at front - refer to datasheet EXTA2
Material	AG1: stainless steel 1.4301 (304) option available upon request : AS1: stainless steel 1.4571 (316Ti) / stainless steel 1.4404 (316L)
Mass	27 kg (15") 25 kg (19") 4 kg (keyboard housing, optional)
Dimensions	582 x 490 x 213 mm (without panel) 582 x 490 x 229 mm (15" panel) 582 x 490 x 224 mm (19" panel)
Construction type	front door hinge on the left

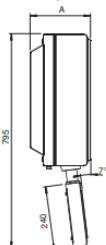
Optional



	A
Built-in panel 15"	229 mm
Built-in panel 19"	224 mm

Housing with Keyboard Option -L

Monitor housing with built-in 15"/19" panel & keyboard option L for VisuNet EX1



Mechanical specifications	
Degree of protection	IP66 (15" / 19") keyboard housing, optional: IP66 (on the back) , depending on mouse type at front - refer to datasheet EXTA2
Material	AG1: stainless steel 1.4301 (304) option available upon request : AS1: stainless steel 1.4571 (316Ti) / stainless steel 1.4404 (316L)
Mass	27 kg (15") 25 kg (19") 4 kg (keyboard housing, optional)
Dimensions	582 x 490 x 213 mm (without panel) 582 x 490 x 229 mm (15" panel) 582 x 490 x 224 mm (19" panel)
Construction type	front door hinge on the left

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EZ VALVE

EZ Valve system can be customized for many applications and valve types. Listed are the standard specifications and features.

Tablet Specifications (PN 150603-02)

ATEX / IECEx / UL913 Certifications	ATEX/IECEx EX II 1 GD Ex ia op is IIC T4 Ga Ex ia op is IIIC T135°C Da UL913 Class I, Zone 0, AEx ia op is IIC T4 Ga Class II, Zone 20, AEx ia IIC T135°C Da Class I, Division 1, Groups A, B, C, D Class II, Division 1, Groups E, F, G Class III, Division 1
Ruggedness	MIL-STD 810G and IP67 certified Vibration, drop, temperature & humidity resistant Salt-fog resistant
Operating System	Windows® 10 Professional
CPU	Intel® Atom Processor x5-Z8350 Processor 1.44GHz, burst up to 1.92 GHz; 2MB Cache
Memory	4GB LPDDR3 ¹
Storage	eMMC 128GB ¹
VGA Controller	Intel HD Graphics
Display	8" IPS TFT LCD WXGA (1280x800) 600 NITS LumiBond® 2.0 sunlight readable display with multi-touch technology
Security	TPM 2.0; NIST BIOS compliant; Contactless HF RFID reader 13.56 MHz HF RFID (ISO 14443 – (A,B), MIFARE, ISO 15693) Optional Absolute™ DDS software
Communications	Dual Band 802.11a/b/g/n, Bluetooth (v4.0); Dedicated GPS; Optional 4G LTE multi-carrier mobile broadband with CA ²

Keyboard	Six tablet buttons: Power, Windows, Programmable x 2, Volume Up & Volume Down
Camera	FHD (1920x1080) webcam x 1, 8MP auto focus camera
Power	Charging Cradle AC adapter (24W, 100-240VAC, 50 / 60Hz); Li-Ion battery (7.4V, 4200mAh)
Dimensions and Weight	9.4" x 6.1" x 1.14" (240 x 155 x 29mm) 3.26lbs (1.48kg) ^{††}
Temperature	Operating Temp: -5.8° F to 122° F / -21°C to 50°C; Storage Temp: -40°F to 160°F / -40°C to 71°C; Humidity: 95% RH, non-condensing
I/O Interfaces	Docking port x 1
Warranty	3 Year bumper-to-bumper warranty standard [‡]



Specification subject to change without notice.

¹Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory.

²Data plan required. Cellular data is available in the US on Verizon Wireless and AT&T networks. LTE is available in select markets. Check with your carrier for details. 4G LTE configuration must be ordered at time of purchase.

[†]For storage, 1GB = 1 billion bytes; actual formatted capacity less.

^{††}Weight varies by configuration and manufacturing process.

[‡]3 year bumper-to-bumper limited warranty standard. For warranty terms and conditions visit www.getac.com

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