

CATALOG
grippers

RPG Series
Parallel Grippers



numatics

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Gripper Summary of Operation

RPG-Series Has true parallel motion that is generated by a double acting piston attached to the pinion mechanism with a linkage that is guided in the body for precise centering.

A. Body

Hardcoat Anodized, Teflon impregnated inside & out
High force to weight ratio.

B. Jaws

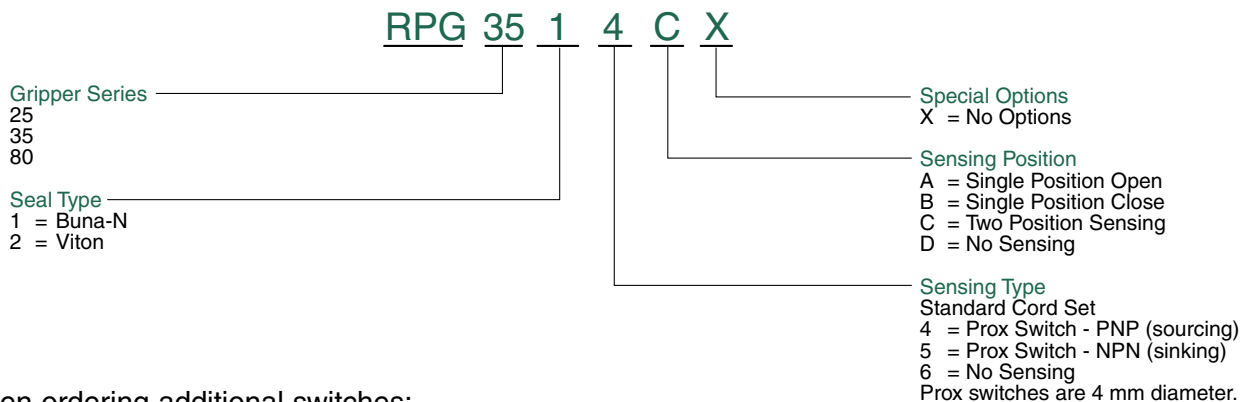
Jaws are aluminum bronze alloy to prevent Jaw breakage. T-Slot style Jaws offers superior load bearing capabilities.

C. Sensing

Proximity switches available for sensing open and Closed positions.



How to Order



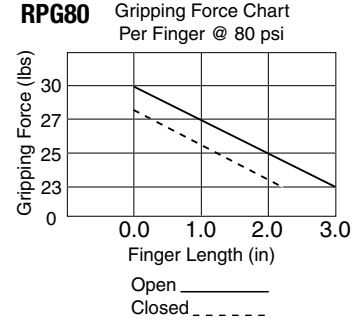
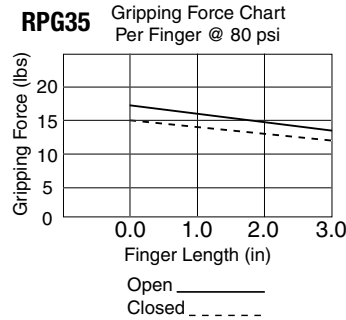
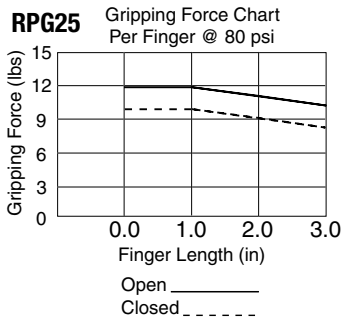
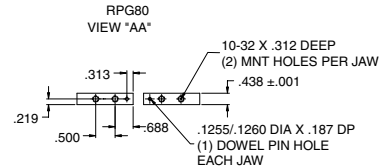
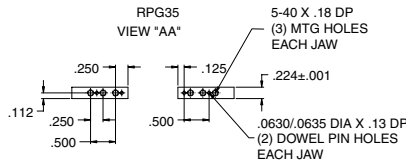
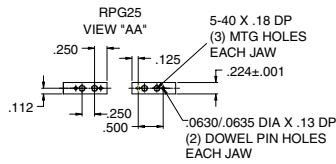
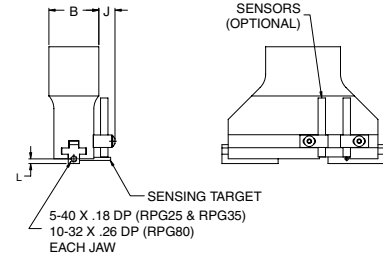
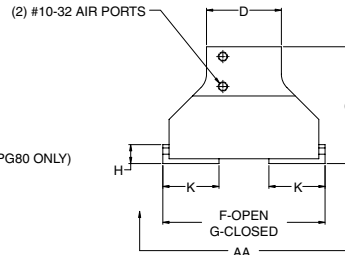
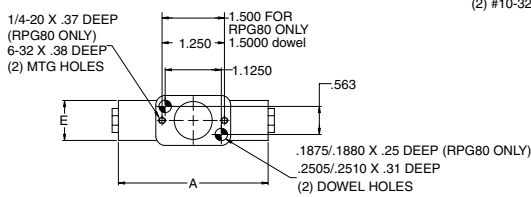
When ordering additional switches:

SWITCH DESCRIPTION	STANDARD PART NO.
Hall Effect-PNP (Sourcing)	PX04PS
Hall Effect-NPN (Sinking)	PX04NS



RPG Series

RPG Series Dimensions and Technical Specifications



RPG Series Dimensions

	RPG25	RPG35	RPG80
A	2.000	2.750	3.000
B	1.000	1.000	1.250
C	1.840	2.340	3.192
D	1.500	1.500	2.000
E	0.800	0.800	1.062
F	2.250	3.250	4.250
G	1.750	2.250	3.125
H	0.400	0.470	0.741
J	0.390	0.390	0.390
K	0.870	1.120	1.563
L	0.094	0.094	0.210

Specifications

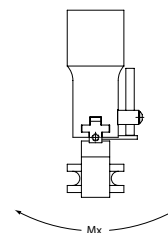
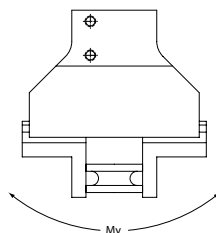
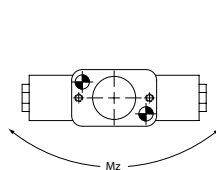
	RPG25	RPG35	RPG80
Grip Force @ 100 psi	25 lbs	36 lbs	80 lbs.
Stroke	0.5	1.0	1.125
Repeatability	+/- .001	+/- .001	+/- .001
Bore Dia.	0.625	.750	1.000
Operating Temp.			
Buna-N	-30° to 180°F	-30° to 180°F	-30° to 180°F
Viton	-20° to 350°F	-20° to 350°F	-20° to 350°F
Max. Actuation Speed	0.12 sec	0.15 sec	.21
Displacement	0.10 cu in	0.22 cu in	.5 cu in
Maximum Pressure	120 psi	120 psi	120 psi
Unit Weight	5 oz	8 oz	1.0 lbs.

Static Condition

LOAD CAPACITY	RPG25	RPG35	RPG80
C-compression	50 lbs.	60 lbs.	100 lbs.
T-tension	50 lbs.	60 lbs.	100 lbs.
Mx	50 in.-lbs.	100 in.-lbs.	200 in.-lbs.
My	60 in.-lbs.	120 in.-lbs.	250 in.-lbs.
Mz	50 in.-lbs.	100 in.-lbs.	200 in.-lbs.

Dynamic Condition

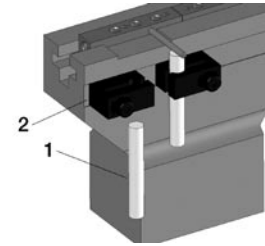
LOAD CAPACITY	RPG25	RPG35	RPG80
C-compression	15 lbs.	20 lbs.	30 lbs
T-tension	15 lbs.	20 lbs.	30 lbs
Mx	12 in.-lbs.	25 in.-lbs.	50 in.-lbs
My	15 in.-lbs.	30 in.-lbs.	60 in.-lbs
Mz	12 in.-lbs.	25 in.-lbs.	50 in.-lbs





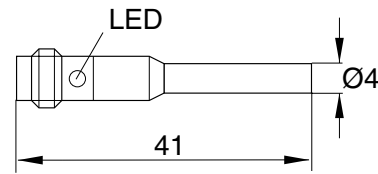
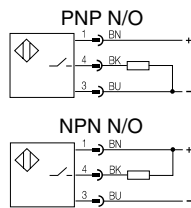
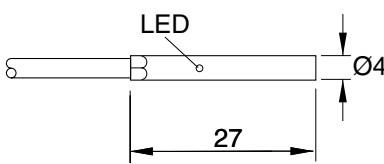
RPG Series Switch Information

SWITCH OR BRACKET DESCRIPTION	STANDARD PART NO.	QUICK DISCONNECT PART NO.
1 Prox Switch PNP	PX04PS	N/A
1 Prox Switch NPN	PX04NS	N/A
2 Switch Bracket	CT-500	CT-500



Prox Switch (NPN NO) Flying Lead - PX04NS
(PNP NO) Flying Lead - PX04PS

Prox Switch (NPN NO), 8 mm connector - PX04NQ
(PNP NO), 8 mm connector - PX04PQ



Sensing Data

Repeat accuracy R		≤5%
Ambient temperature range t_d	(°C)	-25...+70°C
Operating frequency f	(Hz)	1800
Utilization categories	(DC)	13
Function indication		YES

Mechanical Data

Degree of protection per IEC 529	IP 67
Housing material	stainless steel
Material of sensing face	POM
Connection	cable
No. of wires x gauge	3 x 26 AWG

Electrical Data

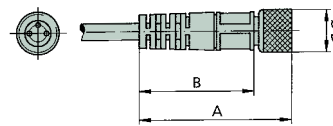
Rated operational voltage U_e	(V)	24 DC
Supply voltage U_B	(V)	10...30 DC
Voltage drop U_d at I_e Stat./dyn.	(V)	≤3.0
Rated insulation voltage U_i	(V)	75 VDC
Load current capacity	(mA)	100
Current consumption	(mA)	≤10 / ≤3
Off-State Current I_r	(uA)	≤80
Protected against polarity reversal		YES
Short circuit protected		YES
Load Capacitance	(uF)	≤1.00

Female Connectors for Reed Switches and Hall Effect Sensors

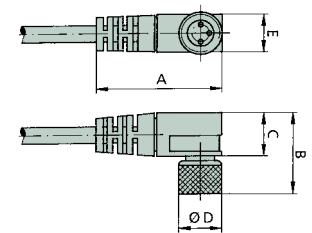
Dimensions (mm)

TYPE	ORDER CODE
Straight, 5 m Cable	PXCST
Elbow, 5 m Calbe	PXC90

Straight Type



Elbow Type



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