

HYDRUS

ULTRASONIC WATER METER

DIEHL
Metering



APPLICATION

Cold water lead-free brass meter, 5/8", 3/4" and 1", NSF/ANSI Standard 61 Annex F/G certified, for all residential, commercial, industrial and reclaimed water applications.

FEATURES

- ▶ Lead-free brass meter
- ▶ Solid-state technology
- ▶ Non moving part (static) meter
- ▶ 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
- ▶ Internal data logging for consumption values
- ▶ Leak detection
- ▶ No measurement of air
- ▶ Alarms on display and via remote reading
- ▶ Up to 20 years battery lifetime

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GENERAL FEATURES

- Lead-free copper alloy "CUPHIN®"
- Industry standard Encoder interface compatible with all AMR/AMI systems
- 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	
Medium 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 200
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
Data storage	Alarms and consumption values
Protection class	IP 68

TECHNICAL DATA DISPLAY

HYDRUS	
Display indication	LCD, 8-digit
Units	Flow and volume (GPM, gal, Ft ³ , m ³)
Values displayed	Volume - flow - reverse flow - water temperature - display test - error and alarm status - battery lifetime

APPROVAL

5/8" - 3/4" - 1"	
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	
Measuring pipe	Lead-free copper alloy "CUPHIN®"
Register housing	Engineered Polymer
Transducers	Composite
Reflectors	Stainless steel

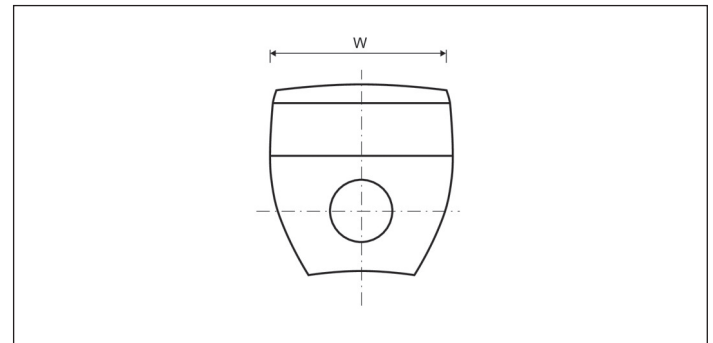
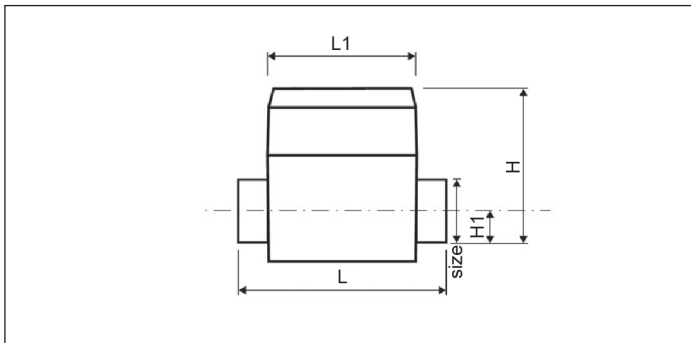
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TECHNICAL DATA

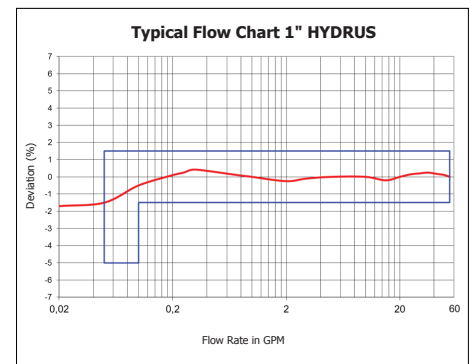
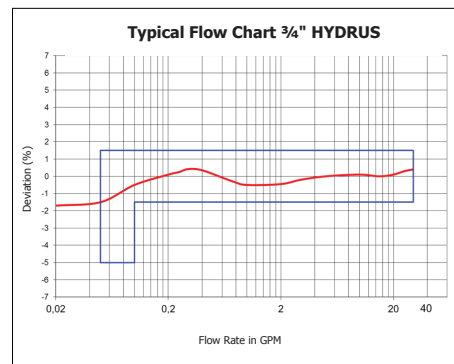
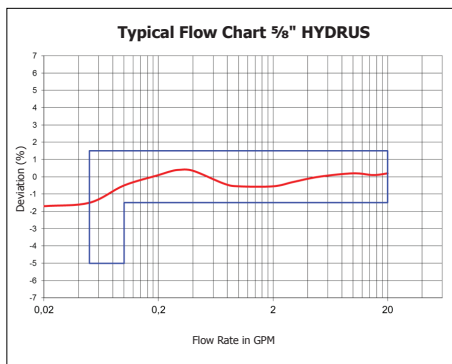
Size		5/8"	3/4" S	3/4" L	1"	
Lay length	L	Inch	7½	7½	9.0	10¾
Operating flow range		GPM	0.1 - 20	0.1 - 30	0.1 - 30	0.4 - 55
Low flow range		GPM	0.05 - 0.1	0.05 - 0.1	0.05 - 0.1	0.25 - 0.4
Operating range accuracy		%	± 1.5	± 1.5	± 1.5	± 1.5
Low flow range accuracy		%	-5 / +1.5	-5 / +1.5	-5 / +1.5	-5 / +1.5
Pressure loss			2.0 psi at 15 GPM	2.0 psi at 15 GPM	2.0 psi at 15 GPM	1.5 psi at 25 GPM
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)			

DIMENSIONS



Size		5/8"	3/4" S	3/4" L	1"	
Lay length	L	Inch	7½	7½	9.0	10¾
Register length	L1	Inch	3.5	3.5	3.5	3.5
Register width	W	Inch	3.7	3.7	3.7	3.7
Overall height	H	Inch	4.0	4.0	4.0	4.2
Height to center of pipe	H1	Inch	1.3	1.3	1.3	1.4
Nominal thread size			1" - 11½ NPSM	1" - 11½ NPSM	1" - 11½ NPSM	1¼" - 11½ NPSM
Net weight		Ib	2.8	2.8	3.1	3.5

TYPICAL FLOW CHARTS



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www.diehl.com/metering

