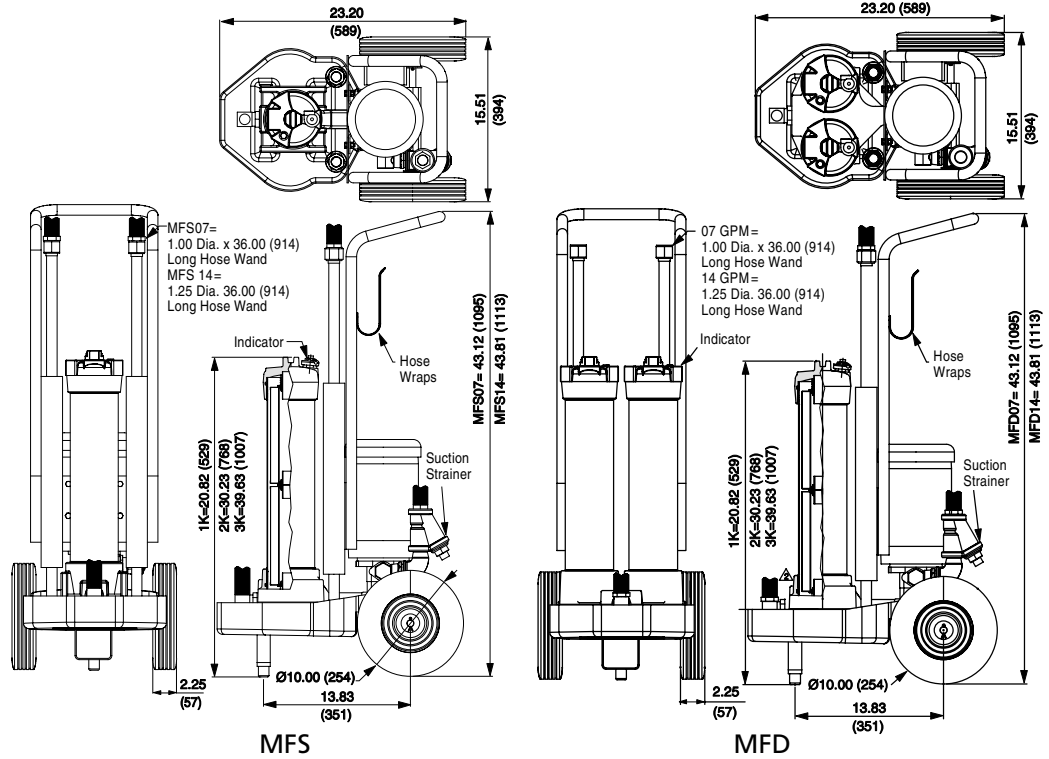


Mobile Filtration Systems



MSS MFS
MSD MFD



Metric dimensions in ().

Optional SMART® Kit not shown

Description

The Schroeder Mobile Filtration System is a compact, self-contained filtration system equipped with high efficiency, high capacity elements capable of removing particulate contamination and/or water quickly, conveniently and economically. It is perfect for cleaning up existing systems as well as for prefiltering new fluids, since new fluids often have contamination levels significantly higher than that recommended for most hydraulic systems.

The most attractive feature of the Mobile Filtration System is the significant reduction in noise, being reduced from 91 decibels to 72 decibels at full load. Additional improvements include a modular base that eliminates hoses and fittings between components, a drip pan, and easier element servicing through the new patent pending K9 base-ported filter housing.

The MFS single filtration unit can remove either water or particulate contamination. The MFD dual filtration unit can be used to remove both water and particulate contamination, or for staged particulate contaminant removal. The MSS is a MFS cart with an integrated SMART® Kit. The MSD is a MFD cart with an integrated SMART® Kit (see pages 36 and 37).

Features

- Modular base eliminates hoses between components and minimizes leakage
- Base-ported filter provides easy element service from the top cap
- Single, double and triple bowl length option allows the flexibility of additional dirt-holding capacity
- D5 Dirt Alarm® indicates when filter element needs changed
- Cleans up oil faster – 7 gpm and 14 gpm models available
- Hoses and connection tubes included
- Drip pan catches oil before it falls to the ground
- Integral suction strainer protects pump
- Off-line stationary system available – see Kidney Loop System, page 74
- Two 7/16 – 20 UNF sampling ports included on all models



Mobile Filtration Systems

- Supplementing continuous filtration by system filters
- Cleaning up a hydraulic system following component replacement
- Filtering new fluid before it is put into service
- Transferring fluid from storage tanks and drums to system reservoirs

Applications

TCM
TCM-FC
TMU
SMART® Kit

Specifications

| | |
|----------------------------------|--|
| Flow Rating: | 7 gpm (26.5 L/min) max or 14 gpm (53.0 L/min) max |
| Maximum Viscosity: | 1000 SUS (216 cSt) Higher viscosity version available. Contact factory for details. |
| Hose Pressure Rating: | 30 psig (2.0 bar) @ 150°F (65.6°C) Full vacuum @ 150°F (65.6°C) |
| Operating Temperature: | 25°F to 150°F (-4°C to 65°C) |
| Bypass Valve Setting: | Cracking: 30 psi (2 bar) |
| Material: | Manifold and cap: Cast aluminum Element case: Steel |
| Compatibility: | All petroleum based hydraulic fluid. Contact factory for use with other fluids. |
| Motor: | 115 VAC Single phase 3/4 hp (7 gpm) or 1-1/2 hp (14 gpm) |
| Element Change Clearance: | 8.50 (215) 1K (9, 18 or 27" depending on model configuration) |

TPM
TIM
CTU
TWS-C
ET-100-6
HMG 3000
EWC
EPK
HTB
GS

Weights

| GPM | MFS-1K lb (kg) | MFS-2K lb (kg) | MFS-3K lb (kg) | MSS-1K lb (kg) | MSS-2K lb (kg) | MSS-3K lb (kg) | MFD-1K lb (kg) | MFD-2K lb (kg) | MFD-3K lb (kg) | MSD-1K lb (kg) | MSD-2K lb (kg) | MSD-3K lb (kg) |
|-----|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 7 | 170 (77) | 180 (82) | 190 (86) | 188 (85) | 198 (90) | 208 (94) | 185 (84) | 203 (92) | 220 (100) | 203 (92) | 221 (100) | 238 (108) |
| 14 | 177 (80) | 187 (85) | 197 (89) | 195 (88) | 195 (93) | 215 (97) | 192 (87) | 210 (95) | 227 (103) | 210 (95) | 228 (103) | 245 (111) |

Trouble
Check Plus
Test Points
Adapters
Hose
Joiners

Model Number Selection

| Catalog Model Number | No. of Elements | Element Length | Element Media First Filter | Element Media Second Filter *** (MFD Only) *** | Seals | Pump Size (gpm) |
|----------------------|-----------------|----------------|----------------------------|--|-------------------------|-----------------|
| MFS | 1 | 09 | ** | ** | B = Buta N V = Viton | 07 |
| MSS | | 18 | **E*, Z, EWR** | **E*, Z, EWR** | | |
| MFD | | 27 | plus 01, 03 | plus 01, 03 | | |
| | 2 | 09 | 05, 10, 25 | 05, 10, 25 | | 14 |
| MSD | | 3 | 09 | | | |

Microflex
Hose
Pressure
Limiters
Pressure
Gauges
Test Kits

Notes:

***E media elements are only available in 03, 10 and 25 microns.

***Water removal (W) elements are indicated by an "EWR" in the part number and are not followed by a 01, 03, 05, 10 or 25.

***When MFD is ordered, the number of elements, element length, and seals will be identical for both filter housings.

Preferred order codes designate shorter lead times and faster delivery.



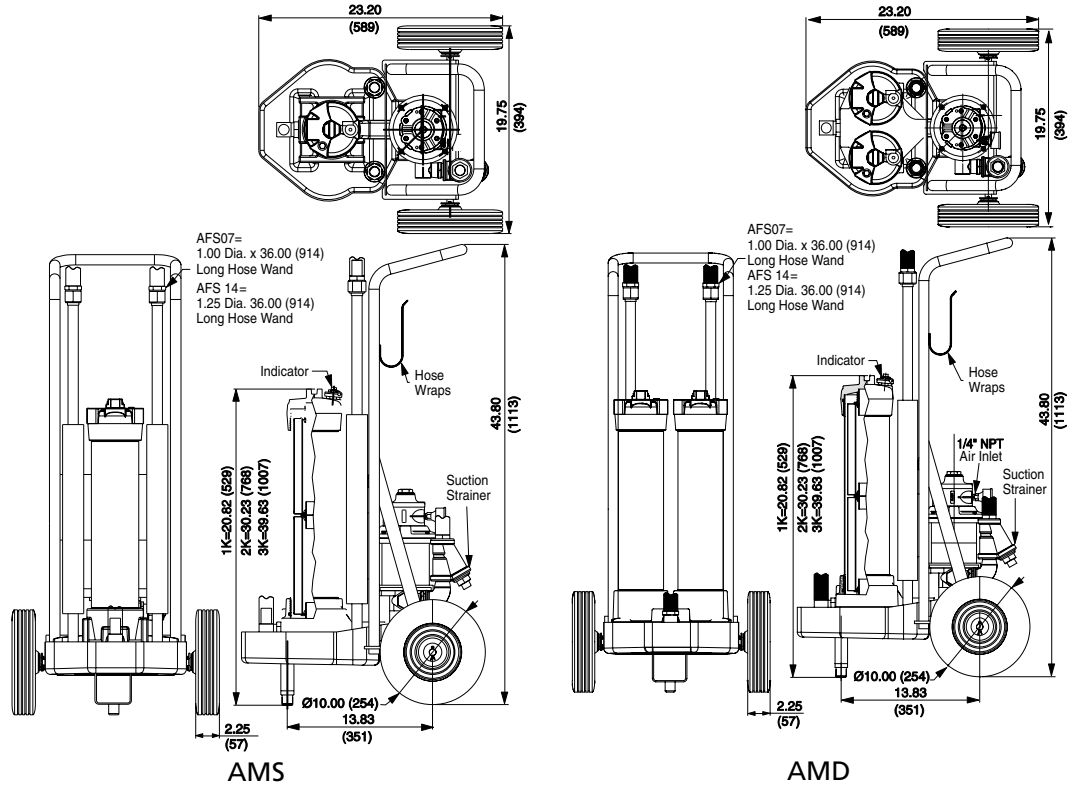
Probalizer
AFM
MSS, MDS
MFS, MFD

AMS, AMD
KSS, KSD
KLS, KLD
AKS, AKD
KLC
X Series
HFS
MTS
SVD
Appendix

Air-Operated Mobile Filtration Systems



**AMS
AMD**

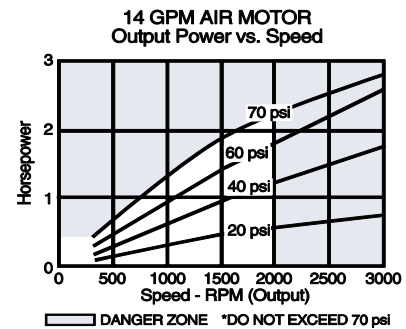
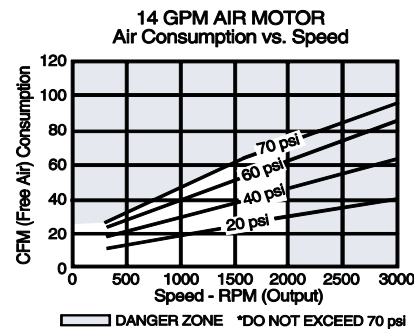
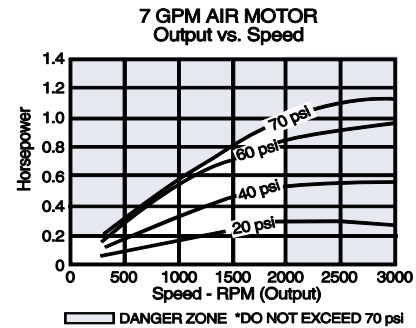
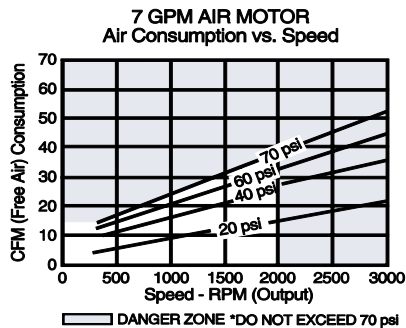


Metric dimensions in ().

Description

Schroeder's AMS and AMD carts feature a pneumatic motor in place of the standard electric motor. The pneumatic motor offers the same flow capability using the same components, but without the need for an electrical outlet. This provides a major advantage in the application of this unit. With no need for an electrical outlet, it is more portable than the standard electric-motored skids and carts.

Because most trucks and industrial machinery are already equipped with an air compressor, a simple connection to the 1/4" NPT port will easily power the 1.5 HP (or 4.0 HP) motor. At 70 psi, and 2000 rpm, this motor consumes less than 40 cfm (70 cfm for the 4.0 HP motor) of compressed air. Because no electricity is used, the pneumatic motor is ideal for working in hazardous environments such as mines.



Note: Performance data represents a 4-vane model with no exhaust restriction.



Air-Operated Mobile Filtration Systems

- Supplementing continuous filtration by system filters
- Cleaning up a hydraulic system following component replacement
- Filtering new fluid before it is put into service
- Transferring fluid from storage tanks and drums to system reservoirs
- Field applications on service trucks

Applications

TCM
TCM-FC
TMU
SMART® Kit
TPM

Specifications

| | |
|----------------------------------|--|
| Flow Rating: | 7 gpm (26.5 L/min) max and 14 gpm (53.0 L/min) max |
| Maximum Viscosity: | 1000 SUS (216 cSt) Higher viscosity version available. Contact factory for details. |
| Housing Pressure Rating: | 250 psi (17.2 bar) max operating 1000 psi (68.9 bar) min yield |
| Operating Temperature: | -25°F to 150°F (-29°C to 65°C) ² |
| Bypass Valve Setting: | Cracking: 30 psi (2 bar) |
| Material: | Manifold and cap: Cast aluminum Element case: Steel |
| Compatibility: | All petroleum based hydraulic fluid. Contact factory for use with other fluids. |
| Element Change Clearance: | 8.50 (215) 1K (9, 18 or 27" depending on model configuration) |

¹For higher hose pressure applications contact factory.

²For higher temperature applications contact factory.

TIM
CTU
TWS-C
ET-100-6
HMG 3000
EWC
EPK
HTB
GS

Trouble
Check Plus

Weights

| GPM | AMS-1K lb (kg) | AMS-2K lb (kg) | AMS-3K lb (kg) | AMD-1K lb (kg) | AMD-2K lb (kg) | AMD-3K lb (kg) |
|-----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 7 | 170 (77) | 180 (82) | 190 (86) | 185 (84) | 203 (92) | 220 (100) |
| 14 | 177 (80) | 187 (85) | 197 (89) | 192 (87) | 210 (95) | 227 (103) |

Test Points

Adapters

Hose
Joiners

Model Number Selection

| Filter Series | No. of Elements | Element Length | Element Media First Filter | Element Media Second Filter (AMD Only)*** | Seal Material | GPM ¹ |
|---------------|-----------------|----------------|-----------------------------|---|---------------|------------------|
| AMS | 1 | 09 | E*, Z, EWR** plus 01, 03 | E*, Z, EWR** plus 01, 03 | B = Buna N | 07 ² |
| | | 18 | | | | |
| AMD | 2 | 09 | 05, 10, 25 | 05, 10, 25 | | 14 ² |
| | | 09 | | | | |

Notes:

1. GPM only valid with fluids up to 1000 SUS.

2. 07 GPM - 50 CFM at 70 psi.

14 GPM - 70 CFM at 70 psi.

*E media elements are only available in 03, 10 and 25 microns.

**Water removal (W) elements are indicated by an "EWR" in the part number and are not followed by a 01, 03, 05, 10 or 25.

***When AMD is ordered, the number of elements, element length, and seals will be identical for both filter housings.

Microflex
Hose

Pressure
Limiters

Pressure
Gauges

Test Kits

Probalizer

AFM

MSS, MDS
MFS, MFD

AMS, AMD

KSS, KSD
KLS, KLD

AKS, AKD

KLC

X Series

HFS

MTS

SVD

Appendix