



Rotary - Standard

Rotaries are a common point level indicator used for high-, mid- and low-level material detection in bins, tanks, and silos. Rotaries are wired to a horn, alarm or light panel to send an alert when material reaches the desired level. BinMaster's standard and fail-safe rotaries can be fit with a wide assortment of paddles and mounting plates, plus a compact mini-rotary is offered for constrained spaces. Extended rotaries for top mounting applications for high level detection, extensions for side mounting through thick bin walls, and stainless steel process connections for corrosive material ensure BinMaster has the right rotary for challenging applications.

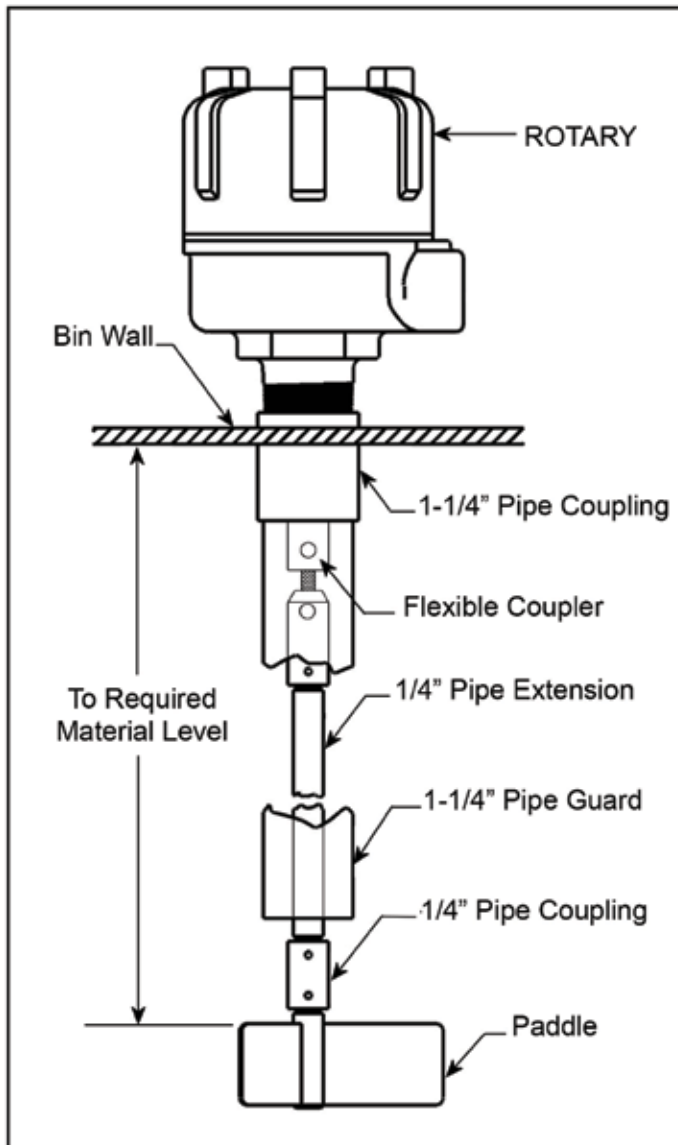
Description	Part No.
BMRX POWER PACS	
BMRX - 115 VAC - Rotary level indicator power pac featuring a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, selectable fail-safe protection, FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	Standard: 730-0504 ATEX: 730-0504-EX Process Connection: 730-0569
BMRX - 230 VAC - Rotary level indicator power pac featuring a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, selectable fail-safe protection, FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	Standard: 730-0503 ATEX: 730-0503-EX Process Connection: 730-0570
BMRX - 24 VAC - Rotary level indicator 24 VAC with dual conduit entries, DPDT relay contacts, selectable fail-safe protection, and FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	Standard: 730-0505 ATEX: 730-0505-EX Process Connection: 730-0571
BMRX - 24 VDC - Rotary level indicator 12 to 24 VDC with dual conduit entries, DPDT relay contacts, selectable fail-safe protection, and FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	Standard: 730-0661 ATEX: 730-0661-EX Process Connection: 730-0664
MAXIMA+ POWER PACS	
MAXIMA+ 24/115/230 VAC - Fail-safe rotary level indicator power pac with hazardous location approval, C/US listed for Class II, Groups E, F, & G and a visual LED status light monitoring paddle rotation, paddle covered, and fault conditions. Features a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, fail-safe protection, SPDT normal and fault relay contact and FDA recognized powder coat finish.	Standard: 730-0528 ATEX: 730-0528-EX Process Connection: 730-0574
MAXIMA+ 12-24VDC - Fail-safe rotary level indicator power pac with hazardous location approval, C/US listed for Class II, Groups E, F, & G and a visual LED status light monitoring paddle rotation, paddle covered, and fault conditions. Features a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, fail-safe protection, SPDT normal and fault relay contact and FDA recognized powder coat finish.	Standard: 730-0662 ATEX: 730-0662-EX Process Connection: 730-0665
FITTINGS	
GRPC-1 - 1-1/4" stainless steel process connection fitting & o-ring for 1" coupled pipe guards	416-0507
GRPC-2 - 1-1/2" stainless steel process connection fitting & o-ring for 1" coupled pipe guards	416-0508
GRPC-3 - 1-1/4" Aluminum process connection fitting & o-ring for 1" coupled pipe guards	416-0505
GRPC-4 - 1-1/2" Aluminum process connection fitting & o-ring for 1" coupled pipe guards	416-0506
SSPC-1 - 1-1/4" NPT stainless steel process connection with bearing and seal	416-0547
SSPC-2 - 1-1/2" NPT stainless steel process connection with bearing and seal	416-0548
SSPC-3 - 1-1/4" NPT stainless steel process connection with bearing and seal, includes teflon bearing and grease packed bearings to provide additional corrosion resistance	416-0736

Description	Part No.
COUPLINGS	
GRSS-1 - Solid shaft, stainless steel side mount coupler	299-0004
GRFC-1 - Flexible stainless steel top mount coupler	416-0155
GRFS-1 - Molded neoprene, flexible shaft, stainless steel top mount coupler	416-0283
BSA - Bindicator stainless steel shaft adapter, to couple BinMaster rotary PowerPac to a Bindicator shaft coupler or Bindicator Paddle.	416-0294
MOUNTING PLATES	
GRMP-1 - 0° Mild carbon steel half coupling 1.25" with black neoprene gasket	730-0020
GRMP-2 - GRMP-2 - 0° Mild carbon steel full coupling 1.25", powder coated with black neoprene gasket	730-0022
GRMP-3 - 0° stainless steel half coupling 1.25" mounting plate with black neoprene gasket	730-0021
GRMP-4 - 0° stainless steel full coupling 1.25" with black neoprene gasket	730-0023
GRMP-9 - 10° Mild carbon steel full coupling 1.25", powder coated with black neoprene gasket	730-0489
GRMP-13 - 30° Mild carbon steel full coupling 1.25", powder coated with black neoprene gasket	730-0508
GRMP-14 - 0° Mild carbon steel half coupling 1.25" with white silicone gasket	730-0567
GRMP-15 - 0° stainless steel full coupling 1.25" with white silicone gasket	730-0568
GRMP-16 - 20° Mild carbon steel full coupling 1.25", powder coated with black neoprene gasket	730-0663
PADDLES	
GRP-1 - Triple-bladed, stainless steel paddle for light weight materials, paddle turns in a 7" diameter, blades are 2" wide	416-0161
GRP-2 - Triple-bladed, stainless steel paddle for average weight materials, paddle turns in a 5" diameter, blades are 1-1/2" wide	416-0152
GRP-3 - Single-blade, stainless steel paddle for average to heavy weight materials, paddle is 2-1/2" long and turns in a 5" diameter, insertable paddle blade is 1/8" thick and 1" wide	416-0153
GRP-11 - High strength nylon paddle for lightweight materials, triple-bladed paddle turns in a 7" diameter, blades are 2" wide	299-0009
GRP-12 - High strength nylon paddle for average weight materials, triple-bladed paddle turns in a 5" diameter, blades are 1.5" wide	299-0010
GRP-22 - Triple-bladed, stainless steel paddle for average to heavy weight materials, turns in a 5" diameter, paddle blades are 1/8" thick and 1" wide	416-0160
GRP-23 - Single bayonet blade, stainless steel paddle for high level control in light and medium materials and low level control in light materials, insertable paddle blade is 1/8" thick and 1" wide	416-0154
GRP-24 - 12" Belt paddle for high level control in heavy materials with large particle size	416-0259
GRP-25 - Triple-bladed, stainless steel paddle for very light materials, paddle turns in a 5" diameter, blades are 5" tall and 1/16" thick	416-0261
GRP-26 - Triple-bladed, stainless steel paddle for light weight materials, paddle turns in a 7" diameter, blades are 2" wide, direct connect paddle that eliminates the need for GRSS-1 coupler	416-0265
GRP-27 - Single bayonet blade, stainless steel paddle for high level control in light and medium materials and low level control in light materials, insertable paddle blade is 1/8" thick and 1" wide, direct connect paddle that eliminates the need for GRSS-1 coupler	416-0266
GRP-28 - Triple-bladed, stainless steel paddle for extremely light materials, paddle turns in a 7" diameter, blades are 5" tall and 1/16" thick	416-0336
GRP-29 - Triple-bladed, stainless steel paddle for very light materials, paddle turns in a 5" diameter, blades are 5" tall and 1/16" thick, direct connect paddle that eliminates the need for GRSS-1 coupler	416-0430
GRP-30 - Triple-bladed, stainless steel paddle for average weight materials, paddle turns in a 5" diameter, blades are 1-1/2" wide, direct connect paddle that eliminates the need for GRSS-1 coupler	416-0100
GRP-31 - Single-bladed, stainless steel paddle for medium to heavy materials, paddle turns in a 6.5" diameter, blade is 3.25" long, 1.63" wide and 1/8" thick	416-0487
GRP-34 - Folding, single-bladed, insertable paddle for medium materials will fold to insert through a 1-1/4" or 1-1/2" process connection, turns in a 7.5" diameter, blades are 1-1/2" wide, direct connect paddle that eliminates the need for GRSS-1 coupler	416-0513
GRP-35 - Folding, double-bladed, insertable paddle for medium materials will fold to insert through a 1-1/4" or 1-1/2" process connection, turns in a 7.5" diameter, blades are 1-1/2" wide, direct connect paddle that eliminates the need for GRSS-1 coupler	416-0514

Description	Part No.
GRP-36 - Threaded, folding, single-bladed, insertable paddle for medium materials will fold to insert through a 1-1/4" or 1-1/2" process connection, turns in a 7.5" diameter, blades are 1-1/2" wide, for use with standard threaded coupler	416-0556
GRP-37 - Threaded, folding, double-bladed, insertable paddle for medium materials will fold to insert through a 1-1/4" or 1-1/2" process connection, turns in a 7.5" diameter, blades are 1-1/2" wide, for use with standard threaded coupler	416-0557
GALVANIZED SHAFT EXTENSIONS	
6" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0407
12" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0408
15" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0907
18" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0409
24" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0410
30" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0682
36" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0411
48" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0412
60" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0609
63" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0610
72" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0611
84" x 1/4"Ø Galvanized shaft extension, includes paddle coupling	299-0612
XX x 1/4"Ø Custom Galvanized shaft extension, includes paddle coupling. \$25 minimum on custom shaft lengths.	999-1000-XX
STAINLESS STEEL SHAFT EXTENSIONS	
6" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0413
12" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0414
15" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0908
18" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0415
24" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0416
30" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0735
36" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0417
48" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0418
60" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0634
72" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0636
84" x 1/4"Ø stainless steel shaft extension, includes paddle coupling	299-0637
XX x 1/4"Ø Custom stainless steel shaft extension, includes paddle coupling. \$25 minimum on custom shaft lengths.	999-1001-XX
1-1/4" STAINLESS STEEL SHAFT GUARDS	
6" x 1-1/4" Diameter stainless steel shaft guard	299-0912
12" x 1-1/4" Diameter stainless steel shaft guard	299-0913
15" x 1-1/4" Diameter stainless steel shaft guard	299-0914
18" x 1-1/4" Diameter stainless steel shaft guard	299-0737
24" x 1-1/4" Diameter stainless steel shaft guard	299-0422
30" x 1-1/4" Diameter stainless steel shaft guard	299-0738
36" x 1-1/4" Diameter stainless steel shaft guard	299-0423
48" x 1-1/4" Diameter stainless steel shaft guard	299-0424
60" x 1-1/4" Diameter stainless steel shaft guard	299-0638
63" x 1-1/4" Diameter stainless steel shaft guard	299-0639

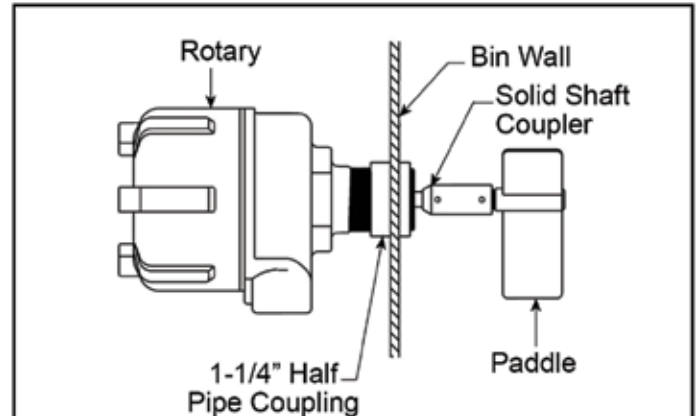
Description	Part No.
72" x 1-1/4" Diameter stainless steel shaft guard	299-0640
84" x 1-1/4" Diameter stainless steel shaft guard	299-0641
XX x 1-1/4" Custom diameter stainless steel shaft guard. \$25 minimum on custom guard lengths.	999-1003-XX
1-1/4" GALVANIZED SHAFT GUARDS	
6" x 1-1/4" Diameter Galvanized shaft guard	299-0909
12" x 1-1/4" Diameter Galvanized shaft guard	299-0910
15" x 1-1/4" Diameter Galvanized shaft guard	299-0911
18" x 1-1/4" Diameter Galvanized shaft guard	299-0681
24" x 1-1/4" Diameter Galvanized shaft guard	299-0419
30" x 1-1/4" Diameter Galvanized shaft guard	299-0736
36" x 1-1/4" Diameter Galvanized shaft guard	299-0420
48" x 1-1/4" Diameter Galvanized shaft guard	299-0421
60" x 1-1/4" Diameter Galvanized shaft guard	299-0613
63" x 1-1/4" Diameter Galvanized shaft guard	299-0614
72" x 1-1/4" Diameter Galvanized shaft guard	299-0615
84" x 1-1/4" Diameter Galvanized shaft guard	299-0616
XX x 1-1/4" Custom diameter Galvanized shaft guard. \$25 minimum on custom guard lengths.	999-1002-XX
1" GALVANIZED SHAFT GUARDS	
4" x 1" Diameter Galvanized shaft guard	299-0915
6" x 1" Diameter Galvanized shaft guard	299-0916
8" x 1" Diameter Galvanized shaft guard	299-0917
10" x 1" Diameter Galvanized shaft guard	299-0918
12" x 1" Diameter Galvanized shaft guard	299-0919
15" x 1" Diameter Galvanized shaft guard	299-0920
18" x 1" Diameter Galvanized shaft guard	299-0921
24" x 1" Diameter Galvanized shaft guard	299-0922
30" x 1" Diameter Galvanized shaft guard	299-0923
36" x 1" Diameter Galvanized shaft guard	299-0924
48" x 1" Diameter Galvanized shaft guard	299-0925
60" x 1" Diameter Galvanized shaft guard	299-0926
72" x 1" Diameter Galvanized shaft guard	299-0927
XX x 1" Custom Diameter Galvanized shaft guard. \$25 minimum on custom guard lengths.	299-0928-XX
1" STAINLESS STEEL SHAFT GUARDS	
6" x 1" Diameter stainless steel shaft guard	299-0760
12" x 1" Diameter stainless steel shaft guard	299-0761
15" x 1" Diameter stainless steel shaft guard	299-0762
18" x 1" Diameter stainless steel shaft guard	299-0763
24" x 1" Diameter stainless steel shaft guard	299-0764
30" x 1" Diameter stainless steel shaft guard	299-0765
36" x 1" Diameter stainless steel shaft guard	299-0766
48" x 1" Diameter stainless steel shaft guard	299-0767

Description	Part No.
60" x 1" Diameter stainless steel shaft guard	299-0768
72" x 1" Diameter stainless steel shaft guard	299-0769
XX x 1" Custom Diameter stainless steel shaft guard. \$25 minimum on custom guard lengths	299-0929-XX
ACCESSORIES	
Rotary fitting to allow 1" guard pipe extensions to be adjusted for variable insertion lengths. The fitting threads into BinMaster 1 1/4" mounting plate and has set screws to allow variable height adjustments.	416-0641
1-1/4" Galvanized NPT female coupler to attach guard pipes together	201-9010
1-1/4" stainless steel NPT female coupler to attach guard pipes together	201-9033
1" Aluminum NPT female coupler to attach guard pipes together	201-9034
1" stainless steel NPT female coupler to attach guard pipes together	201-9035
1/4" Galvanized NPT female coupler to attach paddle to shaft extensions or shaft extensions together	201-9028
1/4" SS NPT female coupler to attach paddle to shaft extensions or shaft extensions together	201-9029
1/4" Aluminum NPT female coupler to attach paddle to shaft extensions or shaft extensions together	201-9036



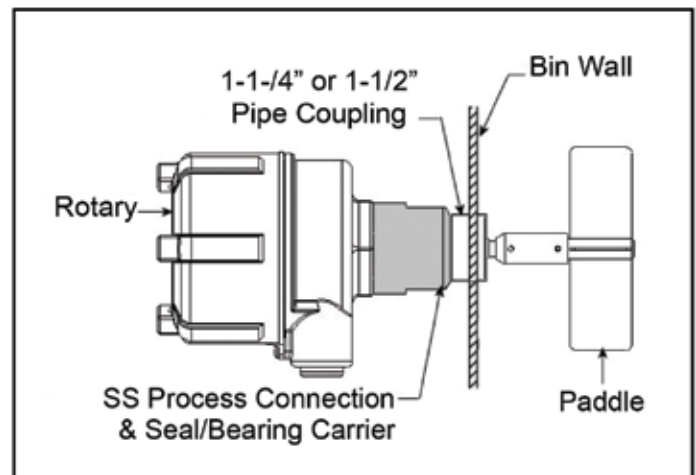
Standard Extended Vertical Mounted Rotary

Standard mounted rotary for straight vertical installations. Angled mounting plates are available for sloped roof installations. The pipe guards and extensions are available in both galvanized or stainless steel.



Standard Horizontal or Vertical Mounted Rotary

Standard mounted rotary for vertical, horizontal and angled installations



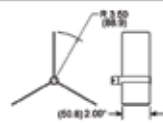
Standard Horizontal or Vertical Mounted Rotary with Optional SS Process Connection Bearing Carrier

The optional stainless steel process connection and seal/bearing carrier is used in corrosive applications. All parts in contact with the materials in the bin are stainless steel.

Paddle Assemblies

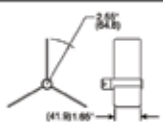
GRP-1

Stainless steel for light materials, 3-vane paddle, turns in 7" diameter.



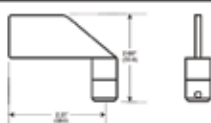
GRP-2

Stainless steel for medium materials, 3-vane paddle, turns in 5" diameter.



GRP-3

Stainless steel for heavy materials, single vane, turns in 5" diameter, insertable through a 1-1/4" or 1-1/2" NPT opening.



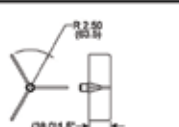
GRP-11

Economical nylon paddle for light materials, 3-vane paddle, turns in 7" diameter.



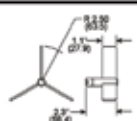
GRP-12

Economical nylon paddle for medium materials 3-vane paddle, turns in 5" diameter.



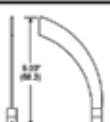
GRP-22

Stainless steel for heavy materials, 3-vane paddle, turns in 5" diameter.



GRP-23

Stainless steel single bayonet style paddle, turns in 5" diameter. Insertable through a 1-1/4" or 1-1/2" NPT opening.



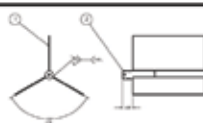
GRP-24

12" belt paddle for use in heavy material with large particulate size such as rock, coal or aggregate.



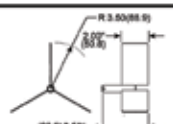
GRP-25

Stainless steel for very light materials, 3-vane, paddles are 5" tall and 1/16" thick to increase resistance in light materials.



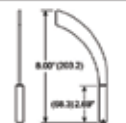
GRP-26

Direct connect version of GRP-1 for light materials, 3-vane, stainless steel, 7" diameter with blades that are 2" wide (side mounting only).



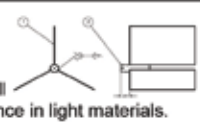
GRP-27

Direct connect version of GRP-23 paddle for medium materials. Insertable, single bayonet style, stainless steel, blade is 1/8" thick and 1" wide (side mounting only).



GRP-28

Stainless steel for extremely light materials, 3-vane, 7" diameter for added resistance, blades are 5" tall and 1/16" thick to increase resistance in light materials.



GRP-29

Direct connect version of GRP-25, 3-vane, stainless steel paddle for very light materials, paddles are 5" tall and 1/16" thick to increase resistance in light materials (side mounting only).



GRP-30

Direct connect version of GRP-2 for medium materials, 3-vane paddle, stainless steel, turns in 5" diameter, (side mounting only).



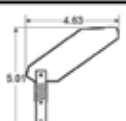
GRP-31

Stainless steel, single-bladed, 3-1/4" long for heavy materials, turns in 6-1/2" diameter, blade is 1/8" thick and 1.63" wide.



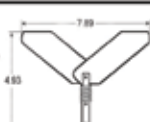
GRP-34

Stainless steel, single-bladed, direct connect, insertable paddle, folds to insert through a 1-1/4" or 1-1/2" NPT opening, turns in 7-1/2" diameter. Paddle blades are 1-1/2" wide.



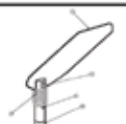
GRP-35

Stainless steel, double-bladed, direct connect, insertable paddle, folds to insert through a 1-1/4" or 1-1/2" NPT opening, turns in 7-1/2" diameter, paddle blades are 1-1/2" wide.



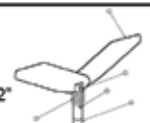
GRP-36

Stainless steel, single-bladed, threaded, insertable paddle, folds to insert through a 1-1/4" or 1-1/2" NPT opening, turns in 7-1/2" diameter, paddle blades are 1-1/2" wide.



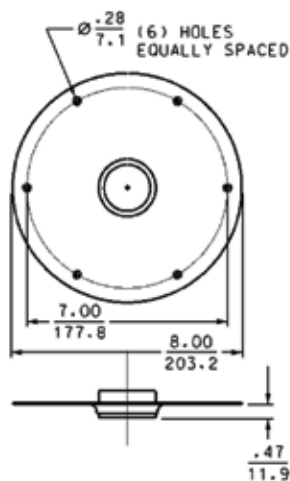
GRP-37

Stainless steel, double-bladed, threaded, insertable paddle, folds to insert through a 1-1/4" or 1-1/2" NPT opening, turns in 7-1/2" diameter, paddle blades are 1-1/2" wide.

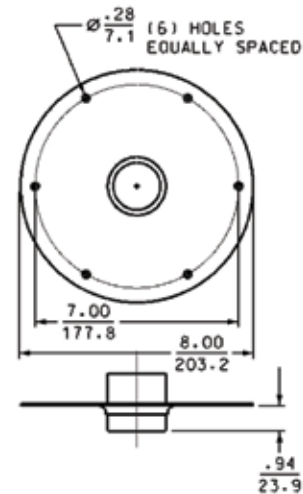


Mounting Plates

Mounting plates allow the rotary units to be mounted from the outside of a vessel on a curved or flat surface. A half coupling mounting plate is used in side mount installations. A full coupling mounting plate is for use in top mount installations where a shaft extension and shaft guards are required. Both mounting plates are available in powder coated carbon steel and stainless steel for use in corrosive environments.



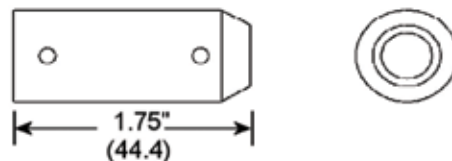
Half Coupling Mounting Plate



Full Coupling Mounting Plate

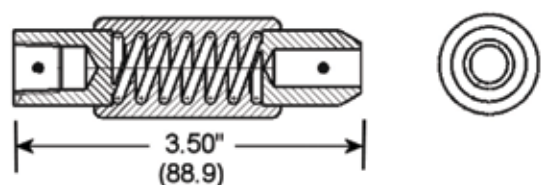
Solid Shaft Coupler

A short solid shaft coupler should be used in side mount installations.



Flexible Shaft Coupler

The flexible coupler should be used in top mount installations to absorb side loads and protect the internal workings of the unit.

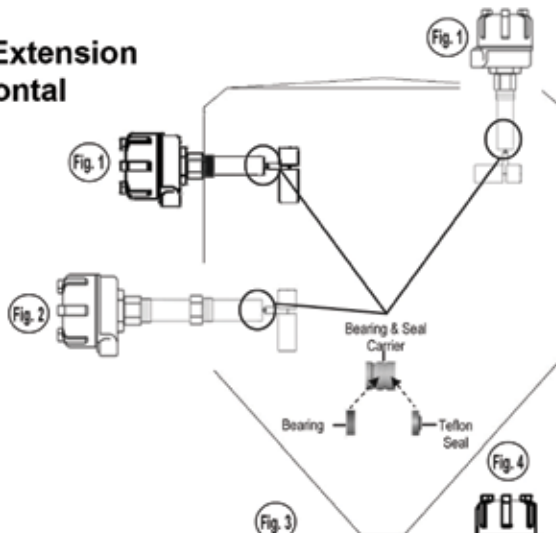




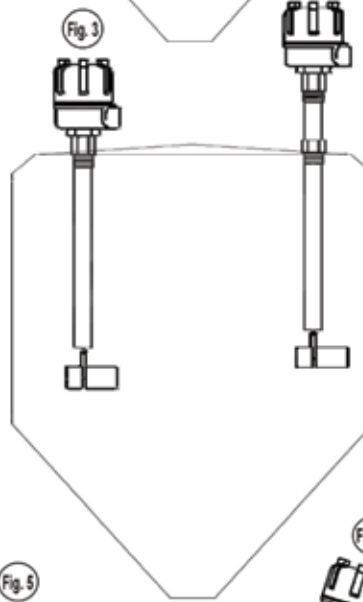
Vertical
Mounted
Flexible
Hanging
Rotary
Extension



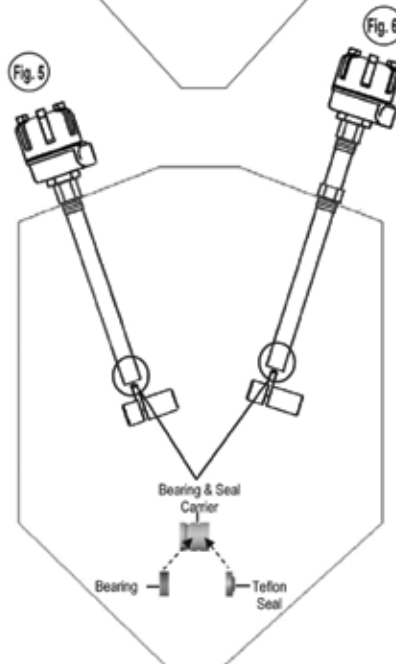
Pipe Extension Horizontal



Pipe Extension Vertical



Pipe Extension Vertical or Angled

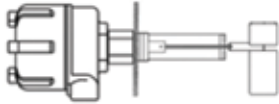


This extension was designed for horizontal applications that need the paddle extended from 6 to 12 inches from the vessel sidewall without compromising any strength. A bearing and shaft seal are at the shaft guard end to center the shaft extension and prevent material from getting up into shaft guard. This unit can also be installed in angled hoppers or vertically from the top. A single vane folding insertable paddle is recommended. This paddle will collapse to fit through a standard 1-1/4" or 1-1/2" process connection from outside the vessel, eliminating the need to cut large holes or go into the vessel. A heat tube is available for high temperature applications.

This extension was designed to extend vertically with a 1" shaft guard and 1/4" shaft extension. The shaft guard is coupled directly into the process connection so it can be mounted without having to use a full coupling mounting plate. A double vane folding insertable paddle is recommended. This paddle will collapse to fit through a standard 1-1/4" or 1-1/2" process connection from outside the vessel, eliminating the need to cut large holes or gain access into the vessel. It also allows you to simply drop in a rotary where another kind of technology may not be working well in your application. A heat tube is available for high temperature applications.

This extension was designed for angled vertical applications. A bearing and shaft seal are at the shaft guard end to center the shaft extension and prevent material from getting up into shaft guard. The shaft guard is coupled directly into the process connection so it can be mounted without having to use a full coupling mounting plate. A double or single vane folding insertable paddle is recommended. This paddle will collapse to fit through a standard 1-1/4" or 1-1/2" process connection from outside the vessel, eliminating the need to cut large holes or gain access into the vessel. A heat tube is available for high temperature applications.

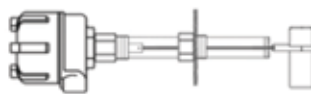
Fig. 1



Extended Horizontal or Vertical Mounted Rotary *with* Seal and Bearing at Tube End

Extended rotary with 1" protection tube for vertical, horizontal and angled installations. Comes in 6", 8", 10", or 12" fixed insertion lengths.

Fig. 2



Extended Horizontal or Vertical Mounted Rotary *with* Seal and Bearing at Tube End and Heat Tube

Extended rotary with 1" protection tube and heat tube for high temp. vertical, horizontal and angled installations. Heat tube comes in 8" or 12" lengths. Protection tube comes in 6", 8", 10" or 12" fixed insertion lengths.

Fig. 3



Coupled Extended Vertical Mounted Rotary *without* Seal and Bearing at Tube End

Extended rotary with 1" shaft guard for straight vertical installations. The shaft guard is coupled directly into the process connection so it can be inserted through a 1-1/4" or 1-1/2" fitting.

Fig. 4



Coupled Extended Vertical Mounted Rotary *without* Seal and Bearing at Tube End and Heat Tube

Extended rotary with 1" shaft guard and heat tube for high temp. Straight vertical installations. The shaft guard is coupled directly into the process connection so it can be inserted through a 1-1/4" or 1-1/2" fitting.

Fig. 5



Coupled Extended Vertical Mounted Rotary *with* Seal and Bearing at Tube End

Extended rotary with 1" shaft guard for straight vertical and angled installations. The shaft guard is coupled directly into the process connection so it can be inserted through a 1-1/4" or 1-1/2" fitting.

Fig. 6

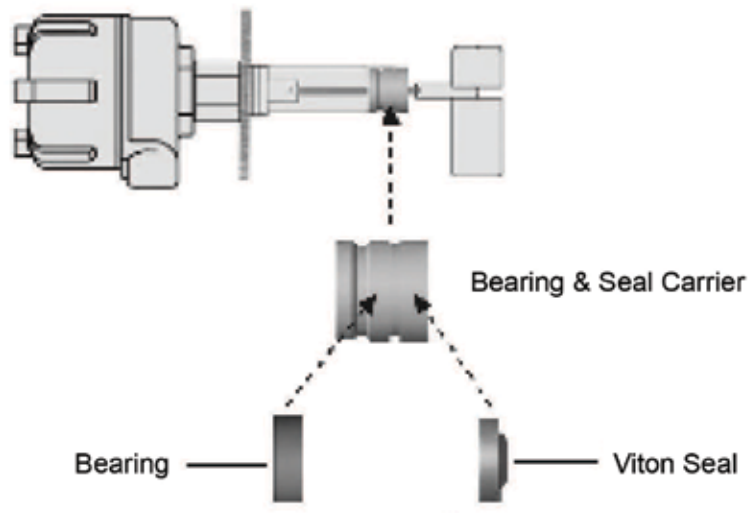


Coupled Extended Vertical Mounted Rotary *with* Seal and Bearing at Tube End and Heat Tube

Extended rotary with 1" protection tube and heat tube for high temp. Straight vertical and angled installations. The shaft guard is coupled directly into the process connection so it can be inserted through a 1-1/4" or 1-1/2" fitting.

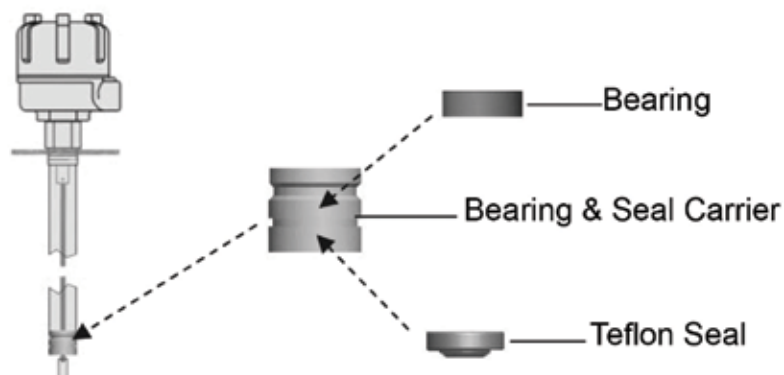
Bearing and Viton Seal at Tube End

The bearing and Viton seal are used to keep the shaft centered and turning without restraint when mounting from the top of a vessel at an angle, or horizontally. It also seals the shaft guard so no material can be forced up into the pipe. The bearing and Viton seal can operate in temperatures up to 500°F (260°C).

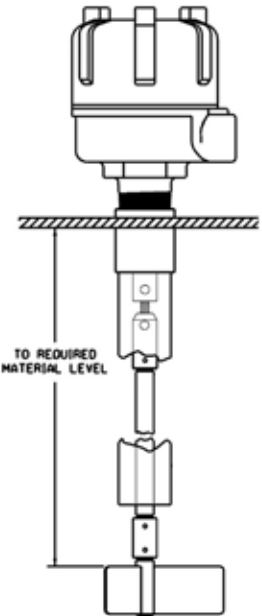


Bearing and Teflon Seal at Tube End

The bearing and Teflon seal are used to keep the shaft centered and turning without restraint when mounting from the top of a vessel at an angle, or horizontally. It also seals the shaft guard so no material can be forced up into the pipe. The bearing and Teflon seal can operate in temperatures up to 500°F (260°C).



Mark X if none									
Sample									
BX1X.	B	A	A	1	X	S	06	S06	XXX



Guard Extensions (XXX if none)
 AXX: 1" Aluminum Guard Pipe - Custom Length (1)
 SXX: 1" Stainless Steel Guard Pipe - Custom Length (1)
 GXX: 1-1/4" Galvanized guard pipe (2)
 SXX: 1-1/4" Stainless steel guard pipe (2)

Shaft Extensions
 XX: In. of 5/8" Stainless steel shaft extension (1)
 XX: Ft. of hanging rotary extension 5/16" 316 SS (2)
 XX: Ft. of hanging rotary extension 5/16" 316 SS FDA Covered (2)

Coupling - (Use X if none)
 S: GRSS-1 - Solid shaft, SS side mount coupler (1)

Heat Tube Fittings - (Use X if none)
 1: 1.25" SS Rotary Heat Tube Coupling (1)
 2: 1.50" SS Rotary Heat Tube Coupling (1)

Heat Tubes - (Use X if none)
 A: 6" Aluminum Heat Tube (1)
 C: 8" Aluminum Heat Tube (1)
 E: 12" Aluminum Heat Tube (1)
 B: 6" Stainless Steel Heat Tube (1)
 D: 8" Stainless Steel Heat Tube (1)
 F: 12" Stainless Steel Heat Tube (1)

Fittings - (Use XX if none)
 A: RPC-1 - 1-1/4" SS fitting for 1" pipe guard (1)
 B: GRPC-2 - 1-1/2" SS fitting for 1" pipe guards (1)
 C: GRPC-3 - 1-1/4" Alum. fitting for 1" pipe guards (1)
 D: GRPC-4 - 1-1/2" Alum. fitting for 1" pipe guards (1)

Shaft Type
 B: Bearing End - 5/8" Stainless steel shaft extension (1)
 H: Hanging rotary extension 5/16" 316 SS (2)
 F: Hanging rotary extension 5/16" 316 SS FDA Covered (2)

Power Pacs
 BX1X.: BMRX - 115 VAC
 BX2X.: BMRX - 230 VAC
 BX3X.: BMRX - 24 VDC
 BX4X.: BMRX - 24 VAC
 MX1X.: MAXIMA+ - 24/115/230 VAC
 MX2X.: MAXIMA+ - 24 VDC

BX1A.: BMRX - 115 VAC - ATEX
 BX2A.: BMRX - 230 VAC - ATEX
 BX3A.: BMRX - 24 VDC - ATEX
 BX4A.: BMRX - 24 VAC - ATEX
 MX1A.: MAXIMA+ - 24/115/230 VAC - ATEX
 MX2A.: MAXIMA+ - 24 VDC - ATEX

1: Custom Bearing End
 2: Custom Hanging

Description	CODE
MOUNTING PLATES & PADDLES	
Refer to Rotary - Standard section for paddle and mounting plate part numbers and prices	
POWER PACS	
NOTE: MAXIMA+ Power Pacs cannot be used with flexible hanging cable.	
BMRX - 115 VAC - Rotary level indicator power pac featuring a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, selectable fail-safe protection, FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	BX1X.
BMRX - 230 VAC - Rotary level indicator power pac featuring a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, selectable fail-safe protection, FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	BX2X.
BMRX - 24 VDC - Rotary level indicator 12 to 24 VDC with dual conduit entries, DPDT relay contacts, selectable fail-safe protection, and FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	BX3X.
BMRX - 24 VAC - Rotary level indicator 24 VAC with dual conduit entries, DPDT relay contacts, selectable fail-safe protection, and FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	BX4X.
MAXIMA+ 24/115/230 VAC - Fail-safe rotary level indicator power pac with hazardous location approval, C/US listed for Class II, Groups E, F, & G and a visual LED status light monitoring paddle rotation, paddle covered, and fault conditions. Features a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, fail-safe protection, SPDT normal and fault relay contact and FDA recognized powder coat finish.	MX1X.
MAXIMA+ 12-24VDC - Fail-safe rotary level indicator power pac with hazardous location approval, C/US listed for Class II, Groups E, F, & G and a visual LED status light monitoring paddle rotation, paddle covered, and fault conditions. Features a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, fail-safe protection, SPDT normal and fault relay contact and FDA recognized powder coat finish.	MX2X.
BMRX - 115 VAC - ATEX - Rotary level indicator power pac featuring a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, selectable fail-safe protection, FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	BX1A.
BMRX - 230 VAC - ATEX - Rotary level indicator power pac featuring a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, selectable fail-safe protection, FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F & G.	BX2A.
BMRX - 24 VDC - ATEX - Rotary level indicator 12 to 24 VDC with dual conduit entries, DPDT relay contacts, selectable fail-safe protection, and FDA recognized powder coat finish, hazardous location approval and C/US listed for Class I, Groups C & D and Class II, Groups E, F, & G.	BX3A.
BMRX - 24 VAC - ATEX - Rotary level indicator 24 VAC with dual conduit entries, DPDT relay contacts, selectable fail-safe protection, and FDA recognized powder coat finish, hazardous location approval, and C/US listed for Class I, Groups C & D and Class II, Groups E, F, & G.	BX4A.
MAXIMA+ 24/115/230 VAC - ATEX - Fail-safe rotary level indicator power pac with hazardous location approval, C/US listed for Class II, Groups E, F & G and a visual LED status light monitoring paddle rotation, paddle covered, and fault conditions. Features a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, fail-safe protection, SPDT normal and fault relay contact and FDA recognized powder coat finish.	MX1A.
MAXIMA+ 12-24 - ATEX - Fail-safe rotary level indicator power pac with hazardous location approval, C/US listed for Class II, Groups E, F, & G and a visual LED status light monitoring paddle rotation, paddle covered, and fault conditions. Features a triple-thread, screw-off cover, dual conduit entries, DPDT relay contacts, fail-safe protection, SPDT normal and fault relay contact and FDA recognized powder coat finish.	MX2A.
SHAFT TYPE	
Bearing End - 5/8" stainless steel shaft extension	B
Hanging rotary extension 5/16" 316 SS	H
Hanging rotary extension 5/16" 316 SS FDA Covered	F
FITTINGS	
GRPC-1 - 1-1/4" stainless steel process connection fitting & o-ring for 1" coupled pipe guards	A
GRPC-2 - 1-1/2" stainless steel process connection fitting & o-ring for 1" coupled pipe guards	B
GRPC-3 - 1-1/4" Aluminum process connection fitting & o-ring for 1" coupled pipe guards	C
GRPC-4 - 1-1/2" Aluminum process connection fitting & o-ring for 1" coupled pipe guards	D

Description	CODE
HEAT TUBES	
6" Aluminum heat tube for rotaries in high temperature applications.	A
8" Aluminum heat tube for rotaries in high temperature applications.	C
12" Aluminum heat tube for rotaries in high temperature applications.	E
6" stainless steel heat tube for rotaries in high temperature applications.	B
8" stainless steel heat tube for rotaries in high temperature applications.	D
12" stainless steel heat tube for rotaries in high temperature applications.	F
HEAT TUBE FITTINGS	
1.25" SS Rotary Heat Tube Coupling	1
1.50" SS Rotary Heat Tube Coupling	2
COUPLING	
GRSS-1 - Solid shaft, stainless steel side mount coupler	S
SHAFT EXTENSION LENGTH	
in. of 3/8" stainless steel shaft extension, includes paddle coupling. Used only with rotaries with a shaft type of Bearing End.	XX
ft. of vertical mounted flexible hanging rotary extension, single flexible Ø 5/16" (8 mm) 316 stainless steel cable with counterweight and coupler to attach power pac shaft. Counterweight includes shaft to connect paddle. Custom length, maximum length 14'. Used only with rotaries with a shaft type of Hanging.	XX
ft. of vertical mounted flexible hanging rotary extension, single flexible Ø 5/16" (8 mm) 316 stainless steel cable covered in FDA Grade Nylon with counterweight and coupler to attach power pac shaft. Counterweight includes shaft to connect paddle. Custom length, maximum length 14'. Used only with rotaries with a shaft type of Hanging with FDA Approved Cable.	XX
GUARD EXTENSIONS	
inches of 1" Aluminum guard pipe	AXX
inches of 1" Stainless steel guard pipe	SXX
inches of 1-1/4" Galvanized guard pipe	GXX
inches of 1-1/4" Stainless steel guard pipe	SXX



Rotary - Mini

The mini-rotary alerts users to material levels in smaller bins and hoppers that contain plastics, food, seed, chemicals, and other powder and bulk solid materials. Its small size and rugged design allows for use of a level sensor where other types of equipment simply will not fit. Its principle of operation is simple: a slow speed motor rotates the paddle when no material is present. When material comes into contact with the paddle, the paddle stops and an alert—such as a light or horn—notifies the operator the bin is full. When the bin is emptied, the paddle begins rotating again. The mini-rotary is simple to install on the side or top of a bin and is appropriate for a variety of light to heavy materials. Paddle options are available, making it adjustable for a wide range of material densities.

Description	Part No.
MINI-ROTARY COMPLETE UNITS	
MR-G-110 - Mini-Rotary 110 VAC with 4-vane, polycarbonate paddle, complete with SPDT contacts	730-0350
MR-G-220 - Mini-Rotary 220 VAC with 4-vane, polycarbonate paddle, complete with SPDT contacts	730-0352
MR-G-24 - Mini-Rotary 24 VAC with 4-vane, polycarbonate paddle, complete with SPDT contacts	730-0392
MR-H-110 - Mini-Rotary 110 VAC with insertable bayonet polycarbonate paddle, complete with SPDT contacts	730-0351
MR-H-220 - Mini-Rotary 220 VAC with insertable bayonet polycarbonate paddle, complete with SPDT contacts	730-0353
MR-I-110 - Mini-Rotary 110 VAC with single-vane, stainless steel rectangular paddle, complete with SPDT contacts	730-0354
MR-I-220 - Mini-Rotary 220 VAC with single-vane, stainless steel rectangular paddle, complete with SPDT contacts	730-0355
MINI-ROTARY PADDLES & ACCESSORIES	
Mini-Rotary 4-vane, polycarbonate paddle turns in a 3.2" diameter, paddle blades are 1.25" wide	299-0936
Mini-Rotary insertable bayonet polycarbonate paddle, turns in a 5" diameter	299-0937
Mini-Rotary single-vane, stainless steel rectangular paddle turns in a 4" diameter, paddle blades are 1.2" wide	299-0938

Description	Part No.
BMRX ROTARY PARTS	
BMRX actuator arm	299-0670
BMRX die cast aluminum cap (short) units after April 2016	220-0419
BMRX die cast aluminum cap AC only units prior to April 2016	220-0366
BMRX die cast aluminum cap DC only units prior to April 2016	220-0370
BMRX housing gasket units prior to April 2016	280-0072
BMRX motor 115 VAC	350-0056
BMRX motor 230 VAC	350-0059
BMRX motor shaft	285-0132
BMRX PCB main 12-14 VDC (Units after May 2014)	530-0791
BMRX PCB main with limit and motor switch 115 VAC	530-0179
BMRX PCB with limit and motor switch 230 VAC	530-0182
BMRX PCB with limit and motor switch 24 VAC	530-0183
BMRX/MAXIMA+ ROTARY PARTS	
BMRX/MAXIMA+ 6 VDC (Units after May 2014)	350-0060
BMRX/MAXIMA+ conduit vent 3/4" NPT	336-0017
BMRX/MAXIMA+ housing gasket units after April 2016	203-0080
BMRX/MAXIMA+ locking tab	299-0679
BMRX/MAXIMA+ motor 24/30 VAC	350-0058
BMRX/MAXIMA+ motor mounting plate	416-0477
BMRX/MAXIMA+ motor spring	292-0036
BMRX/MAXIMA+ o-ring, .139 CORD X 1.88 I.D.	203-0077
BMRX/MAXIMA+ roll pin	150-5004
BMRX/MAXIMA+ Rotary bearing	200-1004
BMRX/MAXIMA+ Rotary conduit plug	175-0188
BMRX/MAXIMA+ Rotary divider all AC units	338-0111
BMRX/MAXIMA+ Rotary divider all DC units	338-0114
BMRX/MAXIMA+ Rotary mounting plate gasket	280-0003
BMRX/MAXIMA+ Rotary retaining ring	165-0002
BMRX/MAXIMA+ Rotary shaft seal	280-0068
BMRX/MAXIMA+ screw, drive #2, u-type	127-0001
BMRX/MAXIMA+ screw, plastics #6-19	175-0182
MAXIMA+ ROTARY PARTS	
MAXIMA+ die cast aluminum cap (tall) units after April 2016	220-0418
MAXIMA+ die cast aluminum cap (tall) units prior to April 2016	220-0364
MAXIMA+ PC board logic AC models (upper)	530-0537
MAXIMA+ PC board logic DC models (upper) (Units after May 2014)	530-0543
MAXIMA+ PCB main DC only	530-0707
MAXIMA+ PCB power (lower)	530-0538
MAXIMA+ photo interrupter	530-0552
MAXIMA+ red lens	335-0071

Description	Part No.
MAXIMA+ slotted timing wheel	299-0699
MAXIMA+ switch assembly	530-0553
GR ROTARY PARTS	
GR parts not listed are no longer available.	
GR II PCB main	530-0069
GR II Slotted timing wheel	299-0331
GR/GRX flat rotary cover gasket	280-0018
GR/GRX micro switch assembly for the limit switch	530-0013
GR/GRX micro switch assembly for the motor switch	530-0012
GR/GRX motor assembly 115 VAC	416-0109
GR/GRX motor only 115 VAC	350-0039
GR/GRX motor only 220 VAC	350-0040
GR/GRX motor Spring	292-0009
GRD/GRDX motor assembly 115 VAC	416-0310