

Grippers

	Series	Type	Grip force max.	mm or degrees of stroke	Spring open	Spring close	Clean room	Page number
	P5GA	Angular	13N to 194N	-10° to 30°	No	No	No	B282
	P5GB	Parallel	16N to 130N	6mm to 16mm	No	No	No	B284
	P5GV	Parallel	36N	3.2mm to 6.3mm	No	No	Yes	B286
	P5GR	Parallel	120N to 458N	6.4mm to 38.1mm	No	Yes	Yes	B288
	P5GU	Parallel	116N to 160N	6.5mm to 25.4mm	No	No	Yes	B291
	P5GN	Parallel	62N to 445N	1.6mm to 9.5mm	No	No	Yes	B294
	P5GM	Parallel	62N to 445N	4.8mm to 25.4mm	No	No	Yes	B297
	P5GS	Parallel	222N to 800N	19.1mm to 73.5mm	No	No	No	B300
	P5GT	Parallel	178N to 2669N	6.4mm to 50.8mm	No	No	No	B303
	P5GP	Electric	111N	0mm to 25mm	No	No	No	B306
	P5GQ	Electric	445N to 1334N	10mm to 20mm	No	No	No	B308
	P5GW	3-Jaw	682N to 44354N	4.0mm to 35mm	No	Yes	Yes	B310

B

Automation Products
 Actuator Products

Grippers

Slide Tables

Rotary Tables

Escapements

Sensors

Fittings

P5GA Angular Gripper Series - Economy

- Angular gripper, 2-finger - economy
- Comprehensive range of bore sizes, 12mm to 32mm
- Magnetic piston standard




Operating information

Operating pressure:	1.5 to 7 bar (21.8 to 102 PSIG)
Temperature range:	-5° to 60° C (23° to 140° F)
Maximum frequency:	180 cycles/min

Ordering Information: P5GA Angular Gripper Series - Economy

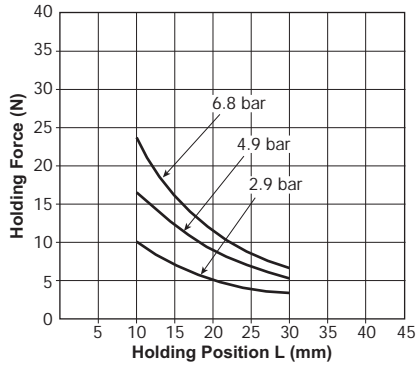
Function	Bore size (mm)	Ports (BSP)	Rotation	Weight (g)	Part number
Double acting magnetic	12	M3	-10 to 30 degrees	53	P5GA-012MSG030B
Double acting magnetic	16	M5	-10 to 30 degrees	103	P5GA-016MSG030B
Double acting magnetic	20	M5	-10 to 30 degrees	193	P5GA-020MSG030B
Double acting magnetic	25	M5	-10 to 30 degrees	327	P5GA-025MSG030B
Double acting magnetic	32	M5	-10 to 30 degrees	525	P5GA-032MSG030B

Sensor part numbers: Page 330.

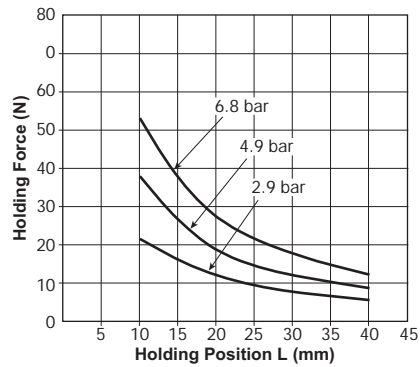
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	Actuator Products
	Grippers
	Slide Tables
	Rotary Tables
	Escapements
	Sensors
	Fittings

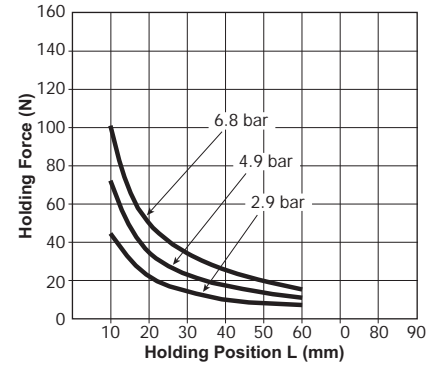
Clamp Force - P5GA-012



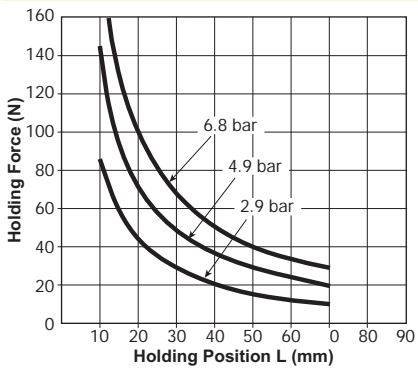
Clamp Force - P5GA-016



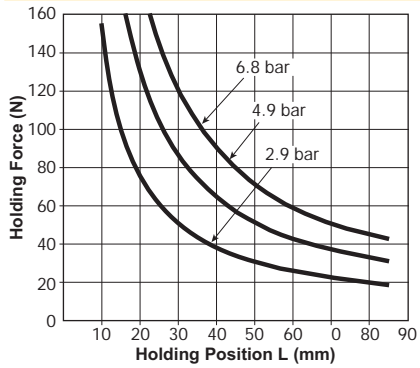
Clamp Force - P5GA-020



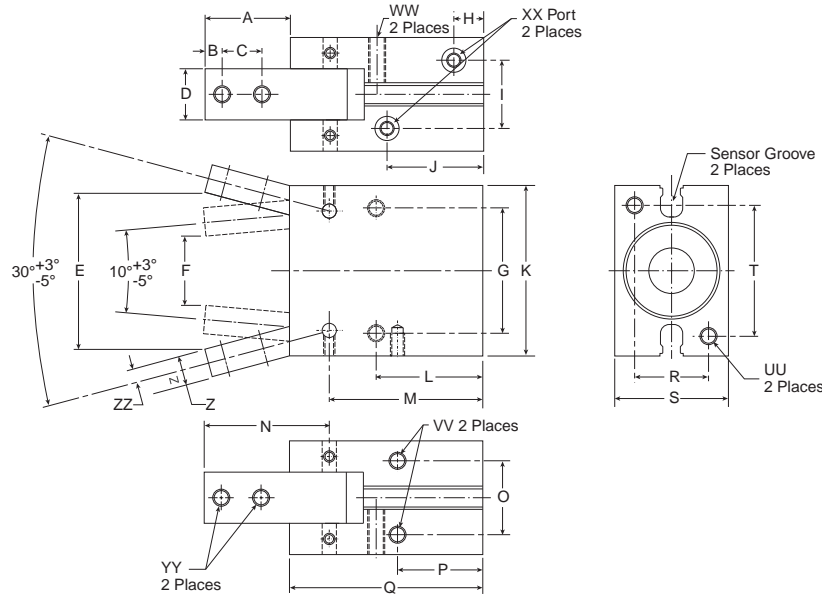
Clamp Force - P5GA-025



Clamp Force - P5GA-032



Dimensions: P5GA Angular Gripper Series - Economy



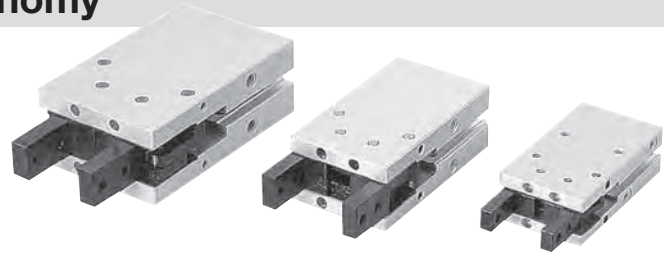
Tube I.D.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	UU	VV	WW	XX	YY	Z	ZZ
12	15.4	3	6	7	26.3	9	20	7.5	10.2	23.5	28	20	32.9	21.5	10.2	16	39	10	16	22	M3	M3	M3	M3	M3	5	2.5
16	17.5	3	8	9	31.1	14	24	7.5	12	22	34	22.5	35	25	14	18	42.5	14	22	26	M4	M4	M4	M5	M3	6	3
20	22	4	10	12	40.1	18	30	8	13	25	45	25	39.5	32.5	16	19	50	16	26	35	M5	M5	M5	M5	M4	7	3.5
25	26	5	12	14	47.9	21	36	8.5	18	28	52	28.5	45.5	38.5	20	21.5	58	20	32	40	M6	M6	M6	M5	M5	9	4
32	30	6	14	18	55.1	24	44	10.5	24	34	60	37.5	54	44	26	30	68	26	40	46	M6	M6	M6	M5	M6	10	5

Dimensions in millimeters



P5GB Parallel Gripper Series - Economy

- Parallel gripper, 2-finger - economy
- Comprehensive range of bore sizes, 12mm to 32mm
- Magnetic piston standard



Operating information

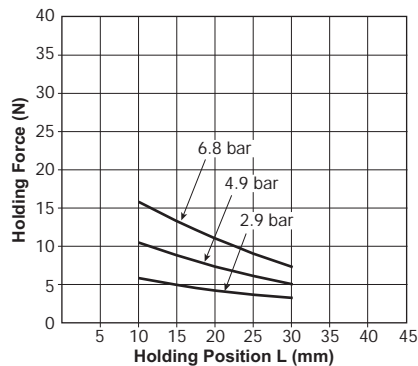
Operating pressure:	1.5 to 7 bar (21.8 to 102 PSIG)
Temperature range:	-5° to 60° C (23° to 140° F)
Maximum frequency:	180 cycles/min

Ordering Information: P5GB Parallel Gripper Series - Economy

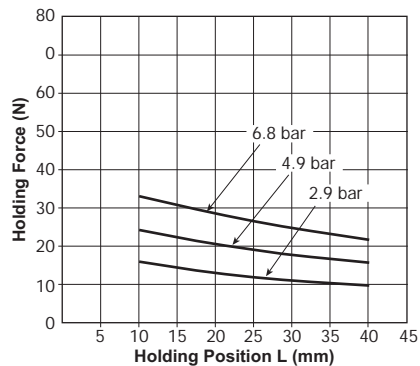
Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Weight (g)	Part number
Double acting magnetic	12	M3	6	66	P5GB-012MSG006B
Double acting magnetic	16	M5	8	144	P5GB-016MSG008B
Double acting magnetic	20	M5	12	255	P5GB-020MSG012B
Double acting magnetic	25	M5	14	419	P5GB-025MSG014B
Double acting magnetic	32	M5	16	719	P5GB-032MSG016B

Sensor part numbers: Page 330.

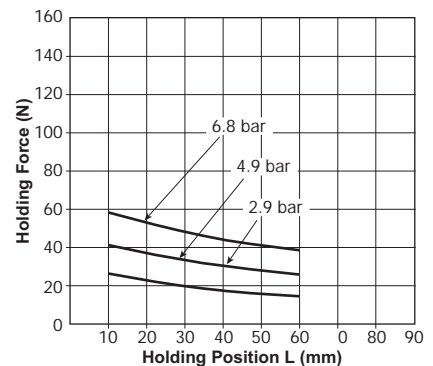
Clamp Force - P5GB-012



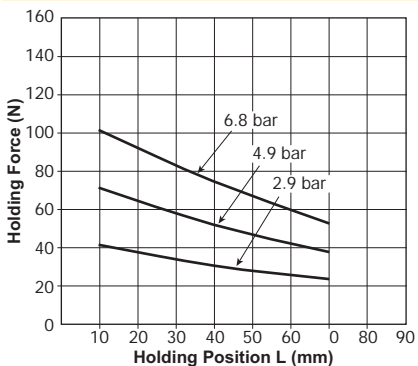
Clamp Force - P5GB-016



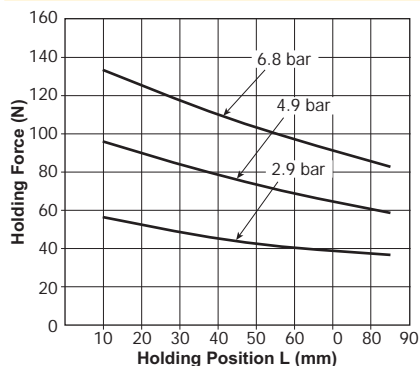
Clamp Force - P5GB-020



Clamp Force - P5GB-025

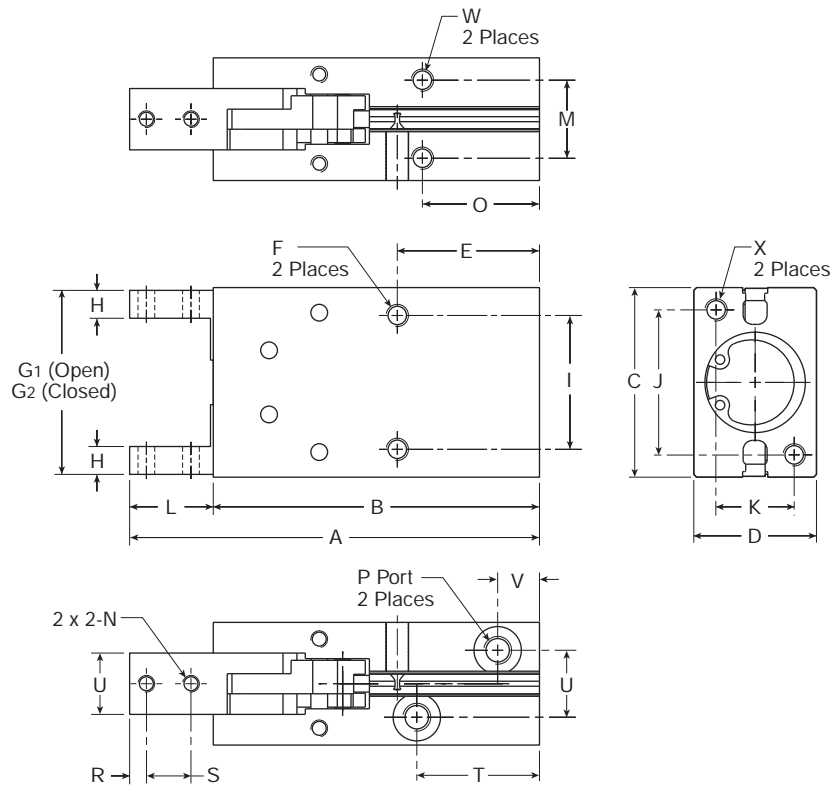


Clamp Force - P5GB-032



 Most popular.

Dimensions: P5GB Parallel Gripper Series - Economy



Tube I.D.	A	B	C	D	E	F	G1	G2	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
12	63.5	50.5	28	16	20	M3 x 0.5 x 5 Dp	27	21	4	18	17	10	13	10	M3 x 0.5	16	M3	7	3	6	23	10.2
16	73.5	58.5	34	22	25.5	M4 x 0.7 x 11 Dp33	25	5	24	26	14	15	14	M3 x 0.5	21	M5	11	3	8	22	12	
20	88.5	69.5	45	26	25	M5 x 0.8 x 8 Dp	44	32	6	30	35	16	19	16	M3 x 0.7	19	M5	12	4	10	26	13
25	102.5	78.5	52	32	28	M6 x 1.0 x 10 Dp51	37	8	36	40	20	24	20	M3 x 0.8	22	M5	14	5	12	29	18	
32	120.5	90.5	60	40	34	M6 x 1.0 x 10 Dp59	43	10	44	46	24	30	26	M3 x 1.0	26	M5	20	7	15	35	24	

Tube I.D.	V	W	X
12	7.5	M3 x 0.5 x 5 Dp	M3 x 0.5 x 5 Dp
16	7.5	M4 x 0.7 x 7 Dp	M4 x 0.7 x 7 Dp
20	8	M5 x 0.8 x 8 Dp	M5 x 0.8 x 8 Dp
25	8.5	M6 x 1.0 x 10 Dp	M6 x 1.0 x 10 Dp
32	10.5	M6 x 1.0 x 10 Dp	M6 x 1.0 x 10 Dp

Dimensions in millimeters

B

Automation Products
 Actuator Products

Grippers

Slide Tables

Rotary Tables

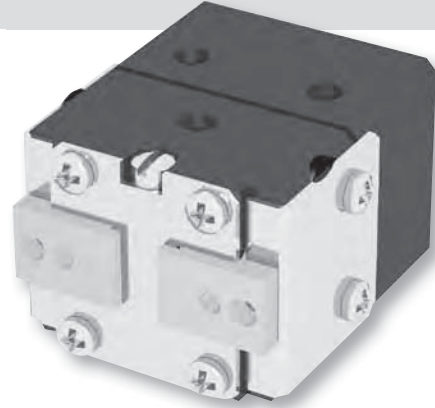
Escapements

Sensors

Fittings

P5GV Miniature Clean Room Series

- One piece lightweight aluminum body
- Stationary and non-contacting stainless steel cover eliminates the possibility of particle generation
- Bearings are preloaded for maximum support and zero side play
- The body has hard-coat anodize 60 RC with PTFE impregnation
- Units are lubricated with a clean-room grade grease
- Purge / scavenge port for extreme environments from dirty and gritty to clean-room class 10 or better
- Adjustable preload screw allows for adjustment of preload on roller bearings
- External components are made from corrosion resistant materials for resistance to de-ionized water or for use in FDA and medical parts handling applications
- Slip fit dowel pin holes located in body and jaws



Operating information

Operating pressure:	3 to 7 bar (44 to 102 PSIG)
Temperature range:	
Nitrile seals (standard)	-35° to 80° C (-30° to 180° F)
Fluorocarbon seals (optional)	-30° to 120° C (-20° to 250° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)

*Addition of lubrication will greatly increase service life

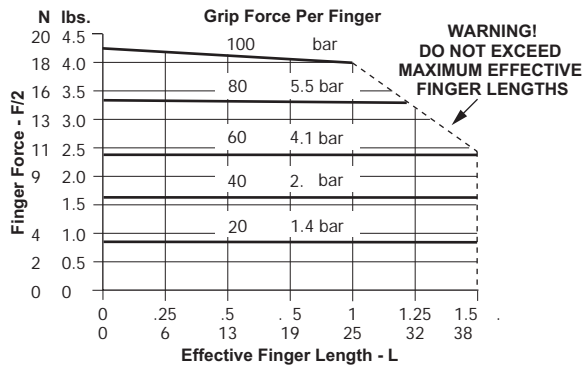
Ordering Information: P5GV Miniature Clean Room Series

Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting, Nitrile	10	M3	3.2	36	0.05	0.03	0.024	P5GV-010MSG003B
Double acting, Fluorocarbon	10	M3	3.2	36	0.05	0.03	0.024	P5GV-010MFG003B
Double acting, Nitrile	10	M3	4.8	36	0.05	0.03	0.026	P5GV-010MSG005B
Double acting, Fluorocarbon	10	M3	4.8	36	0.05	0.03	0.026	P5GV-010MFG005B
Double acting, Nitrile	10	M3	6.3	36	0.05	0.03	0.034	P5GV-010MSG006B
Double acting, Fluorocarbon	10	M3	6.3	36	0.05	0.03	0.034	P5GV-010MFG006B

Not available with sensors.

 Most popular.

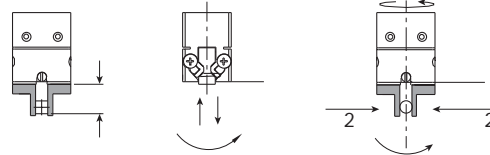
Loading information - P5GV



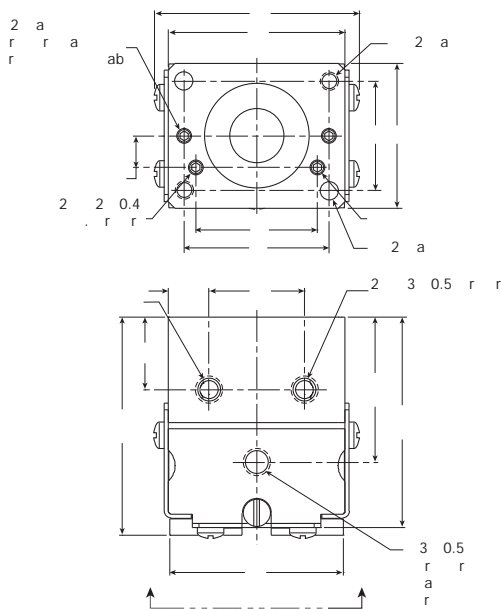
Loading capacity† - P5GV

	Static (metric)	Dynamic (metric)
Maximum tensile T	89 N	31 N
Maximum compressive C	89 N	31 N
Maximum moment Mx	1 Nm	0.5 Nm
Maximum moment My	2 Nm	0.6 Nm
Maximum moment Mz	1 Nm	0.5 Nm

† Capacities are per set of jaws and are not simultaneous

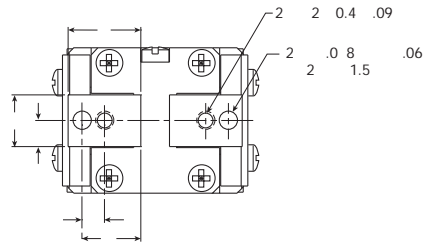


Dimensions: P5GV Miniature Clean Room Series



Unless otherwise noted all tolerances are as shown below

Dimensions are symmetrical about centerline
 Third Angle Projection
Metric (mm)
 (0.) = (±.25)
 (0.0) = (±.13)
 (0.00) = (±.013)



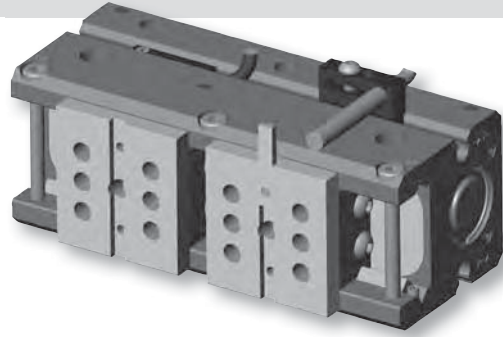
Part number	A	B	C	D	E	F	G	H	J	K	L	M
P5GV-010MS(F)G003B	23	19.5	16.0	13.4	16.0	12.00	3.5	23	16	24.0	8	10.5
P5GV-010MS(F)G005B	24	21.0	16.0	13.4	16.0	12.00	3.5	25	17	25.5	9	10.5
P5GV-010MS(F)G006B	30	26.5	20.0	13.4	16.0	11.00	3.5	25	18	25.5	10	10.5

Part number	N	P	Q	R	S	T	U	V	W	X
P5GV-010MS(F)G003B	4.5	Open 19.2 Closed 16	.569 ±0.03	2.8	6.50	2.5	8	M2 x 0.4	M2 x .18 4.5 Dp	Ø 2H7 x 3.3 Dp
P5GV-010MS(F)G005B	5.2	Open 20.8 Closed 16	.569 ±0.03	2.8	6.50	2.5	8	M2 x 0.4	M2 x 0.4 .18 Dp	Ø 2H7 x 3.3 Dp
P5GV-010MS(F)G006B	8.0	Open 126.4 Closed 20	.569 ±0.03	2.8	7.50	2.5	10	M2 x 0.5	M3 x 0.5 .20 Dp	Ø 3H7 x 5.0 Dp

Dimensions in millimeters

P5GR High Precision Series

- Excellent parallelism and accuracy between gripper mounting surface and jaw surfaces
- H7 dowel pin holes in body and jaws. Jaws also have key slot for better finger alignment.
- Hardened plated jaws for wear resistance and longer life
- Top manifold air ports eliminates the need for airlines
- “Dual-V” roller bearings provide low friction motion and are preloaded for maximum support and zero side play
- One piece, aircraft quality aluminum body, has hard-coat anodized 60 RC with PTFE impregnation
- Standard purge / scavenge port used with vacuum for clean room environments or positive pressure for harsh environments and jaw surfaces
- Adjustable pre-load screws allows for adjustment of preload on roller bearings
- 4 standard air port locations; front, top and both sides
- Shielded design repels contamination from penetrating the “Dual-V” roller bearings
- Magnetic piston standard



Operating information

Pressure range (without springs):	0.3 to 7 bar (4 to 102 PSIG)
Pressure range (with springs):	
P5GR-010MSG006B & P5GR-010MSG013B	1.4 to 7 bar (20 to 102 PSIG)
P5GR-014MSG016B & P5GR-014MSG025B	3.4 to 7 bar (49 to 102 PSIG)
P5GR-021MSG025B	2.8 to 7 bar (41 to 102 PSIG)
P5GR-021MSG038B	2.1 to 7 bar (30 to 102 PSIG)
Temperature range:	
Nitrile seals (standard)	-35° to 80° C (-30° to 180° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)
*Addition of lubrication will greatly increase service life	

Ordering Information: P5GR High Precision Series

Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic	10	M3	6.4	120	0.001	0.00005	0.16	P5GR-010MSG006B
Spring closing, magnetic	10	M3	6.4	120	0.001	0.00005	0.16	P5GR-010DSG006B
Double acting magnetic	10	M3	12.7	120	0.001	0.00005	0.20	P5GR-010MSG013B
Spring closing, magnetic	10	M3	12.7	120	0.001	0.00005	0.20	P5GR-010DSG013B
Double acting magnetic	14	M3	15.9	227	0.001	0.00005	0.48	P5GR-014MSG016B
Spring closing, magnetic	14	M3	15.9	227	0.001	0.00005	0.48	P5GR-014DSG016B
Double acting magnetic	14	M3	25.4	214	0.001	0.00005	0.57	P5GR-014MSG025B
Spring closing, magnetic	14	M3	25.4	214	0.001	0.00005	0.57	P5GR-014DSG025B
Double acting magnetic	21	M5	25.4	458	0.001	0.00005	1.02	P5GR-021MSG025B
Spring closing, magnetic	21	M5	25.4	458	0.001	0.00005	1.02	P5GR-021DSG025B
Double acting magnetic	21	M5	38.1	449	0.001	0.00005	1.41	P5GR-021MSG038B
Spring closing, magnetic	21	M5	38.1	449	0.001	0.00005	1.41	P5GR-021DSG038B

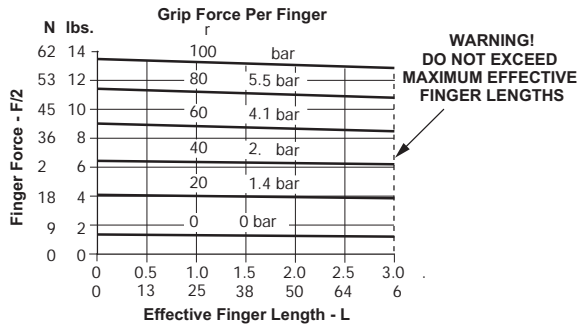
Sensor part numbers: Page 330.

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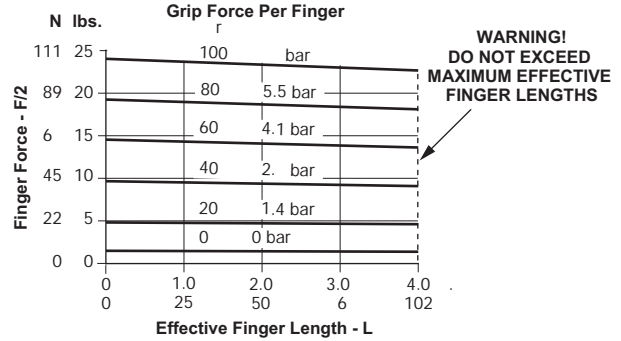


B
 Automation Products
 Actuator Products
 Grippers
 Slide Tables
 Rotary Tables
 Escapements
 Sensors
 Fittings

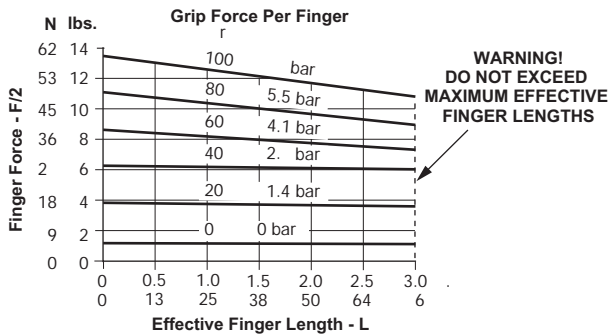
Loading information - P5GR-010*006**



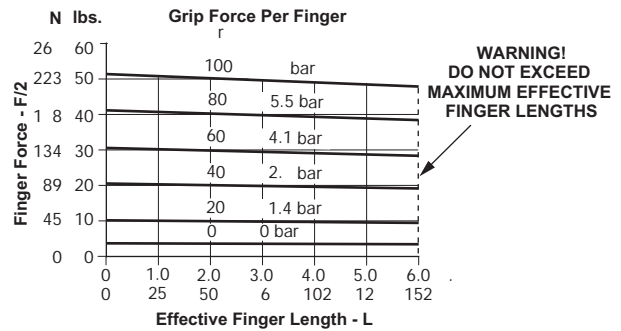
Loading information - P5GR-014*025**



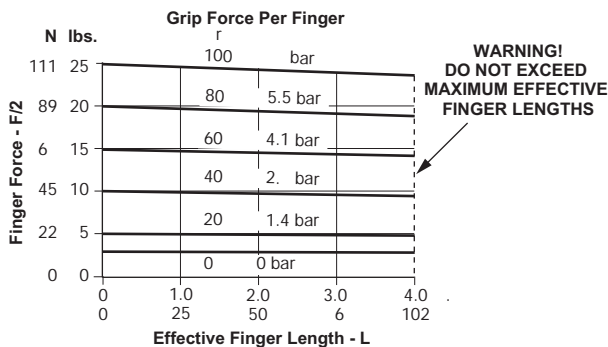
Loading information - P5GR-010*013**



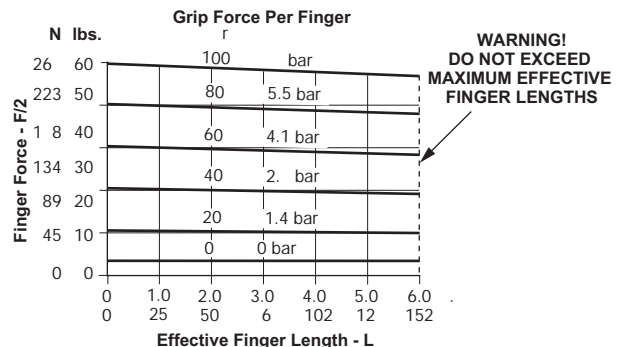
Loading information - P5GR-021*025**



Loading information - P5GR-014...016



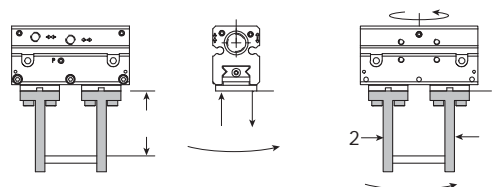
Loading information - P5GR-021*038**



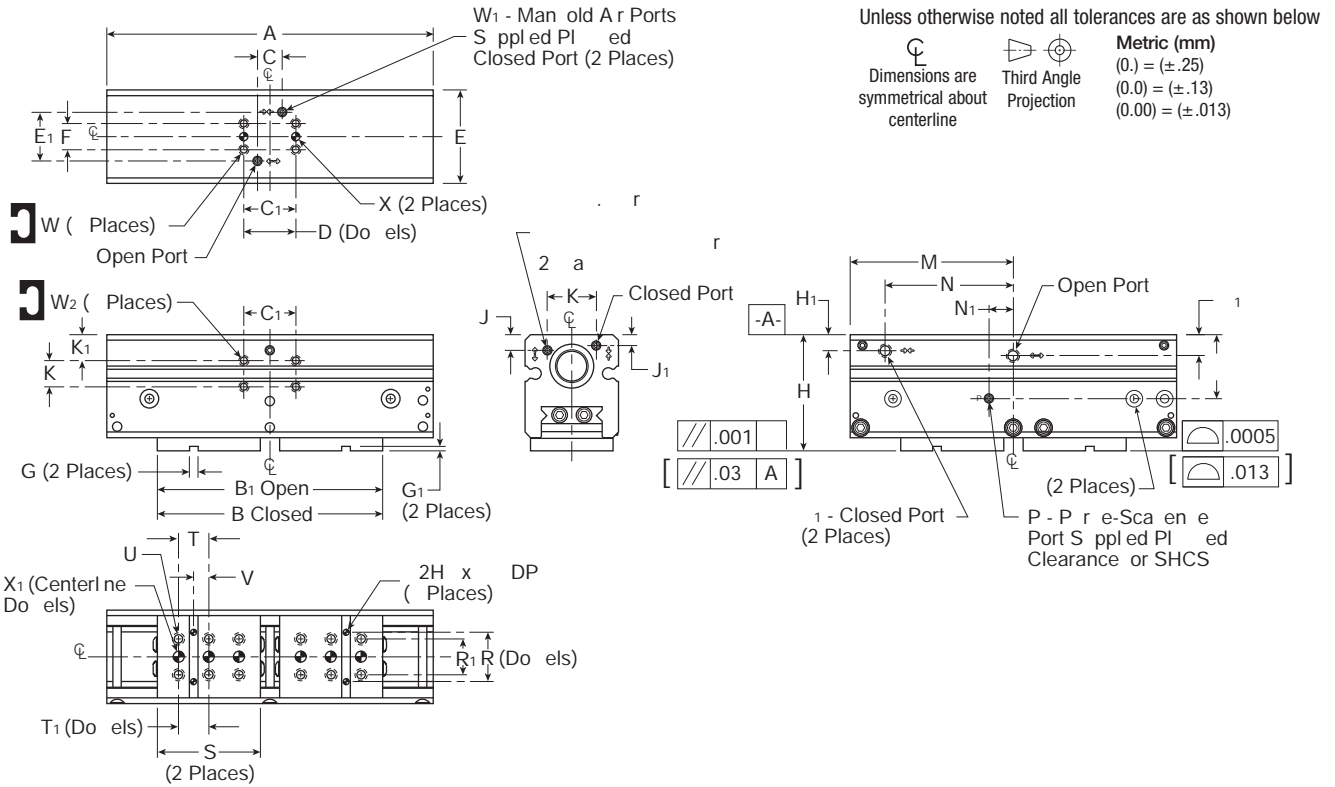
Loading capacity† - P5GR High Precision Series

	P5GR-010***006		P5GR-010***013		P5GR-014***016		P5GR-014***025		P5GR-021***025		P5GR-021***038	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	267 N	89 N	311 N	102 N	556 N	187 N	734 N	245 N	667 N	222 N	890 N	245 N
Maximum compressive C	267 N	89 N	311 N	102 N	556 N	187 N	734 N	245 N	667 N	222 N	890 N	245 N
Maximum moment Mx	4.0 Nm	1.4 Nm	5.6 Nm	1.9 Nm	9.0 Nm	3.1 Nm	11 Nm	3.7 Nm	34 Nm	11 Nm	45 Nm	15 Nm
Maximum moment My	5.6 Nm	1.9 Nm	7.3 Nm	4.0 Nm	12 Nm	4.0 Nm	14 Nm	4.7 Nm	40 Nm	4.7 Nm	51 Nm	17 Nm
Maximum moment Mz	4.0 Nm	1.4 Nm	5.6 Nm	1.9 Nm	9.0 Nm	3.1 Nm	11 Nm	3.7 Nm	34 Nm	11 Nm	45 Nm	15 Nm

† Capacities are per set of jaws and are not simultaneous



Dimensions: P5GR High Precision Series



Part number	A	B	B1	C	C1	D	E	E1	F	G	G1	H	H1	J	J1	K	K1	L	M	N	N1	P
P5GR-010***006	62.9	47	53	8.9	19.1	19.05	25.0	15.2	9.5	3.15 ^{+0.02}	1.52 ^{+0.02}	34.67 ^{+0.02}	5.8	4.4	3.8	9.5	8.5	M3 x 3 Dp	31.4	18.7	5.1	M3 x 3 Dp
P5GR-010***013	73.7	49	62	8.9	19.1	19.05	25.0	15.2	9.5	3.15 ^{+0.02}	1.52 ^{+0.02}	34.67 ^{+0.02}	5.8	4.4	3.8	9.5	8.5	M3 x 3 Dp	36.8	24.1	5.1	M3 x 3 Dp
P5GR-014***016	90.2	63	79	8.9	19.1	19.05	34.0	17.8	9.5	3.15 ^{+0.02}	1.52 ^{+0.02}	42.21 ^{+0.02}	5.8	5.7	3.9	9.5	9.5	M3 x 3 Dp	45.1	32.4	8.9	M3 x 3 Dp
P5GR-014***025	118.7	82	107	8.9	19.1	19.05	34.0	17.8	9.5	3.15 ^{+0.02}	1.52 ^{+0.02}	42.21 ^{+0.02}	5.8	5.7	3.9	9.5	9.5	M3 x 3 Dp	59.4	46.7	8.9	M3 x 3 Dp
P5GR-021***025	129	89	115	12.7	38.1	38.10	46.0	28.7	19.1	3.15 ^{+0.02}	1.52 ^{+0.02}	55.63 ^{+0.02}	5.8	7.0	5.8	19.1	9.5	M5 x 5 Dp	64.5	45.5	14.0	M5 x 5 Dp
P5GR-021***038	175.5	123	161	12.7	38.1	38.10	46.0	28.7	19.1	3.15 ^{+0.02}	1.52 ^{+0.02}	55.63 ^{+0.02}	5.8	7.0	5.8	19.1	9.5	M5 x 5 Dp	87.8	68.7	14.0	M5 x 5 Dp

Part number	Q	Q1	R	R1	S	T	T1	U	V	W	W1	W2	X	X1	Y	Y1
P5GR-010***006	18.5	7.4	9.19	9.0	21	12	11.99	M3 x 5 Dp	6.0	M3 x 4 Dp	M3 x 3 Dp	M3 x 4 Dp	Ø3H7 x 2.5 Dp	Ø2H7 x 3.6 Dp	Ø6.35 x 3 Dp	M5 x 4 Dp
P5GR-010***013	18.5	7.4	9.20	9.0	21	12	11.99	M3 x 5 Dp	6.0	M3 x 4 Dp	M3 x 3 Dp	M3 x 4 Dp	Ø3H7 x 2.5 Dp	Ø2H7 x 3.6 Dp	Ø6.35 x 3 Dp	M5 x 4 Dp
P5GR-014***016	23.2	8.0	17.98	13.0	28	16	16.00	M4 x 7 Dp	8.0	M3 x 4 Dp	M3 x 3 Dp	M3 x 5 Dp	Ø3H7 x 2.5 Dp	Ø4H7 x 3.6 Dp	Ø6.35 x 3 Dp	M5 x 5 Dp
P5GR-014***025	23.2	8.0	17.98	13.0	37.5	11	11.00	M4 x 7 Dp	5.5	M3 x 4 Dp	M3 x 3 Dp	M3 x 5 Dp	Ø3H7 x 2.5 Dp	Ø4H7 x 3.6 Dp	Ø6.35 x 3 Dp	M5 x 5 Dp
P5GR-021***025	31.1	11.2	25.78	17.0	40.0	12.5	12.50	M5 x 10 Dp	6.2	M5 x 5 Dp	M5 x 5 Dp	M5 x 5 Dp	Ø5H7 x 3.0 Dp	Ø5H7 x 5.3 Dp	Ø6.35 x 3 Dp	M5 x 5 Dp
P5GR-021***038	31.1	11.2	25.78	17.0	58.0	16.0	16.00	M5 x 10 Dp	8.0	M5 x 5 Dp	M5 x 5 Dp	M5 x 5 Dp	Ø5H7 x 3.0 Dp	Ø5H x 5.3 Dp	Ø6.35 x 3 Dp	M5 x 5 Dp

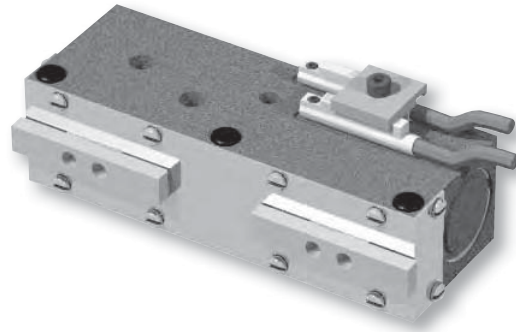
Dimensions in millimeters

B
 Automation Products
 Actuator Products
 Grippers
 Slide Tables
 Rotary Tables
 Escapements
 Sensors
 Fittings



P5GU Clean Room Harsh Environment Series

- Internal components are made from hardened bearing and tool steels. External components are made from corrosion resistant materials for resistance to de-ionized water or for use in FDA and medical parts handling applications.
- Stationary and non-contacting stainless steel shields eliminate the possibility of particle generation
- Adjustable preload screws allow for adjustment of preload on roller bearings
- The body has hard-coat anodized 60 RC with PTFE impregnation
- Dual “V” roller bearings provide low friction rolling motion. Roller bearings are preloaded for maximum support and zero side play.
- Units are lubricated with a clean room grade grease
- Slip fit dowel pin holes in body
- Purge / scavenge port for extreme environments from dirty and gritty to clean room Class 10 or better
- Stainless steel screws provide protection against corrosion
- Magnetic piston standard



Operating information

Operating pressure:	0.3 to 7 bar (4 to 102 PSIG)
Temperature range:	
Standard seals	-35° to 80° C (-30° to 180° F)
Fluorocarbon seals	-30° to 120° C (-20° to 248° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)

*Addition of lubrication will greatly increase service life

Ordering Information: Clean Room Harsh Environment Series

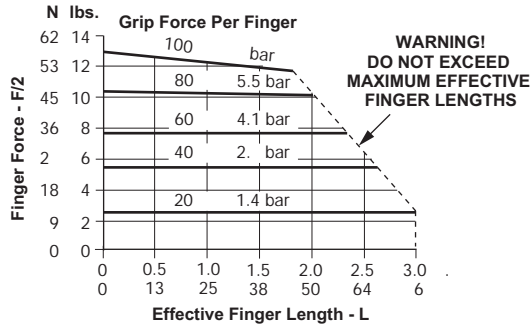
Function	Bore size (mm)	Ports (BSP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic	11	M5	6.4	116	0.05	0.03	0.07	P5GU-011MSG006B
Double acting magnetic	11	M5	6.4	116	0.05	0.03	0.07	P5GU-011MFG006B
Double acting magnetic	11	M5	12.7	116	0.05	0.03	0.09	P5GU-011MSG013B
Double acting magnetic	11	M5	12.7	116	0.05	0.03	0.09	P5GU-011MFG013B
Double acting magnetic	13	M5	19.1	160	0.05	0.03	0.15	P5GU-013MSG019B
Double acting magnetic	13	M5	19.1	160	0.05	0.03	0.15	P5GU-013MFG019B
Double acting magnetic	13	M5	25.4	160	0.05	0.03	0.17	P5GU-013MSG025B
Double acting magnetic	13	M5	25.4	160	0.05	0.03	0.17	P5GU-013MFG025B

Sensor part numbers: Page 330.

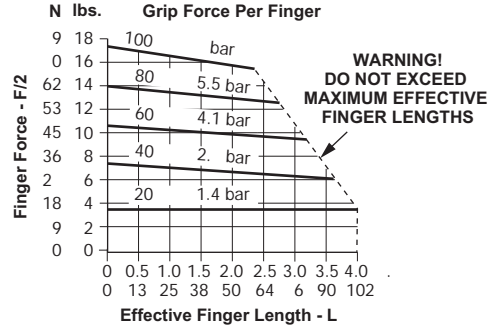
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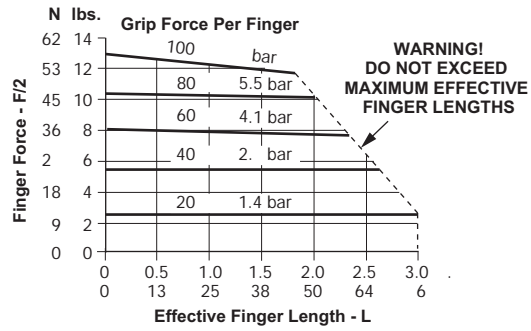
Loading information - P5GU-011*006**



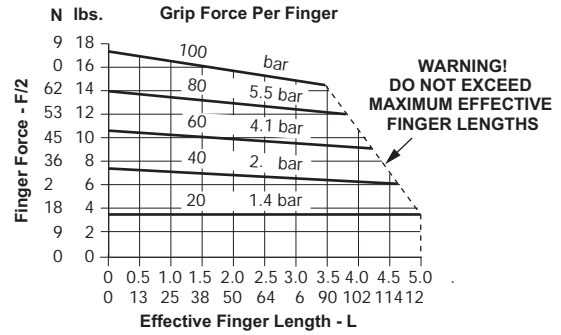
Loading information - P5GU-013*019**



Loading information - P5GU-011*013**



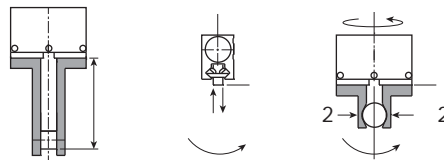
Loading information - P5GU-013*025**



Loading capacity† - P5GU Clean Room Harsh Environment Series

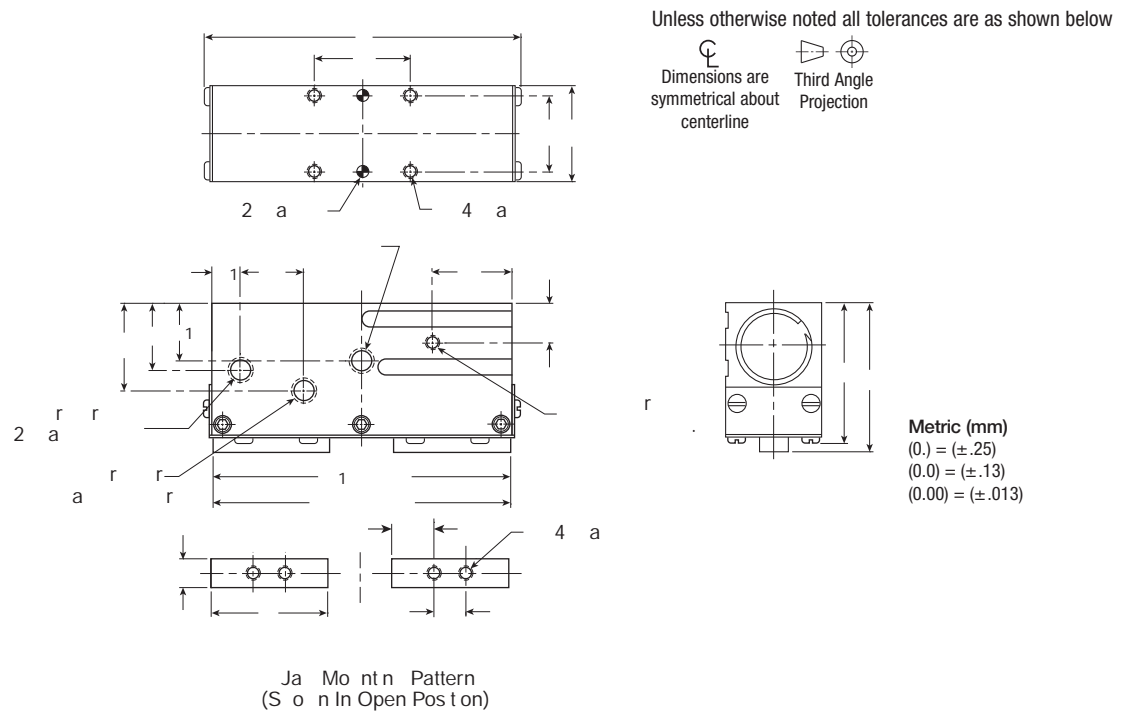
	P5G-011***006		P5GU-011***013		P5GU-013***019		P5GU-013***025	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	222 N	67 N	289 N	89 N	400 N	133 N	534 N	178 N
Maximum compressive C	222 N	67 N	289 N	89 N	400 N	133 N	534 N	178 N
Maximum moment Mx	3.4 Nm	1.1 Nm	5.1 Nm	1.7 Nm	6.8 Nm	2.3 Nm	8.5 Nm	2.8 Nm
Maximum moment My	4.5 Nm	1.4 Nm	6.8 Nm	2.3 Nm	9.0 Nm	2.8 Nm	11.3 Nm	4.0 Nm
Maximum moment Mz	3.4 Nm	1.1 Nm	5.1 Nm	1.7 Nm	6.8 Nm	2.3 Nm	8.5 Nm	2.8 Nm

† Capacities are per set of jaws and are not simultaneous



B
 Automation Products
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 Grippers
 Slide Tables
 Rotary Tables
 Escapements
 Sensors
 Fittings

Dimensions: P5GU Clean Room Harsh Environment Series



Part number	A	B	B ₁	C	D	D ₁	E	F	G	H	J	K	K ₁	L	M	N	P	Q	R
P5GU-011(006)	48.3	38	44	19.1	8	6	19.1	15.09	17	29.5	27.8	13	11	11	8	6.4	5.69 ^{+0.003} _{-0.003}	19.1	6.4
P5GU-011(013)	62.9	46	59	19.1	13	6	19.0	15.09	17	29.5	27.8	13	11	16	8	8.3	5.69 ^{+0.003} _{-0.003}	23.2	6.4
P5GU-013(019)	83.4	63	83	25.4	14	15	22.2	16.66	18	32.6	30.3	13	11	19	8	12.7	5.69 ^{+0.003} _{-0.003}	31.8	6.4
P5GU-013(025)	101.8	76	101	25.4	14	24	22.2	16.66	18	32.6	30.3	13	11	25	8	15.9	5.69 ^{+0.003} _{-0.003}	38.1	6.4

Part number	S	T	U	V	W	X
P5GU-011(006)	M3 x 4 Dp	M3 x 4 Dp	Ø 3 SF x 4 Dp	M5	M5	M3 x 3 Dp
P5GU-011(013)	M3 x 4 Dp	M3 x 4 Dp	Ø 3 SF x 4 Dp	M5	M5	M3 x 4 Dp
P5GU-013(019)	M3 x 4 Dp	M3 x 8 Dp	Ø 3 SF x 6 Dp	M5	M5	M3 x 4 Dp
P5GU-013(025)	M3 x 4 Dp	M3 x 8 Dp	Ø 3 SF x 6 Dp	M5	M5	M3 x 4 Dp

Dimensions in millimeters

B

Automation Products
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Grippers

Slide Tables

Rotary Tables

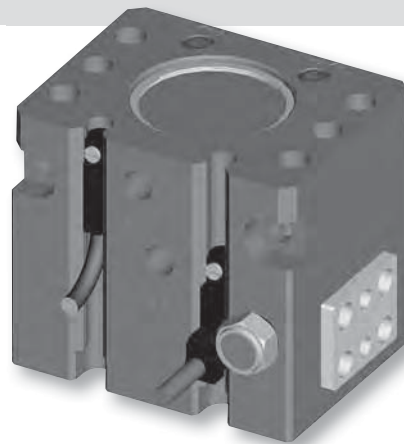
Escapements

Sensors

Fittings

P5GN Compact Series

- One piece lightweight aircraft quality aluminum body
- The body and bottom plate have hard-coat anodize 60 RC with PTFE impregnation
- 3 standard air port locations (front, back, and top)
- Back and top air ports can be o-ring manifold sealed to eliminate air lines
- Standard mounting slots for magneto resistive (sensors sold separately)
- Slip fit dowel pin holes in body and jaws
- Jaws are supported throughout the length of the body
- Purge / scavenge port used with vacuum for clean room environments or positive pressure with harsh environments
- Jaw components made from hardened and precision ground steel for minimum jaw play with hard plating for wear resistance and long life
- Front-to-back thru counterbores for socket head cap screw mounting
- Magnetic piston standard



Operating information


Operating pressure:	1.5 to 7 bar (22 to 102 PSIG)
Temperature range:	
Nitrile seals (standard)	-35° to 80° C (-30° to 180° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)

*Addition of lubrication will greatly increase service life

Ordering Information: P5GN Compact Series

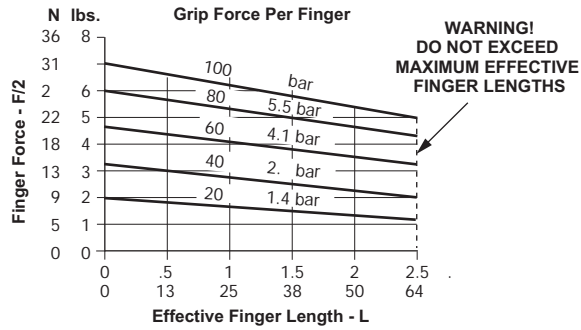
Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic	12	M3	1.6	62	0.05	0.03	0.04	P5GN-012MSG001B
Double acting magnetic	12	M3	2.4	62	0.05	0.03	0.04	P5GN-012MSG002B
Double acting magnetic	12	M3	3.2	62	0.05	0.03	0.04	P5GN-012MSG003B
Double acting magnetic	14	M3	2.4	98	0.05	0.03	0.07	P5GN-014MSG002B
Double acting magnetic	14	M3	3.2	98	0.05	0.03	0.07	P5GN-014MSG003B
Double acting magnetic	14	M3	4.8	98	0.05	0.03	0.07	P5GN-014MSG005B
Double acting magnetic	22	M5	3.2	222	0.05	0.03	0.23	P5GN-022MSG003B
Double acting magnetic	22	M5	4.8	222	0.05	0.03	0.23	P5GN-022MSG005B
Double acting magnetic	22	M5	6.4	222	0.05	0.03	0.23	P5GN-022MSG006B
Double acting magnetic	32	M5	4.8	445	0.08	0.03	0.46	P5GN-032MSG005B
Double acting magnetic	32	M5	6.4	445	0.08	0.03	0.46	P5GN-032MSG006B
Double acting magnetic	32	M5	9.5	445	0.08	0.03	0.46	P5GN-032MSG010B

Sensor part numbers: Page 330.

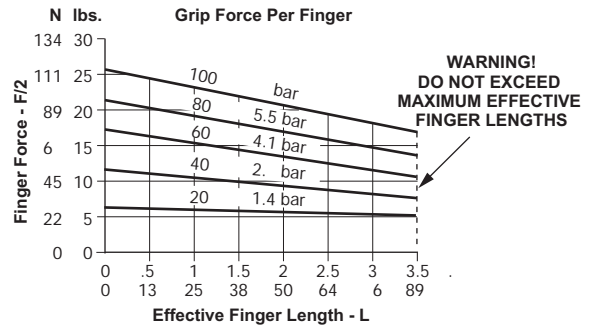
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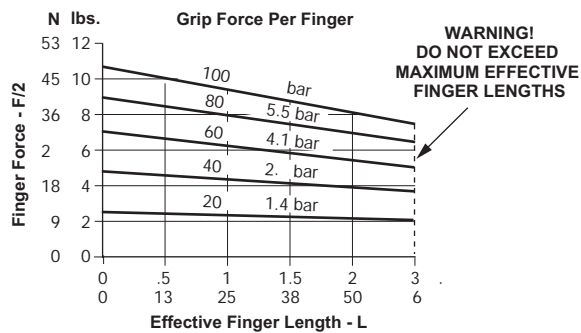
Loading information - P5GN-012



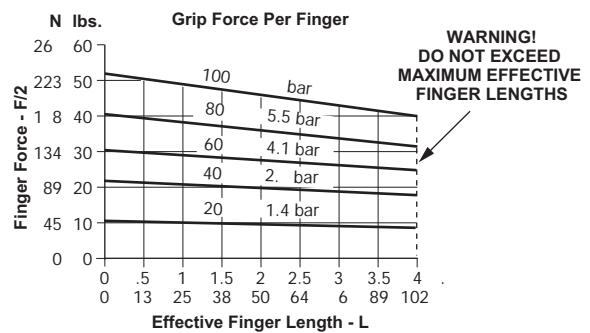
Loading information - P5GN-022



Loading information - P5GN-014



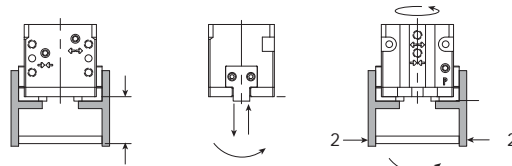
Loading information - P5GN-032



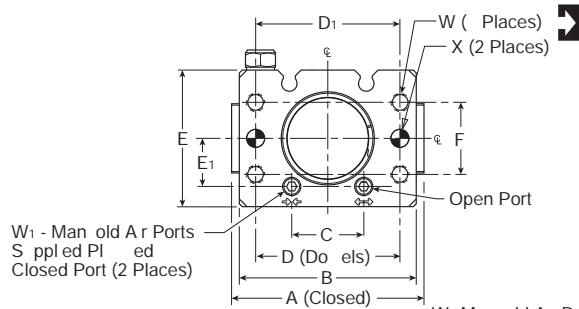
Loading capacity† - P5GN Compact Series

	P5GN-012		P5GN-014		P5GN-022		P5GN-032	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	134 N	27 N	267 N	45 N	614 N	111 N	2225 N	289 N
Maximum compressive C	223 N	45 N	401 N	67 N	1224 N	111 N	4228 N	289 N
Maximum moment Mx	2 Nm	0.6 Nm	5 Nm	8 Nm	14 Nm	2 Nm	48 Nm	8 Nm
Maximum moment My	2 Nm	0.6 Nm	5 Nm	8 Nm	14 Nm	2 Nm	48 Nm	8 Nm
Maximum moment Mz	2 Nm	0.6 Nm	5 Nm	8 Nm	14 Nm	2 Nm	48 Nm	8 Nm

† Capacities are per set of jaws and are not simultaneous

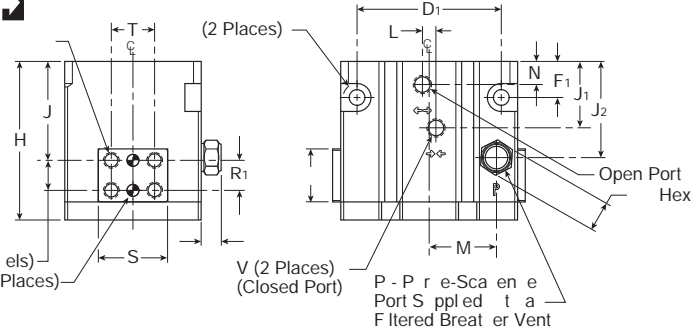
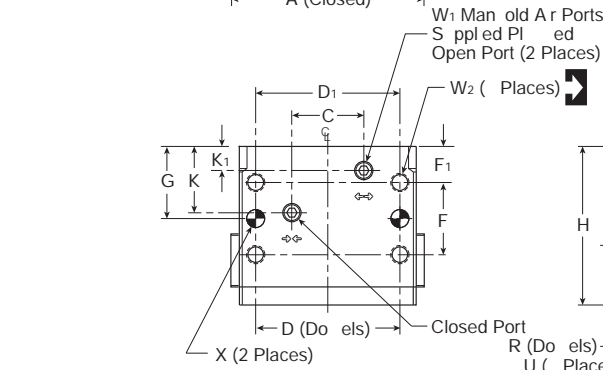


Dimensions: P5GN Compact Series



Unless otherwise noted all tolerances are as shown below

Dimensions are symmetrical about centerline
 Third Angle Projection
Metric (mm)
 (.) = (±.25)
 (0.0) = (±.13)
 (0.00) = (±.013)



B
 Automation Products
 Actuator Products

Part number	A	B	C	D	D1	E	E1	F	F1	G	H	J	J1	J2	K	K1	L	M	N	P
P5GN-012	28	24.4	10.2	19.05	19.1	22.2	7.9	9.5	6.7	11.4	24.4	17.6	9.7	14.7	9.7	3.6	-	9.4	3.6	M3 x 3 Dp
P5GN-014	35	31.2	10.2	19.05	19.1	24.1	8.6	9.5	8.0	12.7	27.4	19.9	11.2	17.0	11.2	3.6	-	11.7	3.6	M3 x 3 Dp
P5GN-022	51	46.7	19.1	38.10	38.1	36.1	12.7	19.1	9.5	19.1	41.9	26.1	17.5	25.4	17.5	6.1	3.6	17.8	6.1	M5 x 4 Dp
P5GN-032	64	59.7	22.9	38.10	38.1	43.2	16.5	19.1	12.7	22.2	51.2	31.3	19.8	30.5	19.8	6.4	4.1	22.4	6.4	M5 x 4 Dp

Part number	Q	R	R1	S	T	U	V	W	W1	W2	X	Y	Z
P5GN-012	7.11 ^{+0.003} _{-0.003}	3.81	-	10.67 ^{+0.003} _{-0.003}	6.4	∅ 2.0 H7 x 3 Dp	M3 x 3 Dp	M3 x 4 Dp	M3 x 3 Dp	M3 x 4 Dp	∅ 3 H7 x 3 Dp	∅ 5 x 4 Dp C'bore (for M2.5 SHCS)	M3 x 4 Dp (4 Places)
P5GN-014	8.64 ^{+0.003} _{-0.003}	4.76	-	12.19 ^{+0.003} _{-0.003}	7.1	∅ 2.5 H7 x 3 Dp	M3 x 3 Dp	M3 x 4 Dp	M3 x 3 Dp	M3 x 4 Dp	∅ 3 H7 x 3 Dp	∅ 5 x 3 Dp C'bore (for M2.5 SHCS)	M4 x 5 Dp (4 Places)
P5GN-022	13.97 ^{+0.003} _{-0.003}	7.94	8.0	18.29 ^{+0.003} _{-0.003}	11.4	∅ 3 H7 x 5 Dp	M5 x 4 Dp	M5 x 8 Dp	M5 x 5 Dp	M5 x 6 Dp	∅ 5 H7 x 5 Dp	∅ 7 x 4 Dp C'bore (for M4 SHCS)	M4 x 6 Dp (8 Places)
P5GN-032	19.05 ^{+0.003} _{-0.003}	11.11	11.1	25.40 ^{+0.003} _{-0.003}	15.9	∅ 4 H7 x 6 Dp	M5 x 4 Dp	M5 x 8 Dp	M5 x 5 Dp	M5 x 6 Dp	∅ 5 H7 x 6 Dp	∅ 7 x 4 Dp C'bore (for M4 SHCS)	M5 x 8 Dp (8 Places)

Dimensions in millimeters

Grippers
 Slide Tables
 Rotary Tables
 Escapements

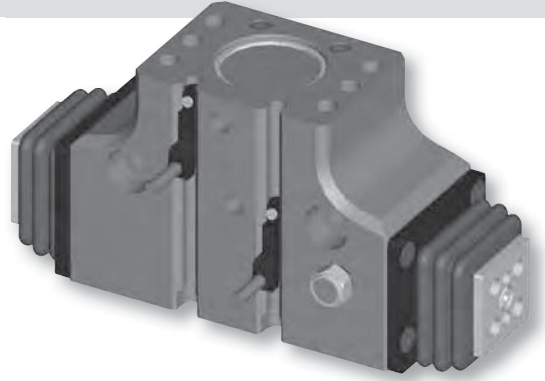
Sensors

Fittings



P5GM Parallel Series

- One piece lightweight aircraft quality aluminum body
- The body and bottom plate have hard-coat anodize 60 RC with PTFE impregnation
- 3 standard air port locations (front, back, and top)
- Back and top air ports can be o-ring manifold sealed to eliminate air lines
- Standard mounting slots for magneto resistive (sensors sold separately)
- Slip fit dowel pin holes in body and jaws
- Jaws are supported throughout the length of the body
- Purge / scavenge port used with vacuum for clean room environments or positive pressure with harsh environments
- Jaw components made from hardened and precision ground steel for minimum jaw play with hard plating for wear resistance and long life
- Front-to-back thru counterbores for socket head cap screw mounting
- Magnetic piston standard



Operating information

Operating pressure:	1.5 to 7 bar (22 to 102 PSIG)
Temperature range:	
Nitrile seals (standard)	-35° to 80° C (-30° to 180° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)

*Addition of lubrication will greatly increase service life

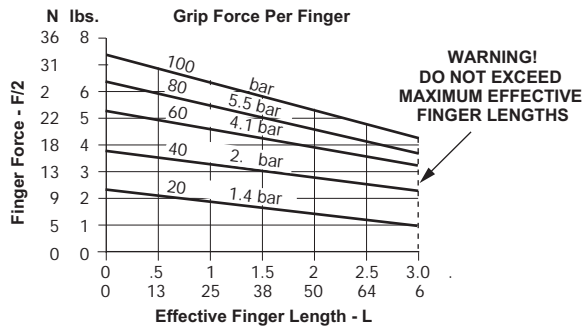
Ordering Information: P5GM Parallel Series

Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic	10	M3	4.8	62	0.05	0.03	0.04	P5GM-010MSG005B
Double acting magnetic	10	M3	6.4	62	0.05	0.03	0.04	P5GM-010MSG006B
Double acting magnetic	10	M3	9.5	62	0.05	0.03	0.04	P5GM-010MSG010B
Double acting magnetic	14	M3	6.4	98	0.05	0.03	0.14	P5GM-014MSG006B
Double acting magnetic	14	M3	9.5	98	0.05	0.03	0.14	P5GM-014MSG010B
Double acting magnetic	14	M3	12.7	98	0.05	0.03	0.14	P5GM-014MSG013B
Double acting magnetic	22	M5	9.5	222	0.05	0.03	0.43	P5GM-022MSG010B
Double acting magnetic	22	M5	12.7	222	0.05	0.03	0.43	P5GM-022MSG013B
Double acting magnetic	22	M5	19.1	222	0.05	0.03	0.43	P5GM-022MSG019B
Double acting magnetic	32	M5	12.7	445	0.08	0.03	0.90	P5GM-032MSG013B
Double acting magnetic	32	M5	19.1	445	0.08	0.03	0.90	P5GM-032MSG019B
Double acting magnetic	32	M5	25.4	445	0.08	0.03	0.90	P5GM-032MSG032B

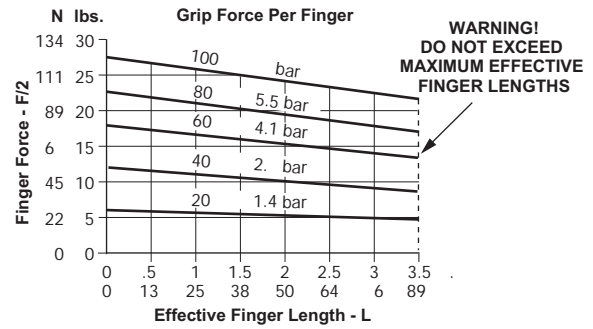
Sensor part numbers: Page 330.

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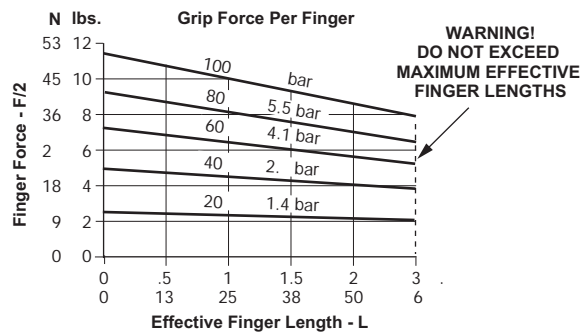
Loading information - P5GM-010



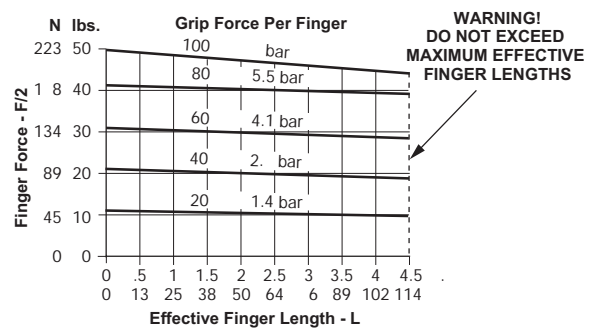
Loading information - P5GM-022



Loading information - P5GM-014



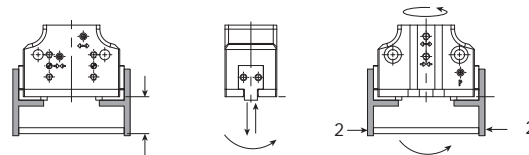
Loading information - P5GM-032



Loading capacity† - P5GM Parallel Series

	P5GM-010		P5GM-014		P5GM-022		P5GM-032	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	445 N	67 N	556 N	111 N	1558 N	178 N	3004 N	401 N
Maximum compressive C	668 N	111 N	1113 N	111 N	2893 N	178 N	5785 N	401 N
Maximum moment Mx	10 Nm	2 Nm	13 Nm	2 Nm	28 Nm	5 Nm	73 Nm	12 Nm
Maximum moment My	10 Nm	2 Nm	13 Nm	2 Nm	28 Nm	5 Nm	73 Nm	12 Nm
Maximum moment Mz	10 Nm	2 Nm	13 Nm	2 Nm	28 Nm	5 Nm	73 Nm	12 Nm

† Capacities are per set of jaws and are not simultaneous



B
 Automation Products
 Actuator Products

Grippers

Slide Tables

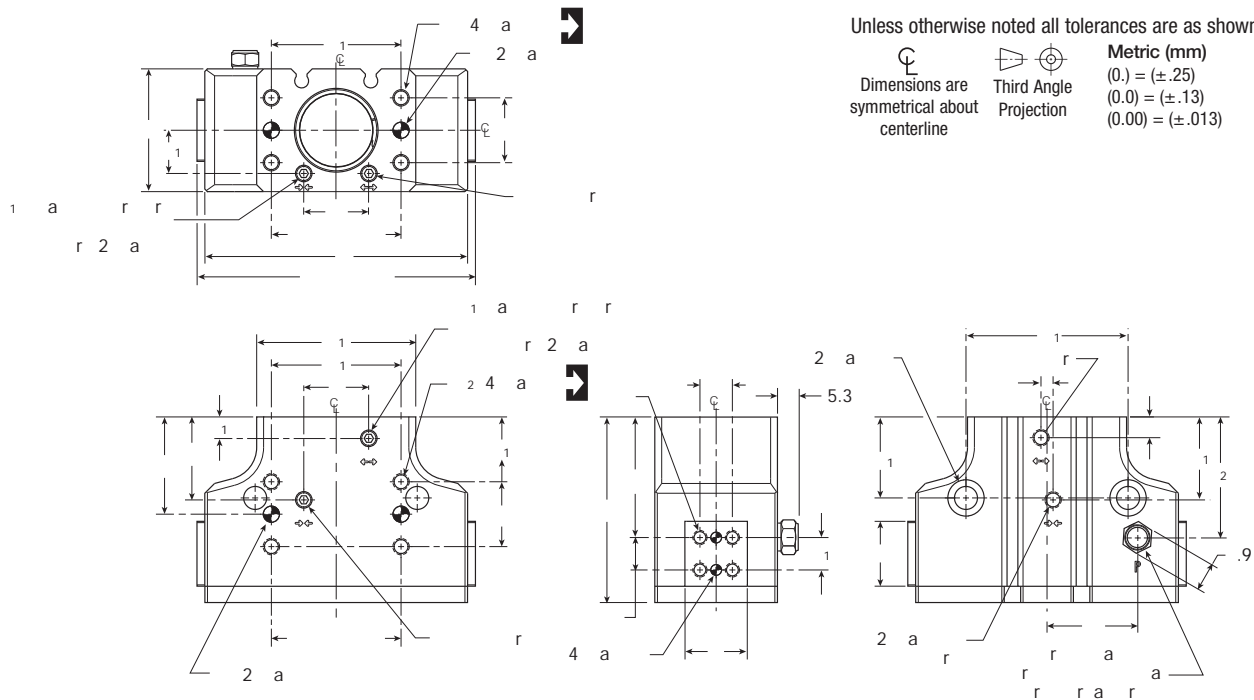
Rotary Tables

Escapements

Sensors

Fittings

Dimensions: P5GM Parallel Series



Part number	A	B	B ₁	C	D	D ₁	E	E ₁	F	F ₁	G	H	J	J ₁	J ₂	K	K ₁	L	M	N	P
P5GM-010	45	41.4	24.4	10.2	19.05	19.1	22.2	7.9	9.5	12.7	17.5	30.7	22.4	13.5	20.3	13.5	3.6	-	14.7	3.6	M3 x 3 Dp
P5GM-014	56	52.6	31.2	10.2	19.05	19.1	24.1	8.6	9.5	15.8	20.6	36.2	26.6	15.7	23.4	15.7	3.6	-	17.3	3.6	M3 x 3 Dp
P5GM-022	82	77.2	46.7	19.1	38.10	38.1	36.1	12.7	19.1	19.1	28.6	54.5	35.4	24.4	35.6	24.4	6.1	3.6	26.7	6.1	M5 x 4 Dp
P5GM-032	103	98.8	59.7	22.9	38.10	38.1	43.2	16.5	19.1	28.6	38.1	67.0	41.6	29.2	43.2	29.2	6.4	4.1	35.1	6.4	M5 x 4 Dp

Part number	Q	R	R ₁	S	T	U	V	W	W ₁	W ₂	X	Y	Z
P5GM-010	10.67 ^{+0.000} _{-0.003}	4.76	-	10.67 ^{+0.000} _{-0.003}	6.4	∅ 2.0 H7 x 3 Dp	M3 x 3 Dp	M3 x 4 Dp	M3 x 3 Dp	M3 x 4 Dp	∅ 3 H7 x 3 Dp	∅ 7 x 4 Dp C'bore (for M4 SHCS)	M3 x 4 Dp (4 Places)
P5GM-014	12.70 ^{+0.000} _{-0.003}	4.76	-	12.19 ^{+0.000} _{-0.003}	7.1	∅ 2.5 H7 x 3 Dp	M3 x 3 Dp	M3 x 4 Dp	M3 x 3 Dp	M3 x 4 Dp	∅ 3 H7 x 3 Dp	∅ 7 x 4 Dp C'bore (for M4 SHCS)	M4 x 5 Dp (4 Places)
P5GM-022	19.05 ^{+0.000} _{-0.003}	9.53	9.5	18.29 ^{+0.000} _{-0.003}	9.5	∅ 3 H7 x 5 Dp	M5 x 3Dp	M5 x 8 Dp	M5 x 5 Dp	M5 x 6 Dp	∅ 5 H7 x 5 Dp	∅ 11 x 7 Dp C'bore (for M6 SHCS)	M4 x 6 Dp (8 Places)
P5GM-032	25.40 ^{+0.000} _{-0.003}	15.88	15.9	25.40 ^{+0.000} _{-0.003}	15.9	∅ 4 H7 x 6 Dp	M5 x 4 Dp	M5 x 8 Dp	M5 x 5 Dp	M5 x 6 Dp	∅ 5 H7 x 5 Dp	∅ 11 x 7 Dp C'bore (for M6 SHCS)	M5 x 8 Dp (8 Places)

Dimensions in millimeters

B

Automation Products
 Actuator Products

Grippers

Slide Tables

Rotary Tables

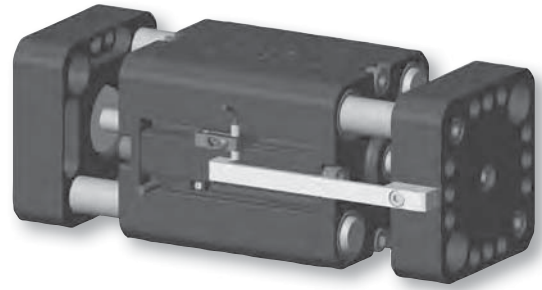
Escapements

Sensors

Fittings

P5GS Wide Body Series

- C-bores on inside of jaws for thru mounting to increase range of applications
- Standard sensor mounting slots for magneto resistive and inductive sensors (sensors sold separately)
- End of stroke cushions reduce shock of fully open and close strokes
- Each jaw is supported by 2 shafts that extend the entire length of the body and are guided by 2 oil impregnated bronze bushings per shaft
- Hardened precision stainless steel shafting for wear resistance and long life
- Magneto resistive sensors are an alternative option to inductive sensors (magnets supplied standard)
- Top air ports can be o-ring manifold sealed to eliminate air lines
- 2 standard air port locations (front and top)
- Slip fit dowel pin holes in body and jaws
- Large jaw configuration allows for simplified finger mounting



Operating information

Operating pressure:	3 to 7 bar (44 to 102 PSIG)
Temperature range:	
Nitrile seals (Standard)	-35° to 80° C (-30° to 180° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)
*Addition of lubrication will greatly increase service life	

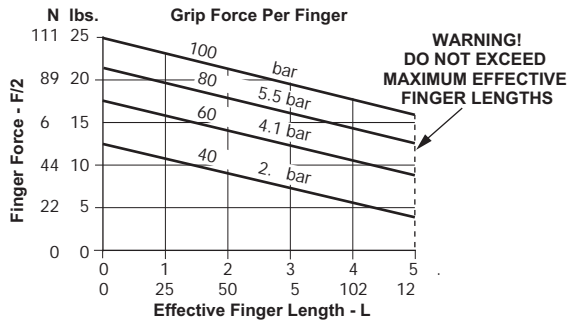
Ordering Information: P5GS Wide Body Series

Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic	16	M3	19.1	222	0.08	0.03	0.30	P5GS-016MSG019B
Double acting magnetic	16	M3	31.8	222	0.08	0.03	0.39	P5GS-016MSG032B
Double acting magnetic	24	M5	25.4	445	0.08	0.03	0.81	P5GS-024MSG025B
Double acting magnetic	24	M5	50.8	445	0.08	0.03	1.20	P5GS-024MSG051B
Double acting magnetic	32	M5	38.1	800	0.08	0.03	1.48	P5GS-032MSG038B
Double acting magnetic	32	M5	73.5	800	0.08	0.03	2.0	P5GS-032MSG074B

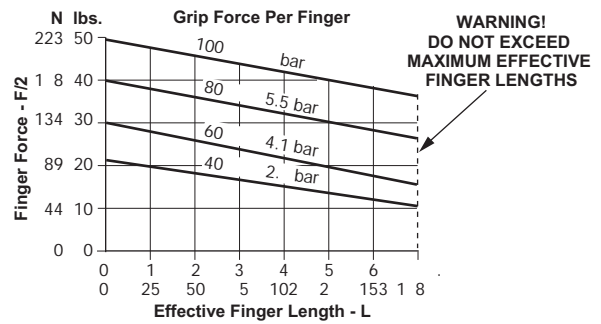
Sensor part numbers: Page 330.

 Most popular.

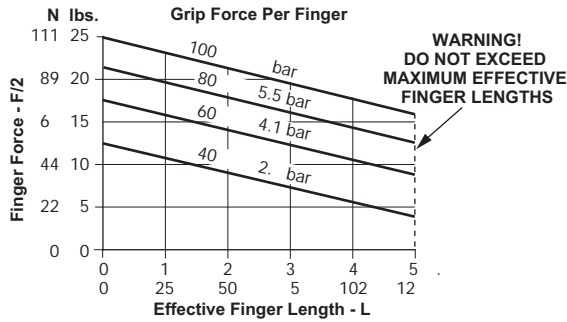
Loading information - P5GS-016MSG019B



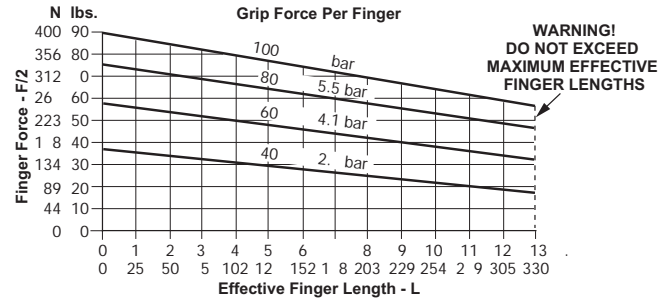
Loading information - P5GS-024MSG051B



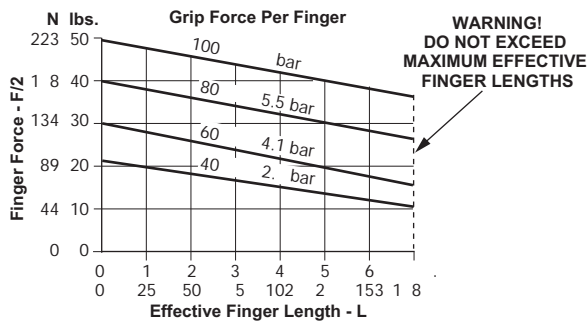
Loading information - P5GS-016MSG032B



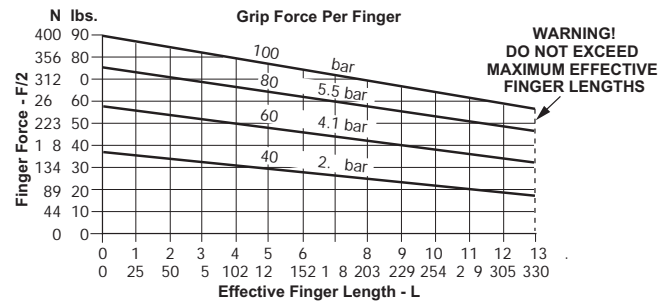
Loading information - P5GS-032MSG038B



Loading information - P5GS-024MSG025B



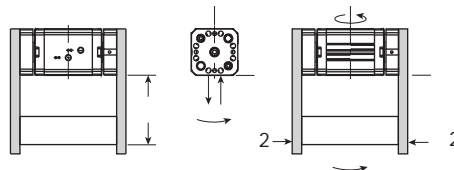
Loading information - P5GS-032MSG074B



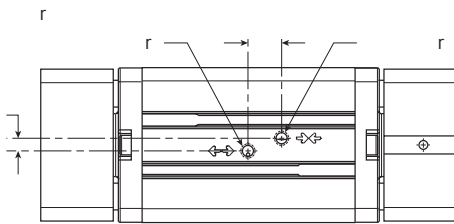
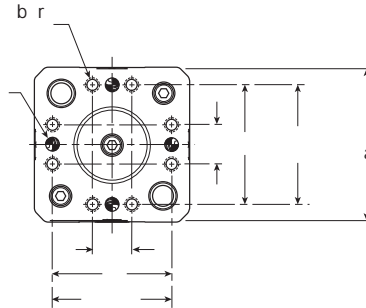
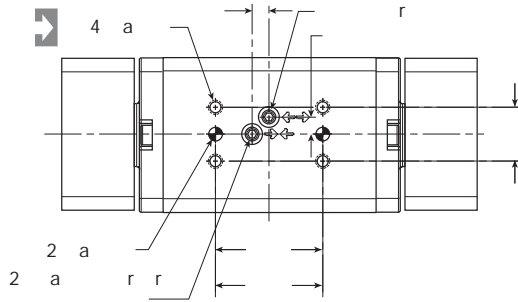
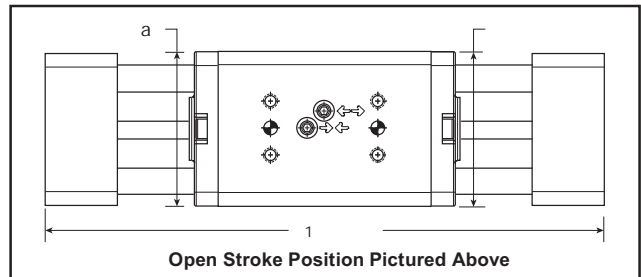
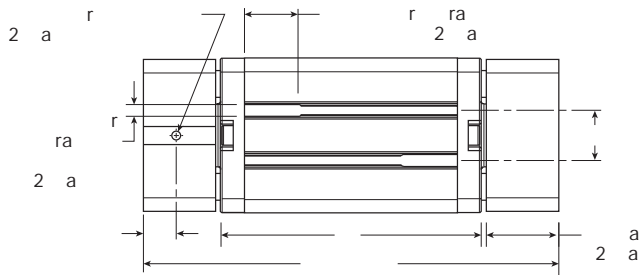
Loading capacity† - P5GS Wide Body Series

	P5GS-016M***19B		P5GS-016M***32B		P5GS-024M***25B		P5GS-024M***51B		P5GS-032M***38B		P5GS-032M***74B	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	267 N	53 N	267 N	53 N	534 N	107 N	534 N	107 N	2668 N	267 N	2668 N	267 N
Maximum compressive C	267 N	53 N	267 N	53 N	534 N	107 N	534 N	107 N	2668 N	267 N	2668 N	267 N
Maximum moment Mx	14 Nm	3 Nm	14 Nm	3 Nm	24 Nm	5 Nm	24 Nm	5 Nm	68 Nm	7 Nm	68 Nm	7 Nm
Maximum moment My	20 Nm	4 Nm	20 Nm	4 Nm	34 Nm	7 Nm	34 Nm	7 Nm	102 Nm	10 Nm	102 Nm	10 Nm
Maximum moment Mz	14 Nm	3 Nm	14 Nm	3 Nm	24 Nm	5 Nm	24 Nm	5 Nm	68 Nm	7 Nm	68 Nm	7 Nm

† Capacities are per set of jaws and are not simultaneous



Dimensions: P5GS Wide Body Series



Unless otherwise noted all tolerances are as shown below

Dimensions are symmetrical about centerline
 Third Angle Projection

Metric (mm)
 (0.) = (±.25)
 (0.0) = (±.13)
 (0.00) = (±.013)

Part number	A	A _t	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
P5GS-016MSG019B	79	98	54.4	5.8	10.5	7.9	19.1	M3 x 3 Dp	4.2	4	M3 x 5 Dp	∅ 3h7 x 5 Dp	19.0	19.05	9.5	M3 x 5 Dp
P5GS-016MSG032B	104	136	67.1	7.3	16.9	7.9	19.1	M3 x 3 Dp	4.2	4	M3 x 5 Dp	∅ 3h7 x 5 Dp	19.1	19.05	9.5	M3 x 5 Dp
P5GS-024MSG025B	97	122	67.1	6.7	13.0	17.8	19.1	M3 x 4 Dp	4.2	6	M3 x 7 Dp	∅ 5h7 x 5 Dp	38.1	38.10	19.1	M5 x 7 Dp
P5GS-024MSG051B	147	198	92.5	11.7	25.7	17.8	19.1	M3 x 4 Dp	4.2	6	M3 x 7 Dp	∅ 5h7 x 5 Dp	38.1	38.10	19.1	M5 x 7 Dp
P5GS-032MSG038B	125	164	82.8	12.1	19.2	18.8	19.1	M3 x 4 Dp	4.2	6	M3 x 8 Dp	∅ 5h7 x 5 Dp	38.1	38.10	19.1	M5 x 5 Dp
P5GS-032MSG074B	177	240	108.2	14.9	39.1	18.8	19.1	M3 x 4 Dp	4.2	6	M3 x 8 Dp	∅ 5h7 x 5 Dp	38.1	38.10	19.1	M5 x 7 Dp

Part number	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE
P5GS-016MSG019B	6	10	10.0	30.0	30.00	37.6	10.0	30.0	30.00	M5 x 5 Dp	37.6	38.0	M4 x 8 Dp	∅ 4h7 x 5 Dp
P5GS-016MSG032B	6	12	10.0	30.0	30.00	37.6	10.0	30.0	30.00	M5 x 5 Dp	37.6	38.0	M4 x 8 Dp	∅ 4h7 x 5 Dp
P5GS-024MSG025B	5	11	14.0	42.5	42.50	54.0	14.0	42.5	42.50	M5 x 6 Dp	54.7	55.0	M5 x 10 Dp	∅ 5h7 x 5 Dp
P5GS-024MSG051B	5	12	14.0	42.5	42.50	54.0	14.0	42.5	42.50	M5 x 6 Dp	54.7	55.0	M5 x 10 Dp	∅ 5h7 x 5 Dp
P5GS-032MSG038B	5	15	18.0	51.0	51.00	63.0	18.0	51.0	51.00	M5 x 6 Dp	63.7	64.0	M6 x 13 Dp	∅ 6h7 x 8 Dp
P5GS-032MSG074B	5	15	18.0	51.0	51.00	63.0	18.0	51.0	51.00	M5 x 6 Dp	63.7	64.0	M6 x 13 Dp	∅ 6h7 x 8 Dp

Dimensions in millimeters

B
 Automation Products
 Actuator Products
 Grippers
 Slide Tables
 Rotary Tables
 Escapements
 Sensors
 Fittings



P5GT Double Wedge Series

- Extremely compact and robust package
- One piece 7075 -T6 aircraft quality aluminum body
- Dynamic components are hardened for wear resistance and long life
- Accessory mounting holes mount sensors to unit
- Slip fit dowel pin holes in body and jaws
- Jaws are supported throughout the length of the body and are precision ground for minimal jaw play
- A double acting piston is connected by a shaft to a double sided wedge
- The wedge slides in a slot located in each of the jaws converting vertical motion of the wedge into horizontal synchronous motion of the jaws
- The large surface area of the wedge minimizes frictional wear
- Magnetic piston standard



Operating information

Operating pressure:	3 to 7 bar (44 to 102 PSIG)
Temperature range:	
Nitrile seals (standard)	-35° to 80° C (-30° to 180° F)
Fluorocarbon seals (optional)	-30° to 150° C (-20° to 300° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)

*Addition of lubrication will greatly increase service life

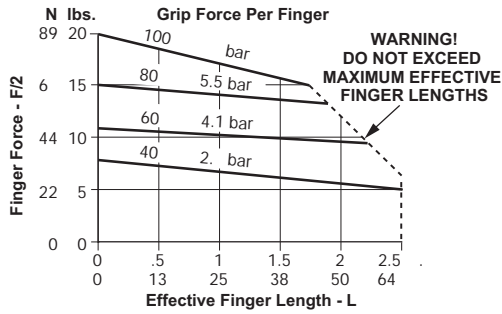
Ordering Information: P5GT Double Wedge Series

Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic, Nitrile	25	M5	6.4	178	0.05	0.03	0.12	P5GT-025MSG006B
Double acting magnetic, Fluorocarbon	25	M5	6.4	178	0.05	0.03	0.12	P5GT-025MFG006B
Double acting magnetic, Nitrile	25	M5	9.5	178	0.05	0.03	0.25	P5GT-025MSG010B
Double acting magnetic, Fluorocarbon	25	M5	9.5	178	0.05	0.03	0.25	P5GT-025MFG010B
Double acting magnetic, Nitrile	32	M5	12.7	311	0.05	0.03	0.57	P5GT-032MSG013B
Double acting magnetic, Fluorocarbon	32	M5	12.7	311	0.05	0.03	0.57	P5GT-032MFG013B
Double acting magnetic, Nitrile	46	1/8	19.1	979	0.08	0.03	1.0	P5GT-046MSG019B
Double acting magnetic, Fluorocarbon	46	1/8	19.1	979	0.08	0.03	1.0	P5GT-046MFG019B
Double acting magnetic, Nitrile	64	1/8	31.8	1779	0.08	0.03	3.5	P5GT-064MSG032B
Double acting magnetic, Fluorocarbon	64	1/8	31.8	1779	0.08	0.03	3.5	P5GT-064MFG032B
Double acting magnetic, Nitrile	89	1/4	50.8	2669	0.08	0.03	9.5	P5GT-089MSG051B
Double acting magnetic, Fluorocarbon	89	1/4	50.8	2669	0.08	0.03	9.5	P5GT-089MFG051B

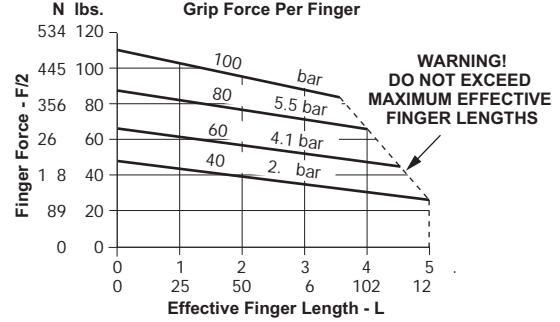
Sensor part numbers: Page 330.

 Most popular.

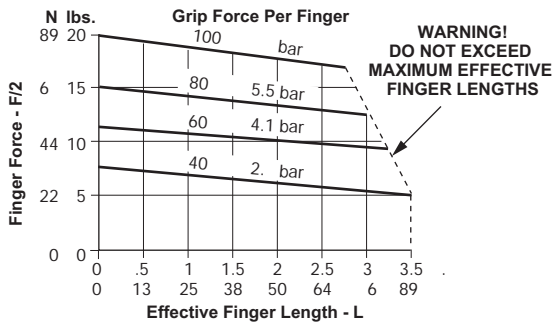
Loading information - P5GT-025/006



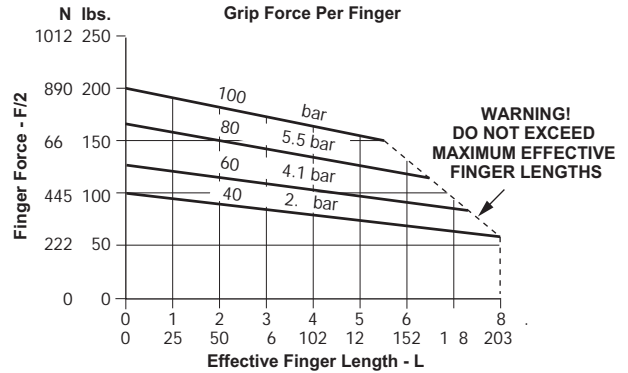
Loading information - P5GT-046



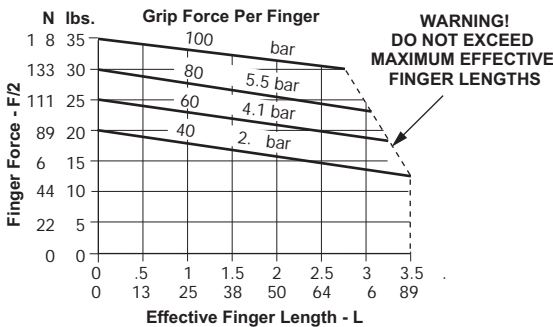
Loading information - P5GT-025/010



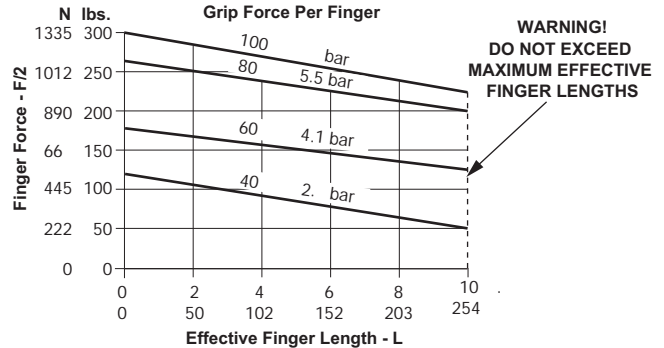
Loading information - P5GT-064



Loading information - P5GT-032



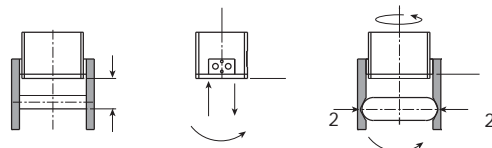
Loading information - P5GT-089



Loading capacity† - P5GT Double Wedge Series

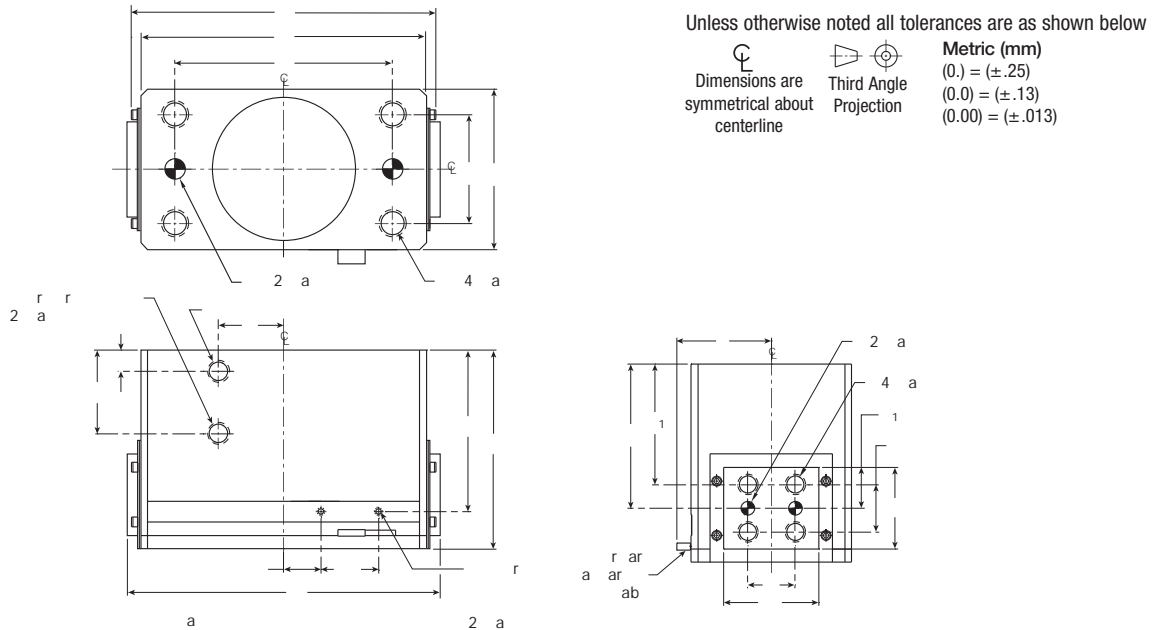
	P5GT-025(006)		P5GT-025(010)		P5GT-032		P5GT-046		P5GT-064		P5GT-089	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	445 N	111 N	890 N	111 N	1779 N	222 N	3336 N	445 N	6672 N	1112 N	13345 N	1334 N
Maximum compressive C	890 N	111 N	1779 N	111 N	3336 N	222 N	6672 N	445 N	13345 N	1112 N	26689 N	1334 N
Maximum moment Mx	11 Nm	2 Nm	17 Nm	3 Nm	34 Nm	6 Nm	85 Nm	14 Nm	170 Nm	28 Nm	565 Nm	56 Nm
Maximum moment My	11 Nm	2 Nm	17 Nm	3 Nm	34 Nm	6 Nm	85 Nm	14 Nm	170 Nm	28 Nm	565 Nm	56 Nm
Maximum moment Mz	11 Nm	2 Nm	17 Nm	3 Nm	34 Nm	6 Nm	85 Nm	14 Nm	170 Nm	28 Nm	565 Nm	56 Nm

† Capacities are per set of jaws and are not simultaneous



B
 Automation Products
 Actuator Products
 Grippers
 Slide Tables
 Rotary Tables
 Escapements
 Sensors
 Fittings

Dimensions: P5GT Double Wedge Series



Part number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
P5GT-025(006)	–	38.1	20	31.75	31.8	12.70	17	28.6	9	5	M5	25	–	Open 48 Closed 41	9.55 ^{+0.00} _{-.003}
P5GT-025(010)	–	50.8	23	38.10	38.1	25.40	12	35.6	14	9	M5	14	6	Open 63 Closed 54	12.34 ^{+0.00} _{-.003}
P5GT-032	70.4	63.50	30	50.80	41.3	19.05	14.4	47.3	18	7	M5	17	3	Open 81 Closed 68	18.69 ^{+0.00} _{-.003}
P5GT-046	89.6	82.55	25	63.50	54.0	25.40	25	61.9	46	8	G1/8	27	5	Open 108 Closed 85	25.43 ^{+0.00} _{-.003}
P5GT-064	142.2	133.35	–	101.60	74.9	50.8	39	92.8	75	10	G1/8	27	17	Open 177 Closed 146	38.10 ^{+0.00} _{-.003}
P5GT-089	214.7	203.20	–	152.40	100.3	69.9	47	118.2	98	11	G1/4	56	25	Open 266 Closed 216	47.63 ^{+0.00} _{-.003}

Part number	R	S	T	U	V	W	X	Y	Z	Z1
P5GT-025(006)	6.35	15.88 ^{+0.00} _{-.003}	7.9	22.2	21.5	M4 x 9 Dp	Ø 3H7 x 6 Dp	Ø 2H7 x 4 Dp	M4 x 4.7 Dp	M3 x 4 Dp
P5GT-025(010)	7.95	18.67 ^{+0.00} _{-.003}	12.7	25.4	26.3	M6 x 12 Dp	Ø 5H7 x 6 Dp	Ø 2.5H7 x 4 Dp	M4 x 7 Dp	M3 x 4 Dp
P5GT-032	9.53	25.01 ^{+0.00} _{-.003}	17.5	27.0	28.5	M6 x 12 Dp	Ø 5H7 x 6 Dp	Ø 4H7 x 4 Dp	M5 x 9 Dp	M3 x 4 Dp
P5GT-046	12.70	31.78 ^{+0.00} _{-.003}	19.1	33.3	38.1	M10 x 19 Dp	Ø 6H7 x 12 Dp	Ø 5H7 x 9 Dp	M6 x 12 Dp	M3 x 6 Dp
P5GT-064	22.2	44.48 ^{+0.00} _{-.003}	22.23	44.2	67.4	M12 x 25 Dp	Ø 10H8 x 12 Dp	Ø 8H7 x 12 Dp	M10 x 19 Dp	M3 x 9 Dp
P5GT-089	28.57	57.10 ^{+0.00} _{-.003}	34.9	56.9	70.7	M20 x 38 Dp	Ø 12H8 x 19 Dp	Ø 6H7 x 12 Dp	M12 x 28 Dp	M3 x 9 Dp

Dimensions in millimeters

B

Automation Products
 Actuator Products

Grippers

Slide Tables

Rotary Tables

Escapements

Sensors

Fittings

P5GP Electric Gripper Series

- One piece, lightweight aircraft quality aluminum body ensures product accuracy
- The body and jaws are hard-coat anodized to 60 RC with PTFE impregnation
- Ridged design and full body support of the jaws allows for long finger lengths
- Versatile mounting on top, side front and back of body.
- IP54 rating for tough application environments
- Slip fit dowel pin holes located in body and jaws for precision mounting
- Precision rack and pinion drive components for smooth actuation. Zero backlash while gripping ensures excellent repeatability and accuracy.
- Built in electronics, no external control board needed
- Magnetic piston standard



Operating information

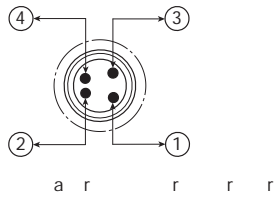
Voltage:	24VDC
Power Req. @ 100% Duty Cycle:	4.2 Watts
Current - Peak:	1.5 Amps Max.
Current - Continuous:	0.175 Amps
Temperature range:	5° to 60° C (41° to 140° F)

Ordering Information: P5GP Electric Gripper Series

Function	Stroke (mm)	Grip force (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Electric	25	111	0.051	0.025	0.53	P5GP-000ESX025B

Sensor part numbers: Page 330.

Electrical Interface

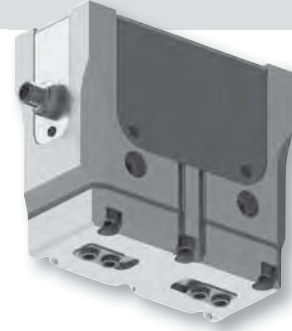


1 r 24
 2 r r 24
 3 r r r 24
 4 a r r 24

4-Wire Power & Signal Cable: P8S-CABL-046

Most popular.

P5GQ Electric Gripper Series - High Force



- Gripper is available in two stroke lengths, standard and extended stroke
- Ridged design and full body support of the jaws allows for long finger lengths
- Finger locating sleeves for precise finger mounting (standard)
- Slip fit dowel pin located in body and jaws for precision mounting
- Jaw components hardened and precision ground steel for minimum jaw play with hard plating for wear resistance and long life
- IP50
- Grip force can be changed on the fly using 0-5V analog input
- No external controller needed, 8-pin cable sold separately
- Magnetic piston standard

Operating information

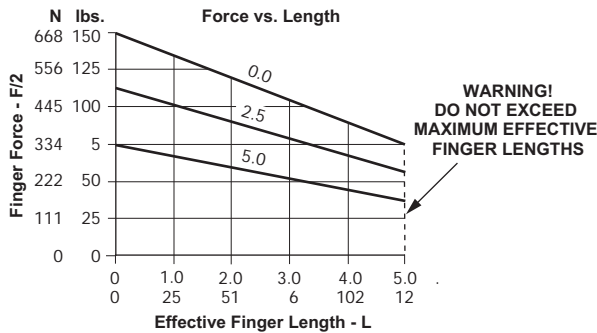
Voltage:	24VDC
Power Req. @ 100% Duty Cycle:	10 Watts
Current - Peak:	2 Amps Max.
Current - Continuous:	0.4 Amps
Temperature range:	0° to 55° C (32° to 131° F)

Ordering Information: P5GQ Electric Gripper Series - High Force

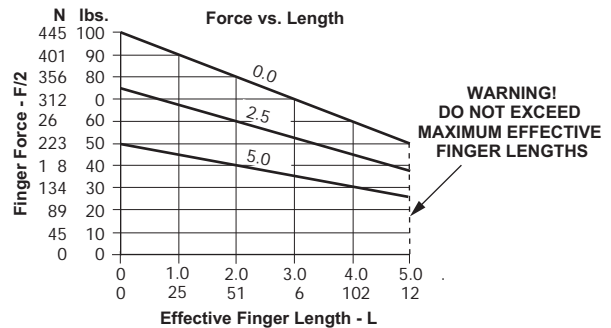
Function	Gripping mode	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Electric	ID	10.0	667-1334	0.05	0.025	2.52	P5GQ-000RSX010B
Electric	ID	20.0	445-890	0.05	0.025	2.52	P5GQ-000RSX020B
Electric	OD	10.0	667-1334	0.05	0.025	2.52	P5GQ-000QSX010B
Electric	OD	20.0	445-890	0.05	0.025	2.52	P5GQ-000QSX020B

Sensor part numbers: Page 330.

Loading information - P5GQ-000*010



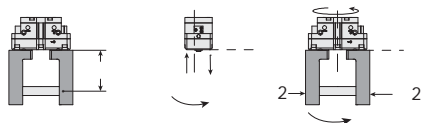
Loading information - P5GQ-000*020



Loading capacity† - P5GQ-000*010

	Static (metric)	Dynamic (Metric)
Maximum tensile T	1564 N	259 N
Maximum compressive C	2070 N	259 N
Maximum moment Mx	76 Nm	10 Nm
Maximum moment My	106 Nm	14 Nm
Maximum moment Mz	70 Nm	14 Nm

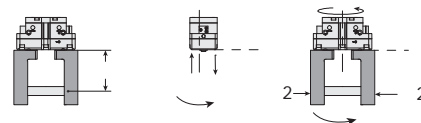
† Capacities are per set of jaws and are not simultaneous



Loading capacity† - P5GQ-000*020

	Static (metric)	Dynamic (Metric)
Maximum tensile T	1394 N	168 N
Maximum compressive C	1845 N	168 N
Maximum moment Mx	68 Nm	6 Nm
Maximum moment My	84 Nm	8 Nm
Maximum moment Mz	56 Nm	8 Nm

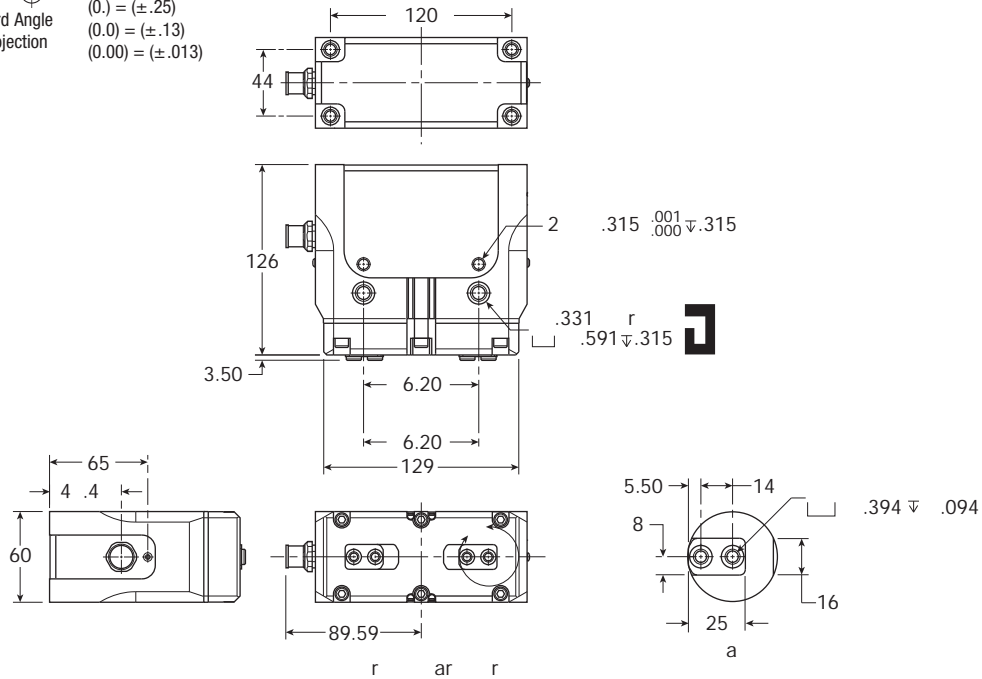
† Capacities are per set of jaws and are not simultaneous



Dimensions: P5GQ Electric Gripper Series - High Force

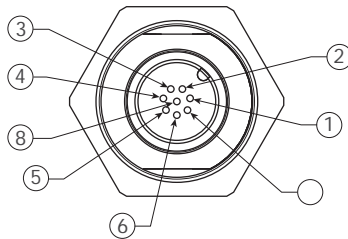
Unless otherwise noted all tolerances are as shown below

Dimensions are symmetrical about centerline
 Third Angle Projection
Metric (mm)
 (0.) = (±.25)
 (0.0) = (±.13)
 (0.00) = (±.013)



P8S-CABL-052: 8 Wire power and signal cable, 5m long, straight M12 connector

P8S-CABL-053: 8 Wire power and signal cable, 5m long, 90 degree M12 connector



Electrical interface: Pin out (Looking into the head of the connector on gripper)

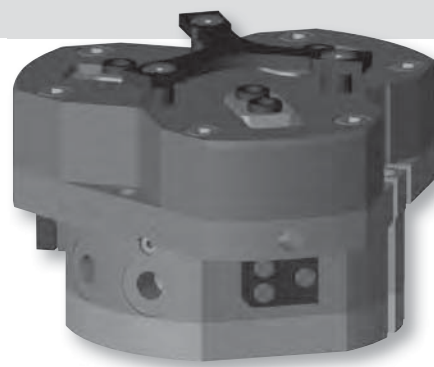
Pin #	Color	Signal	Description	Current
1	White	Force	0-5 VDC (Analog)	5mA
2	Brown	+24V	Motor power	2A (max), 0.4 A (avg)
3	Green	Open	24 VDC active (Inputs)	10mA
4	Yellow	Open sense	NPN / PNP (Outputs)	300mA (max)
5	Gray	Close	24 VDC active (Inputs)	10mA
6	Pink	Close sense	NPN / PNP (Outputs)	300mA (max)
7	Blue	Ground	Motor ground	2A (max)
8	Red	I/O power	24 VDC (PNP outputs only)	300mA (max)

Dimensions in millimeters



P5GW 3-Jaw Centering Series

- Multiple side or top air ports (top ports require o-ring)
- Optional spring assist retains the component should the air supply fail, to assist the gripper for internal (-O) or external (-C) gripping, or in single acting or spring assist mode
- Finger locating sleeves for precise finger mounting
- Jaw components hardened and precision ground steel for minimum jaw play with hard plating for wear resistance and long life
- Standard purge / scavenge port used with vacuum for clean room environments or positive pressure for harsh environments
- Gripper can be mounted from the top or bottom
- Gripper body is shielded to repel chips and other particulate from internal drive mechanism
- Magnetic piston standard



Operating information

Operating pressure:	0.3 to 7 bar (4 to 102 PSIG)
Temperature range:	
Nitrile seals (Standard)	-35° to 80° C (-30° to 180° F)
Fluorocarbon seals (Optional)	-30° to 150° C (-20° to 300° F)
Filtration requirements:	
Air filtration	40 micron or better
Air lubrication	Not necessary*
Air humidity	Low moisture content (dry)

*Addition of lubrication will greatly increase service life

Ordering Information: P5GW 3-Jaw Centering Series

Function	Bore size (mm)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number Fluorocarbon	Part number Nitrile
Double acting magnetic	32	4.0	682	0.04	0.02	0.25	P5GW-032MFG004B	P5GW-032MSG004B
Double acting magnetic	43	6.0	1238	0.04	0.02	0.53	P5GW-043MFG006B	P5GW-043MSG006B
Double acting magnetic	55	8.0	2078	0.04	0.02	1.08	P5GW-055MFG008B	P5GW-055MSG008B
Double acting magnetic	72	10.0	3644	0.06	0.03	1.95	P5GW-072MFG010B	P5GW-072MSG010B
Double acting magnetic	95	13.0	6353	0.06	0.03	3.9	P5GW-095MFG013B	P5GW-095MSG013B
Double acting magnetic	120	16.0	10202	0.08	0.04	7.89	P5GW-120MFG016B	P5GW-120MSG016B
Double acting magnetic	156	25.0	17165	0.10	0.05	15.7	P5GW-156MFG025B	P5GW-156MSG025B
Double acting magnetic	225	35.0	35288	0.10	0.05	43.9	P5GW-225MFG035B	P5GW-225MSG035B

Function	Bore size (mm)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number Spring close
Spring closing magnetic	32	4.0	889	0.04	0.02	0.25	P5GW-032DSG004B
Spring closing magnetic	43	6.0	1490	0.04	0.02	0.53	P5GW-043DSG006B
Spring closing magnetic	55	8.0	2627	0.04	0.02	1.08	P5GW-055DSG008B
Spring closing magnetic	72	10.0	4562	0.06	0.03	1.95	P5GW-072DSG010B
Spring closing magnetic	95	13.0	7877	0.06	0.03	3.9	P5GW-095DSG013B
Spring closing magnetic	120	16.0	13786	0.08	0.04	7.89	P5GW-120DSG016B
Spring closing magnetic	156	25.0	22093	0.10	0.05	15.7	P5GW-156DSG025B
Spring closing magnetic	225	35.0	44354	0.10	0.05	43.9	P5GW-225DSG035B

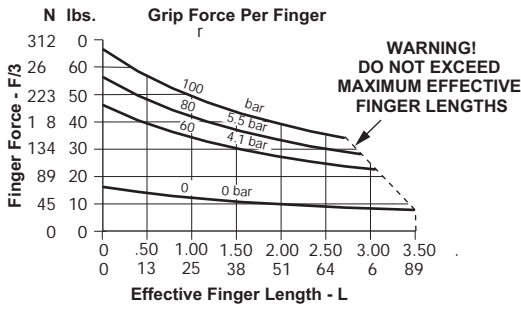
Sensor part numbers: Page 330.

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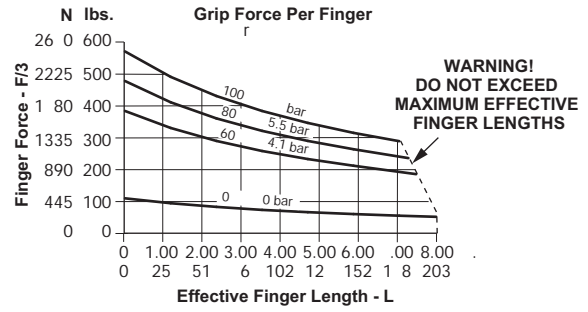
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 Rotary Tables
 Escapements
 Sensors
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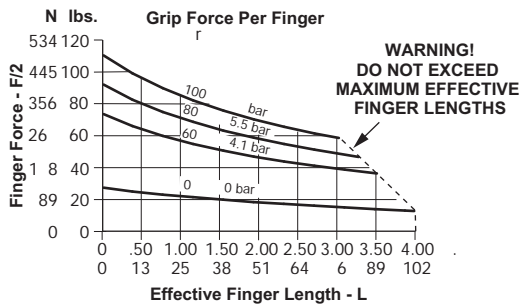
Loading information - P5GW-032



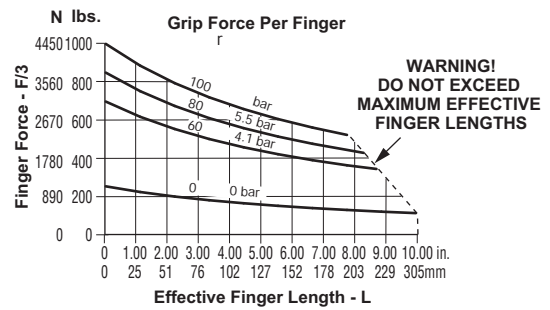
Loading information - P5GW-095



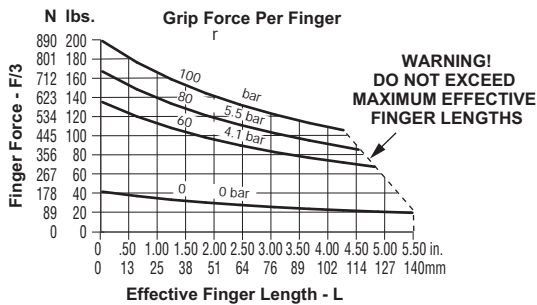
Loading information - P5GW-043



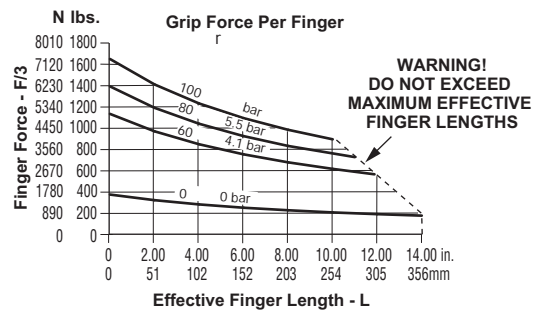
Loading information - P5GW-120



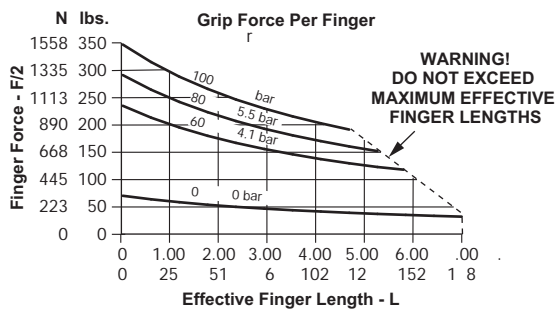
Loading information - P5GW-055



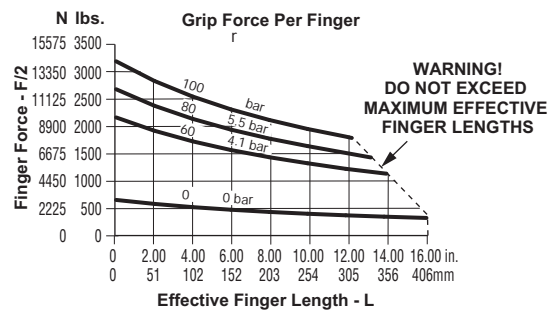
Loading information - P5GW-156



Loading information - P5GW-072



Loading information - P5GW-225



B

Automation Products
 Actuator Products

Grippers

Slide Tables

Rotary Tables

Escapements

Sensors

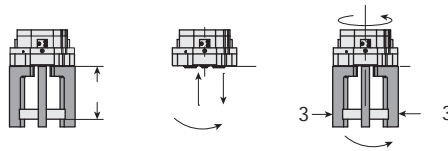
Fittings

Loading capacity† - P5GW 3-Jaw Centering Series

	P5GW-32		P5GW-43		P5GW-55		P5GW-72	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	810 N	89 N	1200 N	129 N	1680 N	302 N	2110 N	425 N
Maximum compressive C	1060 N	89 N	1560 N	129 N	2180 N	302 N	2790 N	425 N
Maximum moment Mx	22 Nm	2 Nm	45 Nm	4 Nm	72 Nm	11 Nm	92 Nm	16 Nm
Maximum moment My	28 Nm	3 Nm	64 Nm	6 Nm	102 Nm	16 Nm	182 Nm	22 Nm
Maximum moment Mz	18 Nm	3 Nm	41 Nm	6 Nm	66 Nm	16 Nm	84 Nm	22 Nm

	P5GW-95		P5GW-120		P5GW-156		P5GW-225	
	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)	Static (metric)	Dynamic (metric)
Maximum tensile T	2990 N	674 N	4320 N	1315 N	5400 N	1763 N	8230 N	2733 N
Maximum compressive C	3980 N	674 N	5810 N	1315 N	7120 N	1763 N	10700 N	2733 N
Maximum moment Mx	127 Nm	25 Nm	172 Nm	45 Nm	215 Nm	60 Nm	455 Nm	131 Nm
Maximum moment My	179 Nm	35 Nm	250 Nm	65 Nm	305 Nm	86 Nm	578 Nm	167 Nm
Maximum moment Mz	117 Nm	35 Nm	164 Nm	65 Nm	208 Nm	86 Nm	362 Nm	167 Nm

† Capacities are per set of jaws and are not simultaneous



B Automation Products Actuator Products

Grippers

Slide Tables

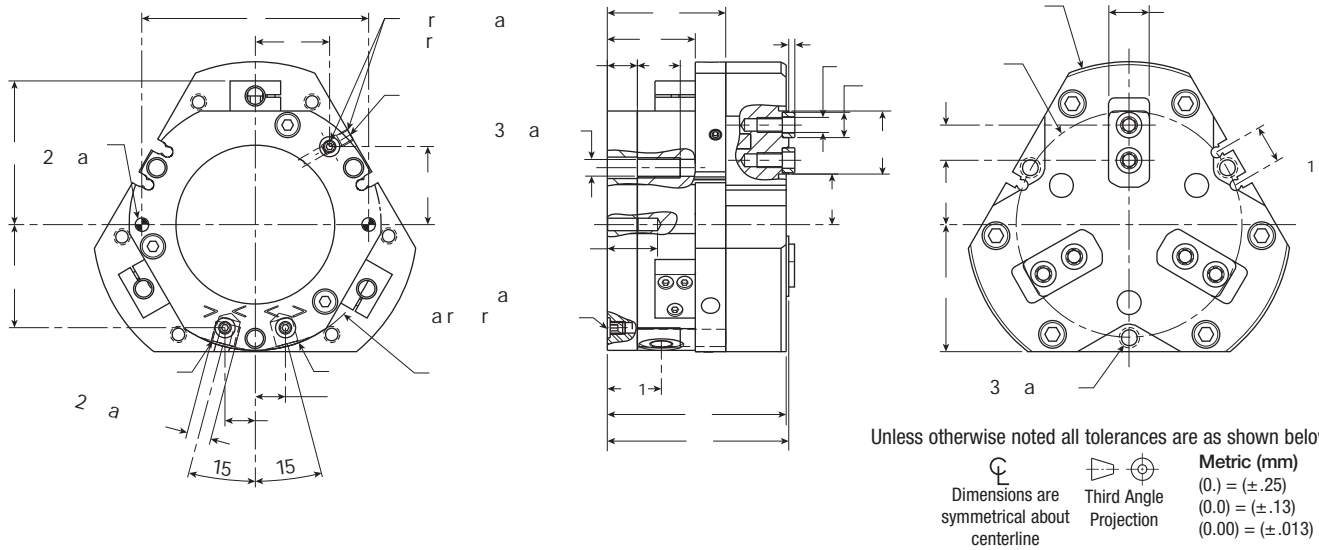
Rotary Tables

Escapements

Sensors

Fittings

Dimensions: P5GW 3-Jaw Centering Series



Part number	A	B	C	D	E	F	G	H	J	K	L	M	N	N ₁	P	Q	R	S
P5GW-032	45.00	13.4	—	19.5	15.8	7.0	51	24.5	18.5	9	6.0	M4	12	11.5	36.5	37.0	1.5	M3 x 5 Dp
P5GW-043	56.00	17.2	37.7	25.0	20.3	9.0	64	32.5	25.5	13	9.0	M6	15	15.5	48.5	49.0	1.5	M4 x 6 Dp
P5GW-055	70.00	23.2	46.7	32.0	23.8	9.0	80	43.5	33.5	17	12.0	M8	20	20.0	63.5	64.0	2.0	M5 x 9 Dp
P5GW-072	90.00	29.5	57.0	41.0	30.9	12.0	100	47.0	35.0	17	12.0	M8	20	21.5	71.0	72.0	2.5	M6 x 10 Dp
P5GW-095	112.00	38.4	71.0	53.0	39.5	15.0	125	57.0	42.0	22	14.0	M10	24	25.0	87.0	88.0	2.5	M6 x 10 Dp
P5GW-120	146.00	49.0	87.0	67.5	50.2	19.0	160	72.0	53.0	22	20.0	M10	30	33.0	109.0	110.0	3.0	M8 x 17 Dp
P5GW-156	184.00	64.3	106.0	87.5	63.7	23.0	200	92.0	70.0	26	24.0	M12	36	43.0	142.0	143.0	4.0	M12 x 17 Dp
P5GW-225	270.00	90.5	150.0	123.0	89.2	32.0	300	125.0	99.0	40	30.0	M20	46	60.0	195.0	196.0	5.0	M16 x 21 Dp

Part number	T	U	V	W	X	Y	Z	Z ₁	AA	BB	CC	DD	EE	FF	GG
P5GW-032	5h7	14.0	8.00	26.0	9.0	12.0	8.0	12.0	M5 x 5 Dp	3h7	M5 x 5 Dp	63	45	3.3	M3 x 4
P5GW-043	6h7	16.0	9.00	32.5	13.0	16.5	10.0	15.0	M5 x 5 Dp	4h7	M5 x 5 Dp	83	56	5.2	M3 x 4
P5GW-055	8h7	20.0	11.00	40.5	16.0	20.5	12.5	15.0	M5 x 5 Dp	5h7	M5 x 5 Dp	104	70	6.8	M4 x 6
P5GW-072	10h7	25.0	14.00	50.5	20.0	25.5	16.0	15.0	M5 x 5 Dp	5h7	M5 x 5 Dp	129	90	6.8	M5 x 6
P5GW-095	10h7	32.0	20.00	63.0	24.5	30.5	20.0	18.0	G1/8 x 8 Dp	6h7	M5 x 5 Dp	162	112	8.5	M5 x 6
P5GW-120	12h7	40.0	25.00	83.5	32.0	39.5	25.0	18.0	G1/8 x 8 Dp	6h7	M5 x 5 Dp	205	146	8.5	M5 x 6
P5GW-156	16h7	43.0	25.00	105.0	42.0	51.0	31.0	21.0	G1/8 x 8 Dp	8h7	G1/8 x 8 Dp	258	184	10.3	M5 x 6
P5GW-225	22h7	58.0	34.00	155.0	57.0	69.0	46.0	29.0	G1/8 x 12 Dp	10h7	G1/8 x 8 Dp	355	260	17.5	M8 x 10

Dimensions in millimeters

B

Automation Products
 Actuator Products

Grippers

Slide Tables

Rotary Tables

Escapements

Sensors

Fittings