

GATTA  
grippers

# GR1400 Series

180° Radial Gripper



numatics®

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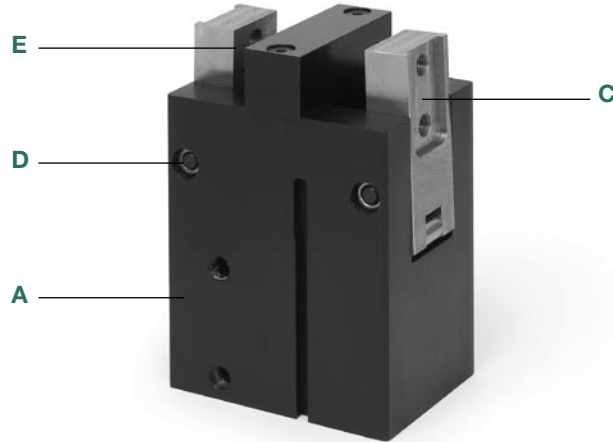
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### GR1400 – 180° Radial Gripper

The GR1400 has a double acting piston attached to a cross bar by a connecting rod. The linear movement of the piston is transformed into radial movement of the jaws through a double toggle link mechanism.

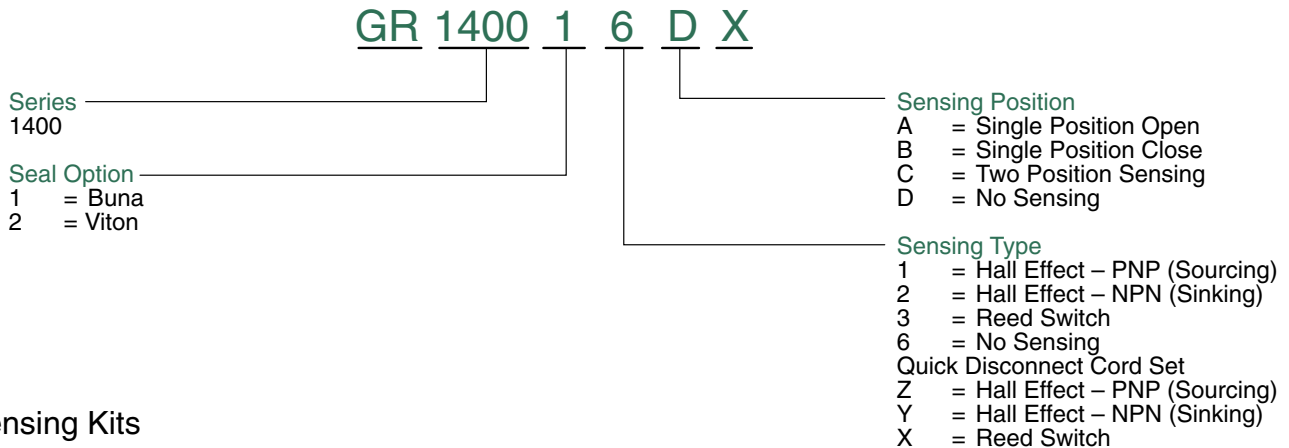
- A.** Body - Hardcoat anodized, T- Slot Sensing track for direct mount of the Numatics Global Switch. Side and top mounting standard. Dowel holes for locating.
- C.** Jaws - Keyway slot for tooling location, 180° Jaw motion
- D.** Pivot Pins - Hardened steel, Needle bearings reduce friction, reduce wear.
- E.** Center Toggle - Aluminum Bronze guided in body for repeatability to center. Bumper for cushion at full open and noise reduction.



### Specifications

GRIP FORCE CLOSE 80 PSI	GRIP FORCE OPEN 80 PSI	SIDE PLAY	WEIGHT	MAXIMUM OPERATING PRESSURE
720 lbs	317 lbs	±0.001	5.62 lbs.	120 psi

### How To Order



### Sensing Kits

SWITCH DESCRIPTION	STANDARD CORD SET PART NO.	QUICK DISCONNECT PART NO.
Hall Effect - PNP Sourcing	HPNPS31	HPNPQ31
Hall Effect - NPN Sinking	HNPNS32	HNPNQ32
Reed Switch	RSS02	RSQ02
90° 5 Meter Cable	N/A	PXC90
Straight 5 Meter Cable	N/A	PXCST

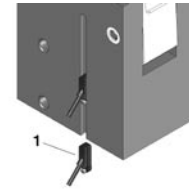


# GR1400 180° Radial Gripper

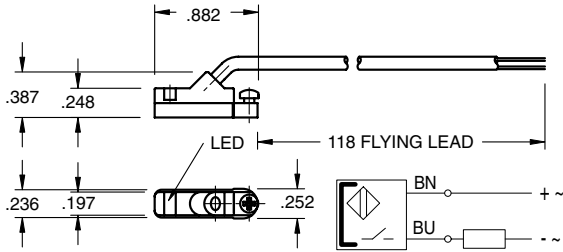


## GR1400 Series Switch Information

SWITCH OR BRACKET DESCRIPTION	STANDARD PART NO.	QUICK DISCONNECT PART NO.
1 Hall Effect - NPN (Sinking)	HNPNS32	HNPNQ32
1 Reed Switch	RSS02	RSQ02



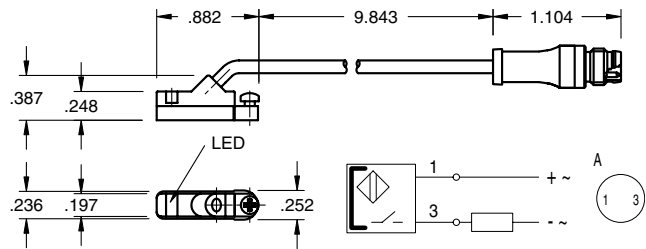
### RSS02 – Reed Switch (AC/DC NO), flying lead



<b>Sensing Data</b>		
Ambient temperature range $T_a$	(°F/°C)	-4 to 176 (-20 to 80)
Frequency of operating cycles $f$ at $U_e$	(kHz)	0.5
Turn on time $t$	(ms)	$\leq 0.25$
Turn off time $t$	(ms)	0.03
LED function indication		yes

<b>Electrical Data</b>		
Rated operational voltage $U_e$	(V)	3...130 AC/DC
Supply voltage $U_B$	(V)	3...130 AC/DC
Voltage drop $U_d$ at $I_e$ Stat./dyn.	(V)	3.5
Rated insulation voltage $U_i$	(V)	2750 DC (EN 60335-1)
Rated supply frequency	(Hz)	AC/DC
Rated operational current $I_e$	(mA)	50 (10W max.)
No-load supply current $I_o$ at $U_e$ d./und.	(mA)	0
Observe polarity for correct LED function		

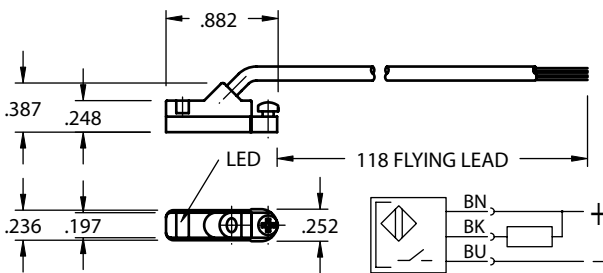
### RSQ02 – 8mm connector



<b>Mechanical Data</b>		
Housing material		Polyamide
Material of sensing face		Polyamide
Connection		PVC cable
Degree of Protection	IP	67
Rated shock: half-sinus, 50g, 11 ms		
Rated vibration environment: 10g, 10...2000 Hz, 90 min		



### HNPNS32 – Electronic Switch (NPN NO), flying lead

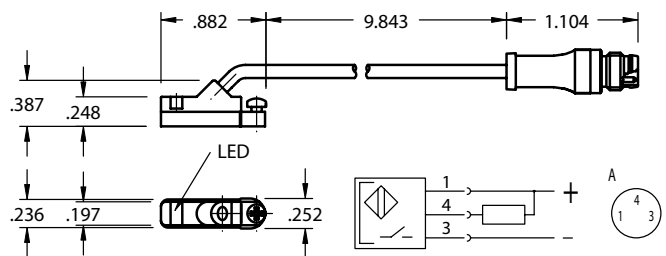


<b>Sensing Data</b>		
Ambient temperature range $t_d$	(°F/°C)	-13 to +158 (-25 to +70)
Temperature drift	(% of $S_T$ )	$\leq 0.3\%/^{\circ}C$
Frequency of operating cycles $f$ at $U_e$	(kHz)	10
Turn on time $t$	(ms)	.05
Turn off time $t$	(ms)	.05
Utilization categories		DC13
Function~/supply voltage indication		YES

<b>Electrical Data</b>		
Rated operational voltage $U_e$	(V)	24 DC
Supply voltage $U_B$	(V)	10...30 DC
incl. ripple	(% of $U_e$ )	15
Voltage drop $U_d$ at $I_e$ Stat./dyn.	(V)	1/-
Rated insulation voltage $U_i$	(V)	75 AC
Rated supply frequency	(Hz)	DC
Rated operational current $I_e$	(mA)	200
No-load supply current $I_o$ at $U_e$ d./und.	(mA)	25/13
Protected against polarity reversal		YES



### HNPNQ32 – 8mm connector



<b>Mechanical Data</b>		
Housing material		Polyamide
Material of sensing face		Polyamide
Connection		PVC cable
Degree of Protection	IP	67
Rated shock: half-sinus, 30 g, 11 ms		
Rated vibration environment: 55 Hz, 1mm amplitude, 3 x 30		

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