

Ejectors

Basic ejector with integrated vacuum switch FEG-VS

FEZER
Simply move more.

Description

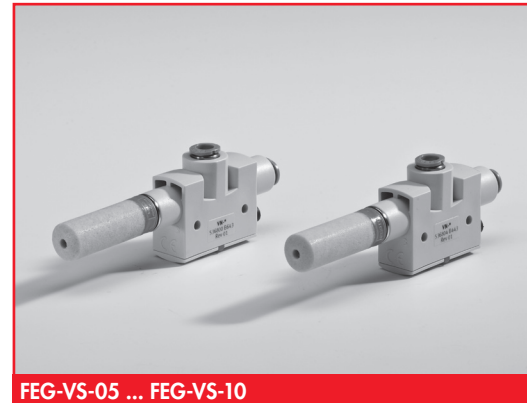
Low-weight and robust basic ejector with integrated vacuum switch. The vacuum switch can pass on signals to the control and thus the suction condition of the ejector can be supervised. The ejectors are available in 3 powers with either high grade of evacuation (HV) or high suction volume (HS) as well as vacuum switches with fixed or variable hysteresis. Teach-in switches for threshold and hysteresis. With plug-in connection.

Application

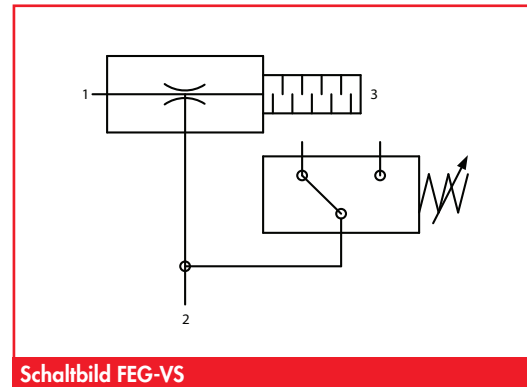
- use in automation and robot operations
- simple connection to electrical controls
- in connection with separate pneumatic valves or valve islands
- any mounting position

Article number

Type	Vacuum switch -V1 fixed hysteresis	Vacuum switch -V2 variable hysteresis
FEG-VS-05-HV- ...	1.44.1.0049	1.44.1.0060
FEG-VS-05-HS- ...	1.44.1.0093	1.44.1.0050
FEG-VS-07-HV- ...	1.44.1.0094	1.44.1.0051
FEG-VS-07-HS- ...	1.44.1.0052	1.44.1.0095
FEG-VS-10-HV- ...	1.44.1.0053	1.44.1.0096
FEG-VS-10-HS- ...	1.44.1.0054	1.44.1.0097



FEG-VS-05 ... FEG-VS-10



Schaltbild FEG-VS

- 1 Compressed air connection
- 2 Vacuum connection
- 3 Exhaust

Ejectors

Basic ejector with integrated vacuum switch FEG-VS

FEZER
Simply move more.

Technical data

Type	Vacuum* (mbar)	Suction volume*		Air consumption*		Pressure** (bar)		Noise level* dB (A)	Temp. (°C)	Weight (kg)
		(m³/h)	(l/s)	(m³/h)	(l/s)	max.	opt.			
FEG-VS-05-HV	-920	0,43	0,12	0,60	0,17	2 ... 8	4,9	50	0 ... +60	0,035
FEG-VS-05-HS	-620	0,84	0,23	0,66	0,17	2 ... 8	5,0	52	0 ... +60	0,035
FEG-VS-07-HV	-920	0,96	0,27	1,44	0,40	2 ... 8	4,4	56	0 ... +60	0,035
FEG-VS-07-HS	-650	1,86	0,52	1,32	0,37	2 ... 8	4,0	62	0 ... +60	0,035
FEG-VS-10-HV	-930	1,32	0,37	2,10	0,58	2 ... 8	3,5	62	0 ... +60	0,043
FEG-VS-10-HS	-610	2,52	0,70	2,76	0,77	2 ... 8	5,0	71	0 ... +60	0,043

* at optimum pressure,

** dry, filtered, oil-free compressed air

Technical data vacuum switch

Operating voltages:	(V DC)	15 ... 30	Electrical connection:	M8x1, 3-cores
Voltage drop:	(V)	< 1,5	Switching exit:	PNP
max. output current:	(mA)	100	Switch element function:	closer
Residual current:	(mA)	< 0,3	Switching function:	threshold with fixed hysteresis, 2 teach points
Opening/closing time:	(ms)	< 4		threshold with variable hysteresis
Setting range threshold	(bar)	-1 ... 0	Switch cond. display:	LED
Switching exactness	% FS*	1,5	Polarity security:	for all electrical connections
Hysteresis	% FS*	2 at fester Hysteresis	Overload firmness:	existing
Temperature coefficient	%/K)	0,05	Safety grade:	IP 40

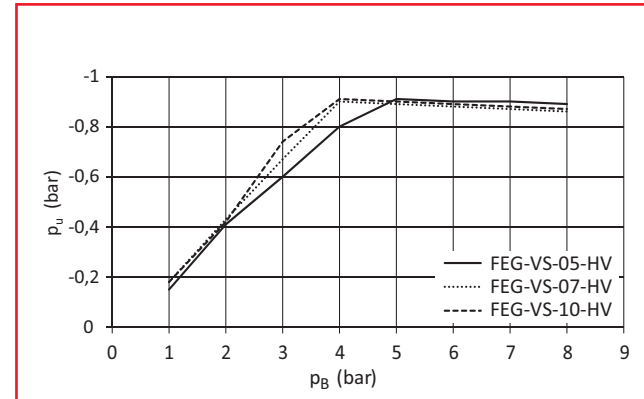
* % FS = % of the measure range's final value

Evacuation and ventilation time (s) for 1l volume

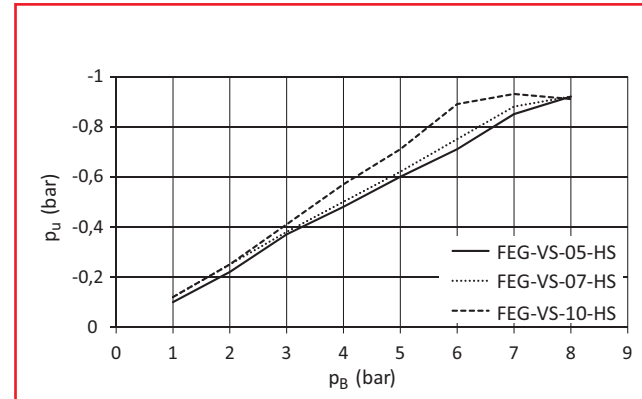
Type	Vacuum level (mbar)								Ventilation time at max. vacuum level
	-100	-200	-300	-400	-500	-600	-700	-800	
FEG-VS-05-HV	1,0	2,0	3,0	4,8	6,1	8,2	12,0	20	5,6
FEG-VS-05-HS	0,4	0,9	1,4	2,2	3,0	4,6	12,8	---	1,9
FEG-VS-07-HV	0,8	1,0	1,3	2,0	2,5	3,5	4,5	7,0	2,2
FEG-VS-07-HS	0,3	0,7	1,1	1,3	1,6	2,2	3,5	---	0,6
FEG-VS-10-HV	0,5	0,7	0,9	1,1	1,4	2,1	2,9	4,0	1,4
FEG-VS-10-HS	0,1	0,2	0,4	0,8	1,2	1,6	3,0	---	0,4

Ejectors

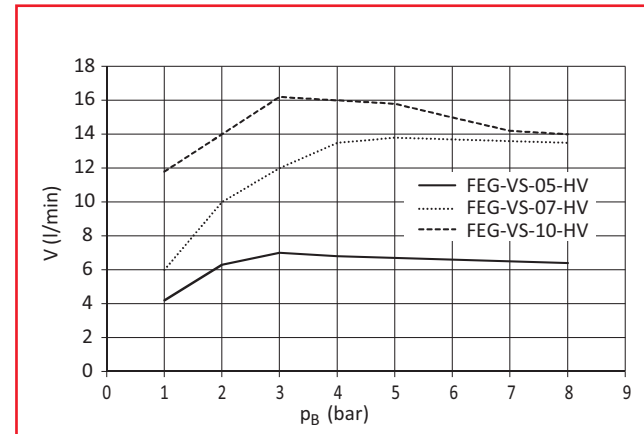
Basic ejector with integrated vacuum switch FEG-VS



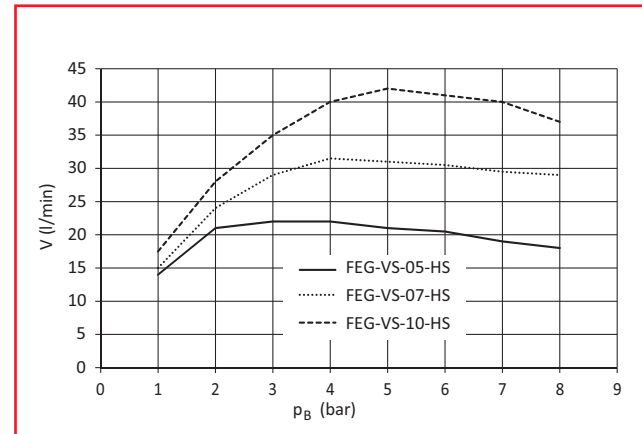
Vacuum level FEG-VS-HV at different pressures



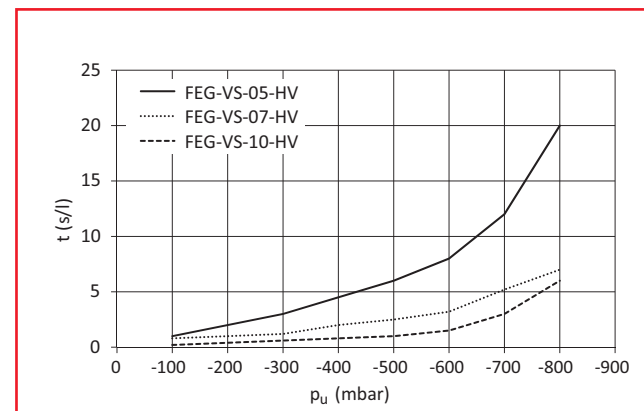
Vacuum level FEG-VS-HS at different pressures



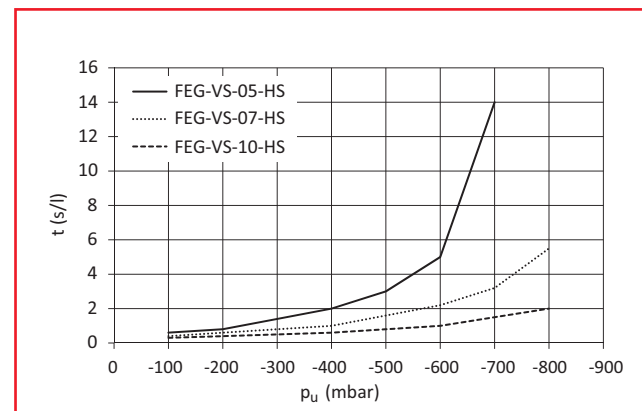
Suction volume FEG-VS-HV at different pressures



Suction volume FEG-VS-HS at different pressures



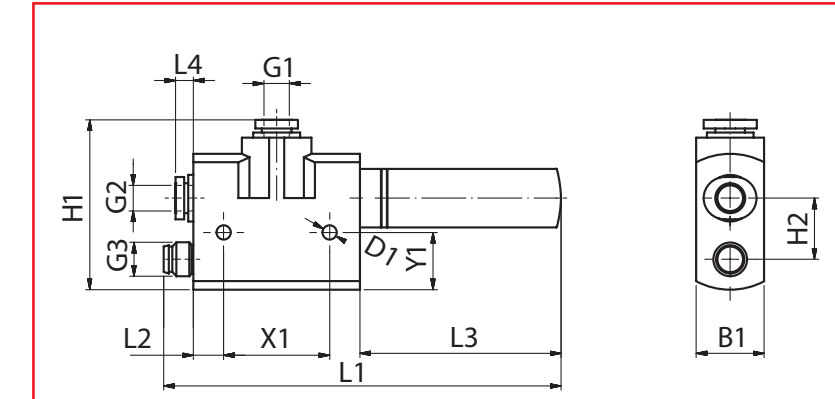
Evacuation time FEG-VS-HV at different grades of evacuation



Evacuation time FEG-VS-HS at different grades of evacuation

Ejectors

Basic ejector with integrated vacuum switch FEG-VS



FEG-VS-05 ... FEG-VS-10

Dimensions

Type	L1	L2	L3	L4	B1	H1	H2	D1	X1	Y1	G1	G2	G3
FEG-VS-05-HV/HS	93,6	6,5	49,4	4,2	16	40	14,4	3,4	25	13,5	6	6	M8x1-3P
FEG-VS-07-HV/HS	107	6,5	46,5	4,2	16	40	14,4	3,4	25	13,5	6	6	M8x1-3P
FEG-VS-10-HV/HS	107	6,5	46,5	4,2	16	40	14,4	3,4	25	13,5	6	6	M8x1-3P