

Selection Information

General

The Racor Marine Diesel Spin-on Series feature a variety of compact sizes to fit most installations and cramped engine compartments.

Mounting Heads:

These units feature multiple fuel ports and many have more than one inlet or outlet. All have a unitized mounting bracket. The 200 and 400 Series heads feature a built-in, hand operated fuel priming pump to simplify servicing procedures.

Filters:

All units feature spin-on replaceable filters and contaminant collection bowls except for the high-pressure 110A. All units may be specified with an in-bowl water probe when used with diesel or kerosene applications.

High-capacity Aquabloc™ filter elements stop water and remove solid contamination. A 10 micron filter (or secondary and even final) is used to filter fuel which is known to be of good quality. A 2 micron filter, used with the 120R model, (or final filter) is the finest filtration available and is the last filter used prior to engine ingestion.

A simple rule to remember is the finer the filtration, the more frequent the filter change. (*Carry extra filters on board*).

Reusable Collection Bowls:

The metal bowls used with these models feature an NPT tapered thread plug for removing contaminants. An optional UL Listed shut-off drain valve may be ordered to simplify servicing.

Options -Available for Diesel fuel systems only.

Water Probe RK21069. When used with a Racor Water Detection Module, the operator can be alerted of a high-water condition, even while the equipment is operating. The bowl is then drained of water at the earliest convenience. Note: A Racor Water Detection Module is needed to work with this probe. See Accessories. Water Probe RK30880. Same features as above, except the 12 or 24 vdc electronic detection module is built-in the probe housing. Includes a detachable connector. See Accessories. **Danger! Do not use water probes with gasoline applications. This could cause an explosion.**

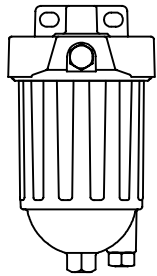
SELECTION

1. Along with the information you obtained in SECTION 2, SELECTION (page 94), consider the following: Are there any space limitations in the available location? The location should provide adequate space for removing the element, draining off contaminants from the bowl (and operating the primer pump on 200 and 400 Series models).
2. What filtration rating is needed? 2, 10 or 30 micron?
3. What options are needed? Water probe and/or a bowl shut-off drain valve?

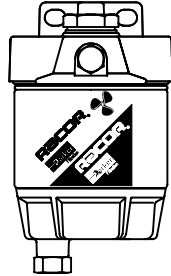
Using this information, select a unit from the next page, or check the models which follow to find the right unit for your application.

For additional information, call your Racor dealer or call Racor customer service at (209) 521-7860 or (800) 344-3286, 6:00 AM to 5:00 PM, Pacific Time, or e-mail us from our website, www.parker.com/racor.

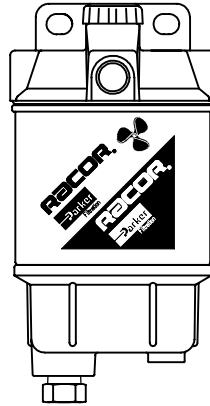
Model Illustrations



110A



120RMAM



200RMAM Series



400MAM Series

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Special Notes

1. Above units feature metal bowls and are approved for diesel service and are UL Listed, USCG Accepted.
2. Model 110A may be used in pressure applications (up to 100 PSI) and gasoline service. UL Listed.
3. The 200RMAM and 400MAM Series units include the head mounted hand priming pump as standard.
4. The 4120MAM model features large 3/4" UNF ports for high-flow, low-restriction applications.
5. Allow at least 2 inches (51 mm) clearance under the units for element replacement and water collection.
6. For additional information and availability, contact customer service: (800) 344-3286, 6 AM to 5 PM, Pacific Time.



Specifications

BASIC MODELS		110A	120RMAM	215RMAM	230RMAM	245RMAM	445MAM	460MAM	490MAM	4120MAM
Maximum Flow Rate	GPH / LPH	15 / 35 ¹ 57 / 132 ¹	15 57	15 57	30 114	45 170	45 170	60 227	90 341	120 454
Port Size		1/4"NPT	1/4"NPT	1/4"NPT	1/4"NPT	1/4"NPT	3/8"NPT	3/8"NPT	3/8"NPT	3/4"UNF
Number of Ports		4	4	3	3	3	4	4	4	4
Filter Element		R11T	R12SUL	R15TUL	R20TUL	R25TUL	S3204TUL	S3211TUL	S3201TUL	S3201TUL
Center threads		N/A	M18 X 1.5	1"-14	1"-14	1"-14	1"-14	1"-14	1"-14	1"-14
Height	in./mm	6/152	5.7/145	8.3/211	9.0/229	10.5/267	9.4/239	10.8/275	12.8/324	12.8/324
Width	in./mm	3.2/81	3.2/81	4/102	4/102	4/102	4.5/114	4.5/114	4.5/114	4.5/114
Depth	in./mm	3.2/81	3.2/81	4/102	4/102	4/102	4.8/121	4.8/121	4.8/121	4.8/121
Weight	Lbs./kgs.	1.3/0.59	1.3/0.59	1.8/0.80	2/0.90	2.2/1	2.9/1.3	3.1/1.4	3.3/1.5	3.3/1.5
Clean Press.Drop	PSI / kPa	0.15 1.08	0.15 1.08	0.12 0.83	0.31 2.14	0.61 4.21	0.17 1.20	0.30 2.07	0.35 2.41	0.45 3.10
Max.Allowable Pressure	PSI / kPa	100 689	7 48	30 207	30 207	30 207	15 103	15 103	15 103	15 103
Bowl Water Capacity	ml	36	52	58	58	58	58	58	58	58
Operating Temperature		- 40° / +255° F / - 40° / +121° C								

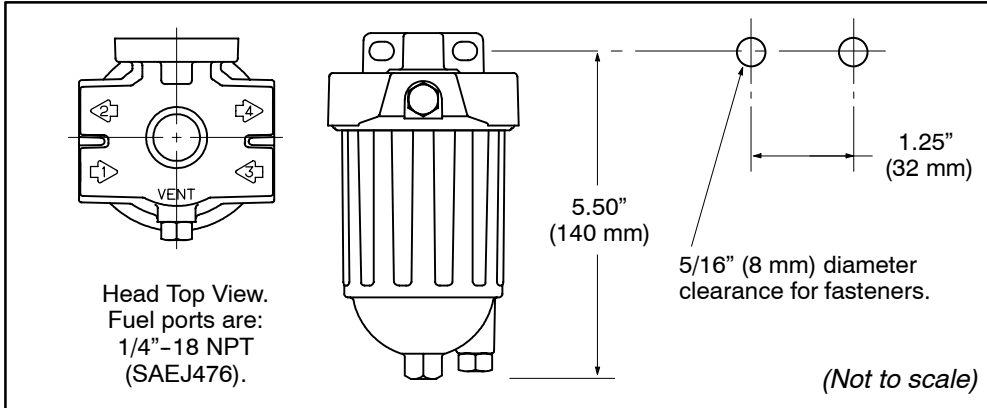
¹ Flow rate for gasoline applications.

SPECIFICATIONS are found on the introduction page.

110A	Replacement Service Element SERVICE ELEMENT INCLUDES LID SEAL.
<u>Basic Model</u> 15 GPH Diesel / 35 GPH Gasoline Two piece die-cast aluminum construc- tion.	R11T 10 Micron -Recommended for Primary or Secondary* Filtration *Consult engine manufacturer or Racor Distributor.

Mounting Hole Pattern

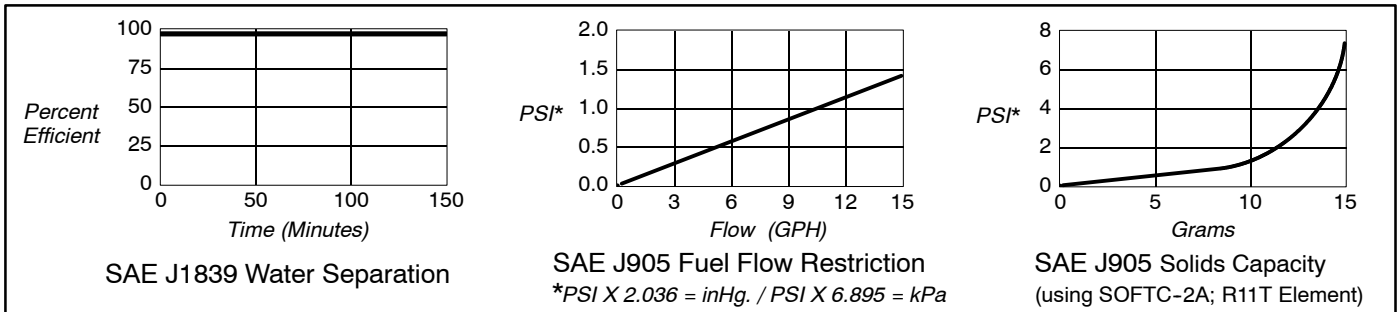
-Refer to Diesel Spin-on Series introduction page for filter dimensions.



110A

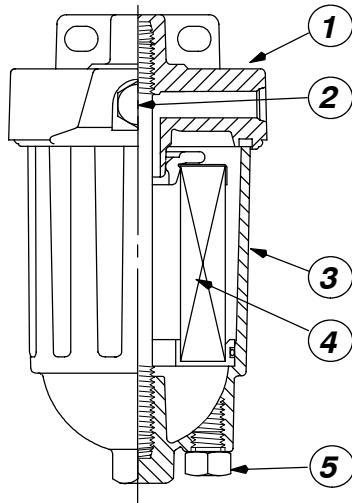
Performance Graphs

-These results are from controlled laboratory tests. Field results may vary by application.



Parts List

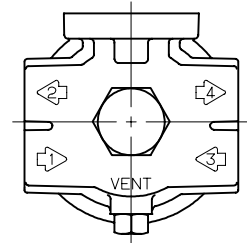
The circled number corresponds to the item number shown in the parts list below.



Item/Part No.	Description	Case Qty.
1 RK21361	110A Head, 1/4"NPT Ports	1
2 RK10110	Metal Vent Plug, 3/8"-24 UNF	1
3 RK21364	110A Housing	1
4 R11T	Replacement Element	12
5 RK20022	Metal Plug, 1/2"-20 UNF	1
RK21363	110A Gasket/O-ring Kit	1
21410	Installation Instructions	

SPECIFICATIONS are found on the introduction page.

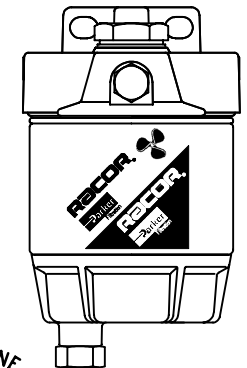
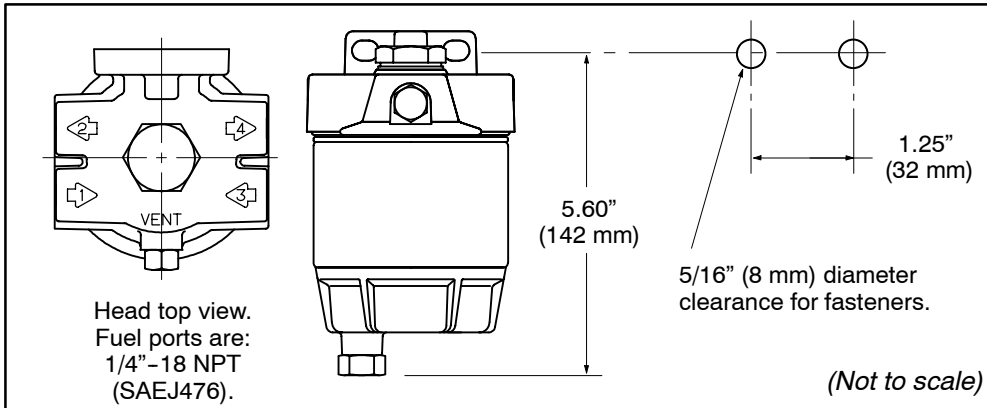
<h2>120RMAM</h2>	Replacement Service Element SERVICE ELEMENT INCLUDES SEALS.
<u>Basic Model</u> 15 GPH Head and bowl are die-cast aluminum.	R12SUL 2 Micron -Recommended for Secondary (Final) Filtration <i>*Consult engine manufacturer or Racor Distributor.</i>



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Mounting Hole Pattern

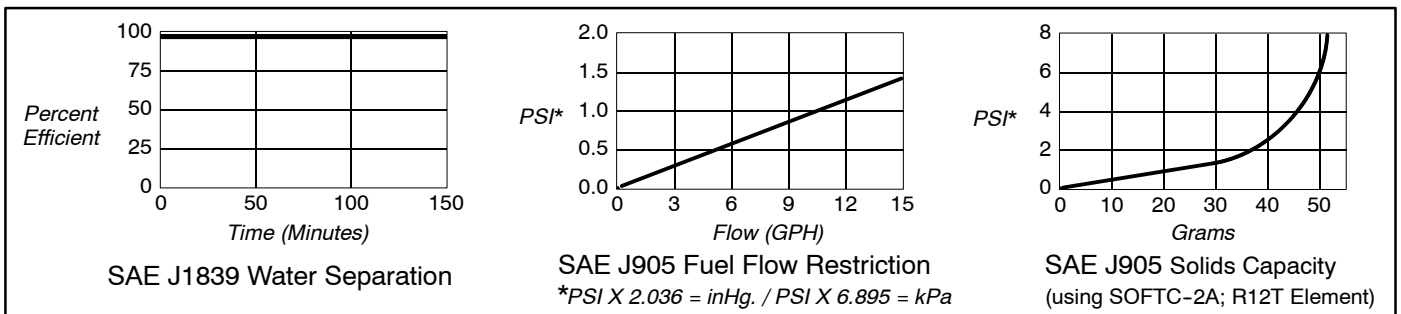
-Refer to Diesel Spin-on Series introduction page for filter dimensions.



120RMAM

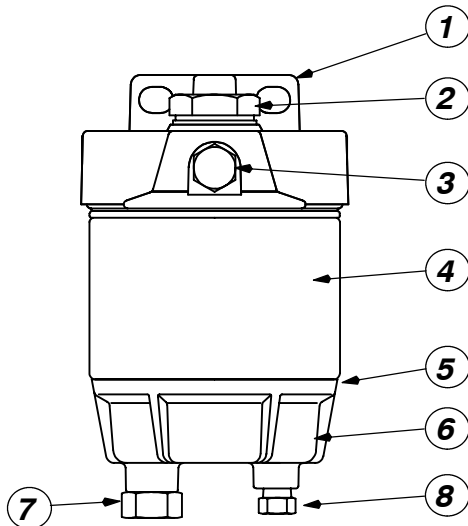
Performance Graphs

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Parts List

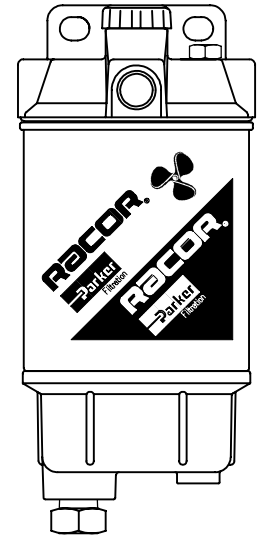
The circled number corresponds to the item number shown in the parts list below.



Item/Part No.	Description	Case Qty.
1 RK10117	Head, 1/4" NPT Ports	1
2 RK10006	Head Bolt Assembly	1
3 RK10110	Metal Vent Plug, 3/8"-24 UNF	1
4 R12SUL	Replacement Element 2 Micron, UL Recognized	20
5 RK10012	Bowl O-ring	1
6 RK10109	Metal Bowl	1
7 RK20022	Metal Plug, 1/2"-20 UNF	1
8 918-N2	Steel Drain Plug, 1/8"NPT	1
RK12041	Metal Plug, 1/4" NPT	1
RK10063	Gasket/O-ring Kit	1
10218	Installation Instructions, 120RMAM	

SPECIFICATIONS are found on the introduction page.

245RMAM	Replacement Service Element SERVICE ELEMENT INCLUDES SEALS.
215RMAM: 15 GPH 230RMAM: 30 GPH 245RMAM: 45 GPH Includes primer pump and metal bowl.	215 use R15TUL (10 Micron) 12/case 230 use R20TUL (10 Micron) 12/case 245 use R25TUL (10 Micron) 12/case

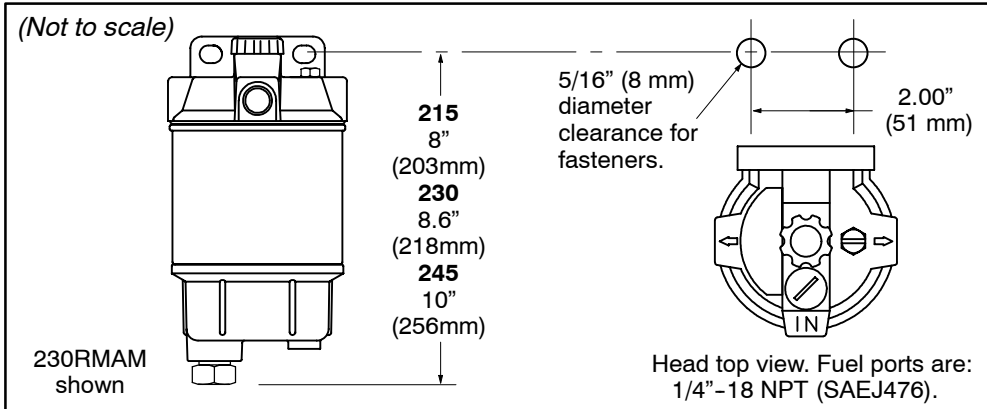


245RMAM shown



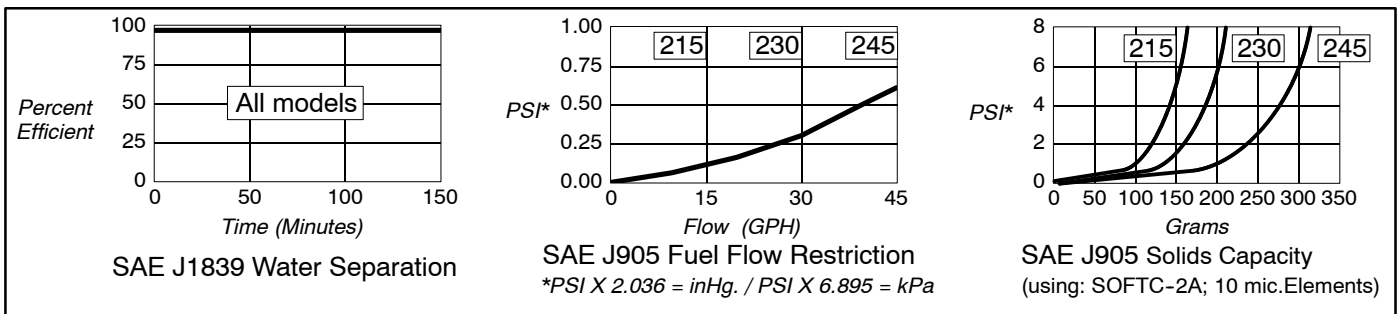
Mounting Hole Pattern

-Refer to Diesel Spin-on Series introduction page for filter dimensions.



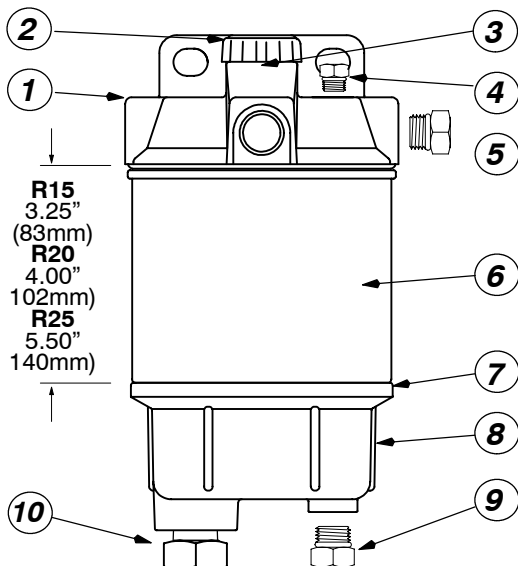
Performance Graphs

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Parts List

The circled number corresponds to the item number shown in the parts list below.



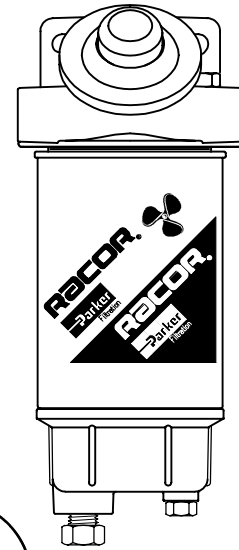
Item/Part No.	Description	Case Qty.
1	RK20046 Head, 1/4" NPT Ports	1
2	RK20025 Primer Pump Assembly	1
3	RK20011 Check Ball and Plastic Cap	1
	RK20742 Metal Check Ball Cap	1
4	RK10110 Metal Vent Plug, 3/8"-16 UNF	1
5	RK12041 Metal Plug, 1/4" NPT	1
6	See 'Replacement Service Element' box above	
7	RK22244 Bowl O-ring	20
8	RK22368 Beige Metal Bowl (with 3/8 NPT drain and 1/2"-20 probe ports)	1
9	RK20022 Metal Plug, 1/2"-20 UNF	1
10	918-N6 Steel Plug, 3/8" NPT	1
	RK20075 Complete Gasket/O-ring Kit	1
	22360 Installation Instructions, 200 Series	

Marine Diesel Spin-on Series Models 445, 460, 490, 4120MAM

SPECIFICATIONS are found on the introduction page.

How to Order -The example below illustrates how the part numbers are constructed.

445MAM	P	10
445MAM: 45 GPH 460MAM: 60 GPH 490MAM: 90 GPH 4120MAM: 120 GPH The powder coated head includes a hand primer pump with 2 inlets & outlets. The metal bowl is standard.	<u>Water Probe:</u> ¹ Specify 'P' for an in-bowl water probe. (Racor part number RK21069). Omit 'P' if not desired.	<u>Element Filtration Rating:</u> These units are standard with a 10 micron element. Add '10' to the part number.
¹ Order a water detection module separately from the Marine Accessories Section.		



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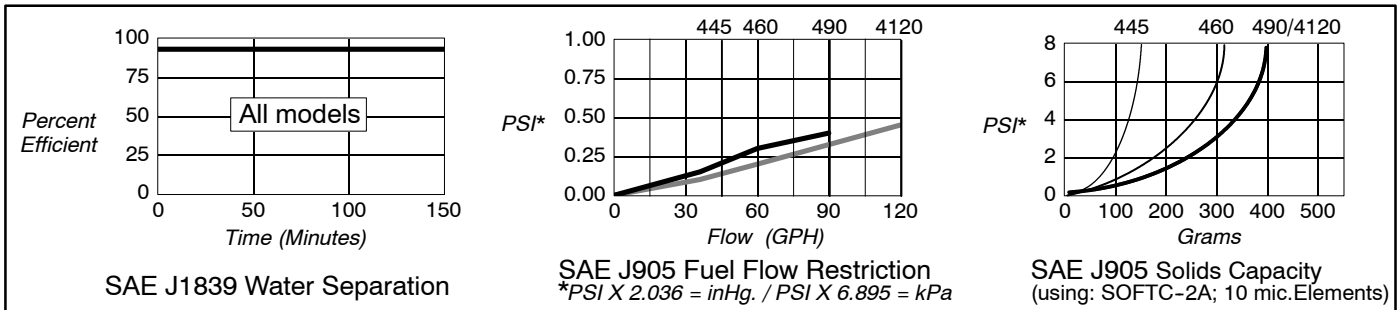
Replacement Service Elements -Service elements include seals.

445MAM	use	S3204TUL (10 Micron) 12 per case
460MAM	use	S3211TUL (10 Micron) 12 per case
490MAM	use	S3201TUL (10 Micron) 12 per case
4120MAM	use	S3201TUL (10 Micron) 12 per case



490MAM

Performance Graphs -These results are from controlled laboratory tests. Field results may vary by application.

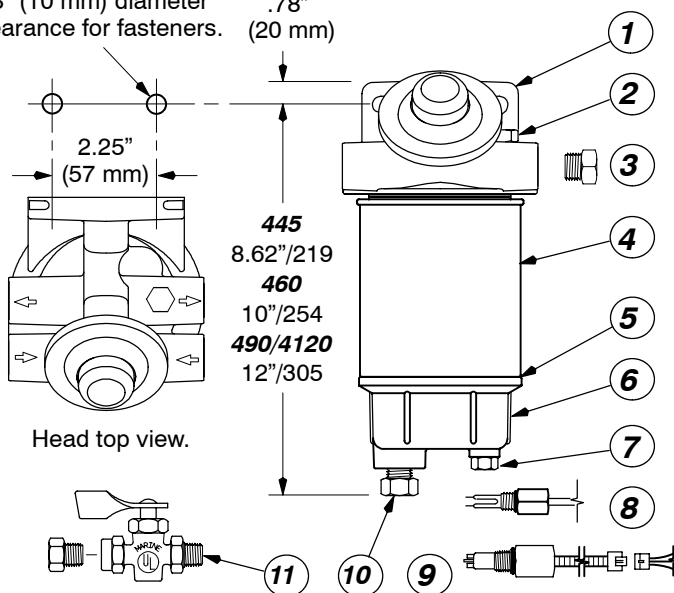


Mounting Hole Pattern / Parts List

The circled number corresponds to the item number shown.

3/8" (10 mm) diameter clearance for fasteners.

.78" (20 mm)



Item/Part No.	Description	Case Qty.
1	RK22425 Mounting Head, 3/8"NPT	1
	RK22270 4120 Mounting Head, 3/4"UNF	1
2	RK10110 Vent Plug (metal)	1
3	01SP-6S Metal Plug, 3/8" NPT	1
4	S3204TUL 445 Service Element, 10 micron	12
	S3211TUL 460 Service Element, 10 micron	12
	S3201TUL 490/4120 Service Element, 10 mic.	12
5	RK30076 Bowl O-ring	20
6	RK30495 Beige Metal Bowl, 1/4"NPT & 1/2"UNF Ports	1
7	RK20022 Metal Plug, 1/2"-20 UNF	1
8	RK21069 ¹ Water Probe, 1/2"-20 UNF	1
9	RK30880 Water Probe with Electronics	1
10	918-N4 Steel Plug, 1/4" NPT	1
11	RK19492 UL Listed Marine Shut-off Valve	1
	22490 Installation Instructions, 400 Series	

¹ Use with water detection module. See Accessories Section.