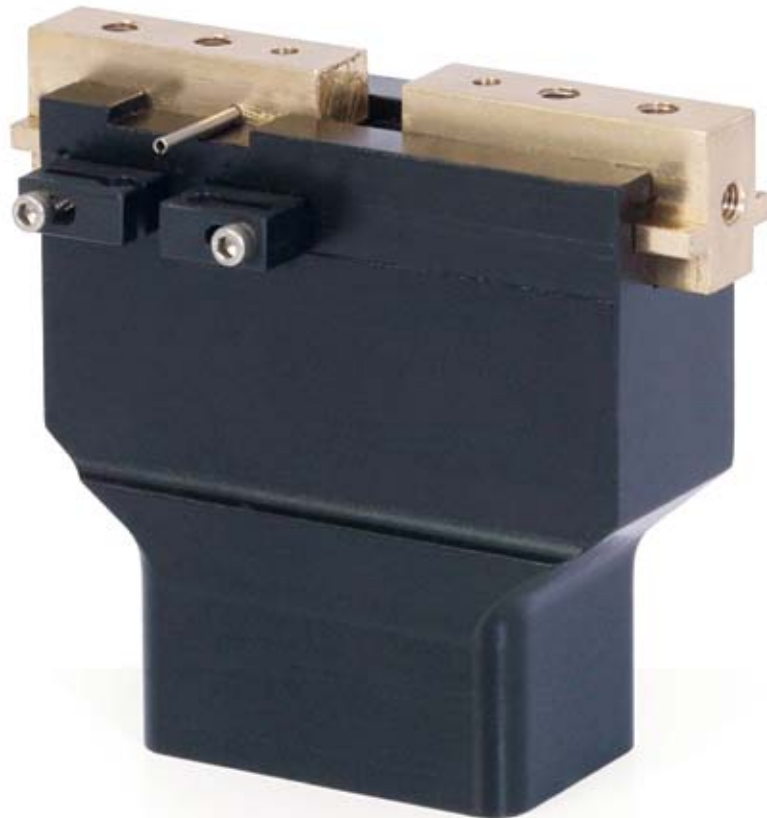


NUMATICS®

RPG Series

Parallel Grippers



www.numatics.com

RPG Series

Features and Benefits	3
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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, PTFE impregnated inside and out. High force to weight ratio.

B. Jaws

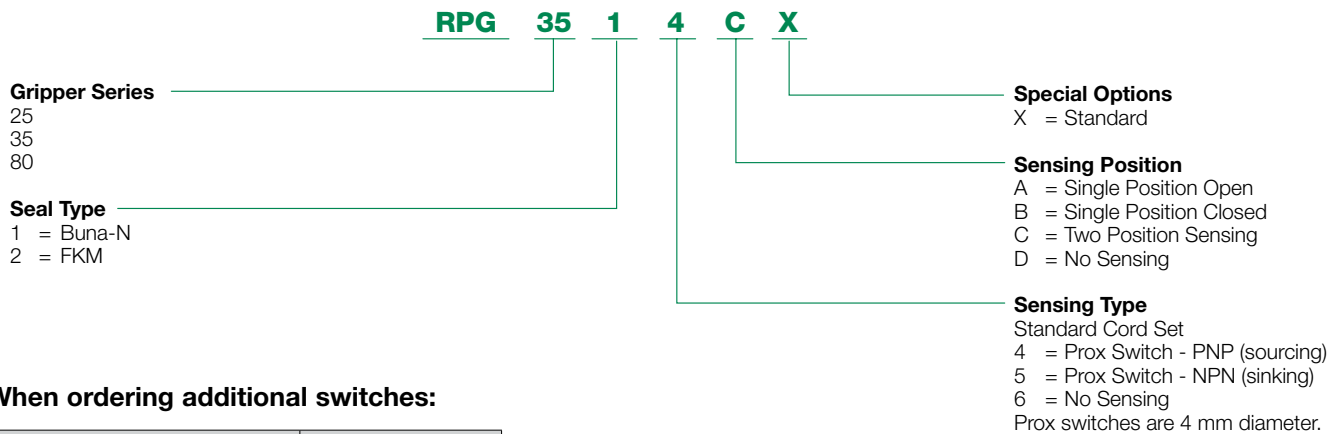
Jaws are aluminum bronze alloy to prevent jaw breakage. T-Slot style jaws offers superior load bearing capabilities.

C. Sensing

Proximity switches available for sensing open and closed positions.



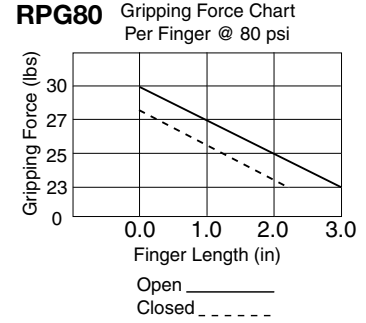
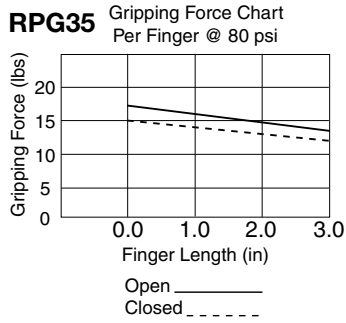
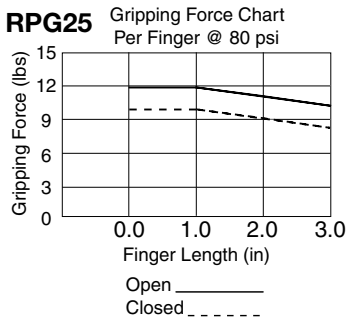
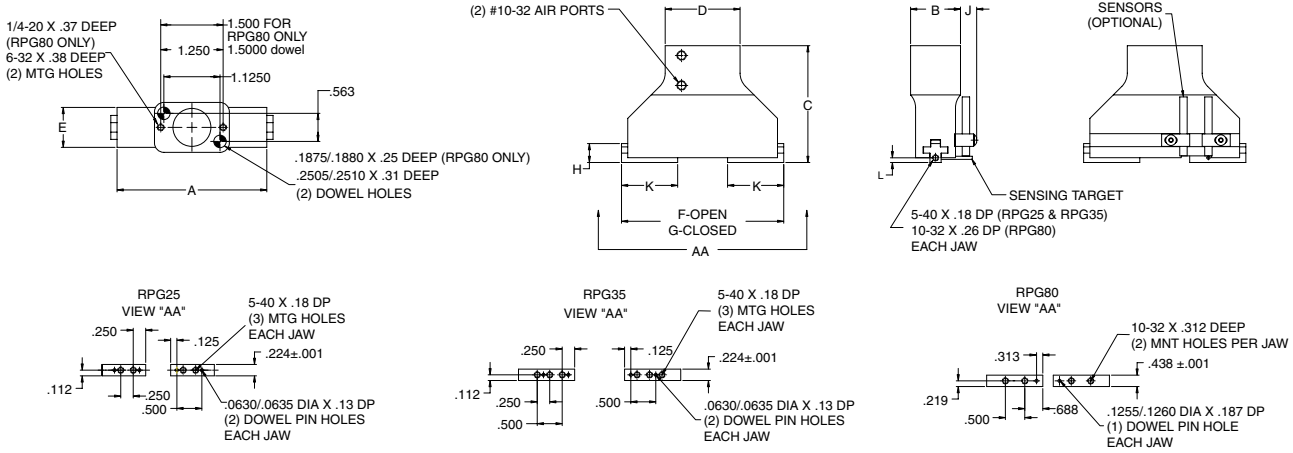
How to Order



When ordering additional switches:

Switch Description	Standard Part No.
Hall Effect - PNP (Sourcing)	PROX-4FL2-P
Hall Effect - NPN (Sinking)	PROX-4FL2-N

RPG Series Dimensions and Technical Specifications



RPG Series Dimensions

Load Capacity	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	0.004	0.210

Specifications

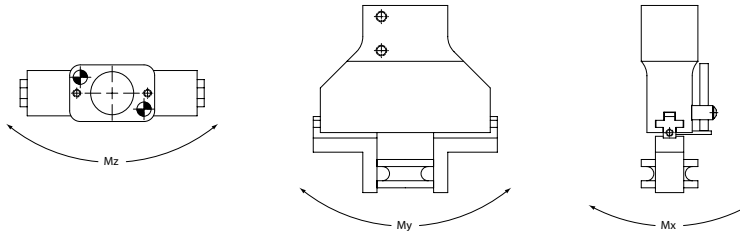
Load Capacity	RPG25	RPG35	RPG80
Grip Force @ 100 psi	25 lbs	36 lbs	80 lbs
Stroke	0.5	1.0	1.125
Repeatability	+/- .001	+/- .001	+/- .001
Bore Dia.	0.625	0.750	1.000
Operating Temp.			
Buna-N	-30° to 180°F	-30° to 180°F	-30° to 180°F
FKM	-20° to 350°F	-20° to 350°F	-20° to 350°F
Max. Actuation Speed	0.12 sec	0.15 sec	0.21 sec
Displacement	0.10 cu in	0.22 cu in	0.5 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.

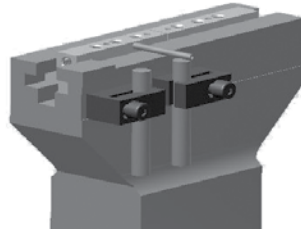
Dynamic Condition

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 Gripper

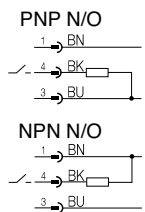
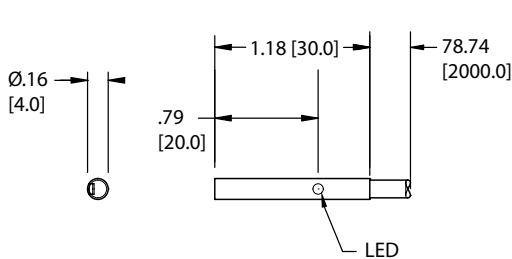
Series	Bracket P/N
RPG	N5103-1018



Sensor Description	Standard Cord Set	Quick Disconnect
Prox PNP	PROX-4FL2-P	PROX-4QDS-P
Prox NPN	PROX-4FL2-N	Not Available

See page 19 for sensor specifications

Prox Switch (NPN NO) Flying Lead - PROX-4FL2-N Prox Switch (PNP NO) Flying Lead - PROX-4FL2-P

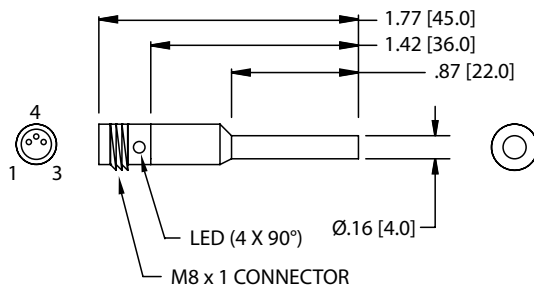


Electrical Design
Output
Operating Voltage
Current Rating
Short Circuit Protection
Overload Protection
Reverse Polarity Protection
Voltage Drop
Current Consumption
Real Sensing Range
Switching Frequency
Ambient Temperature
Protection
Switch-Point Drift
Hysteresis
Operating Distance
Correction Factor

Housing Material
Function Display
Switching Status
Connection

3-Wire DC PNP/NPN
Normally Open
10-36 VDC
100 mA
Yes (Non-Latching)
Yes
Yes
< 2.5V
< 15 mA @ 24V
.8mm ± 10%
> 2000 Hz
-25°C to 70°C
IP 65, III
-10 - 10% OF Sr
1 - 15% OF Sr
0 - .65mm
Mild Steel=1, Stainless Steel=.7,
Brass=.5, Alum.=.4, Copper=.3
Housing; Stainless Steel: POM
Yellow LED
PVC Cable, 2m, 3 x .14mm2

Prox Switch (PNP NO), 8 mm connector - PROX-4QDS-P



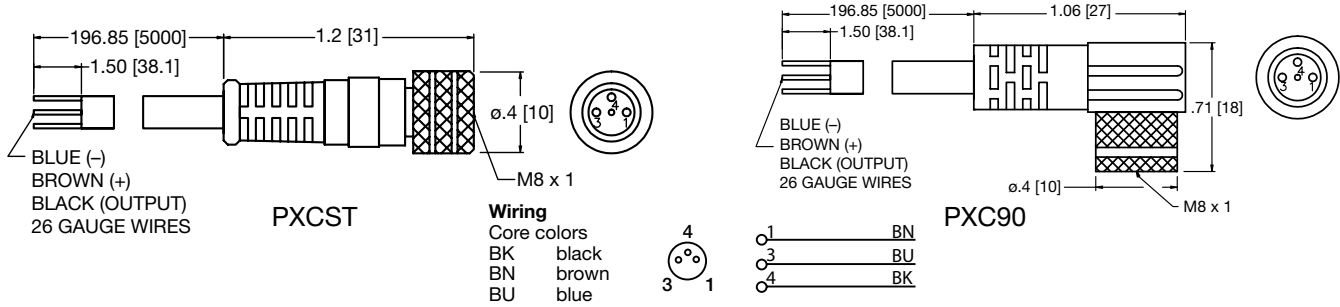
Electrical Design
Output
Operating Voltage
Current Rating
Short Circuit Protection
Overload Protection
Reverse Polarity Protection
Voltage Drop
Current Consumption
Real Sensing Range
Switching Frequency
Ambient Temperature
Protection
Switch-Point Drift
Hysteresis
Operating Distance
Correction Factor

Housing Material
Function Display
Switching Status
Connection
Remarks
Accessories
Agency Approvals

3-Wire DC PNP
Normally Open
10-36 VDC
100 mA
Yes (Non-Latching)
Yes
Yes
< 2.5V
< 15 mA @ 24V
.8mm ± 10%
> 2000 Hz
-25°C to 70°C
IP 65, III
-10 - 10% OF Sr
1 - 15% OF Sr
0 - .65mm
Mild Steel=1, Stainless Steel=.7,
Brass=.5, Alum.=.4, Copper=.3
Housing; Stainless Steel: POM
Red LED (4 x 90°)
M8 Connector
cULus-Class 2 Source Required
Mounting Clamp



Quick Disconnect Cables



Order Code	Type	Operating Voltage	Current Rating	Cable Material	Protection	Connector
PXCST	Straight 5 m Cable (3 x 26 Gauge wire)	60 AC/75 DC	3 A	PUR	IP 68, III	M8
PXC90	90° 5 m Cable (3 x 26 Gauge wire)	60 AC/75 DC	3 A	PUR	IP 68, III	M8

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