

KVP

High Speed Blow-off Venturi Vacuum Pumps

Fastbreak Series



Features

- ◆ Extremely fast part release
- ◆ Accurate part positioning
- ◆ One step installation
- ◆ No assembly or external piping required
- ◆ Automatically cleans vacuum lines

FASTBREAK vacuum pumps with high speed blow-off are ideally suited for pick and place applications that require accurate part placement and rapid part release. In addition to offering extremely fast blow-off capabilities, the compact FASTBREAK pumps incorporate the same high quality construction features and superior operating performance for which the Mini, Midi and Maxi series pumps are renowned. No external piping or on-site assembly is required.

Technical specifications

Medium:	Filtered (50 µ), non lubricated air
Operating pressure:	1.5 bar to 10 bar Optimum 5.5 bar
Operating temperature:	0°C to +50°C
Cycle rates:	Up to 300/min
Positive release pressure:	0.6 bar
Response time:	Instantaneous
Orientation:	Any position
Operating noise level:	72 dBA

KV venturi pumps are designed to operate at peak efficiency at a supply pressure of 5.5 bar.

Materials

Vacuum pump body:	Anodised aluminium
Venturi:	Brass
Seals:	NBR

KVP0X available with 6H venturi only
KVP8X available with 20M or 20H venturi only
KVP1X & 2X available with 8 venturis (6M-15H)

Description

KVP0X: Mini series vacuum pump with automatic blow-off and silencer

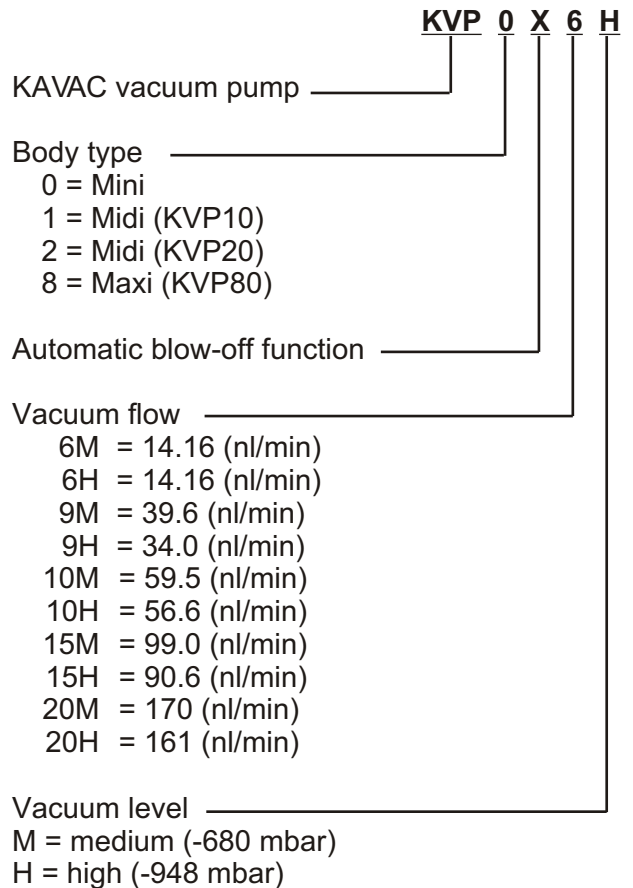
KVP1X: Midi series vacuum pump with automatic blow-off and silencer

KVP2X: Midi series vacuum pump with automatic blow-off, silencer, sensor/gauge port

KVP8X: Maxi series vacuum pump with automatic blow-off, sensor/gauge port

Ordering Information:

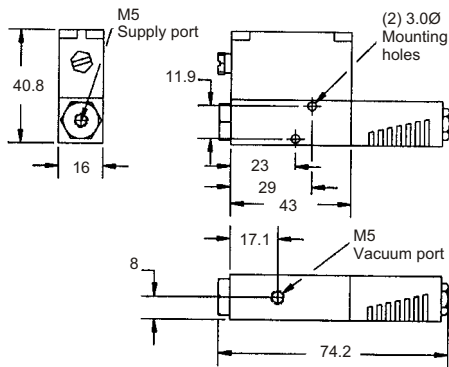
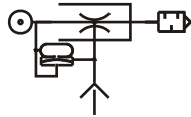
Choose body style and then select venturi type



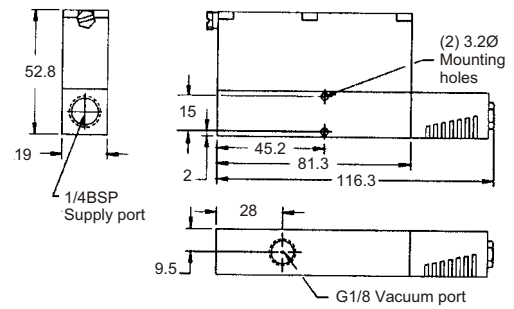
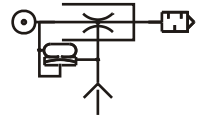
Dimensions

units mm

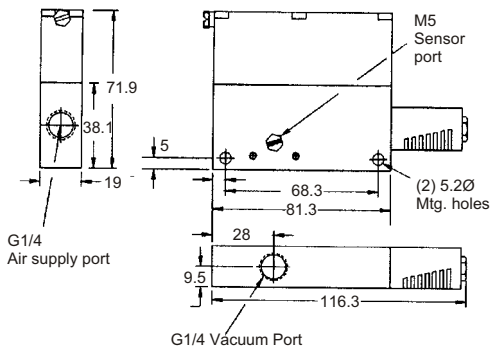
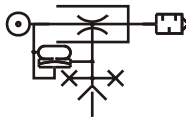
KVP0X6H Mini Fastbreak



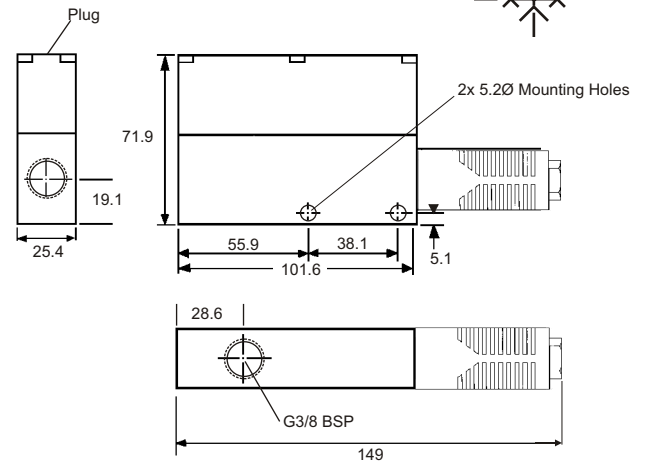
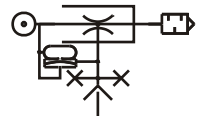
KVP1X Midi Fastbreak



KVP2X Midi Fastbreak



KVP8X20M / 20H Maxi Fastbreak



M Series Venturis

Medium vacuum applications

The 'M' series for 'Medium' vacuum levels of up to (-680 mbar) for applications involving porous materials (cardboard, wood, fabric, etc.)

Flow in nl/min against vacuum level (-mbar gauge)

Compressed air Venturi consumption			Vac level										
Type	nl/min		0	100	200	300	400	500	600	700	800	900	948
6M	14.16	Flow	14.16	11.10	8.37	6.13	4.18	2.23	0.84	0.00	0.00	0.00	0.00
9M	39.64	Flow	39.64	34.70	33.48	29.25	23.71	18.12	6.96	0.00	0.00	0.00	0.00
10M	50.97	Flow	59.47	55.52	51.61	48.74	44.64	34.84	22.28	0.00	0.00	0.00	0.00
15M	79.29	Flow	99.11	88.84	82.30	76.59	69.75	50.17	26.46	0.00	0.00	0.00	0.00
20M	135.92	Flow	169.90	147.14	136.70	111.41	97.64	69.68	30.64	0.00	0.00	0.00	0.00

Evacuation time (in seconds for 1 cubic litre volume of free air/gas) versus vacuum level (-mbar gauge pressure)

Compressed air Venturi consumption			Vac level										
Type	nl/min		0	100	200	300	400	500	600	700	800	900	948
6M	14.16	Time	0.00	0.43	0.87	1.52	2.39	3.45	5.34	7.89	-	-	-
9M	39.64	Time	0.00	0.13	0.25	0.43	0.66	1.04	1.81	3.62	-	-	-
10M	50.97	Time	0.00	0.09	0.20	0.34	0.56	0.80	1.26	1.97	-	-	-
15M	79.29	Time	0.00	0.05	0.11	0.18	0.27	0.41	0.81	1.81	-	-	-
20M	135.92	Time	0.00	0.03	0.07	0.11	0.18	0.30	0.59	1.48	-	-	-



H Series Venturis

High vacuum applications

The 'H' series for 'High' vacuum levels of up to (-948 mbar) for applications involving non-porous materials (steel, plastic, glass, etc.)

Flow in nl/min against vacuum level (-mbar gauge)

Compressed air		Vac level											
Venturi Type	consumption nl/min		0	100	200	300	400	500	600	700	800	900	948
6H	22.65	Flow	14.16	10.55	8.93	8.36	7.53	6.41	5.57	3.62	1.39	0.56	0.00
9H	50.97	Flow	33.98	27.76	26.50	25.07	23.71	20.90	19.50	14.50	13.10	5.58	0.00
10H	79.29	Flow	56.63	51.36	48.82	43.73	39.06	34.84	29.25	23.42	19.50	9.76	0.00
15H	135.92	Flow	90.61	77.73	69.75	64.06	55.80	44.59	38.99	33.45	22.29	13.94	0.00
20H	220.87	Flow	152.91	130.48	107.41	91.91	83.70	72.46	58.49	44.61	33.44	16.73	0.00

Evacuation times in seconds for 1 cubic litre of volume down to different vacuum levels (-mbar gauge)

Compressed air		Vac level											
Venturi Type	consumption nl/min		0	100	200	300	400	500	600	700	800	900	948
6H	22.65	Time	0.00	0.52	1.04	1.76	2.59	3.57	4.72	6.37	8.55	14.26	27.49
9H	50.97	Time	0.00	0.23	0.43	0.66	1.13	1.63	2.27	3.21	4.52	7.73	9.78
10H	79.29	Time	0.00	0.09	0.23	0.39	0.61	0.90	1.33	1.92	2.75	5.80	8.75
15H	135.92	Time	0.00	0.08	0.13	0.23	0.35	0.49	0.74	1.56	1.91	2.82	4.35
20H	220.87	Time	0.00	0.04	0.07	0.12	0.18	0.27	0.40	0.70	1.23	2.18	3.41