09.09

product manual

H-2786

Air Meter

METER NUMBER: _____

DATE TESTED: _____

PREDETERMINED INITIAL PRESSURE LINE: _____

Press-Ur-Meter— H-2786
The original Press-Ur-Meter for field and laboratory tests, 1/4-cu.-ft. (.007m^3) air meter is designed to determine air content, determination of specific gravity and free moisture test of aggregates. Designed to save time, reduce water used, ensure accuracy and maintain sample integrity (sample may be used for slump and compression tests). Features built-in, all-brass H-2785.DB super pump. Furnished with all necessary accessories for calibration and operation and carrying case. Overall height: 20-1/2" (521mm). Shipping wt. 36 lbs. (16.4kg)

All our Type-B Concrete Air Meters feature our all-brass H-2785.DB Super Pump for reliability and faster operation.

All air meters meet ASTM C231; AASHTO T152.

Operation Instructions

1. Fill the base with a sample of fresh concrete, placing it in the base by vibrating or tamping, in much the same manner as the concrete is to be placed on the job. Strike off the base, level full, with the bronze straight edge furnished. Wipe top edge clean.
2. Clamp cover on with petcocks open.
3. Using rubber syringe, inject water through one petcock. Leave petcocks open.
4. With built-in pump, pump up air to "initial pressure" line on gauge.
5. Wait a few seconds for compressed air to cool to normal temperature and then bleeding off, as needed.
6. Close both petcocks and press down on "thumb lever" to release the air into the base. Hold thumb lever down for a few seconds, lightly tapping the gauge with the finger to stabilize the hand on dial.

   DO NOT TILT THE METER AT ANY TIME.
7. Read percent of air in concrete on dial.
8. Open the petcocks to release the pressure and then remove cover. Clean up the base, cover and petcock openings.

To Check Calibration of Meter Gauge

1. Fill the base full of water.
2. Screw the short piece of straight tubing into the threaded petcock hole on the underside of the cover. Clamp cover on the base with the tube extending down into the water.
3. With both petcocks open, add water with syringe through the petcock having the pipe extension below, until all air is forced out opposite petcock. Leave both petcocks open.
4. Pump up air pressure to a little beyond the pre-determined initial pressure line. Wait a few seconds for compressed air to cool to normal temperature and then stabilize the gauge hand at the proper initial pressure line by pumping or bleeding off as needed.
5. Close both petcocks and immediately press down on the thumb lever exhausting air into the base. Wait a few seconds until the hand is stabilized. If all the air was eliminated and the initial pressure line was correctly selected, the gauge should read 0%. If two or more tests show a consistent variation from 0% in the result, then change initial pressure line to compensate for the variation. Use the newly established "initial pressure" line for subsequent tests.

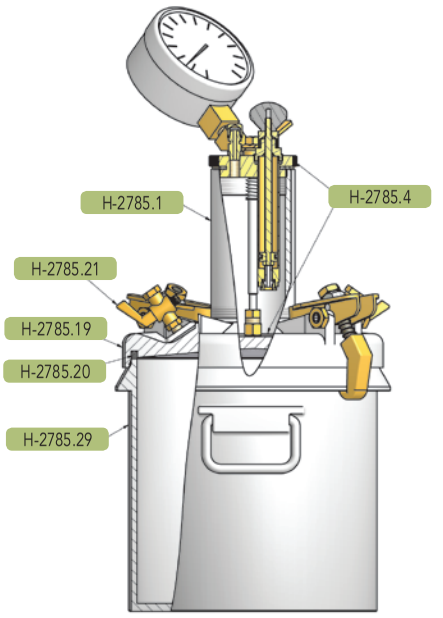
6. Screw curved tube into the outer end of petcock and by pressing on thumb lever and controlling flow with petcock lever, fill the 5% calibrating vessel level full of water from the base.
7. Release the air at the free petcock. Open the other pet cock and let the water in the curved pipe run back into the base. There is now 5% air in the base.
8. With petcocks open, pump air pressure in exact manner as out lined in paragraph 4. Close petcocks and immediately press the thumb lever. Wait a few seconds for exhaust air to warm to normal temperature, and for the needle to stabilize. The dial should now read 5%.
9. If two or more consistent tests show that the gauge reads incorrectly at 5% air in excess of .2% (or whatever is considered satisfactory), then remove gauge glass and reset the dial hand to 5% by turning the recalibrating screw.
10. When gauge hand reads correctly at 5%, additional water may be withdrawn in same manner to check results at 10%, 15%, 20%, etc.
11. The recalibrating screw is located in the center of the pointer.

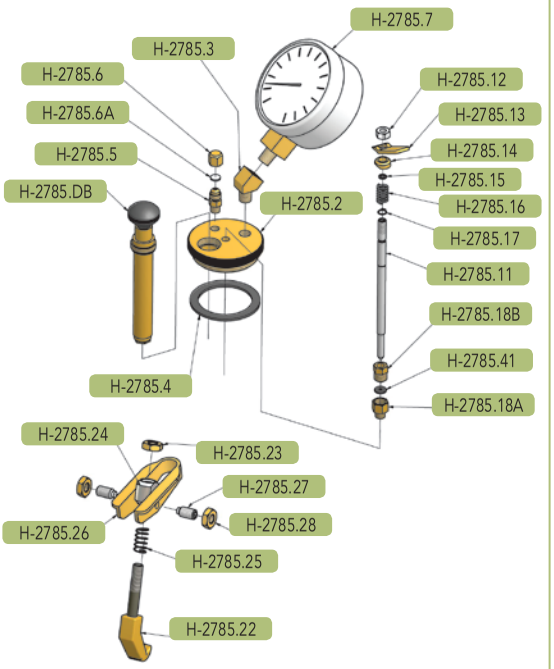
Maintenance Tips

1. Prompt cleaning with water of the air meter cover and pot, both inside and out will ensure a proper seal and volume are maintained.
2. Periodic oiling of petcock screws will prevent them from seizing. WD-40 or a similar product is sufficient.

H-2786 Replacement Parts

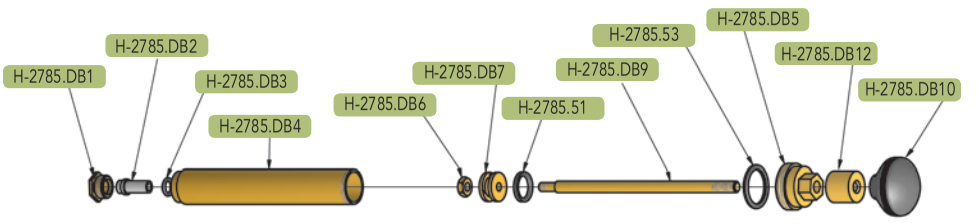
H-2785.1	Pressure chamber
H-2786.2	Pressure chamber cap
H-2785.3	Pressure chamber elbow
H-2785.4	Pressure chamber gasket
H-2785.5	Air-release stem
H-2785.6	Air-release cap
H-2785.6A	Release cap gasket
H-2785.7	Air meter gauge
H-2785.11	Needle valve stem
H-2785.12	Needle valve nut
H-2785.13	Needle valve lever
H-2785.14	Needle valve spacer
H-2785.15	Needle valve O-ring
H-2785.16	Needle valve spring
H-2785.17	Needle valve spring retainer
H-2785.18A	Needle valve seat assembly
H-2785.18B	Needle valve seat bushing
H-2785.19	Cover
H-2785.20	Cover O-ring
H-2785.21	Cover Petcock
H-2785.22	Clamp
H-2785.23	Clamp nut
H-2785.24	Clamp trunnion
H-2785.25	Clamp spring
H-2785.26	Clamp toggle
H-2785.27	Clamp toggle set screw
H-2785.28	Clamp toggle lock nut
H-2785.29	Base
H-2785.41	Needle valve seat gasket
H-2785.51	Pump piston O-ring
H-2785.53	Pump tube O-ring
H-2785.DB	Super Pump Assembly





H-2785DB Super Pump Replacement Parts

H-2785.DB1	Valve nut
H-2785.DB2	Valve
H-2785.DB3	Valve O-ring
H-2785.DB4	Pump tube
H-2785.DB5	Pump cap
H-2785.DB6	Stem nut
H-2785.DB7	Pump piston
H-2785.DB9	Pump stem
H-2785.DB10	Pump handle
H-2785.DB12	Stem cap
H-2785.51	Pump piston O-ring
H-2785.53	Pump tube O-ring



Warranty

Humboldt Mfg. Co. warrants its products to be free from defects in material or workmanship. The exclusive remedy for this warranty is Humboldt Mfg. Co., factory replacement of any part or parts of such product, for the warranty of this product please refer to Humboldt Mfg. Co. catalog on Terms and Conditions of Sale. The purchaser is responsible for the transportation charges. Humboldt Mfg. Co. shall not be responsible under this warranty if the goods have been improperly maintained, installed, operated or the goods have been altered or modified so as to adversely affect the operation, use performance or durability or so as to change their intended use. The Humboldt Mfg. Co. liability under the warranty contained in this clause is limited to the repair or replacement of defective goods and making good, defective workmanship.

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