

# ANSUL® HAND PORTABLE EXTINGUISHERS

## Product Profile



### ANSUL® RED LINE® AND AMEREX® HIGH PERFORMANCE

ITEM	ANSUL RED LINE	AMEREX HIGH PERFORMANCE
<b>Design and Operating Features</b>		
<b>Hanger Hook and Removal</b>	<p>Specially designed tank attachment allows easy removal of the extinguisher in the excitement of a fire.</p> <p>Hanger hook welded in place.</p>	<p>Post-type hanger requires lifting the unit before removal.</p> <p>One screw in brass valve head holds hanger hook in place.</p>
<b>Carrying Handles</b>	<p>Shaped to fit hand for comfort and non-slip holding.</p> <p>45° carrying angle helps to eliminate dragging and provides extra clearance when carrying the unit up or down stairs.</p> <p>Gloved hands have plenty of clearance due to angle of handle.</p>	<p>Handle angle may make gripping and carrying difficult with gloves.</p> <p>Upright carrying position of unit may cause dragging when going up or down stairs.</p> <p>Adequate clearance between shell and handle when using gloves.</p>
<b>Operating, Recharge, Inspection and Maintenance Instructions</b>	<p>Split aluminum nameplates resist mechanical damage and fading.</p> <p>Front nameplate has the operating instructions and pictograms while back nameplate contains recharge, inspection and maintenance instructions. This avoids confusion as to what information pertains to use and operation in the event of a fire.</p>	<p>One piece Mylar nameplate subject to fading, scuffing, and mechanical damage.</p> <p>Operating instructions and pictograms centrally located with other information located off to the side on continuous nameplate.</p>
<b>Accidental Discharge Protection</b>	<p>Discharge hose acts as actuation inhibitor.</p>	<p>Requires ring pin which could in some instances become corroded or bent and hinder actuation in the event of a fire.</p> <p>Ring pin could be difficult to remove with gloves.</p>
<b>Nozzle and Valve Discharge</b>	<p>Provides accurate control of agent discharge through a downward application angle mechanically designed into the nozzle.</p> <p>Nozzle/holster combination restricts the entrance of foreign materials from entering and plugging the hose.</p> <p>One-hand operation is possible.</p>	<p>With the same hand, operator must lift and control extinguisher while applying a downward force to open the valve.</p> <p>Preformed hose hangs freely and is open to atmosphere which may allow the entrance of foreign objects and restrictions up the hose.</p> <p>Two-hand operation is required.</p>
<b>Hose</b>	<p>Longer hose enables additional control and versatility.</p>	<p>Shorter hose requires additional maneuvering of extinguisher.</p>
<b>Leakers</b>	<p>One potential leak point:</p> <p>Cartridge seal.</p> <p>ANSUL factory filled cartridges are 100% leak tested.</p>	<p>Five potential leak points:</p> <p>Valve stem, gauge guard threads, gauge threads, valve body threads, bourdon-tube gauge.</p> <p>Factory leak tested.</p>
	<p>Although leak testing procedures vary from one manufacturer to another, ANSUL manufacturing data shows that large stored pressure units leak 4 1/2 times as often as cartridges.</p>	
<b>UL Manifest</b>	<p>Easily checked when looking at nameplate on back of unit. Label adheres to cylindrical surface so that all edges of label meet the shell surface making removal difficult.</p>	<p>Some high performance units have the separate UL manifest on the bottom of the shell while other units have the manifest located next to the operating manifest.</p> <p>When located on the bottom, the unit must be laid on its side to examine the UL manifest. Label is applied to concave surface leaving ridges and edges of the label exposed.</p>

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<b>Design and Operating Features (Continued)</b>		
<b>Permanent Markings</b>	Each extinguisher is permanently marked with UL listing, rating, classification and model information on the flat surface of the fill collar as a permanent record that the extinguisher was manufactured to UL specifications. This information is provided in addition to the UL manifest on the extinguisher nameplate.	No permanent markings with UL information on the extinguisher should the original UL manifest label be removed or become illegible.
<b>Brackets</b>	One piece frame is bent and then seam welded for durability.  20-G painted metal bracket is 0.146 in. (.37 cm) thick.  20 lb. extinguisher uses bracket for 6 in. (15.24 cm) shell.  30 lb. extinguisher uses bracket for 7 in. (17.8 cm) shell.	Two piece bracket is spot welded making bracket more susceptible to failure in high vibration areas.  810G bracket frame is 0.066 in. (.167 cm) thick with a base plate thickness of 0.093 in. (.236 cm).  20 lb. extinguisher uses bracket for 7 in. (17.8 cm) shell.  30 lb. extinguisher uses bracket for 8 in. (20.3 cm) shell.
<b>Bracket/Extinguisher Vibration Test</b>	Bracket and extinguisher combination passes UL 299 vibration tests. Bracket remains intact.	During comparison tests to UL 299 requirements, base and frame separated at spot welded base and frame joint.
<b>Fire Training</b>	ANSUL provides a fully staffed and equipped first aid fire training school at the ANSUL Fire School or at a selected site.	Amerex does not offer a fire school.
<b>Field Rechargeability</b>		
<b>Fill Opening</b>	3 in. (7.6 cm) fill opening is larger for ease of filling.	1 1/8 in. (2.86 cm) fill opening is smaller and slows down recharge.
<b>Agent</b>	During field recharge, unit can be filled with agent by sight rather than by weight.	Agent must be measured by weight to assure proper agent to gas ratio.
<b>Expellant Gas</b>	Replace cartridge and return empty to distributor for cartridge credit.	Requires nitrogen cylinder, regulator, hose, adaptors and tools to repressurize.
<b>Leakers</b>	When recharging and using factory filled cartridges, you are using cartridges that are 100% leak tested. The leak testing procedure is so sensitive that it will detect a leak rate of 1/4 oz. (7 g) in 127 years.	All parts of the disassembled valve must be thoroughly cleaned and relubricated. Valve is then reassembled. Leak testing is normally performed using a soap solution procedure and observing gauge for 24 to 48 hours.
<b>Maintenance</b>		
<b>Expellant Gas Check</b>	Cartridge can be easily weighed to assure proper amount of gas is available.	Gauge may be checked visually, however, gauge may take a set causing an inaccurate reading. A thorough gauge check requires additional special tools and procedures.
<b>Moving Parts</b>	All parts including nozzle and cartridge receiver/actuator can be checked, lubricated and operated without discharging the unit.	Moving valve parts cannot be checked without depressurizing the unit.
<b>Agent Examination</b>	Agent can be easily examined for proper type and condition without discharging the unit.	Agent cannot be checked without depressurizing the unit.
<b>Rubber Components</b>	O-Rings, Gaskets and Quad Rings can be removed, cleaned, lubricated or replaced without discharging the unit.	Unit must be depressurized before most rubber components can be accessed.
<b>Six Year Teardown per NFPA 10</b>	Not required.	Required.  <b>Note:</b> Some states require annual tear downs.

SPECIFICATIONS									
	ANSUL I-K-20-G	AMEREX 566 Compliance Flow 20 lb. Purple K	ANSUL HF-I-K-20-G	AMEREX 580 Fast Flow 20 lb. Purple K	ANSUL I-K-30-G	AMEREX 591 Compliance Flow 30 lb. Purple K	ANSUL HF-I-K-30-G	AMEREX 569 Fast Flow 30 lb. Purple K	
▶ <b>Flow Rate</b> lb./sec. / kg/sec.	0.90 (.41)	0.67 (.30)	1.55 (.70)	1.33 (.60)	1.03 (.47)	0.88 (.40)	2.35 (1.07)	1.88 (.85)	
<b>Effective Discharge Times (sec.)</b>	21	29	12	15	27	34	12	16	
<b>Ratings</b>	80-B:C	120-B:C	20-B:C	40-B:C	120-B:C	160-B:C	20-B:C	40-B:C	
<b>Interpreting Ratings, Flow Rates and Discharge Times</b>	<p><i>To avoid a false sense of security when selecting an extinguisher, selection should not be based solely on the UL ratings. It is important to realize the differences between the type of fire that is used to determine the rating and those fires most likely to be encountered in actual field situations.</i></p> <p><i>UL rating system is based on the size of the UL standard square pan that a hand portable extinguisher can extinguish. Even with extinguishers of the same size, the UL rating for one extinguisher can be increased by reducing the dry chemical discharge rate and maintaining a sufficient range to push the fire off the rear of the test pan.</i></p> <p><i>Most 'real world' Class B fires involve obstacles and/or flowing fuel three dimensional situations. Fuel under pressure is often involved. Unlike the UL test rating type fire where lowering the dry chemical discharge rate can yield increased ratings, higher dry chemical discharge rates are necessary for increased effectiveness when these types of fires are encountered.</i></p> <p><i>In summary, if the potential fire condition is similar to the UL test rating fire conditions (no flowing fuel, no pressure and no obstacle fires), then the UL rating can be closely followed. However, if the potential fire involves flowing fuel, fuel under pressure, or contains obstacles; an extinguisher with a higher dry chemical discharge rate will provide increased fire fighting capability.</i></p>								
<b>Listings</b>	UL, FM, USCG†	UL, USCG†	UL, FM, USCG†	UL, USCG†	UL, FM, USCG†	UL, USCG†	UL, FM, USCG†	UL, USCG†	
▶ <b>Strip Fire Fighting Range</b>	5 ft. (1.5 m)	37-42 sec.	35-40 sec.	37-42 sec.	35-45 sec.	37-42 sec.	40-45 sec.	37-42 sec.	35-40 sec.
	10 ft. (3.1 m)	47-52 sec.	45-50 sec.	47-52 sec.	45-50 sec.	47-52 sec.	50-55 sec.	52-57 sec.	55-60 sec.
	20 ft. (6.1 m)	57-62 sec.	35-40 sec.	—	—	57-62 sec.	45-50 sec.	—	—
<b>Strip Fire Fighting Range</b>	CAUTION!!! The range as determined by the strip fire test was determined under ideal conditions. The tests were conducted in an indoor test facility and measured the location of the fire wall in the ten inch wide test pan relative to the operator. The tests show the stored pressure units began to lose fire extinguishment range after approximately 20 seconds with normal flow nozzles; this range loss continued and increased through the effective discharge time. The cartridge-operated units maintained the range throughout the effective discharge time.								
<b>Dimensions:</b>									
▶ <b>Height</b> (in.) / (cm)	20 1/2 (52)	24 1/2 (62)	20 1/2 (52)	24 1/2 (62)	22 1/2 (57)	26 1/8 (66.4)	22 1/2 (57)	26 1/4 (66.7)	
▶ <b>Width</b> (in.) / (cm)	10 3/8 (26.3)	9 1/2 (24)	10 3/8 (26.3)	9 1/2 (24)	11 1/8 (28.3)	10 1/2 (26.7)	11 1/8 (28.3)	10 1/2 (26.7)	
<b>Depth</b> (in.) / (cm)	7 (17.8)	7 (17.8)	7 (17.8)	7 (17.8)	8 (20.3)	8 (20.3)	8 (20.3)	8 (20.3)	
<b>Shell Diameter</b> (in.) / (cm)	6 (15.24)	7 (17.8)	6 (15.24)	7 (17.8)	7 (17.8)	8 (20.3)	7 (17.8)	8 (20.3)	
▶ <b>Weight**</b>	36 lb. (16.3 kg)	40 lb. 12 oz. (18.5 kg)	36 lb. (16.3 kg)	40 lb. 12 oz. (18.5 kg)	51 lb. 8 oz. (23.4 kg)	56 lb. 1/2 oz. (25.4 kg)	51 lb. 8 oz. (23.4 kg)	56 lb. 1/2 oz. (25.4 kg)	

† USCG approved only with bracket

\* Based on actual fire test

▶ \*\* The USCG states that an extinguisher "shall weigh not more than 55 lb. (24.9 kg), maximum, when fully charged." (46 CFR Part 162.028-3 Paragraph B)

**AVAILABLE FEATURES**

	<b>ANSUL I-K-20-G</b>	<b>AMEREX 566 Compliance Flow 20 lb. Purple K</b>	<b>ANSUL HF-I-K-20-G</b>	<b>AMEREX 580 Fast Flow 20 lb. Purple K</b>	<b>ANSUL I-K-30-G</b>	<b>AMEREX 591 Compliance Flow 30 lb. Purple K</b>	<b>ANSUL HF-I-K-30-G</b>	<b>AMEREX 569 Fast Flow 30 lb. Purple K</b>
<b>Corrosion Resistant</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Indicator Fill Cap</b>	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A
<b>Low Temperature (-65 °F)</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>High Flow Nozzle Color Coded</b>	N/A	N/A	Yes	No	N/A	N/A	Yes	No
<b>Ring Pin</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

N/A Not Applicable

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