



## CERTIFIED ROTARY VALVE



Transitioning the World to a Safer Working Environment

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Agriculture & Grain



Food and Beverage



Metal Working



Pharmaceutical



Wood Processing



## Certified Rotary Valve

**B**oss Products signed an exclusive North American distribution contract with **VDL Industrial Products** in January 2019. For decades, **VDL Industrial Products** has been providing effective rotary valve solutions for many industries and applications. In addition to the classic styles of rotary valves, **VDL** also offers various innovations as a result of targeted market research and continuous developments from their R&D department. The most notable examples include; diverse explosion-proof designs, explosion certified flex-tip and the MD range for pneumatic conveying.

All rotary valve motors and gearboxes are sourced and inventoried in North America, installed and tested by **Boss Products** at our facility near San Antonio, Texas.

### EcoMaxx® / VDL Rotary Valves are :

ATEX Certified, NFPA Compliant  
Including Rotary Vales with ATEX tested Flex-Tip

### VDL Rotary Valves

Standard Duty (Non ATEX/ NFPA)

## EXPLOSION ISOLATION & DIVERSION

Certified Rotary Valve EMVDL-RVEX-HT



04

Certified Rotary Valve EMVDL-RVEX-HTS



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Certified Rotary Valve EMVDL-RVEX-MD



06

Certified Rotary Valve EMVDL-RVEX-BS



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Rotary Valve VDL-HTHB (*Heat resistant*)



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Rotary Valve VDL-HTHBS (*Heat resistant*)



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Blades and Rotors



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# Certified Rotary Valve EMVDL-RVEX-HT

## APPLICATIONS

- Passive explosive isolation. ATEX EN 15089 / NFPA 69
- Differential pressures up to 40" WG
- Rotary airlock for dust collectors and cyclones
- Feeder valve for screw conveyors, scales, dryers and coolers

### CERTIFICATIONS & STANDARDS

EN 15089  
 CE 0588 Ex II ID/\* c T4 Ex D FSA 15 ATEX 1661/1662 X  
 NFPA 69 compliant  
 Flex tip design certified to prevent flame passage  
 NFPA 69 12.2.4.3.6 compliant

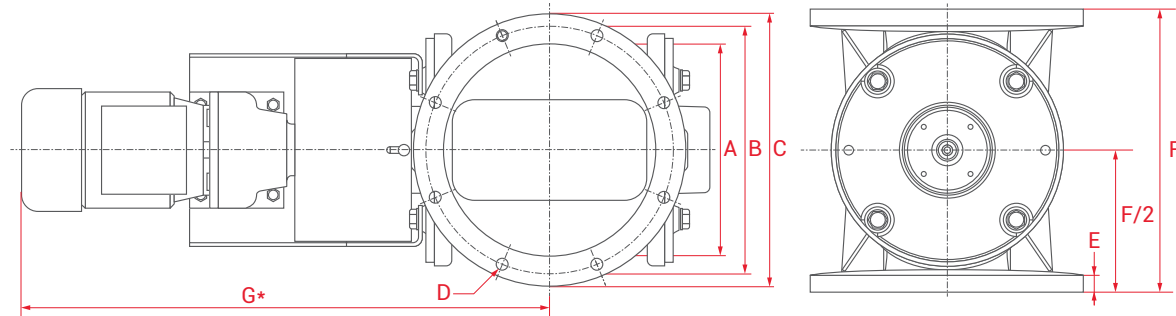


### STANDARD FEATURES

- Explosion & Flame Proof design rated up to 25 psi / 1.7 bar
- Cast iron body with flanged round inlet/outlet
- NFPA 69 Compliant with 8 blade rotor, polyurethane flex-tips
- External oil / bronze bearings with felt shaft seal
- 15 RPM direct drive gearmotor with flex coupling, USA Mfg

### OPTIONAL FEATURES

- Motors for hazardous locations and extreme temperature
- 30 RPM gearmotor with EM variable speed control package
- Special construction such as stainless steel, chromium or nickel plating, quick disassembly
- Insulation box, speed monitors, flange gasket, injector fittings and product scrapers



DIMENSIONS*										
MODEL	15 RPM HP	30 RPM HP	CAPACITY FT <sup>3</sup> (LTR)	Ø A	Ø B	Ø C	D	E	F*	G
EMVDL RVEX-HT250	0.33	0.75	0.24 (7)/rev	10" (250 mm)	12" (290 mm)	13" (320 mm)	8 x Ø12 mm	0.79" (20 mm)	13" (330 mm)	24" (620 mm)
EMVDL RVEX-HT350	0.50	1.00	0.70 (20)/rev	14" (340 mm)	15" (390 mm)	17" (420 mm)	8 x Ø12 mm	0.79" (20 mm)	16" (400 mm)	26" (670 mm)
EMVDL RVEX-HT450	1.00	2.00	1.23 (35)/rev	17" (420 mm)	19" (490 mm)	21" (525 mm)	8 x Ø12 mm	0.79" (20 mm)	20" (500 mm)	33" (850 mm)

SQUARE TO ROUND TRANSITIONS*						
SQUARE TRANSITION (Nominal Size Inches)	6X6	8X8	10X10	12X12	14X14	16X16
Model : EMVDL-RVEX	HT250	HT250	HT250	HT350	HT350	HT450
Transition Height	2.84" (72 mm)	2.80" (71 mm)	2.80" (71 mm)	2.80" (71 mm)	2.80" (71 mm)	3.43" (87 mm)
Overall Height (Dim F + Transition Height)	16" (402 mm)	16" (401 mm)	16" (401 mm)	19" (471 mm)	19" (471 mm)	23" (587 mm)

\* Length varies dependent on motor selection – Units in inches rounded to the closest whole number

# Certified Rotary Valve EMVDL-RVEX-HTS

## APPLICATIONS

- Passive explosion isolation, ATEX EN 15089 / NFPA 69
- Rotor selections for dry, corrosive & sticky material
- Tested for high vacuum applications up to 160" WG
- Ideal for dust collectors, cyclones, silos, hoppers & specialized process applications

### CERTIFICATIONS & STANDARDS

EN 15089  
 CE 0588 Ex II ID/\* c T4 Ex D FSA 15 ATEX 1661/1662 X  
 NFPA 69 compliant  
 Flex tip design certified to prevent flame passage  
 NFPA 69 12.2.4.3.6 compliant

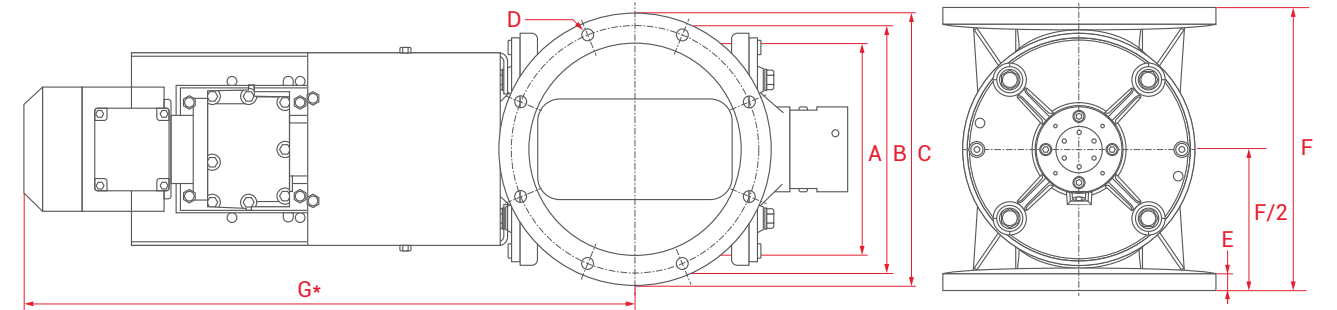


### STANDARD FEATURES

- Explosion & Flame Proof design rated up to 36 psi / 2.5 bar (25 psi / 1.7 bar with polyurethane flex tip rotor)
- Cast iron body with flanged inlet and outlet
- NFPA Compliant with 8 blade polyurethane flex tip rotor
- NFPA Compliant with 8 blade steel or S/S construction
- Dust tight ball bearings & shaft seal with adjustable packing
- 15 RPM direct drive gearmotor w/flex coupling, IP65, USA mfg

### OPTIONAL FEATURES

- Motors for hazardous locations and extreme temperature
- 30 RPM gearmotor with EM variable speed control package
- Square to round flange adapter incl. gasket and mounting bolts
- S/S construction, quick disassembly, and specialized coatings
- Insulation box, speed monitor, injector fittings and scrapers



DIMENSIONS*										
MODEL	15 RPM HP	30 RPM HP	CAPACITY FT <sup>3</sup> (LTR)	Ø A	Ø B	Ø C	D	E	F*	G
EMVDL RVEX-HTS250	0.33	0.75	0.24 (7)/rev	10" (250 mm)	12" (290 mm)	13" (320 mm)	8 x Ø12 mm	0.79" (20 mm)	13" (330 mm)	28" (710 mm)
EMVDL RVEX-HTS350	0.50	1.00	0.70 (20)/rev	14" (340 mm)	15" (390 mm)	17" (420 mm)	8 x Ø12 mm	0.79" (20 mm)	16" (400 mm)	33" (830 mm)

SQUARE TO ROUND TRANSITIONS					
SQUARE TRANSITION (Nominal Size Inches)	6X6	8X8	10X10	12X12	14X14
Model : EMVDL-RVEX	HTS250	HTS250	HTS250	HTS350	HTS350
Transition Height	2.84" (72 mm)	2.80" (71 mm)	2.80" (71 mm)	2.80" (71 mm)	2.80" (71 mm)
Overall Height (Dim F + Transition Height)	16" (402 mm)	16" (401 mm)	16" (401 mm)	19" (471 mm)	19" (471 mm)

\* Length varies dependent on motor selection – Units in inches rounded to the closest whole number

# Certified Rotary Valve EMVDL-RVEX-MD

## APPLICATIONS

- Passive explosion isolation requiring rotor access for frequent cleaning
- Differential pressures **up to 400" WG**
- Heavy Duty design, ideal for high vacuum applications
- Recommended for pneumatic conveying of process material and dust feeder valve for screw conveyors, scales, classifiers dryers and coolers

### CERTIFICATIONS & STANDARDS

EN 15089  
 CE 0588 Ex II ID/\* c T4 Ex D FSA 15 ATEX 1661/1662 X  
 NFPA 69 compliant  
 Flex tip design certified to prevent flame passage  
 NFPA 69 12.2.4.3.6 compliant

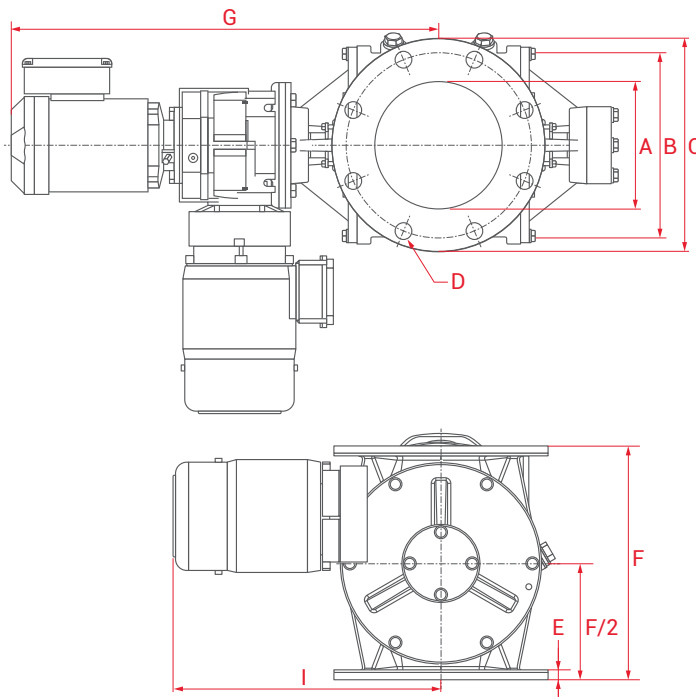


### STANDARD FEATURES

- Explosion & Flame Proof design to **36 psi / 2.5 bar** (25 psi / 1.7 bar with polyurethane flex tip rotor)
- Cast iron housing with round inlet and outlet
- Direct Drive **15 RPM, IP65 gearmotor** w/flex coupling
- Removable 8 vane polyurethane, steel or S/S rotor
- Adjustable Gland Pack bearings for shaft sealing
- High fill ratio with very low leakage & product damage

### OPTIONAL FEATURES

- Motors for hazardous locations and extreme temperature
- 30 RPM** gearmotor with EM variable speed control package
- Special construction, stainless steel, chromium/nickel plating
- Insulation box, speed monitors, flange gasket, injector fittings and product scrapers



DIMENSIONS *												
MODEL	15 RPM HP	30 RPM HP	CAPACITY FT <sup>3</sup> (LTR)	Ø A	Ø B	Ø C	D	E	F	G	H	I
EMVDL RVEX-MD150	0.50	0.75	0.10 (3)/rev	6" (150 mm)	9" (240 mm)	11" (285 mm)	8 x Ø23 mm	0.51" (13 mm)	10" (260 mm)		13" (330 mm)	14" (355 mm)
EMVDL RVEX-MD200	0.75	1.50	0.39 (11)/rev	8" (200 mm)	12" (300 mm)	13" (340 mm)	8 x Ø23 mm	0.51" (13 mm)	15" (370 mm)		16" (400 mm)	21" (525 mm)
EMVDL RVEX-MD250	1.00	1.00	0.74 (21)/rev	10" (250 mm)	14" (350 mm)	16" (395 mm)	12 x Ø23 mm	0.67" (17 mm)	17" (425 mm)	30" (770 mm)		
EMVDL RVEX-MD300	1.50	3.00	1.30 (37)/rev	12" (300 mm)	16" (400 mm)	18" (445 mm)	12 x Ø23 mm	0.79" (20 mm)	20" (500 mm)	33" (840 mm)		

Columns G, H and I depend on drive

\* Units in inches rounded to the closest whole number

# Certified Rotary Valve EMVDL-RVEX-BS

## APPLICATIONS

- Passive explosion and flame isolation
- Differential pressures **up to 28" WG**
- Ideal for wood applications w/flex-tip rotor
- Rotary airlock for dust collectors and cyclones

### CERTIFICATIONS & STANDARDS

ATEX 1D/2D T4 safety system  
 CE 0588 Ex II 1D/2D T4 (Device Inside/Outside) Ex D (Protective system) FSA 15 ATEX 1658 X  
 NFPA 69 compliant  
 Flex tip design certified to prevent flame passage  
 NFPA 69 12.2.4.3.6 compliant

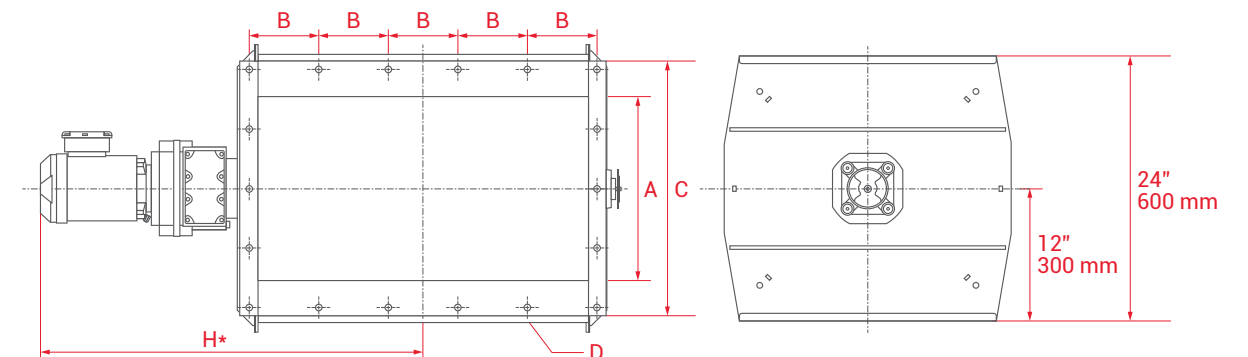


### STANDARD FEATURES

- Explosion and flame isolation **up to 7 psi / 0.5 bar**
- 8 vane flex-tip NFPA 69** compliant rotor, Ex/flame proof
- 15 RPM, IP65** direct drive gear motor with flex coupling
- Inlet/ discharge size **20" X 20," 20" X 30" & 20" X 40"**
- Requires system integrated control panel for ATEX certification

### OPTIONAL FEATURES

- Motors for hazardous locations and extreme temperature
- 30 RPM** gear motor with EM variable speed control package
- EM system integration package required for ATEX certification
- Stainless steel construction, Insulation box, speed monitor, flange gasket



DIMENSIONS *								
MODEL	15 RPM HP	30 RPM HP	CAPACITY FT <sup>3</sup> (LTR)	A	B	C	D	H
EMVDL RVEX-BS500	1.00	2.00	4.41 (125)/rev	20" x 20" (500 x 500 mm)	0.16" x 5.30" (4 x 135 mm)	23" x 23" (580 x 580 mm)	16 x Ø 10.5 mm	30" (742 mm)
EMVDL RVEX-BS750	1.00	2.00	6.64 (188)/rev	20" x 30" (500 x 750 mm)	0.20" x 6.22" (5 x 158 mm)	23" x 33" (580 x 830 mm)	18 x Ø 10.5 mm	34" (867 mm)
EMVDL RVEX-BS1000	1.50	3.00	8.83 (250)/rev	20" x 40" (500 x 1000 mm)	0.31" x 5.12" (8 x 130 mm)	23" x 43" (580 x 1080 mm)	24 x Ø 10.5 mm	40" (997 mm)

Available as EMVDL-RVEX-BS, Rotary valve with explosion detector and control – Available as EMVDL-RV-BS, Rotary valve only

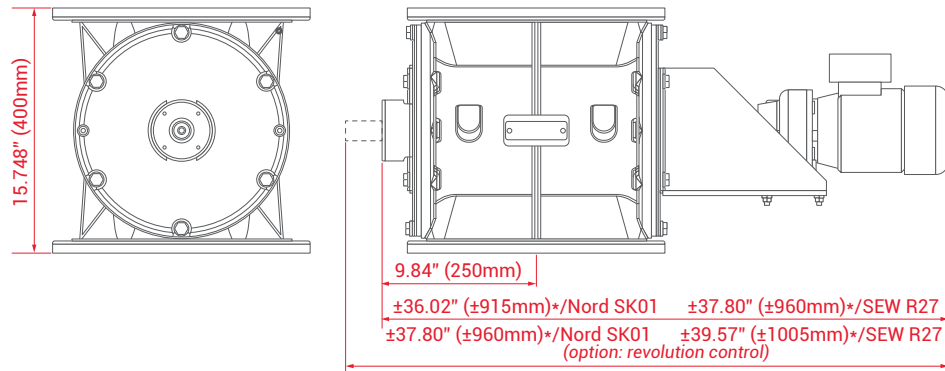
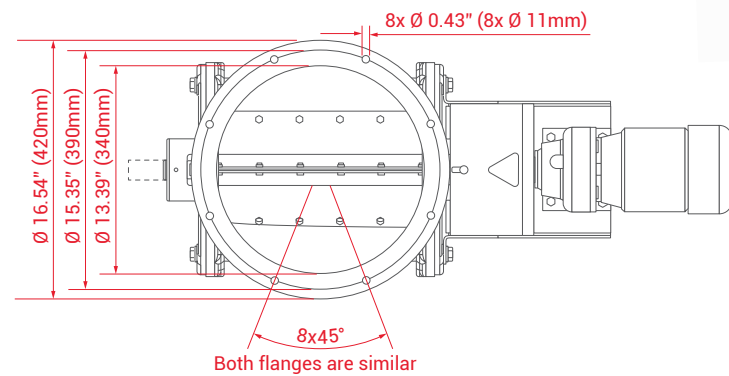
\* Length varies dependent on motor selection – Units in inches rounded to the closest whole number



# Rotary Valve VDL-HTHB (Heat resistant)

## APPLICATIONS

- Rotary airlock for dust collectors and cyclones
- Feeder valve for screw conveyors, scales, dryers and coolers
- Rotary valve is suitable for ambient temperature up to 104°F/40°C
- Suitable for product temperatures up to 392°F/200°C
- Differential pressures up to 40" WG / 1.000 mm w.g.



\* Length varies dependent on motor selection

	VDL-HTHB-250	VDL-HTHB-350
Body and covers	Cast iron GG25	
Inlet and outlet	10" / 250 mm	14" / 350 mm
Rotor construction	Open, with 6 chambers	
Drive unit	Direct, with chain coupling and gearmotor HTHB 250 : 0,33 HP (15 RPM) - 0.50 HP (30 RPM)	Direct, with chain coupling and gearmotor HTHB 350 : 0,50 HP (15 RPM) - 1.00 HP (30 RPM)
Finishing	<ul style="list-style-type: none"> <li>In- and outlet painted in heat resistant, silver paint</li> <li>Body, covers and motor console painted in heat resistant, silver paint</li> </ul>	
Sealing	<ul style="list-style-type: none"> <li>Bronze bush</li> <li>Rotor with 6 chambers : Bronze bush + heat resistant sealing + heat resistant feltring</li> </ul>	
Bearings	Slide bearings with PTFE coating	
Max. operating pressure	20" w.g. / 5.000 Pa	
Temperature	5°F up to 392°F / -15° up to 200°C	
Capacity (100% filling)	0,23 FT³ (7 liters) / rev	0,70 FT³ (20 liters) / rev



ROTORS

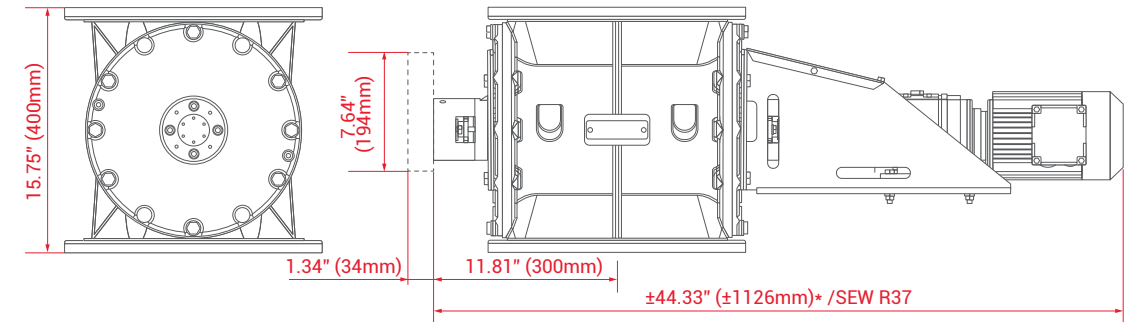
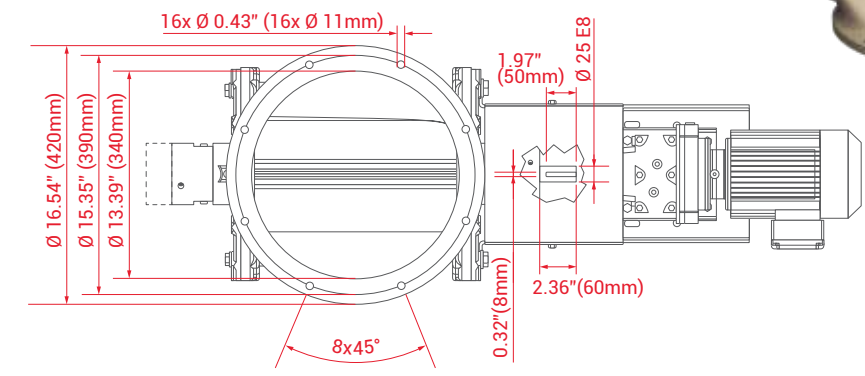


INSULATION

# Rotary Valve VDL-HTHBS (Heat resistant)

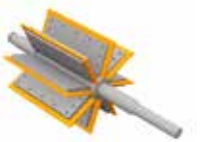
## APPLICATIONS

- Ideal for dust collectors, cyclones, silos, hoppers & specialized process applications
- Rotary valve is suitable for ambient temperature up to 104°F/40°C
- Suitable for product temperatures up to 392°F/200°C
- Tested for high vacuum applications up to 160" WG / 4.064 mm w.g.
- Rotor selections for dry, corrosive & sticky material



\* Length varies dependent on motor selection

	VDL-HTHBS-250	VDL-HTHBS-350
Body and covers	Cast iron GG25	
In- and outlet	10" / 250 mm	14" / 350 mm
Rotor construction	Open, with 8 chambers	
Drive unit	Direct, with chain coupling and gearmotor HTSHB 250 : 0,33 HP (15 RPM) - 0.50 HP (30 RPM)	Direct, with chain coupling and gearmotor HTSHB 350 : 0,50 HP (15 RPM) - 1.00 HP (30 RPM)
Finishing	<ul style="list-style-type: none"> <li>In- and outlet painted in heat resistant, silver paint</li> <li>Body, covers and motor console painted in heat resistant, silver paint</li> </ul>	
Sealing	Adjustable gland packing	
Bearings	External heat resistant ball bearings	
Max. operating pressure	157" w.g. / 40.000 Pa	
Temperature	5°F up to 392°F / -15° up to 200°C	
Capacity (100% filling)	0,23 FT³ (7 liters) / rev	0,70 FT³ (20 liters) / rev



ROTORS



INSULATION

## Rotary Valve Blades & Rotors

EcoMAXX® Rotary Valves are available with a wide range of replaceable blades and optional rotor styles to handle just about any application.

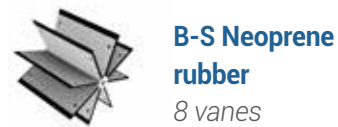
Product characteristics	BLADE MATERIAL			
	Polyurethane	Steel	Stainless Steel	
<b>POWDERS</b>	Not abrasive	X	X	X
	Abrasive	X		
	Sticky		X	X
	Corrosive			X
<b>GRANULATES</b>	X			
<b>FIBROUS MATERIAL</b>	X			



**HT Stainless steel**  
Stainless steel removable blades  
6 or 8 vanes



**MD Steel**  
Polyurethane removable blades  
6 or 8 vanes



**B-S Neoprene rubber**  
8 vanes



**HT Stainless steel**  
Polyurethane removable blades  
6 or 8 vanes



**MD Steel-Steel**  
Removable Tips  
6 or 8 vanes



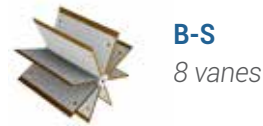
**B-S Silicone**  
8 vanes



**HT Steel-Springsteel**  
Removable blades  
6 or 8 vanes



**MD Stainless steel**  
Fixed blades  
all around tapered  
6 or 8 vanes



**B-S**  
8 vanes



**HT Steel**  
Polyurethane removable blades  
6 or 8 vanes



**MD200 Stainless steel**  
Removable stainless steel blades  
6 or 8 vanes



**MD Steel**  
Fixed steel blades  
welded and tapered  
6 or 8 vanes

## Rotary Valve Accessories

Boss Products knows that the right rotary valve can be key range of accessories for use with our rotary valves to meet to a successful project. EcoMAXX® VDL offers a complete all of your special application needs.

### Pneumatic Convey Line Injectors

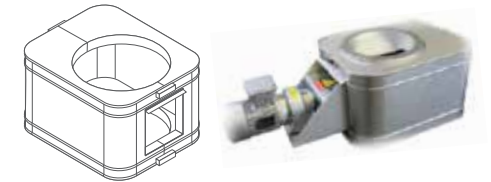
Used to introduce metered product from the airlock into a pneumatic airstream. Stainless Steel construction available in diameters 2 3/8"-6".



Tube diameter in. (mm.)	MODEL			
	MD 150	MD 200	MD 250	MD 300
2 3/8 (60)	X			
3.0 (76)	X			
3.5 (88,9)	X	X		
4.0 (101,6)		X	X	
4 1/4 (108)		X	X	
4.5 (114,3)			X	X
5.5 (139,7)				X
6.0 (154)				X

### Insulation Boxes

Insulation boxes are available for applications requiring operation in extreme heat or cold conditions.



### Replacement Gaskets in EPDM & Silicone

Factory cut precision gasketing is available in EPDM or Silicone



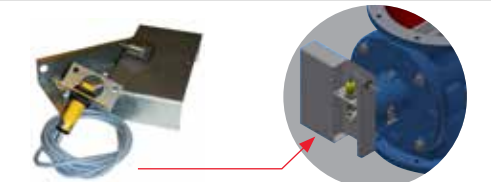
### Special Sanitary designs

Special designs are available for applications that require quick and deep cleaning.



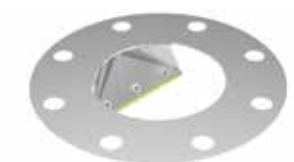
### Speed Sensors

Detects rotor RPM for speed control



### Capacity Limiter w PU Blade

Prevents the overfilling of the rotor chamber. Helps prevent product damage.



### Air Purge Seal Kit

Creates an overpressure which keeps abrasive powders out of bearings & seals.





Transitioning the World to a Safer Working Environment



ISO 9001 : 2015 Certified Company, Certificate #12373



# RAPTOR Series™



6729 GUADA COMA DR. - SCHERTZ, TX 78154 -USA - Main # 210-664-4200

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