MINIATURE Series



FEATURES

- > Maintenance free
- > Oil-less
- > Compact
- > Pulsation free
- > High flow
- >Low vibration
- >No valves
- > Reversible

TYPICAL APPLICATIONS

- > Automotive
- > Medical
- > Analysis
- > Automation
- > Fuell Cell

BASE MODEL

G01

G02

BL-G 02

G 04

G 045

G 07

G 08

G 09









Rotary Vane Vacuum and Pressure Pumps

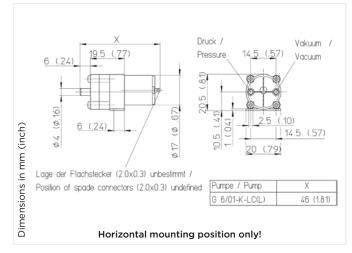
PRODUCT OVERVIEW

Model	Flow	Max. pressure	Max. vacuum	Page
G 01-K-LCL	2,0 l/min	55 mbar	5.5 %	3
G 01-K-EB	1,4 l/min	40 mbar	4 %	4
G 01 EB	1,6 l/min	180 mbar	20 %	5
G 01-4 EB	1,4 l/min	280 mbar	29 %	6
G 02 EB	3,6 l/min	190 mbar	19 %	7
G 02-4 EB	3,7 l/min	310 mbar	31 %	8
G 02-8	2,7 l/min	410 mbar	37 %	9
BL-G 02-4	2,1 l/min	200 mbar	19 %	10
G 04 EB	6,8 l/min	150 mbar	16 %	11
G 04-4 EB	5,1 l/min	240 mbar	26 %	12
G 04-8	4,4 I/min	260 mbar	25 %	13
G 045-LC	6,5 l/min	750 mbar	63 %	14
G 045	6,1 l/min	750 mbar	70 %	15
G 07	21 l/min	1400 mbar	77 %	16
G 08	15,5 l/min	1400 mbar	83 %	17
G 08-T	36 l/min	1400 mbar	93 %	18
G 09	11 l/min	370 mbar	35 %	19

Rotary Vane Pump G 01-K-LCL

Flow	2.0 l/min	
Max. pressure	55 mbar	
Max. vacuum	5.5 %	





PNEUMATIC DATA

Description	G 6/01-K-LCL
Part number	50027
Max. flow	2.0 l/min
Max. intermittent pressure	55 mbar
Max. intermittent vacuum	5.5 %

ELECTRICAL DATA

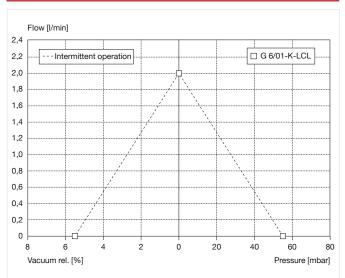
Motor type	Permanent magnet
Nominal voltage	6 V DC
Min. current consumption	0.17 A
Max. current consumption	0.23 A
Protection class	IP40
Motor bearing	Sleeve bearing

GENERAL DATA

Ambient temperature	0 to 40 °C	
Weight	0.03 kg	
Direction of rotation	cw/ccw	

All listed values are measured at standard atmospheric conditions.

FLOW CURVES

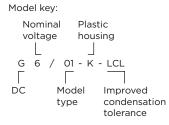


CURRENT CONSUMPTION

500... Stock programme

Max.: at max. intermittent operation

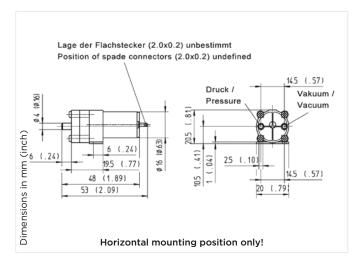
Min.: at open flow



Rotary Vane Pump G 01-K-EB

Flow	1.4 l/min
Max. pressure	40 mbar
Max. vacuum	4 %



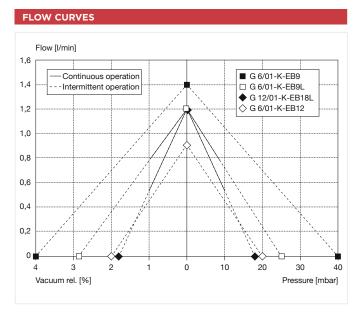


PNEUMATIC DATA				
Description	G 6/01-K-EB12	G 6/01-K-EB9L	G 6/01-K-EB9	G 12/01-K-EB18L
Part number	50251	50094	50250	50080
Max. flow	0.9 l/min	1.2 l/min	1.4 l/min	1.2 l/min
Max. intermittent pressure	20 mbar	25 mbar	40 mbar	18 mbar
Max. continuous pressure	-	10 mbar	-	10 mbar
Max. intermittent vacuum	2 %	2.8 %	4 %	1.8 %
Max. continuous vacuum	-	1 %	-	1 %

ELECTRICAL DATA				
Motor type	Ironless Core DC	Ironless Core DC	Ironless Core DC	Ironless Core DC
Nominal voltage	6 V DC	6 V DC	6 V DC	12 V DC
Min. current consumption	18 mA	36 mA	50 mA	25 mA
Max. current consumption	30 mA	65 mA	70 mA	48 mA
Protection class	IP50	IP50	IP50	IP50
Motor bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing

GENERAL DATA				
Ambient temperature	-20 to 40 °C			
Weight	0.04 kg	0.04 kg	0.04 kg	0.04 kg
Direction of rotation	cw/ccw	cw/ccw	cw/ccw	cw/ccw

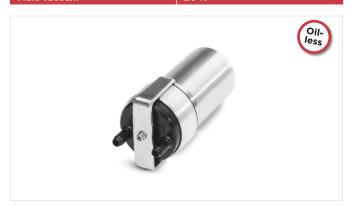
All listed values are measured at standard atmospheric conditions.

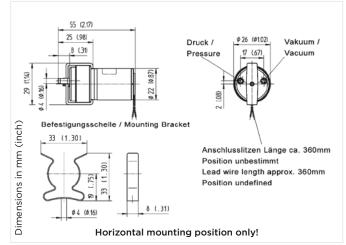


CURRENT CONSUMPTION 50... Stock programme Min.: at open flow Max.: at max. intermittent operation Model key: Plastic Nominal voltage housing motor voltage 6 / 01 - K - EB9L DC Model Ironless Improved condensation type motor tolerance

Rotary Vane Pump G 01 EB

Flow	1.6 I/min
Max. pressure	180 mbar
Max. vacuum	20 %





PNEUMATIC DATA G 3/01 EB G 6/01 EB G 12/01 EB G 24/01 EB Description 50083 50081 50096 50099 Part number Max. flow 0.9 I/min 1.0 l/min 1.4 l/min 1.6 l/min Max. intermittent pressure 90 mbar 120 mbar 150 mbar 180 mbar Max. continuous pressure 80 mbar 80 mbar 100 mbar 100 mbar 9 % 12 % 16 % 20 % Max. intermittent vacuum 8 % 8 % 10 % 10 % Max. continuous vacuum

ELECTRICAL DATA				
Motor type	Ironless Core DC	Ironless Core DC	Ironless Core DC	Ironless Core DC
Nominal voltage	3 V DC	6 V DC	12 V DC	24 V DC
Min. current consumption	0.12 A	0.07 A	0.09 A	0.05 A
Max. current consumption	0.28 A	0.19 A	0.20 A	0.13 A
Protection class	IP50	IP50	IP50	IP50
Motor bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing

GENERAL DATA				
Ambient temperature	-30 to 50 °C			
Weight	0.1 kg	0.1 kg	0.1 kg	0.1 kg
Direction of rotation	CW	cw	CW	CW

Pumps include mounting bracket. All listed values are measured at standard atmospheric conditions.

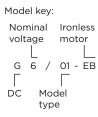
FLOW CURVES

Flow [l/min] 1,8 ■ G 24/01 EB Continuous operation 1,6 ☐ G 12/01 EB - Intermittent operation ♦ G 6/01 EB 1,4 ♦ G 3/01 EB 1,2 1,0 8,0 0,6 0,4 0,2 20 15 10 50 100 150 200 Vacuum rel. [%] Pressure [mbar]

CURRENT CONSUMPTION

500... Stock programme

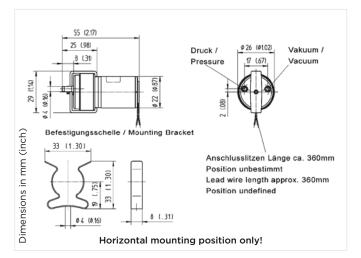
Min.: at open flow
Max.: at max. intermittent
operation



Rotary Vane Pump G 01-4-EB

Flow	1.4 l/min
Max. pressure	280 mbar
Max. vacuum	29 %





PNEUMATIC DATA			
Description	G 6/01-4 EB	G 12/01-4 EB	G 24/01-4 EB
Part number	50088	50090	50092
Max. flow	1.0 l/min	1.4 l/min	1.4 l/min
Max. intermittent pressure	180 mbar	280 mbar	280 mbar
Max. continuous pressure	100 mbar	100 mbar	100 mbar
Max. intermittent vacuum	20 %	28 %	29 %
Max. continuous vacuum	10 %	10 %	10 %

ELECTRICAL DATA			
Motor type	Ironless Core DC	Ironless Core DC	Ironless Core DC
Nominal voltage	6 V DC	12 V DC	24 V DC
Min. current consumption	0.10 A	0.11 A	0.06 A
Max. current consumption	0.32 A	0.31 A	0.17 A
Protection class	IP50	IP50	IP50
Motor bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing

GENERAL DATA			
Ambient temperature	-30 to 50 °C	-30 to 50 °C	-30 to 50 °C
Weight	0.1 kg	0.1 kg	0.1 kg
Direction of rotation	cw/ccw	cw/ccw	cw/ccw

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

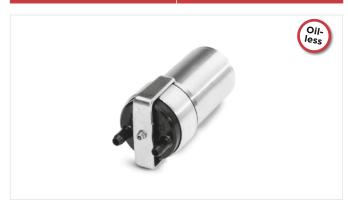
FLOW CURVES Flow [l/min] 1,6 -Continuous operation ■ G 24/01-4 EB ☐ G 12/01-4 EB ◆ G 6/01-4 EB - Intermittent operation 1,2 1,0 0,8 0,6 0,4 0,2 0 100 40 30 20 200 300 400 Vacuum rel. [%] Pressure [mbar]

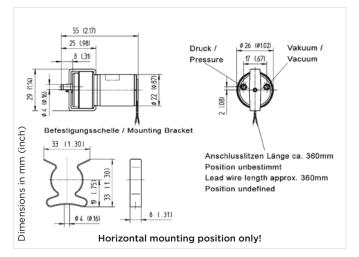
CURRENT CONSUMPTION Min.: at open flow Max.: at max. intermittent operation Model key: Nominal Number of voltage vanes G 6 01 - 4EB DC Model type Ironless

500... Stock programme

Rotary Vane Pump G 02 EB

Flow	3.6 l/min
Max. pressure	190 mbar
Max. vacuum	19 %





PNEUMATIC DATA G 3/02 EB G 6/02 EB G 12/02 EB G 24/02 EB Description 50084 50103 50095 50098 Part number 2.4 l/min 3.6 l/min Max. flow 2.6 l/min 3.6 l/min Max. intermittent pressure 110 mbar 120 mbar 180 mbar 190 mbar Max. continuous pressure 90 mbar 80 mbar 100 mbar 100 mbar 11 % 12 % 18 % 19 % Max. intermittent vacuum 9 % 8 % 10 % 10 % Max. continuous vacuum

ELECTRICAL DATA				
Motor type	Ironless Core DC	Ironless Core DC	Ironless Core DC	Ironless Core DC
Nominal voltage	3 V DC	6 V DC	12 V DC	24 V DC
Min. current consumption	0.16 A	0.09 A	0.09 A	0.07 A
Max. current consumption	0.53 A	0.30 A	0.33 A	0.18 A
Protection class	IP50	IP50	IP50	IP50
Motor bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing

GENERAL DATA				
Ambient temperature	-30 to 50 °C			
Weight	0.1 kg	0.1 kg	0.1 kg	0.1 kg
Direction of rotation	CW	cw	CW	CW

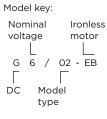
Pumps include mounting bracket. All listed values are measured at standard atmospheric conditions.

FLOW CURVES Flow [l/min] 4,0 ■ G 24/02 EB -Continuous operation 3,6 - Intermittent operation ☐ G 12/02 EB ◆ G 6/02 EB 3,2 ♦ G 3/02 EB 2,8 2,4 2,0 1,2 0,8 0,4 0 15 10 50 100 150 200 Vacuum rel. [%] Pressure [mbar]

CURRENT CONSUMPTION

50... Stock programme

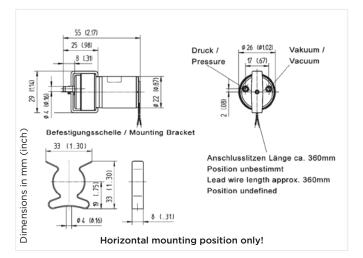
Min.: at open flow
Max.: at max. intermittent
operation



Rotary Vane Pump G 02-4-EB

Flow	3.7 I/min
Max. pressure	310 mbar
Max. vacuum	31 %





PNEUMATIC DATA G 6/02-4 EB G 12/02-4 EB G 24/02-4 EB Description 50089 50091 50093 Part number 3.5 l/min Max. flow 2.6 l/min 3.7 l/min Max. intermittent pressure 230 mbar 310 mbar 310 mbar 100 mbar 100 mbar 100 mbar Max. continuous pressure 23 % 31 % 31 % Max. intermittent vacuum 10 % Max. continuous vacuum 10 % 10 %

ELECTRICAL DATA			
Motor type	Ironless Core DC	Ironless Core DC	Ironless Core DC
Nominal voltage	6 V DC	12 V DC	24 V DC
Min. current consumption	0.13 A	0.15 A	0.09 A
Max. current consumption	0.53 A	0.51 A	0.27 A
Protection class	IP50	IP50	IP50
Motor bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing

GENERAL DATA				
Ambient temperature	-30 to 50 °C	-30 to 50 °C	-30 to 50 °C	
Weight	0.1 kg	0.1 kg	0.1 kg	
Direction of rotation	cw/ccw	cw/ccw	cw/ccw	

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

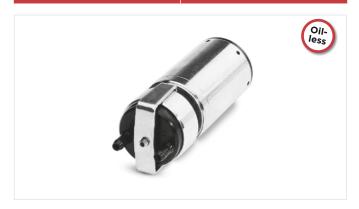
FLOW CURVES Flow [l/min] 4,0 ■ G 24/02-4 EB -Continuous operation 3,6 ☐ G 12/02-4 EB -Intermittent operation → G 6/02-4 EB 3,2 2,8 2,4 2,0 1,6 1,2 0,8 0,4 0 40 30 20 10 100 200 300 400 Vacuum rel. [%] Pressure [mbar]

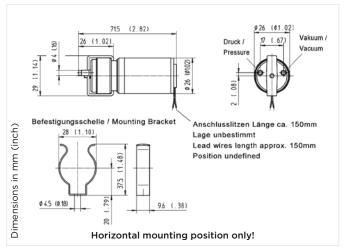
CURRENT CONSUMPTION Min.: at open flow Max.: at max. intermittent operation Model key: Number of Nominal voltage vanes G 02 - 4EB 6 DC Model Ironless type motor

500... Stock programme

Rotary Vane Pump G 02-8

Flow	2.7 l/min
Max. pressure	410 mbar
Max. vacuum	37 %





PNEUMATIC DATA Description G 6/02-8 G 12/02-8 50163 50165 Part number Max. flow 2.7 I/min 2.6 l/min 410 mbar Max. intermittent pressure 410 mbar Max. continuous pressure 200 mbar 200 mbar Max. intermittent vacuum 37 % 37 % 20 % 20 % Max. continuous vacuum

ELECTRICAL DATA		
Motor type	Ironless Core DC	Ironless Core DC
Nominal voltage	6 V DC	12 V DC
Min. current consumption	0.23 A	0.11 A
Max. current consumption	0.70 A	0.35 A
Protection class	IP50	IP50
Motor bearing	Ball bearing	Ball bearing

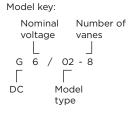
GENERAL DATA		
Ambient temperature	-30 to 50 °C	-30 to 50 °C
Weight	0.13 kg	0.13 kg
Direction of rotation	cw/ccw	cw/ccw

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

FLOW CURVES Flow [l/min] 3,0 ■ G 12/02-8 -Continuous operation 2.7 - Intermittent operation ☐ G 6/02-8 2,4 2,1 1.8 1,5 1,2 0,9 0,6 0,3 50 37,5 12,5 125 250 375 500 Vacuum rel. [%] Pressure [mbar]

CURRENT CONSUMPTION

Min.: at open flow
Max.: at max. intermittent
operation



501... Stock programme

Rotary Vane Pump BL-G 02-4

Flow	2.4 I/min
Max. pressure	200 mbar
Max. vacuum	22 %



PNEUMATIC DATA

Description	BL-G 12/02-4
Part number	50180
Max. flow	2.1 l/min
Max. intermittent pressure	200 mbar
Max. continuous pressure	150 mbar
Max. intermittent vacuum	19 %
Max. continuous vacuum	15 %

ELECTRICAL DATA

Motor type		Brushless DC	
Nominal voltage		12 V DC	
Drive electronics		integrated with reverse supply	
		voltage protection	
Min. current con	sumption	0.16 A	
Max. current consumption		0.33 A	
Protection class		IP00	
Motor bearing		Ball bearing	
Connector	Housing:	Molex KK 22-01-2045	
	Terminal:	Molex KK 08-50-0031	

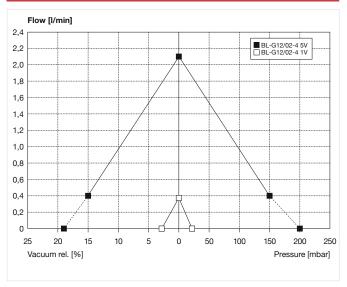
GENERAL DATA

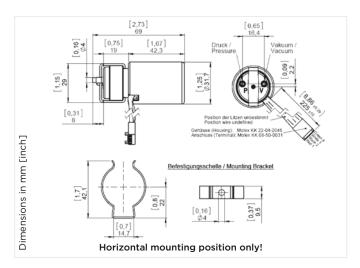
Ambient temperature	0 to 50°C
Weight	0.13 kg
Direction of rotation	CW

Pumps include mounting bracket.

Above performance values are based on max. control voltage 5V. All listed values are measured at standard atmospheric conditions and at 50Hz.

FLOW CURVES





WIRING DIAGRAM

	Function	Colour	Control
Din 1	V Supply	Red	12 V DC (max. voltage range: 1018 V DC)
PIII I	v Supply	Red	24 V DC (max. voltage range: 1028 V DC)
Din 2	Ground	Black	Ground for V supply (PIN 1) and
PIII Z	Ground	DIACK	Speed Control (PIN 3)
			analog: 05 V DC (max. 28V)
Pin 3 Speed Control White		White	PWM: 620 kHz - 1496%
			Speed voltage input threshold: 0.2 V
			18 pulses per revolution
Din 4	Tacho out	Green	Pulse time "LOW": 195 μ s
PIII 4	FIII 4 Iacilo out		Output level "LOW": 0 / max. 0.5 V
			Output level "HIGH": min. 4 V / max. 5 V

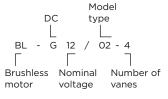


Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment part number 29011932

CURRENT CONSUMPTION

Min.: at open flow Max.: at max. intermittent operation

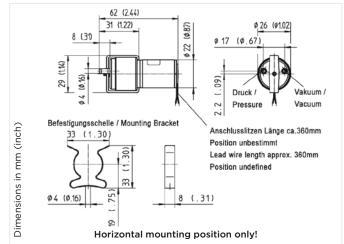
Model key:



Rotary Vane Pump G 04 EB

Flow	6.8 I/min
Max. pressure	150 mbar
Max. vacuum	16 %





PNEUMATIC DATA				
Description	G 3/04 EB	G 6/04 EB	G 12/04 EB	G 24/04 EB
Part number	50085	50102	50097	50104
Max. flow	4.5 l/min	4.7 l/min	6.2 l/min	6.8 I/min
Max. intermittent pressure	100 mbar	110 mbar	140 mbar	150 mbar
Max. continuous pressure	50 mbar	50 mbar	50 mbar	40 mbar
Max. intermittent vacuum	11 %	12 %	15 %	16 %
Max. continuous vacuum	5 %	5 %	5 %	4 %

ELECTRICAL DATA				
Motor type	Ironless Core DC	Ironless Core DC	Ironless Core DC	Ironless Core DC
Nominal voltage	3 V DC	6 V DC	12 V DC	24 V DC
Min. current consumption	0.26 A	0.16 A	0.18 A	0.11 A
Max. current consumption	0.80 A	0.48 A	0.47 A	0.26 A
Protection class	IP50	IP50	IP50	IP50
Motor bearing	Ball bearing/	Ball bearing/	Ball bearing/	Ball bearing/
	Sleeve bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing

GENERAL DATA				
Ambient temperature	-30 to 50 °C			
Weight	0.1 kg	0.1 kg	0.1 kg	0.1 kg
Direction of rotation	cw	cw	cw	CW

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

FLOW CURVES Flow [l/min] ■ G 24/04 EB -Continuous operation ☐ G 12/04 EB ☐ G 12/04 EB ♠ G 6/04 EB -Intermittent operation ♦ G 3/04 EB 2 0 20 15 10 50 100 150 200 Vacuum rel. [%] Pressure [mbar]

CURRENT CONSUMPTION

50... Stock programme

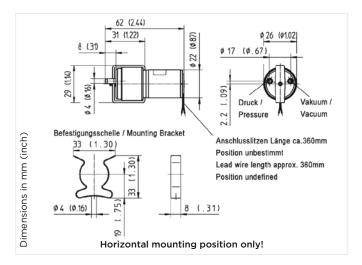
Min.: at open flow Max.: at max. intermittent operation

Model key: Nominal Ironless voltage motor G 6 / 04 - EB DC Model type

Rotary Vane Pump G 04-4-EB

Flow	5.1 l/min
Max. pressure	240 mbar
Max. vacuum	26 %





PNEUMATIC DATA

Description	G 6/04-4 EB	G 12/04-4 EB
Part number	50101	50100
Max. flow	4.0 l/min	5.1 l/min
Max. intermittent pressure	200 mbar	240 mbar
Max. continuous pressure	50 mbar	50 mbar
Max. intermittent vacuum	21 %	26 %
Max. continuous vacuum	5 %	5 %

ELECTRICAL DATA

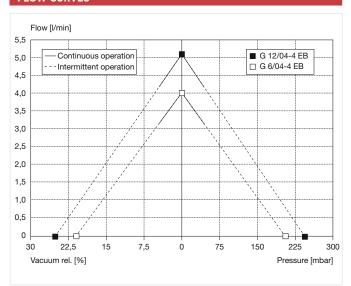
Motor type	Ironless Core DC	Ironless Core DC
Nominal voltage	6 V DC	12 V DC
Min. current consumption	0.30 A	0.29 A
Max. current consumption	0.85 A	0.70 A
Protection class	IP50	IP50
Motor bearing	Ball bearing/Sleeve bearing	Ball bearing/Sleeve bearing

GENERAL DATA

Ambient temperature	-30 to 50 °C	-30 to 50 °C
Weight	0.1 kg	0.1 kg
Direction of rotation	cw/ccw	cw/ccw

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

FLOW CURVES



CURRENT CONSUMPTION

Min.: at open flow
Max.: at max. intermittent
operation

Model key:

Nominal Number of voltage vanes

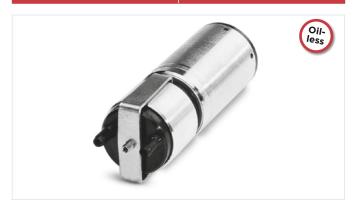
G 6 / 04 - 4EB

DC Model Ironless type motor

50... Stock programme

Rotary Vane Pump G 04-8

Flow	4.4 l/min
Max. pressure	260 mbar
Max. vacuum	25 %



(ø102) 77.5 (3.05) Ø 26 (Ø1.02) 08) 32 (1.26) (ø.16) 17 (.67) ø 26 31 Druck / Pressure Befestigungsschelle / Mounting Bracket Anschlusslitzen Länge ca.150mm Lage unbestimmt Lead wire length approx. 150mm Position undefined Dimensions in mm (inch) 28 (1.10) 37.5 9.6 (.38) Ø 4.5 (Ø.18) Horizontal mounting position only!

PNEUMATIC DATA

Description	G 12/04-8
Part number	50119
Max. flow	4.4 l/min
Max. intermittent pressure	260 mbar
Max. continuous pressure	100 mbar
Max. intermittent vacuum	25 %
Max. continuous vacuum	10 %

ELECTRICAL DATA

Motor type	Ironless Core DC
Nominal voltage	12 V DC
Min. current consumption	0.21 A
Max. current consumption	0.51 A
Protection class	IP50
Motor bearing	Ball bearing

GENERAL DATA

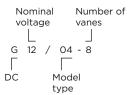
Ambient temperature	-30 to 50 °C
Weight	0.14 kg
Direction of rotation	cw/ccw

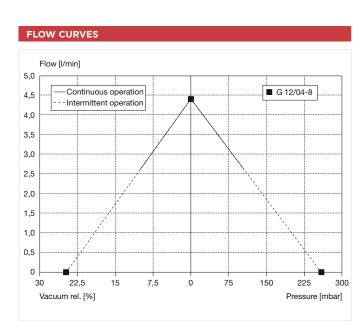
Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

CURRENT CONSUMPTION

Min.: at open flow Max.: at max. intermittent operation

Model key:





Rotary Vane Pump G 045-LC

Flow	7.5 l/min
Max. pressure	900 mbar
Max. vacuum	63 %



Befestigungsschelle / Mounting Bracket 39 (1.53) Befestigungsschelle / Mounting Bracket 4 (9.56) Horizontal mounting position only!

PNEUMATIC DATA

Description	G 12/045-LC
Part number	50213
Max. flow	6.5 l/min
Max. intermittent pressure	750 mbar
Max. continuous pressure	100 mbar
Max. intermittent vacuum	63 %
Max. continuous vacuum	10 %

ELECTRICAL DATA

Motor type	Permanent magnet
Nominal voltage	12 V DC
Min. current consumption	1.8 A
Max. current consumption	3.5 A
Protection class	IP20
Motor bearing	Ball bearing/Sleeve bearing

GENERAL DATA

Ambient temperature	-10 to 40 °C
Weight	0.25 kg
Direction of rotation	cw/ccw

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

CURRENT CONSUMPTION

502... Stock programme

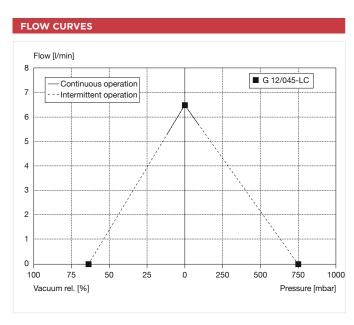
Min.: at open flow
Max.: at max. intermittent
operation

Model key:

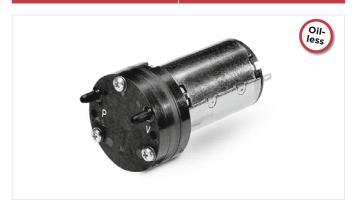
Nominal voltage

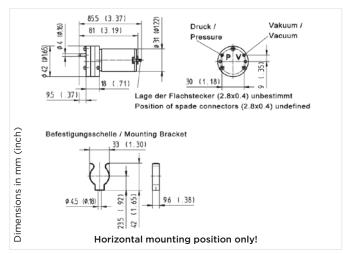
G 12 / O45 - LC

DC Model type



Flow	6.1 l/min
Max. pressure	750 mbar
Max. vacuum	70 %





PNEUMATIC DATA		
Description	G 12/045	G 24/045
Part number	50200	50201
Max. flow	5.5 l/min	6.1 I/min
Max. intermittent pressure	650 mbar	750 mbar
Max. continuous pressure	150 mbar	150 mbar
Max. intermittent vacuum	58 %	70 %
Max. continuous vacuum	15 %	15 %

ELECTRICAL DATA		
Motor type	Permanent magnet	Permanent magnet
Nominal voltage	12 V DC	24 V DC
Min. current consumption	0.64 A	0.33 A
Max. current consumption	1.36 A	0.77 A
Protection class	IP30	IP30
Motor bearing	Ball bearing	Ball bearing

GENERAL DATA		
Ambient temperature	10 to 40 °C	10 to 40 °C
Weight	0.25 kg	0.25 kg
Direction of rotation	cw/ccw	cw/ccw

Pumps include mounting bracket.
All listed values are measured at standard atmospheric conditions.

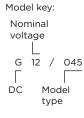
FLOW CURVES

Flow [l/min] 6,5 6,0 ■ G 24/045 Continuous operation □ G 12/045 - Intermittent operation 5,5 5,0 4,5 4,0 3,5 3,0 2,5 2,0 1,5 1,0 0,5 0 800 80 60 200 400 600 Vacuum rel. [%] Pressure [mbar]

CURRENT CONSUMPTION

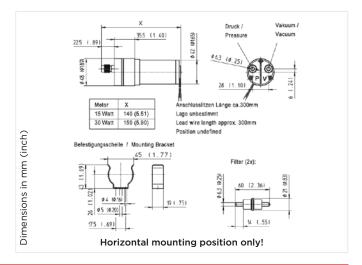
50... Stock programme

Min.: at open flow
Max.: at max. intermittent
operation



Flow	21 l/min
Max. pressure	1.4 bar
Max. vacuum	77 %





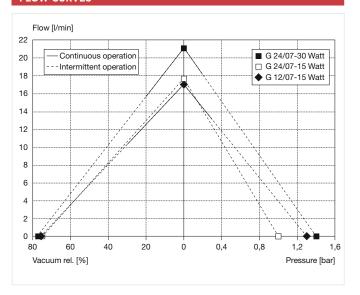
PNEUMATIC DATA G 12/07-15 Watt G 24/07-15 Watt G 24/07-30 Watt Description 50336 50218 50221 Part number 17.5 I/min 21.0 I/min Max. flow 17.0 l/min 1.4 bar Max. intermittent pressure 1.3 bar 1.0 bar 0.3 bar 0.2 bar Max. continuous pressure 75 % 77 % 76 % Max. intermittent vacuum 20 % Max. continuous vacuum 30 %

ELECTRICAL DATA			
Motor type	Permanent magnet	Permanent magnet	Permanent magnet
Nominal voltage	12 V DC	24 V DC	24 V DC
Min. current consumption	1.9 A	1.1 A	1.9 A
Max. current consumption	3.2 A	1.6 A	2.5 A
Protection class	IP40	IP40	IP40
Motor bearing	Ball bearing	Ball bearing	Ball bearing

GENERAL DATA			
Ambient temperature	-10 to 40 °C	-10 to 40 °C	-10 to 40 °C
Weight	0.6 kg	0.6 kg	0.7 kg
Direction of rotation	cw	cw	CW

Pumps include tube connector (2x) G 1/8 to tube I.D. 6 mm, mounting bracket and filter (2x). All listed values are measured at standard atmospheric conditions.

FLOW CURVES



CURRENT CONSUMPTION

Min.: at open flow
Max.: at max. intermittent
operation

Model key:

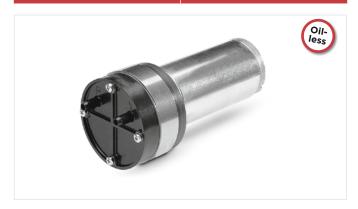
Nominal Nominal voltage motor power

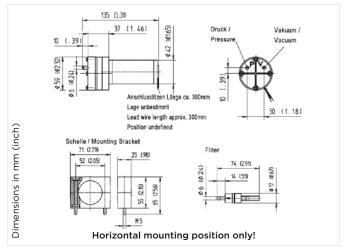
G 12 / 07 - 30 Watt

C Model type

50... Stock programme

Flow	15.5 l/min
Max. pressure	1.4 bar
Max. vacuum	83 %





PNEUMATIC DATA G 12/08-30 Watt G 24/08-30 Watt G 24/08-30 Watt rev. Description 50325 50358 50360 Part number 15.5 l/min 15.5 l/min 15.5 l/min Max. flow 1.4 bar Max. intermittent pressure 1.2 bar 1.2 bar Max. continuous pressure 0.3 bar 0.3 bar 0.3 bar 80 % 83 % 74 % Max. intermittent vacuum 30 % 30 % 30 % Max. continuous vacuum

ELECTRICAL DATA			
Motor type	Permanent magnet	Permanent magnet	Permanent magnet
Nominal voltage	12 V DC	24 V DC	24 V DC
Min. current consumption	1.5 A	0.8 A	0.6 A
Max. current consumption	3.2 A	1.6 A	1.8 A
Protection class	IP40	IP40	IP40
Motor bearing	Ball bearing	Ball bearing	Ball bearing

GENERAL DATA			
Ambient temperature	-10 to 40 °C	-10 to 40 °C	-10 to 40 °C
Weight	0.75 kg	0.75 kg	0.75 kg
Direction of rotation	cw	CW	cw/ccw

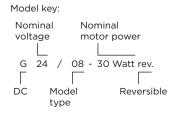
Pumps include mounting bracket and filter.
All listed values are measured at standard atmospheric conditions.

FLOW CURVES Flow [l/min] 16 Continuous operation -Intermittent operation ■ G 12/08-30 Watt 12 ☐ G 24/08-30 Watt ◆ G 24/08-30 Watt rev. 10 8 Ω 100 80 0,5 1,0 1,5 Vacuum rel. [%] Pressure [bar]

CURRENT CONSUMPTION

503... Stock programme

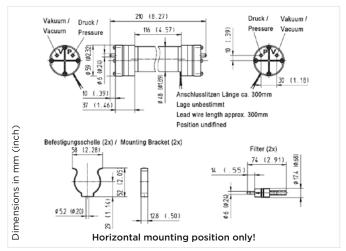
Min.: at open flow
Max.: at max. intermittent
operation



Rotary Vane Pump G 08-T

Flow	36 l/min
Max. pressure	1.4 bar
Max. vacuum	93 %





PNEUMATIC DATA G 12/08-T G 12/08-T G 24/08-T G 24/08-T Description 50238 Part number 50241 50241 50238 connected in series connected in parallel connected in series connected in parallel Max. flow 17 l/min 33 l/min 19 I/min 36 I/min Max. intermittent pressure 1.4 bar 1.4 bar 93 % 84 % 93 % 84 % Max. intermittent vacuum

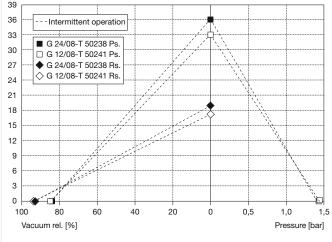
ELECTRICAL DATA				
Motor type	Permanent magnet	Permanent magnet	Permanent magnet	Permanent magnet
Nominal voltage	12 V DC	12 V DC	24 V DC	24 V DC
Min. current consumption	4.0 A	4.0 A	2.0 A	2.0 A
Max. current consumption	5.0 A	8.0 A	2.5 A	4.0 A
Protection class	IP40	IP40	IP40	IP40
Motor bearing	Ball bearing	Ball bearing	Ball bearing	Ball bearing

GENERAL DATA				
Ambient temperature	-10 to 40 °C			
Weight	1.3 kg	1.3 kg	1.3 kg	1.3 kg
Direction of rotation	CW	CW	CW	cw

Pumps include mounting bracket (2x) and filter (2x). These pumps are **not** suitable for continuous operation. All listed values are measured at standard atmospheric conditions.

FLOW CURVES

Flow [l/min] 39 36 ---Intermittent operation 33 ■ G 24/08-T 50238 Ps. 30 ☐ G 12/08-T 50241 Ps 27 ◆ G 24/08-T 50238 Rs.



CURRENT CONSUMPTION

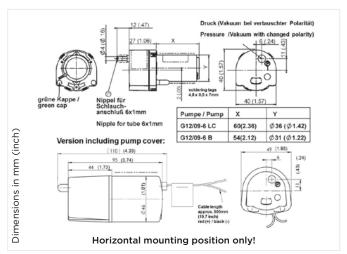
Min.: at open flow Max.: at max. intermittent operation

Model key: Nominal Double voltage headed G 12 08 - T DC Model type

50... Stock programme

Flow	11 l/min
Max. pressure	370 mbar
Max. vacuum	35 %





PNEUMATIC DATA	PN	ΕU	MA	TIC	DA	T/A
----------------	----	----	----	-----	----	-----

Description	G 12/09-6 B	G 12/09-6 LC	G 24/09-6 LC
Part number	50330	50555/50556 ¹⁾	50554/50552 ¹⁾
Max. flow	11.0 l/min	9.0 l/min	9.0 I/min
Max. intermittent pressure	370 mbar	350 mbar	350 mbar
Max. continuous pressure	200 mbar	150 mbar	150 mbar
Max. intermittent vacuum	32 %	35 %	35 %
Max. continuous vacuum	20 %	15 %	15 %

ELECTRICAL DATA

Motor type	Permanent magnet	Permanent magnet	Permanent magnet
Nominal voltage	12 V DC	12 V DC	24 V DC
Min. current consumption	0.7 A	0.7 A	0.4 A
Max. current consumption	1.8 A	2.2 A	1.3 A
Protection class	IP30	IP20	IP20
Motor bearing	Ball bearing	Ball bearing/Sleeve bearing	Ball bearing/Sleeve bearing

GENERAL DATA

Ambient temperature	-20 to 50 °C	-20 to 50 °C	-20 to 50 °C
Weight	0.24 kg	0.30 kg	0.30 kg
Direction of rotation	cw/ccw	cw/ccw	cw/ccw

ACCESSORIES

Optional mounting bracket (part number)	31947	31911/31914	31911/31914

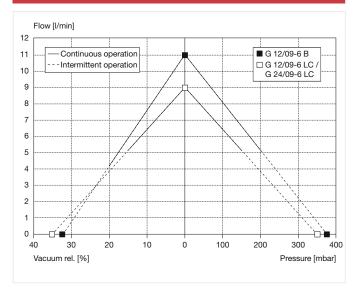
¹⁾ Pump including EPDM-cover for sound reduction.

All listed values are measured at standard atmospheric conditions.

For vacuum operation: change electrical polarity.

For noise reduction: do not remove green cap. To optimise flow: remove green cap. Mounting on motor body only. Do not allow force on pump head.

FLOW CURVES

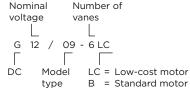


CURRENT CONSUMPTION

50... Stock programme

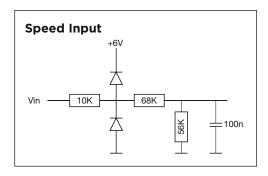
Min.: at open flow Max.: at max. intermittent operation

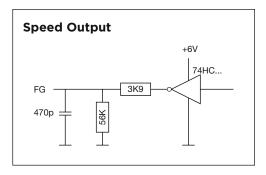
Model key:



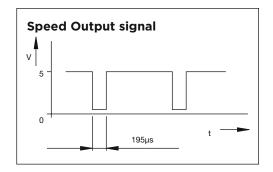
Wiring diagram (Brushless DC motor)

	Function	Colour	Control
Pin 1	V Supply	Red	12 V DC (max. voltage range: 1018 V DC) 24 V DC (max. voltage range: 1028 V DC)
Pin 2	Ground	Black	Ground for V supply (PIN 1) and Speed Control (PIN 3)
Pin 3	Speed Control	White	analog: 05 V DC (max. 28V) PWM: 620 kHz - 1496% Speed voltage input threshold: 0.2 V
Pin 4	Tacho out	Green	18 pulses per revolution Pulse time "LOW": 195 µs Output level "LOW": 0 / max. 0.5 V Output level "HIGH": min. 4 V / max. 5 V





Optional: Adapter for 2-wire duty incl. potentiometer for speed adjustment



Options / Accessories

P/N 29011932 Adapter for BLDC motor

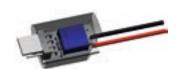
4-2 wire w/ manual speed control

12 V DC "red"

P/N 29011933 Adapter for BLDC motor

4-2 wire w/ manual speed control

24 V DC "black"



Notes	

Notes	

Notes	







Gardner Denver Thomas GmbH Livry-Gargan-Str. 10

82256 Fürstenfeldbruck Germany T +49 8141 2280 0 F +49 8141 8892136

 $thomas. de@gardnerdenver.com \\ td. usa@gardnerdenver.com$

1419 Illinois Avenue Sheboygan. WI 53081 USA

T +1 920 4574891 F +1 920 4514276

Gardner Denver Thomas. Inc. Gardner Denver Thomas Pneumatic Systems (Wuxi) Co., Ltd.

No. 1 New Dong An Road, Shuofang Town, Wuxi, Xinwu District Jiangsu 214142

China

T +86 510 6878 2258

F +86 510 6878 2200

thomas.cn@gardnerdenver.com

The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas products. It is the responsibility of the user to determine the suitability of the product for the intended use and the user assumes all risk and liability in connection therewith. Thomas does not warrant, guarantee or assume any obligation or liability in connection with this information.

Models presented in this catalog are representative of the product family. Photos of products pictured in this catalog do not necessarily represent a specific model number. To obtain further information for custom options, contact your local Thomas office.

Printed in Germany Form No. 17000115 10/2023 © Gardner Denver Thomas GmbH. All rights reserved.