



POTABLE WATER & IRRIGATION SERVICES 2014
SunUp Bay

INSTALLATION / INSPECTION FEES		***METER COSTS
1 ½" Domestic / Irrigation Water Meter Fee	\$150	\$750.00

*Detail drawings and material specifications will be supplied for meter sets and water line connection to existing main line

**Meter pricing disclosure: pricing listed above is good for 60 days after date on application

INSPECTIONS

	Initials	Date
Water Service: 1)	_____	_____

Notice:

1. The water meter installation fee includes one inspection of the service when installed for construction water, the installation of the meter and a second inspection when the service is installed to the home.
2. The domestic / irrigation meter fee includes one inspection prior to backfill of the service and the installation of the meter.
3. The STEP system installation fee includes an inspection at the tank and service line prior to backfill and the installation of the system and an inspection of the entire system when installation is complete. If any additional inspections are needed an inspection fee of \$1100 per inspection will be billed to the owner.
4. All installation / inspection fees include temporary monitoring of the wet utilities to ensure proper operation.

Applicant Initials

Date

Contact info:

Kleimle & Hagood

C/O Josh BeeBe

2065 W. Riverstone Dr. #101

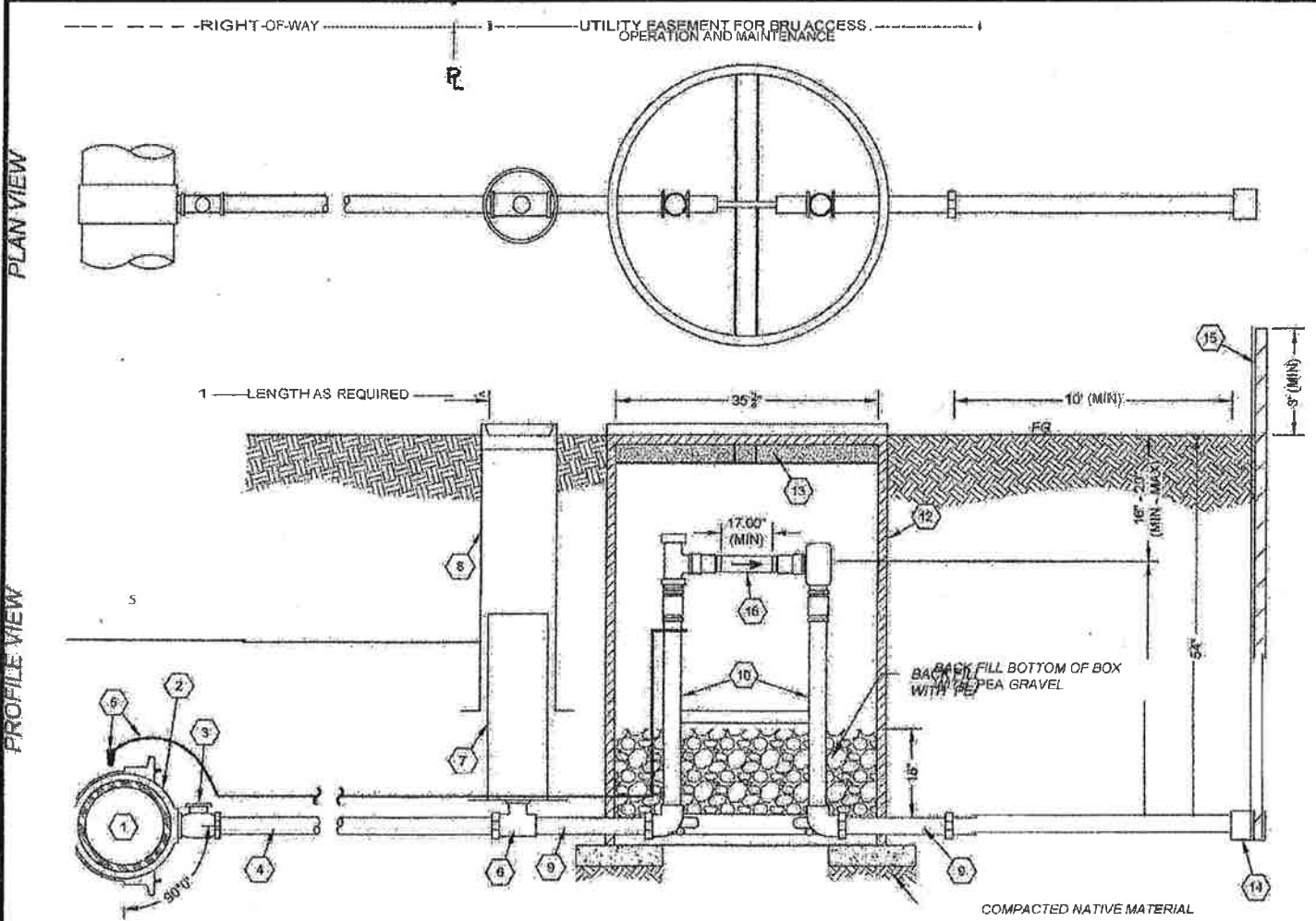
Coeur d'Alene, ID 83814

GENERAL NOTES:

1. All construction of new potable water lines shall conform to Black Rock Utility (BRU) standards and Idaho standards for public works construction (ISPWC) standards (latest edition). In the event of a conflict BRU standards shall prevail.
2. All installations shall be true, straight, centered and plumb.
3. All potable water mains and services shall be bedded with 4" of pea gravel, top & bottom of pipe and maintain a minimum pipe bury depth of 4.5".
4. Prior to backfill, all potable water lines connected to the BRU system shall be inspected by a BRU representative.
5. All materials that may come into contact with potable water shall be NSF 61 approved and compliant with all regulatory requirements.
6. All threaded connections shall be wrapped in Teflon tape prior to tightening.

KEY NOTES

- 1) Water main contractor to verify pipe size and pipe classification prior to work.
- 2) 2" romac double strap services saddle model 202-S installed per manufacture specifications.
- 3) Tap water main (dry and live) 2" corp stop X 2" polyethylene pack joint adapter with stiffener.
- 4) 2" 250 PSI polyethylene pipe
- 5) A solid copper tracer wire taped to top of water pipes. Extend with 12" excess wire inside all water valves and meter boxes. Splice all breaks in locating wire with 3M DBR or DRYCONN DBSR splice kits. Install water line below warning tape as required.
- 6) 2" AY McDonald ball style curb stop model 76101. Install with 2" polyethylene pack joint adapter with stiffener as required.
- 7) 4" schedule 40 PVC pipe centered over curb stop. Length as required.
- 8) Tyler Foundry DI valve box with lid marked "water" centered over burb stop. Set rim 2" above finish grade elevations.
- 9) 2"x18" threaded brass nipple
- 10) 2"x36" A.Y McDonald meter setter model 720-B736WDF775 installed per manufactures specifications. BRU shall install meter, install setters angle ball valve towards water main, install (2) 3"x 3/4" galvanized pipe braces through setter bracing eyes.
- 11) 2" polyethylene female pack joint adapter with stiffener
- 12) Raven RMB R-24-33-48 poly meter box with AY McDonald 74M53A16" round meter box cover with lock. Set box centered on setter on top of 1" masonry blocks placed continuously around entire bottom
- 13) of meter box on top of mechanically compacted native soils. Set rim 2" above finish grade elevations. If meter is installed in traffic areas, box shall be traffic rated with lid set flush at finish surface elevations.
- 14) 2" thick rigid foam insulation cut to fit inside meter box. Drill 1" diameter pick hole in center of insulation panel.
- 15) 2"x4" painted blue extended 3" minimum above finish grade
- 16) Contractor to install 17.00"(MIN) threaded blank



STANDARD DRAWING W-3

2" DOMESTIC OR IRRIGATION WATER SERVICE

SINGLE FAMILY RESIDENCE

DESIGNED BY: DCD
 DRAFTED BY: SMA
 SCALE: N. T. S.
 DATE: 02/27/2014
 JOB NO: 14-007
 ACADWAT SRV_W-3.DWG



Recordall® Disc Meters

Lead-Free Bronze Alloy Models 120 & 170, Sizes 1-1/2" (40 mm) & 2" (50 mm), NSF/ANSI Standards 61 and 372 Certified

DESCRIPTION

The Recordall Models 120 and 170 Disc Series meters meet or exceed the most recent revision of AWWA Standard C700 and are available in a lead-free bronze alloy. Both meters comply with the lead-free provisions of the Safe Drinking Water Act, are certified to NSF/ANSI Standards 61 and 372 (Trade Designations: M120-LL and M170LL) and carry the NSF-61 mark on the housing. All components of the lead-free bronze alloy meter (housing, measuring element, seals, and so on) comprise the certified system.

Applications: For use in measurement of potable cold water in residential, commercial and industrial services where flow is in one direction only.

Operation: Water flows through the meter's strainer and into the measuring chamber where it causes the disc to nutate. The disc, which moves freely, nutates on its own ball, guided by a thrust roller. A drive magnet transmits the motion of the disc to a follower magnet located within the permanently sealed register. The follower magnet is connected to the register gear train. The gear train reduces the disc nutations into volume totalization units displayed on the register or encoder face.

Operating Performance: The Recordall Disc Series meters meet or exceed registration accuracy for the low flow rates (95%), normal operating flow rates ($100 \pm 1.5\%$), and maximum continuous operation flow rates as specifically stated in AWWA Standard C700.

Construction: Recordall Disc meter construction, which complies with ANSI/AWWA standard C700, consists of three basic components: meter housing, measuring chamber, and permanently sealed register or encoder. The water meter is available in a lead-free bronze alloy. A corrosion-resistant engineered polymer material is used for the measuring chamber.

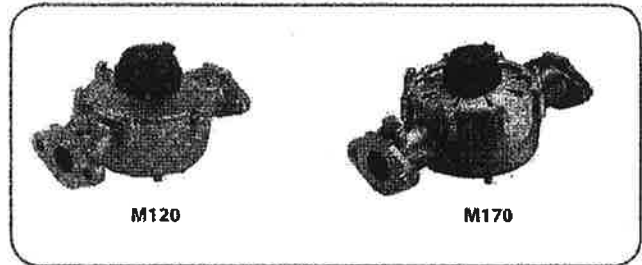
Magnetic Drive: Direct magnetic drive, through the use of high-strength magnets, provides positive, reliable and dependable register coupling for straight-reading or AMR/AMI meter reading options.

Tamper-Proof Features: Unauthorized removal of the register or encoder is inhibited by the option of a tamper detection seal wire screw, TORX® tamper-resistant seal screw or the proprietary tamper-resistant keyed seal screw. Each can be installed at the meter site or at the factory.

Maintenance: Badger Meter Recordall Disc Series meters are designed and manufactured to provide long-term service with minimal maintenance. When maintenance is required, it can be performed easily either at the meter installation or at any other convenient location.

To simplify maintenance, the register, measuring chamber, and strainer can be replaced without removing the meter housing from the installation. No change gears are required for accuracy calibration. Interchangeability of parts among like-sized meters minimizes spare parts inventory investment. The built-in strainer has an effective straining area of twice the inlet size.

Connections: Companion flanges in cast iron or NL bronze are available as options. Straight connection sets are available in NL bronze.



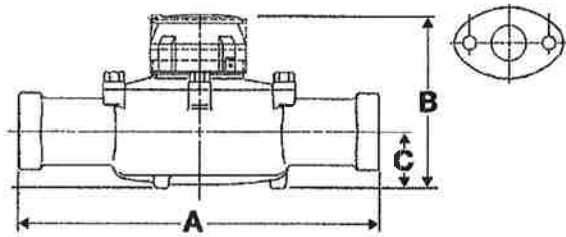
SPECIFICATIONS

Meter Model	M120	M170
Typical Operating Range (100% ± 1.5%)	2.5...120 gpm (0.57...27 m ³ /hr)	2.5...170 gpm (0.57...39 m ³ /hr)
Low Flow (Min. 95%)	1.25 gpm (0.28 m ³ /hr)	1.5 gpm (0.34 m ³ /hr)
Maximum Continuous Operation	80 gpm (18 m ³ /hr)	100 gpm (23 m ³ /hr)
Pressure Loss at Maximum Continuous Operation	4.8 psi at 80 gpm (0.33 bar at 18 m ³ /hr)	3.3 psi at 100 gpm (0.23 bar at 23 m ³ /hr)
Maximum Operating Temperature	80° F (26° C)	80° F (26° C)
Maximum Operating Pressure	150 psi (10 bar)	150 psi (10 bar)
Measuring Element	Nutating disc, positive displacement	Nutating disc, positive displacement
Meter Connections	1-1/2" AWWA two-bolt elliptical flange, drilled or 1-1/2...11-1/2 NPT internal pipe threads	2" AWWA two-bolt elliptical flange, drilled or 2...11-1/2 NPT internal pipe threads
Test Plugs	Optional 1" NPT test plug (TP)	Optional 1" NPT test plug (TP)

Materials

Meter Housing	Lead-free bronze alloy
Housing Top Plates	Lead-free bronze alloy
Measuring Chamber	Engineered polymer
Disc	Engineered polymer
Trim	Stainless steel
Strainer	Engineered polymer
Disc Spindle	Stainless steel
Magnet	Ceramic
Magnet Spindle	Stainless steel
Register Lid and Shroud	Engineered polymer, bronze

DIMENSIONS



Meter Size	Meter Model	A Laying Length	B Height Reg./RTR	C Centerline Base	Width	Approx. Shipping Weight
1-1/2" (40 mm)	120 EL, Hex 120 EL, TP	12-5/8" (321 mm)	7" (178 mm)	2-3/8" (60 mm)	8-3/4" (222 mm)	19 lb (8.6 kg)
1-1/2" (40 mm)	120 ELL 120 ELL, TP	13" (330 mm)	7" (178 mm)	2-3/8" (60 mm)	8-3/4" (222 mm)	19 lb (8.6 kg)
2" (50 mm)	170 EL, Hex 170 EL, TP	15-1/4" (387 mm)	8" (203 mm)	2-7/8" (73 mm)	9-1/2" (241 mm)	30 lb (13.6 kg)
2" (50 mm)	170 ELL 170 ELL, TP	17" (432 mm)	8" (203 mm)	2-7/8" (73 mm)	9-1/2" (241 mm)	30 lb (13.6 kg)

EL = Elliptical ELL = Elliptical Long Hex = Hexagon, 1-1/2...11-1/2" NPT Thread TP=Test Plug 1"

REGISTERS / ENCODERS

Standard—Sweep-Hand Registration

The standard register is a straight-reading, permanently sealed magnetic drive register. Dirt, moisture, tampering and lens fogging problems are eliminated. The register has a six-odometer wheel totalization display, 360° test circle with center sweep hand, and flow finder to detect leaks. Register gearing is made of self-lubricating engineered polymer, which minimizes friction and provides long life. The multi-position register simplifies meter installation and reading. The register capacity is 10,000,000 gallons (1,000,000 ft³, 100,000 m³).



Meter Model	Gallon	Cubic Feet	Cubic Meter
120	100	10	1/0.1
170	100	10	1

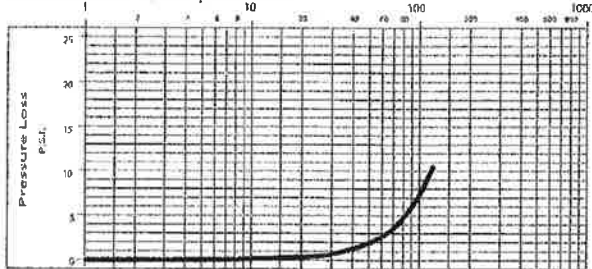
Optional—Encoders for AMR/AMI Reading Solutions

AMR/AMI solutions are available for all Recordall Disc Series meters. All reading options can be removed from the meter without disrupting water service. Badger Meter encoders provide years of reliable, accurate readings for a variety of applications and are also available pre-wired to Badger Meter approved AMR/AMI solutions. See details at www.badgermeter.com.

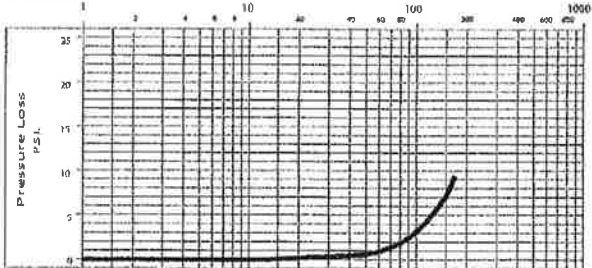
PRESSURE LOSS CHARTS

1-1/2" Meter

Rate of Flow in Gallons per Minute



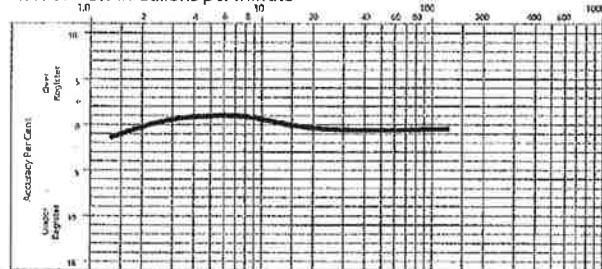
2" Meter



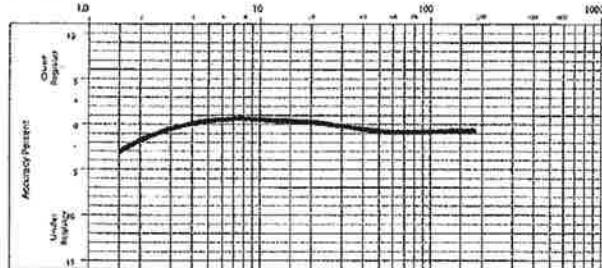
ACCURACY CHARTS

1-1/2" Meter

Rate of Flow in Gallons per Minute



2" Meter



Making Water Visible®

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www.badgermeter.com

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 China | Badger Meter | 7-1202 | 99 Hangzhong Road | Minhang District | Shanghai | China 201101 | +86-21-5763 5412

Legacy Document Numbers: RDM-DS-00671-EN and RDM-DS-00672-EN

For Residential and Commercial Applications

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

LEAD FREE*

Series LF25AUB-Z3 Water Pressure Reducing Valves**

Sizes: 1/2" - 2" (15 - 50mm)

Series LF25AUB-Z3 Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. This series is suitable for water supply pressures up to 300psi (20.7 bar) and may be adjusted from 25 - 75psi (172 - 517 kPa). The LF25AUB-Z3 features Lead Free* construction to comply with Lead Free* installation requirements. The standard setting is 50psi (345 kPa). All parts are quickly and easily serviceable without removing the valve from the line. The standard bypass feature permits the flow of water back through the valve into the main when pressures, due to thermal expansion on the outlet side of the valve, exceed the pressure in the main supply.

Features

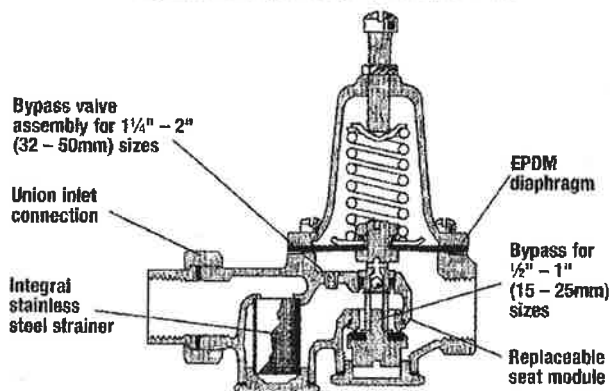
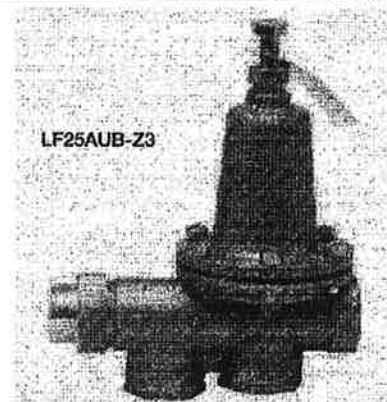
- Standard construction includes Z3 sealed spring cage and stainless steel corrosion resistant adjusting & cage screws for accessible outdoor or pit installations
- Union inlet connection
- Integral stainless steel strainer
- Replaceable seat module
- Lead Free* brass body construction
- Serviceable in line
- Bypass feature controls thermal expansion pressure***
- High temperature resistant reinforced diaphragm for hot water

Models

LF25AUB-Z3	NPT threaded female union inlet x NPT female outlet
LF25AUB-S-Z3	Solder union inlet x NPT female outlet
LF25AUB-DU-Z3	Double Union -- NPT threaded union female inlet and outlet
LF25AUB-S-DU-Z3	Double Union -- Solder union inlet and outlet
LF25AUB-DU-THDxPEX-Z3	Double Union -- NPT threaded female inlet and PEX union outlet
LF25AUB-DU-LF-Z3	Double union body less fittings (3/4", 1", 1 1/4")
LF25AUB-QC-Z3	Single Union -- Quick-Connect union inlet (1/2", 3/4", 1")
LF25AUB-DU-QC-Z3	Double Union -- Quick-Connect inlet and outlet (1/2", 3/4", 1")

Specifications

A Water Pressure Reducing Valve with integral strainer shall be installed in the water service pipe near its entrance to the building where supply main pressure exceeds 60psi (413 kPa) to reduce it to 50psi (345 kPa) or lower. The water pressure reducing valve shall be constructed using Lead Free* materials. Lead Free* regulators shall comply with state codes and standards, where applicable, requiring reduced lead content. The valve shall feature a Lead Free* brass body suitable for water supply pressures up to 300psi (20.7 bar). Provision shall be made to permit the bypass flow of water back through the valve into the main when pressures, due to thermal expansion on the outlet side of the valve, exceed the pressure in the main supply. Water Pressure Reducing Valve with built-in bypass check valves will be acceptable. Approved valve shall be listed to ASSE 1003 and IAPMO and certified to CSA B356. Valve shall be a Watts Series LF25AUB-Z3.**



*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

**A water saving test program concluded that reducing the supply pressure from 80-50psi (551-345 kPa) resulted in a water savings of 30%.

***The bypass feature will not prevent the pressure relief valve from opening on the hot water supply system with pressure above 150psi (10.3 bar).

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

WATTS®

Materials

Body:	Lead Free* brass
Seat:	1/2"-1" (15-25mm) Replaceable engineered polymer (10% glass filled Noryl®) 1 1/4"-2" (32-50mm) Replaceable stainless steel
Integral Strainer:	Stainless steel
Diaphragm:	Reinforced EPDM
Valve Disc:	EPDM

Note: for LP models where application temperatures exceed 160°F (71°C), but not over 180°F (82°C), a Teflon® protector should be added to sizes 1 1/4"-2" (32-50mm).

Pressure - Temperature

Temperature Range:	33°F - 160°F (0.5°C - 71°C)
Maximum Working Pressure:	300psi (20.7 bar)
Adjustable Reduced Pressure Range:	25-75psi (1.72 - 5.17 kPa)
Standard Reduced Pressure Setting:	50psi (3.45 kPa)

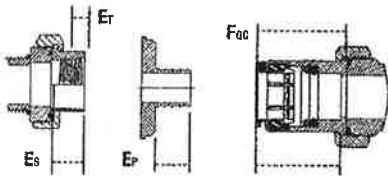
Options

Add Suffix

G	Gauge tapping, 1/8" (3mm)
GG	Gauge tapping and 160psi (11 bar) gauge
HP	High pressure range 75-125psi (5.2 - 8.6 bar)
LP	Low pressure range 10-35psi (0.69 - 2.41 kPa)
Z7	400psi (27.6 bar) initial pressure, 1/2" (20mm) models only

Noryl® is a registered trademark of SABIC Innovative Plastics™
Teflon® is a registered trademark of the E. I. du Pont de Nemours & Company.

Dimensions - Weights



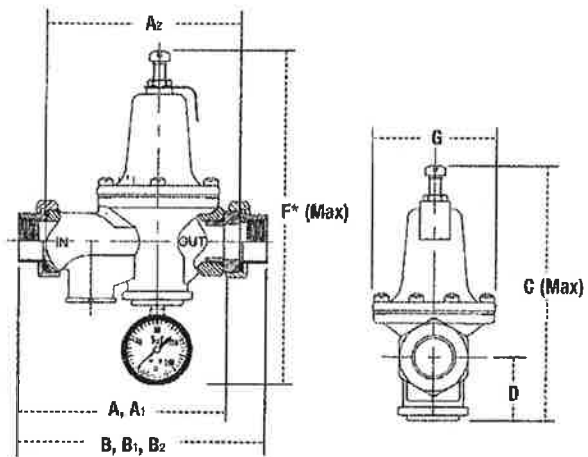
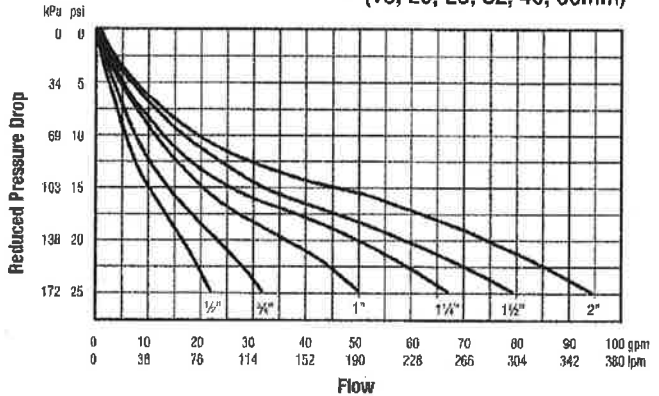
- A - LF25AUB-Z3
- A1 - LF25AUB-S-Z3
- A2 - LF25AUB-DU-LF-Z3
- B - LF25AUB-DU-Z3
- B1 - LF25AUB-S-DU-Z3
- B2 - LF25AUB-DU-THDxPEX-Z3
- Er - NPT Engagement for tight joint
- Es - Female sweat socket depth
- Ep - PEX end connection
- Fac - Quick-Connect union



Meets requirements of ASSE Standard 1003; ANSI A112.26.2; CSA Standard B356; Southern Standard Plumbing Code and listed by IAPMO. Military Standard MIL-V-18146B Type I.

Capacity

Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
(15, 20, 25, 32, 40, 50mm)



SIZE (DN)		DIMENSIONS													
in.	mm	A		A1		A2		B		B1		B2		C	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1/2	15	5 3/16	137	5 1/16	135	5 1/16	132	6 7/16	164	6 3/8	162	-	-	7	178
3/4	20	5 1/8	135	5 1/2	140	5 1/4	133	6 1/2	165	6 1/2	175	6 3/4	171	7	178
1	25	6	152	6 1/4	159	5 7/8	149	7 1/8	187	7 1/16	198	7 1/16	195	8	203
1 1/4	32	8 3/4	222	8 1/16	227	8 1/4	210	10 1/4	273	11	279	-	-	9	229
1 1/2	40	8 3/4	222	9	229	8 1/4	210	10 3/4	273	11 3/16	284	-	-	9 1/2	241
2	50	9 1/4	235	10	254	8 3/4	222	11 3/16	287	12 1/16	322	-	-	11 1/4	286

SIZE (DN)		DIMENSIONS							WEIGHT						
D	F*	G		Er		Es		Ep		Fac					
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.		
1 1/2	38	9 7/16	240	3 1/8	79	1/2	13	1/2	13	-	-	1 1/2	38	3.5	1.6
1 1/2	38	9 7/16	240	3 1/4	79	1/2	13	3/4	19	5/8	16	1 1/16	42	3.5	1.6
1 1/4	44	10 7/16	266	3 3/8	92	5/8	16	1 1/16	23	1 3/16	21	1 3/4	45	6.5	3.0
2 1/4	54	11 7/16	291	3 3/4	92	3/4	16	1	25	-	-	-	-	10	4.5
2 1/4	60	11 1/16	304	4 1/16	103	5/8	16	1 1/16	28	-	-	-	-	10	4.5
3 1/4	83	13 1/16	348	4 3/4	121	3/4	16	1 3/16	34	-	-	-	-	15	6.8

* Dimension includes optional gauge



A Watts Water Technologies Company



ISO 9001-2008
CERTIFIED

USA: Tel. (978) 688-1811 • Fax: (978) 794-1848 • www.watts.com
Canada: Tel. (905) 332-4090 • Fax: (905) 332-7068 • www.wattscanada.ca



**Consolidated
Supply Co.**

**** Acknowledgement ****

Order #: S6930311

P/O # : 1-1/2" METER

Release:

Printed: 10:07:32 26 JUN 2014

Page # 1 of 1

CONSOLIDATED SUPPLY CO - CDA
155 EAST DALTON AVE
DALTON GARDENS, ID 83815
Phone # : 208-762-2568

**** C.O.D. * C.O.D. * C.O.D. ****

Bill To: 154875
LARRY ROBERGE
14960 MCGARY GRADE
JULIAETTA, ID 83535

Ship To:
LARRY ROBERGE
14960 MCGARY GRADE
JULIAETTA, ID 83535

Ord-Date	Ship Date	Writer Terms	Ship Via	Ordered By
06/26/14	06/26/14	SHOJOS ***C.O.D. Only!***	WCN WC NOW	BRUCE IZATT
	Ship Br:14Slsman	Phone	Total Weight	Freight
	Prc Br:14HOUCDA	208-755-7691	0.2	Billable

Order Qty	Product Description	Unit Price	Ext Price
1ea	1-1/2" 562 HERSEY NO LEAD DI PD METER US GAL STANDARD VISUAL READ NSF-61 ANNEX G COMPLIANT W0NN201	433.238ea	433.24
1ea	2" FLG BOLT & NUT SET ZINC CONSISTING OF 4 EA 5/8"X2-1/4" BOLT W/ HEX NUT/LESS GASKET (BOXED)	3.063ea	3.06
2ea	1-1/2"X1/8" BLACK NEOPRENE DROP IN METER GASKET	0.420ea	0.84

ORDER TOTAL	437.14
sales tax	26.23
Invoice Amount	463.37