

grippers parallel



SERIES	SIZE	GRIP FORCE* lb [N]	NOMINAL TOTAL JAW TRAVEL in [mm]	MAJOR BENEFITS	INDUSTRY USE
GRS pages 4-11	27x4.5	68 [302]	.177 [4.5]	• low profile • high grip force • pneumatic service • switches • five sizes • spring assist	• Assembly machine builders • Robotics • Cosmetics • Plumbing fixtures • Vehicle lighting equipment
	27x7	48 [213]	.276 [7]		
	28x6	77 [341]	.250 [6]		
	28x10	48 [213]	.394 [10]		
	32x8	109 [485]	.315 [8]		
	32x13	70 [310]	.512 [13]		
	50x19	235 [1045]	.750 [19]		
	50x28	157 [697]	1.102 [28]		
GRD pages 4-21	3	33 [147]	.187 [4.75]	• small size • pneumatic service • high grip force • two jaw travels • spring assist • switches • low cost	• Assembly machine builders • Cosmetics • Batteries • Light bulb manufacturing • Plumbing fixtures
	4	40 [178]	.335 [8.5]		
	5	87 [387]	.315 [8.0]		
	6	136 [604]	.423 [10.75]		
	LONG JAW TRAVEL:				
	5	54 [240]	.502 [12.75]		
	6	91 [406]	.699 [17.75]		
	GRW pages 4-31	16	36 [160]		
25		90 [400]	2.09 [53]		
32		170 [756]	2.56 [65]		
40		207 [921]	3.58 [91]		
50		429 [1908]	4.61 [117]		
GRC (with SHURGRIP option) pages 4-39	3	96 [427]	1.00 [25.5]	• long travel • pneumatic service • high grip force • locking feature • spring assist • switches	• Assembly machine builders • Automotive • Batteries • Robotics
	4	209 [930]	1.53 [39]		
	5	383 [1704]	2.00 [51]		
	6	870 [3870]	3.07 [78]		
GRT (3 Jaw) pages 4-51	1	44 [196]	▲ 0.236 [6]	• very low profile • pneumatic service • eight sizes • high grip force • switches	• Assembly machine builders • Light bulb manufacturing • Packaging • Automotive • Golf equipment • Robotics
	2	112 [499]	▲ 0.315 [8]		
	3	168 [747]	▲ 0.472 [12]		
	4	218 [971]	▲ 0.630 [16]		
	5	378 [1683]	▲ 0.787 [20]		
	6	569 [2531]	▲ 1.024 [26]		
	7	880 [3912]	▲ 1.260 [32]		
	8	1452 [6459]	▲ 1.575 [40]		
▲ Represents the change in jaw movement as a diameter change.					
GRL pages 4-61	14x7	28 [124]	0.28 [7]	• long travel • pneumatic service • slim profile • switches	• Assembly machine builders • Light bulb manufacturing • Packaging
	14x13	30 [132]	0.51 [13]		
	16x20	41 [182]	0.79 [20]		
	16x26	41 [182]	1.02 [26]		
GRF pages 4-69	19x4.5	30 [135]	.177 [4.5]	• low profile • high grip force • pneumatic service • four sizes • two jaw travels • three jaw styles	• Assembly machine builders • Light bulb manufacturing • Robotics
	25x6.5	35 [156]	.256 [6.5]		
	28x6	77 [341]	.250 [6]		
	28x10	48 [213]	.394 [10]		
	32x8	116 [516]	.315 [8]		
	32x13	85 [378]	.512 [13]		
190, 191 pages 4-77	SHORT JAW TRAVEL: STYLE 1 & 2			• small size • pneumatic service • two jaw travels • two jaw styles • spring assist • switches	• Assembly machine builders • Light bulb manufacturing • Vehicle lighting equipment • Medical • Batteries • Bearing manufacturing
	6	5.3 [24]	.157 [4]		
	7	10.6 [47]	.276 [7]		
	8	21.8 [97]	.394 [10]		
	9	42.6 [190]	.512 [13]		
	LONG JAW TRAVEL: STYLE 2				
	6	3.2 [14]	.315 [8]		
	7	8.1 [36]	.433 [11]		
	8	13.1 [58]	.630 [16]		
	9	23.5 [105]	.866 [22]		
5300 pages 4-87	6	128 [570]	.62 [15.8]	• heavy duty construction • pneumatic service • high grip force • spring assist • switches	• Automotive • Robotics • Material handling
	7	261 [1164]	1.00 [25.4]		
	8	488 [2172]	1.31 [33.3]		
	9	980 [4356]	1.80 [45.8]		
GRR pages 4-91	63x150	704 [3131]	5.906 [150]	• wide range of jaw travel • high capacity • narrow width • rugged design • low jaw deflection	• Assembly machine builders • Robotics • Material handling
	63x200		7.874 [200]		
	63x250		9.843 [250]		
	63x250		13.780 [350]		

▲ Represents the change in jaw movement as a diameter change.

GUARDIAN
GRIPPER



grippers angular



SERIES	SIZE	GRIP FORCE** lb [N]	MINIMUM DISTANCE** in [mm]	MAJOR BENEFITS	INDUSTRY USE
8400 pages 4-107 	0	11.7 [52]	.20 [5.1]	• small size • pneumatic service • spring assist • switches • low cost	• Assembly machine builders • Light bulb manufacturing • Batteries
	1	19.7 [88]	.30 [7.6]		
	2	55 [244]	.40 [10]		
	3	81 [359]	.62 [16]		
GRB (180°) pages 4-113 	12	13 [57]	.44 [11.3]	• robust cam design • pneumatic service • three jaw rotations available • compatible with PHD solid state, reed & proximity switches	• Assembly machine builders • Light bulb manufacturing • Medical • Batteries • Bearing manufacturing • Semiconductor
	16	28 [124]	.56 [14.3]		
	20	79 [353]	.67 [17.0]		
	32	179 [797]	.92 [23.4]		
	40	265 [1180]	1.21 [30.8]		
	50	549 [2443]	1.90 [48.3]		
5300 pages 4-123 	2	201 [894]	.81 [21]	• heavy duty construction • pneumatic service • high grip force • spring assist • switches	• Assembly machine builders • Material handling • Robotics
	3	499 [2220]	.97 [25]		
	4	1025 [4559]	1.20 [30]		
	5	2167 [9639]	1.68 [43]		
PFC pages 4-129 	L	11250 [50040]	3.93 [100.0]	• ideal for heavy parts • rugged cam design with consistent clamping force • wide jaw throat	• Automotive • Appliances • Sheet metal handling
	W	7200 [32027]	3.93 [100.0]		

* Gripping force shown on previous pages is at zero tooling length and 87 psi [6 bar] (pneumatic). The values shown are minimum produced. Optional spring assist can increase the gripping force shown or can be a safety device on the following types: Series 190/191, GRD, 5300, GRC, and GRT. The spring option can also be used to allow single acting operation of Series GRC, GRD, 5300, most 190/191, and GRT Grippers.

** Above gripping force is at the corresponding minimum distance (from the jaw pivot) at 87 psi [6 bar] (pneumatic). Optional spring assist can increase the gripping force or be a safety device on the Series 5300.

SEE THE PHD CLASSICS CATALOG FOR THE FOLLOWING PHD GRIPPERS:

PARALLEL

Series 7900
Series 8600

ANGULAR

Series 7900 2 & 3 Jaw
Series 8600 2 Jaw
Series 190
Series 8600 3 Jaw

