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**Multi-inlet ejectors series MIF Page 11-07**



**Classic ejectors series HF Page 11-03**



**Column ejectors series HV Page 11-04**



**Column ejectors series HF Page 11-05**



**Multi-inlet ejectors series MI Page 11-06**



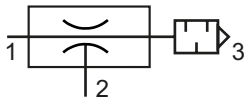
# Series HV

## Technical details

<b>Temperature range</b>	0°C ... +60°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: Al (anodized), fittings: brass, nickel plated, silencer: plastic



Vacuum ejectors work according to the Venturi principle. The pressure and vacuum connection have an integrated filter which protects against large dirt particles. The granulate silencer is part of delivery. The HV series is developed for high vacuum level.



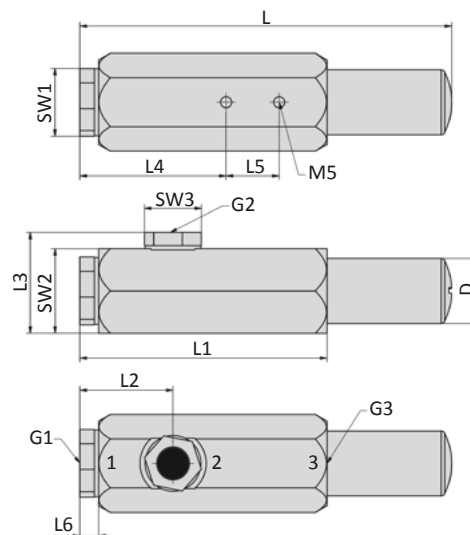
## Technical data

Model-no.:	HV-33	HV-63	HV-93	HV-133	HV-333	HV-533
<b>Max. vacuum level (%)</b>	95	95	95	95	95	95
<b>Flow rate (l/min)**</b>	4	10	15	30	40	45
<b>Air consumption (l/min)*</b>	25	45	70	120	300	480
<b>Time to evacuate (s/l)**</b>	7.50	3.20	2.00	0.95	0.53	0.42
<b>Nozzle-Ø (mm)</b>	0.7	1.1	1.3	1.7	2.5	3.0
<b>Operating pressure (bar)</b>	4 ... 6	4 ... 6	4 ... 6	4 ... 6	4 ... 6	4 ... 6
<b>Weight (kg)</b>	0.052	0.131	0.131	0.242	0.368	0.385

\* at 5 bar operating pressure

\*\* at 70% vacuum level and 5 bar operating pressure

## Dimensions



- 1 = pressure inlet
- 2 = vacuum inlet
- 3 = exhaust

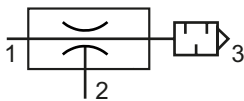
Model-no.:	L	L1	L2	L3	L4	L5	L6	SW1	SW2	SW3	G1	G2	G3	Ø D
<b>HV-33</b>	76	49.5	23.5	27.8	-	-	6.5	17	17	13	G1/8	G1/8	G1/8	15
<b>HV-63</b>	129.5	82.5	33.5	34.5	47	16	6.5	24	19	13	G1/4	G1/8	G3/8	24.5
<b>HV-93</b>	129.5	82.5	33.5	34.5	47	16	6.5	24	19	13	G1/4	G1/8	G3/8	24.5
<b>HV-133</b>	140	93	35	38	55	20	7	32	24	19	G1/4	G1/4	G1/2	24.5
<b>HV-333</b>	207	110	35	38.1	52	29	7	32	24	19	G1/4	G1/4	G3/4	48
<b>HV-533</b>	207	110	35	38.1	52	29	7	32	24	19	G1/4	G1/4	G3/4	48

**Technical details**

<b>Temperature range</b>	0°C ... +60°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: Al (anodized), fittings: brass, nickel plated, silencer: plastic



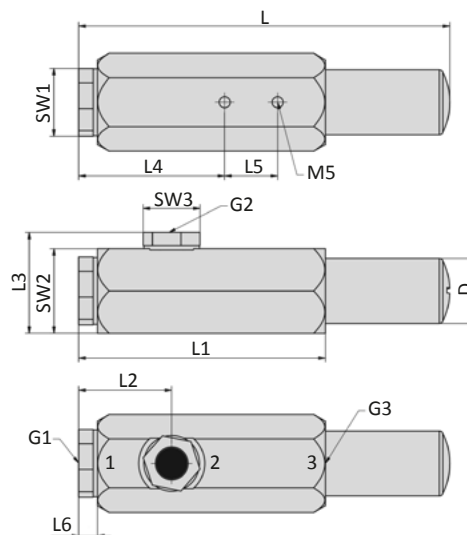
Vacuum ejectors work according to the Venturi principle. The pressure and vacuum connection have an integrated filter which protects against large dirt particles. The granulate silencer is part of delivery. The HF series is developed for high flow rates.


**Technical data**

Model-no.:	HF-133	HF-333	HF-533
Max. vacuum level (%)	60	65	80
Flow rate (l/min)**	80	190	215
Air consumption (l/min)*	110	300	480
Time to evacuate (s/l)**	0.22	0.12	0.09
Nozzle-Ø (mm)	1.7	2.5	3.0
Operating pressure (bar)	4 ... 6	4 ... 6	4 ... 6
Weight (kg)	0.242	0.368	0.385

\* at 5 bar operating pressure

\*\* at 40% vacuum level and 5 bar operating pressure

**Dimensions**


- 1 = pressure inlet
- 2 = vacuum inlet
- 3 = exhaust

Model-no.:	L	L1	L2	L3	L4	L5	L6	SW1	SW2	SW3	G1	G2	G3	Ø D
<b>HF-133</b>	140	93	35	38	55	20	7	32	24	19	G1/4	G1/4	G1/2	24.5
<b>HF-333</b>	207	110	35	38.1	52	29	7	32	24	19	G1/4	G1/4	G3/4	48
<b>HF-533</b>	207	110	35	38.1	52	29	7	32	24	19	G1/4	G1/4	G3/4	48

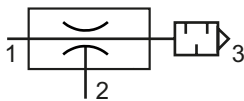
# Series HV

## Technical details

<b>Temperature range</b>	0°C ... +60°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: Al (anodized), silencer: plastic



Vacuum ejectors work according to the Venturi principle. The granulate silencer is part of delivery. The HV series is developed for high vacuum level.



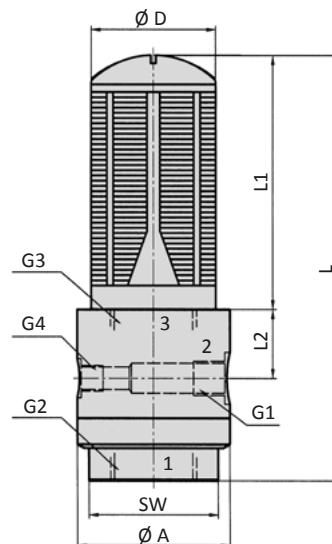
## Technical data

Model-no.:	HV-80	HV-150	HV-300	HV-600
<b>Max. vacuum level (%)</b>	80	85	85	85
<b>Flow rate (l/min)**</b>	10	33	57	77
<b>Air consumption (l/min)*</b>	88	170	350	630
<b>Time to evacuate (s/l)**</b>	1.22	0.42	0.25	0.19
<b>Operating pressure (bar)</b>	3 ... 7	3 ... 7	3 ... 7	3 ... 7
<b>Weight (kg)</b>	0.300	0.300	0.400	0.400

\* at 5 bar operating pressure

\*\* at 60% vacuum level and 5 bar operating pressure

## Dimensions



- 1 = pressure inlet
- 2 = vacuum inlet
- 3 = exhaust

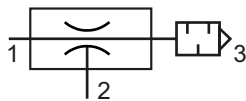
Model-no.:	Ø A	Ø D	G1	G2	G3	G4	L	L1	L2	SW
<b>HV-80</b>	48	24.5	G1/4	G1/2	G1/2	G1/8	109	47	25	40
<b>HV-150</b>	48	24.5	G1/4	G1/2	G1/2	G1/8	109	47	25	40
<b>HV-300</b>	59	48	G1/4	G1	G1	G1/8	163	97	28	50
<b>HV-600</b>	59	48	G1/4	G1	G1	G1/8	163	97	28	50

**Technical details**

<b>Temperature range</b>	0°C ... +60°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: Al (anodized), silencer: plastic



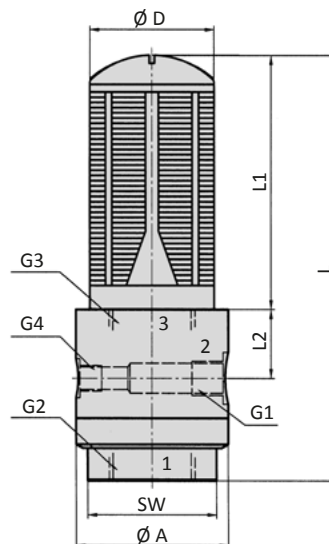
Vacuum ejectors work according to the Venturi principle. The granulate silencer is part of delivery. The HF series is developed for high flow rates.


**Technical data**

Model-no.:	HF-100	HF-200	HF-300	HF-450	HF-600	HF-1150	HF-1500
Max. vacuum level (%)	75	74	80	78	78	80	68
Flow rate (l/min)**	40	95	135	130	200	407	436
Air consumption (l/min)*	108	220	320	480	650	1250	1600
Time to evacuate (s/l)**	0.180	0.100	0.060	0.016	0.011	0.021	0.021
Operating pressure (bar)	3 ... 7	3 ... 7	3 ... 7	3 ... 7	3 ... 7	3 ... 7	3 ... 7
Weight (kg)	0.240	0.400	0.400	0.400	0.400	0.900	0.900

\* at 5 bar operating pressure

\*\* at 40% vacuum level and 5 bar operating pressure

**Dimensions**


- 1 = pressure inlet
- 2 = vacuum inlet
- 3 = exhaust

Model-no.:	Ø A	Ø D	G1	G2	G3	G4	L	L1	L2	SW
HF-100	48	24.5	G1/4	G1/2	G1/2	G1/8	109	47	25	40
HF-200	59	48	G1/4	G1	G1	G1/8	163	97	28	50
HF-300	59	48	G1/4	G1	G1	G1/8	163	97	28	50
HF-450	59	48	G1/4	G1	G1	G1/8	163	97	28	50
HF-600	59	48	G1/4	G1	G1	G1/8	163	97	28	50
HF-1150	88	64	G3/8	G1½	G2	G1/8	180	90	38	69
HF-1500	88	64	G3/8	G1½	G2	G1/8	180	90	38	69

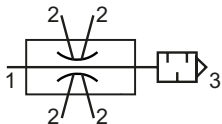
# Series MI

## Technical details

<b>Temperature range</b>	0°C ... +60°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: Al (anodized), silencer: plastic



The MI series is based on the Venturi principle. The unit is available with 4, 6 or 8 vacuum ports. The vacuum is maintained on all ports, even in cases where one or several cups draw atmospheric pressure. The granulate silencer is part of delivery. The MI series is developed for high vacuum level.



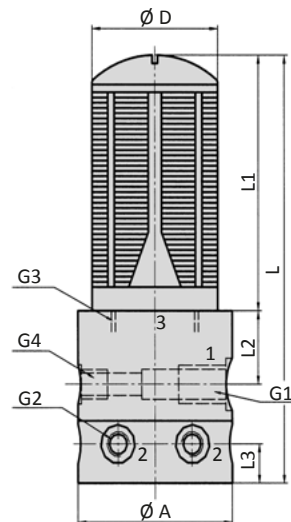
## Technical data

Model-no.:	MI-4/20	MI-4/40	MI-6/30	MI-6/55	MI-8/40
<b>Max. vacuum level (%)</b>	78	82	80	82	82
<b>Number of vacuum ports</b>	4	4	6	6	8
<b>Flow rate (l/min)**</b>	2	6	3	8	6
<b>Air consumption (l/min)*</b>	100 (4 x 25)	168 (4 x 42)	198 (6 x 33)	390 (6 x 65)	384 (8x48)
<b>Time to evacuate (s/l)**</b>	6.7	2.4	3.7	1.7	2.2
<b>Operating pressure (bar)</b>	4.5 ... 6	4.5 ... 6	4.5 ... 6	4.5 ... 6	4.5 ... 6
<b>Weight (kg)</b>	0.300	0.300	0.300	0.400	0.400

\* at 5 bar operating pressure

\*\* at 60% vacuum level and 5 bar operating pressure

## Dimensions



- 1 = pressure inlet
- 2 = vacuum inlet
- 3 = exhaust

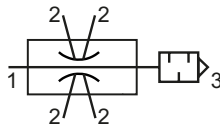
Model-no.:	Ø A	Ø D	G1	G2	G3	G4	L	L1	L2	L3
MI-4/20	48	24.5	G1/4	G1/8	G1/2	G1/8	109	47	25	15
MI-4/40	48	24.5	G1/4	G1/8	G1/2	G1/8	109	47	25	15
MI-6/30	48	24.5	G1/4	G1/8	G1/2	G1/8	109	47	25	15
MI-6/55	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15
MI-8/40	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15

**Technical details**

<b>Temperature range</b>	0°C ... +60°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: Al (anodized), silencer: plastic



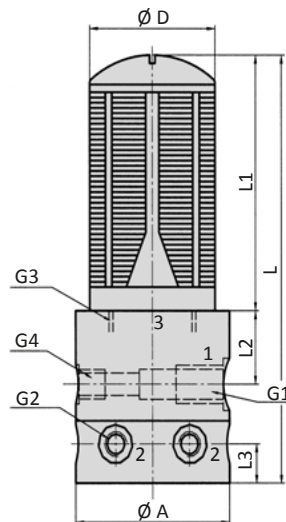
The MI series is based on the Venturi principle. The unit is available with 4, 6 or 8 vacuum ports. The vacuum is maintained on all ports, even in cases where one or several cups draw atmospheric pressure. The granulate silencer is part of delivery. The MIF series is developed for high flow rates.


**Technical data**

Model-no.:	MIF-4/25	MIF-4/60	MIF-4/80	MIF-6/40	MIF-6/55	MIF-8/30	MIF-8/40
<b>Max. vacuum level (%)</b>	70	73	70	73	67	70	70
<b>Number of vacuum ports</b>	4	4	4	6	6	8	8
<b>Flow rate (l/min)**</b>	8	16	25	9	17	11	16
<b>Air consumption (l/min)*</b>	112 (4x28)	240 (4x60)	376 (4x94)	240 (6x40)	366 (6x61)	240 (8x30)	400 (8x50)
<b>Time to evacuate (s/l)**</b>	1.1	0.6	0.4	0.8	0.6	0.8	0.6
<b>Operating pressure (bar)</b>	4.5 ... 6	4.5 ... 6	4.5 ... 6	4.5 ... 6	4.5 ... 6	4.5 ... 6	4.5 ... 6
<b>Weight (kg)</b>	0.240	0.370	0.370	0.370	0.370	0.370	0.370

\* at 5 bar operating pressure

\*\* at 40% vacuum level and 5 bar operating pressure

**Dimensions**


- 1 = pressure inlet
- 2 = vacuum inlet
- 3 = exhaust

Model-no.:	Ø A	Ø D	G1	G2	G3	G4	L	L1	L2	L3
<b>MIF-4/25</b>	48	24.5	G1/4	G1/8	G1/2	G1/8	109	47	25	15
<b>MIF-4/60</b>	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15
<b>MIF-4/80</b>	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15
<b>MIF-6/40</b>	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15
<b>MIF-6/55</b>	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15
<b>MIF-8/30</b>	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15
<b>MIF-8/40</b>	59	48	G1/4	G1/8	G1	G1/8	163	97	28	15