

HYDRUS 1 1/2" & 2"

ULTRASONIC WATER METER

DIEHL
Metering



APPLICATION

Highly accurate, stainless steel ultrasonic smart water meter for all residential, commercial and industrial installations

FEATURES

- ▶ Extended minimum low flow rate in comparison to mechanical meters
- ▶ Integrated leak detection
- ▶ Mountable in any installation position
- ▶ UV resistant housing with IP 68 rating
- ▶ Over 40 days of hourly data storage
- ▶ Accuracy is maintained over the life of the meter
- ▶ No measurement of air
- ▶ Diehl Extended Encoder protocol that includes, temperature, alarms and error messages, etc.
- ▶ Meets or exceeds C715 AWWA/ANSI Standards
- ▶ Complies with NSF/ANSI Standards 61, Annex F/G as well as FCC part 15 B

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GENERAL TECHNICAL DATA

HYDRUS 1 1/2" & 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 Extended 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 1 1/2" & 2"	
Display indication	LCD, 8-digit
Units	Flow and volume (gpm, gal, ft ³)
Values displayed	Volume - flow - reverse flow - water temperature - display text - error and alarm status - battery lifetime

APPROVAL

HYDRUS 1 1/2" & 2"	
NSF	Complies with NSF/ANSI Standard 61, Annex F/G
AWWA	Meets or exceeds applicable sections of the AWWA/ANSI C715 Standards
FCC	Complies with FCC part 15 B

MATERIAL

HYDRUS 1 1/2" & 2"	
Measuring pipe	Stainless steel
Register housing	Engineered Polymer
Transducers	Composite
Reflectors	Stainless steel

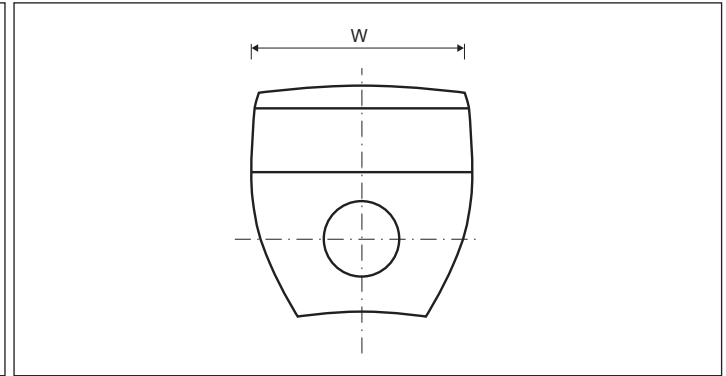
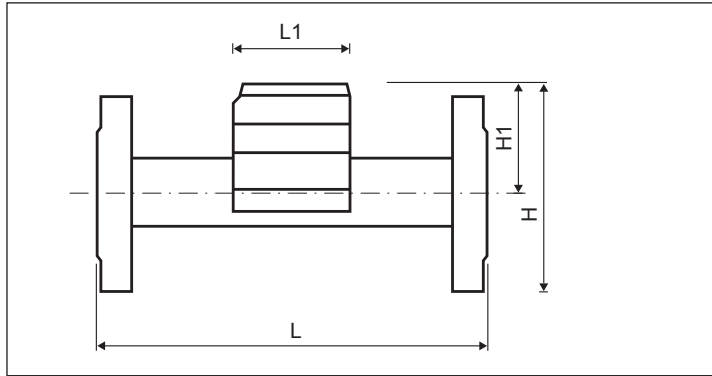
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TECHNICAL DATA

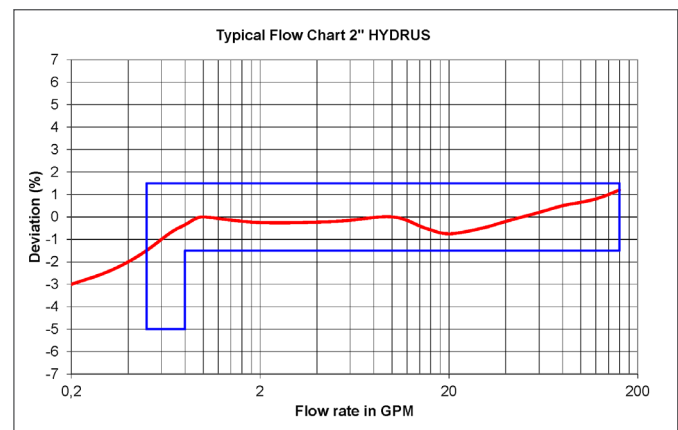
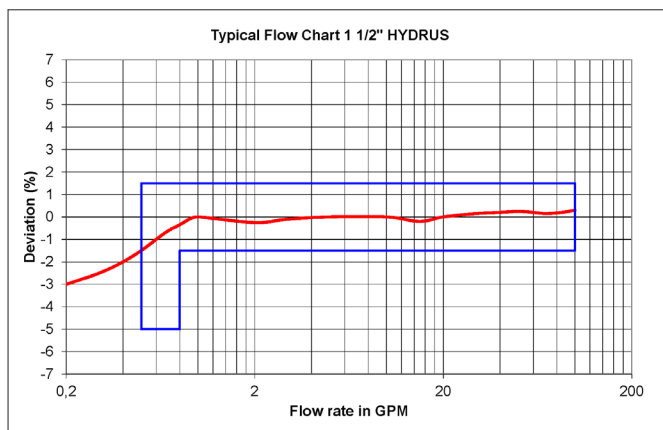
Size		1 1/2"	2"S	2"L
Lay length	L Inch	13"	10"	17"
Safe Maximum Operating Capacity (SMOC)	gpm	0.08 - 100	0.8-160	0.8-160
Minimum test flow rate	gpm	0.5 - 0.8	0.55 - 0.8	0.55 - 0.8
Start flow @ 90%	gpm	0.1	0.25	0.25
Max. flow	gpm	105	178	178
Operating range accuracy	%	±1.5	±1.5	±1.5
Low flow range accuracy	%	-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
Operating performance	In the temperature range of 45 to 85° F, meter consumption measurement is accurate to ± 1.5% over the normal test flow limits up to SMOC (reference: approved Diehl Metering test bench, ISO9001 certified)			

DIMENSIONS



Size		1 1/2"	2"S	2"L
Lay length	L Inch	13"	10"	17"
Register length	L1 Inch	3 1/2"	3 1/2"	3 1/2"
Register width	W Inch	3 3/4"	3 3/4"	3 3/4"
Overall height	H Inch	5.3"	5.8"	5.8"
Height from center of pipe to top	H1 Inch	3.3"	3.3"	3.3"
Net weight	lbs.	14.1	16.1	19.2

TYPICAL FLOW CHARTS



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<https://www.diehl.com/metering/us/en/>

