

# Sanitary and Food Pumps



We Make The Difference

# Line Introduction

**RubyShine Air Diaphragm Pumps** are designed specifically for food, beverage, and cosmetic applications.

They can work with low to highly viscous liquids even if they contain suspended particles.

FDA compliant, these high-quality pumps are distinguished by their superior surface finish of **Ra 0.8 µm** and achieve the highest performance ratings.

The body of **RubyShine** pumps is made of AISI 316 and they are equipped with standard Tri-Clamp connections.

## Main Advantages

Available in STAINLESS STEEL 316

- Polished Stainless Steel Surface Roughness of 0.8 µm
- Certified for use in potentially explosive atmospheres (ATEX certification zone 1-2)
- Advanced diaphragms of new technology
- New generation PTFE compound diaphragms for long life operation
- Advanced quality PTFE-A Full capacity diaphragms for high chemical and mechanical applications
- Dry running without risk of damage
- Self-priming capacity
- No need for air lubrication
- Innovative oil free Air Valve
- Adjustable flow rate and head
- Designed for varying flow, and head conditions
- Automatic suction
- Easy manifold reverse
- Long service life
- Reliable, optimal performance at the lowest possible cost
- Operating temperatures: -10°C / 130°C

# Main application sectors

# **Ruby**Shine







glycose, ketchup, wine etc.



# Ruby Diaphragms

### Introducing the Advanced Composite Diaphragms of Ruby pumps

Diaphragms play a crucial role in the operation of a diaphragm pump. No matter what the pumping liquid is, from water to aggressive acids, diaphragms must meet the needs of very specific handling characteristics as they relate to product compatibility.

Diaphragms of Ruby pumps are constructed of high-quality materials and their design, enables them to produce reliable and optimal performance. Available in a full range of options, PTFE, PTFE-A, NBR, EPDM, VITON, they meet the specific needs of every pumping application.

- Excellent, extended service life
- Greater performance
- Higher displacement per cycle
- Easy to install and maintain
- Eliminated leak paths due to absence of central hole
- They can be installed and removed without the use of tools
- Our diaphragms last longer and are considerably stronger than other diaphragms
- They can be used with most chemicals and are ideal for a wide range of pumping tasks
- Longer diaphragm life in more abrasive applications that still require PTFE

### Advanced Composite Diaphragms Offer:



Innovative diaphragm support side, offers flexibility, long life and protects from cavitation **Special internal plate** supports diaphragm in every movement

# *⊠***Ruby**Shine

## New Air Valve Design

Designed and made using the most innovative technology, the **Air Valve** is the "heart" of the RubyShine pump.

It functions without the need for lubricants or oils, hence:

- Eliminates the risk of seizing due to lubrication issues
- Protects the environment
- Saves money spent for lubrication

The innovative Air Valve of RubyShine pumps also provides:

- Great saving energy due to fully managed airflow
- Low-maintenance
- Non- Internal freeze
- Non-dead-Centre asymmetric operation
- Long service life
- Low cost of spare parts
- Easy installation
- Reliability
- Does not contain metal parts (excluding shaft)

# **ATEX Certificate**

Metallic conductive series of RubyShine Air Diaphragm Pumps comply with the demands of EU Directive 2014/34/EU and are certified by ATEX II 2/2 G/D so they can operate safely in potentially explosive atmospheres where flammable gases, mists or dust particles may be present.

ATEX Certificate has been issued by the European notified body TÜV NORD. Certificate number : C 004-2

### **RubyShine Pumps composition codes:**

example: model RubyShine 125SL-AN-ZST-T

Pump Model RubyShine 125, AISI 316 mirror polish Pump Body, Alu Nickel Plated Center Section, PTFE A Diaphragms, AISI 316 Ball Seats, PTFE Ball Valve, PTFE O-ring

R 125	SL	AN	Z	S	Т	Т
Pump Model	Pump Body	Center Section	Diaphragms	Ball Seats	Ball Valve	0-ring
Ruby 115 Ruby 125 Ruby 140 Ruby 150 Ruby 180	SL: AISI 316 mirror polish	W : PP WHITE AN : Alu Nickel Plated	E : EPDM Conductive T : PTFE+back up (EPDM Conductive) Z : PTFE A+back up (EPDM Conductive)	S: AISI 316	T: PTFE S: AISI 316	T: PTFE

Construction materials: Stainless Steel 316 Mirror Polish Surface Roughness : 0.8µm



Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIB T135°C Dc Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db

### Technical data

Ruby	115
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Suction / Discharge connections	DN 25 Tri-clamp
Air connection	1/2" BSP F
*Max. flow rate	72 L/min
*Max. self-priming capacity - dry running	3 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3 mm
Max. operating Temperature	95°C
Weight	9.0 Kg





ATEX



FDA COMPLIANT

EHC

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#### Performances PTFE+A Fitted



 $^{\ast}$  The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

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#### Construction materials: Stainless Steel 316 Mirror Polish Surface Roughness : 0.8µm



Ruby 125

Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIB T135°C Dc Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db

**Ruby**Shine

### Technical data

Suction / Discharge connections	DN 40 Tri-clamp
Air connection	1/2" BSP F
*Max. flow rate	185 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	3.5 mm
Max. operating Temperature	95°C
Weight	15.0 Kg







FDA COMPLIANT







#### Performances Rubber Fitted



#### Performances PTFE+A Fitted



\* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.



#### Construction materials: Stainless Steel 316 Mirror Polish Surface Roughness : 0.8µm



Ruby 140

Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIB T135°C Dc Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db

### Technical data

Suction / Discharge connections	DN 50 Tri-clamp
Air connection	1/2" BSP F
*Max. flow rate	380 L/min
*Max. self-priming capacity - dry running	4 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	5 mm
Max. operating Temperature	95°C
Weight	26.0 Kg







FDA COMPLIANT

**JCI** 1935/2004/EC





#### Performances Rubber Fitted



#### Performances PTFE+A Fitted



 $^{\ast}$  The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

#### Construction materials: Stainless Steel 316 Mirror Polish Surface Roughness : 0.8µm



Ruby 150

Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIB T135°C Dc Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db

**Ruby**Shine

### Technical data

Suction / Discharge connections	DN 65 Tri-clamp
Air connection	3/4" BSP F
*Max. flow rate	696 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	8 mm
Max. operating Temperature	95°C
Weight	64.0 Kg







FDA COMPLIANT



**ERIC** TR CU



#### Performances Rubber Fitted



#### Performances PTFE+A Fitted



\* The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

ATEX

#### Construction materials: Stainless Steel 316 Mirror Polish Surface Roughness : 0.8µm



Ruby 180

Zone 2 - Zone 22 II 3G Ex h IIB T4 Gc - II 3D Ex h IIB T135°C Dc Zone 1 - Zone 21 II 2G Ex h IIC T4 Gb - II 2D Ex h IIIC T135°C Db

### Technical data

Suction / Discharge connections	DN 80 Tri-clamp
Air connection	3/4" BSP F
*Max. flow rate	850 L/min
*Max. self-priming capacity - dry running	5 m
*Max. negative suction head - with pump primed	9.5 m
Max. head	80 m
Max. operating pressure	Min. 2 bar - Max. 8 bar
Max. size of solids	8 mm
Max. operating Temperature	95°C
Weight	64.0 Kg





ATEX



FDA COMPLIANT







#### Performances Rubber Fitted



#### Performances PTFE+A Fitted



 $^{\ast}$  The curves and performance values refer to pumps with submerged suction and a free delivery outlet with water at 20°C and vary according the construction material.

# **Dimensions:**

**Ruby 140** -

1/2"BSPG

350

248

375

50

118

64

66

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TRI-CLAMP DN50



## **Ruby 115** – 269.5 1/2"BSPG 239 뙤 TRI-CLAMP DN25 70 32.5

Ø258

230

8

330

### **Ruby 125**







**Ruby 150** -

479







202 66





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We Make The Difference

#### Headquarters / Factory:

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