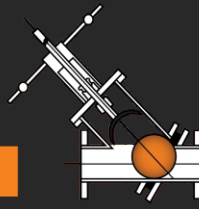
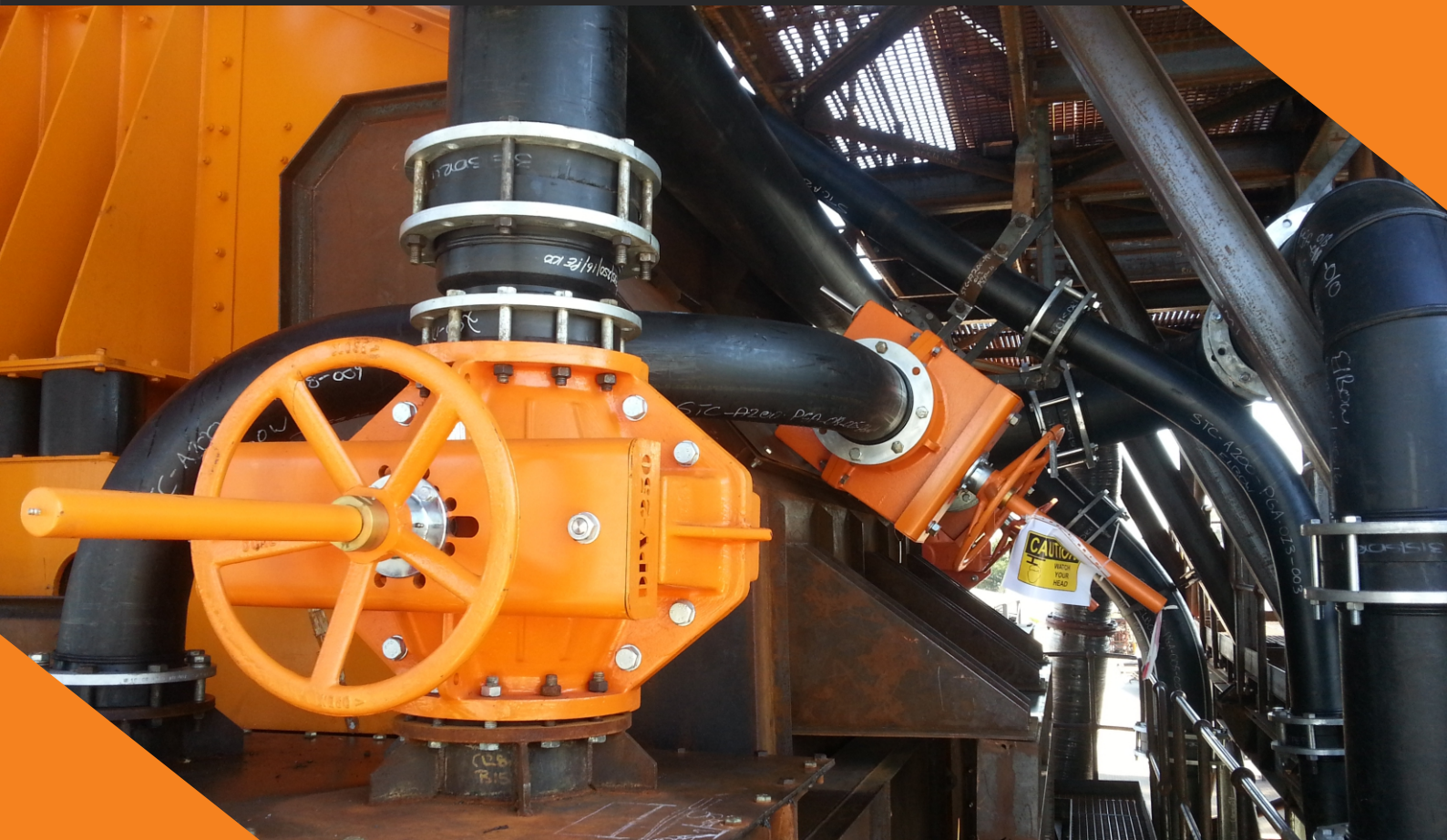




# DUAL



ONE STOP SLURRY SOLUTION



## PINCH VALVES





# TABLE OF CONTENTS

## **Dual Pinch Valves:**

- **Dual Pinch Valve Enclosed (DPVE)**
- **Dual Pinch Valve Open Type (DPVO)**
- **Dual Single Pinch Valve (DSPV)**
- **Dual Straight Through Pinch Valve (DSTPV)**
- **Dual Pneumatic Pinch Valve (DPPV)**
- **Dual Pneumatic Pinch Valve Large (DPPV-L)**
- **Dual Pinch Valve Sleeves (DPVS)**



# DUAL PINCH VALVE OPEN BODY TYPE (DPVO)

**DUAL's** Pinch Valve consists of a tough, but flexible full bore sleeve, which forms part of the pipeline. The valve is closed mechanically via movement of the Pinch Bars located on opposite sides of the sleeve. The core of the Dual Pinch valve is the sleeve - this sleeve is reinforced with high-strength fabric. The valves are well suited for on/off and throttling control applications where scale build up is a problem.



## FEATURES

- The Dual Pinch Valves double- open body with easily replaceable, flexible rubber sleeves.
- Thrust bearing for ease of opening and closing (handwheel type).
  - Long operating life.
  - Full bore, low friction loss.
  - 100% drip tight closure even with solids in the medium.
  - Rising spindle.
  - Seals in both directions.
  - High flexibility sleeve design reduces closing forces, improves recovery to full open position.
  - Fast and easy sleeve change.
  - Single wearing part.
  - Positive opening tags.
  - Unobstructive flow reduces pumping costs.
  - No glands which require regular adjustment.
  - Available in open or enclosed body styles.

## FACE TO FACE COMPATIBLE WITH DIAPHRAGM VALVES

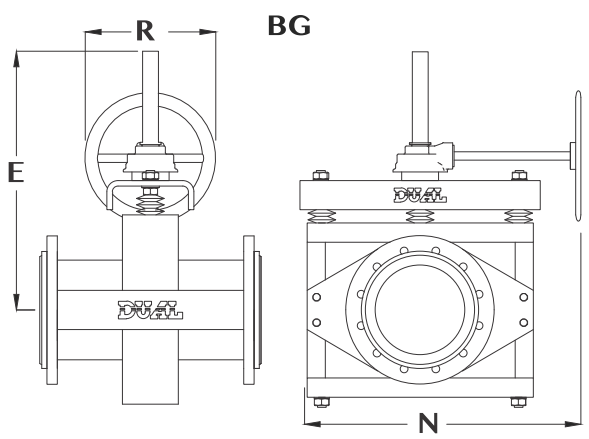
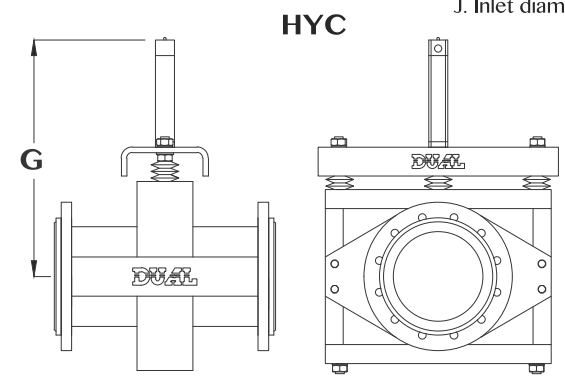
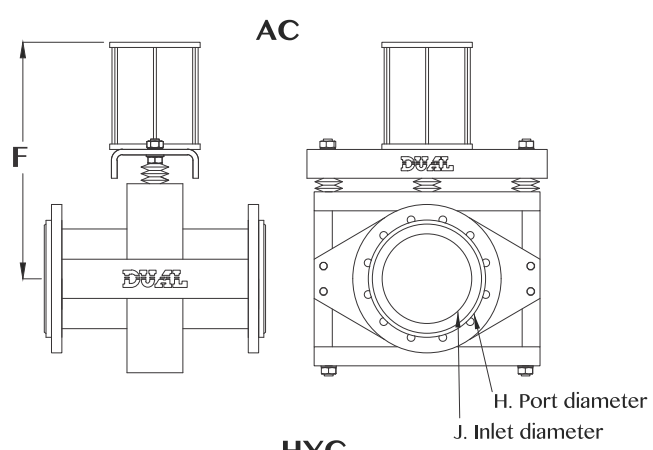
### PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Iron/Aluminium or Fabricated Carbon Steel.
<b>ELASTOMER SLEEVE:</b>	Gum Rubber, Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Vitron and Hypalon.
<b>SIZE RANGE:</b>	50mm - 600mm (for larger consult factory).
<b>PRESSURE RATING:</b>	25 Bar (for higher pressure consult factory).
<b>PINCH BARS:</b>	Carbon Steel Bar Stock.
<b>PINCH BAR GUIDES:</b>	Stainless Steel with protective Covers.
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>VALVE INTERVALS:</b>	304 Stainless Steel spindles and guides, rubber sleeve, steel Pinch Bars and Nylon Bushing.
<b>TEMPERATURE:</b>	-50°C to +80°C
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.

### SLEEVE DESIGN



DPVO



## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic or handwheel.

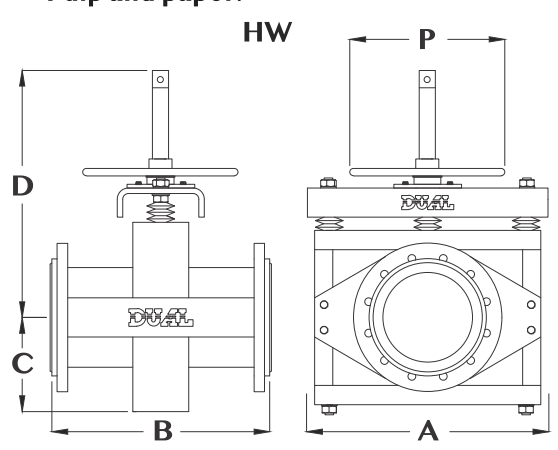
## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

- Natural Red Rubber.
- Natural Black Rubber.
- Neoprene Rubber.
- Nitrile Rubber.
- EPDM Rubber.
- Reduced port sleeve for throttling applications.
- Urethane.

## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.

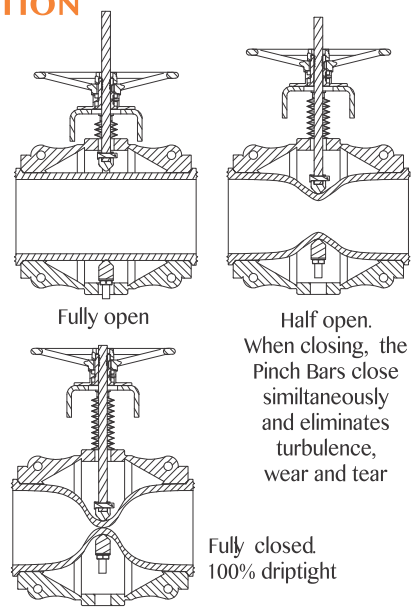


## DIMENSIONS AND WEIGHTS

VALVE SIZE (mm)	FACE TO FACE (B)															VALVE WEIGHT (kg)			
	A	ISO	ANSI	SABS	DIN	C	D	E	F	G	H	J	N	P	R	BG	AC	HYC	HW
50	245	178	178	196	178	120	345	350	267	325	70	50	345	300	300	30	30	20	22
80	300	203	200	262	203	155	366	370	346	390	100	80	400	300	300	50	50	30	30
100	320	229	228	312	300	175	398	400	380	485	120	100	420	400	400	70	70	40	50
125	345	254	250	365	325	210	489	500	399	525	135	125	445	400	400	80	80	70	70
150	400	267	266	415	350	240	558	580	415	645	170	150	500	500	400	120	120	90	90
200	520	457	400	530	400	295	726	750	501	900	220	200	620	500	400	220	220	170	140
250	660	538	500	645	450	380	867	880	609	1040	270	250	760	500	400	280	280	190	160
300	720	601	600	760	500	445	849	900	700	1720	320	300	830	600	400	380	380	230	220
350	840	685	710	990	550	650	1024	1100	750	1930	370	350	940	600	400	400	400	350	330
400	1080	762	810	1200	750	800	1406	1500	800	1470	420	400	1200	700	400	500	500	630	550
450	1180	863	900	1350	810	900	1500	1600	850	1610	470	450	1280	700	400	600	600	680	730
500	1280	914	1000	1500	880	1000	1600	1700	900	1760	520	500	1380	700	400	700	700	870	810
600	1350	1051	1200	1500	1000	1200	1990	2100	1120	2040	620	600	1450	700	400	1000	1000	900	1000

Contact Dual Valves for larger sizes. Dimensions are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.

## TROUBLE-FREE OPERATION







# DUAL PINCH VALVE ENCLOSED BODY TYPE (DPVE)

**DUAL's** Pinch Valve consists of a tough, but flexible full bore sleeve, which forms part of the pipeline. The valve is closed mechanically via movement of the Pinch Bars located on opposite sides of the sleeve. The core of the Dual Pinch Valve is the sleeve - this sleeve is reinforced with high-strength fabric. The valves are well suited for on/off and throttling control applications where scale build up is a problem.



## FEATURES

The Dual Pneumatic Pinch Valves double-enclosed body with easily replaceable, flexible rubber sleeves.

- Thrust bearing for ease of opening and closing (handwheel type).
- Long operating type.
- Full bore, low friction loss.
- 100% drip tight closure even with solids in the medium.
- Rising spindle.
- Seals in both directions.
- High flexibility sleeve design reduces closing forces, improves recovery to full open position.
- Enclosed body protects the sleeve.
- Fast and easy sleeve change.
- Single wearing part.
- Positive opening tags.
- Unobstructive flow reduces pumping costs.
- No glands which require regular adjustment.
- Available in open or enclosed body styles.

## FACE TO FACE COMPATIBLE WITH DIAPHRAGM VALVES

### PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Iron/Aluminium or Fabricated Carbon Steel.
<b>ELASTOMER SLEEVE:</b>	Gum Rubber, Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Vitron and Hypalon.
<b>SIZE RANGE:</b>	50mm - 350mm (for larger consult factory).
<b>PRESSURE RATING:</b>	40 Bar (for higher pressure consult factory).
<b>PINCH BARS:</b>	Carbon Steel Bar Stock.
<b>PINCH BAR GUIDES:</b>	Stainless Steel with protective Covers.
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>VALVE INTERVALS:</b>	304 Stainless Steel spindles and guides, rubber sleeve, steel Pinch Bars and Nylon Bushing.
<b>TEMPERATURE:</b>	-50°C to +80°C
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.

### SLEEVE DESIGN



DPVE

## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic or handwheel.

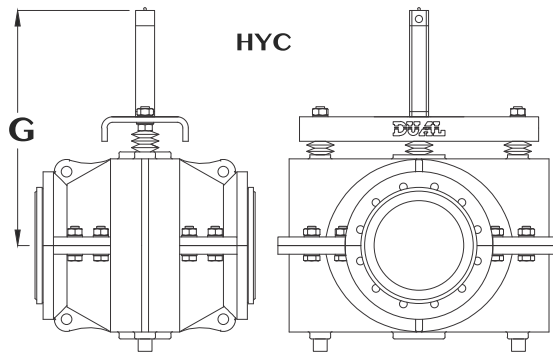
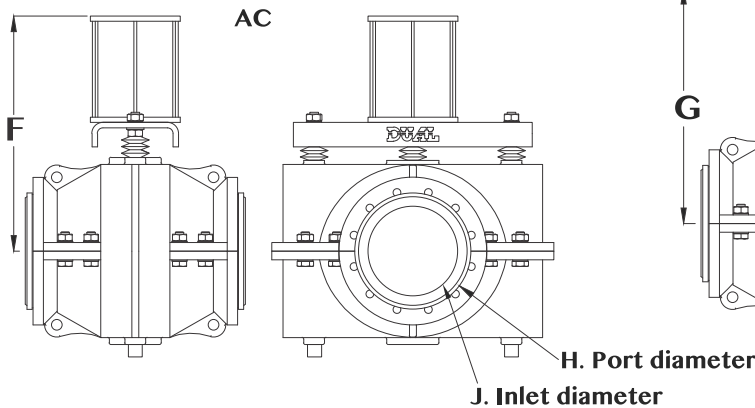
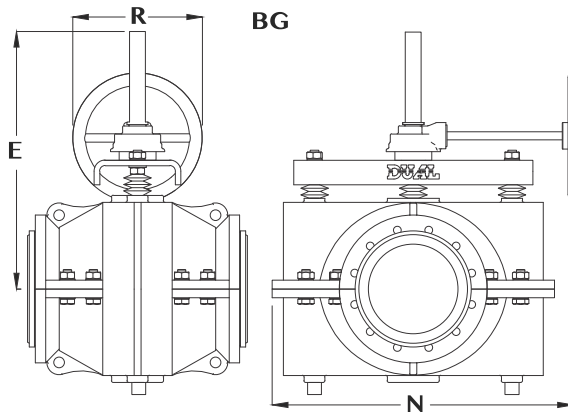
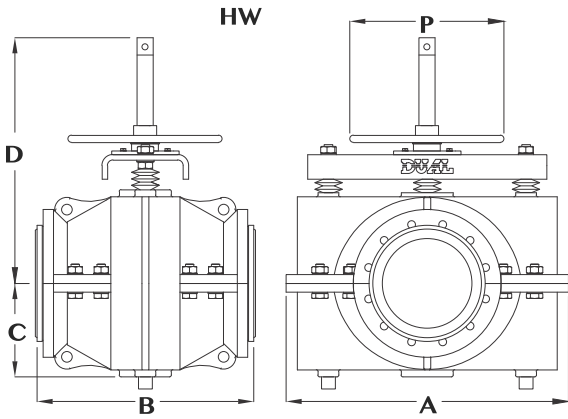
## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

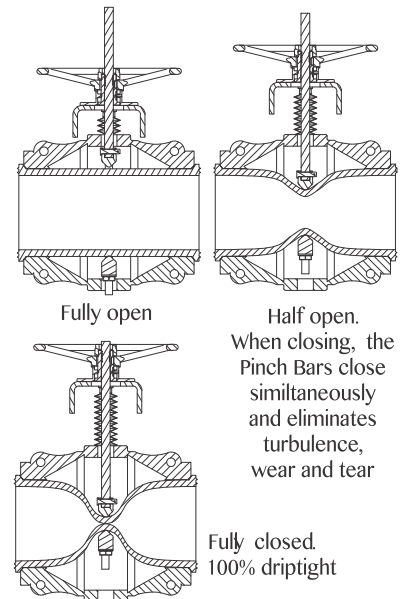
- Natural Red Rubber.
- Natural Black Rubber.
- Neoprene Rubber.
- Nitrile Rubber.
- EPDM Rubber.
- Reduced port sleeve for throttling applications.
- Urethane.

## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.



## TROUBLE-FREE OPERATION



## DIMENSIONS AND WEIGHTS

VALVE SIZE (mm)	FACE TO FACE (B)																VALVE WEIGHT (kg)			
	A	ISO	ANSI	SABS	DIN	C	D	E	F	G	H	J	N	P	R	BG	AC	HYC	HW	
50	245	178	178	196	178	120	345	350	267	325	70	50	345	300	300	30	30	20	22	
80	300	203	200	262	203	155	366	370	346	390	100	80	400	300	300	50	50	30	30	
100	320	229	228	312	300	175	398	400	380	485	120	100	420	400	400	70	70	40	50	
125	345	254	250	365	325	210	489	500	399	525	1356	125	445	400	400	80	80	70	70	
150	400	267	266	415	350	240	558	580	415	645	170	150	500	500	400	120	120	90	90	
200	520	457	400	530	400	295	726	750	501	900	220	200	620	500	400	220	220	170	140	
250	660	538	500	645	450	380	867	880	609	1040	270	250	760	500	400	280	280	190	160	
300	720	601	600	760	500	445	849	900	700	1720	320	300	830	600	400	380	380	230	220	
350	840	685	710	990	550	650	1024	1100	750	1930	370	350	940	600	400	400	400	350	330	
400	1080	762	810	1200	750	800	1406	1500	800	1470	420	400	1200	700	400	500	500	630	550	
450	1180	863	900	1350	810	900	1500	1600	850	1610	470	450	1280	700	400	600	600	680	730	
500	1280	914	1000	1500	880	1000	1600	1700	900	1760	520	500	1380	700	400	700	700	870	810	
600	1350	1051	1200	1500	1000	1200	1990	2100	1120	2040	620	600	1450	700	400	1000	1000	900	1000	

Contact Dual Valves for larger sizes. Dimensions are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.



# DUAL SINGLE PINCH VALVE (DSPV)

**DUAL's** Single Pinch Valve consists of a tough, but flexible full bore sleeve, which forms part of the pipeline. The valve is closed mechanically via movement of a pinch gate located above the sleeve. The core of the Dual Single Pinch Valve is the sleeve. The valves are well suited for on/off and throttling control applications involving slurries, powders, liquids, granulated materials and applications where scale build is a problem.



## FEATURES

The Dual Single Pinch Valves double-ended enclosed body with easily replaceable, flexible rubber sleeves.

- Thrust bearing for ease of opening and closing (handwheel type).
- Long operating life.
- Full bore, low friction loss.
- 100% drip tight closure even with solids in the medium.
- Light weight.
- Seals in both directions.
- High flexibility sleeve design reduces closing forces, improves recovery to full open position.
- Enclosed body protects the sleeve from the environment.
- Fast and easy sleeve change.
- Single wearing part.
- Face to face compatible with diaphragm valves.
- Rising and non rising spindle types.
- Positive opening tags.
- Open/closed sight glass indicator.
- Visible spindle indicator.

## FACE TO FACE COMPATIBLE WITH DIAPHRAGM VALVES

### PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Aluminium, Cast SG Iron and Stainless Steel enclosed body type.
<b>ELASTOMER SLEEVE:</b>	Gum Rubber, Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Vitron and Hypalon.
<b>SIZE RANGE:</b>	50mm - 350mm.
<b>PRESSURE RATING:</b>	10 Bar (for higher pressure consult factory).
<b>THRUST BEARINGS:</b>	To reduce operating torque (handwheel type).
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>VALVE INTERVALS:</b>	304 Stainless Steel spindles and guides, rubber sleeve, steel Pinch Bars and Nylon Bushing.
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.
<b>VALVE TYPE:</b>	Rising and non rising spindle.
<b>TEMPERATURE:</b>	-50°C to +80°C

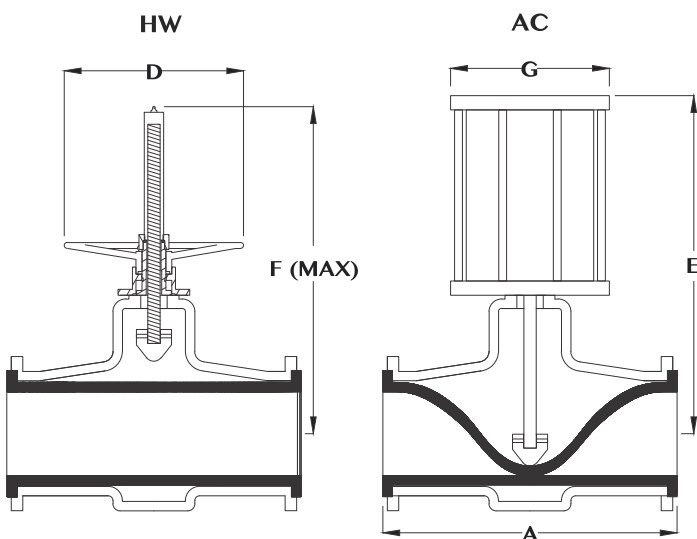
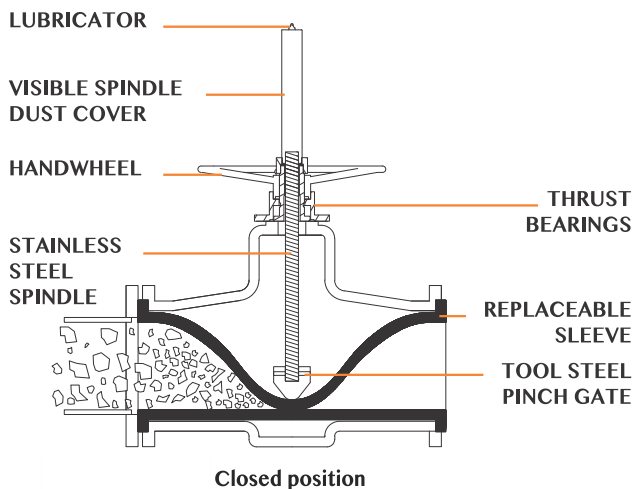
## PNEUMATICALLY ACTUATED VALVE



DSPV

## HOW THE VALVE OPERATES

As the valve cycles downwards, the Pinch Mechanism will start to compress the soft rubber sleeve, from the top of the valve only, therefore achieving a 100% drip tight closure, even with solids in the medium.



## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.

## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic or handwheel.

## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

- Polyurethane.
- Natural Red Rubber.
- Natural Black Rubber.
- Neoprene Rubber.
- Nitrile Rubber.
- EPDM Rubber.
- Reduced port sleeve for throttling applications.



## DIMENSIONS AND WEIGHTS

VALVE SIZE DN	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	WEIGHT (kg)	
								HW	AC
50	196	165	50	300	200	150	100	20	25
80	260	200	80	300	250	215	100	30	35
100	310	220	100	400	300	265	160	40	45
125	362	250	125	400	350	300	160	50	60
150	412	285	150	400	400	350	250	60	70
200	527	340	200	500	450	400	300	110	120
250	641	405	250	500	500	550	300	200	210
300	755	460	300	600	700	630	350	300	350
350	986	520	350	600	850	800	400	450	500

Dimensions are for guidance only - detailed dimension drawings available on request.  
All dimensions are in millimeters, unless stated.





# DUAL STRAIGHT-THROUGH PINCH VALVE (DSTPV)

**DUAL's** Straight-Through Pinch Valve consists of a tough, but flexible full bore sleeve, which forms part of the pipeline. The valve is closed mechanically via movement of a pinch valve gate located above the sleeve. The core of the Dual Straight-Through Pinch Valve is the sleeve. The valves are well suited for on/off and throttling control applications involving slurries, powders, liquids, granulated materials and applications where scale build is a problem.



## FEATURES

The Dual Pinch Valves double-ended enclosed body with easily replaceable, flexible rubber sleeves.

- Thrust bearing for ease of opening and closing (handwheel type).
- Long operating life.
- Full bore, low friction loss.
- 100% drip tight closure even with solids in the medium.
- Light weight.
- Seals in both directions.
- High flexibility sleeve design reduces closing forces, improves recovery to full open position.
- Enclosed body protects the sleeve from the environment.
- Fast and easy sleeve change.
- Single wearing part.
- Face to face compatible with diaphragm valves.
- Rising and non rising spindle types.
- Positive opening tags.
- Open/closed sight glass indicator.

## FACE TO FACE COMPATIBLE WITH DIAPHRAGM VALVES

### PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Aluminium, Cast SG Iron and Stainless Steel enclosed body type.
<b>ELASTOMER SLEEVE:</b>	Gum Rubber, Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Vitron and Hypalon.
<b>SIZE RANGE:</b>	50mm - 350mm.
<b>PRESSURE RATING:</b>	16 Bar (for higher pressure consult factory).
<b>THRUST BEARINGS:</b>	To reduce operating torque (handwheel type).
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>VALVE INTERVALS:</b>	304 Stainless Steel Spindles, Rubber Sleeve and Cast Aluminium Pinch Gate (Plunger).
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.
<b>VALVE TYPE:</b>	Rising and non rising spindle.
<b>TEMPERATURE:</b>	-50°C to +80°C

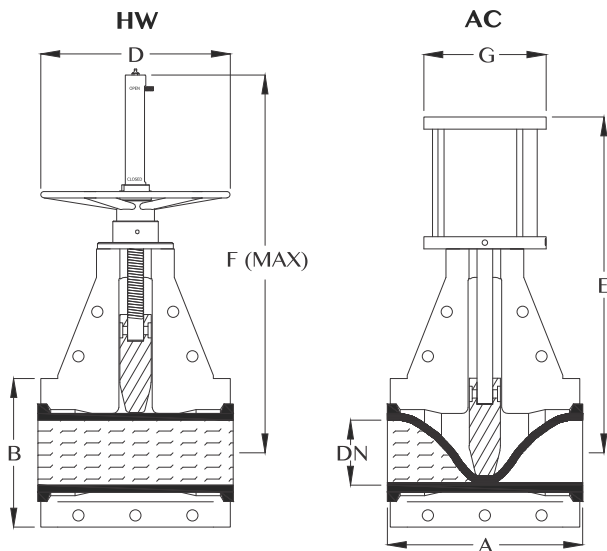
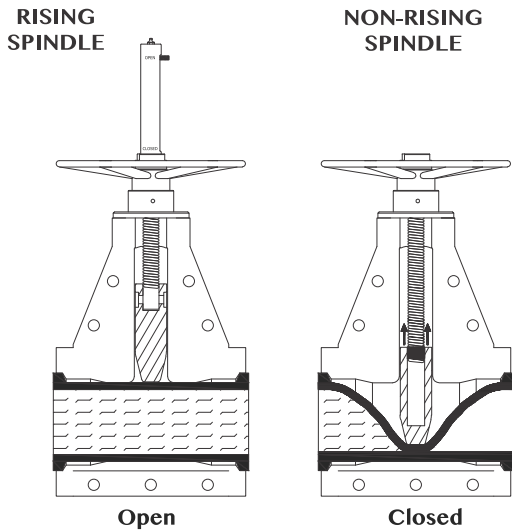


**PNEUMATICALLY ACTIVATED VALVE**

DSTPV

## HOW THE VALVE OPERATES

As the valve cycles downwards, the Pinch Mechanism will start to compress the soft rubber sleeve, from the top of the valve only, therefore achieving a 100% drip tight closure, even with solids in the medium.



## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.
- Environmental and effluent.

## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic or handwheel.

## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

- Polurethane.
- Natural Red Rubber.
- Natural Black Rubber.
- Neoprene Rubber.
- Nitrile Rubber.
- EPDM Rubber.
- Reduced port sleeve for throttling applications.



## DIMENSIONS AND WEIGHTS

VALVE SIZE DN	A- BS5156 FACE TO FACE (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	WEIGHT (kg)	
								HW	AC
50	190	165	85	300	435	230	100	20	25
80	254	200	105	300	545	290	100	30	35
100	305	220	120	400	650	320	160	40	45
125	356	250	130	400	780	400	160	50	60
150	406	285	140	400	850	450	250	60	70
200	521	340	175	500	900	600	300	110	120
250	635	405	205	500	1000	950	300	200	210
300	747	460	250	600	1200	1150	350	300	350
350	749	520	300	600	1400	1300	400	450	500

Dimensions are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.



# DUAL PNEUMATIC PINCH VALVE (DPPV)

**DUAL's** Pneumatic Valve consists of a tough, but flexible full bore sleeve in an enclosed body. Actuated by means of air or Hydraulic Fluid, the valve body acts as an Actuator. When the media is introduced, the sleeve is compressed forming a complete and effective seal.

- Single wearing part.
- Face to face compatible with diaphragm valves.
- No glands which require regular adjustment.
- Pneumatic or hydraulic medium can be used to operate the valve.
- Ideal for remote operations.

## FACE TO FACE COMPATIBLE WITH DIAPHRAGM VALVES

### PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Aluminium, Cast SG Iron, Stainless Steel enclosed body type.
<b>ELASTOMER SLEEVE:</b>	Gum Black Rubber, EPDM, Chlorobutyl, Neoprene, Vitron and Hypalon.
<b>SIZE RANGE:</b>	50mm - 350mm.
<b>PRESSURE RATING:</b>	10 Bar (for higher pressure consult factory).
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.
<b>TEMPERATURE:</b>	-50°C to +80°C



### FEATURES

The Dual Pneumatic Pinch Valves double-enclosed body with easily replaceable, flexible rubber sleeves.

- Valve can be installed in any position.
- Housing acts as a built-in actuator.
- Long operating life.
- Full bore, low friction loss.
- 100% drip tight closure even with solids in the medium.
- Light weight.
- Seals in both directions.
- High flexibility sleeve design reducing closing forces, improves recovery to full open position.
- Enclosed body protects the sleeve from the environment and contaminants in the event of sleeve failure.
- Fast and easy sleeve change.

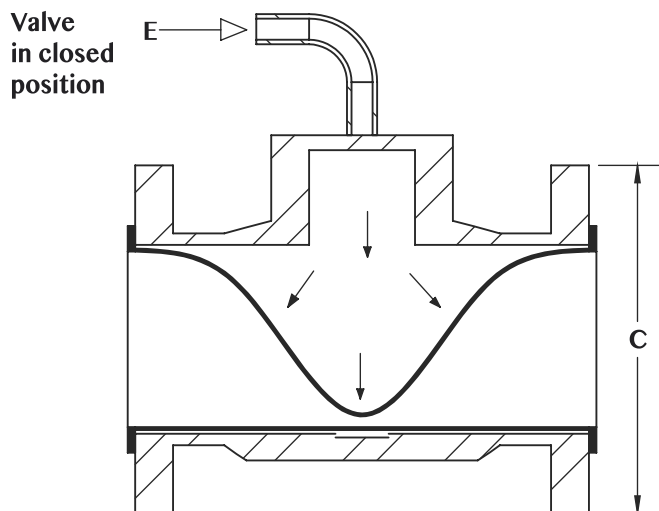
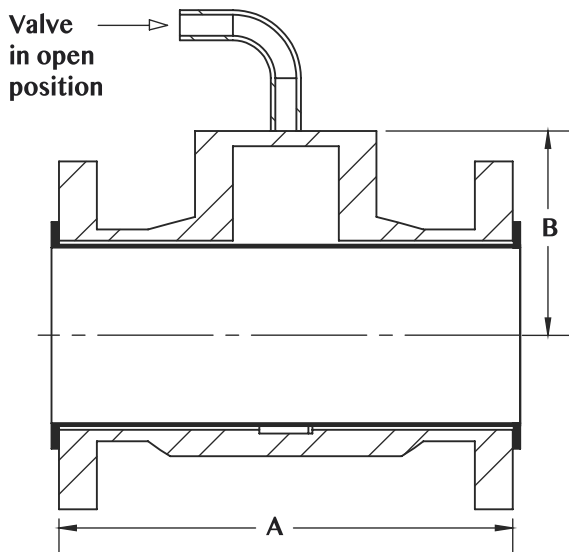


DPPV

## HOW THE VALVE OPERATES

The valve closes by means of air or hydraulic pressure placed on the sleeve, through the top of the valve housing. The valve body acts as a built-in actuator.

**NOTE:** Air pressure must be vented from the valve to permit operating.



## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

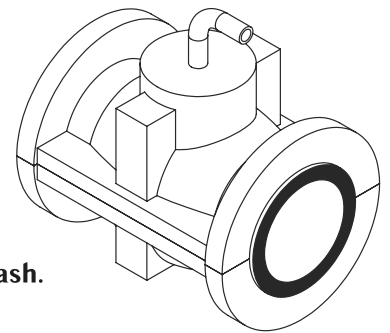
- Polyurethane.
- Natural Red Rubber.
- Natural Black Rubber.
- Neoprene Rubber.
- Nitrile Rubber.
- EPDM Rubber.
- Reduced port sleeve for throttling applications.

## SLEEVE DESIGN



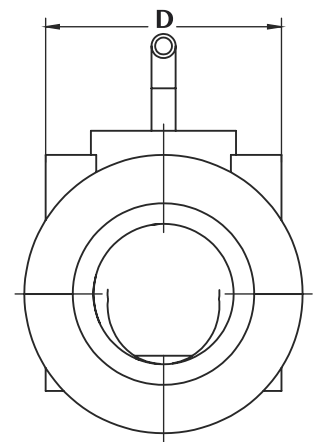
## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.



VALVE SIZE (mm/inch)	FACE TO FACE (A)				B (mm)	C (mm)	D (mm)	E (BSP)	WEIGHT CAST IRON (kg)	VOLUME (lt)	VALVE CV	
	ISO	ANSI	SABS	DIN							USGPM	m <sup>3</sup> /h
50/2"	178	178	196	178	85	165	245	1/4"	25	0.3	392	89
80/3"	203	200	262	203	100	200	280	1/4"	40	1.2	881	200
100/4"	229	228	312	300	120	220	300	1/4"	30	3	1 556	353
125/5"	254	250	365	325	150	250	330	1/4"	80	5	2 447	555
150/6"	267	266	415	350	165	285	370	1/2"	50	7	3 524	800
200/8"	457	400	530	400	200	340	420	1/2"	80	17	6 658	1 422
250/10"	538	500	645	450	250	405	500	1/2"	110	32	9 789	2 222
300/12"	601	600	760	500	300	460	560	1/2"	140	55	14 097	3 200
350/14"	685	710	990	550	330	520	620	1/2"	200	87	16 000	4 800

Contact Dual Valves for larger sizes. Dimensions are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.



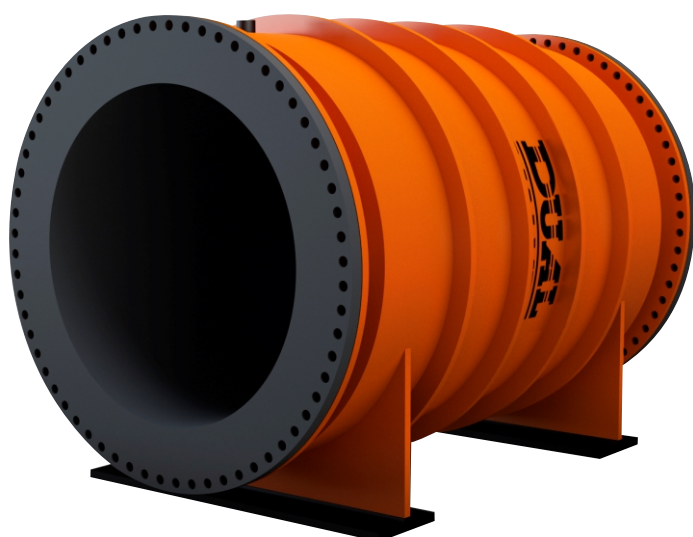




# DUAL PNEUMATIC PINCH VALVE (DPPV-L)

**DUAL's** Pneumatic Valve consists of a tough, but flexible full bore sleeve in an enclosed body. Actuated by means of air or Hydraulic Fluid, the valve body acts as an Actuator. When the media is introduced, the sleeve is compressed forming a complete and effective seal.

- Single wearing part.
- Face to face compatible with diaphragm valves.
- No glands which require regular adjustment.
- Pneumatic or hydraulic medium can be used to operate the valve.
- Ideal for remote operations.



## FACE TO FACE COMPATIBLE WITH DIAPHRAGM VALVES

### PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Aluminium, Cast SG Iron, Stainless Steel enclosed body type.
<b>ELASTOMER SLEEVE:</b>	Gum Black Rubber, EPDM, Chlorobutyl, Neoprene, Vitron and Hypalon.
<b>SIZE RANGE:</b>	50mm - 350mm.
<b>PRESSURE RATING:</b>	10 Bar (for higher pressure consult factory).
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.
<b>TEMPERATURE:</b>	-50°C to +80°C

### FEATURES

The Dual Pneumatic Pinch Valves double-enclosed body with easily replaceable, flexible rubber sleeves.

- Valve can be installed in any position.
- Housing acts as a built-in actuator.
- Long operating life.
- Full bore, low friction loss.
- 100% drip tight closure even with solids in the medium.
- Light weight.
- Seals in both directions.
- High flexibility sleeve design reducing closing forces, improves recovery to full open position.
- Enclosed body protects the sleeve from the environment and contaminants in the event of sleeve failure.
- Fast and easy sleeve change.

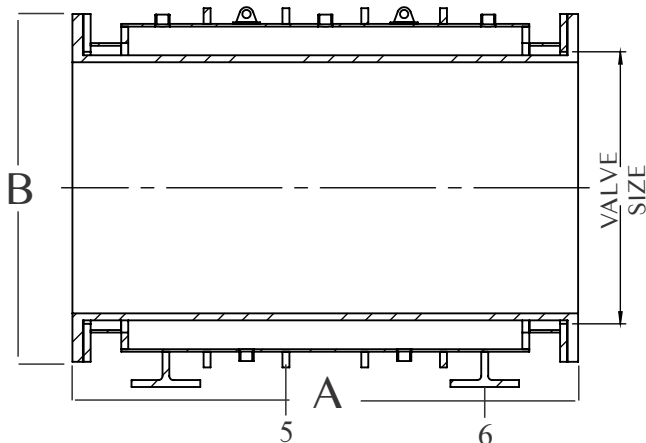
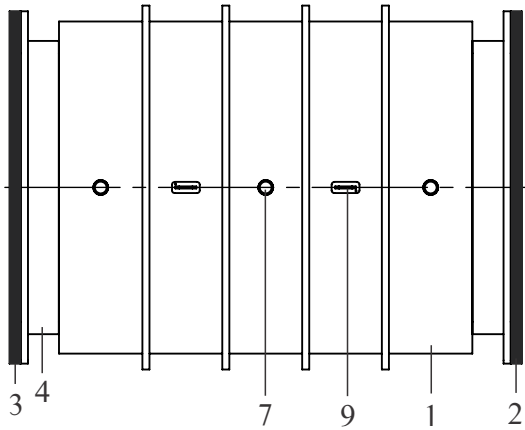


DPPV-L

## HOW THE VALVE OPERATES

The valve closes by means of air or hydraulic pressure placed on the sleeve, through the top of the valve housing. The valve body acts as a built-in actuator.

**NOTE:** Air pressure must be vented from the valve to permit operating.



VALVE SIZE (mm/inch)	FACE TO FACE (A)	B (mm)	C (BSP)	WORKING PRESSURE (bar)	WEIGHT CAST IRON (kg)
400 / 16"	1200	600	1/2"	4	630
450 / 18"	1350	700	1/2"	4	700
500 / 20"	1500	800	1/2"	4	870
600 / 24"	1500	900	1/2"	4	1000
700 / 28"	1500	1000	1/2"	4	2000
750 / 30"	1500	1200	1/2"	4	4000
950 / 36"	1800	1500	1"	4	5000
1200 / 48"	2438	1800	1"	4	6000
1500 / 60"	3048	2000	1"	4	8000
1800 / 72"	3657	2534	1"	2	10037
2100 / 84"	4267	2800	1"	2	12000

Contact Dual Valves for larger sizes. Dimensions are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.

## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

- Polyurethane.
- Natural Red Rubber.
- Natural Black Rubber.
- Neoprene Rubber.
- Nitrile Rubber.
- EPDM Rubber.
- Reduced port sleeve for throttling applications.

1	Valve Body	Carbon Steel or Stainless Steel
2	Rubber Sleeve	Chemical and Abrasive Resistant
3	Flange	Carbon Steel or Stainless Steel
4	Pipe	Carbon Steel or Stainless Steel
5	Valve Body Support	Carbon Steel or Stainless Steel
6	Stand	Carbon Steel or Stainless Steel
7	NPT Air Connection	Carbon Steel or Stainless Steel
8	Bolts & Nuts	Cadmium Plates / High Tensile
9	Lifting Lugs	Carbon Steel or Stainless Steel

## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.

## SLEEVE DESIGN





# DUAL PINCH VALVE SLEEVES (DPVS)

The core of the **DUAL** Pinch Valve is the rubber sleeve, which is the only part in contact with the medium. The full bore sleeve integrates the valve perfectly to the pipeline, eliminates turbulence and minimizes pressure losses. Technologically advanced sleeves guarantee high wear and corrosion resistance, a trouble free operation and an extended lifetime. The sleeves are well suited for on/off throttling control applications involving slurries, powders, liquids, granulated materials and applications where scale build is a problem.



## FEATURES

- Excellent wear resistance.
- High corrosive resistance.
- No turbulence.
- No flow resistance.
- Reduces process downtime.
- Long operating lifetime.
- Full bore, low friction loss.
- 100% drip tight closure even with solids in the medium.
- Light weight.
- Flexible.
- Self-cleaning.
- Multilayer construction.
- Steel reinforcing for high pressures.
- 100% tight.
- Only sleeve is in contact with the medium.
- Numerous elastomer compounds.
- Special sleeve designs.

## PRODUCT SPECIFICATION

<b>ELASTOMER SLEEVE MATERIAL:</b>	Gum Black and Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Vitron, Hypalon or Polyurethane.
<b>SIZE RANGE:</b>	50mm - 1500mm / 1/2" - 60".
<b>PRESSURE RATING:</b>	From vacuum to 80 Bar.
<b>FLANGE TYPE:</b>	Full face or D ring.
<b>SLEEVE INTERNALS:</b>	Resistant to wear and chemicals.
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical test reports can be supplied.
<b>VALVE TYPE:</b>	Rising and non-rising spindle.
<b>TEMPERATURE:</b>	-50°C to +120°C

## SLEEVE DESIGN

Pinch Valves are commonly applied in aggressive, abrasive and corrosive medium types or in high pressure applications. To withstand these conditions Dual sleeves are handmade, layer by layer, in a quality process.



High grade sleeve materials range from wear resistant styrene butadiene to numerous other elastomers and rubber compounds. They are highly resistant to abrasive/corrosive slurries, powders and granular substances.

DPVS

## SPECIALIZED SLEEVE DESIGNS

Several sleeve design options such as a conical sleeve for control valves and a vacuum sleeve for negative pressure applications are available.

### Suction Sleeve

Specially designed for negative pressure applications such as suction lines and for applications where sleeve pulsations occurs.

### Conical Sleeve

Conical sleeves ensure the most accurate control in flow control applications. High pressure sleeve designed for high pressure ANSI 300# application.

### Sensomate Sleeves

Sensomate sleeves detects and signals critical wear.

### Polyurethane (PU) Lined Sleeves

Sleeves with polyurethane lining ensures improved protection against wear. Double wall sleeves designed for extremely abrasive applications.

## APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.
- Environmental and effluent.
- Water and wastewater.

## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic or handwheel.

## SLEEVE MATERIAL

Dual offers the following alternative sleeve materials, providing chemical and abrasive resistance to most media such as;

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- Reduced port sleeve for throttling applications.



## ALTERNATIVE SLEEVE MATERIAL OPTIONS

RUBBER QUALITY	APPLICATION EXAMPLES	TEMPERATURE RANGE	TYPICAL MEDIA
<b>NBR</b> Nitrile Rubber	Oils, fats and hydrocarbon	-30°C to +100°C	Oils, fats, fuels, hydrocarbon, lubricants
<b>NR</b> Natural Rubber	High wear applications	-50°C to +75°C	Abrasive materials, diluted acids, alkali and chemicals
<b>HNBR</b> Hydrogenated Nitrile	High temperature applications	-30°C to +160°C	Oils, fats, fuels, hydrocarbon, lubricants
<b>NRF</b> Natural Rubber Foodstuff Quality White Inner Lining	Foodstuff applications. Fulfils FDA (Food and Drug Administration requirements	-40°C to +75°C	Media used in food and other CIP (clean-in-place) processes, alcohol
<b>NBRF</b> Nitrile Rubber White Inner Lining	Applications involving fatty foodstuff Fulfils FDA (Food and Drug Administration requirements	-30°C to +100°C	Vegetable and animal oils and fats
<b>EPDM/B</b> Ethylene Propylene Rubber	Pulp and paper industry's green liquor application	-40°C to +100°C	Green liquor, alkaline and extraneous matter in green liquor processes
<b>CR</b> Chloroprene Rubber	Special- purpose chemical applications • Resilient to ozone and adverse weather	-40°C to +100°C	Chemical, acids, several solvents, aliphatic oils, fats and lubricants
<b>FPM</b> Fluorine Rubber (Viton®)	Special- purpose chemical applications • Resilient to ozone and adverse weather	-20°C to +120°C	Chemicals, aliphatic oils, aromatic and halogenated hydrocarbon
<b>CSM</b> Chloro-Sulphate-Ethylene Rubber (Hypalon®)	Special- purpose chemical applications • Resilient to ozone and adverse weather	-40°C to +100°C	Chemicals, acids, several solvents, aliphatic oils, fats and lubricants
<b>IIR</b> Chloro-Butyl Rubber	Special- purpose chemical applications • Impermeable to gas	-40°C to +100°C	Concentrated and acidic chemicals, vegetable oils
<b>PU</b> Polyurethane Lined Sleeve	Abrasive medium applications	-10°C to +80°C	Abrasive materials, diluted chemicals, hydrocarbon oils and lubricants

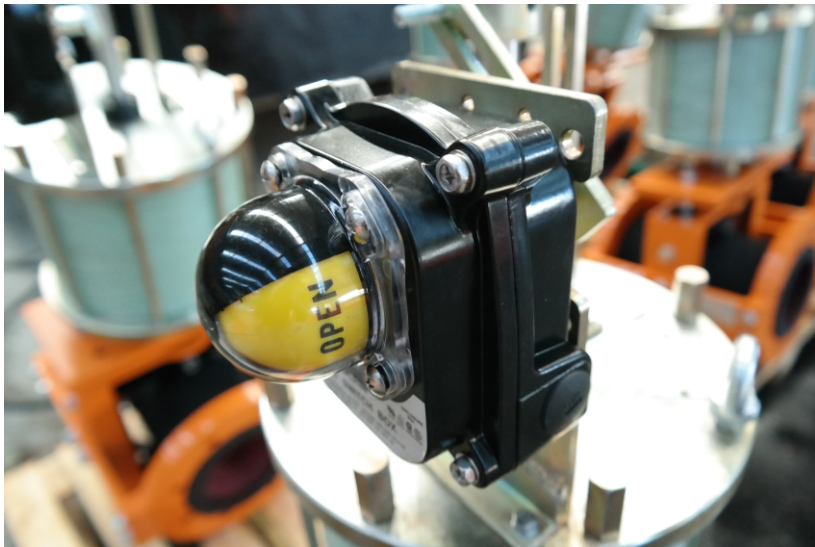






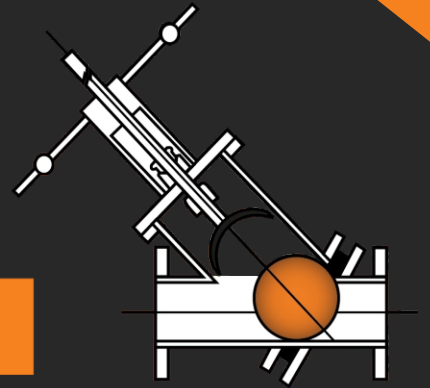








# DUAL



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