

AVT™ EZ VALVE®

100mm to 350mm data sheet



**Advanced Valve
Technologies**

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AVT EZ VALVE 100MM TO 350MM

The award-winning AVT EZ Valve is the best choice for emergency repairs and the smartest solution for planned and emergency pipeline maintenance on 100mm to 350mm diameter lines.

This inline insertion valve can be installed on horizontal or vertical lines and normally requires a single excavation; so fixing a line is fast, with fewer disruptions to businesses and residents and less cost and risk for owners and operators. On pipe diameters from 100mm to 350mm, these valves normally can be installed in around an hour.

Ranked among the industry's most innovative solutions, the light and compact AVT EZ Valve is designed with a built-in isolation gate that allows the valve to be installed under pressure, a design feature that permits flow through the line while the repair is being made. It is durable, reliable, and certified to industry standards.

BENEFITS & VALUES:

- No water shutoff required during installation
- No service interruption
- No fines for water shutoff
- No customer notices
- No risk of dropped coupon
- No loss of pipe integrity
- Four times quicker to install than other valves on the market
- Only one excavation required for water line repair

APPLICATIONS:

- Water Company Networks
- Transmission and distribution lines
- Wastewater treatment plants
- Pumping Sewer Mains
- Refining and petrochemical plants
- Offshore applications
- Commercial buildings / isolation
- High-rise buildings
- Multiple occupancy buildings
- Industrial process piping
- Ground storage tank isolation



FEATURES

DESIGN

- Unique, patented technology
- Low profile design
- Ductile iron castings
- Integrated isolation valve
- Patented gaskets which conform to irregular pipe geometries and sizes
- Size 100mm to 350mm

INSTALLATION

- Can be installed on all common pipe materials
- Installs at any angle
- Valve bonnet can be removed after a repair or remain in place as a permanent functioning valve

SAFETY

- Approved Epoxy Resin Coating
- Stainless steel fasteners for secure positioning
- Working pressure of 250 PSI, (17 Bar) – Tested Pressure to 375 PSI (26 Bar)
- EZ Valve Components are WRAS Certified, meets AWWA C509 & C515 standards (latest versions) and UL Classified to NSF/ANSI Standard 61, Drinking Water System Components - Health Effects

INSTALL PROCESS

1

Prepare Insertion Site

Prepare insertion site by lubricating the gasket and contact areas



2

Lubricate Gasket Sets & Channels

Lubricate gasket sets and gasket channels in casting bodies



3

Assemble Ductile Iron Castings

Assemble ductile iron castings with ductile iron fasteners to accept a pressure test and temporarily allow rotation for milling



4

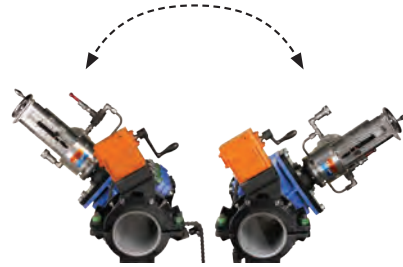
Attach EM Machine

Check integral isolation gate is fully open, fit rotation assembly, attach EM machine and apply pressure tests

5

Mill A Slot Over a 120° Path

Maintaining system line pressure, mill a slot over a 120° path (Note: The slot normally is cut to provide for vertical valve alignment, but the installer can select any position.)



6

Retract The Milling Head

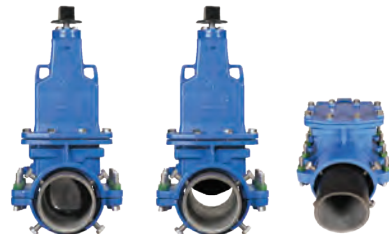
Retract the milling head, close the integral isolation gate. Replace the EM Machine with the resilient wedge bonnet, remove the rotation assembly and tighten casting fasteners to specified torque values



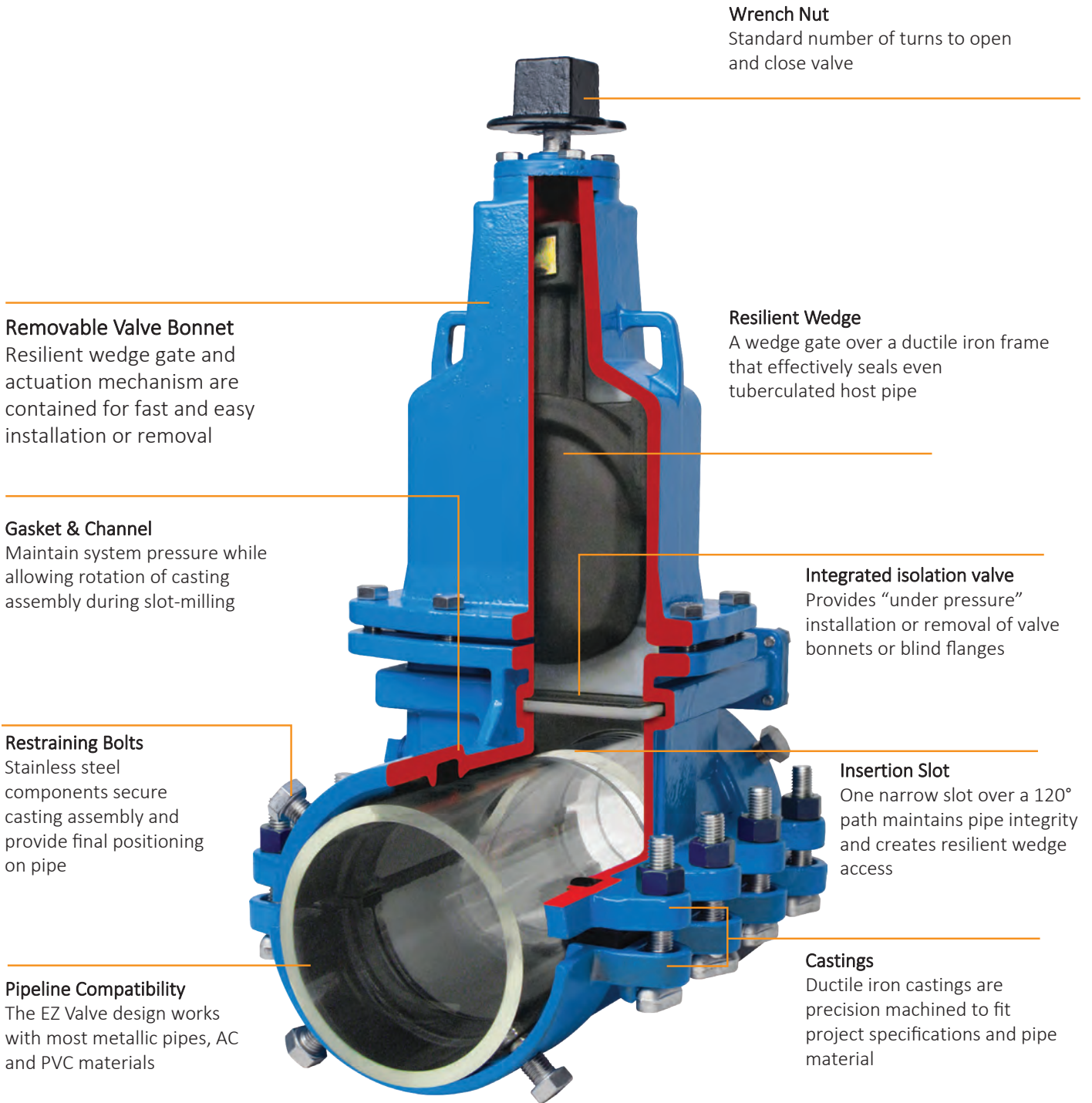
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Open and Operate

Open the integral isolation gate and operate the AVT EZ Valve. For line stop applications, replace the valve bonnet with a blind flange using the integral isolation gate



CUT AWAY VALVE WITH KEY



Wrench Nut
Standard number of turns to open and close valve

Removable Valve Bonnet
Resilient wedge gate and actuation mechanism are contained for fast and easy installation or removal

Resilient Wedge
A wedge gate over a ductile iron frame that effectively seals even tuberculated host pipe

Gasket & Channel
Maintain system pressure while allowing rotation of casting assembly during slot-milling

Integrated isolation valve
Provides “under pressure” installation or removal of valve bonnets or blind flanges

Restraining Bolts
Stainless steel components secure casting assembly and provide final positioning on pipe

Insertion Slot
One narrow slot over a 120° path maintains pipe integrity and creates resilient wedge access

Pipeline Compatibility
The EZ Valve design works with most metallic pipes, AC and PVC materials

Castings
Ductile iron castings are precision machined to fit project specifications and pipe material

100MM TO 350MM EZ VALVE DIMENSIONS & DIAMETRICAL RANGE

DIMENSIONS

Size	Height (H1)	Height (H2)	Length	Width	Weight
100mm	601.9mm	453.5mm	450.3mm	298mm	61kg
150mm	726.5mm	521.6mm	450.3mm	354mm	79kg
200mm	887.75mm	608.12mm	450.3mm	416.3mm	110kg
250mm	997.71mm	679.7mm	500.3mm	480.3mm	159kg
300mm	1112.01mm	735mm	500.3mm	540.5mm	201kg
350mm	1366mm	951mm	650mm	590mm	362kg

Pipe Size	Actuator (A1)	Actuator (A2)	Actuator (A3)
100mm	285.75mm	300mm	887.65mm
150mm	285.75mm	300mm	1012.25mm
200mm	285.75mm	300mm	1173.5mm
250mm	285.75mm	300mm	1283.46mm
300mm	285.75mm	300mm	1397.76mm
350mm	285.75mm	300mm	1651.75mm

DIAMETRICAL RANGE

Our standard casting cater for all pipe materials from IPS steel to oversized cast iron, our A/C casting (4" to 12") cater for: A/C 100, A/C 150, and A/C 200 size ranges

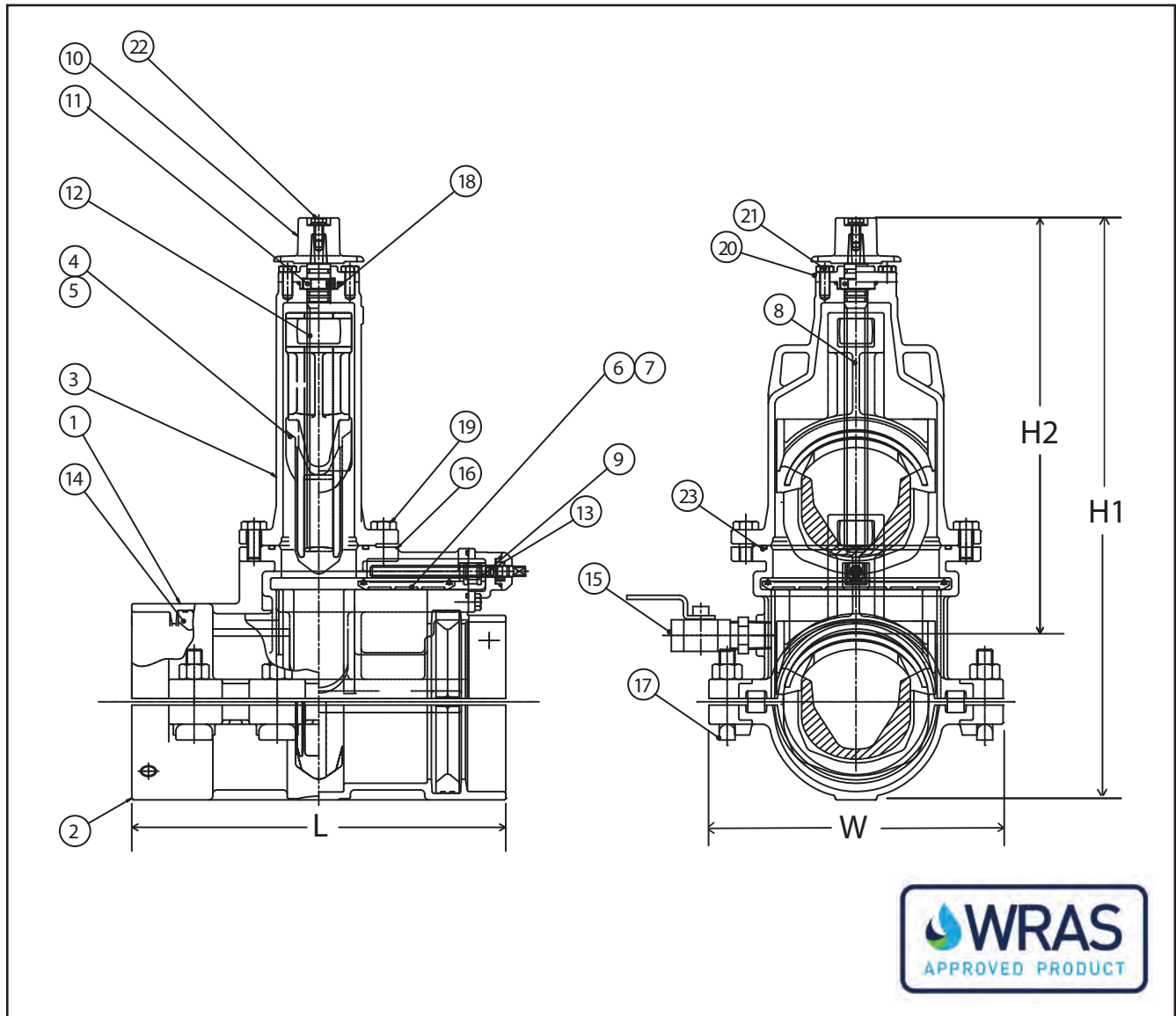
Pipe Size	Diametrical Range
100mm	122mm to 134mm
150mm	169mm to 191mm
200mm	219mm to 246mm
250mm	273mm to 307mm
300mm	324mm to 365mm
350mm	388mm to 394mm

INSTALLATION

Clean, joint-free length of pipe required to allow for standard EZ Valve installation

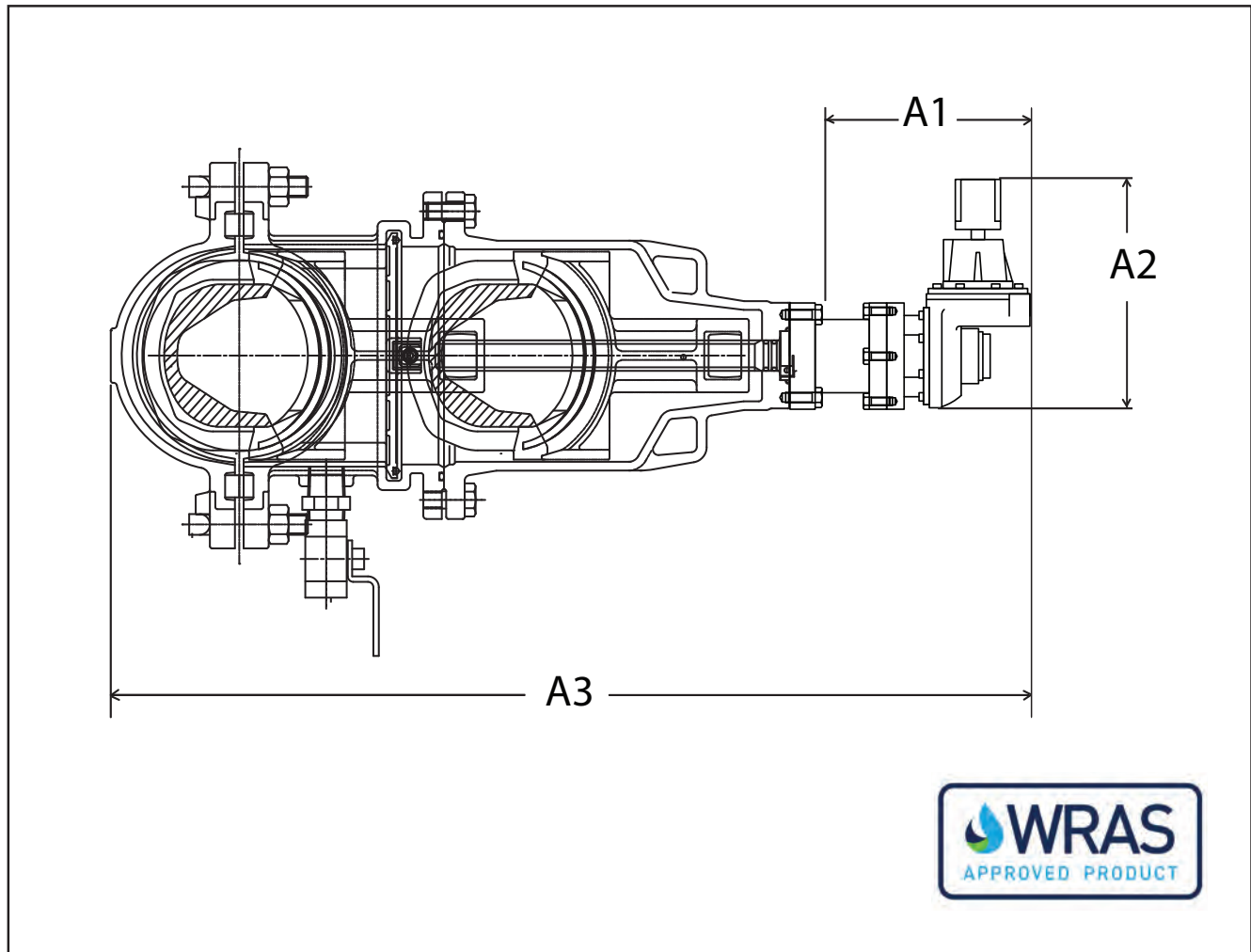
Size	Clean pipe
100mm	1150mm
150mm	1150mm
200mm	1150mm
250mm	1400mm
300mm	1400mm
350mm	1400mm

100MM TO 350MM EZ VALVE SPECIFICATIONS



Item No	Description	Material
1	Upper Half of Body	DUCTILE IRON
2	Bottom Half of Body	DUCTILE IRON
3	Bonnet Body	DUCTILE IRON
4	Gate	DUCTILE IRON
5	Gate Rubber	EPDM
6	Isolation Gate	DUCTILE IRON
7	Isolation Gate Rubber	EPDM
8	Stem (Feed Screw)	STAINLESS STEEL
9	Isolation Gate Stem	STAINLESS STEEL
10	Wrench Nut	DUCTILE IRON
11	Set Collar	BRONZE
12	Stem Nut	BRONZE
13	Isolation Gate Stem Nut	BRONZE
14	Gasket	EPDM
15	Chip Flushing Port	N/A
16	EM Cutting Port	N/A
17	Fasteners & Nuts	DUCTILE IRON
18	O-Rings	BUNA-N
19	Bonnet Bolts	STAINLESS STEEL
20	Bonnet Bush	DUCTILE IRON
21	Bush Fasteners	STAINLESS STEEL
22	Bolt for Wrench Nut	STAINLESS STEEL
23	Bonnet O-Ring	EPDM

EZ VALVE WITH OPTIONAL ACTUATOR SUPPLIED



SPECIFICATIONS

1. Bottom Half Body: DI. ASTM A536 65-45-12
2. Upper Half Body: DI. ASTM A536 65-45-12
3. Bonnet: DI. ASTM A536 65-45-12
4. Gate: DI. ASTM A536 65-45-12
5. Gate Rubber Coated: EPDM ISO 4097:2014
6. Stem: Stainless Steel 17-4PH
7. Gasket: EPDM ISO 4097:2014
8. Set Collar: Bronze C954 (AWWA C-509-01)
9. Stem Nut: Bronze C954 (AWWA C-509-01)
10. Wrench Nut: DI. ASTM A536 65-45-12

Warranty: A One Year warranty covers parts and labour for Equipment and Valves (Excluding Perishable Tooling and O-Rings) barring misuse or lack of routine maintenance.

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Advanced Valve Technologies (AVT) is part of ClockSpring|NRI, the high-performance critical infrastructure solutions company. AVT's advanced solutions are based on simple designs that minimize risk to the environment and reduce costly downtime. Our primary focus is on disruptions in water service that cost providers money and leave end users without service.

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