

# HYDRUS 1½" & 2"

ULTRASONIC WATER METER

**DIEHL**  
Metering



## APPLICATION

Cold water stainless steel 1½" and 2", NSF/ANSI Standard 61 Annex F/G certified, for all residential, commercial and industrial applications

## FEATURES

- ▶ Static meter with Solid State Technology
- ▶ Non moving part (static) meter
- ▶ Over 40 days of hourly data storage
- ▶ Accuracy is maintained over the life of the meter
- ▶ Extended minimum low flow rate in comparison to mechanical meters
- ▶ Available with industry standard connector
- ▶ Rate of flow and reverse flow indication
- ▶ Leak detection
- ▶ No measurement of air
- ▶ Alarms on display and via remote reading
- ▶ Up to 20 years battery lifetime

# HYDRUS 1½" & 2"

## ULTRASONIC WATER METER

### GENERAL FEATURES

- Stainless steel
- Industry standard Encoder interface compatible with all AMR/AMI systems
- Approved AMR/AMI systems (Itron, Aclara, Metron Farnier)
- Mounting in any installation position
- Designed for meter pit installation (IP 68)
- Meets or exceeds applicable C700 AWWA/ANSI Standards
- Complies with NSF/ANSI Standards 61, Annex F/G as well as FCC part 15 B

### GENERAL TECHNICAL DATA

HYDRUS 1½" & 2"	
Potable water temperature range	°F 34 ... 122
Ambient operating temperature	°F 34 ... 158
Ambient storage temperature	°F -4 ... +140(> 90° F max. for one hour)
Maximum pressure	psi 300
Power supply	3.6 VDC lithium battery
Battery lifetime	Up to 20 years
Interfaces	Industry standard Encoder protocol, ASCII output for compatibility with all AMR/AMI systems, Diehl Extendend protocol is available
Data storage	Alarms and consumption values (42 days memory configurable value hourly / daily)
Protection class	IP 68
Operating performance	In the temperature range of 45 to 85° F, meter consumption measurement is accurate to ±1.5% over the normal flow range (reference: approved Diehl Metering test bench, ISO9001 certified)

### TECHNICAL DATA DISPLAY

HYDRUS 1½" & 2"	
Display indication	LCD, 8-digit
Units	Flow and volume (GPM, gal, Ft³)
Values displayed	Volume - flow - reverse flow - water temperature - display test - error and alarm status - battery lifetime

### APPROVAL

HYDRUS 1½" & 2"	
NSF	Complies with NSF/ANSI Standard 61, Annex F/G
AWWA	Meets or exceeds applicable sections of the AWWA/ANSI C700 Standards
FCC	Complies with FCC part 15 B

### MATERIAL

HYDRUS 1½" & 2"	
Measuring pipe	Stainless steel
Register housing	Engineered Polymer
Transducers	Composite
Reflectors	Stainless steel

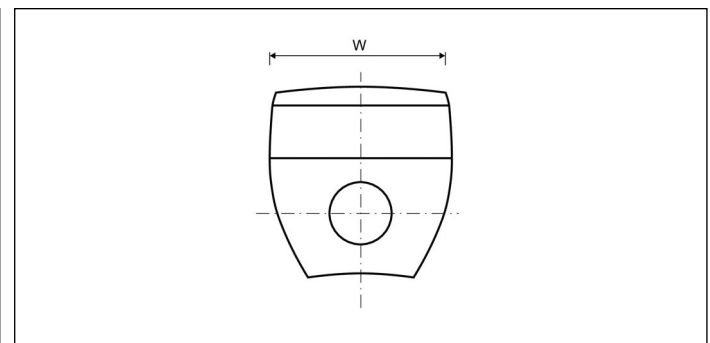
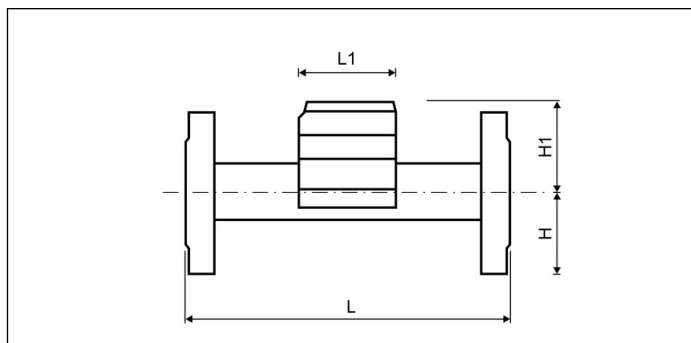
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## TECHNICAL DATA

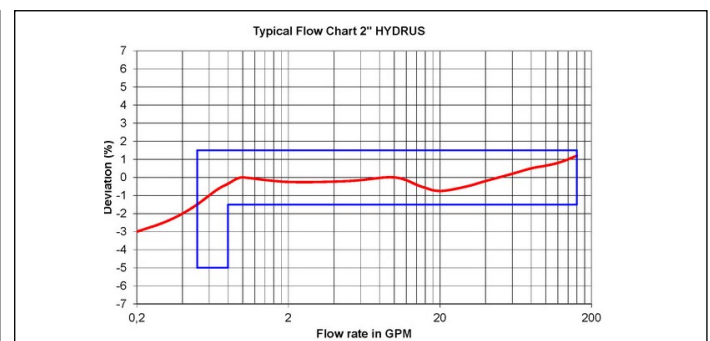
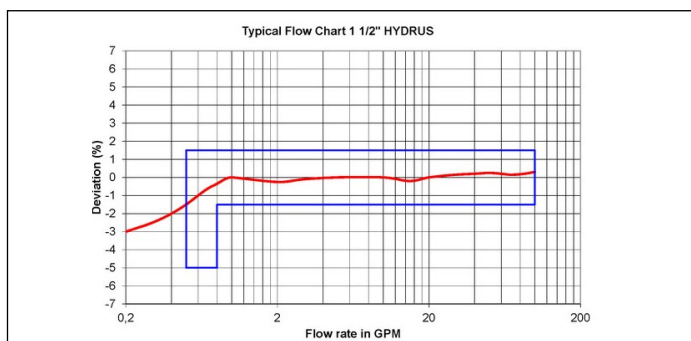
Size			1½"	2" S	2" L
Lay length	L	Inch	13"	10"	17"
Operating flow range		GPM	0.8 - 100	0.8 - 160	0.8 - 160
Low flow range		GPM	0.5 - 0.8	0.55 - 0.8	0.55 - 0.8
Operating range accuracy		%	±1.5	±1.5	±1.5
Low flow range accuracy		%	-5 / +1.5	-5 / +1.5	-5 / +1.5
Pressure loss			3.5 psi at 70 GPM	3.6 psi at 110 GPM	3.6 psi at 110 GPM

## DIMENSIONS



Size			1½"	2" S	2" L
Lay length	L	Inch	13"	10"	17"
Register length	L1	Inch	3½"	3½"	3½"
Register width	W	Inch	3¾"	3¾"	3¾"
Height to center of pipe	H	Inch	2"	2.5"	2.5"
Height to center of pipe	H1	Inch	3.3"	3.3"	3.3"
Net weight		Ib	14.1	16.1	19.2

## TYPICAL FLOW CHARTS



DMUS 04/2017 A



[www.diehl.com/metering](http://www.diehl.com/metering)

