



Model 8208

## 2-Way Plastic Media Isolation Valve

- Excellent Resistance to Aggressive Media
- PVDF Body / PTFE Bellows
- Simple Compact Design
- Value Priced



## Technical Data

Function:

2-Way Normally Closed

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range* (PSI) |
|-------------|---------|------|---------------------------------|
| G1/4        | 1/8"    | 0.28 | 0 - 100                         |
| G3/8        | 3/16"   | 0.50 | 0 - 72                          |
| 1"          | 1/4"    | 0.74 | 0 - 29                          |
| 1/4"        | 5/16"   | 1.0  | 0 - 14                          |

Temperature Rating

Ambient: 32°F to 122°F (0°C to +50°C)

Fluid: 14°F to 230°F (-10°C to +110°C)

Power Rating: 12 Watt

Voltage:

24 Volt DC

24/50-60, 120/50-60, 230/50-60 Volt AC

Electrical Connector:

DIN Style Plug with Removable Cable Plug Adapter

Body: PVDF

Bellows: PTFE

Tube Fitting: Delrin

Seat Seal:

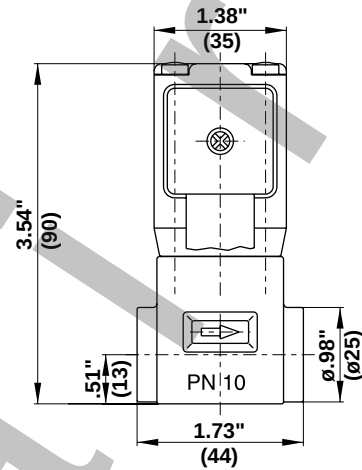
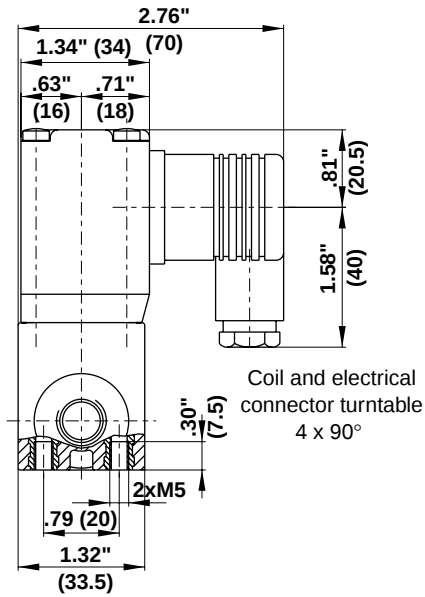
EPDM (Standard)

Fluorocarbon, PTFE (Optional)

Coil: Class F, Molded, Continuous Duty

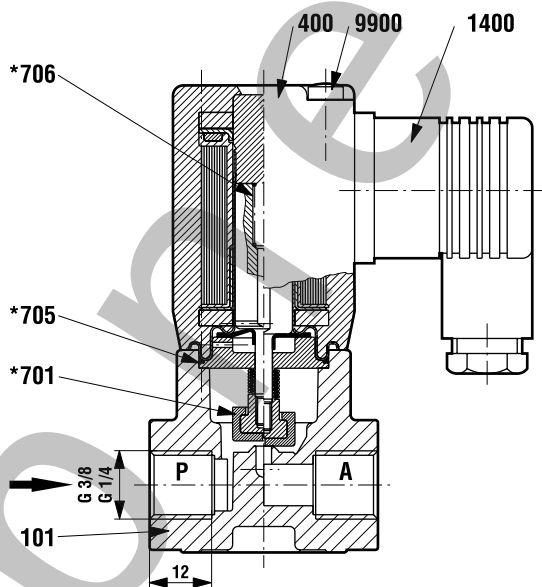
## Part Number Identification

| 8 2 0 8 - 2 5   0 2 - 1 3 - Voltage - Optional |                        |            |                   |                            |
|------------------------------------------------|------------------------|------------|-------------------|----------------------------|
| VALVE SERIES                                   | PORTS                  | ORIFICE    | SEAL              | SUFFIX                     |
|                                                | 95 = 1/4" Tube Fitting | 02 = 1/8"  | 02 = Fluorocarbon | CO = 1/2" NPT Conduit      |
|                                                | 25 = G 1/4             | 04 = 3/16" | 08 = PTFE         | CL = 1/2" NPT Conduit with |
|                                                | 27 = G 3/8             | 05 = 1/4"  | 13 = EPDM         | 24" Lead Wires             |
|                                                |                        | 06 = 5/16" |                   |                            |



#### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 12W | 13VA   | 13VA    |



|      |                      |
|------|----------------------|
| 101  | Body                 |
| 400  | Coil                 |
| *701 | Guide                |
| *705 | O-ring               |
| *706 | Pressure spring      |
| 1400 | Electrical connector |
| 9900 | Oval head cap screw  |

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



Model 8241

## 2-Way Brass Diaphragm Valve

- Ideal for Control of Neutral Gases and Liquids
- Hot Water & Steam Valves Available
- Minimal Pressure Differential Required
- Interchangeable "Click-On®" Coil
- Manual Override – Optional
- Latching Coil – Optional for 6, 12 & 24 VDC Versions (1/4"–1" NPT only)



## Technical Data

Function:

2-Way Normally Closed

2-Way Normally Open – Optional

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range* (PSI) |
|-------------|---------|------|---------------------------------|
| 1/4"        | 5/16"   | 2.3  | 1.5 - 232 PSI (0.1 - 16 bar)    |
| 3/8"        | 3/8"    | 3.6  | 1.5 - 232 PSI (0.1 - 16 bar)    |
| 1/2"        | 7/16"   | 4.5  | 1.5 - 232 PSI (0.1 - 16 bar)    |
| 3/4"        | 3/4"    | 7.3  | 1.5 - 232 PSI (0.1 - 16 bar)    |
| 1"          | 1"      | 11.4 | 1.5 - 232 PSI (0.1 - 16 bar)    |
| 1-1/4"      | 1-1/4"  | 27.6 | 1.5 - 145 PSI (0.1 - 10 bar)    |
| 1-1/2"      | 1-1/2"  | 30.0 | 1.5 - 145 PSI (0.1 - 10 bar)    |
| 2"          | 2"      | 49.2 | 1.5 - 145 PSI (0.1 - 10 bar)    |

Temperature Rating

Ambient:

14°F to 122°F (-10°C to +50°C)

14°F to 140°F (-10°C to +60°C) - HNBR\*

Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM,\* Fluorocarbon

32°F to 302°F (0°C to +150°C) - HNBR\*

\*Pressure range (EPDM seals):

4.5 – 232 PSI (0.3 – 16 bar): 1/4" – 1" NPT

4.5 – 145 PSI (0.3 – 10 bar): 1-1/4" – 2" NPT

\*Pressure range (HNBR seals):

1.5 – 232 PSI (0.1 – 10 bar):

1/4" – 1" NPT only

Power Rating: 6.5 Watt

Voltage:

24 Volt DC

24/50, 110/50, 120/60, 220/60,

230/50 Volt AC

Electrical Connector:

DIN Style Plug with Removable Cable Plug Adapter

Body: Brass

Seal: Buna (Standard)

Other Wetted Parts: Stainless Steel, PVDF, Brass

Coil: Class F, Molded, Continuous Duty, UL Recognized

## Part Number Identification

A 8 – 8 2 4 1 – 1 1 1 1 – 0 1 – U – Voltage – Optional

## VALVE SERIES

## PORTS

## ORIFICE

## SEAL

## SUFFIX

0506 = 1/4" NPT

5/16"

01 = Buna

NO = Normally Open

0707 = 3/8" NPT

3/8"

02 = Fluorocarbon

MO = Manual Override

0908 = 1/2" NPT

7/16"

13 = EPDM

LC = Latching Coil

1010 = 3/4" NPT

3/4"

51 = HNBR (Steam)

CO = 1/2" NPT Conduit

1111 = 1" NPT

1"

CL = 1/2" NPT Conduit with

1212 = 1-1/4" NPT

1-1/4"

24" Lead Wires

1313 = 1-1/2" NPT

1-1/2"

1414 = 2" NPT

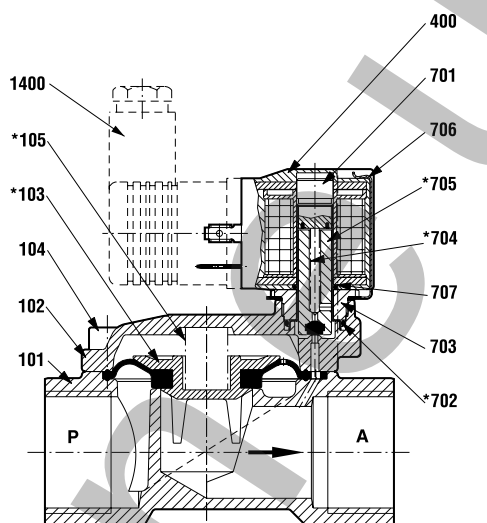
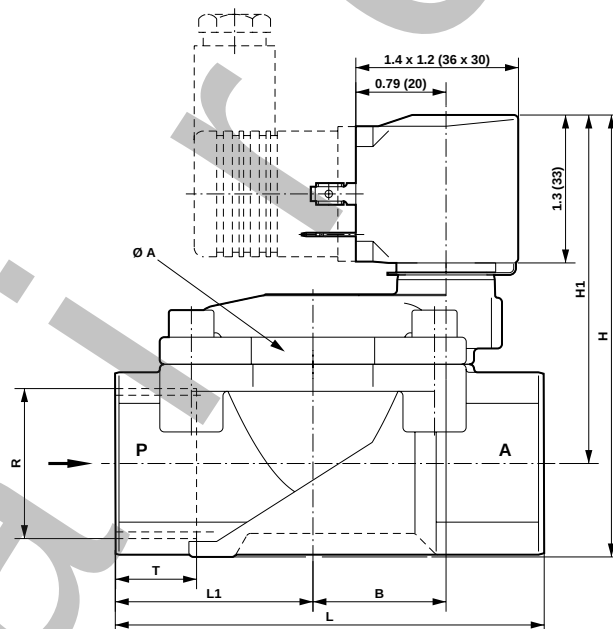
2"



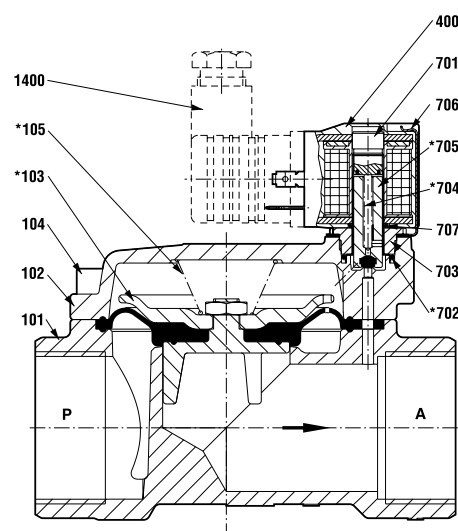
| R          | ØA            | B              | H               | H <sub>1</sub> | L             | L <sub>1</sub> |
|------------|---------------|----------------|-----------------|----------------|---------------|----------------|
| 1/4" NPT   | 1.73<br>(44)  | .77<br>(19.5)  | 3.09<br>(78.5)  | 2.64<br>(67)   | 2.36<br>(60)  | 1.08<br>(27.5) |
| 3/8" NPT   | 1.73<br>(44)  | .77<br>(19.5)  | 3.09<br>(78.5)  | 2.64<br>(67)   | 2.36<br>(60)  | 1.08<br>(27.5) |
| 1/2" NPT   | 1.73<br>(44)  | .77<br>(19.5)  | 3.19<br>(81)    | 2.64<br>(67)   | 2.64<br>(67)  | 1.22<br>(31)   |
| 3/4" NPT   | 1.97<br>(50)  | .95<br>(24)    | 3.47<br>(88)    | 2.82<br>(71.5) | 3.15<br>(80)  | 1.44<br>(36.5) |
| 1" NPT     | 2.44<br>(62)  | 1.16<br>(29.5) | 3.84<br>(97.5)  | 3.03<br>(77)   | 3.74<br>(95)  | 1.73<br>(44)   |
| 1-1/4" NPT | 3.62<br>(92)  | 1.75<br>(44.5) | 4.90<br>(124.5) | 3.76<br>(95.5) | 5.20<br>(132) | 2.36<br>(60)   |
| 1-1/2" NPT | 3.62<br>(92)  | 1.75<br>(44.5) | 4.90<br>(124.5) | 3.76<br>(95.5) | 5.20<br>(132) | 2.36<br>(60)   |
| 2" NPT     | 4.29<br>(109) | 2.15<br>(54.5) | 5.61<br>(142.5) | 4.25<br>(108)  | 6.30<br>(160) | 2.91<br>(74)   |

Power Consumption

| DC   | AC     |         |
|------|--------|---------|
|      | Inrush | Holding |
| 6.5W | 15VA   | 12VA    |



- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Socket head cap screw
- \*105 Pressure spring
- 400 Coil
- 701 Guide



- \*702 O-ring
- 703 Screw piece
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- 707 O-ring
- 1400 Electrical connector

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



Model 8257

## 2-Way Stainless Steel Diaphragm Valve

- Ideal for Control of Slightly Aggressive Gases and Liquids
- Operates at Zero Pressure Differential
- High Flow Capacity
- Compact Design
- Suitable for Vacuum

**Technical Data**

Function: 2-Way Normally Closed

| Ports (NPT) | Orifice | Cv  | Operating Pressure Range (PSI) |
|-------------|---------|-----|--------------------------------|
| 1/4"        | 3/8"    | 1.8 | 0 - 145 PSI (0 - 10 bar)       |
| 3/8"        | 3/8"    | 2.0 | 0 - 145 PSI (0 - 10 bar)       |
| 1/2"        | 3/8"    | 2.0 | 0 - 145 PSI (0 - 10 bar)       |

Temperature Rating:

Ambient:

14°F to 140°F (-10°C to +60°C)

Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM, Fluorocarbon

Power Rating: 12 Watt

Voltage:

24 Volt DC

24/50, 110/50, 120/60, 220/60, 230/50 Volt AC

Electrical Connector:

DIN Style Plug with Removable Cable Plug Adapter

Body: Stainless Steel

Diaphragm:

Buna (Standard)

Fluorocarbon, EPDM (Optional)

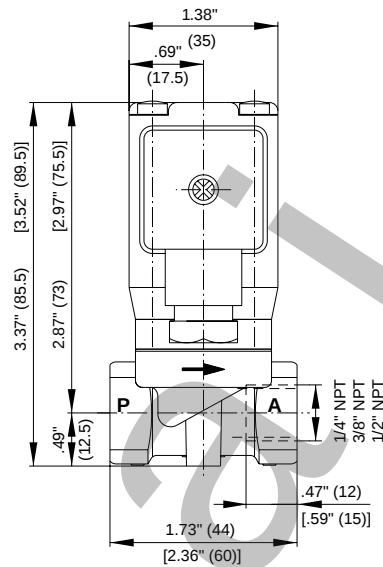
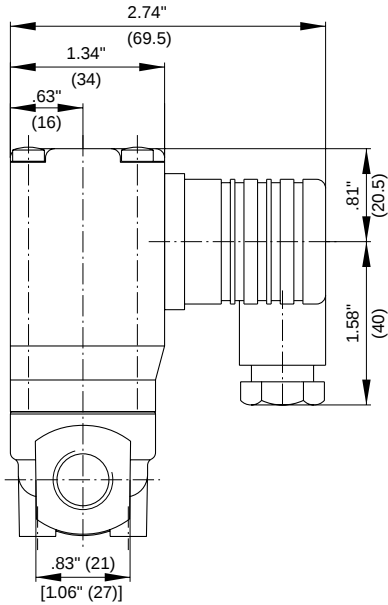
Other Wetted Parts:

Stainless Steel, Polyamid 66

Coil: Class F, Molded, Continuous Duty

**Part Number Identification**

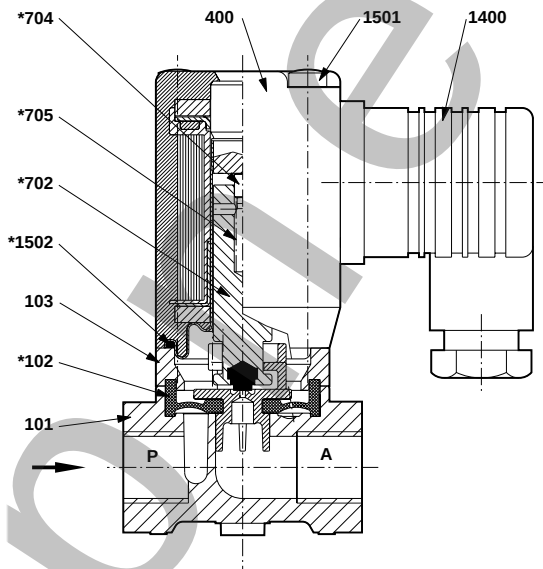
| 8 2 5 7 - 0 5   0 7 - 0 1 - Voltage - Optional |               |           |                   |                       |
|------------------------------------------------|---------------|-----------|-------------------|-----------------------|
| VALVE SERIES                                   | PORTS         | ORIFICE   | SEAL              | SUFFIX                |
|                                                | 05 = 1/4" NPT | 07 = 3/8" | 01 = Buna         | CO = 1/2" NPT Conduit |
|                                                | 07 = 3/8" NPT |           | 02 = Fluorocarbon |                       |
|                                                | 09 = 1/2" NPT |           | 13 = EPDM         |                       |



#### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 12W | 13VA   | 13VA    |

Dimensions in [ ] for version 1/2" NPT.



- 101 Valve body
- \*102 Diaphragm
- 103 Spacer
- 400 Coil
- \*702 Plunger
- \*704 Guide pin
- \*705 Pressure spring
- 1400 Electrical connector
- 1501 Oval head cap screw
- \*1502 O-ring

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



Model 8263

2-Way Brass Diaphragm Valve

- Ideal for Control of Neutral Gases and Liquids
- Hot Water & Steam Valves Available
- Operates at Zero Pressure Differential
- High Flow Capacity
- Compact Design

**Technical Data**

Function: 2-Way Normally Closed

| Ports (NPT) | Orifice | Cv  | Operating Pressure Range (PSI)* |
|-------------|---------|-----|---------------------------------|
| 1/4"        | 3/8"    | 1.8 | 0 - 145 PSI (0 - 10 bar)        |
| 3/8"        | 3/8"    | 2.0 | 0 - 145 PSI (0 - 10 bar)        |
| 1/2"        | 3/8"    | 2.0 | 0 - 145 PSI (0 - 10 bar)        |

\*0 - 87 PSI (0 - 6 bar): HNBR Seal

**Temperature Rating**

Ambient:

14°F to 140°F (-10°C to +60°C)

14°F to 122°F (-10°C to +50°C) - HNBR

Fluid :

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM, Fluorocarbon

14°F to 302°F (-10°C to +150°C) - HNBR

Power Rating: 12 Watt

Voltage:

24 Volt DC

24/50, 110/50, 120/60, 220/60, 230/50 Volt AC

Electrical Connector: DIN Style Plug with Removable Cable Plug Adapter

Body: Brass

Diaphragm:

Buna (Standard)

Fluorocarbon, EPDM, HNBR (Optional)

Other Wetted Parts: Brass, Polyamid 66

Coil: Class F, Molded, Continuous Duty, UL Recognized

**Part Number Identification**

A 8 - 8 2 6 3 - 0 5 | 0 7 - 0 1 - U - Voltage - Optional

VALVE SERIES

PORTS

05 = 1/4" NPT

07 = 3/8" NPT

09 = 1/2" NPT

ORIFICE

07 = 3/8"

SEAL

01 = Buna

02 = Fluorocarbon

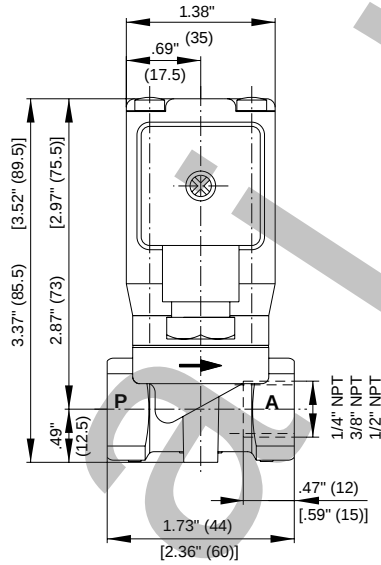
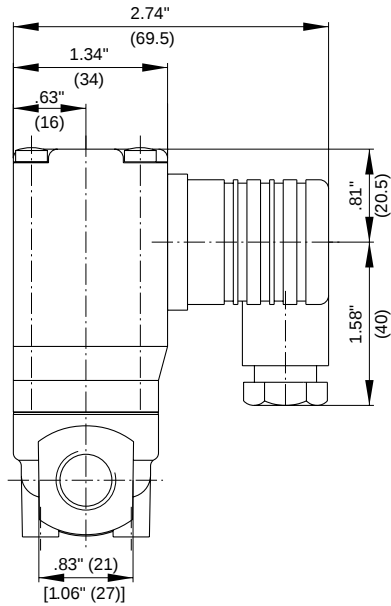
13 = EPDM

51 = HNBR (Steam)

SUFFIX

CO = 1/2" NPT Conduit

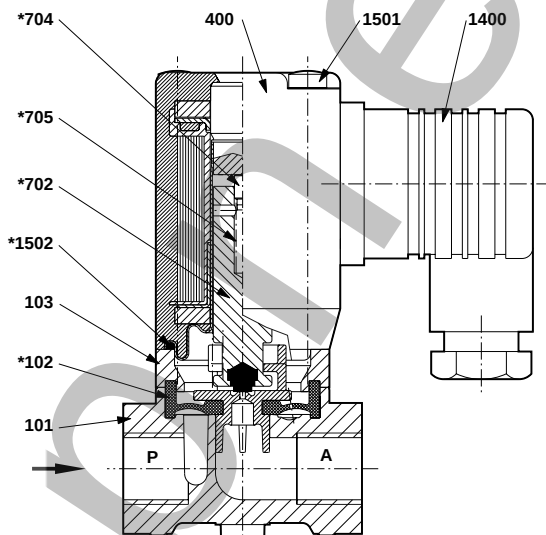
CL = 1/2" NPT Conduit with 24" Lead Wires



#### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 12W | 20VA   | 16VA    |

Dimensions in [ ] for version 1/2" NPT.



- 101 Valve body
- \*102 Diaphragm
- 103 Spacer
- 400 Coil
- \*702 Plunger
- \*704 Guide pin
- \*705 Pressure spring
- 1400 Electrical connector
- 1501 Oval head cap screw
- \*1502 O-ring

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



Model 8264

2-Way Brass Diaphragm Valve

- Ideal for Control of Neutral Gases and Liquids
- Zero Pressure Differential
- Interchangeable "Click-On" Coil
- Normally Open – Optional
- Suitable for Vacuum

**Technical Data**

Function:

2-Way Normally Closed

2-Way Normally Open – Optional

| Ports (NPT) | Orifice | Cv  | Operating Pressure Range (PSI) |
|-------------|---------|-----|--------------------------------|
| 1/4"        | 5/16"   | 2.3 | 0 - 145 PSI (0 - 10 bar)       |
| 3/8"        | 3/8"    | 3.6 | 0 - 145 PSI (0 - 10 bar)       |
| 1/2"        | 7/16"   | 4.1 | 0 - 145 PSI (0 - 10 bar)       |
| 3/4"        | 3/4"    | 7.0 | 0 - 145 PSI (0 - 10 bar)       |
| 1"          | 1"      | 9.6 | 0 - 145 PSI (0 - 10 bar)       |

Temperature Rating:

Ambient:

14°F to 122°F (-10°C to +50°C)

Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - Fluorocarbon, EPDM

Power Rating: 18 Watt

Voltage:

24 Volt DC

24/50-60, 42/50-60, 110/50-60, 230/50-60  
Volt AC

Electrical Connector:

DIN Style Plug with Removable Cable Plug  
Adapter

Body: Brass

Seal:

Buna (Standard)

Fluorocarbon, EPDM (Optional)

Other Wetted Parts: Stainless Steel, PVDF

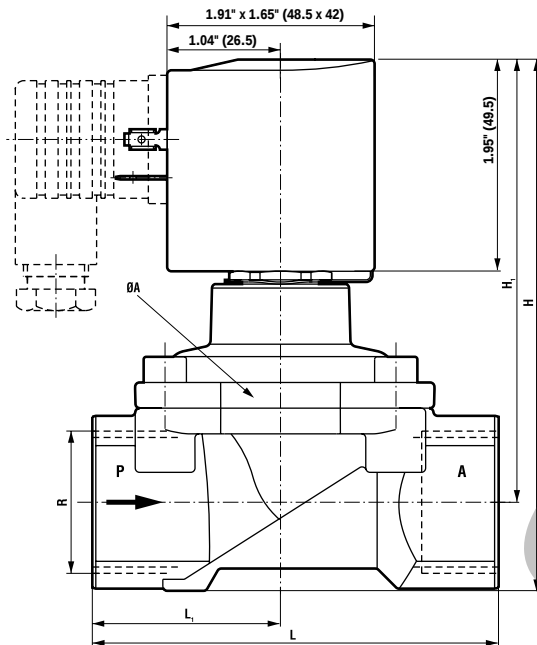
Coil: Class F, Molded, Continuous Duty

**Part Number Identification**

| 8 2 6 4 - 1 1 1 1 - 0 1 - Voltage - Optional |                 |         |                   |                                              |
|----------------------------------------------|-----------------|---------|-------------------|----------------------------------------------|
| VALVE SERIES                                 | PORTS           | ORIFICE | SEAL              | SUFFIX                                       |
|                                              | 0506 = 1/4" NPT | 5/16"   | 01 = Buna         | NO = Normally Open                           |
|                                              | 0707 = 3/8" NPT | 3/8"    | 02 = Fluorocarbon | CO = 1/2" NPT Conduit                        |
|                                              | 0908 = 1/2" NPT | 7/16"   | 13 = EPDM         | CL = 1/2" NPT Conduit with<br>24" Lead Wires |
|                                              | 1010 = 3/4" NPT | 3/4"    |                   |                                              |
|                                              | 1111 = 1" NPT   | 1"      |                   |                                              |

## Model 8264

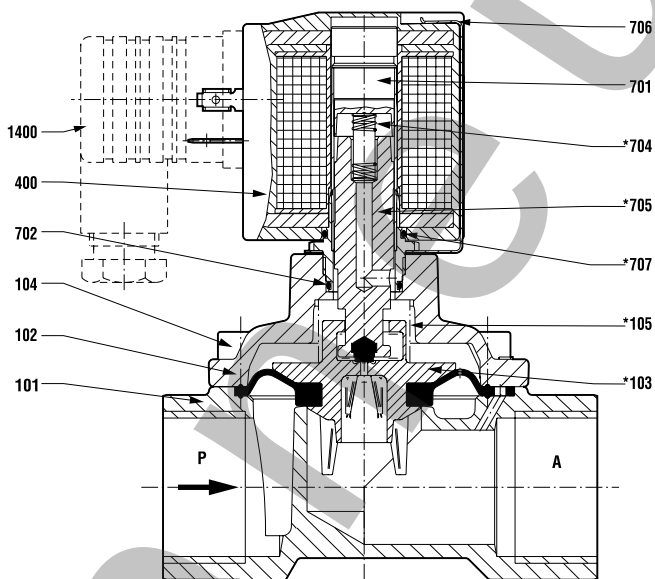
All Dimensions in Inches (mm)



| R        | AØ           | H             | H <sub>i</sub>  | L            | L <sub>i</sub> |
|----------|--------------|---------------|-----------------|--------------|----------------|
| 1/4" NPT | 1.74<br>(44) | 4.10<br>(104) | 3.64<br>(92.5)  | 2.37<br>(60) | 1.08<br>(27.5) |
| 3/8" NPT | 1.74<br>(44) | 4.10<br>(104) | 3.64<br>(92.5)  | 2.37<br>(60) | 1.08<br>(27.5) |
| 1/2" NPT | 1.74<br>(44) | 4.26<br>(108) | 3.72<br>(94.5)  | 2.64<br>(67) | 1.22<br>(31)   |
| 3/4" NPT | 1.97<br>(50) | 4.53<br>(115) | 3.90<br>(99)    | 3.15<br>(80) | 1.43<br>(36.5) |
| 1" NPT   | 2.44<br>(62) | 4.90<br>(124) | 4.07<br>(103.5) | 3.74<br>(95) | 1.74<br>(44)   |

### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 18W | 20VA   | 20VA    |



- 101 Valve body
- 102 Body cover
- \*103 Diaphragm
- 104 Socket head cap screw
- \*105 Pressure spring
- 400 Coil
- 701 Guide
- 702 O-ring
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- \*707 O-ring
- 1400 Electrical connector

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



# Model 8265

## 2-Way Brass Diaphragm Valve

- Ideal for Control of Neutral Gases and Liquids
- Hot Water & Steam Valves Available
- Operates at Zero Pressure Differential
- High Flow Capacity
- Suitable For Vacuum



### Technical Data

Function: 2-Way Normally Closed

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range (PSI)      |
|-------------|---------|------|-------------------------------------|
| 1/4"        | 5/16"   | 2.3  | DC Valves: 0 - 116 PSI (0 - 8 bar)  |
| 3/8"        | 3/8"    | 3.1  | AC Valves: 0 - 232 PSI (0 - 16 bar) |
| 1/2"        | 1/2"    | 3.8  | All Steam Valves (HNBR Seal):       |
| 3/4"        | 3/4"    | 9.0  | 0 - 145 PSI (0 - 10 bar)            |
| 1"          | 1"      | 12.0 |                                     |

### Temperature Rating

Ambient:

14°F to 122°F (-10°C to +50°C)

14°F to 140°F (-10°C to +60°C) - HNBR

Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM, Fluorocarbon

14°F to 302°F (-10°C to +150°C) - HNBR

Power Rating: 18 Watt

Voltage:

24 Volt DC

24/50, 110/50, 120/60, 220/60,  
230/50 Volt AC

Electrical Connector:

DIN Style Plug with Removable Cable Plug  
Adapter

Body: Brass

Diaphragm:

Buna (Standard)

Fluorocarbon, EPDM, HNBR (Optional)

Other Wetted Parts: Brass, PVDF, 430F

Stainless, 304 Stainless

Coil: Class F, Molded, Continuous Duty, UL  
Recognized

### Part Number Identification

A 8 - 8 2 6 5 - 1 1 1 1 - 0 1 - U - Voltage - Optional

VALVE SERIES

PORTS

ORIFICE

SEAL

SUFFIX

0506 = 1/4" NPT

5/16"

01 = Buna

CO = 1/2" NPT Conduit

0707 = 3/8" NPT

3/8"

02 = Fluorocarbon

CL = 1/2" NPT Conduit with

0909 = 1/2" NPT

1/2"

13 = EPDM

24" Lead Wires

1010 = 3/4" NPT

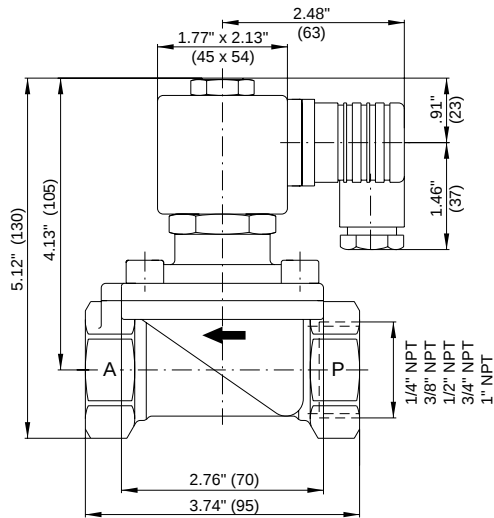
3/4"

51 = HNBR (Steam)\*

1111 = 1" NPT

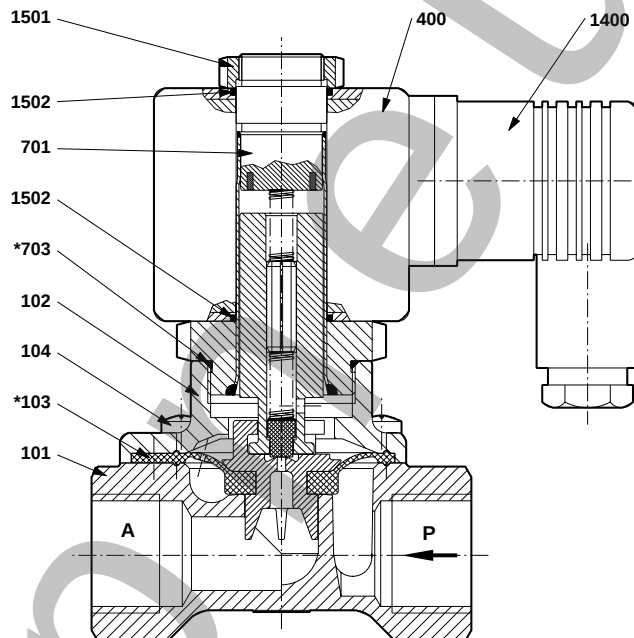
1"

\* Note: Valves with seal option 51 (HNBR)  
are not available with UL recognized coils.



#### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 18W | 106VA  | 35VA    |



|      |                                                                           |
|------|---------------------------------------------------------------------------|
| 101  | Valve body                                                                |
| 102  | Valve cover                                                               |
| *103 | Diaphragm                                                                 |
| 104  | Oval head cap screw up to 1/2" NPT<br>Socket head cap screw from 3/4" NPT |
| 400  | Coil                                                                      |
| 701  | Guide                                                                     |
| *703 | O-ring                                                                    |
| 1400 | Socket                                                                    |
| 1501 | Hexagon nut                                                               |
| 1502 | O-ring                                                                    |

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



## Model 8273

### 2-Way Stainless Steel Diaphragm Valve

- Ideal for Control of Slightly Aggressive Gases and Liquids
- Hot Water Valves Available
- Minimal Pressure Differential Required
- Interchangeable "Click-On" Coil
- High Flow Rate
- Compact Design



#### Technical Data

##### Function:

2-Way Normally Closed

2-Way Normally Open – Optional

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range (PSI) |
|-------------|---------|------|--------------------------------|
| 1/4"        | 5/16"   | 2.3  | 1.5 - 232 PSI (0.1 - 16 bar)   |
| 3/8"        | 3/8"    | 3.6  | 1.5 - 232 PSI (0.1 - 16 bar)   |
| 1/2"        | 7/16"   | 4.6  | 1.5 - 232 PSI (0.1 - 16 bar)   |
| 3/4"        | 3/4"    | 7.3  | 1.5 - 232 PSI (0.1 - 16 bar)   |
| 1"          | 1"      | 11.4 | 1.5 - 232 PSI (0.1 - 16 bar)   |

##### Temperature Rating

##### Ambient:

14°F to 122°F (-10°C to +50°C)

##### Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM\*, Fluorocarbon

##### \*Pressure range (EPDM seals):

4.5 – 232 PSI (0.3 – 16 bar)

Power Rating: 8 Watt

##### Voltage:

24 Volt DC, 205 Volt DC

24/50, 110/50, 120/60, 220/60,  
230/50 Volt AC

##### Electrical Connector:

DIN Style Plug with Removable Cable  
Plug Adapter

Body: Stainless Steel

Seal: Buna (Standard)

Other Wetted Parts: Stainless Steel, PVDF

Coil: Class F, Molded, Continuous Duty,  
UL Recognized

**A 8 - 8 2 7 3 - 1 1 1 1 - 0 1 - U - Voltage - Optional**

#### VALVE SERIES

#### PORTS

#### ORIFICE

#### SEAL

#### SUFFIX

0506 = 1/4" NPT

5/16"

01 = Buna

NO = Normally Open

0707 = 3/8" NPT

3/8"

02 = Fluorocarbon

0908 = 1/2" NPT

7/16"

13 = EPDM (Hot Water)

1010 = 3/4" NPT

3/4"

1111 = 1" NPT

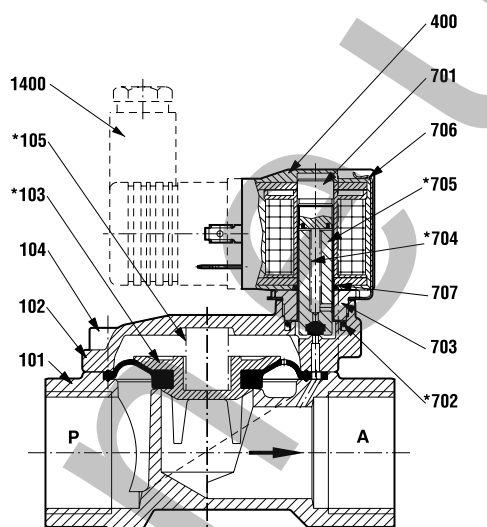
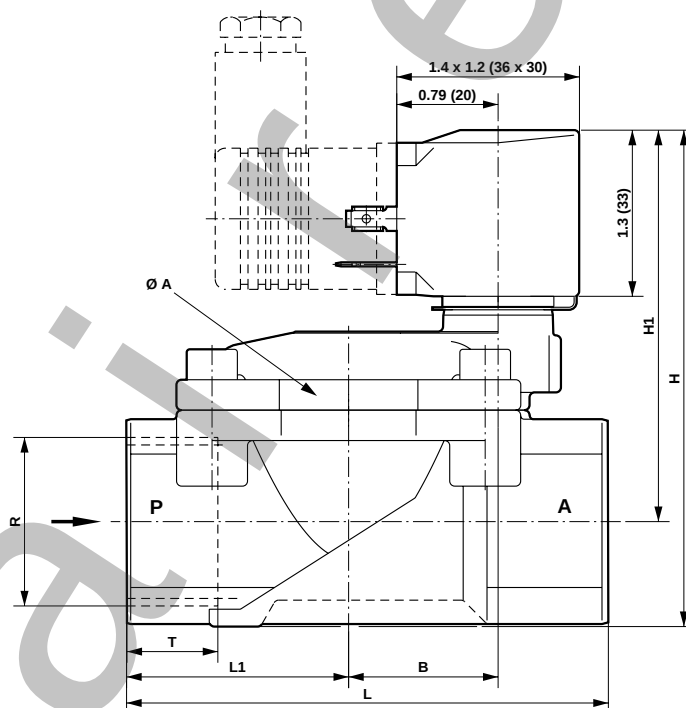
1"



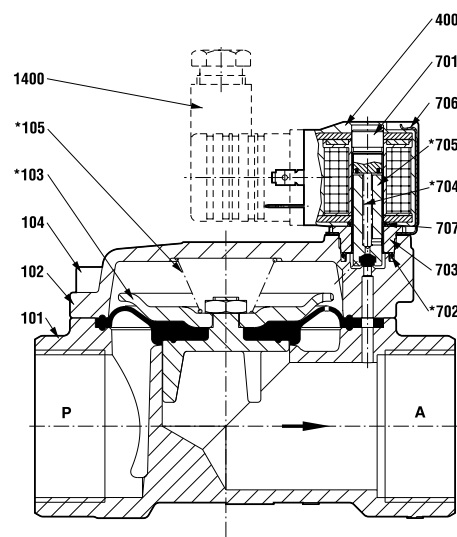
| R        | ØA           | B              | H              | H <sub>1</sub> | L            | L <sub>1</sub> |
|----------|--------------|----------------|----------------|----------------|--------------|----------------|
| 1/4" NPT | 1.73<br>(44) | .77<br>(19.5)  | 3.09<br>(78.5) | 2.64<br>(67)   | 2.36<br>(60) | 1.08<br>(27.5) |
| 3/8" NPT | 1.73<br>(44) | .77<br>(19.5)  | 3.09<br>(78.5) | 2.64<br>(67)   | 2.36<br>(60) | 1.08<br>(27.5) |
| 1/2" NPT | 1.73<br>(44) | .77<br>(19.5)  | 3.19<br>(81)   | 2.64<br>(67)   | 2.64<br>(67) | 1.22<br>(31)   |
| 3/4" NPT | 1.97<br>(50) | .95<br>(24)    | 3.47<br>(88)   | 2.82<br>(71.5) | 3.15<br>(80) | 1.44<br>(36.5) |
| 1" NPT   | 2.44<br>(62) | 1.16<br>(29.5) | 3.84<br>(97.5) | 3.03<br>(77)   | 3.74<br>(95) | 1.73<br>(44)   |

### Power Consumption

| DC | AC     |         |
|----|--------|---------|
|    | Inrush | Holding |
| 8W | 15VA   | 12VA    |



- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Socket head cap screw
- \*105 Pressure spring
- 400 Coil
- 701 Guide



- \*702 O-ring
- 703 Screw piece
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- 707 O-ring
- 1400 Electrical connector

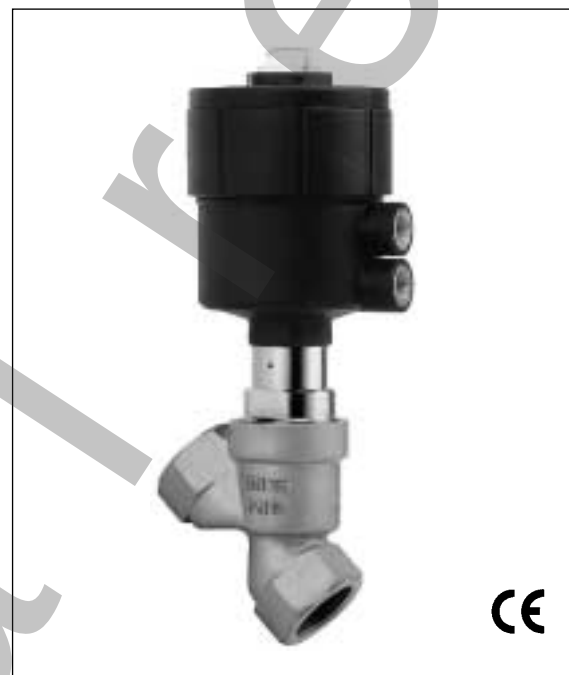
\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



Model 8451

2-Way Bronze Angle Seat Valve

- Ideal for Control of Neutral Gases and Liquids
- High Flow Rate
- Waterhammer-Free
- Suitable for Slurries
- Optical Position Indicator Standard
- High Pressure Version Optional
- Vacuum Service Compatible

**Technical Data**

Function:

2-Way Normally Closed

2-Way Normally Open – Optional

2-Way Double-Acting – Optional

Flow Direction: Fixed, Underseat

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range* (PSI) | Pilot Pressure Range (PSI) |
|-------------|---------|------|---------------------------------|----------------------------|
| 1/2"        | 1/2"    | 5.8  | 0 - 232 (363)**                 | 51 - 145                   |
| 3/4"        | 3/4"    | 12.0 | 0 - 145 (232)**                 | 51 - 145                   |
| 1"          | 1"      | 16.8 | 0 - 145                         | 51 - 145                   |
| 1-1/4"      | 1-1/4"  | 27.6 | 0 - 102                         | 51 - 145                   |
| 1-1/2"      | 1-1/2"  | 36.0 | 0 - 65                          | 51 - 145                   |
| 2"          | 2"      | 44.4 | 0 - 44                          | 51 - 145                   |

\* Operating pressure range based on gaseous and liquid fluids up to 600 mm2/s

\*\*High Pressure Version (see Part Number Identification below)

Temperature Rating

Media: 14°F to 356°F (-10°C to +180°C)

Ambient: 14°F to 140°F (-10°C to +60°C)

Body: Bronze, Nickel-Plated Brass

Seal: PTFE

Other Wetted Parts:

Brass, Stainless Steel, Sandvik 1802

Actuator: 30% Glass-Filled Polyamid 66

**Part Number Identification**

8 4 5 1 - 0 9 0 9 - 0 8 - Voltage - Optional

**VALVE SERIES****PORTS****ORIFICE****SEAL****SUFFIX**

0909 = 1/2" NPT

1/2"

08 = PTFE

NO = Normally Open

1010 = 3/4" NPT

3/4"

DA = Double Acting

1111 = 1" NPT

1"

(4/2- or 5/2-way pilot valve required)

1212 = 1-1/4" NPT

1-1/4"

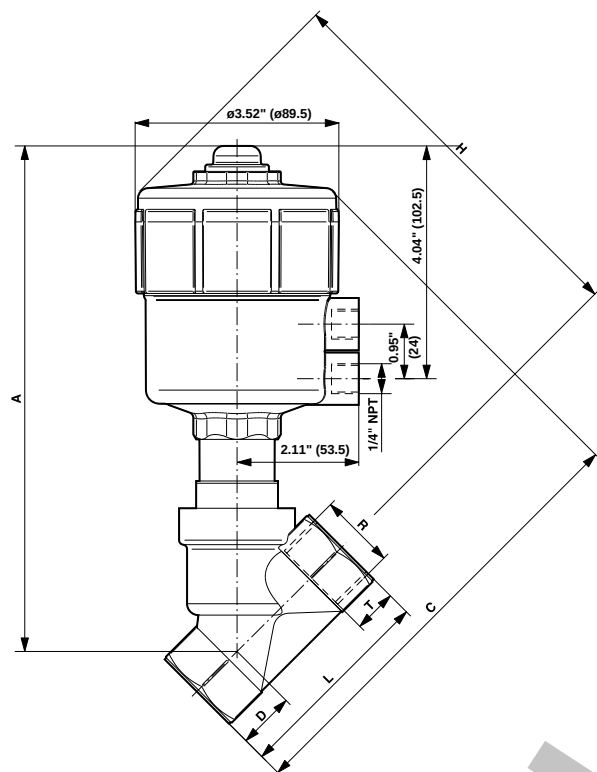
HP = High Pressure

1313 = 1-1/2" NPT

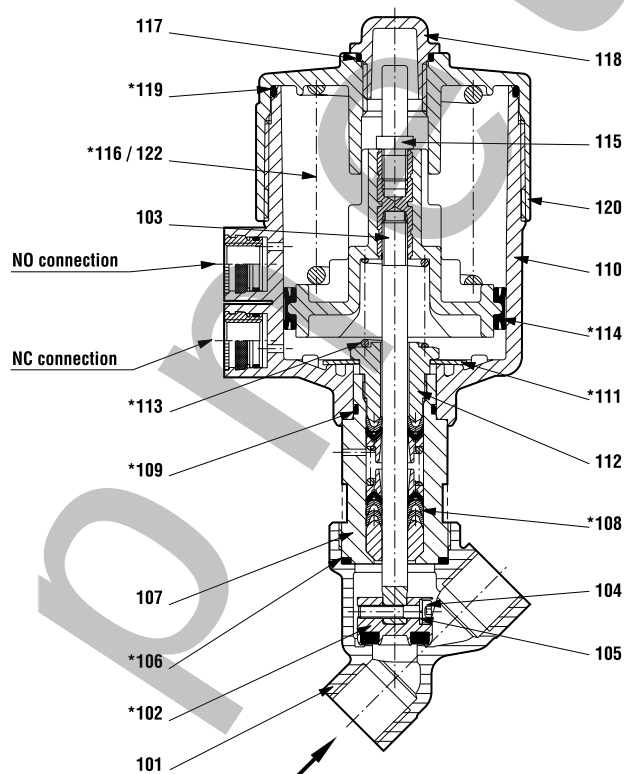
1-1/2"

1414 = 2" NPT

2"



| R          | A               | C               | D              | H               | L             | T              |
|------------|-----------------|-----------------|----------------|-----------------|---------------|----------------|
| 1/2" NPT   | 8.05<br>(204.5) | 7.20<br>(183)   | 0.73<br>(18.5) | 6.46<br>(164)   | 2.56<br>(65)  | 0.51<br>(13)   |
| 3/4" NPT   | 8.41<br>(213.5) | 7.44<br>(189)   | 0.83<br>(21)   | 6.61<br>(168)   | 2.95<br>(75)  | 0.55<br>(14)   |
| 1" NPT     | 8.72<br>(221.5) | 7.83<br>(199)   | 0.98<br>(25)   | 6.85<br>(174)   | 3.54<br>(90)  | 0.65<br>(16.5) |
| 1-1/4" NPT | 9.31<br>(236.5) | 8.37<br>(212.5) | 1.12<br>(28.5) | 7.24<br>(184.5) | 4.33<br>(110) | 0.67<br>(17)   |
| 1-1/2" NPT | 9.39<br>(238.5) | 8.54<br>(217)   | 1.22<br>(31)   | 7.32<br>(186)   | 4.72<br>(120) | 0.67<br>(17)   |
| 2" NPT     | 9.86<br>(250.5) | 9.23<br>(234.5) | 1.57<br>(40)   | 7.66<br>(194.5) | 5.91<br>(150) | 0.69<br>(17.5) |



- 101 Valve body
- \*102 Valve plate
- 103 Valve spindle, complete
- 104 Round head cap screw
- 105 Spring washer
- \*106 Seal ring
- 107 Screw piece
- \*108 Seal packing
- \*109 O-ring
- 110 Control head housing cover, bottom part
- \*111 Cup spring
- 112 Screw piece
- \*113 Pressure spring
- \*114 Cylinder packing
- 115 Signal pin
- \*116 Pressure spring
- 117 O-ring
- 118 Cover cap
- \*119 O-ring
- 120 Control head housing cover
- \*122 Pressure spring

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



## Model 8453

### 2-Way Stainless Steel Angle Seat Valve

- Ideal for Control of Aggressive Gases and Liquids
- High Flow Rate
- Waterhammer-Free
- Suitable for Slurries
- Optical Position Indicator Standard
- High Pressure Version Optional
- Vacuum Service Compatible



#### Technical Data

##### Function:

- 2-Way Normally Closed
- 2-Way Normally Open – Optional
- 2-Way Double-Acting – Optional

##### Flow Direction: Fixed, Underseat

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range* (PSI) | Pilot Pressure Range (PSI) |
|-------------|---------|------|---------------------------------|----------------------------|
| 1/2"        | 1/2"    | 5.8  | 0 - 232 (580)**                 | 51 - 145                   |
| 3/4"        | 3/4"    | 12.0 | 0 - 145 (232)**                 | 51 - 145                   |
| 1"          | 1"      | 16.8 | 0 - 145                         | 51 - 145                   |
| 1-1/4"      | 1-1/4"  | 27.6 | 0 - 102                         | 51 - 145                   |
| 1-1/2"      | 1-1/2"  | 36.0 | 0 - 65                          | 51 - 145                   |
| 2"          | 2"      | 44.4 | 0 - 44                          | 51 - 145                   |

\* Operating pressure range based on gaseous and liquid fluids up to 600 mm<sup>2</sup>/s

\*\* High Pressure Version (see Part Number Identification below)

#### Temperature Rating

##### Media:

14°F to 356°F (-10°C to +180°C)

##### Ambient:

14°F to 140°F (-10°C to +60°C)

Body: Stainless Steel

Seal: PTFE

Other Wetted Parts: Stainless Steel

Actuator: 30% Glass-Filled Polyamid 66

#### Part Number Identification

8 4 5 3 - 0 9 0 9 - 0 8 - Voltage - Optional

##### VALVE SERIES

##### PORTS

##### ORIFICE

##### SEAL

##### SUFFIX

0909 = 1/2" NPT

1/2"

08 = PTFE

NO = Normally Open

1010 = 3/4" NPT

3/4"

DA = Double Acting

1111 = 1" NPT

1"

(4/2- or 5/2-way pilot valve required)

1212 = 1-1/4" NPT

1-1/4"

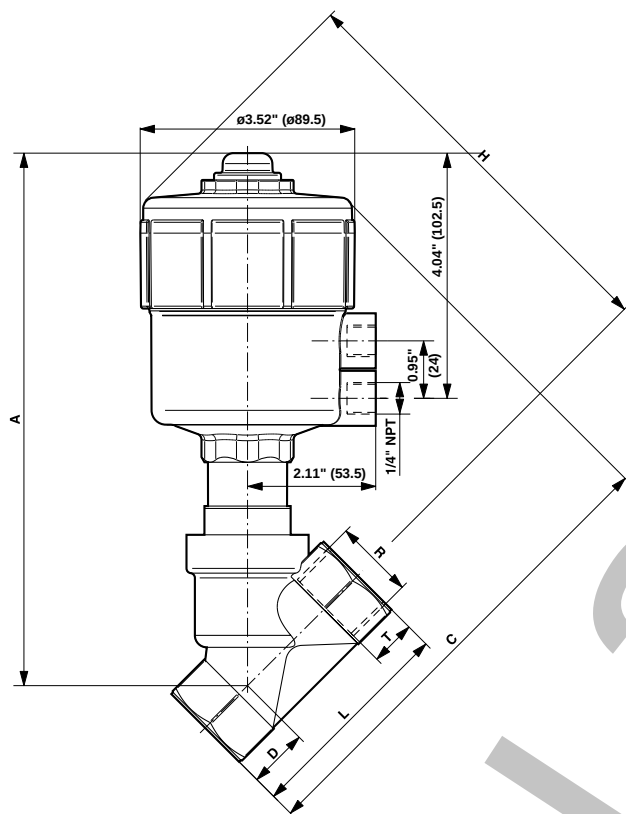
HP = High Pressure

1313 = 1-1/2" NPT

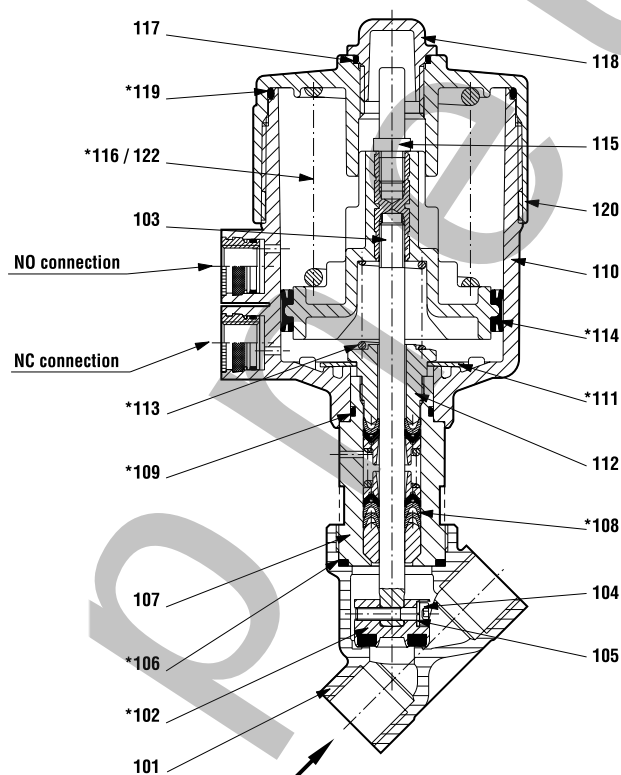
1-1/2"

1414 = 2" NPT

2"



| R          | A               | C               | D              | H               | L             | T              |
|------------|-----------------|-----------------|----------------|-----------------|---------------|----------------|
| 1/2" NPT   | 8.05<br>(204.5) | 7.20<br>(183)   | 0.73<br>(18.5) | 6.46<br>(164)   | 2.56<br>(65)  | 0.51<br>(13)   |
| 3/4" NPT   | 8.41<br>(213.5) | 7.44<br>(189)   | 0.83<br>(21)   | 6.61<br>(168)   | 2.95<br>(75)  | 0.55<br>(14)   |
| 1" NPT     | 8.72<br>(221.5) | 7.83<br>(199)   | 0.98<br>(25)   | 6.85<br>(174)   | 3.54<br>(90)  | 0.65<br>(16.5) |
| 1-1/4" NPT | 9.31<br>(236.5) | 8.37<br>(212.5) | 1.12<br>(28.5) | 7.24<br>(184.5) | 4.33<br>(110) | 0.67<br>(17)   |
| 1-1/2" NPT | 9.39<br>(238.5) | 8.54<br>(217)   | 1.22<br>(31)   | 7.32<br>(186)   | 4.72<br>(120) | 0.67<br>(17)   |
| 2" NPT     | 9.86<br>(250.5) | 9.23<br>(234.5) | 1.57<br>(40)   | 7.66<br>(194.5) | 5.91<br>(150) | 0.69<br>(17.5) |



- 101 Valve body
- \*102 Valve plate
- 103 Valve spindle, complete
- 104 Round head cap screw
- 105 Spring washer
- \*106 Seal ring
- 107 Screw piece
- \*108 Seal packing
- \*109 O-ring
- 110 Control head housing cover, bottom part
- \*111 Cup spring
- 112 Screw piece
- \*113 Pressure spring
- \*114 Cylinder packing
- 115 Signal pin
- \*116 Pressure spring
- 117 O-ring
- 118 Cover cap
- \*119 O-ring
- 120 Control head housing cover
- \*122 Pressure spring

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



# Model 8501

## 2-Way Brass Flat Piston Valve

- Ideal for Control of Neutral Gases and Liquids
- Hot Water & Steam Valves Available
- Operates at Zero Pressure Differential
- Manual Override – Optional (3/4" - 2" NPT only)
- High Flow Capacity



### Technical Data

#### Function:

2-Way Normally Closed

2-Way Normally Open – Optional

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range (PSI)  |
|-------------|---------|------|---------------------------------|
| 1/2"        | 7/16"   | 4.5  |                                 |
| 3/4"        | 3/4"    | 13.2 | 0 - 360 PSI (0 - 25 bar)        |
| 1"          | 1"      | 15.6 | All orifice sizes:              |
| 1-1/4"      | 1-1/4"  | 36.0 | 0 - 232 PSI (0 - 16 bar) - PTFE |
| 1-1/2"      | 1-1/2"  | 37.2 |                                 |
| 2"          | 2"      | 55.2 |                                 |

#### Temperature Rating

##### Ambient:

14°F to 122°F (-10°C to +50°C)

14°F to 140°F (-10°C to +60°C) - PTFE

##### Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM, Fluorocarbon

14°F to 392°F (-10°C to +200°C) - PTFE

#### Power Rating:

22 Watt (1/2" NPT)

40 Watt (3/4" NPT to 2" NPT)

#### Voltage:

24 Volt DC

24/50-60, 110/50-60, 230/50-60 Volt AC

#### Electrical Connector:

DIN Style Plug with Removable Cable Plug Adapter

Body: Brass

Piston Seal: Buna (Standard)

Fluorocarbon, EPDM, PTFE (Optional)

Other Wetted Parts: Stainless Steel, Brass, Gun Metal

Coil: Class F, Molded, Continuous Duty

### Part Number Identification

**8 5 0 1 - 1 1 1 1 - 0 1 - Voltage - Optional**

#### VALVE SERIES

#### PORTS

#### ORIFICE

#### SEAL

#### SUFFIX

0908 = 1/2" NPT

7/16"

01 = Buna

NO = Normally Open

1010 = 3/4" NPT

3/4"

02 = Fluorocarbon

MO = Manual Override

1111 = 1" NPT

1"

08 = PTFE

CO = 1/2" NPT Conduit

1212 = 1-1/4" NPT

1-1/4"

13 = EPDM

CL = 1/2" NPT Conduit with

1313 = 1-1/2" NPT

1-1/2"

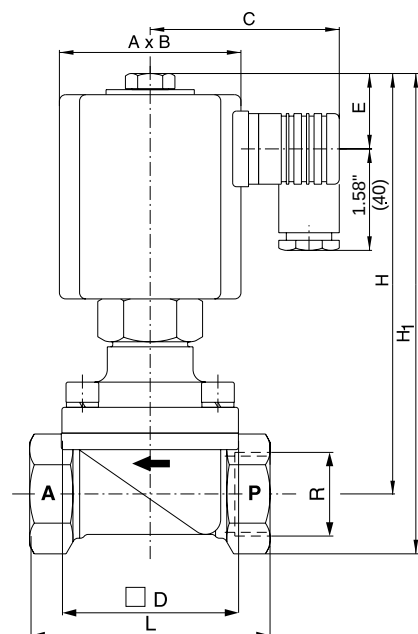
24" Lead Wires

1414 = 2" NPT

2"

# Model 8501

All Dimensions in Inches (mm)

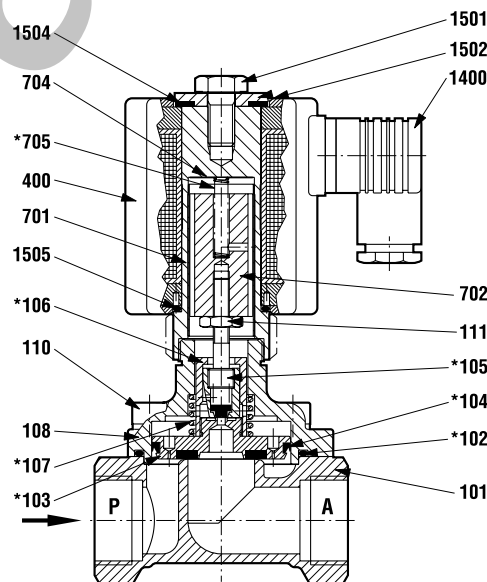
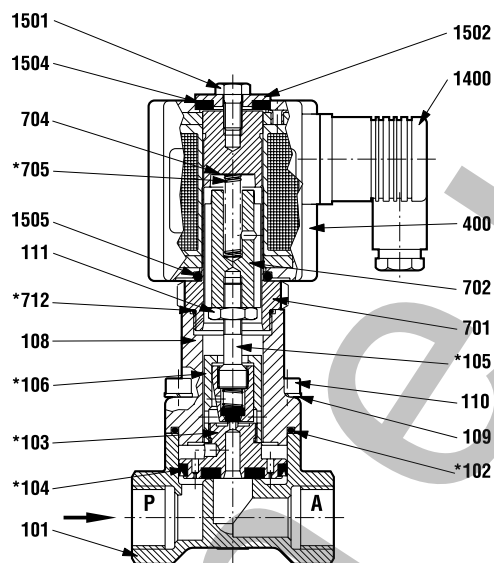


| R          | A x B                    | C            | □ D           | E            | H             | H <sub>1</sub> | L             |
|------------|--------------------------|--------------|---------------|--------------|---------------|----------------|---------------|
| 1/2" NPT   | 2.05 x 2.56<br>(52 x 65) | 2.56<br>(65) | 1.77<br>(45)  | 1.02<br>(26) | 5.71<br>(145) | 6.30<br>(160)  | 2.64<br>(67)  |
| 3/4" NPT   | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 2.76<br>(70)  | 1.22<br>(31) | 6.77<br>(172) | 7.72<br>(196)  | 3.74<br>(95)  |
| 1" NPT     | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 2.76<br>(70)  | 1.22<br>(31) | 6.77<br>(172) | 7.72<br>(196)  | 3.74<br>(95)  |
| 1-1/4" NPT | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 3.78<br>(96)  | 1.22<br>(31) | 7.36<br>(187) | 8.66<br>(220)  | 5.20<br>(132) |
| 1-1/2" NPT | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 3.78<br>(96)  | 1.22<br>(31) | 7.36<br>(187) | 8.66<br>(220)  | 5.20<br>(132) |
| 2" NPT     | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 4.41<br>(112) | 1.22<br>(31) | 7.80<br>(198) | 9.37<br>(238)  | 6.30<br>(160) |

## Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 22W | 25VA   | 25VA    |
| 40W | 45VA   | 45VA    |

AC coil incl. rectifier



- 101 Valve body
- \*102 O-ring
- \*103 Valve plate
- \*104 Grooved ring
- \*105 Valve spindle
- \*106 Screw piece
- \*107 Pressure spring, from 3/4" NPT
- 108 Body cover
- 109 Spring washer
- 110 Round head cap screw
- 111 Hexagon nut

- 400 Coil
- 701 Guide
- 702 Plunger
- 704 Round plate
- \*705 Pressure spring
- \*712 O-ring, 1/2" NPT only
- 1400 Socket
- 1501 Hexagon screw
- 1502 Round plate
- 1504 Gasket
- 1505 O-ring

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



## Model 8505

### 2-Way Stainless Steel Flat Piston Valve

- Suitable for Slightly Aggressive Media
- Operates at Zero Pressure Differential
- High Flow Capacity
- Suitable for Vacuum



#### Technical Data

##### Function:

2-Way Normally Closed

2-Way Normally Open – Optional

| Ports (NPT) | Orifice | Cv   | Operating Pressure Range (PSI)  |
|-------------|---------|------|---------------------------------|
| 3/8"        | 3/8"    | 4.0  |                                 |
| 1/2"        | 7/16"   | 4.5  | 0 - 360 PSI (0 - 25 bar)        |
| 3/4"        | 3/4"    | 13.2 | All orifice sizes:              |
| 1"          | 1"      | 15.5 | 0 - 232 PSI (0 - 16 bar) - PTFE |

##### Temperature Rating

##### Ambient:

14°F to 122°F (-10°C to +50°C)

##### Fluid :

-4°F to 194°F (-20°C to +90°C) - Buna

-4°F to 230°F (-20°C to +110°C) - EPDM, Fluorocarbon, PTFE

##### Power Rating:

22 Watt (3/8" NPT, 1/2" NPT)

40 Watt (3/4" NPT, 1" NPT)

##### Voltage:

24 Volt DC

24/50-60, 110/50-60, 230/50-60 Volt AC

##### Electrical Connector:

DIN Style Plug with Removable Cable Plug Adapter

Body: 316 Stainless Steel

##### Piston Seal:

Buna (Standard)

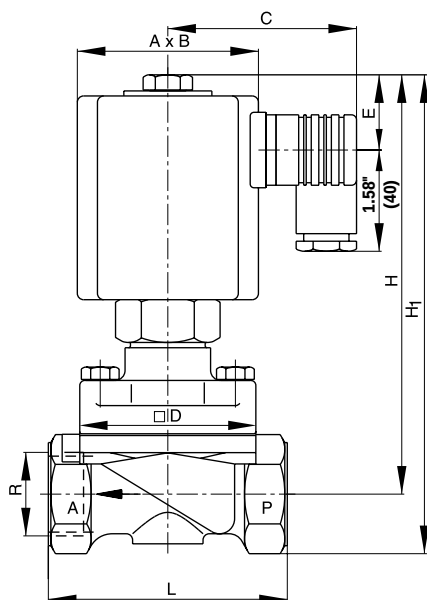
Fluorocarbon, EPDM, PTFE (Optional)

Other Wetted Parts: 430F, 316, 304, 301  
Stainless Steel

Coil: Class F, Molded, Continuous Duty

#### Part Number Identification

| 8 5 0 5 - 0 7 0 7 - 0 1 - Voltage - Optional |                 |         |                   |                            |
|----------------------------------------------|-----------------|---------|-------------------|----------------------------|
| VALVE SERIES                                 | PORTS           | ORIFICE | SEAL              | SUFFIX                     |
|                                              | 0707 = 3/8" NPT | 3/8"    | 01 = Buna         | NO = Normally Open         |
|                                              | 0908 = 1/2" NPT | 7/16"   | 02 = Fluorocarbon | CO = 1/2" NPT Conduit      |
|                                              | 1010 = 3/4" NPT | 3/4"    | 08 = PTFE         | CL = 1/2" NPT Conduit with |
|                                              | 1111 = 1" NPT   | 1"      | 13 = EPDM         | 24" Lead Wires             |

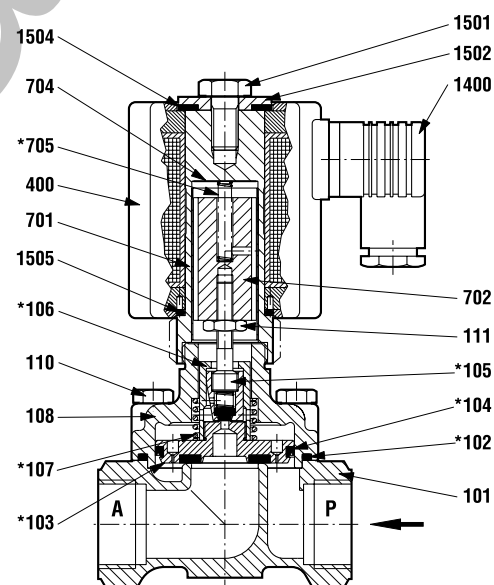
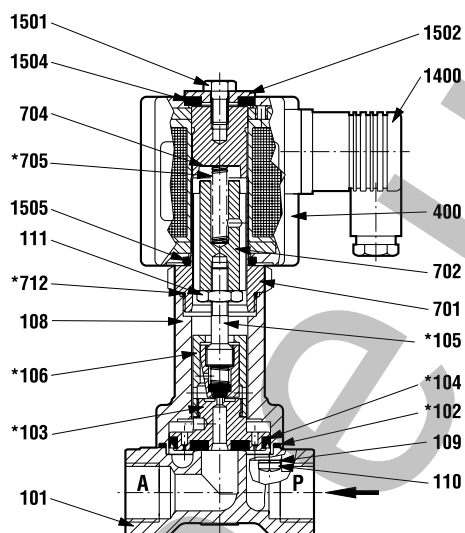


| R        | A x B                    | C            | D            | E            | H             | H <sub>1</sub> | L            |
|----------|--------------------------|--------------|--------------|--------------|---------------|----------------|--------------|
| 3/8" NPT | 2.05 x 2.56<br>(52 x 65) | 2.56<br>(65) | 1.77<br>(45) | 1.02<br>(26) | 5.91<br>(150) | 6.50<br>(165)  | 2.64<br>(67) |
| 1/2" NPT | 2.05 x 2.56<br>(52 x 65) | 2.56<br>(65) | 1.77<br>(45) | 1.02<br>(26) | 6.91<br>(150) | 6.50<br>(165)  | 2.64<br>(67) |
| 3/4" NPT | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 2.76<br>(70) | 1.22<br>(31) | 6.77<br>(172) | 7.72<br>(196)  | 3.74<br>(95) |
| 1" NPT   | 2.84 x 3.62<br>(72 x 92) | 2.95<br>(75) | 2.76<br>(70) | 1.22<br>(31) | 6.77<br>(172) | 7.72<br>(196)  | 3.74<br>(95) |

#### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 22W | 25VA   | 25VA    |
| 40W | 45VA   | 45VA    |

AC coil incl. rectifier



- 101 Valve body
- \*102 O-ring
- \*103 Valve plate
- \*104 Grooved ring
- \*105 Valve spindle
- \*106 Screw piece
- \*107 Pressure spring, from 3/4" NPT
- 108 Body cover
- 109 Spring washer, 1/2" NPT only
- 110 Round head screw, 1/2" NPT only
- 111 Hexagon head screw from 3/4" NPT
- 111 Hexagon nut

- 400 Coil
- 701 Guide
- 702 Plunger
- 704 Round plate
- \*705 Pressure spring
- \*712 O-ring, 1/2" NPT only
- 1400 Electrical connector
- 1501 Hexagon screw
- 1502 Round plate
- 1504 Gasket
- 1505 O-ring

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.



## Model 8531

### 2-Way High Pressure Flat Piston Valve

- Ideal for Control of Neutral Gases and Liquids
- Minimal Pressure Differential Required
- Interchangeable "Click-On" Coil
- High Flow – High Pressure Capacity
- Manual Override – Optional



#### Technical Data

##### Function:

2-Way Normally Closed

2-Way Normally Open – Optional

Ports (NPT): 1/4" 3/8" 1/2" 3/4" 1"

Orifice: 5/16" 3/8" 1/2" 3/4" 1"

Cv Factor: 2.6 4.1 5.3 8.4 12.6

Pressure Range: 7.25 - 580 PSI (0.5 - 40 bar) all orifice sizes

##### Temperature Rating

##### Ambient:

14°F to 122°F (-10°C to +50°C)

##### Fluid:

14°F to 194°F (-10°C to +90°C) - Buna

14°F to 230°F (-10°C to +110°C) - EPDM, Fluorocarbon

Power Rating: 18 Watt

##### Voltage:

24 Volt DC

24/50, 110/50, 120/60, 220/60, 230/50 Volt AC

##### Electrical Connector:

DIN Style Plug with Removable Cable Plug Adapter

Body: Brass

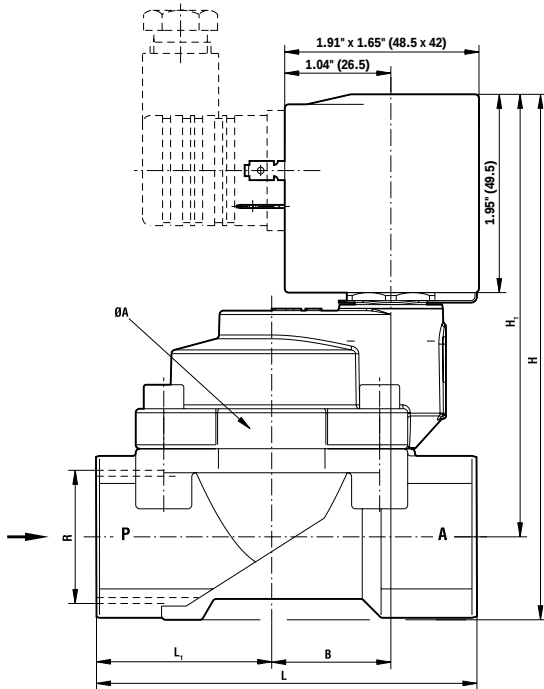
Seal: Buna (Standard)

Other Wetted Parts: Brass, PTFE, Stainless Steel

Coil: Class F, Molded, Continuous Duty

#### Part Number Identification

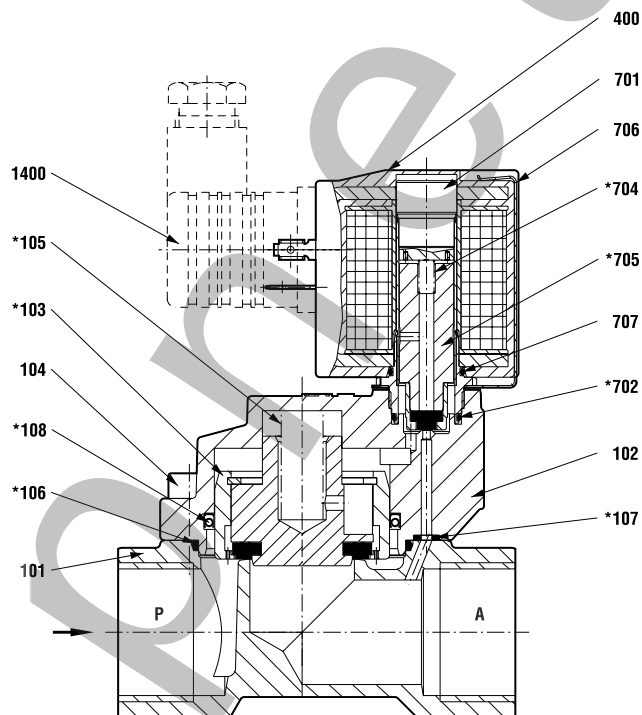
| 8 5 3 1 - 0 5 0 6 - 0 1 - Voltage - Optional |                 |         |                   |                            |
|----------------------------------------------|-----------------|---------|-------------------|----------------------------|
| VALVE SERIES                                 | PORTS           | ORIFICE | SEAL              | SUFFIX                     |
|                                              | 0506 = 1/4" NPT | 5/16"   | 01 = Buna         | NO = Normally Open         |
|                                              | 0707 = 3/8" NPT | 3/8"    | 02 = Fluorocarbon | MO = Manual Override       |
|                                              | 0909 = 1/2" NPT | 1/2"    | 13 = EPDM         | CO = 1/2" NPT Conduit      |
|                                              | 1010 = 3/4" NPT | 3/4"    |                   | CL = 1/2" NPT Conduit with |
|                                              | 1111 = 1" NPT   | 1"      |                   | 24" Lead Wires             |



| R        | B              | H               | H <sub>i</sub>  | L            | L <sub>i</sub> | AØ           |
|----------|----------------|-----------------|-----------------|--------------|----------------|--------------|
| 1/4" NPT | 0.77<br>(19.5) | 4.13<br>(105)   | 3.68<br>(93.5)  | 2.36<br>(60) | 1.08<br>(27.5) | 1.73<br>(44) |
| 3/8" NPT | 0.77<br>(19.5) | 4.13<br>(105)   | 3.68<br>(93.5)  | 2.36<br>(60) | 1.08<br>(27.5) | 1.73<br>(44) |
| 1/2" NPT | 0.77<br>(19.5) | 4.23<br>(107.5) | 3.68<br>(93.5)  | 2.64<br>(67) | 1.22<br>(31)   | 1.73<br>(44) |
| 3/4" NPT | 0.95<br>(24)   | 4.70<br>(119)   | 4.04<br>(102.5) | 3.15<br>(80) | 1.44<br>(36.5) | 1.97<br>(50) |
| 1" NPT   | 1.16<br>(29.5) | 5.18<br>(131.5) | 4.35<br>(110.5) | 3.74<br>(95) | 1.73<br>(44)   | 2.44<br>(62) |

#### Power Consumption

| DC  | AC     |         |
|-----|--------|---------|
|     | Inrush | Holding |
| 18W | 45VA   | 35VA    |



- 101 Valve body
- 102 Valve cover
- \*103 Valve piston
- 104 Round head cap screw
- \*105 Pressure spring
- \*106 Seal ring
- \*107 O-ring
- \*108 Grooved ring
- 400 Coil
- 701 Guide
- \*702 O-ring
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- 707 O-ring
- 1400 Electrical connector

\* These individual parts form a complete wearing unit. When ordering spare parts please state complete part number.