150 Series 1/2" Recessed Switch Sets



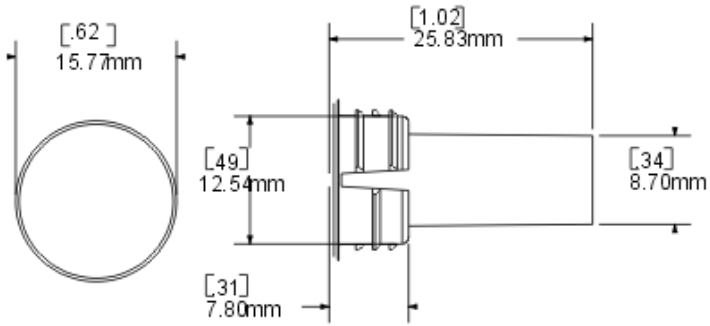
150-12



150-T

- Designed for Hollow Core Doors & Windows
- Hole Size Allows for Extra Wire, etc.
- Up to One Inch Standard Gap
- Installs Firmly in Wood, Vinyl and Aluminum
- Recessed Magnetic Contact
- Press or Snap Fit
- 12" #22AWG Leads
- Longer Leads, Zip Cord or Jacketed Cable Upon Request
- Hermetically Sealed
- Plated Contacts Resist Sticking or Freezing
- Built-in E.O.L. Resistors and Diodes Upon Request
- Switches and Magnets Available Separately
- Colors: White or Brown
- Lifetime Warranty

Larger than 3/8" but smaller than 3/4", G.R.I introduces their newest innovative switch design, the one-half inch diameter, flush mount, 150-12. This new design is in response to requests from our customers for a switch that would give them additional "working room" for extra wire, E.O.L. resistors, etc., yet would more readily install in the increasingly popular hollow core windows.



150-12

RECESSED 1/2" SWITCH SET

150 SERIES

- ◆ Designed For Hollow Core Doors & Windows
- ◆ Hole Size Allows For Extra Wire, etc.
- ◆ Up To One Inch Standard Gap
- ◆ Installs Firmly In Wood, Vinyl And Aluminum
- ◆ Recessed Magnetic Contact ◆ Press or Snap Fit ◆ 12" #22AWG Leads
- ◆ Longer Leads, Zip Cord or Jacketed Cable Upon Request
- ◆ Hermetically Sealed ◆ Plated Contacts Resist Sticking or Freezing
- ◆ Built-in E.O.L. Resistors and Diodes Upon Request
- ◆ Supervisory Loops Upon Request
- ◆ Switches and Magnets Available Separately
- ◆ Color: White & Brown ◆ Lifetime Warranty



150-12



150-T

PART NUMBERS	Closed Loop	Open Loop	SPDT	DPDT
Standard Gap Up To 1"	150-12	160-12	170-12	175-12
Standard Gap Up To 1"	150-T			
Wide Gap Up To 1 1/4"	150-12WG	160-12WG	170-12WG	
Wide Gap Up To 1 1/4"	150-TWG			
Standard Gap 5/8"+	150MF-12	160MF-12	170MF-12	
Wide Gap 1"+	150MF-12WG	160MF-12WG	170MF-12WG	

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G.R.I. PLAZA
KIMBALL, NE 69145

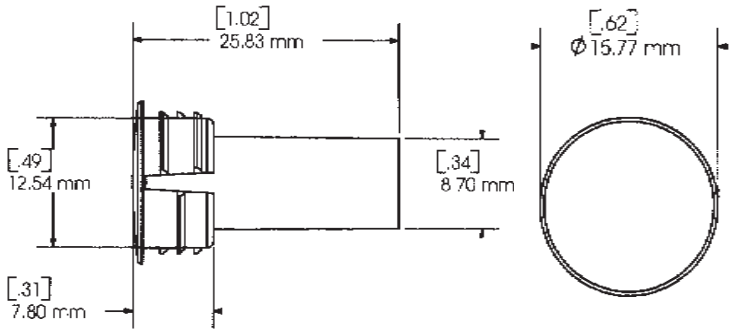
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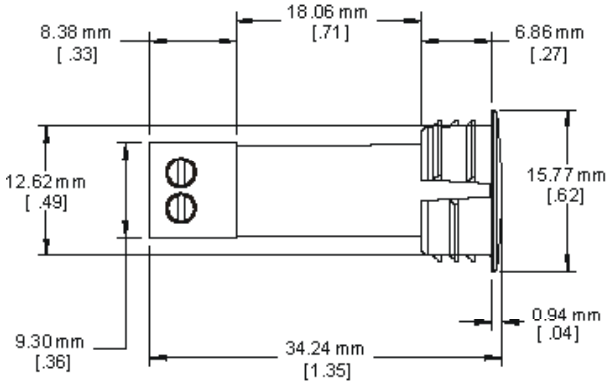
RECESSED 1/2" SWITCH SET

Larger than 3/8" but smaller than 3/4", G.R.I. introduces their newest innovative switch design, the one-half inch diameter, flush mount, 150-12. This new design is in response to requests from our customers for a switch that would give them additional "working room" for extra wire, E.O.L. resistors, etc., yet would more readily install in the increasingly popular hollow core windows. The G.R.I. 150-12 is a 1/2" diameter contact, manufactured from a special polyvinyl material with a unique collar design that will "press-fit" into wooden or vinyl clad windows with a "snap-in" fit for hollow core vinyl or aluminum windows.

The G.R.I. 150-12 is paired with a matching 1/2" magnet case to offer the installer up to a 1" gap. The 150 switch can also be paired with any of the wide selection of G.R.I. magnets to help resolve difficult installation applications, such as our MF-875. Patent Pending.



150-12



150-T

GRI products meet or exceed these minimum general specifications:

PART NUMBER	LOOP TYPE	SWITCH ELECTRICAL CONFIG.	REED FORM	MAXIMUM INITIAL CONTACT RESISTANCE (Ω)	MAXIMUM CONTACT RATING (W)	MAXIMUM SWITCHING VOLTAGE (VDC)	MAXIMUM SWITCHING CURRENT (A)
150-12	CLOSED	N/O	A	.150	10	200	.500
150-T	CLOSED	N/O	A	.150	10	200	.500
150-12WG	CLOSED	N/O	A	.150	10	200	.400
150-TWG	CLOSED	N/O	A	.150	10	200	.400
150MF-12	CLOSED	N/O	A	.150	10	200	.500
150MF-12WG	CLOSED	N/O	A	.150	10	200	.400
160-12	OPEN	N/C	B	.140	5	175VDC	.250
160-12WG	OPEN	N/C	B	.140	5	175VDC	.250
160MF-12	OPEN	N/C	B	.140	5	175VDC	.250
160MF-12WG	OPEN	N/C	B	.140	5	175VDC	.250
170-12	OPEN/CLOSED	SPDT	C	.140	5	175VDC	.250
170-12WG	OPEN/CLOSED	SPDT	C	.140	5	175VDC	.250
170MF-12	OPEN/CLOSED	SPDT	C	.140	5	175VDC	.250
170MF-12WG	OPEN/CLOSED	SPDT	C	.140	5	175VDC	.250
175-12	OPEN/CLOSED	DPDT	CX2	.140	5	175VDC	.250

WARRANTY:
Lifetime warranty against workmanship, material and factory defects

Contact your GRI Distributor or call:

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MADE IN U.S.A.

BA-159 Rev L 10/08/2013

N Series Switch Sets

- Rare Earth Magnets Paired With Press To Fit Contacts
- Solves Problem Installs ◆ Time Saving Installations
- Nickel Plated To Protect From Chipping And Corrosion
- Use MM-600 With A Standard Gap Switch To Attain Wide Gap



N2120-12



N2020-TWG



N20RS-12

G.R.I.'s "Mighty Mag" contacts will assist in resolving the installer's problem of drilling into the new thinner vinyl windows. These rare earth magnets are less than 1/8" high and install fast and easily without worry about damage to the window itself. (Please see the Mighty Mag page in the accessories section of G.R.I.'s full line catalog for dimensions).

G.R.I.'s Mighty Magnets make use of a rare earth alloy which allows the size of the magnet to be significantly reduced while still retaining or improving the gap involved. These rare earth magnets can be mounted with the stainless steel mounting screws provided (MM-400 and MM-600) and/or double stick tape included in the bag, or may be glued into place.

Note: G.R.I. suggests using a silicone or clear nail polish sealant on the surface of installed rare earth magnets to prevent corrosion.

PART NUMBERS:

N120T-12	N2020-TWG	N2120-12WG	N50RF-12WG
N120T-12WG	N20RS-12	N4473	N50RS-12
N150-12	N20RS-12WG	N4473WG	N50RS-12WG
N150-12WG	N20RS-T	N50R-12	N5065
N2020-12	N20RS-TWG	N50R-12WG	
N2020-12WG	N2120-12	N50RF-12	
N2020-T			

Other possible combinations including Open Loop and S.P.D.T. available or as Switch Only and Magnet Only.

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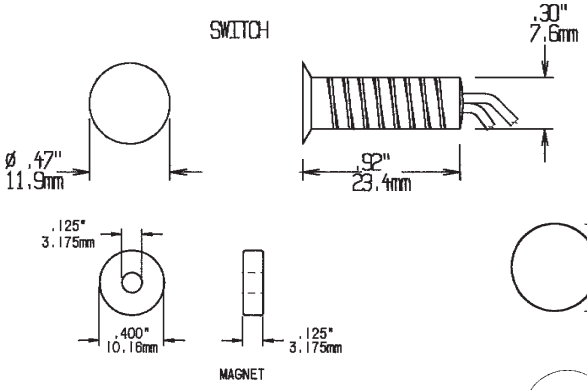
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Switches With Rare Earth Magnets

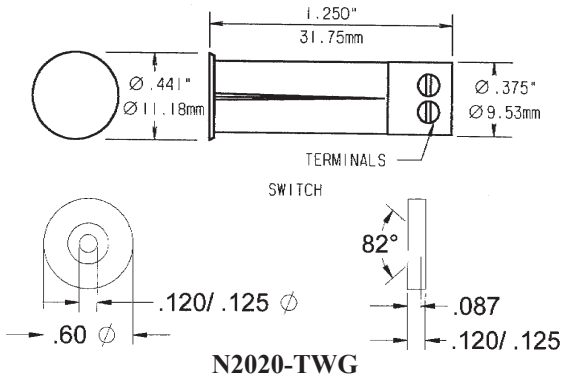
Pair Switch with Magnet to get the following gaps:

Switch	Description	MM-25 MMR-25	MM-375	MM-10	MM-400	MM-600	MMF-875
S120T-12	3/4" Press Fit/Leads	3/8"+	1"+	Up to 1"	Up to 3/4"	1"+	3/4"+
S150-12	1/2" Press Fit/Leads	1/2"+	1 1/2"+	Up to 1"	3/4"+	1 1/2"+	1"+
S2020-12	3/8" Press Fit/Leads	Up to 1/2"	1"+	Up to 1"	1"+	1"+	1"
S2020-T	3/8" Press Fit/Terminals	3/8"+	1"+	Up to 1"	Up to 3/4"	1"+	1/2"+
S20RS-12	3/8" Short Press Fit/Leads	Up to 3/8"	1"+	3/4"+	Up to 3/4"	Up to 1"	3/4"
S20RS-T	3/8" Short Press Fit/Terminals	3/8"+	1"+	3/4"+	Up to 3/4"	Up to 1"	3/4"
S2120-12	3/8" Ribbed Press Fit/Leads	5/8"+	1"+	Up to 1"	Up to 3/4"	1"+	3/4"+
S4473	3/4" Press Fit/Terminals	Up to 1/2"	1 1/4"+	Up to 1"	Up to 3/4"	1"+	3/4"+
S50R-12	1/4" Press Fit/Leads	Up to 1/2"	Up to 1 1/2"	1"+	3/4"+	Up to 1 1/4"	3/4"+
S50RF-12	1/4" Press Fit/Flanged/Leads	Up to 1/2"	Up to 1 1/2"	1"+	Up to 3/4"	Up to 1 1/4"	1"
S50RS-12	1/4" Short Press Fit/Leads	Up to 3/8"	1"+	3/4"+	Up to 1/2"	Up to 1 1/4"	3/4"
S5065	3/8" Press Fit/Leads	1/2"+	1"+	1"+	Up to 1"	Up to 1 1/4"	1/2"+

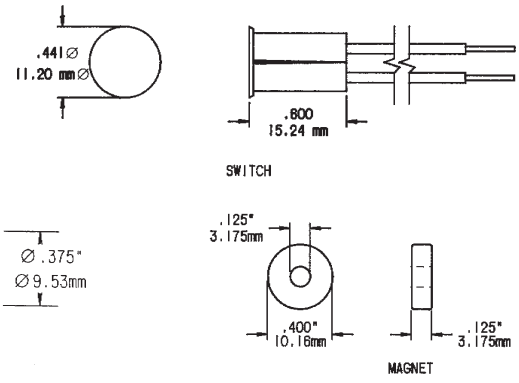
Magnet orientation will affect operation of switch. Please confirm operation prior to installation.



N2120-12



N2020-TWG



N20RS-12

WARRANTY:
Lifetime warranty against workmanship, material and factory defects.

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BA-162 Rev F 10/04/2013