

YELLOW JACKET®
Electronic Instruments —
finding the facts needed
for the job

IMPROVED
AccuProbe™ Leak Detector
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NEW
Refrigerant Analyzer
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YELLOW JACKET® AccuPROBE™ LEAK DETECTOR – heated sensor and Smart Alarm™ to find every leak fast and sure, and know how big

Building on the field-proven original, this improved unit is the only tool you need for fast, easy, and certain leak detection. The heated sensor tip of the YELLOW JACKET® AccuPROBE™ Leak Detector positively identifies the leak source for all refrigerants even those that other detectors miss. That includes HCFCs such as R-22 as small as 0.03 oz./yr., HFC leaks of 0.06 oz./yr., even R-404A and R-410A, and CFC – R-12 and R-502.



Frequency of flashes in the tip and audible beeping increases the closer you get to the leak source. You zero-in and the exclusive Smart Alarm™ LED shows how big or small the leak on a scale of 1 to 9. Maximum value helps you determine if the leak needs immediate repair.

Service life of the replaceable heated electro-chemical sensor is more than 300 hours with minimal cleaning and no adjustments. Replaceable filters help keep out moisture and dust that can trigger false sensing and alarms.

Independent of the Smart Alarm LED, the unit combines three sensitivity levels with visual and audible signalling, including ultra-high to detect leaks that could be missed with other detection systems.

- Position probe for close-up or extended 18" detection
- Lightweight for handling comfort
- Replaceable filters help keep out dust and moisture
- Sensor failure mode
- Automatic calibration (no manual recalibration required)
- Leak Standard bottle of non-ozone depleting chemical included to verify proper functioning of sensor and electronic circuitry
- 2-year limited warranty (1-year warranty on sensor)
- Sensor not poisoned by large amount of refrigerant



Unit is preset at normal sensitivity, but you can switch to high or low. If there is no response from the flashing tip or beeping signal at normal sensitivity in the general area of a suspected leak, select high sensitivity. This will detect even low levels in the general area and confirm your suspicions. Use low sensitivity as you move the tip over more defined areas of a system, and you will be alerted when the tip encounters the concentration at the leak source.

The frequency of flashing from the heated sensor tip increases as you get closer to a leak and refrigerant concentration increases. You can also turn on the audible alert. Beeping increases in frequency and duration as concentration increases.

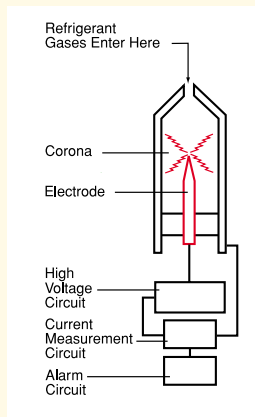
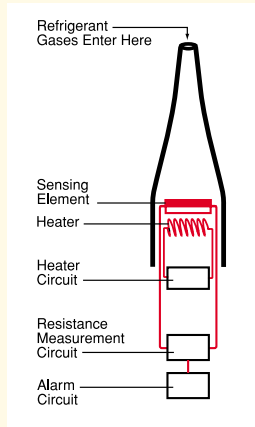
Technology Comparison – Heated Sensor or Negative Corona?

Heated Sensor Leak Detectors

When the heated sensing element is exposed to refrigerant, an electrochemical reaction changes the electrical resistance within the element causing an alarm. The sensor is refrigerant specific with superior sensitivity to all HFCs, HCFCs, and CFCs and minimal chance of false alarms. When exposed to large amounts of refrigerant which could poison other systems, the heated sensor clears quickly and does not need recalibration before reuse.

Negative Corona Leak Detectors

In the sensor of an old-style corona detector, high voltage applied to a pointed electrode creates a corona. When refrigerant breaks the corona arc, the degree of breakage generates the level of the alarm. This technology has good sensitivity to R-12 and R-22, but only fair for R-134a, and poor for R-410A, R-404A, and R-407C. Sensitivity decreases with exposure to dirt, oils and water. And false alarms can be triggered by dust, dirt specks, soap bubbles, humidity, smoke, small variations in the electrode emission, high levels of hydrocarbon vapors, and other non-refrigerant variables.



Tips for detecting system leaks

1. Inspect entire A/C system for signs of oil leakage, corrosion cracks, or other damage. Follow the system in a continuous path so no potential leaks are missed.
2. Make sure there is enough refrigerant in system (about 15% of system capacity or 50 psi min.) to generate pressure to detect leaks.
3. Check all service access port fittings. Check seals in caps.
4. Move detector probe at 1" per second within 1/4" of suspected leak area.
5. Refrigerant is heavier than air so position probe below test point.
6. Minimize air movement in area to make it easier to pinpoint the leak.
7. Verify an apparent leak by blowing air into suspected leak to clean the area and see if the leak remains..
8. When checking for evaporator leaks, check for gas in condensate drain tube.
9. Use heated sensor type detector for difficult-to-detect R-134a, R-410A, R-407C, and R-404A.

Specifications

Max sensitivity : 0.06 oz. (1.7 g)/yr.
HFC's R-134a

Max sensitivity : 0.03 oz. (0.9 g)/yr.
HCFC's R-22

Heated semiconductor sensor: Over 300 hours life

Maintenance required: No

Affected by humidity: No

Response time: Very fast

Body length: 10 inches (25.4 cm)

Probe length: 18 inches (46 cm)

Weight: 20 ounces (0.6 L)

Warm up time: 25 seconds or less

Battery type continuous life: 4 AA
alkaline, 8 hours

Operating temp. range: 24° to 110°F
(-4° to 43°C)

Storage temp range: -4° to 122°F
(-20° to 50°C)

Approvals : SAE J1627, CE



UPC#	Description
69365	Heated AccuProbe
69366	Heated AccuProbe European
69367	Heated AccuProbe Japan
69368	Heated AccuProbe Australia/New Zealand
69378	(std w/69368) AC Adapter 230V/50-60 Hz
69380	(std w/69365) AC adapter – 115V/60 Hz
69381	(std w/69366) AC adapter – 230V/50 Hz
69382	(std w/69367) AC adapter – 100V/50-60 Hz
Accessories and Parts	
69383	Kit–sensor, filters and bottle
69384	Replacement sensor and filter
69385	Package 5 sensor filters
69386	Leak sensor bottle
69387	Carrying case with inserts
69388	Carrying holster with clip
69389	Battery cover and screw

YELLOW JACKET® COMBUSTIBLE GAS DETECTOR –with ultra- sensitive, long life sensor



Hand-held precision equipment detects all hydrocarbon and other combustible gases including propane, methane, butane, industrial solvents, and more. See page 79 for details.

YELLOW JACKET® DIGITAL ELECTRONIC CHARGING SCALES



- Eliminate charging cylinders with a touch.
- Save time with any refrigerant in any system.
- Designed within UL and CE guidelines



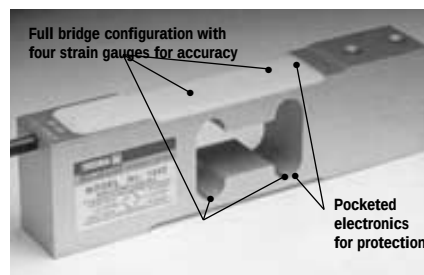
- On-the-job convenience with removable control module on retractable 5 foot coiled cord
- Water and environmental resistance with sealed LCD display and control module touchpad
- Industrial grade circuitry for long life performance
- Mechanical overload protection and "OL" alert on LCD
- Minus (-) reading shows weight removed from the platform
- Large easy-to-read 0.5" numbers even in brightly lighted areas
- "Low" battery icon on LCD for 9V alkaline battery
- Measures pounds/ounces, or pounds in decimal and kilograms
- Designed within UL and CE guidelines

Put this rugged scale to work with any refrigerant in any system and eliminate the time and cost of charging cylinders. The time-saving process also eliminates refrigerant transfer from tank to cylinder to system. You weigh the refrigerant container and charge directly into the system or recover from the system. No concern about residual refrigerant in a charging cylinder.

Self-contained, the scale is ready to use in the carrying case or removed and set on a level surface. Select 110 or 220-lb. capacity (50 or 100 kg).

- Calibration standards traceable to the National Institute of Standards and Technology (NIST)
- Large heavy duty metal platform and over sized strain gauge bridge for rigidity, repeatability, and accuracy of ± 0.5 oz., ± 0.03 lb., ± 0.015 kg, or 0.1% of reading, whichever greater
- Resolution 0.1 oz., 0.01 lb., 0.01 kg

Single point load cell strain gauge for accuracy and long term stability



- Durability of solid aluminum block and largest strain gauge available
- IP66 protection from moisture
- Temperature compensated
- NIST traceable calibration
- NTEP approved
- Engraved with serial number for QC tracking and assurance

DIGITAL PROGRAMMABLE CHARGING SCALE



Programmable charging scales have the same features as at left but with added capabilities for automated, and even faster, more economical charging. Simply enter the charging weight on the control touchpad. When weight has been dispensed, scale automatically signals to shut-off refrigerant flow.

- Mesh filter in charging module protects solenoid valve from debris
- Low flow triggers automatic hold to extend solenoid life
- Schrader valve prevents backflow through solenoid
- Charging accuracy is equal to scale accuracy ± 0.25 oz.
- Solenoid valve with 400 psi maximum operating pressure differential (MOPD) allows metering broad range of refrigerants

Larger carrying case contains charging module, control/programming module, either a 110 or 220-lb. capacity platform (50 or 100 kg), and an AC power pack for solenoid power during charging.

Convert scale to programmable with upgrade kits 68804 and 68805

With one of these kits, standard 68802 or 68800 scales can be upgraded with programmable charging capability. Each kit includes a charging module, power pack, instruction manual, and larger carrying case to hold all parts.

Basic principle of electronic charging scales

The cylinder and refrigerant in it are weighed before and after charging. The difference will be a very accurate measurement of the refrigerant used.

A digital scale shows the progress of the charge as it is happening so you know when to close the valves and stop the charge.

With the programmable scale, you can also program the stopping point so valves will close automatically.

Compared to charging cylinders – or especially bathroom scales or hanging scales – the electronic scale is faster, easier, safer, and more accurate.

Scale Specifications 110 lb. scale

Capacity: 110 lbs. (50 kg)

Resolution: 0.1 Ounce / 0.01 lb./ 0.01 kg

Accuracy: ± 0.5 oz. } Or 0.1%
 ± 0.03 lb. } of reading,
 ± 0.015 kg } whichever is greater

Total unit weight: 9 lbs. (4.1 kg)

Case Size: 15.5" L x 12.25" W x 3.25" H (394 x 311 x 83 mm)

Module display: Sealed LCD with high resolution 0.5" characters

Keypad: moisture resistant membrane keypad with tactile metal domes

Components: Industrial grade

Operation method: Oversized strain gauge bridge

Platform size: 9" x 9" (228 x 228 mm)

Battery: 25 hours (continuous use approx.)

Battery: 9V alkaline

Operating temp: 32° to 122°F (0° to 50°C)

Storage temp: -4° to 158°F (-20° to 70°C)

220 lb. scale

Capacity: 220 lbs. (100 kg)

Total unit weight: 12 lbs. (5.4 kg)

Case Size: 18" x 13" x 4.25" 457 x 330 x 108 mm)

Platform size: 12" x 12" (304 x 304 mm)

UPC#	Description
68802	Electronic scale 110 lbs. (50 kg)
68812	Electronic scale 220 lbs. (100 kg)
68803	Programmable electronic scale 110 lbs. (50 kg)
68813	Programmable electronic scale 220 lbs. (100 kg)
68800	Metric electronic scale 50 kg (110 lbs.)
68810	Metric electronic scale 100 kg (220 lbs.)
68801	Metric programmable scale 50 kg (100 lbs.)
68811	Metric programmable scale 100 kg (50 lbs.)
68804	Scale upgrade kit 115V
68805	European upgrade kit 230V
68806	AC power pack 115V
68807	European power pack 230V
68818	UK power pack 230V

YELLOW JACKET® REFRIGERANT ANALYZER for speed, accuracy, and portability



- Quickly and automatically determines purity of R-12 and R-134a to help eliminate potential of human error
- Large graphing display is easy to read

This portable unit delivers the features and benefits professional A/C technicians want for assurance, ease, and profitability.

- Dispersive infrared (NDIR) technology quickly determines the weight concentrations of R-12, R-134a, R-22, hydrocarbons and air
- Analytical software identifies all EPA S.N.A.P. approved blends, as well as illegal replacements and blends including propane and butane

- Rechargeable battery lasts all day

Unit comes in a rugged portable case with R-12 and R-134a sample hoses



Built-in printer runs an instant receipt for convenient and accurate customer billing. (68947)

Specifications:

Weight: 8.0 lbs.

Power requirements: 12VDC, via battery clips (optional power supply available)

Output: Digital display and LEDs, Optional printer module (internal)

Refrigerant: R-12, R-134a, R-22, HC, and EPA S.N.A.P. approved blends

Display: 128 x 64 Pixel Graphing

Resolution: 0.1%

Operating humidity: 0-95% RH non-condensing

Operating temperature: 40° to 130°F

Start to finish: 60 seconds

UPC #	Description
68945	Refrigerant analyzer
68947	Refrigerant analyzer with printer
68948	Optional internal rechargeable battery kit with battery and 110 VAC charger
68949	Optional 110/220 VAC power adapter

SuperEvac™ LCD VACUUM GAUGE – Full range – atmosphere to 1 micron

Compact design with storage
for sensor, cable and brass
connector.



YELLOW JACKET LCD vacuum gauges combine thermocouple sensor technology with advanced electronics for precise readings and repeatability not found with thermistor sensors or analog meters. The result - accurate readings from atmosphere to 1 micron without recalibration on job after job.

Thermocouple technology has long been proven in laboratory and precision industrial instrumentation for sensing the deep vacuum range. Thermocouple sensors are factory calibrated and exhibit few of the electronic variances of thermistor sensors found in many other electronic gauges.

Thermocouple sensor features:

- No adjustments or warm-up. Stays calibrated after on/off switching and long evacuations.
- Automatic battery compensation
- Automatic ambient temperature compensation

LCD gauge features:

- Normal handling and jarring will not affect the LCD reading
- Rugged molded case protects electronic circuitry and sensor
- Calibration standards traceable to (NIST)

- Precision circuitry controls sensor and translates sensor input into micron readings on the easy-to-read LCD

Specifications

Response time:	3 seconds
Calibration:	Automatic
Warm up:	3 seconds
Sensor cable:	5.5 feet (167 cm) coiled
Sensor connection:	1/4" Male flare
Operating temperatures:	32° to 120°F (0° to 49°C)
Power:	1 "D" cell battery
Battery life:	70 hrs continuous
Battery check:	On LCD display
Dimensions:	9" x 12.25" x 2.37" (230 x 310 x 60 mm)
Accuracy:	± 20% of reading

UPC #	Description
69071	1/4" brass Female flare connector
69073	Replacement sensor for 69070, 69075
69075	SuperEvac LCD vacuum gauge full range complete in case (atmosphere to 1 micron)
69067	Optional ball valve to add to sensor 1/8" NPT Female x 1/4" Female flare
19110	Optional coupler to add to sensor 1/8" NPT Female x 1/4" Female flare

YELLOW JACKET® DELUXE LED VACUUM GAUGE – AC powered



Professional laboratory type is 100% automatic instrument with .56" high bright LED readout.

- Thermocouple sensor technology for precise and repeatable accuracy
- Improved software expands sensing range from atmospheric pressure to 1 micron.
- Calibration standards traceable to (NIST)

Complete unit includes aluminum LED display unit, sensor with valve, cable, brass connector and carrying case.

Specifications

Response time:	3 seconds
Calibration:	Automatic
Warm up:	3 seconds
Sensor cable:	9 feet (274 cm)
Sensor connection:	1/4" Male flare with isolation valve
Operating temperatures:	-30° to 150°F (-34° to 65°C)
Storage temperatures:	-30° to 160°F (-34° to 65°C)
Power:	115V 60 Hz (230V available)
Power cord:	6 feet
Dimensions:	4.25" x 5.5" x 1.5" (108 x 140 x 38 mm)
Carrying case:	Heavy duty plastic 12.25" x 8" x 3.5" (310 x 203 x 89 mm)

UPC #	Description
69060	LED vacuum gauge kit complete with case, 115V
69063	LED vacuum gauge kit complete with case, 230V
69064	Sensor for 69060 and 69063
69065	9' sensor cable for above
69066	Carrying/storage case
69067	Ball valve for sensor 1/8" NPT Female x 1/4" Male flare
69071	1/4" brass Female flare connector
15006	Optional vibration isolation hose

YELLOW JACKET® DIGITAL VACUUM GAUGE with seven different units of vacuum



This easy-to-use gauge helps you to be certain that air and moisture have been removed from the system. Simple push of a button changes the display readout between 7 units of vacuum. **Each displays down to the equivalent of 10 microns of vacuum to let you know that your vacuum pump is**

clean and performing properly. If the sensor gets dirty, simply pull a new sensor out of your tool kit, plug it into the gauge, run

through a quick calibration process, and be back on the job within minutes.

- Unique patented thermal conductivity sensor automatically compensates for temperature
- Replaceable, cleanable, plug-in sensor (Part #69087) handles 450 psi positive pressure
- Displays 7 different units of vacuum (microns, milliTorr, Torr, millimeters of mercury, millibar, kiloPascal and Pascal)
- Calibration standards traceable to (NIST)

- 12" coiled sensor cord stretches to 24" for easy reach, connectivity, and readability of display
- Low battery indicator
- Automatic shut-off after 20 minutes
- Operating Temperature Range: 32° to 122°F (0° to 50°C)
- Weight: 12 oz. (340 g) with battery
- Battery Life: Approximately 25 hours continuous use

UPC #	Description
69086	Hand-held vacuum gauge with fabric carry pouch
69087	Replacement sensor
69088	Replacement cable
69089	Battery cover (blue)
69090	Accessory case
69091	Replacement fabric pouch for 69086

YELLOW JACKET® DIGITAL LCD ECONOMY VACUUM GAUGE



Versatile — Connect to the YELLOW JACKET® SuperEvac™ Vacuum Pump, or in line with a tee fitting, or directly to the system with YELLOW JACKET® core removal tool 18975 at right (and see page 21).

For peace of mind, this gauge shows you that air and moisture has been removed from the system. The lower the number of microns, the more complete the vacuum and less chance for no-charge call-backs. Track down 14 increments from atmosphere to 25 microns to know that the system is clean and your vacuum pump is performing properly.

- Unique thermal conductivity sensor automatically compensates for temperature with no calibration
- Simple On/Off controls
- Easy-to-clean sensor handles 450 psi positive pressure
- Rugged construction with tough ABS housing and solid state circuitry for accuracy



- Automatic battery saver shuts gauge off after 20 minutes with no reading changes
- Low battery indicator
- Calibration standards traceable to the National Institute of Standards and Technology (NIST)
- Patented technology

Packaged complete with 9V alkaline battery and hanging hook

UPC #	Description
69080	Digital LCD vacuum gauge with battery, hook
69081	Optional soft-sided protective case
69079	Replacement battery door and screw

What is an “adequate” vacuum, and how do I measure it?

ASHRAE recommends evacuation to below 1000 microns, and after isolation a system must not rise above 2500 microns within several hours. Some equipment manufacturers specify deeper vacuum such as 400 microns to ensure that harmful water vapor is removed from the system.

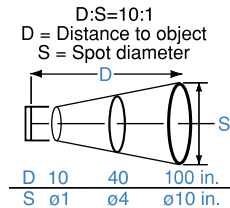
1000 microns equal only .039 inches of mercury, a measurement that cannot be made with a mechanical gauge, or determined by evacuation time or the sound of the pump. **The only tool that can measure vacuum at these levels is an electronic vacuum gauge.**

The best place to measure vacuum is at the system, *not* at the pump. With a combination vacuum/charging valve, you can attach the gauge directly at the system and isolate it from the pump, hoses and manifold for a true indication of the vacuum in the system. You can see the last evidence of moisture being removed and know that the system has dried out.

YELLOW JACKET® PISTOL-GRIP INFRARED THERMOMETER – -40°F to 932°F



With wide measurement of -40° to 932°F, this easy-to-use tool is the effective choice for high or low temp and refrigeration applications. For accuracy and resolution, the focal point is a tight 10:1 ratio with laser sighting.



- Selectable 3-point emissivity for simple set-up
- Backlight for dark area use
- °F/°C switchable
- ± 2% or 2°C accuracy
- 0.1°F resolution at -40° to 212°F (-40° to 100°C)
- Fast response time of 500 ms

UPC #	Description
69228	Pistol-grip infrared thermometer

Applications

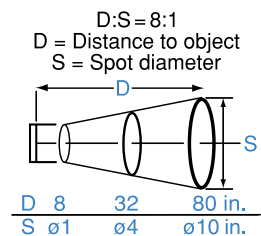
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| • HVAC/R | • Plastic molding |
| • Automotive | • Road construction |
| • Plant maintenance | • Energy auditing |
| • Laboratories | • Electrical |
| • Food service | |

YELLOW JACKET® INFRARED THERMOMETERS



Pocket-size – compact and lightweight.

With laser sighting, you simply target a surface and press the power key to take a fast and safe non-contact temperature reading. 95% response in 500 msec at -4° to 788°F (-20° to 420°C). To take readings in low light, the large LCD features a switchable backlight.



Measurement capabilities 69240:

- Real time temp of surface measured
- Highest and lowest temperature taken
- Average temperature from the time the power key was first pressed
- Determines net temp difference between two surfaces or readings of the same surface to calculate net heating or cooling

FEATURE	MODEL		
	69235	69237	69240
Accuracy	±5.4°F, ±3%	±3°C, ±3%	±3.6°F, ±2%
Emissivity	Fixed	Fixed	adj. 0.3-1.0
Distance/Spot ratio	8:1	8:1	8:1
Switchable	°F only	°C only	Yes
Max/Min Delta T/Avg	No	No	Yes
9 pt. memory	No	No	Yes
Audio alarm	No	No	Yes
Keys	3 Keys	3 Keys	5 Keys
Dimension	6-1/8" x 1-5/16" x 2-1/8" (156 x 33 x 53 mm)		
Weight	6.3 oz. (180 g)		

UPC #	Description
69235	Infrared thermometer – °F
69237	Infrared thermometer – °C
69240	Full feature infrared thermometer

YELLOW JACKET® MICRO INFRARED THERMOMETER



At 2.7" x 1.5" x .7" and 0.9 ozs. (1.1 oz. w/battery), this is the most compact infrared thermometer available. Quickly measures -27° to 428°F (-33° to 220°C) with distance to spot ratio of about 1:1.

- ±2% of reading or 4°F (2°C), whichever is greater

- Operating temp. range: 14° to 122°F (-10° to 50°C)
- Emissivity: 0.05-1 adjustable
- Wave length: 5-14 microns
- Maximum and Minimum hold
- °F/°C switchable
- Resolution: .1°F or C
- Fast response time of 0.5 second
- 3V button cell battery included (CR2032)

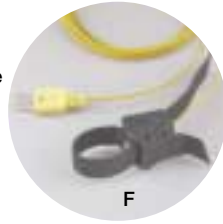
UPC #	Description
69225	Micro infrared thermometer

YELLOW JACKET® DIGITAL THERMOMETERS

Differential and single probe types



Easy strap-on probe for 1/4" OD and larger piping. Efficient for super heat. Part 69224.



Specifications

Range: -58° to 1999°F (-50° to 1300°C)
Resolution: 1 or 0.1 degree
Display: LCD 5/8" (16 mm)
Operating temp: 32° to 120°F (0 to 49°C)
Storage temp: -20° to 130°F (-29 to 54°C)
Power: 9 volt alkaline battery

Battery life: Approximately 200 hours continuous
Dimensions: 7.2" x 2.75" x 1.6" (180 x 70 x 40 mm)

Accuracy:
 -58° to 1800°F ± (0.3% of reading + 2°F)
 -50° to 982°C ± (0.3% of reading + 1°C)

Thermometer applications:
 HVAC/R technicians, research, industrial process laboratory.

Single Probe "K" type features:

- Single "K" type input
- Switchable °F and °C. -58° to 1999°F (-50° to 1300°C)
- Resolution is switchable 0.1° and 1°
- Max/Min and hold temperature readings
- Low battery indicator
- Power off after 30 minutes

Differential "K" type added features:

- Dual "K" type thermocouple input
- T1, T2, or T1-T2 differential readings
- Resolution 1°

UPC #	Description				
69200	Digital thermometer — single general purpose probe and case				
69205	Differential thermometer — 2 clamp on, 2 general purpose probes and case				
69207	Differential digital thermometer — 2 strap-on, 2 general purpose probes and case				
69210	Differential thermometer — two general purpose probes and case				
UPC #	Description	Max. Temp.	Length	Response time (sec.)	
69215	Type "K" air probe (E)	1100°F (593°C)	4 ft. (1.21 m)	5	
69216	Type "K" clamp-on probe (A)	1100°F (593°C)	4 ft. (1.21 m)	12	
69218	Type "K" general purpose probe (C)	500°F (260°C)	3 ft. (.91 m)	3	
69220	Type "K" surface probe (B)	1650°F (900°C)	4 ft. (1.21 m)	3	
69222	Type "K" puncture probe (D)	570°F (299°C)	4 ft. (1.21 m)	12	
69224	Type "K" strap-on probe (F)	300°F (149°C)	12 ft. (3.65 m)	12	

YELLOW JACKET® WATER-PROOF DIGITAL THERMOMETER — Single probe "K" type



Easy-to-use single "K" probe unit meets IP66 standard. First 6 means that the unit is dust tight. Second 6 means that the unit is "protected against powerful water jets" from any direction with "no harmful effects."

- Auto-ranging resolution .1 and 1°
- Max/min/relative reading memory
- Backlight for dark area use
- Sleep mode on/off
- °F/°C switchable

Specifications

Range: -328° to 1999°F (-200° to 1300°C)
Operating temp: 32° to 122°F (0° to 50°C) (0-85%RH, non-cond)
Sampling rates: 2.5 per second
Battery: 9 volt, battery life 200 hours
Display: 1.5" x 1.7" (37 x 42 mm) LCD, maximum reading 1999
Dimensions: 7.1" x 2.8" x 1.2" (181 x 71 x 30 mm)

Accuracy:

-200° to 1300°C ± (0.3% rdg + 1°C)
 1000° to 1300°C ± (0.5% rdg + 1°C)
 -328° to 2372°F ± (0.3% rdg + 2°F)
 (18° to 28°C ambient temperature)

UPC #	Description
69233	Waterproof thermometer — single "K" probe

YELLOW JACKET® DIGI-ALARM THERMOMETER



This compact unit measures from -58° to 392°F (-50° to 200°C) and triggers an alarm at the high and low temperatures that you've programmed.

- Maximum/minimum temperature memory
- °F/°C switchable
- Data hold function
- Key tone for operation confirmation
- No calibration
- Foldaway stand
- Automatic self test after battery installation

Specifications

Accuracy:

±1°C between -50° to 150°C
otherwise ±4°C
±2°F between -58° to 302°F
otherwise ±8°F

Display resolution:

0.1° over the full range

Sampling rate: 1 second

Battery:

1.5 volt size AAA/UM4 or equivalent (1 piece included)

Ambient temperature:

14° to 122°F
(-10° to 50°C)

UPC #	Description
69239	Digi-alarm thermometer

POCKET DIGITAL THERMOMETER

Digital head rotates 180° for easy reading.

- On/off button
- Auto shut-off after 10 minutes to save battery
- Reading updates every second
- 5" (125 mm) stem



UPC #	Description	Case/Qty.
69107	Thermometer -58° to 302°F digital (-50° to 150°C)	1
69250	60107 display pkg.	12
69110	Battery	

POCKET THERMOMETERS



1" and 1-3/8" dial thermometers are adjustable with a 5" stainless steel stem. Colored sheath with pocket clip.

- Individually calibrated.
- Shock resistant.

Packaging:
12 units with display



UPC #	Description	Case/Qty.
69251	1" dial 0° to 220°F	12
69252	1" dial 40° to 160°F	12
69253	1" dial 50° to 550°F	12
69255	1-3/8" dial -40° to 160°F (-40° to 70°C)	12
69256	1-3/8" dial 0° to 220°F (-10° to 110°C)	12
69265	1" dial 0° to 70°C	12

Applications

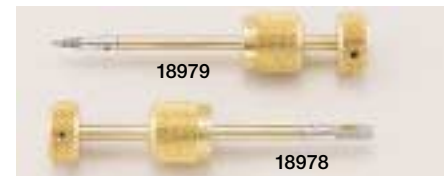
- Food processing
- Heating and ventilating
- Agriculture
- Laboratories
- Industrials
- Refrigeration
- Pharmaceutical
- Brewing

YELLOW JACKET SUPERHEAT CALCULATION KIT



With the access valve, improved °F and °C digital thermometer and core extractor tool you can easily take an internal temperature reading for calculating system superheat.

- Read from -58° to 302°F (-50° to 150°C), and pressure
- Extract Schrader core without opening system
- Remove broken Schrader cores
- Chase damaged threads
- Replace cores
- Use as vacuum valve to increase flow and reduce vacuum time. Also can decrease charging time
- Use to reduce recovery time



Accessory Set 18980

UPC #	Description
69104	Complete Superheat Kit and Accessories (as shown)
69103	Superheat Kit w/o accessory kit
18975	Improved Vacuum/Charge Valve
18980	Accessory Set - 2 piece
18978	Schrader Rethreading Accessory
18979	Broken Schrader Remover Accessory
69106	Digital Thermometer and Nut - 40° to 230°F
69107	Pocket Thermometer
18997	Grappler rod and nut assembly

YELLOW JACKET® HYGRO-THERMOMETER



CE

As indoor air quality and environmental issues gain in importance, instruments to accurately measure temperature and relative humidity are essential. The YELLOW JACKET hygro-thermometer is a highly accurate industrial grade meter that measures both humidity and temperature for the AC&R industry as well as heating and ventilation. Features include:

- Microprocessor controlled for reliability and repeatability
- Wide temperature and humidity range
- Using temperature only probe – 139° to 392°F (-95° to 200°C)
- Industrial grade components.
- Calculates and displays dew point in °F or °C
- Maximum and minimum temperature and humidity readings
- Switchable from °F and °C
- Display “hold” function for operator ease
- Replaceable sensor probe
- Long battery life of approximately 300 hours

Applications: HVAC/R technicians, clean rooms, hospitals, computer rooms, laboratories, warehousing, pharmaceuticals.

Specifications

Range: %RH 5.0 to 95% RH
-4° to 176°F (-20° to 80°C)

Range: using separate 68855 temperature only probe -139° to 392°F (-95° to 200°C)

Accuracy: ± 2.0% RH. ±0.3% of temp reading ±1 digit

Resolution: ±0.1% RH. 0.1°F or °C

Response time: RH – up to 90% of change is measured value in 15 seconds.
Temperature – approximately 60 seconds

Temperature drift: ±0.5% RH per 18°F (10°C)

Display: LCD 0.5" x 4 digits (15 mm)

Operating temperature:
Instrument: 32° to 122°F (0° to 50°C)

Probe: -4° to 176°F (-20° to 80°C)

Power: 2 AA alkaline battery

Battery life: approx. 300 hours

Battery check: low battery on LCD display

Dimensions: 7.1" x 3" x .8"
(181 x 71 x 20 mm)

Probe 1" diameter (25 mm)

Weight: 8 oz. (.22 kg) with batteries

UPC #	Description
68850	Hygro-Thermometer complete with probe, batteries and case
68854	Replacement relative humidity/temperature probe
68855	Temperature only probe -139° to 392°F (-95° to 200°C)

SOUND LEVEL METER



This easy-to-use unit measures and displays 30-130 decibels digitally and as an analog graph to help you test for OSHA compliance, monitor equipment, and more.

CE

- Meets IEC 651, ANSI S1.4, Type 2 standard
- Six measurement ranges in 10 db increments
- Max/Min and Max Hold functions

Specifications

Accuracy: ±1.5dB (under reference condition)

Digital display: 3-1/2 digit LCD, 0.1dB resolution updated 0.5 seconds

Analog output: AC: 0.707 vrms (at full scale) DC: 10mV/db

Measurement frequency range:
31.5Hz - 8KHz

Power: 9V battery (included)

Dimension: 3.1" W x 10" H x 1.5" D
(80 x 256 x 38 mm)

UPC#	Description
69346	Deluxe sound meter

YELLOW JACKET® TACHOMETER

Easy-to-use and read unit measures 10 to 99,999 rpm on compressors, fans, motors, gears, pulleys, and more. Non-contact reading maintains torque and precise measurement.

- Auto range function
- Units in rpm
- Hold function to freeze rotating speed
- Readings to a resolution of 0.001 rpm



CE

Specifications

Time base: 4.0 MHz quartz crystal

Power: 9V battery (included)

Sampling time: 1 second (>60 rpm, 10 to 60 rpm)

Dimension: 4.8" L x 1.9" W x 1.3" H
(124 x 50 x 33 mm)

UPC#	Description
69348	Non-contact photo tachometer

YELLOW JACKET® DIGITAL ANEMOMETER



Precision industrial grade instrument for air conditioning, refrigeration, heating and ventilation. Measures air velocity and calculates air flow volume. Features include:

- Reads air velocity from 40-7800 fpm
- Probes have metal vanes and high quality bearings for durability. Balanced to work reliability at -4° to 210°F (-20° to 99°C)
- Probes calibrated before leaving factory. Replaceable and recalibrateable
- Extension handles and 5 foot cable for hard-to-reach areas
- Microprocessor controlled for reliability and repeatability
- Calculates and reads in cfm (cubic feet/minutes) or cmh (cubic meters/hour)
- Switchable imperial to metric measurements
- Memory saves minimum and maximum readings
- Averages reading over 2 or 16-second periods
- Display "hold" button

Applications: Balancing air conditioning and heating ducts, refrigerated cases, check fan and blower operations, automotive, meeting safety regulations.

Specifications

Air flow:

Probe 68904	40-7800 fpm (0.2 to 40.00 mps)
Probe 68905	60-6800 fpm (0.3 to 35.00 mps)
Calc. Air Vol.	0.0 to 9999 cfm (0.0 to 9999 cmh) (cubic meter/hr.)

Accuracy: ±1% of reading
±1 digit

Resolution: 1 fpm (0.01 mps)

Display: .5" LCD 4 digits

Operating Instrument: 32° to 122°F (0-50°C)

Probe: -4° to 212°F
(-20° to 100°C)

Power: 2 AA alkaline batteries

Battery life: Approx. 300 hours

Battery check: Low on LCD display

Dimensions :

Inst.	7.1" x 3.0" x 0.8" (180 x 76.2 x 20.3 mm)
68904	2-7/8" (70 mm) dia. probe
68905	1.0" (25 mm) dia. probe

UPC #	Description
68900	Complete Kit 2.75" dia. Probe
68901	Complete Kit 1.0" dia. Probe
68904	Probe 2.75" dia. Vane type
68905	Probe 1.0" dia. Vane type
68906	5' extension cable
68907	10" extension rod
68908	10" flexible extension

YELLOW JACKET ANEMOMETER



This hand-held instrument reads both air velocity and temperature simultaneously when balancing air conditioning/heating ventilation systems.

Features:

- Low cost
- Microprocessor controller
- Calculates cfm air volume
- Records minimum and maximum readings
- Averages air velocity
- Display "hold" button freezes LCD reading
- Switchable imperial to metric
- Auto power off after 20 minutes
- RS232 output

Specifications

Air flow ranges: 125 – 4900 ft/min

Resolution: 1 ft/min and 0.01 m/sec.

Accuracy: ±2%

Temperature: 14° to 122°F
(-10° to 50°C)

Resolution: 0.01°F and 0.1°C

Accuracy: ±1.0°F (±0.6°C)

Power: 9V/100 hr. average

Fan Diameter: 2-7/8" (70 mm)

UPC #	Description
68915	Anemometer kit
68916	Replacement 2.75" (70 mm) diameter probe assembly

YELLOW JACKET® COMBUSTIBLE GAS DETECTOR – with ultra-sensitive, long life sensor



Hand-held precision equipment detects all hydrocarbon and other combustible gases including propane, methane, butane, industrial solvents, and more.

Sensitivity, bar graph, and beeping to signal how much and how close

Unit is preset at normal sensitivity, but you can switch to high or low. After warm-up you'll hear a slow beeping. Frequency increases when a leak is detected until an alarm sounds when moving into high gas concentration. The illuminated bar graph indicates leak size.

If no leak is detected in an area you suspect, select high sensitivity. This will detect even low levels in the area to confirm your suspicions. Use low sensitivity as you move the tip over more defined areas, and you will be alerted when the tip encounters the concentration at the leak source.

- Ultra-sensitive sensor detects less than 5 ppm methane and better than 2 ppm for propane. Performs equally well on a complete list of detectable gases including acetylene, butane, and isobutane.
- Automatic calibration and zeroing
- Long life sensor easily replaced after full service life
- 2-year limited warranty
- And many more features

Applications

- Gas lines/pipes
- Propane filling stations
- Gas heaters
- Combustion appliances
- Hydrocarbon refrigerant
- Heat exchangers
- Marine bilges
- Manholes
- Air quality
- Arson residue (accelerants)

Specifications

Response time:	Instantaneous
Warm up time:	10 seconds
Power:	4 AA alkaline batteries
Probe length:	17 inches (43.17 cm)
Sensor life:	500 hours
Body length:	10 inches (25.4 cm)
Weight:	20 ozs. (0.57 kg)
Battery life:	20 hrs. continuous
Operating temp. range:	32° to 110°F (0° to 43.3°C)
Approvals:	Intrinsic Safety, CE

UPC#	Description
69373	Combustible gas detector w/case
69301	Sensing tip
69371	Replacement sensor
69379	Battery cover red and screw
69387	Carrying case – blow molded
69388	Carrying holster

DIGITAL SLING PSYCHROMETERS THERMO HYGROMETERS



Pocket-sized to carry on every call. Set systems at specific superheat or subcooling temperatures. Use actual wet and dry bulb measurements and factory charts.

- Display °F or °C
- Data hold

- Auto power off
- Display relative humidity and temperature simultaneously

Specifications

Temperature

Range: -4° to 122°F (-20° to +50°C)

Size: 7" H x 1-7/8" W x 1" D
178 H x 48 W x 25 mm D

Sensors: Temperature: thermistor bead
Humidity: polymer film (capacitance)

Batteries: 2 standard AAA

Operating

range: +4° to +122°F
(-20° to +50°C) 0-100% RH

Resolution: 0.1°F/C, 0.1% RH

Accuracy:

Relative humidity functions
(± 3% RH at 25°C)
Temperature ± 1°F (0.6°C)

Auto-power-off: 5 min. (defeatable)

Response time: Approx. 60 sec.

Update Rate: 2-6 sec. depending on function

Weight: 2.65 oz. (75 g)

UPC #	Description
69008	Digital thermo psychrometer

Sling Psychrometer on next page.

YELLOW JACKET® SLING PSYCHROMETER



Streamlined, compact tool measures wet and dry bulb temperatures of surrounding air for immediate

conversion of readings to relative humidity percentage.

- One piece unit self-contained housing fits into your pocket
- Calibrated and easy-to-read
- "Slide rule" scale is part of the case

- Accurate to 1% of "Hygrometric Tables"

UPC #	Description
69010	Sling psychrometer
69011	Replacement wicks (5 pack)
69015	Replacement thermometer

YELLOW JACKET® DIGITAL ELECTRONIC MANOMETER



The unit benefits all contractors who wish to eliminate the mess and fragility of U-tubes or diaphragm type gas pressure gauges. This easy to use electronic instrument provides a continuous display of the measured positive or negative pressure. The unit provides

measurements from -19.95" to +19.95" water column. Ideal for setting gas pressure at manifold, also check pressure, flue draft and air balancing. Once your work is complete it automatically turns itself off. Kit includes battery, tubing, and brass fitting.

- -19.95" to +19.95" water gauge
- 0.05" WG resolution
- Easy to use
- Large LCD display
- Automatic power-off
- Long battery life
- Includes 18" tubing and fitting

UPC#	Description
78050	Digital electronic manometer
78051	Battery door
78071	Tubing with fitting
59511	Brass fitting only

YELLOW JACKET WATER-TYPE MANOMETER



Economical plastic tube manometer helps you set manifold pressure for natural or L.P. gas. Now goes to -2" W.C. for newer systems.

Strong magnet on manometer holds it in convenient upright position.

Includes tubing with fitting.

UPC #	Description
78070	-2" - 0 - 7-1/2" scale manometer
78075	-2" - 0 - 15" scale manometer
78071	Tubing with fitting
59511	Brass fitting only

YELLOW JACKET® GAS PRESSURE TEST KIT



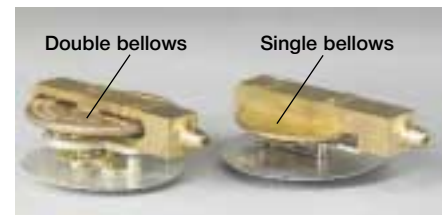
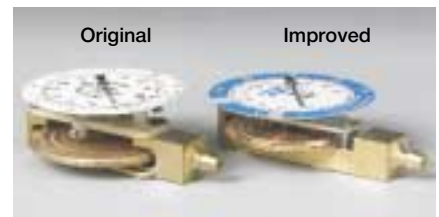
Easier to use than a manometer, this compact kit helps you accurately set manifold pressure for natural or L.P. gas.

- Sensitive diaphragm gauge calibrated in inches of water column
- Improved lamination strength of

diaphragm (bellows) to brass plate withstands higher over-pressure.

- Tube nipple for easy connection to system manifold
- Two gauge ranges available

UPC#	Description
78055	Complete test kit - 0-10" W.C.
78056	Barb-fitting gauge - 0-10" W.C.
78057	1/4" NPT Male gauge - 0-10" W.C.
78060	Complete test kit - 0-35" W.C.
78061	Barb-fitting gauge - 0-35" W.C.
78066	1/4" NPT Male gauge - 0-35" W.C.
78062	Hose with nipple
78064	Brass barb-fitting
78065	Rubber nipple
78059	Gauge crystal
78063	Carrying case



The unique single bellows on brass plate design replaces the double bellows for a stronger seal that resists greater over-pressure.

GLASS MIRRORS —telescoping

All mirrors have telescoping feature. Some have clips for pockets and magnifying glass. Replaceable mirrors.



UPC #	Description	Extension
78094	2-1/4" round	9-1/4" to 14-1/2"
78097	2-1/4" round magnified	9-1/4" to 14-1/2"
With pocket clip and insulated head		
78098	1-1/4" round	7" to 27"
78099	1-1/4" round magnified	7" to 27"
78103	2-1/8" x 3-3/8" rectangular	11" to 15-1/2"
78104	1" x 2" oval	7" to 19"
Replacement mirrors only		
78105	2-1/4" round glass	
78106	2-1/8" x 3-3/8" rectangular glass	
78107	1" x 2" oval glass	

INSPECTION MIRRORS — stainless telescoping



Check leaks in hard to see places. Stainless steel mirror on ball joint rotates 360°. Handle telescopes to 28".

UPC #	Description
78100	Round 3-3/4" diameter
78101	Rectangular 3-3/4" x 2"
78102	Rectangular 2" x 1-1/4"

FUEL OIL TEST KIT



Complete kit to determine pump efficiency, cut-off, suction etc. Also use to analyze or trouble shoot burner

efficiency. Kit includes 2" gauge, 30" 0-150 lbs. scale, and 12" YELLOW JACKET hose with fittings.

UPC #	Description
78020	Complete fuel oil gauge kit
78021	2" fuel oil gauge only
78023	Carrying case
78011	12" hose – no valve opener
78024	Fitting set (4)
78031	2-1/2" gauge, scale 30", 0-150 lbs.
78032	2-1/2" gauge, scale 30", 0-300 lbs.

All gauges are 1/8" NPT.

OIL PUMP VIBRATION ELIMINATOR

Reinforced rubber hose helps eliminate noise and vibration when installed in a heating system.



12 inch OA

- 1250 psi (86 bar) min. burst, 250 psi (17 bar) max. working pressure
- Operating temperature -20° to 180°F (-28.8° to 82.2°C)

UPC #	Description	Fittings
78012	Oil burner connector	3/8" Male flare x 1/4" NPT Male

GAS TEST GAUGE — 1/2", 3/4" and 1" pipe

Easy-to-read gauge to test system pressure for leaks in new installations.



Pressure drop on 2" gauge indicates leakage. 0-30 gauge is in 1/4 lb. increments and 0-15 is in 1/5 lb increments to meet some local inspection regulations.

UPC #	Description
78076	Test unit 0- 15 lb. gauge 1/2" end
78077	Test unit 0- 15 lb. gauge 3/4" end
78080	Test unit 0-30 lb. gauge 3/4" end
78087	Test unit 0-60 lb. gauge 3/4" end
78090	Test unit 0- 100 lb. gauge 3/4" end
78078	Gauge 1/4" NPT Male 0- 15 lb.
78081	Gauge 1/4" NPT Male 0-30 lb.
78091	Gauge 1/4" NPT Male 0- 100 lb.
78079	Test unit 0- 15 lb. gauge 1" end
78085	Test unit 0-30 lb. gauge 1" end
78095	Test unit 0- 100 lb. gauge 1" end
78096	Schrader fitting 1/8" NPT Male x tire fitting

YELLOW JACKET® GAS TEST – 3/4" and 1"– with 3-1/2" gauge



Larger 3-1/2" gauges are easier to read. Scale in psi and bar. Brass threaded bell for leak tight connection.

UPC #	Description
78084	3-1/2" test unit 0-30 3/4" pipe
78086	3-1/2" test unit 0-100 3/4" pipe
78088	3-1/2" test unit 0-30 1" pipe
78089	3-1/2" test unit 0-100 1" pipe
49382	Gauge only 2-1/2" test unit 0-60 lb.
49421	Gauge only 3-1/2" test unit 0-30 lb.
49424	Gauge only 3-1/2" test unit 0-100 lb.



TEST LEAD SETS

Set of two leads three feet in length. Clips with red and black insulators each end. 120/240V – AC.

69532 & 69531 use 16-1 wire.
69530 & 69529 use 14-1 wire.

UPC #	Product Information		
	Max Amps	Clip Size	Replaces
69532	5 Amp	Small	Annie T-16-1 & HI TL1
69531	10 Amp	Medium	Annie T-16-2 & HI TL2
69530	10 Amp	Medium	Annie T-14-2 & HI TL3
69529	20 Amp	Large	Annie T-14-3 & HI TL4



TEST LEAD SETS

A six-foot lead using number 16-2 wire and male plug one end.

Clips with red and black insulators other end.

UPC #	Product Information		
	Max Amps	Clip Size	Replaces
69526	5 Amp	Small	Annie C-6-1M & HI TL7
69525	10 Amp	Medium	Annie C-6-2M & HI TL8
69524	15 Amp	Large	Annie C-6-3M & HI TL9



TEST LEAD SETS

A six-foot lead using number 16-2 wire and female plug one end.

Two clips other end with red and black insulators. 120/240V – AC.

UPC #	Product Information		
	Max Amps	Clip Size	Replaces
69528	10 Amp	Medium	Annie C-6-2F & HI TL5
69527	15 Amp	Large	Annie C-6-3F & HI TL6



ADAPTER CORD – TEST CONNECTOR

12-inch lead using number 14-3 wire and female plug one end. Three large clips other end with

red, black and green insulators. 120/240V – AC.

UPC #	Product Information		
	Max Amps	Clip Size	Replaces
69522	15 Amp	Large	Annie CA-220- & HI TL11



START SWITCH

A six lead using number 16-2 wire and male plug one end. Clips with red, black and white insulators.

Other end includes push button start switch. 120/240V – AC.

UPC #	Product Information		
	Max Amps	Clip Size	Replaces
69523	15 Amp	Large	Annie C-6-35T & HI TL10