

Pneumatic Parallel Grippers

VRG 2-Finger

VRG is a long stroke two-finger parallel gripper for lighter duty applications.

Advantages

- Compact design and wide range of strokes available.
- Double piston design with finger synchronization by a rack and pinion mechanism.
- All shafts equipped with self-lubricating bearings.
- Long stroke, round guidance system protected from dirt and debris.
- Side finger mounting.
- Slots for mounting and positioning of magnetic-field sensors.
- Air supply via screw connections.



SPECIFICATIONS

Model	Stroke Per Jaw	Air Consumption Per Cycle (Dual Stroke)	Closing Force Per Jaw @ 6 bar	Opening Force Per Jaw @ 6 bar	Total Closing Force @ 6 bar	Total Opening Force @ 6 bar	Recommended Workpiece Weight*	Weight	Repeatability
VRG 16 - 30	15 mm	9.1 cm ³	60 N	60 N	120 N	120 N	0.60 kg	0.59 kg	± 0.01 mm
	0.59 in	0.56 in ³	13.5 lb	13.5 lb	27.0 lb	27.0 lb	1.30 lb	1.29 lb	± 0.004 in
VRG 16 - 60	30 mm	18.2 cm ³	60 N	60 N	120 N	120 N	0.60 kg	0.80 kg	± 0.01 mm
	1.18 in	1.11 in ³	13.5 lb	13.5 lb	27.0 lb	27.0 lb	1.30 lb	1.75 lb	± 0.004 in
VRG 16 - 80	40 mm	24.2 cm ³	60 N	60 N	120 N	120 N	0.60 kg	0.94 kg	± 0.01 mm
	1.57 in	1.48 in ³	13.5 lb	13.5 lb	27.0 lb	27.0 lb	1.30 lb	2.06 lb	± 0.004 in
VRG 20 - 40	20 mm	17.6 cm ³	100 N	100 N	200 N	200 N	1.00 kg	1.03 kg	± 0.01 mm
	0.79 in	1.07 in ³	22.5 lb	22.5 lb	45.0 lb	45.0 lb	2.20 lb	2.26 lb	± 0.004 in
VRG 20 - 80	40 mm	35.2 cm ³	100 N	100 N	200 N	200 N	1.00 kg	1.50 kg	± 0.01 mm
	1.57 in	2.15 in ³	22.5 lb	22.5 lb	45.0 lb	45.0 lb	2.20 lb	3.29 lb	± 0.004 in
VRG 20 - 100	50 mm	44 cm ³	100 N	100 N	200 N	200 N	1.00 kg	1.69 kg	± 0.01 mm
	1.97 in	2.68 in ³	22.5 lb	22.5 lb	45.0 lb	45.0 lb	2.20 lb	3.72 lb	± 0.004 in
VRG 25 - 50	25 mm	38 cm ³	170 N	170 N	340 N	340 N	1.70 kg	1.69 kg	± 0.01 mm
	0.98 in	2.32 in ³	38.2 lb	38.2 lb	76.4 lb	76.4 lb	3.70 lb	3.72 lb	± 0.004 in
VRG 25 - 100	50 mm	76 cm ³	170 N	170 N	340 N	340 N	1.70 kg	2.56 kg	± 0.01 mm
	1.97 in	4.64 in ³	38.2 lb	38.2 lb	76.4 lb	76.4 lb	3.70 lb	5.63 lb	± 0.004 in
VRG 25 - 120	60 mm	91.2 cm ³	170 N	170 N	340 N	340 N	1.70 kg	2.78 kg	± 0.01 mm
	2.36 in	5.56 in ³	38.2 lb	38.2 lb	76.4 lb	76.4 lb	3.70 lb	6.11 lb	± 0.004 in
VRG 32 - 70	35 mm	84.5 cm ³	300 N	300 N	600 N	600 N	3.00 kg	2.91 kg	± 0.01 mm
	1.38 in	5.15 in ³	67.4 lb	67.4 lb	134.9 lb	134.9 lb	6.60 lb	6.39 lb	± 0.004 in
VRG 32 - 120	60 mm	145 cm ³	300 N	300 N	600 N	600 N	3.00 kg	3.82 kg	± 0.01 mm
	2.36 in	8.85 in ³	67.4 lb	67.4 lb	134.9 lb	134.9 lb	6.60 lb	8.40 lb	± 0.004 in
VRG 32 - 160	80 mm	193 cm ³	300 N	300 N	600 N	600 N	3.00 kg	4.66 kg	± 0.01 mm
	3.15 in	11.77 in ³	67.4 lb	67.4 lb	134.9 lb	134.9 lb	6.60 lb	10.24 lb	± 0.004 in

* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

Operating Pressure **1 - 6 bar (14.5 - 87 psi)**

Working Temperature **10 - 60 °C (50 - 140 °F)**

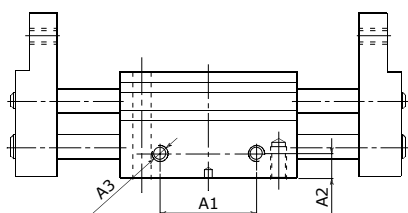
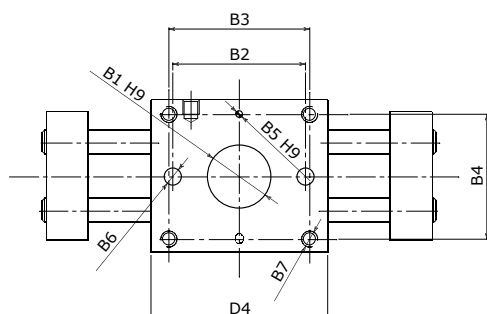
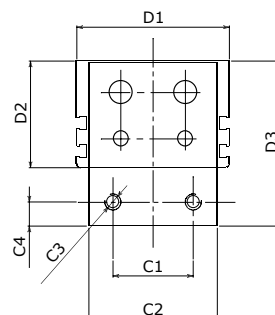
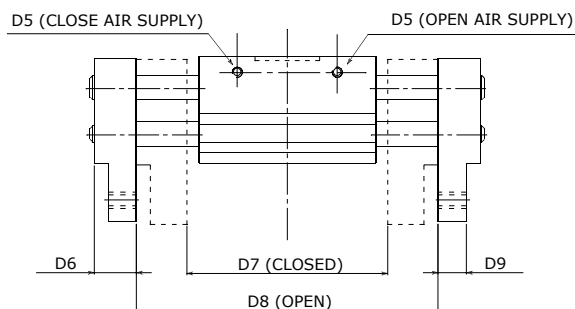
Noise Emission (Sound Pressure) **≤ 70 dB(A) in any direction**

PRODUCT INFORMATION

VRG 2-Finger



03.25_Rev.06



Options

- Magnetic switches

	Mounting - Option # 1			Mounting - Option # 2							Finger Application				Informational Dimensions								
	A1	A2	A3	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D1	D2	D3	D4	D5	D6	D7	D8	D9
VRG 16-30	28.0 (1.10)	10 (0.39)	M5	23.00 (0.91)	40 (1.57)	45 (1.77)	42 (1.65)	3 (0.12)	5.5 (0.22)	M5	25 (0.98)	44.5 (1.75)	M5	8 (0.31)	55 (2.17)	40 (1.57)	59 (2.32)	60 (2.36)	M5	13 (0.51)	68 (2.68)	98 (3.86)	9 (0.35)
VRG 16-60	58.0 (2.28)	10 (0.39)	M5	23.00 (0.91)	70 (2.76)	75 (2.95)	42 (1.65)	3 (0.12)	5.5 (0.22)	M5	25 (0.98)	44.5 (1.75)	M5	8 (0.31)	55 (2.17)	40 (1.57)	59 (2.32)	90 (3.54)	M5	13 (0.51)	110 (4.33)	170 (6.69)	9 (0.35)
VRG 16-80	78.0 (3.07)	10 (0.39)	M5	23.00 (0.91)	90 (3.54)	95 (3.74)	42 (1.65)	3 (0.12)	5.5 (0.22)	M5	25 (0.98)	44.5 (1.75)	M5	8 (0.31)	55 (2.17)	40 (1.57)	59 (2.32)	110 (4.33)	M5	13 (0.51)	130 (5.12)	210 (8.27)	9 (0.35)
VRG 20-40	38.0 (1.50)	11 (0.43)	M6	24.00 (0.94)	54 (2.13)	58 (2.28)	52 (2.05)	4 (0.16)	6.6 (0.26)	M6	30 (1.18)	54 (2.13)	M6	10 (0.39)	65 (2.56)	46 (1.81)	70 (2.76)	71 (2.80)	M5	17 (0.67)	82 (3.23)	122 (4.80)	12.5 (0.49)
VRG 20-80	80.0 (3.15)	11 (0.43)	M6	24.00 (0.94)	96 (3.78)	100 (3.94)	52 (2.05)	4 (0.16)	6.6 (0.26)	M6	30 (1.18)	54 (2.13)	M6	10 (0.39)	65 (2.56)	46 (1.81)	70 (2.76)	113 (4.45)	M5	17 (0.67)	142 (5.59)	222 (8.74)	12.5 (0.49)
VRG 20-100	100.0 (3.94)	11 (0.43)	M6	24.00 (0.94)	116 (4.57)	120 (4.72)	52 (2.05)	4 (0.16)	6.6 (0.26)	M6	30 (1.18)	54 (2.13)	M6	10 (0.39)	65 (2.56)	46 (1.81)	70 (2.76)	133 (5.24)	M5	17 (0.67)	162 (6.38)	262 (10.31)	12.5 (0.49)
VRG 25-50	48.0 (1.89)	12.5 (0.49)	M8	32.00 (1.26)	66 (2.60)	70 (2.76)	62 (2.44)	4 (0.16)	9 (0.35)	M8	40 (1.57)	64 (2.52)	M8	12 (0.47)	76 (2.99)	53 (2.09)	82 (3.23)	88 (3.46)	M5	21 (0.83)	100 (3.94)	150 (5.91)	14 (0.55)
VRG 25-100	102.0 (4.02)	12.5 (0.49)	M8	32.00 (1.26)	120 (4.72)	124 (4.88)	62 (2.44)	4 (0.16)	9 (0.35)	M8	40 (1.57)	64 (2.52)	M8	12 (0.47)	76 (2.99)	53 (2.09)	82 (3.23)	142 (5.59)	M5	21 (0.83)	182 (7.17)	282 (11.10)	14 (0.55)
VRG 25-120	120.0 (4.72)	12.5 (0.49)	M8	32.00 (1.26)	138 (5.43)	142 (5.59)	62 (2.44)	4 (0.16)	9 (0.35)	M8	40 (1.57)	64 (2.52)	M8	12 (0.47)	76 (2.99)	53 (2.09)	82 (3.23)	160 (6.30)	M5	21 (0.83)	200 (7.87)	320 (12.60)	14 (0.55)
VRG 32-70	60.0 (2.36)	22 (0.87)	M8	35.00 (1.38)		86 (3.39)	64 (2.52)	6 (0.24)		M8	50 (1.97)	70 (2.76)	M10	15 (0.59)	82 (3.23)	68 (2.68)	100 (3.94)	110 (4.33)	RC 1/8	24 (0.94)	150 (5.91)	220 (8.66)	15 (0.59)
VRG 32-120	108.0 (4.25)	22 (0.87)	M8	35.00 (1.38)		134 (5.28)	64 (2.52)	6 (0.24)		M8	50 (1.97)	70 (2.76)	M10	15 (0.59)	82 (3.23)	68 (2.68)	100 (3.94)	158 (6.22)	RC 1/8	24 (0.94)	198 (7.80)	318 (12.52)	15 (0.59)
VRG 32-160	152.0 (5.98)	22 (0.87)	M8	35.00 (1.38)		178 (7.01)	64 (2.52)	6 (0.24)		M8	50 (1.97)	70 (2.76)	M10	15 (0.59)	82 (3.23)	68 (2.68)	100 (3.94)	202 (7.95)	RC 1/8	24 (0.94)	242 (9.53)	402 (15.83)	15 (0.59)
VRG 40-100	80.0 (3.15)	28 (1.10)	M10	40.00 (1.57)		116 (4.57)	76 (2.99)	6 (0.24)		M10	60 (2.36)	86 (3.39)	M12	18 (0.71)	98 (3.86)	80 (3.15)	118 (4.65)	148 (5.83)	RC 1/8	28 (1.10)	188 (7.40)	288 (11.34)	18 (0.71)
VRG 40-160	138.0 (5.43)	28 (1.10)	M10	40.00 (1.57)		174 (6.85)	76 (2.99)	6 (0.24)		M10	60 (2.36)	86 (3.39)	M12	18 (0.71)	98 (3.86)	80 (3.15)	118 (4.65)	206 (8.11)	RC 1/8	28 (1.10)	246 (9.69)	406 (15.98)	18 (0.71)

* Dimensions are in millimeters (inches).

** All dimensions are descriptive and subject to variation for technical upgrading. We reserve the right to make variations without prior notification



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