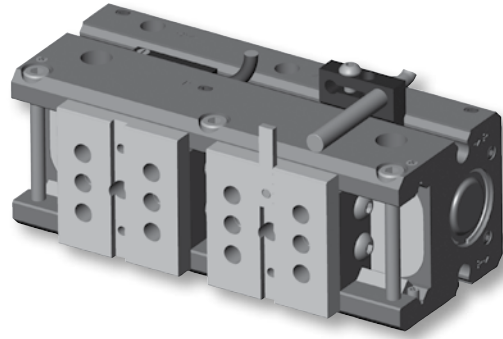


- Excellent parallelism and accuracy between gripper mounting surface and jaw surfaces
- H7 dowel pin holes in body and jaws. Jaws also have key slot for better finger alignment.
- Hardened plated jaws for wear resistance and longer life
- Top manifold air ports eliminates the need for airlines
- “Dual-V” 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

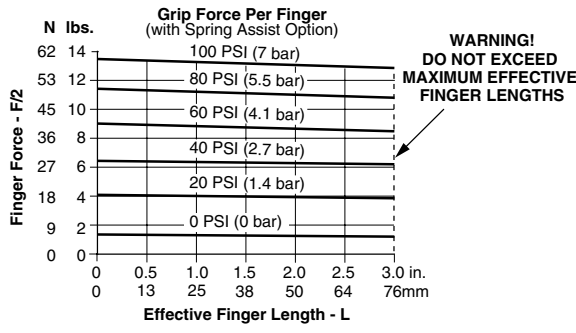
Function	Bore size (mm)	Ports (BSPP)	Stroke (mm)	Grip force @ 7 bar (N)	Accuracy +/- mm	Repeatability +/-mm	Weight (kg)	Part number
Double acting magnetic	10	M3	6.4	120	0.001	0.00005	0.16	P5GR-010MSG006B
Spring closing, magnetic	10	M3	6.4	120	0.001	0.00005	0.16	P5GR-010DSG006B
Double acting magnetic	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 53.

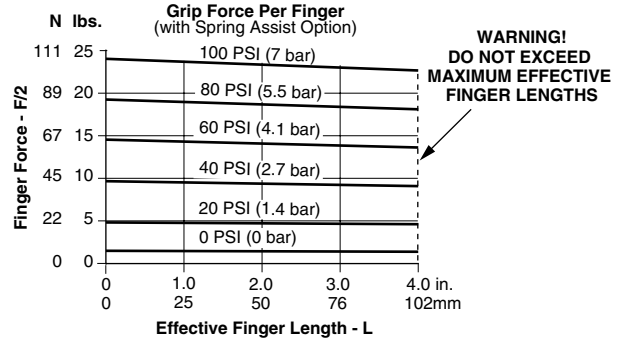
Most popular.



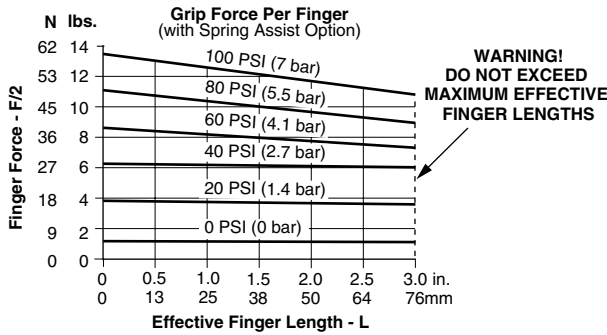
Loading information - P5GR-010***006



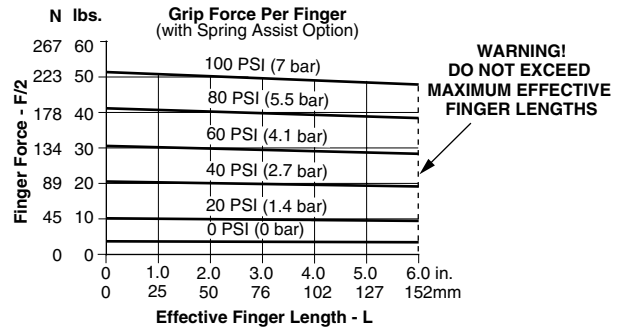
Loading information - P5GR-014***025



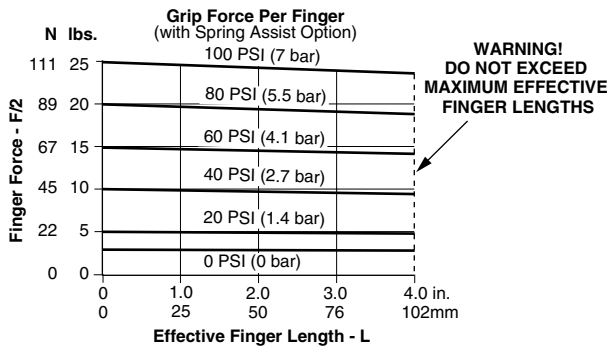
Loading information - P5GR-010***013



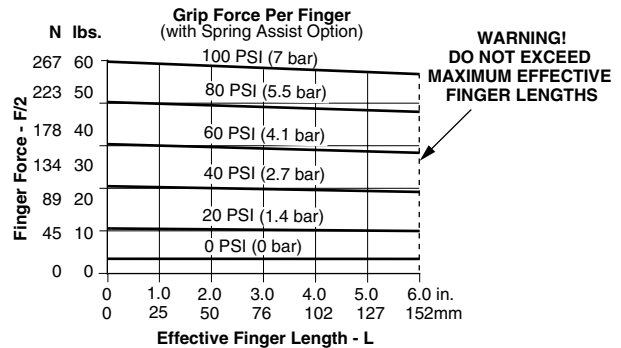
Loading information - P5GR-021***025



Loading information - P5GR-014...016



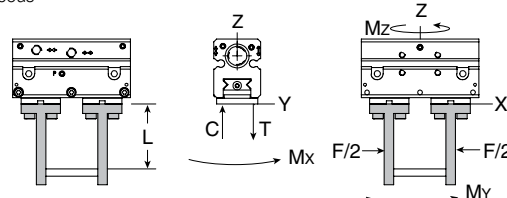
Loading information - P5GR-021***038



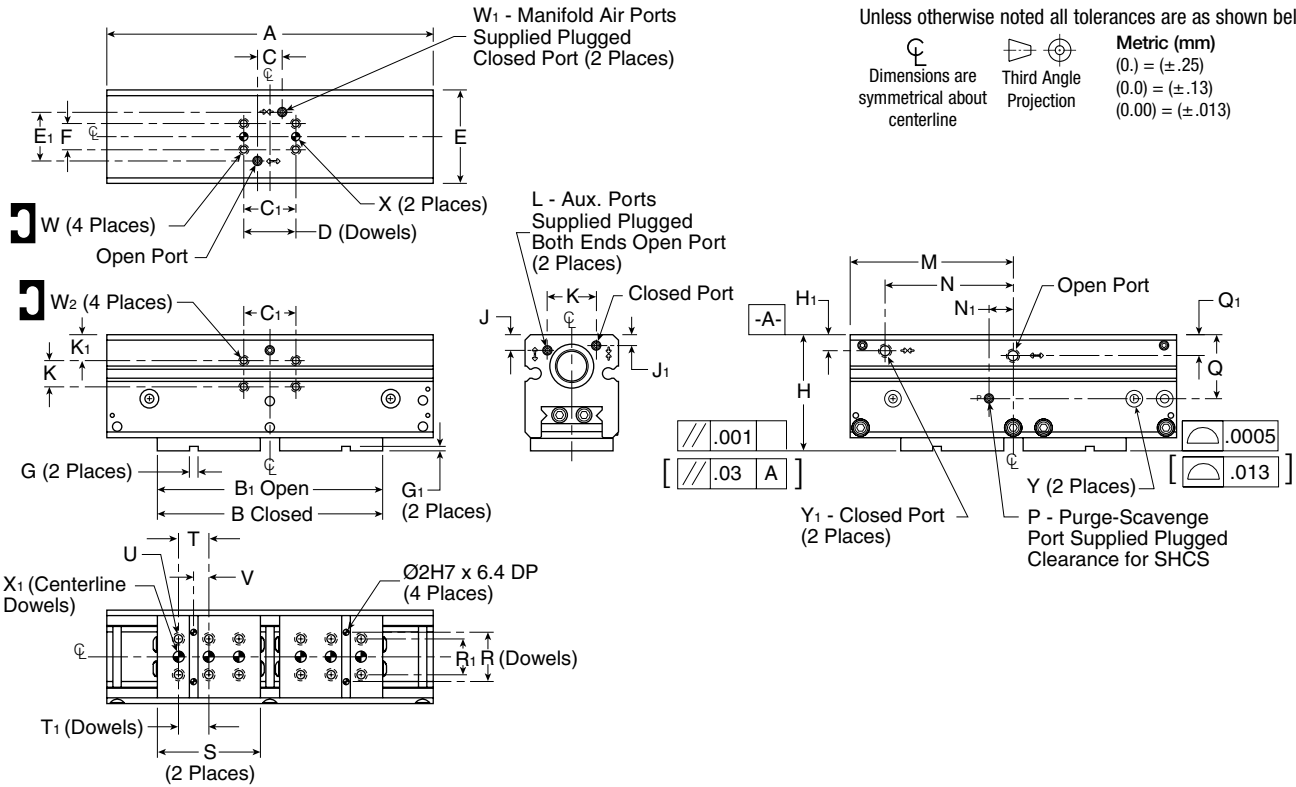
Loading capacity† - P5GR High Precision Series

	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