MAX Rail

Exhaust extraction system for emergency stations

The MAX Rail is designed for drive-through applications and vehicles in tandem. The MAX nozzle features a direct, magnetic connection to an adapter secured at the vehicle's tailpipe, capturing the exhaust directly at the source.

The high temperature, free-hanging exhaust hose is supported by the rail trolley and balancer that connects the nozzle to the exhaust pipe. As the vehicle moves within the station, the trolley slides down with the rail with the nozzle secured to the tailpipe. When the vehicle exits the station, tension on the hose / balancer disconnects the nozzle from the vehicle. The hose drop includes a safety disconnect that releases in the unlikely event the nozzle does not disconnect from the apparatus.

The MAX Rail is available in track lengths from 7 to 30 m (24.6 to 98.4 ft) and fits a variety of tailpipe diameters on low, under vehicle arrangements. These systems can also support up to 2 vehicles per bay.

Technical System Specifications

Vehicle Capacity	2
Exhaust Pipe Location	Low, under vehicle
Maximum Exit Speed	15 km/hr (10 mph)
Vehicle Approach	Back-in (typical) or Drive-through
Vehicle Exhaust Temperature	Up to 510°C (950°F)
Recommended Airflow	425 - 850 m^3/hr (250 - 500 CFM)
Nozzle Type	MAX Nozzle, direct connect with SiCo rare earth magnet(s)
Nozzle Connection Size(s)	4" or 6" nominal
Tailpipe Adapter Size(s)	3", 3.5", 4", 5" or 6" OD Tailpipe
Track Style	Rail
Actuator	Dashboard transmitter or in duct pressure switch
Track Mounting Height	3.3 - 4.0 m (10-13 ft)
Available Track Lengths	Available in 2.5 m (8.2 ft) increments beginning with 7.5 m (24.6 ft) up to 30 m (98.4 ft)
Hose Length	4.0 m (13.1 ft)
Exhaust Hose Diameter	100 mm (4") or 150 mm (6")
Balancer Specifications	14.3 kg (31.5 lb) pull force; 1.5 m (5 ft) length of use
Approximate Weights	
Track / Rail	6.7 kg/m (4.5 lb/ft)
Trolley / Balancer	11 kg (24.2 lb)
Extraction Unit (per drop)	14.5 kg (32 lb)
Tailpipe Adapter	2.3 kg (5 lb)
Materials	
Tailpipe Adapter	Electrolytic nickel plated steel
Nozzle	Electrolytic nickel plated steel, rubber bumper and silicone rubber diaphragm
Hose	Synthetic, high temperature hose with steel helix and wear strip
Track / Rail Type	Aluminum with EPDM seals
Sliding Block (trolley)	Composite shell with metallic, internal working components
Balancer	Steel cord, composite shell

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REV.032322

MAX Rail Components & Accessories

Rail		
Length m (ft)	**Maximum Nozzle Drops**	**Article No.**
7.5 (24.6)	1	20919220
10 (32.8)	2	20916320
12.5 (41.0)	2	20916420
15 (49.2)	2	20916520
17.5 (57.4)	2	20916620
20 (65.6)	2	20916720
22.5 (73.8)	2	20916820
25 (82.0)	2	20916920
27.5 (90.2)	2	20917020
30 (98.4)	2	20917120

Extraction Drop (includes trolley, flexible duct, balancer, safety disconnect and nozzle)		
Nozzle Diameter	**Hose Diameter**	**Article No.**
4″	4″	20919220
6″	4″	20916320
6″	6″	20916420

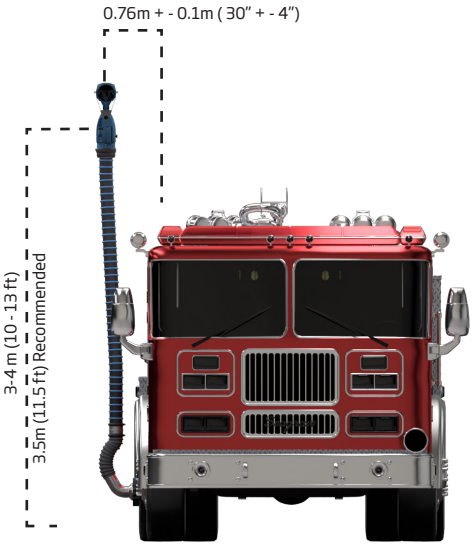
Tail Pipe Adapter Assembly (includes tailpipe adapter and clamp)	
Tailpipe Diameter	**Article No.**
3″	89299201
3.5″	89299202
4″	89299203
5″	89299204
6″	89299205

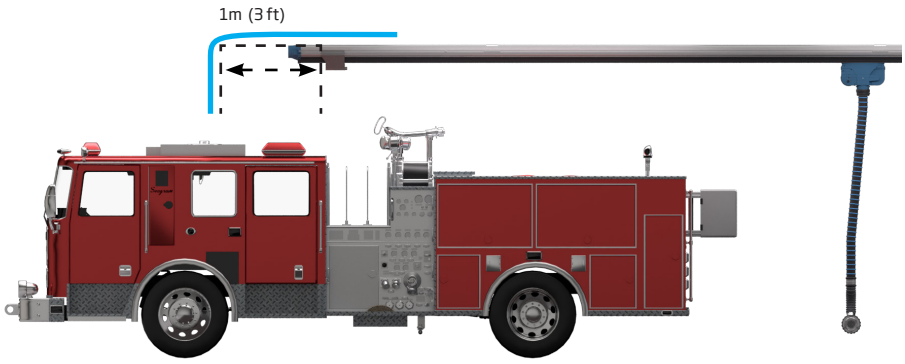
Accessories	
Description	**Article No.**
Trolley Stop (1 required per rail)	20373836
Top Outlet Connection (2 required for 18 m (60 ft) or greater rail lengths	20374246
Auto start/stop transmitter Gen II	89116064
Pressure Switch for MAX (hard wired)	89298271
Wireless Transmitter for Pressure Switch	89215003

System Pressure Drop

MAX Rail System Pressure Loss (includes nozzle, hose and 30m rail)															
Airflow CFM (m3/hr)	250 (425)	300 (510)	350 (595)	400 (680)	450 (765)	500 (850)	550 (934)	600 (1019)	650 (1104)	700 (1189)	800 (1359)	900 (1529)	1000 (1699)	1100 (1869	1200 (2118
Single Trolley Pressure Loss in w.c. (Pa)															
4″ Hose	2.5 (624)	3.2 (800)	4.0 (995)												
6″ Hose				2.1 (525)	2.4 (600)	2.8 (697)	3.4 (848)	4.2 (1046)							
Two Trolleys Pressure Loss in w.c. (Pa)															
4″ Hose						2.4 (600	2.9 (722)	3.5 (871)	3.9 (970)	4.4 (1095)					
6″ Hose											2.3 (574)	2.7 (672)	3.2 (800)	4.0 (995)	4.9 (1220)

General Installation Dimensions





Our facilities are ISO 14001:2015 certified

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