

# **Advanced Crankcase Ventilation**

**ACV Series** 



protecting your equipment • protecting your environment

Solberg designs and manufactures high efficiency, open and closed, Advanced Crankcase Ventilation Systems to capture hazardous oil mist and particulate emissions (blow-by). This blow-by is vented from the crankcase of reciprocating engines. The ACV systems ensure environmental compliance, protect the engines turbocharger, intercoolers and inlet air filters while keeping the engine room free of oil mist.

Solberg's ACV series incorporates industry leading vacuum control technology paired with extremely long filter life. Choose from five size offerings as a standalone unit or a complete installation kit. For ease of installation, kit customization is available.

## **Applications Include**

- Prime Power Engines
- Standby Generators
- Emergency Generators
- Marine Engines
- Gas Engines
- Diesel Engines
- Dual Fuel Engines
- Biogas/Digester Gas Engines
- CHP Applications
- And many other applications



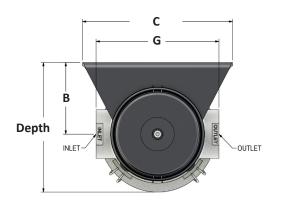
# Design Features

- Eliminates visible emissions (99%+ efficient at 0.3 um)
- High performance coalescing elements offer long life
- Flow ranges from 2 40 CFM (3 68 m<sup>3</sup>/hr) for single units
- Integrated vacuum control valve controls precise range of vacuum
- Diaphragm vacuum regulation valve design, no springs - No manual vacuum adjustment required
- Drain port for oil recovery
- Universal mounting bracket
- Available with installation kits
- Optional atmospheric bypass



# ACV Specifications





Part #	ACV0712D(L/R)	ACV1017D(L/R)	ACV2034D(L/R)	ACV4068(L/R)	
INLET/OUTLET	1" NPSC	2" NPSC	2" NPSC	3" NPT	
DRAIN	.5" NPSC	.5" NPSC	.5" NPSC	1" NPSC	
GAUGE TAP	.25" NPSC	.25" NPSC	.25" NPSC	.25" NPSC	
FLOW RATE	7 CFM   12 m³/hr	10 CFM   17 m <sup>3</sup> /hr	20 CFM   34 m <sup>3</sup> /hr	40 CFM   68 m <sup>3</sup> /hr	
LENGTH	3"   76 mm	9.5"   241 mm	9.5"   241 mm	6"   152 mm	
DEPTH	9.1"   230 mm	9.5"   241 mm	9.5"   241 mm	12.7"   323 mm	
А	16.6"   421 mm	17.4"   442 mm	22.3"   567 mm	28.6"   718 mm	
В	5.5"   140 mm	5.3"   133 mm	5.3"   133 mm	7"   178 mm	
С	4.5"   114 mm	11"   279 mm	11"   279 mm	8.5"   216 mm	
D	-	1.1"   27 mm	1.1"   27 mm	1.06"   27 mm	
E	0.56"   14 mm	0.43"   11 mm	0.43"   11 mm	0.43"   11 mm	
F	0.5"   13 mm	0.5"   13 mm	0.5"   13 mm	0.5"   13 mm	
G	7"   178 mm	9"   229 mm	9"   229 mm	13.5"   343 mm	
	NON VACUUM REGULATED "ACV-X" UNITS				
HEIGHT	14.3"   363 mm	15.2"   387 mm	20.1"   511 mm	26"   659 mm	



# **Advanced Crankcase Ventilation Installation Kits**

# **ACV Series**

#### **Overview**

Solberg's Advanced Cranckcase Ventilation Series can be supplied with a standard, off the shelf, installation kit to reduce the time required to integrate the Solberg ACV to your engine.

#### **Standard Kit Components**

- Multi-position and field reversible mounting bracket (x1)
- Standard NPT to hosebarb blowby connections (x2)
- Petroleum grade blow-by hose (10 feet)
- Hose clamps for blow-by hose (x4)
- Clear, vacuum rated, drainline hose (3 feet)
- Brass hosebarbs for drainline connections (x2)
- Brass check valve for drainline installation (x1)

Note: Installation kits can be customized for your specific engine or packaged genset. Contact factory for additional information.



Rev: ACVKIT-US1908K

# Insulation Jackets to Reduce/Prevent Liquid Dropout in Blow-by

### **Application**

Water and oil emulsions can wreak havoc on crankcase ventilation systems causing oil contamination, premature filter failure, and seal leakage, all of which can result in costly repair and maintenance. For engines operating in environments where temperatures can drop below 60° F (15° C), the use of insulation jackets helps reduce the potential of crankcase fumes reaching dewpoint temperature and the resulting condensation that can cause emulsions.

Solberg offers specially fitted insulation jackets to prevent emulsions in the crankcase ventilation system. Many sizes are available from stock. Jackets can be customized for your specific needs. Contact factory for additional information.

#### **Features**

- Purpose built fit
- Quick and easy installation and removal
- Durable construction



**Insulation Jacket on ACV Series** 



Insulation Jackets on Main Coalescing Filter and Pre-Separator on ACVB Series



1151 Ardmore Avenue. Itasca, IL 60143 USA

Sales/Service: 630.773.1363

Fax: 630.773.0727

sales@solbergmfg.com

www.solbergmfg.com



# **Advanced Crankcase Ventilation**

**ACV Series** 



protecting your equipment • protecting your environment

Solberg designs and manufactures high efficiency, open and closed, Advanced Crankcase Ventilation Systems to capture hazardous oil mist and particulate emissions (blow-by). This blow-by is vented from the crankcase of reciprocating engines. The ACV systems ensure environmental compliance, protect the engines turbocharger, intercoolers and inlet air filters while keeping the engine room free of oil mist.

Solberg's ACV series incorporates industry leading vacuum control technology paired with extremely long filter life. Choose from five size offerings as a stand-alone unit or a complete installation kit. For ease of installation, kit customization is available.

## **Applications Include**

- Prime Power Engines
- Standby Generators
- Emergency Generators
- Marine Engines
- Gas Engines
- Diesel Engines
- Dual Fuel Engines
- Biogas/Digester Gas Engines
- CHP Applications
- And many other applications



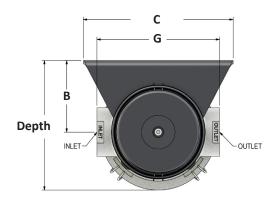
# Design Features

- Eliminates visible emissions (99%+ efficient at 0.3 um)
- High performance coalescing elements offer long life
- Flow ranges from 3 68 m<sup>3</sup>/hr (2 40 CFM) for single units
- Integrated vacuum control valve controls precise range of vacuum
- Diaphragm vacuum regulation valve design, no springs - No manual vacuum adjustment required
- Drain port for oil recovery
- Universal mounting bracket
- Available with installation kits
- Optional atmospheric bypass



# ACV Specifications





Part #	ACV0712D(L/R)	ACV1017D(L/R)	ACV2034D(L/R)	ACV4068(L/R)
INLET/OUTLET	1" NPSC	2" NPSC	2" NPSC	3" NPT
DRAIN	.5" NPSC	.5" NPSC	.5" NPSC	1" NPSC
GAUGE TAP	.25" NPSC	.25" NPSC	.25" NPSC	.25" NPSC
FLOW RATE	7 CFM   12 m <sup>3</sup> /hr	10 CFM   17 m <sup>3</sup> /hr	20 CFM   34 m <sup>3</sup> /hr	40 CFM   68 m <sup>3</sup> /hr
LENGTH	3"   76 mm	9.5"   241 mm	9.5"   241 mm	6"   152 mm
DEPTH	9.1"   230 mm	9.5"   241 mm	9.5"   241 mm	12.7"   323 mm
А	16.6"   421 mm	17.4"   442 mm	22.3"   567 mm	28.6"   718 mm
В	5.5"   140 mm	5.3"   133 mm	5.3"   133 mm	7"   178 mm
С	4.5"   114 mm	11"   279 mm	11"   279 mm	8.5"   216 mm
D	-	1.1"   27 mm	1.1"   27 mm	1.06"   27 mm
E	0.56"   14 mm	0.43"   11 mm	0.43"   11 mm	0.43"   11 mm
F	0.5"   13 mm	0.5"   13 mm	0.5"   13 mm	0.5"   13 mm
G	7"   178 mm	9"   229 mm	9"   229 mm	13.5"   343 mm
	NON VACUUM REGULATED "ACV-X" UNITS			
HEIGHT	14.3"   363 mm	15.2"   387 mm	20.1"   511 mm	26"   659 mm

Solberg designs and manufactures high efficiency, open and closed, Advanced Crankcase Ventilation Systems to capture hazardous oil mist and particulate emissions (blow-by). This blow-by is vented from the crankcase of reciprocating engines. The ACV systems ensure environmental compliance, protect the engines turbocharger, intercoolers and inlet air filters while keeping the engine room free of oil mist.

Solberg's ACV series incorporates industry leading vacuum control technology paired with extremely long filter life. Choose from five size offerings as a stand-alone unit or a complete installation kit. For ease of installation, kit customization is available.

### Applications Include

- Prime Power Engines
- Standby Generators
- Emergency Generators
- Marine Engines
- Gas Engines
- Diesel Engines
- Dual Fuel Engines
- Biogas/Digester Gas Engines
- CHP Applications
- And many other applications



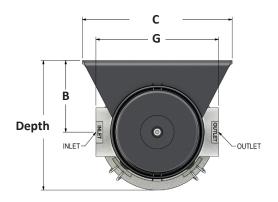
# Design Features

- Eliminates visible emissions (99%+ efficient at 0.3 um)
- High performance coalescing elements offer long life
- Flow ranges from 3 68 m<sup>3</sup>/hr (2 40 CFM) for single units
- Integrated vacuum control valve controls precise range of vacuum
- Diaphragm vacuum regulation valve design, no springs - No manual vacuum adjustment required
- Drain port for oil recovery
- Universal mounting bracket
- Available with installation kits
- Optional atmospheric bypass



# ACV Specifications





Part #	ACV0712D(L/R)	ACV1017D(L/R)	ACV2034D(L/R)	ACV4068(L/R)	
INLET/OUTLET	1" NPSC	2" NPSC	2" NPSC	3" NPT	
DRAIN	.5" NPSC	.5" NPSC	.5" NPSC	1" NPSC	
GAUGE TAP	.25" NPSC	.25" NPSC	.25" NPSC	.25" NPSC	
FLOW RATE	7 CFM   12 m <sup>3</sup> /hr	10 CFM   17 m <sup>3</sup> /hr	20 CFM   34 m <sup>3</sup> /hr	40 CFM   68 m <sup>3</sup> /hr	
LENGTH	3"   76 mm	9.5"   241 mm	9.5"   241 mm	6"   152 mm	
DEPTH	9.1"   230 mm	9.5"   241 mm	9.5"   241 mm	12.7"   323 mm	
А	16.6"   421 mm	17.4"   442 mm	22.3"   567 mm	28.6"   718 mm	
В	5.5"   140 mm	5.3"   133 mm	5.3"   133 mm	7"   178 mm	
С	4.5"   114 mm	11"   279 mm	11"   279 mm	8.5"   216 mm	
D	-	1.1"   27 mm	1.1"   27 mm	1.06"   27 mm	
E	0.56"   14 mm	0.43"   11 mm	0.43"   11 mm	0.43"   11 mm	
F	0.5"   13 mm	0.5"   13 mm	0.5"   13 mm	0.5"   13 mm	
G	7"   178 mm	9"   229 mm	9"   229 mm	13.5"   343 mm	
	NON VACUUM REGULATED "ACV-X" UNITS				
HEIGHT	14.3"   363 mm	15.2"   387 mm	20.1"   511 mm	26"   659 mm	



# **Advanced Crankcase Ventilation Installation Kits**

# **ACV Series**

#### **Overview**

Solberg's Advanced Cranckcase Ventilation Series can be supplied with a standard, off the shelf, installation kit to reduce the time required to integrate the Solberg ACV to your engine.

### **Standard Kit Components**

- Multi-position and field reversible mounting bracket (x1)
- Standard NPT to hosebarb blowby connections (x2)
- Petroleum grade blow-by hose (10 feet)
- Hose clamps for blow-by hose (x4)
- Clear, vacuum rated, drainline hose (3 feet)
- Brass hosebarbs for drainline connections (x2)
- Brass check valve for drainline installation (x1)

Note: Installation kits can be customized for your specific engine or packaged genset. Contact factory for additional information.



Rev: ACVKIT-US2203J

# Insulation Jackets to Reduce/Prevent Liquid Dropout in Blow-by

# **Application**

Water and oil emulsions can wreak havoc on crankcase ventilation systems causing oil contamination, premature filter failure, and seal leakage, all of which can result in costly repair and maintenance. For engines operating in environments where temperatures can drop below 60° F (15° C), the use of insulation jackets helps reduce the potential of crankcase fumes reaching dewpoint temperature and the resulting condensation that can cause emulsions.

Solberg offers specially fitted insulation jackets to prevent emulsions in the crankcase ventilation system. Many sizes are available from stock. Jackets can be customized for your specific needs. Contact factory for additional information.

#### **Features**

- Purpose built fit
- Quick and easy installation and removal
- Durable construction



**Insulation Jacket on ACV Series** 



Insulation Jackets on Main Coalescing Filter and Pre-Separator on ACVB Series



United Kingdom Phone: +44 (0) 1902 798499 UKsales@solbergmfg.com Belgium Phone: +32 3 774 52 11 BEsales@solbergmfg.com Germany Phone: +49 9129 145 3902 vertrieb@solbergmfg.com Slovakia Phone: +421 (0) 48 41 33 251 predaj@solbergmfg.com

www.solbergmfg.com