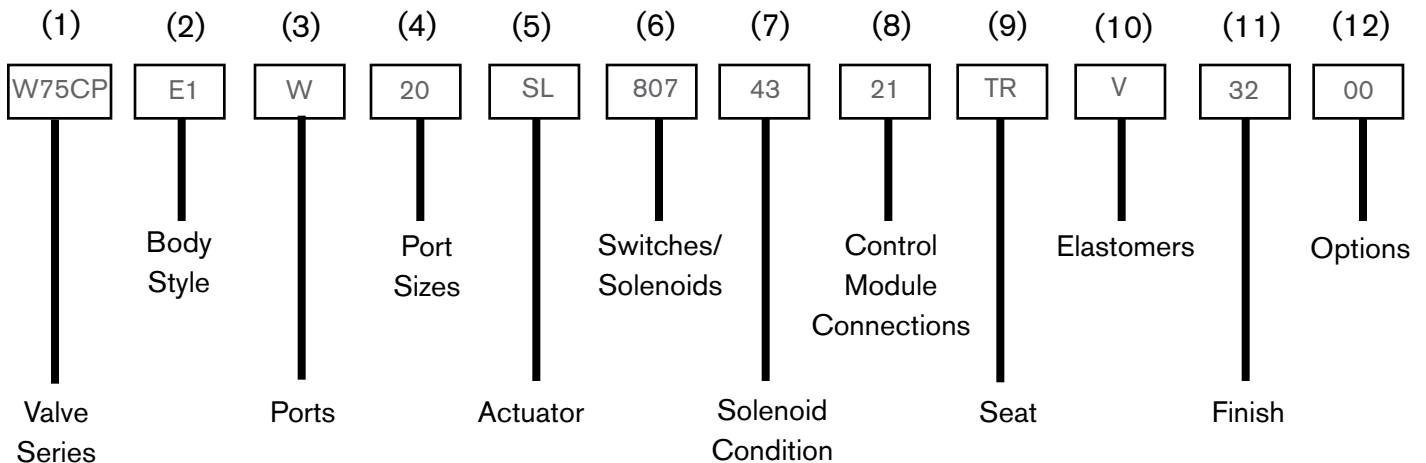




# Mix Proof Valve Key

The Valve Key is designed to provide our customers with a clear and concise description of the valve required. The key number will always contain 12 fields defining all areas of the valve's specification.

Example: W75CP Mix Proof valve with an E1 one piece body, butt weld ports, 2" size, seat lifting actuator, (2) proximity switches, (1) yoke proximity switch, and (3) solenoids, solenoid condition 43, 10 Pin Turck connector, Tri Ring seats, Fluoroelastomer, 32 Ra Finish, and no options.

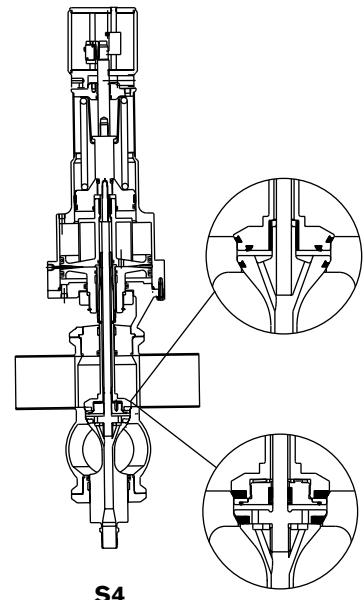
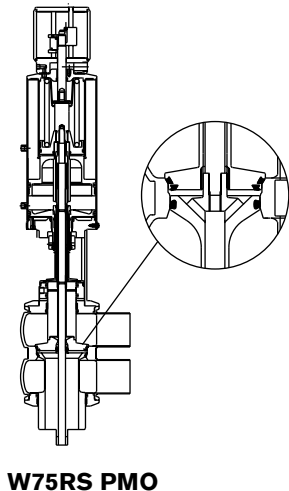
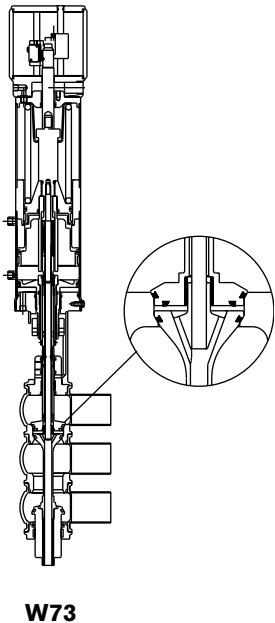
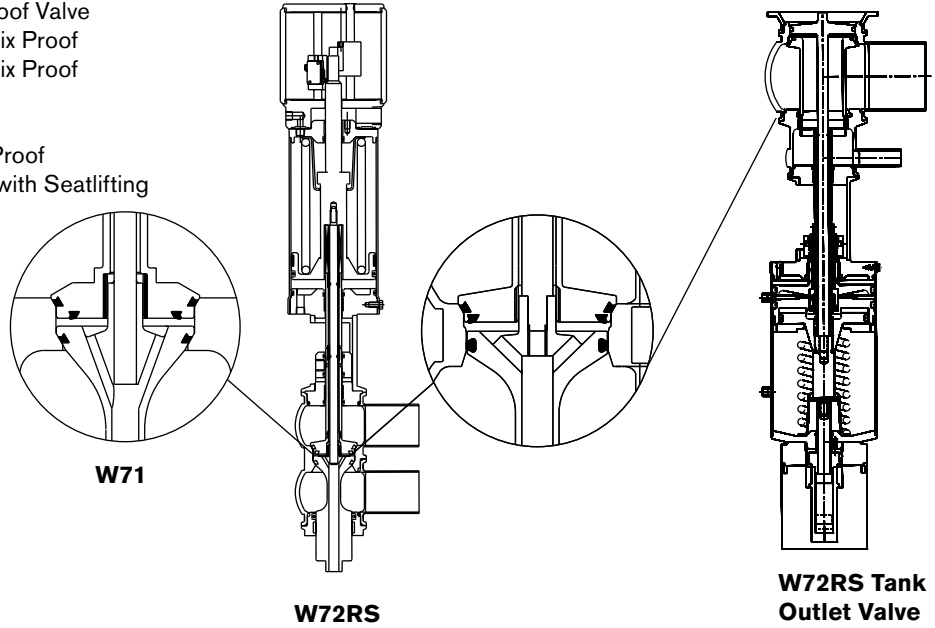


(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
W75CP	E1	W	20	SL	807	43	21	TR	V	32	00

## (1) Valve Series

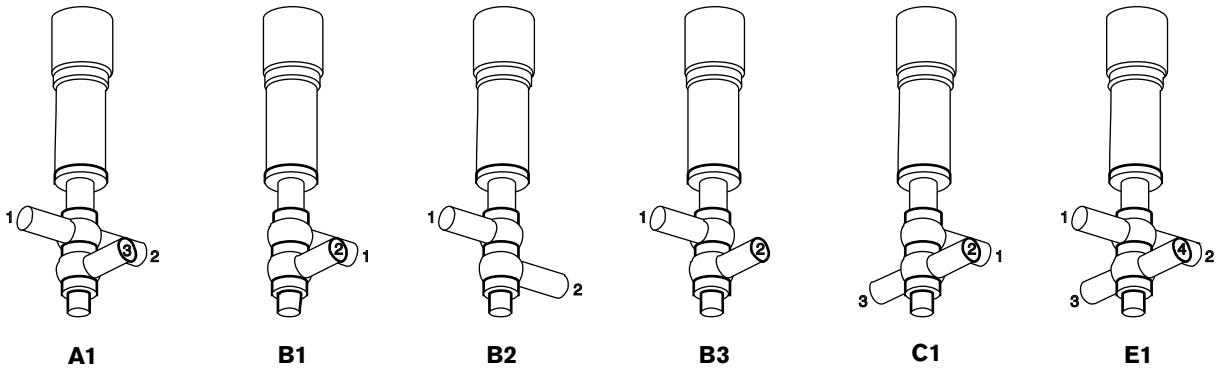
- W71**
- W72RS**
- W72RS Tank Outlet**
- W73**
- W75RS**
- S4**
- W75CP**

- Standard Mix Proof Valve
- Minimum Spill Mix Proof
- Minimum Spill Mix Proof
- Divert Mix Proof
- PMO Mix Proof
- Sentinel IV Mix Proof
- PMO Mix Proof with Seatlifting



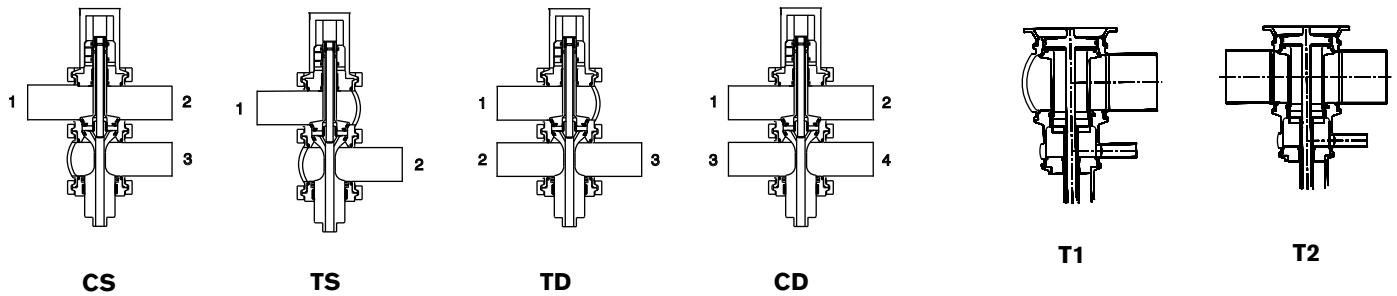
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
W75CP	E1	W	20	SL	807	43	21	TR	V	32	00

## (2) Body Configuration



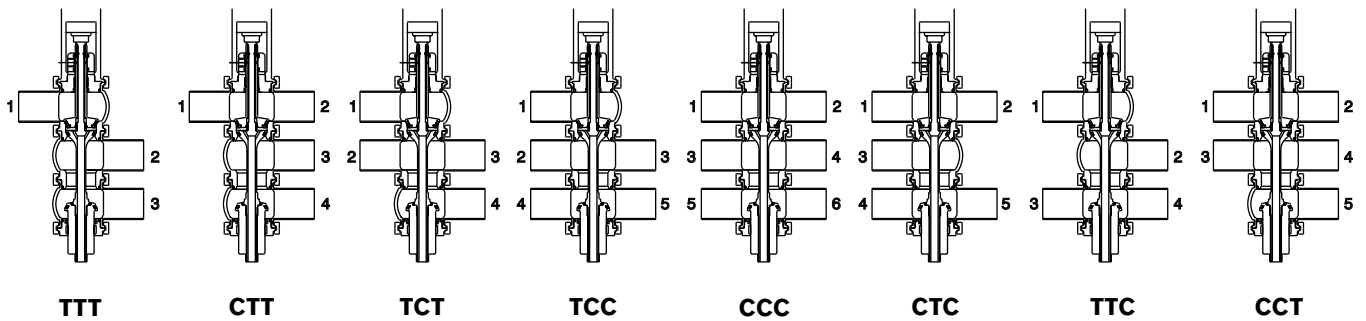
Two Piece Clamped Bodies\*

Tank Outlet Bodies (W72RS Only)\*

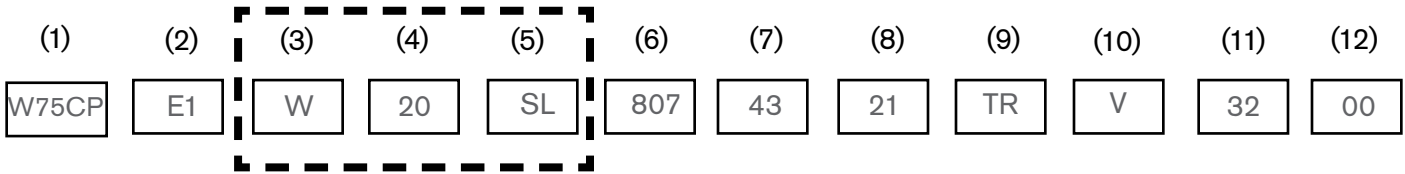


## W73 - Divert

Three Piece Clamped Bodies\*



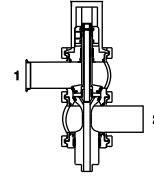
\*Clamped bodies allow ports to be rotated in any direction (Not Available for W75 series valves)



### (3)Ports

- W Butt Weld
- S S-Line
- I I-Line (female - 15l)
- F Flange (ANSI B116.5, 150# RF)
- Q Q-Line
- D DIN 11815 405 Thread

For mixed connection types, specify in order of port # shown in body configuration see page 3.



Example W71-TS-SW  
TS

### (4)Ports Size(s)

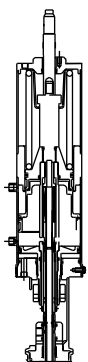
<b>Tube Size OD:</b>		<b>IPS Sch 5s (Not available on W75):</b>	
15	1-1/2"	20V	2"
20	2"	30V	3"
25	2-1/2"	40V	4"
30	3"	60V	6"
40	4"		
60	6"		

For mixed sized bodies indicate upper ports first. Mixed body sizes not available on W75 series PMO valves.

Example: 1-1/2" Upper by 2" Lower is 1520.

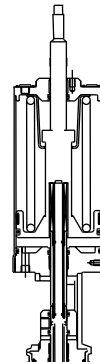
**Contact Factory to verify availability of mixed body sizes prior to placing an order.**

### (5)Actuator



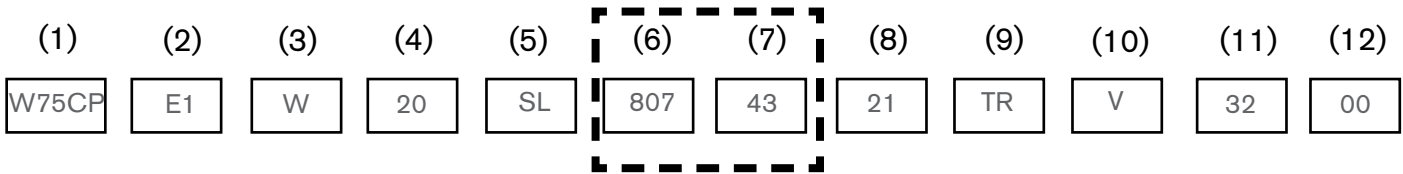
**SL** Seat Lifting

Standard with quick exhaust valve on lower seat lift air connection



**NSL** Non Seat Lifting

Not available on W75 series models



## (6) Switches/Solenoids

DESCRIPTION	NO	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
	CONTROL	MODULE NO	MODULE	MODULE	MODULE	MODULE	MODULE	MODULE
	MODULE <sup>1</sup>	SOLENOIDS	WITH (1) 110V	WITH (2) 110V	WITH (3) 110V	WITH (1) 24V	WITH (2) 24V	WITH (3) 24V
			AC SOL	AC SOL	AC SOL	DC SOL	DC SOL	DC SOL
No Switches	000	501	502	503	504	505	506	507
No Switches, Control top stem	001	---	---	---	---	---	---	---
Set & Forget								
24 VDC Only	510	511	---	---	---	515	516	
Prox Switch (1) lower	520	521	522	523	524	525	526	527
Prox Switch (1) upper	530	531	532	533	534	535	536	537
Prox Switch (2) 24 VDC/110 VAC	540	541	542	543	544	545	546	547
Microswitch (1) lower	550	551	552	553	554	555	556	557
Microswitch (1) upper	560	561	562	563	564	565	566	567
Microswitch (2) 24 VDC/110 VAC	570	571	572	573	574	575	576	577
Prox Switch (1) lower <sup>3</sup>	580	581	---	---	---	---	---	---
Prox Switch (1) upper <sup>3</sup>	590	591	---	---	---	---	---	---
Prox Switch (2) <sup>3</sup> Intrinsically Safe	600	601	---	---	---	---	---	---
5-25VDC/110 VAC								
AS-i Card & Set & Forget	---	611	---	---	---	615	616	617
AS-i Card & Prox Switch (1) lower	---	621	---	---	---	625	626	627
AS-i Card & Prox Switch (1) upper	---	631	---	---	---	635	636	637
AS-i Card & Prox Switch (2) 24 VDC Only	---	641	---	---	---	645	646	647
DeviceNet Card & Set & Forget								
DeviceNet Card & Prox Switch (1) lower	---	711	---	---	---	715	716	717
DeviceNet Card & Prox Switch (1) upper	---	721	---	---	---	725	726	727
DeviceNet Card & Prox Switch (2)	---	731	---	---	---	735	736	737
DeviceNet Card & Prox Switch (2)	---	741	---	---	---	645	746	747
24 VDC (requires PNP switches)								
Prox Switch (3) <sup>2</sup>	---							
AS-I Card & (3) Prox Switches 24 VDC only <sup>2</sup>	---	801	802	803	804	805	806	807
DeviceNet Card & (3) Prox Switches 24 VDC only <sup>2</sup>	---	811	---	---	---	815	816	817
DeviceNet Card & (3) Prox Switches 24 VDC only <sup>2</sup>	---	821	---	---	---	825	826	827

<sup>1</sup>Where proximity switches are indicated, these are externally mounted on top of actuator. (No Control Module)

<sup>2</sup>Indicates PMO control top options, the 3rd proximity switch is yoke mounted.

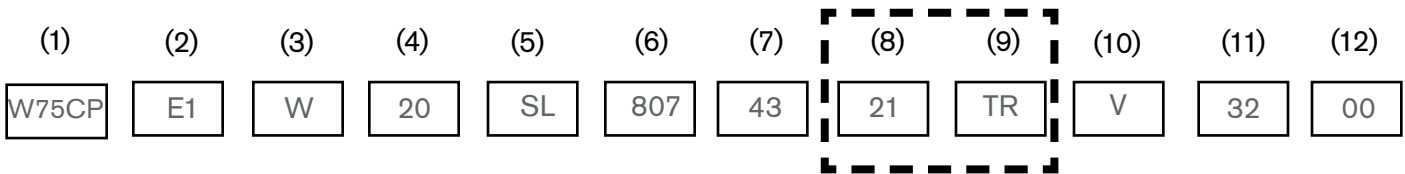
<sup>3</sup>Requires amplifier (not included, provided by others)

When one proximity switch or microswitch is supplied, default is lower position to verify properly closed valve. Specify on order. Consult factory for special control module requirements.

## (7) Solenoid Condition

VALVE	DESCRIPTION*	OPTION NUMBER
	No Option	00
W71, W73	Mix Proof - No Solenoid	20
	Mix Proof - 1 Solenoid	21
	Mix Proof - 2 Solenoids	22
	Mix Proof - 3 Solenoids	23
	Mix Proof Radial Seal (RS) - No Solenoid	30
W72RS	Mix Proof Radial Seal (RS) - 1 Solenoid	31
	Mix Proof Radial Seal (RS) - 2 Solenoid	32
	Mix Proof Radial Seal (RS) - 3 Solenoid	33
	PMO - No Solenoid	40
W75RS, W75CP	PMO - 1 Solenoid	41
	PMO - 2 Solenoid	42
	PMO - 3 Solenoid	43

Note: For Mix Proof Valves, Solenoid 1 = Valve Open, Solenoid 2 = Upper Seat Lift, Solenoid 3 = Lower Seat Lift



## (8) Control Module Connections

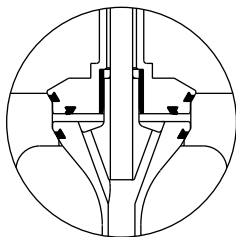
DESCRIPTION	OPTION NUMBER
No Control Module	00
S/O Cord, Strain Relief (Std)	01
4 Pin Turck Eurofast™ (Std for AS-i™ or up to 2 Switches only - no solenoid; AC/DC)	24
5 Pin Turck Eurofast™ (Std for Device Net™ and Set & Forget Switch only; AC/DC)	25
6 Pin Turck Eurofast™ (1 or 2 Switches and 1 solenoid; 3 switches and no solenoid; DC only)	26
10 Pin Turck Eurofast™ (up to 3 switches and up to 3 solenoids; DC only)	21
12 Pin Turck Eurofast™ (DC only)	22
8 Pin Turck Eurofast™ (Up to 2 Switches and up to 3 solenoids; DC only)	28
5 Pin Turck Minifast™ (1 or 2 Switches, no solenoid; AC/DC)	45
6 Pin Turck Minifast™ (1 or 2 Switches and up to 2 solenoids; AC/DC)	46
7 Pin Turck Minifast™ (1 or 2 Switches and up to 3 solenoids; AC/DC)	47
8 Pin Turck Minifast™ (up to 2 switches and up to 3 solenoids; AC/DC)	48
9 Pin Turck Minifast™ (AC/DC)	49
10 Pin Turck Minifast™ (up to 3 switches and up to 3 solenoids; AC/DC)	41

Includes connector on control module only. Mating connector and cable sold separately, by others.

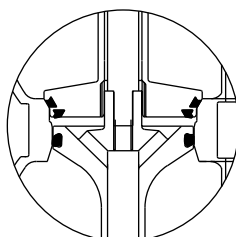
\*Turck™ is WCB Standard for pin connectors.

## (9) Seat

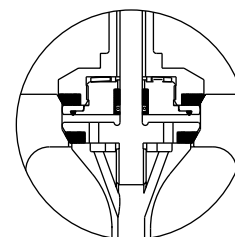
- TR** Tri Ring (W71, W72RS, W73, W75RS, W75CP, optional on S4)
- TF** PTFE (S4 std)
- EP** EPDM (S4 optional)



**TR**  
(W71/W73/S4)



**TR**  
(W72RS/W75RS/W75CP)



**TF/EP**  
(S4)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
W75CP	E1	W	20	SL	807	43	21	TR	V	32	00

## (10) Elastomer

*(Specifies materials for all gaskets, O-rings, & Tri Ring seals)*

- E** EPDM
- V** Fluoroelastomer
- X** Optional Elastomer (specify)

Contact Factory for special requirements.

## (11) Finish

- 32** Standard Finish (Machined <32Ra) ID (.8µm)
- 15** 15Ra Mechanical Polish ID (.2µm)
- 32EP** 32Ra Machined Finish and Electropolish ID
- 15EP** 15Ra Mechanical Polish and Electropolish ID

*Electropolish (EP) is in addition to the mechanical polish finish.*

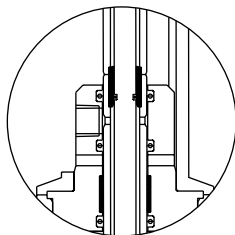
## (12) Options

DESCRIPTION	OPTION NUMBER
No Options	00
Mill Test Reports	06
Stainless Steel Tags	08
Quick Dump Valve for main air connection	09
Wiping Stem Seals (upper and lower)	10
External Flush (liquid vent cavity only)	11
External Flush (liquid vent cavity and lower stem)	12
Upper Stem Balancer	15
External Flush (steam vent cavity, upper & lower stem*)	22

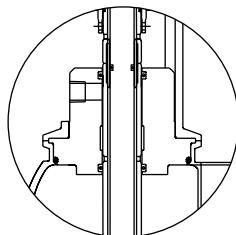
Multiple options available (Example: Stainless Steel Tags & External Liquid Flush: 08,11)

\*Steam continually accesses vent cavity when valve is open and closed.

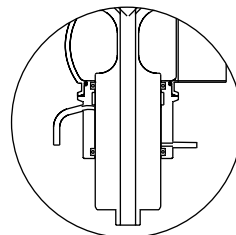
NOTE: Wiping stem seals standard on W75 series PMO Mix Proof Valves.



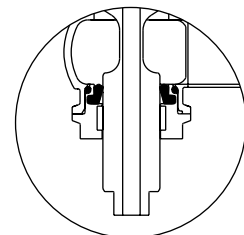
External Flush  
Liquid Vent Cavity



External Flush  
Steam Vent Cavity  
Upper Stem



External Flush  
Lower Stem  
(Liquid or Steam)



Wiping Stem Seal  
(lower stem shown)

# Website

For technical details on products and services available from SPX Process Equipment, contact us at [www.spxprocessequipment.com](http://www.spxprocessequipment.com).

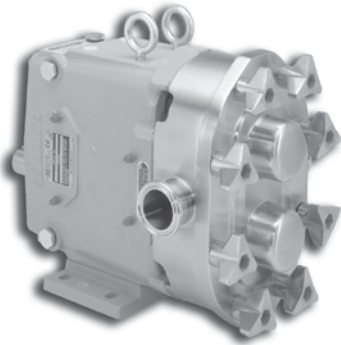
Download specific technical product information including:

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- Data sheets
- Maintenance Manuals
- Maintenance Manuals with digital video

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Valves



PD Pumps



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SPX Process Equipment  
611 Sugar Creek Road  
Delavan, WI 53115

Phone: (262)728-1900 or (800)252-5200 Fax: (262)728-4904 or (800)252-5012

E-mail: [wcb@spx.com](mailto:wcb@spx.com)

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