

MCP-GO

Compact all-in-one cartridge filtration system.

General Description



A highly efficient, space-saving dust collection solution featuring a plug-and-play fan and motor assembly for quick and hassle-free installation. Designed for versatility, this unit handles a wide range of dust and welding fume applications with ease. Installation requires only a few common tools, making it ideal for facilities seeking minimal downtime and maximum performance.

Warning: Can not be used in combustible dust applications. For combustible dust, refer to Nederman's MCP SmartFilter.

- Small footprint
- Pre-wired motor and controls
- 6 patented Uniclean filter cartridges
- Flame retardant nanofiber filter media provides high filter load
- Automatic energy saving compressed air reverse air pulse cleaning
- 5/64 in (2 mm) galvanized sheet metal cabinet
- 17 gal (65 L) dust bin and front access to important service areas

Models

MCP-GO-2-6SL Nominal air flow 1800 cfm (3058 m³/hr) @ 14 in wg

MCP-GO-2-6S Nominal air flow 2800 cfm (4757 m³/hr) @ 12 in wg

All units equipped with variable frequency drive (VFD), Insight Controller, two pressure sensors and reverse air pulse filter cleaning system.

MCP-GO-2-6SL Low MCP-GO-2-6S High



Main Components Descriptions

| Component | Description |
|------------------------------------|--|
| Cabinet/Housing | 5/64 in (2 mm) galvanized sheet metal, bolted and sealed. |
| Filter cartridges | SC178: Nederman patented square cartridges with Uniclean flame retardant (cellulose/polyester blend) nanofiber filter media. Efficiency: MERV 14 |
| Dirty air inlet | Located backside and includes a baffle plate to protect filter cartridges from direct impact of hot and abrasive particles. Various transition pieces available (see accessories). |
| Extraction fan | Heavy duty industrial fan with fully welded impeller and backwards inclined blades. Fan static efficiency up to 82%. |
| Fan and motor silencer | Fan and motor sound enclosure lined with acoustic foam reducing the fan noise below 75 dB(A) |
| Clean air outlet | Clean air is exhausted vertically away from operations avoiding disruption and reducing noise. Ducted exhaust connection available (see accessories) or additional in-line silencer to further reduce sound level. |
| Compressed air tank & nozzle pipes | Compressed air is blown through nozzles above the filter in pulses to regenerate the filter cartridge. |
| Dust bin | 17 gal (65 L) bin equipped with simple to operate locking / sealing mechanism with large hand lever |

Control System Components Specifications

| Component | Description |
|--------------------------------|---|
| Variable Frequency Drive (VFD) | Built-in dP sensor directly regulates fan performance based on the underpressure in the dirty air duct |
| Compact Insight Control Panel | <p>Complete system control</p> <p>Remote digital monitoring and cloud connectivity</p> <p>Intellipulse energy saving filter cleaning algorithms</p> <p>Full-color 7 in HMI for easier operation</p> <p>Automatic pressure set point maintenance</p> <p>Gateway - 4G, ethernet and wifi connection ready</p> <p>Fieldbus adapters available for BMS system integration (see accessories page)</p> <p><i>(Modbus, Profibus, Ethernet I/P, Profinet, BACnet)</i></p> <p>Note: Requires 115 V power supply</p> |

Insight Control Panel

| Features: | Compact |
|---|-----------------|
| Start/Stop from HMI | X |
| Contacts for remote start/stop | X |
| E-stop | X |
| Contacts for external E-stop | X |
| 1 lamp showing RUN - WARNING - ALARM | X |
| Pilot activation of system | X |
| Duct static pressure sensor | X |
| IntelliPULSE cleaning | X |
| Down time Cleaning (DTC) | X |
| Main filter dP sensor | X |
| HEPA/control filter dP sensor | |
| Interactive communication with VFD | X |
| Interlock for machines | X |
| Lime feeder ready signal | |
| Run time schedule | X |
| Run time counter (hours) | X |
| Hours to next service | X |
| Contactor for rotary air lock/screw conveyor #1 | |
| Contactor for rotary air lock/screw conveyor #2 | |
| Available Sensors: | |
| Container Level Sensor (CLS) | |
| Compressed air switch (CAS) | |
| Fan vibration sensor | |
| Zero speed sensor for rotary air lock/screw conveyor #1 | |
| Zero speed sensor for rotary air lock/screw conveyor #2 | |
| Sensors required for ComDust | |
| EX vent panel sensor | |
| EIFV lock sensor | |
| EIFV dust accumulation sensor | |
| Dimensions (w x h x d) - in | 16 x 16 x 9 |
| Dimensions (w x h x d) - mm | 400 x 400 x 212 |
| Weight - lb (kg) | 30 (13.6) |

Technical Data

| Specification | | MCP-GO-2-6SL (low) | MCP-GO-2-6S (high) |
|---|---|---|---|
| Number of valves / number of filter modules | | 2/2 | 2/2 |
| | Type | SC178-84F | SC178-132F |
| | Material | SC178: cellulose/polyester blend with nanofiber coating, flame retardant | SC178: cellulose/polyester blend with nanofiber coating, flame retardant |
| | Number of cartridges | 6 | 6 |
| Filter | Diameter - in [mm] | 7.5 (191) | 7.5 (191) |
| | Length - in [mm] | 34.5 (875) | 53.4 (1355) |
| | Filtration area ft ² [m ²] | 90 (8.4) | 142 (13.2) |
| | Total filter area ft ² [m ²] | 543 (50.4) | 853 (79.2) |
| Compressed air consumption * | | 1.5 cfm (34.8 NI/cleaning pulse) 15 cfm (417 NI/min) 12 cfm (20 m ³ /h) compressed air required for the dust collector | 1.5 cfm (34.8 NI/cleaning pulse) 15 cfm (417 NI/min) 12 cfm (20 m ³ /h) compressed air required for the dust collector |
| Fan / Motor | Power HP [kW] | 7.5 (5.6) | 10 (7.5) |
| | Frequency - Hz | 60 | 60 |
| | Voltage - V | 230/460 | 230/460 |
| | Speed - rpm | 3600 | 3600 |
| Fan efficiency (static) | | 82% | 82% |
| Nominal air flow cfm [m ³ /h] | | 1800 (3058) @ 14 in wg | 2800 (4757) @ 12 in wg |
| ~MAX Weight lb [kg] | | 725 (329) | 833 (378) |
| Ambient temperature °F [°C] | | -4 to 104 (-20 to 40) | -4 to 104 (-20 to 40) |
| Operating temperature °F [°C] | | 40 to 158 (5 to 70) | 40 to 158 (5 to 70) |
| Noise level dB(A) ** | | 75 | 73,1 |
| Placement | | Indoor | Indoor |
| Dust bin volume gal [L] | | 17 (65) | 17 (65) |

*At standard parameter settings of the controller

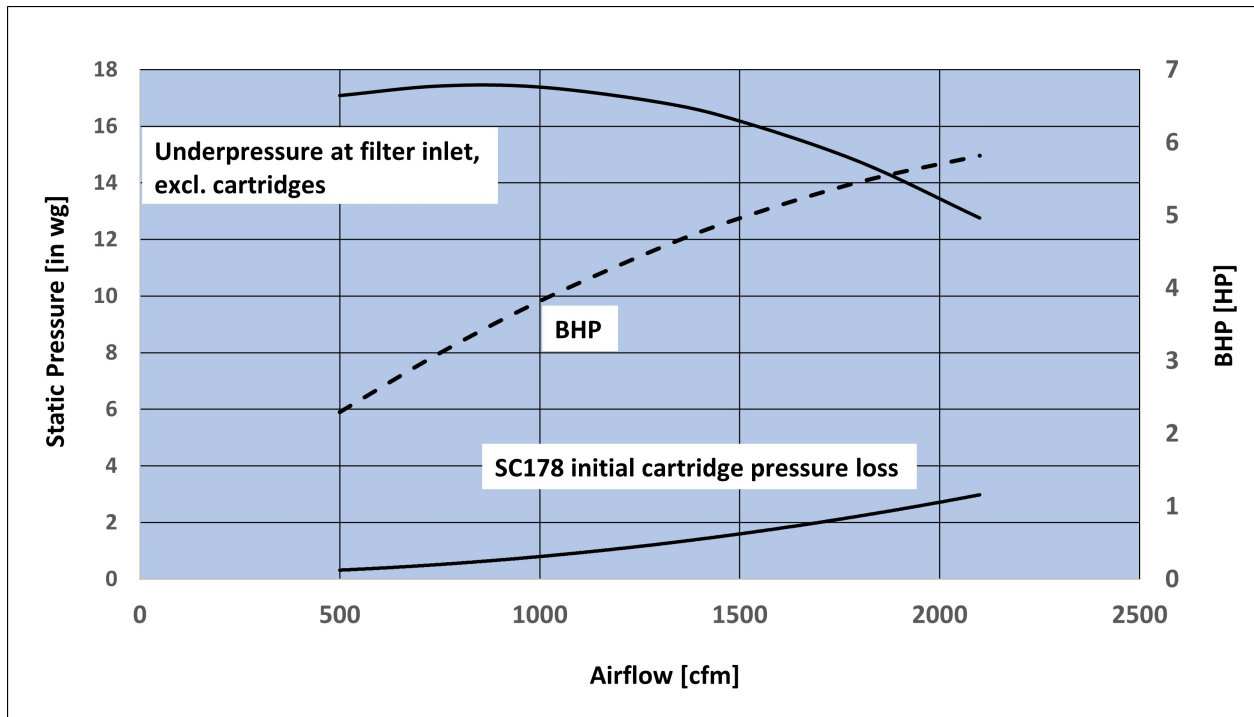
**Measurement in open space in 3 ft (1 m) distance and 5 ft (1.6 m) height to the unit

Available Models

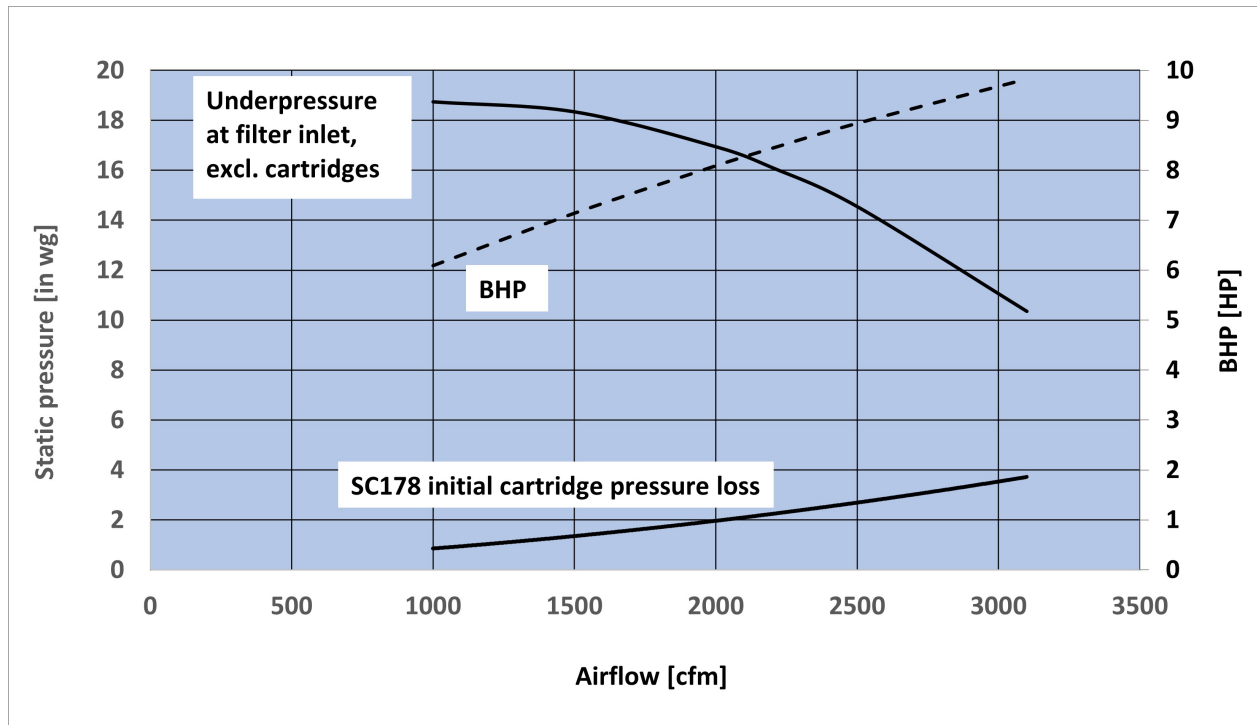
| Part No. | Model | Description |
|----------|----------------------|--|
| 89106603 | MCP-GO-2-6SL / 230 V | 7.5 HP (5.6 kW), 1800 cfm (3.058 m ³ /h), with VFD, Insight, fan and 6 short SC178 cartridges (3 per valve) |
| 89106604 | MCP-GO-2-6SL / 460 V | 7.5 HP (5.6 kW), 1800 cfm (3.058 m ³ /h), with VFD, Insight, fan and 6 short SC178 cartridges (3 per valve) |
| 89106601 | MCP-GO-2-6S / 230 V | 10 HP (7.5 kW), 2800 cfm (4.757 m ³ /h), with VFD, Insight, fan and 6 long SC178 cartridges (3 per valve) |
| 89106602 | MCP-GO-2-6S / 460 V | 10 HP (7.5 kW), 2800 cfm (4.757 m ³ /h), with VFD, Insight, fan and 6 long SC178 cartridges (3 per valve) |

Fan Pressure Curves

MCP-GO-2-6SL - 7.5 HP (5.6 kW)



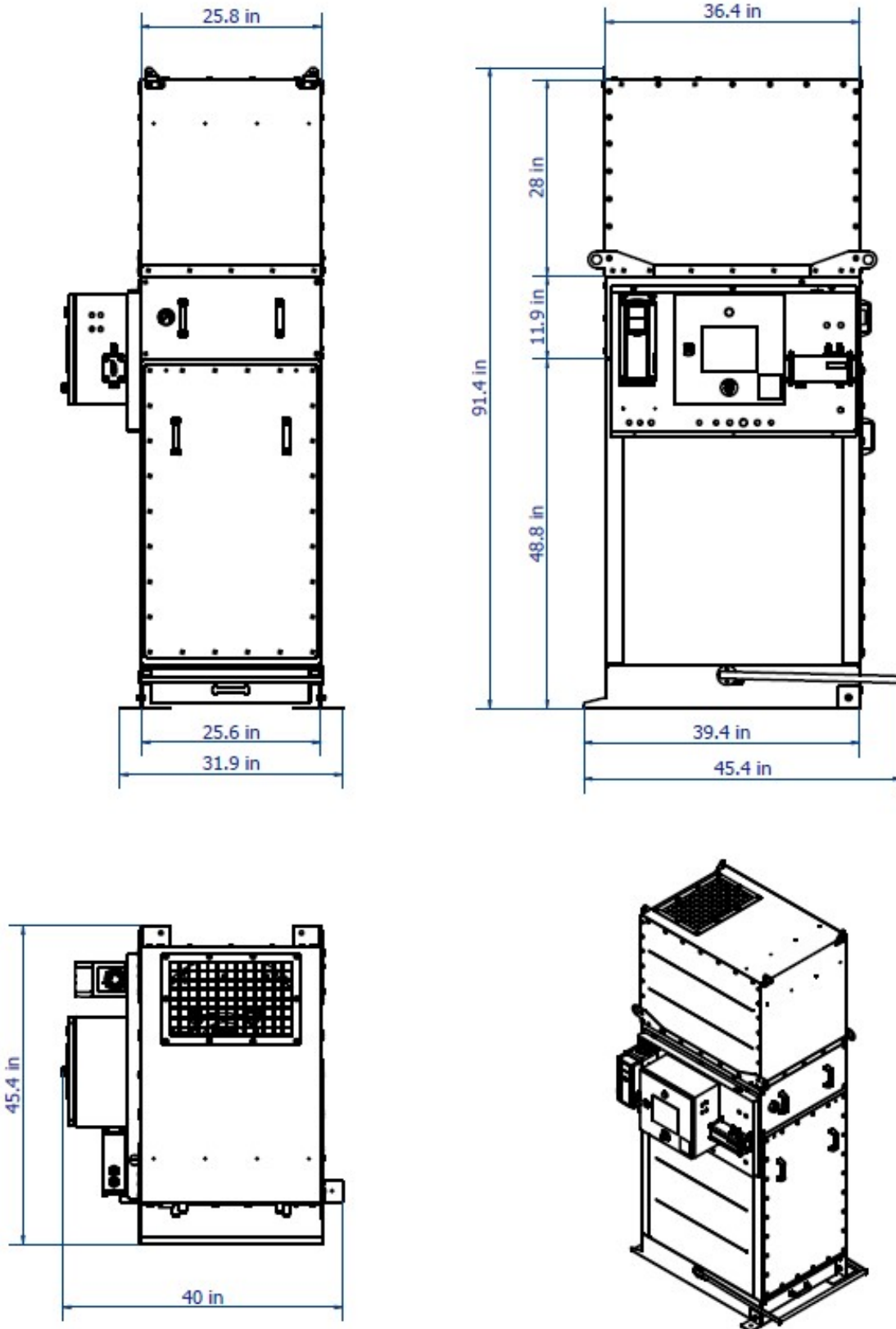
MCP-GO-2-6S - 10 HP (7.5 kW)



- The above charts (for both units) are with straight inlets (horizontal duct).

MCP-GO Filter Dimensions

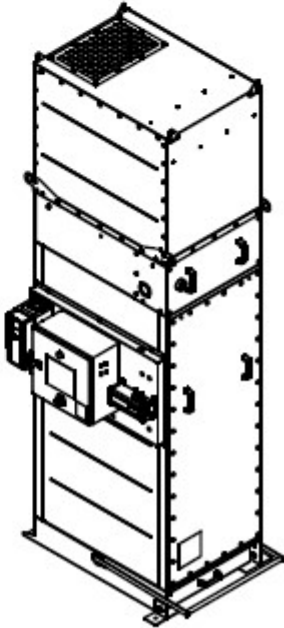
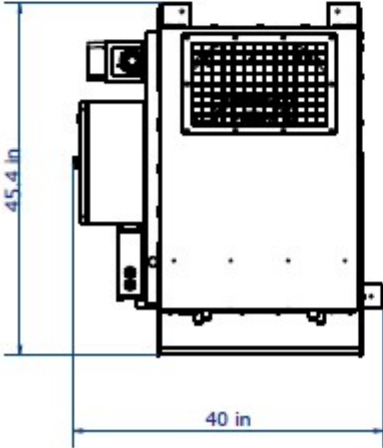
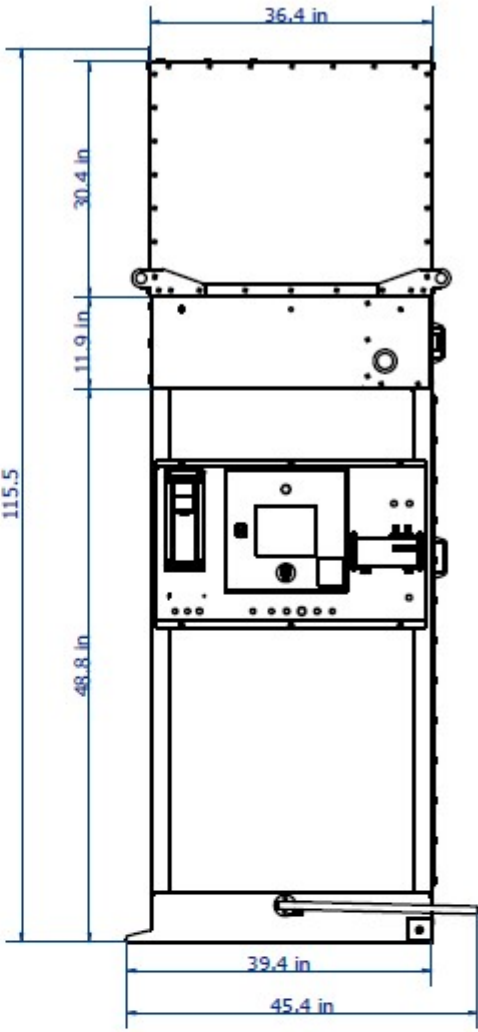
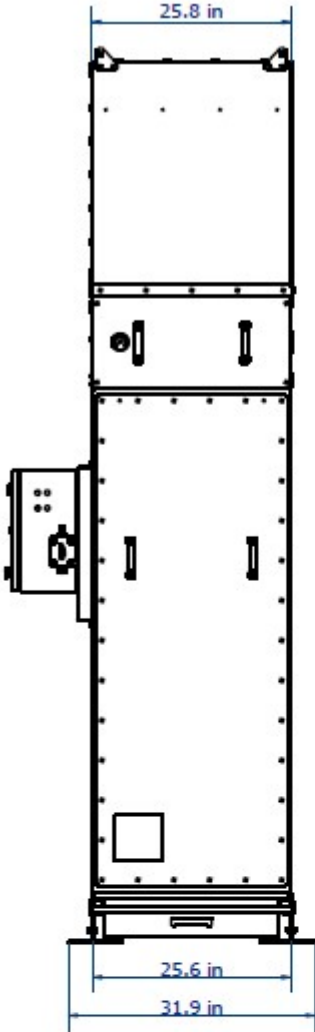
MCP-GO-2-6SL




MCP-GO Filter Dimensions



MCP-GO-2-6S



MCP-GO Accessories

| | | |
|----------------------|--|--|
| 89106605 89106606 | 90° Inlet - 12 in QF for MCP-GO-2-6S (<i>high</i>) 90° Inlet - 10 in QF for MCP-GO-2-6SL (<i>low</i>) |  |
| 89106607 89106608 | Flat Inlet - 12 in QF for MCP-GO-2-6S (<i>high</i>) Flat Inlet - 10 in QF for MCP-GO-2-6SL (<i>low</i>) |  |
| Contact factory | Silencer outlet - 14 in Silencer outlet - 12 in |  |
| 55999315 | Filter Regulator |  |
| 7943692 | Assembly/Locking Tool for filter cartridges |  |
| 89119041 | Auto-Transformer (for 575 V) | 3 PH / 60 Hz / 30 kVA - PRI:600Y - SEC:480Y - Type 3R IP 24 - 130 lb |

Optional Fieldbus modules for BMS system integration:

- 2800203 MICS Fieldbus, M40 Profibus DP-VI
- 2800207 MICS Fieldbus, M40 Ethernet/IP -EI
- 2806423 MICS Fieldbus, M40 Modbus TCP
- 2807921 MICS Fieldbus, M40 Profinet IO
- 2812815 MICS Fieldbus, M40 BACnet/IP

