



Centrifugal Sand Separators

Remove contaminants to minimize required maintenance and increase efficiency

RAIN & BIRD

Features and Benefits Include:

- No moving parts.
- 150 PSI carbon steel construction with threaded or flanged inlet/outlet connections.
- Polyester powder coated for long service life.
- Non-ASME code standard construction (ASME code construction available optionally).
- Capacities of 4 to 8300 gpm.
- Simple installation (no electrical required).
- Efficient pre-filter to reduce sand load on downstream components.
- Cost effective.

Pumping water from wells or other sources with excessive amounts of sand, silt, or other abrasive grit particles can lead to the premature degradation of irrigation system components. These contaminants can reduce the efficiency of the irrigation system equipment by plugging and clogging sprinklers, drip emitters, valves, and spray nozzles. Repairing these components costs time and money in replacement parts, downtime and productivity. Rain Bird Centrifugal Sand Separators are designed to separate abrasive particles before they can enter the irrigation system, keeping equipment clean and clear of debris, which minimizes the amount of maintenance required and increases operational efficiency. These filters are designed and manufactured to exacting standards, providing many years of optimal performance.

Rain Bird centrifugal separators are designed for easy installation, minimal maintenance, and reliable operation. The separator removes sand and particles that are heavier than water (materials with a specific gravity of 2 or greater) before these particles can damage your system. Note: Silt, due to its mass (or lack thereof) would not be able to be filtered.

Liquids and solids enter the unit and begin traveling in a circular flow. This centrifugal action throws heavier particulates towards the filter walls and eventually downward in a spiral motion to the separation chamber. The particulates collect in the separation chamber and are purged manually from the system. The filtered water is then drawn to the separator's vortex and through the outlet.

An optional automatic purge controller and valve can be used on all applications to automate the purge process, which eliminates the need for manual flushing. Small vertical design separators may be wall mounted or supported by the system piping.

> Clean water is drawn out through the separator's vortex action

Liquid / solid mix enters unit tangentially inducing centrifugal action

Centrifugal Separator Theory of Operation

Solids drop into the collection chamber

Centrifugal action moves heavier particles to sides of the separator

Solids are purged as required from the collection chamber

Irrigation

Irrigation

Centrifugal Sand Separators Performance Data

Dimensions											
Model Number	А	В	С	D	E	F	G	н	I	J	К
ACS-R40LA	48 1/2"	46 1/2"	46 1/2"	16 11/16"	16"	7 1/2"	19"	4"	6 5/8"	12"	80"
ACS-R60LA	63"	59 1/2"	60 3/8"	20 1/2"	20 3/4"	10 1/2"	22"	5 1/4"	10 3/4"	16"	106 1/4"
ACS-R80LA	71"	65"	66"	21 3/4"	22 5/8"	12"	24 1/2"	5 5/8"	12 3/4"	18"	114"
ACS-R100LA	78"	71"	72 3/4"	21"	24 1/2"	13"	29"	7"	16"	22"	123 1/2"
ACS-R120LA	102"	75 1/4"	76 1/2"	23 3/4"	26 5/8"	14 1/4"	32"	8 1/8"	18"	26"	139"
ACS-R140LA	102 1/2"	85 3/8"	86 5/8"	24 1/2"	27 3/4"	12"	33 1/2"	9"	20"	28"	152 1/2"
ACS-R160LA	108"	89 1/4"	90"	24 3/8"	29"	12"	33 1/2"	9"	24"	30"	160"
ACS-R180LA	118 1/2"	98 1/4"	100 1/4"	27"	33 5/8"	15"	34 1/2"	11"	28"	36"	177"





Dimensions					
Model Number	А	В	С	D	
VCS-R5V	21 1/2"	6"	2 3/8"	2 1/2"	
VCS-R7V	21 1/2"	6"	2 3/8"	2 1/2"	
VCS-R10V	30 1/2"	6"	3 1/2"	2 3/4"	
VCS-R12V	30 1/2"	6"	3 1/2"	3"	
VCS-R15V	30 1/2"	6"	3 1/2"	3 1/8"	
VCS-R20V	38"	8"	4 1/2"	3 5/8"	
VCS-R25V	43 3/4"	10"	4 1/2"	4 1/2"	
VCS-R30V	47 1/2"	10"	5 9/16"	5"	
VCS-R40V	49"	12"	6 5/8"	6"	
ACS-R60LA	ACS-R80LA ACS-R100LA	ACS-R120LA	ACS-R140LA	ACS-R160LA ACS-R180LA	



ACS-R40LA 10 9 8 Pressure Drop (psi) 7 6 5 4 3 800 900 1000 2000 0009 7000 8000 200 100 300 400 500 600 700 3000 4000 5000 Flow (gpm) /CS-R15V /CS-R20V VCS-R12V VCS-R30V CS-R10V /CS-R25V VCS-R5V VCS-R7V 10 9 8 7 Pressure Drop (psi) 6 5 4 3 4 ß 9 8 6 0 60 80 90 00 ო 20 30 40 50 200 300 Flow (gpm)

Auto Purge Options:

• 1" controller and auto purge valve for 1" models

• 2" controller and auto purge valve for 2" models

Contact Rain Bird for drawings or visit www.rainbird.com to download.

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