

Omni Hammer Union Pressure transmitter, 2" 1502.

The Omni Hammer Union is made from Stainless Steel for high strength and anti-corrosion properties. The body has been specially designed with the operator in mind;

- Large hand grips for a secure hold in the toughest conditions.
- Open tool port for easy access to pressure transmitter.
- Wide pressure contact face for an instant response to pressure changes, quick drainage and less opportunities for obstructions or blockages.



The unique design offers an advanced protection to the pressure transmitter and electrical connection while still offering a stable accurate method of pressure measurement. The body is slim line for easy access and installment to hammer union fittings. Featuring large openings for easy grip even with gloves on. Stainless steel 316 construction provides maximum protection against adverse weather conditions, corrosion resistance against chemical and robust protection when in use.

A large pressure port offers instant pressure response time while allowing a quick drainage feature.

All pressure transmitters can be specified to individual applications, allowing for the correct pressure range to be accurately measured. Pressure transmitters come in a range of sizes with a typical accuracy of 0.2% FS or better. Built in temperature compensation and a usable operating range of -40 to 125°C. Ultra-fast response time of 1ms across 10-90% of the pressure range. Designed to operate in hazardous areas with ATEX, IECEx approval.

Pressure transmitters can be quickly and easily changed out for different operations to enable a better accuracy across the operating pressure range, this also enables quick change out in the field in cases of unexpected failures with basic hand tools (Pressure transmitter should **only** be removed after hammer union has been removed first).

- **Certificates: ATEX, IECEx, EAC, GL/DNV, ABS, Lloyds**
- **Any measuring ranges between 0 ... 50 mbar und 0 ... 1000 bar available**
- **Static accuracies available to 0.05 %FS**
- **Hysteresis and repeatability better than 0.01 %**
- **Piezoresistive technology suitable for static and dynamic pressure measurements**
- **Modular design ideal for customization to the application**

Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

For pricing or any further information, please contact Omni Instruments Ltd.

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Pressure Transmitter Specifications

PRESSURE MEASURING RANGE (BAR)

	<u>0 ... > 100 to 0 ... ≤ 600, (1)</u>	<u>0 ... > 600 to 0 ... 1000</u>
Overpressure	3 x FS (≤ 850 / ≤ 1500 bar)	≤ 850 / ≤ 1500 bar
Burst pressure	> 850 / > 1500 bar	> 850 / > 1500 bar
Accuracy, (2) (± % FS)	≤ 0.2 / ≤ 0.1	≤ 0.2
Total Error, (3), (4) (± % FS ; typ. / max.)		
0 ... 70°C compensated	≤ 0.3 / 0.5	≤ 0.4 / 0.6
-25 ... 100°C compensated	≤ 0.5 / 0.7	≤ 0.7 / 1.0
-40 ... 125°C compensated	≤ 0.7 / 0.9	≤ 1.0 / 1.2
Response time, (typ.)	< 1ms / 10 ... 90 % FS	< 1ms / 10 ... 90 % FS
Long term stability, (typ./max. per year)	< 0.1% FS / < 0.2% FS	< 0.1% FS / < 0.2% FS

- (1) Overpressure (proof) and burst pressure 1500 bar (stainless steel) optional
- (2) Zero based accuracy according to EN-61298, incl. hysteresis and repeatability at ambient temperature
- (3) Total error including accuracy and temperature influences at maximum signal span (16 mA / 10 V DC)
- (4) Does not apply to titanium solution ≤ 1 bar

TEMPERATURE RANGE

Operating temperature -40 ... 125°C
 Process temperature Standard: -40 ... 125°C;
 Optional: -40 ... 150°C (with cooling fins)
 Storage temperature -40 ... 125°C

ELECTRICAL SPECIFICATIONS

4 ... 20 mA
 Power supply 9 ... 28 V DC
 Supply influence < 0.05% FS
 Start up time < 170 ms
 Load influence < 0.05% FS
 Reverse polarity protection Yes

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ATEX, IECEX APPROVAL

Certificates (1)

ATEX	SEV 09 ATEX 0108 X
IECEX	IECEX MSC 14.0002 X
IECEX	IECEX SEV 10.0003 X

Standards

EN 60079-0:2012 (A11:2013)	EN 60079-11:2012 EN 50303:2000	EN 60079-26:2015
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Gas

Zone 0	II 1G Ex ia IIC T3 ... T6 Ga
Zone 1	II 2G Ex ia IIB T3 ... T6 Gb

Dust

Zone 20	II 1D Ex ia IIIC T145°C Da
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Mining

I M1 Ex ia I Ma
I M2 Ex ia I Mb

Maximum values of the intrinsically safe circuit 28V / 93 mA / 0.65W

Temperature class (2)	T6	T4	T3
Ambient temperature (Ta)	-40 ... 50°C	-40 ... 85°C	-40 ... 125°C
Process temperature	-40 ... 50°C	-40 ... 110°C	-40 ... 150°C

(1) For detailed Ex specifications see certificate and operating and safety instructions

(2) Without any information about temperature class the transmitter will be delivered for T4

PHYSICAL SPECIFICATIONS

Oil filling	Standard: Silicone oil AS100; Optional: Anderol Food or PAO4
Transducer	Standard: Stainless steel (316L/1.4435); Optional: Titanium (Gr.2) or Hastelloy C-276
Housing Standard:	Stainless steel (316L/1.4435); Optional: Titanium (Gr.2) or Hastelloy C-276
Weight	typ. 145 gram, depending on the configuration

QUALIFICATIONS

	<u>Description</u>	<u>Level</u>	<u>Typical interferences</u>
EN 60068-2-6	Vibration	10 G (4 ... 2000 Hz)	
EN 60068-2-27	Shock	100 G (impulse duration 6 ms)	
EN 55022	Emission, class B	< 30 dBµV/m (0.03...1 GHz)	
EN 61000-4-2	Electrostatic discharge	8 kV contact / 15 kV air	
EN 61000-4-3	Irradiated RF	10V/m (0.08...2.7 GHz, 3s)	Radio sets, wireless Phones.
EN 61000-4-4	Transients (burst)	4 kV	Motors, valves.
EN 61000-4-5	Surge	Line-Line: 0.5 kV/42 Ω, Line-Earth: 1 kV/42 Ω.	Overvoltage.
EN 61000-4-6	Conducted RF	3 V (0.15 ... 80 MHz, 3 s)	Frequency converters

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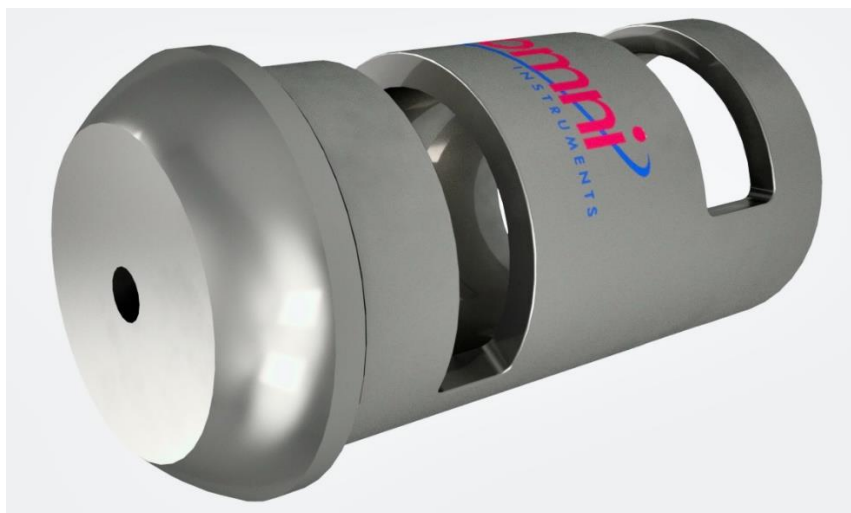
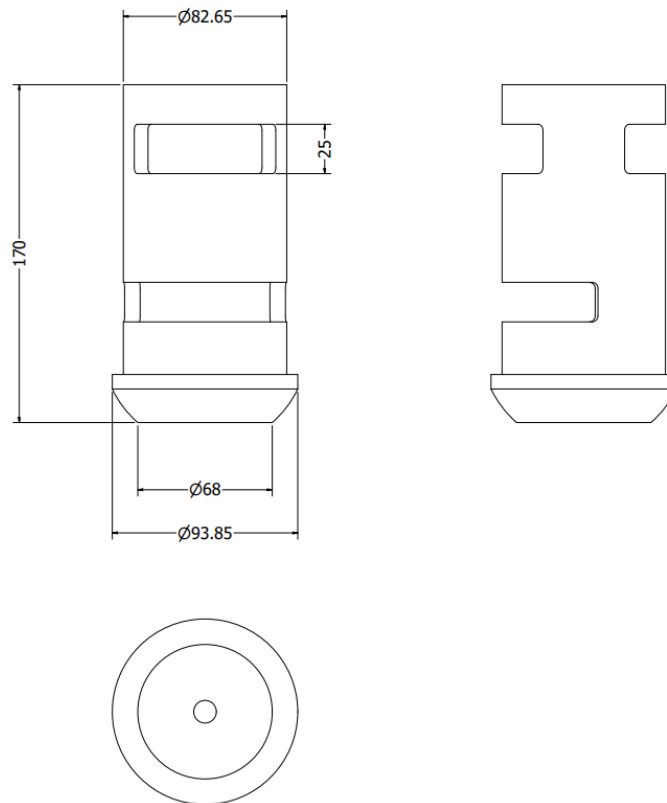
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OVERALL PHYSICAL DIMENTIONS



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