

**JACOB**  
Modular Tubing Systems

USDA

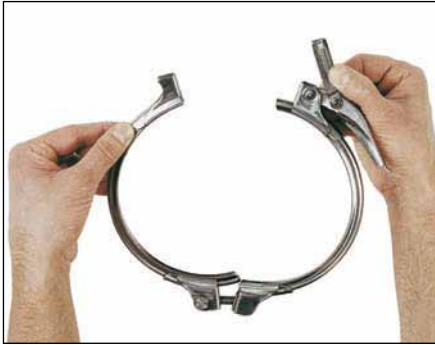
dairy accepted  
sanitary equipment



# The Jacob USDA Dairy Certified Quick-Connect System

Is As Easy As...

1. Open



2. Fit



3. Close



The newly developed combination joint and the extended profile allow the Quick Connect Pull Ring to be placed easily over the ferruled tube ends. The clasp can be guided over the closing hook with sufficient play. The bolt on the swivel joint can be tightened later, if required, when the ring is closed. Dismantling is just as easy as assembling.



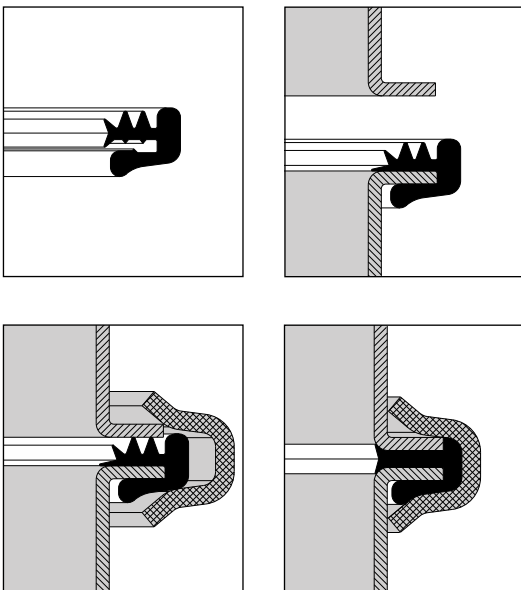
## Fast, Tight and Secure

The solid and ergonomically shaped grip enables the toggle clip to be opened and closed quickly and firmly. Due to the overlapping ends, the Quick Connect Pull Ring provides an airtight connection and has an explosion pressure resistance of 3 bar.

The Quick Connect Pull Ring and associated components received an acceptance certificate from the USDA Dairy Office.

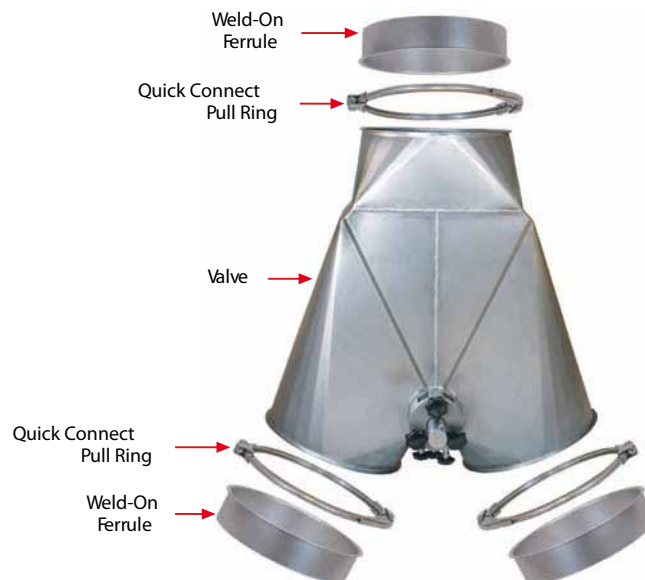
## Seamless Seal- 3A Silicone

The seamless "U" shaped seals were designed for a tight and secure connection.



## Adapts to Existing Components

Through the use of a weld-on ferrule, Jacob valves can quickly be fitted to any existing tubes or equipment.



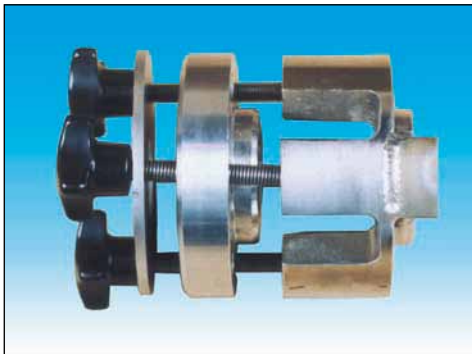
# Now You Can Choose a USDA/Sanitary Valve Designed Specifically for Bulk Material and Air Flow

- Received an acceptance certificate from the USDA Dairy Office.
- Designed for low pressure, vacuum or gravity flow product conveying systems.
- Shaft positioned between pant legs to increase angle of flow, reducing product deformation.
- Available with 45 degree outlets or 60 degree outlets.
- Available 6" (150mm) up to 12" (300mm) dia.
- Larger diameters available upon request.
- All valves are available symmetric or asymmetric, manual or actuated.



## Polished 304 Stainless Steel

- Sheet metal body precision formed.
- Product contact surfaces polished to 3A requirements of 32 micro inches.



## Spaced Bearings

- Spaced bearings to avoid product contamination
- Thumb bolts for easy removal.



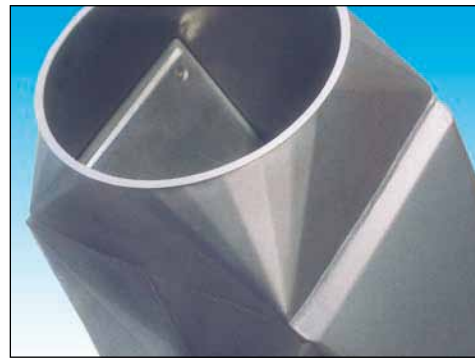
## Increased Angle of Flow

- Shaft positioned between pant legs.
- Increases angle of flow.
- Reduces product deformation.



## Recessed Ledges

- Recessed ledge for a positive flap seal.
- Eliminates gasket abrasion.
- Reduces product deformation.



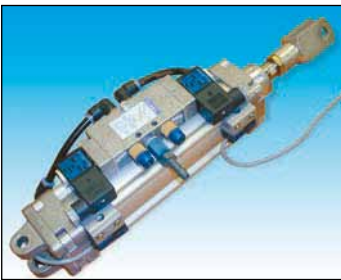
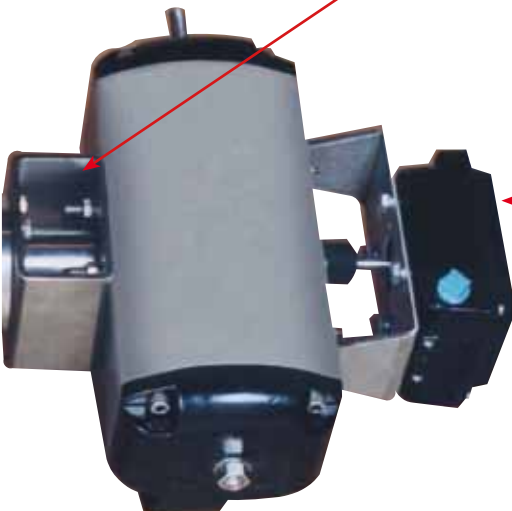
## Mounting Bracket and Bearing Spacer

- Mounts actuator directly to valve



## Actuation

- All valves have option of manual, rotary, or linear actuation.
- Valves are fully assembled and tested prior to shipping.
- Manual valves are equipped with a universal drive connection shaft to allow later upgrade to pneumatic operation.
- Drive units can be mounted on either side of the valve (factory standard right-hand installation).



## Linear Actuator

Linear assembly includes:

- Solenoid valve – dual coil, 110V standard, NEMA 4
- Proximity switches
- Cylinder unit
- Mounting hardware
- Protective cover for cylinder unit

### OPTIONS:

- 24V solenoid
- Explosion proof, NEMA 7 & 9

## Rotary Actuator

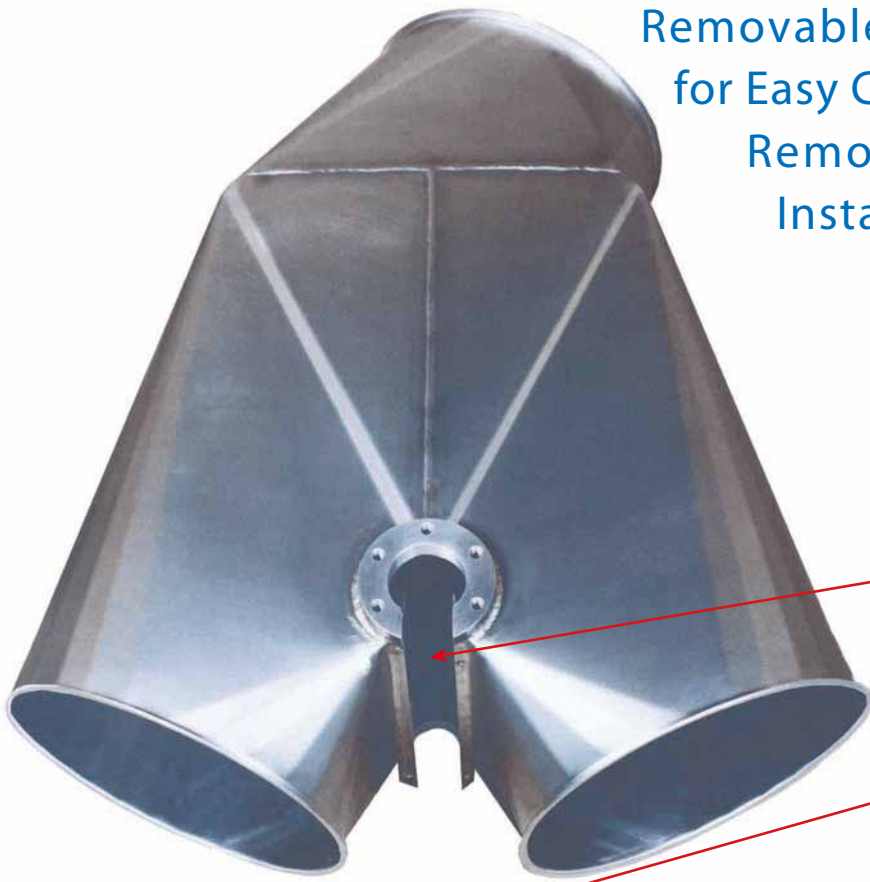
- Allowing compact design
- Double acting actuator (spring return available)
- Silencers to regulate airflow to minimize the wear on valve and actuator components
- NAMUR mounting
- No external moving components
- Quick response time
- Rotary assembly includes:
  - Actuator
  - Solenoid valve – single coil, 110V standard, NEMA 4
  - Silencers
  - Mounting Hardware



### OPTIONS:

- Limit Switches
- Positioner
- Dual coil solenoid
- 24V solenoid
- Explosion proof, NEMA 7 & 9

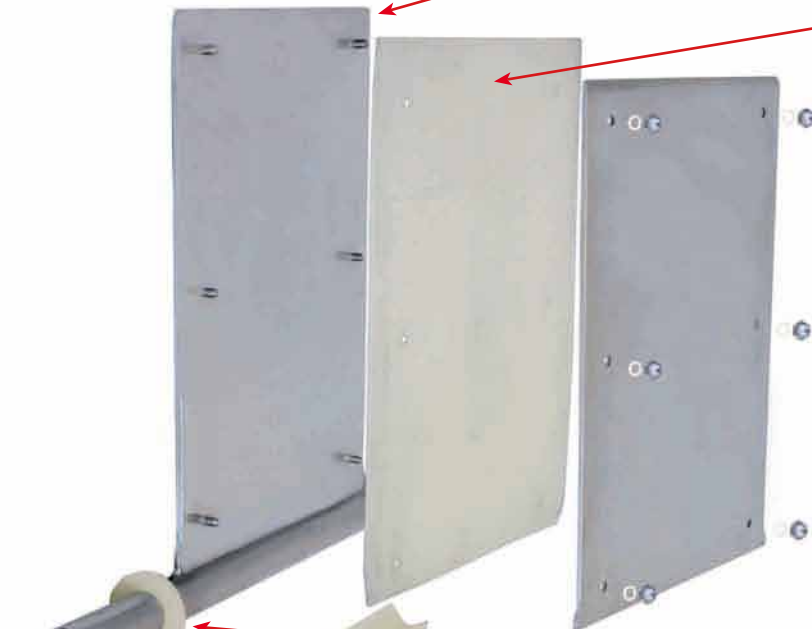
# Removable Shaft Assembly for Easy Cleaning Without Removing Valve from Installation.



Split collar and gap  
for shaft and flap removal.

Sandwich flapper  
with shaft.

Replaceable flap  
gasket 3A silicone.



Stainless steel acorn  
nuts with 3A silicone  
o-rings.

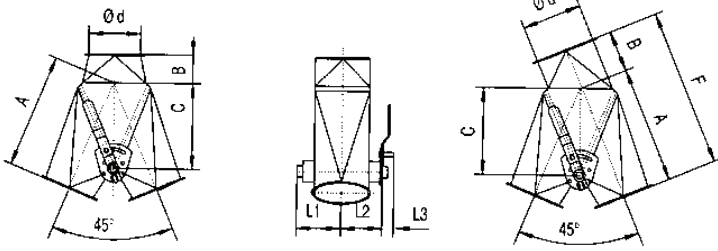
Shaft seal and  
gaskets 3A silicone.

Cover plate for shaft seal.

Thumb bolts for  
adjusting shaft seal.



## 2-Way Distributor (45° Manual)



### Symmetrical

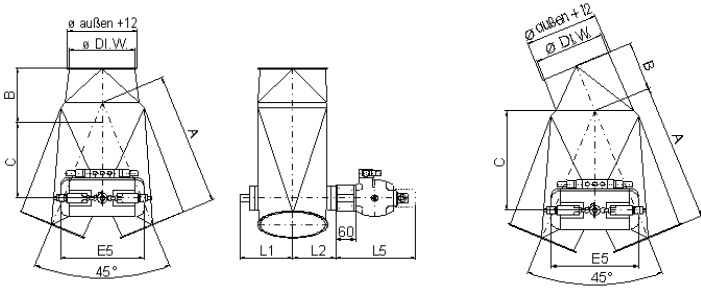
∅	Part No.	d	A	B	C	F	L1	L2	L3
150	D12153518	149	315	75	221	-	135	105	88
200	D12203518	199	400	105	289	-	160	130	88
250	D12253518	249	480	130	356	-	188	158	88
300	D12303518	299	570	160	426	-	213	183	88

### Asymmetrical

∅	Part No.	d	A	B	C	F	L1	L2	L3
150	D12153519	149	315	75	221	-	135	105	88
200	D12203519	199	400	105	289	-	160	130	88
250	D12253519	249	480	130	356	-	188	158	88
300	D12303519	299	570	160	426	-	213	183	88

Larger diameters are available upon request.

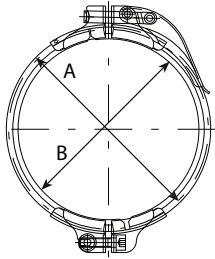
## 2-Way Distributor (45° Actuated)



∅	Symmetrical	Asymmetrical	E5	L5
150	D69221501	D69121501	252	272
200	D69222001	D69122001	296	281
250	D69222501	D69122501	342	304
300	D69223001	D69123001	342	304

Larger diameters are available upon request.

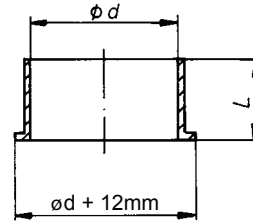
## Quick-Connect Pull Ring & U-Seal



∅	A	B	Pull Ring	U-Seal
100	125	104	D12103903	D10107952
150	175	154	D12153903	D10157952
200	225	204	D12203903	D10207952
250	275	254	D12253903	D10257952
300	325	304	D12303903	D10307952

Larger diameters are available upon request.

## Weld-On Ferrule



∅	D	L	Part No.
100	99	55	D12103060
150	149	55	D12153060
200	199	55	D12203060
250	249	55	D12253060
300	299	55	D12303060

Larger diameters are available upon request.

## Additional Jacob Tubing Components

Just a few of the other components available for your vacuum, air and gravity flow conveying include:

For USDA Dairy Certified Quick Connect System



Tubes



Bends



Forks



T-Pieces



Cones



Teléfono: (57+2) 665 64 55 - Móvil: +57 317 427 4045

ventas@colductos.com - www.colductos.com

Calí - Colombia

