

## Valve Key

BUTTERFLY, SINGLE SEAT, MIX PROOF, ASEPTIC, REGULATING, PROCESS VALVES



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# SV & SVS Butterfly Valves



The order code is constructed as follows:

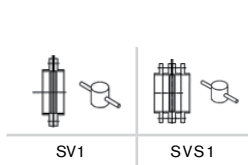
POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	SV1	316L	T	T20	A1	C41Y	30	R	E	10	A0

\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**SV1** Standard (2-piece design)

**SVS1** Intermediate Flanged (4-piece design)



## (2) MATERIAL OF CONSTRUCTION

**316L** Housing Material

## (3) PORT CONNECTIONS

**F** Hygienic Flange (SVS1 only)

**T** Clamp

**W** Butt weld

**G** DIN Male Thread (DIN 11851)

**R** RJT Ring Joint Type (BS 4825-5)

**S** SMS Swedish Milk Standard (SMS 1145)

**K** DIN Female Liner and Nut (DIN 11851)

**I** IDF/ISS (International Dairy Fitting)

**X** Without Counter Flanges (SVS1 only)

For mixed port connections, specify both key identifiers. Example: **TS** or **GK**

Additional port connections available upon request.

Please contact factory.

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube
<b>DN125</b>	DN 125		
<b>DN150</b>	DN 150	<b>T60</b>	6.0" Tube
<b>DN200</b>	DN 200		
<b>DN250</b>	DN 250		

## (5) ACTUATOR

SPRING TO CLOSE	SPRING TO OPEN	AIR TO AIR	MANUAL	ACTUATOR SIZE	NOMINAL VALVE SIZE	OPTIONAL VALVE SIZE
A1	A2	A3		80 mm diameter	DN25-DN100 or T10-T40	
B1	B2	B3		125 mm diameter	DN125-DN150 or T60	DN100 or T40
C1	C2	C3		180 mm diameter	DN200-DN250	DN125, DN150
			H1	Standard Manual Handle Open/Closed Position	DN25-DN100 or T10-T40	
			H1L	Lockable Manual Handle Open/Closed Position	DN25-DN100 or T10-T40	
			H2	Infinite Position Adjustment Manual Handle	DN25-DN100 or T10-T40	
			H3	Manual Handle with yoke, coupling, and indicator for position feedback	DN25-DN100 or T10-T40	
			M1	Metal Multi-position Handle	DN25-DN250 or T10-T60	
			H3L2	Manual Handle with compact yoke, coupling, and indicator for position feedback	DN25-DN100 or T10-T40	

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "AA0A" as default for valves without control unit or sensor feedback.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3
CX	ATEX CU
BE	TC 8692 Electropneumatic Positioner

### CU Identifier Position 3

SOLENOID	
<b>1</b>	<b>1 Solenoid</b>
9	1 Solenoid + NOT Element

### CU Identifier Position 4

COMMUNICATION TYPE			CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, TC8692, ATEX CU</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3, TC 8692
V	Profibus DP		CU3, TC 8692
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
XX	N/A	Manual Handle Only
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory  
\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

**E** EPDM  
**V** FPM  
**H** HNBR  
**S** VMQ

## (10) SURFACE FINISH

GLASS BLASTED ACTUATOR OD	POLISHED ACTUATOR OD	INSIDE POLISH
10	20	1.6 µm (63 µ-in) Ra ID
11	21	0.8 µm (32 µ-in) Ra ID
12	22	0.5 µm (20 µ-in) Ra ID with Electro-Polish

## (11) OPTIONS

**A0** None  
**A1** 3.1 Certification (3.1 certification on housing halves; 2.2 certification on flap/disc)  
**A3** ATEX  
**C6** Assembled (standard valve supplied dis-assembled for easier installation into pipeline)

# SW Series Single Seat Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	SW	41	W	T30	C1	CP1Y	30	TR	E	10	A0

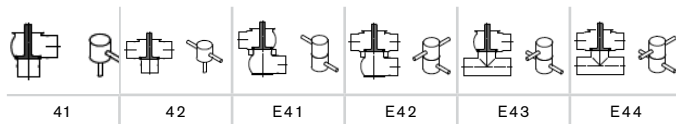
\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

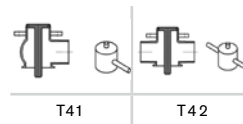
**SW** Single Seat Valves

## (2) HOUSING COMBINATIONS

### Shut-off Valves

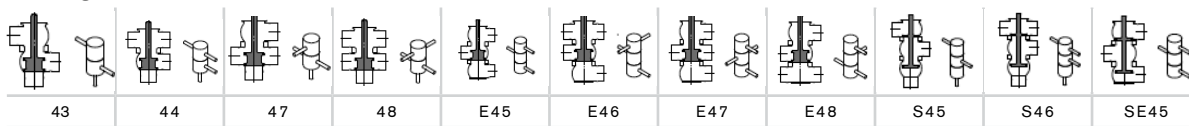


### Tank Outlet Valves\*



\*Tank flanges ordered separately

### Change-over Valves



## (3) PORT CONNECTIONS

**W** Butt weld

**T** Clamp

Additional and mixed port connections available upon request on certain housing combinations. Please contact factory.

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube
<b>DN125</b>	DN 125		
<b>DN150</b>	DN 150	<b>T60</b>	6.0" Tube

For availability of mixed sizes on E-style matrix housings, please contact Factory

## (5) ACTUATOR

NORMALLY CLOSED	NORMALLY OPEN	AIR TO AIR	MANUAL	ACTUATOR SIZE	NOMINAL VALVE SIZE <sup>1</sup>
A1	A2	A3		74 mm diameter	DN25, DN40, T10, T15
B1	B2	B3		110 mm diameter	DN50, DN65, T20, T25
C1	C2	C3		165 mm diameter	DN80, DN100, T30, T40
D1	D2	D3		255 mm diameter	Only DN125, D150, T60
E1	E2			110 mm diameter Long Stroke	Only DN50 to DN65 & T20 to T25
F1	F2			165 mm diameter Long Stroke	Only DN80, DN100, T30, T40
			H1	Manual Hand Actuator	DN25-DN150 or T10-T60

Add "L" to actuator identifier for stroke limiting mid-position actuator (example "B1L"). Only available on A1, B1, C1.

<sup>1</sup> A, B & C sizes are available on all sizes DN25-DN100 see instruction manual for holding pressures. For change-over valves, "Normally Closed" = "Fail Down" and "Normally Open" = "Fail Up"

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit. Use identifier "AA0A" for valves with manual handle.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3

### CU Identifier Position 3

SOLENOID	
<b>1</b>	<b>1 Solenoid</b>
9	1 Solenoid + NOT Element*
3	3 Solenoid

\*Only available up to DN100/T40 size

### CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, ATEX CU</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
XX	N/A	Manual Handle Only
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory

\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

**E** EPDM  
**V** FPM  
**H** HNBR  
**S** VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 µm (63 µ-in) Ra ID
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

## (11) OPTIONS

**A0** None  
**A1** 3.1 Certification  
**A3** ATEX  
**B1** 3-A compliant (at minimum with 0.8 µm (32 µ-in) Ra ID finish)  
**C1** Steam Barrier (DPF)  
**C7** Elastomer shaft seal

For high pressure (hp) options, please contact factory

# SWmini Series Fractional Size Single Seat Valves



The order code is constructed as follows:

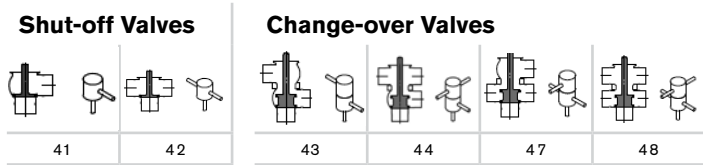
POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	SWmini	41	W	T30	C1	C41W	20	TR	E	10	A0

\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**SWmini** Single Seat Fractional

## (2) HOUSING COMBINATIONS



## (3) PORT CONNECTIONS

**W** Buttweld  
**T** Clamp

## (4) PORT SIZES

**DN10** DN 10      **T050** 0.5" Tube  
**DN15** DN 15      **T075** 0.75" Tube  
**DN20** DN 20      **T10** 1.0" Tube

## (5) ACTUATOR

NORMALLY CLOSED	NORMALLY OPEN	AIR TO AIR	MANUAL	ACTUATOR SIZE	NOMINAL VALVE SIZE
G1	G2	G3		50 mm	Only Used On SWmini Valves
			H1	Manual Actuator	

For change-over valves, "Normally Closed" = "Fail Down" and "Normally Open" = "Fail Up"

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit. Use identifier "AA0A" for valves with manual handle.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3

### CU Identifier Position 3

SOLENOID	
<b>1</b>	<b>1 Solenoid</b>
9	1 Solenoid + NOT Element
3	3 Solenoid

## CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
XX	N/A	Manual Handle Only
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory  
\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seat

## (9) SEAL MATERIAL

**E** EPDM  
**V** FPM  
**H** HNBR  
**S** VMQ

## (10) SURFACE FINISH

POLISHED OD	INSIDE POLISH
21	0.8 µm (32 µ-in) Ra ID

## (11) OPTIONS

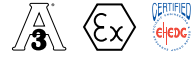
**A0** None

Note: 3-A certified design is standard

# MS Series Aseptic Diaphragm Single Seat Valves



The order code is constructed as follows:



POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	MS	41	T	T20	B1	C41U	30	TR	E	11	A0

\* Add multiple options to the end of code (i.e. -A1A3)

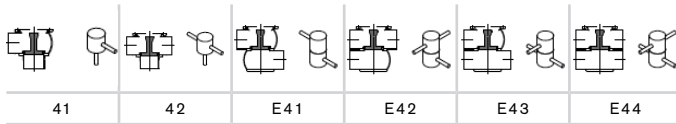
## (1) VALVE TYPE

**MS** Diaphragm Style with Metal Stem and Elastomeric Seat Seal

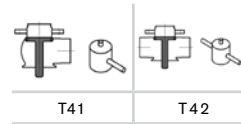
**MSP** Diaphragm Style with PTFE Stem

## (2) HOUSING COMBINATIONS

### Shut-off Valves

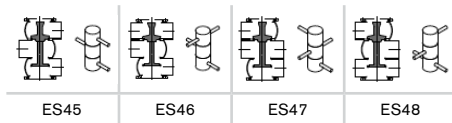


### Tank Outlet Valves\*



\*Tank flanges ordered separately

### Change-over Valves\*



\*Change-over valves only available as MS type

## (3) PORT CONNECTIONS

**W** Buttweld

**T** Clamp

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube

## (5) ACTUATOR

NORMALLY CLOSED	NORMALLY OPEN	AIR TO AIR	MANUAL	ACTUATOR SIZE	NOMINAL VALVE SIZE <sup>1</sup>
A1	A2	A3		74 mm diameter	DN25, T10
B1	B2	B3		110 mm diameter	DN40, DN50, T15, T20
C1	C2	C3		165 mm diameter	DN65, DN80, DN100, T25, T30, T40
			H1	Manual Hand Actuator	DN25-DN100 or T10-T40

Add "L" to actuator identifier for stroke limiting mid-position actuator (example "B1L"). Only available on A1, B1, C1.

<sup>1</sup> A, B & C sizes are available on all sizes DN25-DN100 see instruction manual for holding pressures

For change-over valves, "Normally Closed" = "Fail Down" and "Normally Open" = "Fail Up"



## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit. Use identifier "AA0A" for valves with manual handle.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3
CX	ATEX CU*

\*Not available with MSP type

### CU Identifier Position 3

SOLENOID	
<b>1</b>	<b>1 Solenoid</b>
9	1 Solenoid + NOT Element*
3	3 Solenoid

\*Not available with MSP type

### CU Identifier Position 4

COMMUNICATION TYPE			CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, ATEX CU</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
XX	N/A	Manual Handle Only
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory

\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

<b>TR</b>	Elastomeric Profile Seat
<b>PT</b>	PTFE Stem

## (9) SEAL MATERIAL

<b>E</b>	EPDM
<b>V</b>	FPM
<b>H</b>	HNBR
<b>S</b>	VMQ
<b>T</b>	PTFE (MSP only)

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

## (11) OPTIONS

<b>A0</b>	None
<b>A1</b>	3.1 Certification
<b>A3</b>	ATEX (unavailable with MSP type)
<b>B1</b>	3-A compliant (at minimum with 0.8 µm (32 µ-in) Ra ID surface finish)

# AP Series Fractional Size Aseptic Diaphragm Single Seat Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	AP	11	W	DN10	EC1	AA0A	2X	PT	T	11	A0

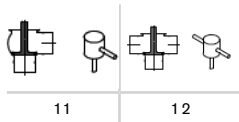
\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

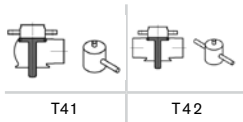
**AP** Fractional Size Diaphragm Style with PTFE Stem

## (2) HOUSING COMBINATIONS

### Shut-off Valves



### Tank Outlet Valves\*



\*Tank flanges ordered separately

## (3) PORT CONNECTIONS

**W** Buttweld

**T** Clamp

## (4) PORT SIZES

**DN10** DN 10      **T005** 0.5" Tube

**DN15** DN 15

**DN20** DN 20

## (5) ACTUATOR

NORMALLY CLOSED	NORMALLY OPEN	AIR TO AIR	MANUAL	ACTUATOR
EC1	EC2	EC3		Econo Air Actuator
TC1	TC2	TC3		Techno Air Actuator
			HE	Econo Hand Actuator
			HT	Techno Hand Actuator

## (6) FEEDBACK

IDENTIFIER	DESCRIPTION
AA0A	No CU
HP0N	2 Prox (open/closed) - Prox Holder only (no switches)

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

4 MM AIR FITTINGS	CONNECTION TYPE
XX	Manual Handle Only
2X	No CU / Feedback

## (8) SEAT TYPE

**PT** PTFE Stem

## (9) SEAL MATERIAL

**T** PTFE

## (10) SURFACE FINISH

POLISHED OD	INSIDE POLISH
21	Econo Only - 0.8 µm (32 µ-in) Ra ID with Electro-Polish
22	Techno Only - 0.5 µm (20 µ-in) Ra ID with Electro-Polish

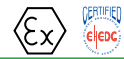
## (11) OPTIONS

**A0** None

**A1** 3.1 Certification (only with Techno)

**Note: 3-A certified design is standard**

# DA Double Seat Mix Proof Valve with Seat Lift



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11*
CODE	DA	34	W	DN50	SL	C43Y	20	TR	E	11	A0

\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**DA** Double Seat Mix Proof

## (2) HOUSING COMBINATIONS

### Shut-off Valves

31	31(16)	31(18)	32	33	34

## (3) PORT CONNECTIONS

**W** Buttweld

Additional and mixed port connections available upon request. Please contact factory.

## (4) PORT SIZES

<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube		
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube	<b>P20</b>	2" IPS Schedule 5 Pipe
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube		
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube	<b>P30</b>	3" IPS Schedule 5 Pipe
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube	<b>P40</b>	4" IPS Schedule 5 Pipe
<b>DN125</b>	DN 125				
<b>DN150</b>	DN 150	<b>T60</b>	6.0" Tube	<b>P60</b>	6" IPS Schedule 5 Pipe

For mixed size valves, indicate lower ports first.

Example: 1.5" Lower Housing by 2" Upper Housing is T15T20.

To verify availability of mixed sizes, please contact Factory

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
SL	Seat Lifting (Includes Integrated Upper and Lower Shaft Flush and External Flush to clean atmospheric vent cavity)

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus with Seat Lift Detection (SLD)
C3	CU3
CX	ATEX CU
CS	CU4 with Seat Lift Detection (SLD)

### CU Identifier Position 3

SOLENOID	
3	3 Solenoid

### CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, ATEX CU, CS</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory

\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

<b>E</b>	EPDM
<b>V</b>	FPM
<b>H</b>	HNBR
<b>S</b>	VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

## (11) OPTIONS

<b>A0</b>	None
<b>A2</b>	Middle vent cavity seal for water hammering
<b>A3</b>	ATEX
<b>D9</b>	M12x1 proximity sensor compatible

# DE Series Double Seat Mix Proof Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11*
CODE	DE	34	W	DN50	NSL	C41W	20	TR	E	11	A0

\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**DE** Double Seat Mix Proof

## (2) HOUSING COMBINATIONS

### Shut-off Valves

31	31(16)	31(18)	32	33	34

### Change-over Valves

U35	U36	U37	U38

### Tank Outlet Valves\*

T32

\*Tank flanges ordered separately

## (3) PORT CONNECTIONS

**W** Butt weld

Additional and mixed port connections available upon request. Please contact Factory.

## (4) PORT SIZES

<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube		
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube	<b>P20</b>	2" IPS Schedule 5 Pipe
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube		
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube	<b>P30</b>	3" IPS Schedule 5 Pipe
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube	<b>P40</b>	4" IPS Schedule 5 Pipe
<b>DN125</b>	DN 125				
<b>DN150</b>	DN 150	<b>T60</b>	6.0" Tube	<b>P60</b>	6" IPS Schedule 5 Pipe

For mixed size valves, indicate lower ports first.

Example: 1.5" Lower Housing by 2" Upper Housing is T15T20.

To verify availability of mixed sizes, please contact Factory

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
NSL	Non Seat Lifting (Includes External Flush to clean atmospheric vent cavity)

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3
CX	ATEX CU

### CU Identifier Position 3

SOLENOID	
1	1 Solenoid

### CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, ATEX CU</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory

\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

<b>E</b>	EPDM
<b>V</b>	FPM
<b>H</b>	HNBR
<b>S</b>	VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 μm (63 μ-in) Ra ID
11	21	0.8 μm (32 μ-in) Ra ID

## (11) OPTIONS

<b>A0</b>	None
<b>A3</b>	ATEX
<b>D9</b>	M12x1 proximity sensor compatible

# SWcip Series Double Seal Mix Proof CIP Valves



The order code is constructed as follows:

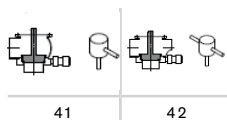
POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	SWcip	41	W	T25	B1	C41W	30	TR	E	10	A0

## (1) VALVE TYPE

**SWcip** Double Seal Mix Proof CIP Valve

## (2) HOUSING COMBINATIONS

### Shut-off Valves



## (3) PORT CONNECTIONS

**W** Buttweld

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube
<b>DN125</b>	DN 125		
<b>DN150</b>	DN 150	<b>T60</b>	6.0" Tube

## (5) ACTUATOR

NORMALLY CLOSED	ACTUATOR SIZE	STANDARD VALVE SIZE <sup>1</sup>
A1	74 mm diameter	DN25, DN40, T10, T15
B1	110 mm diameter	DN50, DN65, T20, T25
C1	165 mm diameter	DN80, DN100, T30, T40
D1	255 mm diameter	DN125, DN150, T60

<sup>1</sup>See instruction manual pressure data chart for holding pressures

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3
CX	ATEX CU

### CU Identifier Position 3

SOLENOID	
<b>1</b>	<b>1 Solenoid</b>
9	1 Solenoid + NOT Element*
3	3 Solenoid

\*Only available up to DN100/T40 size

### CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, ATEX CU</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory  
\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

**E** EPDM

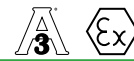
## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	N/A	1.6 μm (63 μ-in) Ra ID
11	N/A	0.8 μm (32 μ-in) Ra ID with Electro-Polish

## (11) OPTIONS

**A0** None

# SD Series Double Seal Mix Proof Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	SD	41	W	DN65	B1	C49Y	20	TR	E	10	A0

\* Add multiple options to the end of code (i.e. -A1A3)

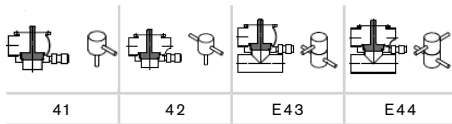
## (1) VALVE TYPE

**SD** Double Seal Mix Proof

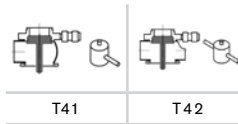
**SDMS** Aseptic Double Seal Mix Proof

## (2) HOUSING COMBINATIONS

### Shut-off Valves

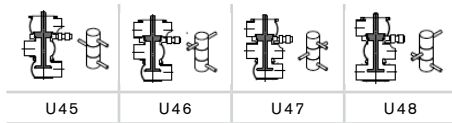


### Tank Outlet Valves\*



\*Tank flanges ordered separately

### Change-over Valves



## (3) PORT CONNECTIONS

**W** Buttweld

Additional and mixed port connections available upon request. Please contact factory.

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube

For mixed size valves, indicate lower ports first.

Example: 1.5" Lower Housing by 2" Upper Housing is T15T20.

To verify availability of mixed sizes on E-style matrix housings, please contact Factory

## (5) ACTUATOR

NORMALLY CLOSED	ACTUATOR SIZE	NOMINAL VALVE SIZE <sup>1</sup>
A1	74 mm diameter	DN25, DN40, T10, T15
B1	110 mm diameter	DN50, DN65, T20, T25
C1	165 mm diameter	DN80, DN100, T30, T40
E1	110 mm diameter Long Stroke	Only DN50 to DN65 & T20 to T25
F1	165 mm diameter Long Stroke	Only DN80, DN100, T30, T40

<sup>1</sup> A, B & C sizes are available on all sizes DN25-DN100 see instruction manual for holding pressures

For change-over valves, "Normally Closed" = "Fail Down" and "Normally Open" = "Fail Up"

For SDMS type, nominal actuator sizes will vary and long stroke not available. Please confirm configuration with factory.

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "HP0N" as default for valves without control unit.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3
CX	ATEX CU

### CU Identifier Position 3

SOLENOID	
1	1 Solenoid
<b>9</b>	<b>1 Solenoid + NOT Element</b>

### CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4, ATEX CU</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3
S	Direct Connect	12V DC	ATEX CU

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory

\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

**E** EPDM  
**V** FPM  
**H** HNBR  
**S** VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 μm (63 μ-in) Ra ID
11	21	0.8 μm (32 μ-in) Ra ID with Electro-Polish

## (11) OPTIONS

**A0** None  
**A3** ATEX  
**C1** Steam barrier (DPF)\*  
**C7** Elastomer shaft seal\*

\*Not available with SDMS type

# DKR Series Double Seat Mix Proof Ball Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	DKR	S	FG	DN65	A1	C41Y	20	PT	E	10	A0

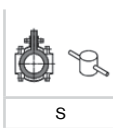
\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**DKR** Double Seat Mix Proof Ball Valve

## (2) HOUSING COMBINATIONS

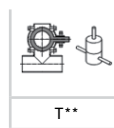
### Standard



### High Pressure



### Tank Outlet



\* Only available in sizes DN50 and DN80

\*\* Only available in sizes DN50, DN80, and DN100.

Tank flanges sold separately

## (3) PORT CONNECTIONS

**F** Hygienic Flange

**X** Without Counter Flanges

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube
<b>DN125</b>	DN 125		

## (5) ACTUATOR

NORMALLY CLOSED	ACTUATOR SIZE	STANDARD VALVE SIZE
A1	80 mm diameter	DN25-DN65 or T10-T25
B1	125 mm diameter	DN80-DN100 or T30-T40
C1	180 mm diameter	DN125

## (6) CONTROL UNIT / FEEDBACK

See page 27 for most common control unit configurations. **BOLD** indicates standard control unit options. Use identifier "AA0A" as default for valves without control unit.

### CU Identifier Positions 1 & 2

CONTROL TOP TYPE	
<b>C4</b>	<b>CU4</b>
CP	CU4plus
C3	CU3

### CU Identifier Position 3

SOLENOID	
1	1 Solenoid
9	1 Solenoid + NOT Element

### CU Identifier Position 4

	COMMUNICATION TYPE		CU UNITS AVAILABLE
	COMMUNICATION	VOLTAGE	
<b>W</b>	<b>Direct Connect</b>	<b>24V DC</b>	<b>CU4</b>
U	Direct Connect	110 V AC	CU4
T	AS-i 31		CU4
<b>Y</b>	<b>AS-i 62</b>		<b>CU4, CU4plus</b>
Z	DeviceNet™		CU3
V	Profibus DP		CU3

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	3X	No CU / Feedback
<b>20</b>	<b>30</b>	<b>Cable Gland</b>
24	34	4-pin M12 Connector*

For additional pin connector options on CU, please contact Factory  
\*Only available on CU with AS-i communication from Delavan factory

## (8) SEAT TYPE

**PT** PTFE Seal

## (9) SEAL MATERIAL

**E** EPDM

**V** FPM

**H** HNBR

**S** VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 µm (63 µ-in) Ra ID
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

## (11) OPTIONS

**A0** None

**A3** ATEX (2D rating for dust only)

**C8** Leakage Reduction

**C9** Leakage Guidance

**Note:** For horizontal valve installation in horizontal or vertical pipelines, please contact factory for special drain options



# UF Series Pressure Relief Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	UF	31	W	DN40	NSL	HP0N	2X	TR	E	11	L1

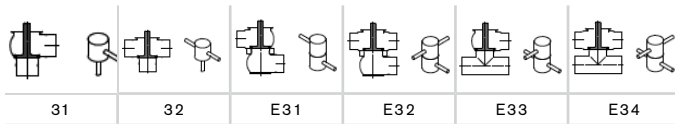
\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

- UF** Pressure Relief Valve
- UFR** Pressure Relief Valve with Tapered Stem

## (2) HOUSING COMBINATIONS

### Shut-off Valves



## (3) PORT CONNECTIONS

- W** Buttweld
- Additional and mixed port connections available upon request. Please contact factory.

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube
<b>DN125</b>	DN125		

For availability of mixed sizes on E-style matrix housings, please contact Factory

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
NSL	Non Seat Lifting
SL	Seat Lifting

## (6) CONTROL UNIT / FEEDBACK

IDENTIFIER	DESCRIPTION
AA0A	No CU / Feedback*

\*Prox holder brackets and sensors ordered separately

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	3X	No CU / Feedback

## (8) SEAT TYPE

- TR** Elastomeric Profile Seal

## (9) SEAL MATERIAL

- E** EPDM
- V** FPM
- H** HNBR
- S** VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 µm (63 µ-in) Ra ID
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

## (11a) PRESSURE RELIEF RANGE IN BAR (REQUIRED)

UF				
VALVE SIZE	PRESSURE RELIEF RANGE (BAR)			
T10 DN25	<b>LP</b>	<b>L1</b>		
	0-6.8	0-10		
T15 DN40	<b>LM</b>	<b>LR</b>	<b>L1</b>	
	0-3.5	0-7.5	0-10	
T20 DN50	<b>LK</b>	<b>LN</b>	<b>L1</b>	
	0-2.1	0-4.5	0-10	
T25 DN65	<b>LK</b>	<b>LL</b>	<b>LS</b>	<b>L1</b>
	0-2.1	0-2.7	0-7.6	0-10
T30 DN80	<b>LY</b>	<b>L3</b>	<b>LZ</b>	<b>L1</b>
	0-0.9	0-1.8	0-5.2	0-10
T40 DN100	<b>LW</b>	<b>LH</b>	<b>LM</b>	<b>LT</b>
	0-0.6	0-1.2	0-3.5	0-8.3

UFR				
VALVE SIZE	PRESSURE RELIEF RANGE (BAR)			
T10 DN25	<b>L8</b>	<b>L1</b>		
	0-5.4	0-10		
T15 DN40	<b>L5</b>	<b>L9</b>	<b>L1</b>	
	0-2.9	0-6.3	0-10	
T20 DN50	<b>L3</b>	<b>L6</b>	<b>L1</b>	
	0-1.8	0-4.0	0-10	
T25 DN65	<b>L2</b>	<b>L4</b>	<b>LA</b>	<b>L1</b>
	0-1.1	0-2.4	0-7.0	0-10
T30 DN80	<b>LX</b>	<b>LJ</b>	<b>L7</b>	<b>L1</b>
	0-0.8	0-1.7	0-4.8	0-10
T40 DN100	<b>LU</b>	<b>L2</b>	<b>LQ</b>	<b>LB</b>
	0-0.5	0-1.1	0-3.2	0-7.7

The minimum response pressure can be > 0 bar depending on the valve mounting position and the friction on the shaft seal. For higher relief pressure options, please contact Factory

## (11b) OPTIONS

- A3** ATEX
- B1** 3-A compliant (at minimum with 0.8 µm (32 µ-in) Ra ID surface finish)

# RG/RGE Series Modulating Valves



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	RG	41	FG	T30 (63)	C1	S20W	30	LL	E	10	A9

\* Add multiple options to the end of code (i.e. -A1A3)

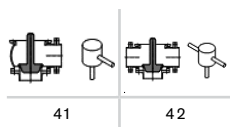
For sizing of new modulating valve applications, please [CLICK HERE](#) to complete the RG specification sheet

## (1) VALVE TYPE

- RG** Regulating
- RGE** Regulating Economical
- RGMS** Aseptic Membrane Regulating

## (2) HOUSING COMBINATIONS

### Shut-off Valves



For additional housing combinations, please contact factory

## (3) PORT CONNECTIONS

- F** Hygienic Flange (standard on RG/RGMS)
- W** Buttweld (standard on RGE)
- X** Without Counter Flanges

Additional connections available upon request. Please contact factory.

## (4) PORT SIZES (FLOW COEFFICIENT)

PORT SIZES (FLOW COEFFICIENT)				RG KV VALUE (M <sup>3</sup> /H) <sup>1</sup>	RGE KV VALUE (M <sup>3</sup> /H) <sup>1</sup>
<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube	0.25, 0.4, 0.63, 1.0, 1.6, 2.5, 4.0, 6.3, 10	6.3, 10
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube	2.5, 4.0, 6.3, 10, 16, 25	2.5, 4.0, 6.3, 10, 16, 25
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube	4.0, 6.3, 10, 16, 25, 40	40
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube	16, 25, 40, 63	63
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube	40, 63, 100	80
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube	63, 100, 160	160
<b>DN125</b>	DN 125			100, 160, 250	N/A
<b>DN150</b>	DN 150	<b>T60</b>	6.0" Tube	160, 250, 400	N/A

<sup>1</sup>For key use port size with (Kv) in parentheses. Example: T20(6.3).

Kv chart shows all possible combinations of Kv based on valve size

## (5) ACTUATOR

SPRING CLOSING MFS	SPRING OPENING MFH	MANUAL	ACTUATOR SIZE	RECOMMENDED KV-VALUES (M <sup>3</sup> /H)
A1			120cm <sup>2</sup> actuating surface	0.25, 0.4, 0.63, 1.0, 1.6, 2.5, 4.0, 6.3, 10
B1			240cm <sup>2</sup> actuating surface	16, 25
C1			350cm <sup>2</sup> actuating surface	40, 63, 80
D1			700cm <sup>2</sup> actuating surface	100, 160, 250, 400
	A2		120cm <sup>2</sup> actuating surface	0.25, 0.4, 0.63, 1.0, 1.6, 2.5, 4.0, 6.3, 10, 16, 25, 40
	B2		240cm <sup>2</sup> actuating surface	63, 80
	C2		350cm <sup>2</sup> actuating surface	100
	D2		700cm <sup>2</sup> actuating surface	160, 250, 400
		H1	Manual Hand Actuator	Full range: 0.25-160

For special requests, please fill out the specification sheet and contact factory.

For holding pressures on actuators, please see instruction manual.

For actuator and Kv combinations that are not displayed, please contact factory for verification or fill out specification sheet.

## (6) POSITIONER

IDENTIFIER	DESCRIPTION
<b>INTEGRATED DESIGN</b>	
S00W	Samson EP I/P (4-20mA) Model IP3725
S10W	Samson EP I/P (4-20mA) Model IP3730-0 (non Auto-tune)
<b>S20W</b>	<b>Samson EP I/P (4-20mA) Model IP3730-1 (Auto-tune) - standard</b>
S30W	Samson EP I/P (4-20mA) Model IP3730-2 (Auto-tune & Self diagnostics)
S40W	Samson EP I/P (4-20mA) Model IP3767 (analog)
S30H	Samson EP I/P (4-20mA) Model IP3730-3 with Hart Protocol (Auto-tune & Self diagnostics)
S30V	Samson EP I/P (4-20mA) Model IP3730-4 with Profibus PA (Auto-tune & Self diagnostics)
S30F	Samson EP I/P (4-20mA) Model IP3730-5 with Foundation Fieldbus (Auto-tune & Self diagnostics)
SP0W	Samson Pneumatic PP (3-15 psi) Model P3766
<b>EXTERNAL MOUNT DESIGN</b>	
SN0W	Samson Namur mount EP I/P (4-20mA) Model IP4763
SM0W	Samson Namur mount PP (0.2-1bar/3-15 psi) Model P4765

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
XX	N/A	Manual Handle Only
2X	3X	No Positioner
<b>20</b>	<b>30</b>	<b>Cable Gland</b>

## (8) STEM TYPE

**LL** Linear

**EP** Equal Percentage

All seats contain elastomer seat seal except DN25/T10 with 0.25-1.6 Kv values

## (9) SEAL MATERIAL

**E** EPDM

**V** FPM

**H** HNBR

**S** VMO

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 µm (63 µ-in) Ra ID*
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

\*Only available with RGE type

## (11) OPTIONS

**A0** None

**A3** ATEX\*

**A8** Noise Reducer\*

**B1** 3-A compliant (only with 0.8 µm (32 µ-in) Ra ID surface finish)

**D4** No Seat Seal

\*Only available with RG/RGMS types

# CPV Constant Pressure Valve



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	CPV	O	W	T20	STD	AA0A	2X	M	E	10	A0

\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**CPV** Constant Pressure Valve

## (8) SEAT TYPE

**M** Metal

## (2) APPLICATION

### Constant Pressure Before Valve

**O**  
(increasing product pressure acts to open the valve)



### Constant Pressure After Valve

**C**  
(increasing product pressure acts to close the valve)



## (9) SEAL MATERIAL

**T** PTFE/EPDM (standard)

**E** EPDM

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
11	21	0.8 μm (32 μ-in) Ra ID

## (11) OPERATING RANGE (REQUIRED)

**B9** 0.8-7.0 bar (11.6-101.5 psi) only with PTFE/EPDM seal material standard

**B8** 0.3-3.0 bar (4.4-43.5 psi) only with EPDM seal material

**Note: 3-A certified design is standard**

## (3) PORT CONNECTIONS

**W** Buttweld

## (4) PORT SIZES

**DN50** DN 50      **T20** 2.0" Tube

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
STD	Standard
BT	Booster*

\*Use booster when air supply is insufficient for desired constant pressure. See instruction manual for more details.

## (6) CONTROL UNIT / FEEDBACK

IDENTIFIER	DESCRIPTION
AA0A	No CU available

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	CONNECTION TYPE
2X	N/A	No CU / Feedback

# RUF Spring Check Valve



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	RUF	S	FG	T30	NA	AA0A	XX	TR	E	10	A0

\* Add multiple options to the end of code (i.e. -A1A3)

## (1) VALVE TYPE

**RUF** Spring Check Non-Return Valve

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (2) HOUSING COMBINATIONS

**S** Standard

## (9) SEAL MATERIAL

**E** EPDM

**V** FPM

**H** HNBR

**S** VMQ

## (3) PORT CONNECTIONS

**F** Hygienic Flange

**X** Without Counter Flanges

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
11	21	0.8 µm (32 µ-in) Ra ID with Electro-Polish

## (4) PORT SIZES

**DN25** DN 25      **T10** 1.0" Tube

**DN40** DN 40      **T15** 1.5" Tube

**DN50** DN 50      **T20** 2.0" Tube

**DN65** DN 65      **T25** 2.5" Tube

**DN80** DN 80      **T30** 3.0" Tube

**DN100** DN 100      **T40** 4.0" Tube

**DN125** DN 125

**DN150** DN 150      **T60** 6.0" Tube

## (11) OPTIONS

**A0** None

**A1** 3.1 Certification

**A3** ATEX

Note: 3-A certified design is standard

Schedule 5 and 10 pipe sizes available upon request. Please contact Factory

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
NA	N/A

## (6) CONTROL UNIT / FEEDBACK

IDENTIFIER	DESCRIPTION
AA0A	No feedback available

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

IDENTIFIER	DESCRIPTION
XX	N/A

# VPN Spring Check Valve



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	VPN	S	W	T10	NA	AA0A	XX	TR	E	10	A0

## (1) VALVE TYPE

**VPN** Spring Check Non-Return Valve

## (8) SEAT TYPE

**TR** Elastomeric Profile Seat

## (2) HOUSING COMBINATIONS

**S** Standard

## (9) SEAL MATERIAL

**E** EPDM

## (3) PORT CONNECTIONS

**W** Buttweld

**T** Clamp

## (10) SURFACE FINISH

GLASS BLASTED OD	MACHINE FINISH OD	INSIDE POLISH
10	Standard	1.6 $\mu\text{m}$ (63 $\mu\text{-in}$ ) Ra ID

## (4) PORT SIZES

**DN25** DN 25      **T10** 1.0" Tube

**DN40** DN 40      **T15** 1.5" Tube

**DN50** DN 50      **T20** 2.0" Tube

**DN65** DN 65      **T25** 2.5" Tube

**DN80** DN 80      **T30** 3.0" Tube

**DN100** DN 100      **T40** 4.0" Tube

## (11) OPTIONS

**A0** None

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
NA	N/A

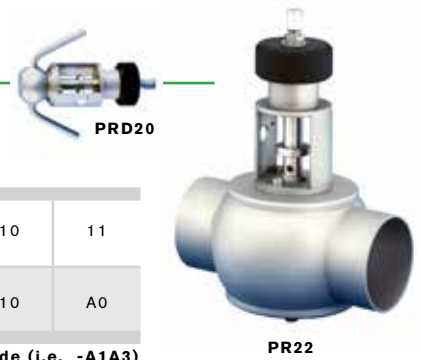
## (6) CONTROL UNIT / FEEDBACK

IDENTIFIER	DESCRIPTION
AA0A	No feedback available

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

IDENTIFIER	DESCRIPTION
XX	N/A

# PR Sample Valve



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	PR	21	W	DN25	G4	AA0A	2X	M	E	10	A0

\* Add multiple options to the end of code (i.e. -A1A3)

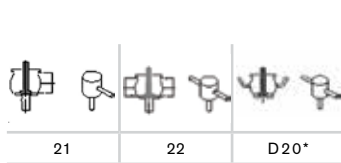
## (1) VALVE TYPE

**PR** Sample Valve

## (8) SEAT TYPE

**PT** PTFE

## (2) HOUSING COMBINATIONS



\*Only available in size DN25

## (9) SEAL MATERIAL

**E** EPDM

**V** FPM

**H** HNBR

**S** VMO

## (3) PORT CONNECTIONS

**W** Buttweld

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 μm (63 μ-in) Ra ID
11	21	0.8 μm (32 μ-in) Ra ID with Electro-Polish

## (4) PORT SIZES

<b>DN25</b>	DN 25	<b>T10</b>	1.0" Tube
<b>DN40</b>	DN 40	<b>T15</b>	1.5" Tube
<b>DN50</b>	DN 50	<b>T20</b>	2.0" Tube
<b>DN65</b>	DN 65	<b>T25</b>	2.5" Tube
<b>DN80</b>	DN 80	<b>T30</b>	3.0" Tube
<b>DN100</b>	DN 100	<b>T40</b>	4.0" Tube
<b>DN125</b>	DN 125		

## (11) OPTIONS

**A0** None

## (5) ACTUATOR

IDENTIFIER	DESCRIPTION
G4	Manual Handle
G5	Pneumatic Actuator and Manual Handle Combination

## (6) CONTROL UNIT / FEEDBACK

IDENTIFIER	DESCRIPTION
AA0A	No CU / Feedback*

\*Prox holder brackets and sensors ordered separately

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
XX	N/A	Manual Handle Only
2X	N/A	No CU / Feedback

# VRA Vacuum Relief Valve



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	VRA	11	W	DN50	SL	AA0A	2X	TR	E	11	A0

\* Add multiple options to the end of code (i.e. -A1A3)

For assistance sizing of new vacuum relief valve applications, please contact factory or local sales agent.

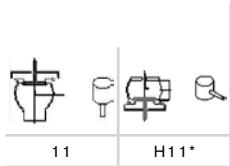
## (1) VALVE TYPE

**VRA** Vacuum Relief

## (8) SEAT TYPE

**TR** Elastomeric Profile Seal

## (2) HOUSING COMBINATIONS



\*Only available in size DN100

## (9) SEAL MATERIAL

**E** EPDM

**V** FPM

**H** HNBR

## (3) PORT CONNECTIONS

**W** Buttweld

## (10) SURFACE FINISH

GLASS BLASTED OD	POLISHED OD	INSIDE POLISH
10	20	1.6 $\mu\text{m}$ (63 $\mu\text{-in}$ ) Ra ID
11	21	0.8 $\mu\text{m}$ (32 $\mu\text{-in}$ ) Ra ID with Electro-Polish

## (4) PORT SIZES

**DN50** DN 50

**DN100** DN 100

**DN150** DN 150

## (11) OPTIONS

**A0** None

**B7** Large outlet port (only with VRA11)

## (5) ACTUATOR

TYPE	DESCRIPTION
SL	Seat Lifting

## (6) CONTROL UNIT / FEEDBACK

TYPE	DESCRIPTION
AA0A	No CU / Feedback*

\*Prox holder brackets and sensors ordered separately

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	1/4" AIR FITTINGS	ELECTRICAL CONNECTION
2X	N/A	No CU / Feedback



# SI Safety Valve



The order code is constructed as follows:

POSITION	1	2	3	4	5	6	7	8	9	10	11
CODE	SI	21	FG	DN65	SL	AA0A	2X	TR	E	11	A1

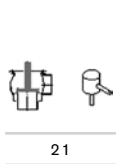
\* Add multiple options to the end of code (i.e. -A1A3)

For assistance sizing of new safety relief valve applications, please contact factory or local sales agent.

## (1) VALVE TYPE

**SI** Safety Valve

## (2) HOUSING COMBINATIONS



## (3) PORT CONNECTIONS

**F** Hygienic Flange

## (4) PORT SIZES

**DN25** DN 25  
**DN40** DN 40  
**DN50** DN 50  
**DN65** DN 65  
**DN80** DN 80  
**DN100** DN 100

## (5) ACTUATOR

TYPE	DESCRIPTION
HSL	Manual Handle Seat Lifting
SL	Pneumatic Seat Lifting

## (6) CONTROL UNIT / FEEDBACK

TYPE	DESCRIPTION
AA0A	No CU / Feedback*

\*Prox holder brackets and sensors ordered separately

## (7) CONTROL UNIT / ACTUATOR CONNECTORS

6 MM AIR FITTINGS	ELECTRICAL CONNECTION
2X	No CU / Feedback

## (8) SEAT TYPE

**TR** Elastomeric Profile Seat

## (9) SEAL MATERIAL

**E** EPDM  
**V** FPM  
**H** HNBR  
**S** VMQ

## (10) SURFACE FINISH

GLASS BLASTED OD	INSIDE POLISH
11	0.8 µm (32 µ-in) Ra ID

## (11a) OPTIONS

**A1** 3.1 Certification

**(11b) PRESSURE RELIEF RANGE (REQUIRED)**

VALVE SIZE	PRESSURE RELIEF RANGE (BAR) FOR FLUID AND GAS												
	E1	E2	E3	E4	E5	E6	E7	E8					
DN25	0.3-1.5 FG	1.5-2.1 FG	2.1-2.3 F	2.3-3.2 F	3.2-4.3 F	4.3-6.0 F	6.0-7.8 F	7.8-10.0 F					
DN40	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA			
	0.3-0.75 FG	0.75-1.2 FG	1.2-2.1 FG	2.1-3.5 FG	3.5-4.0 FG	4.0-4.6 F	4.6-5.4 F	5.4-7.2 F	7.2-9.2 F	9.2-10.0 F			
DN50	G1	GC	G2	G3	G4	G5	G6	G7	G8	G9	GA	GB	
	0.3-0.55 FG	0.55-0.85 FG	0.85-1.5 FG	1.5-2.5 FG	2.5-2.7 FG	2.7-3.5 FG	3.5-4.1 F	4.1-5.25 F	5.25-6.0 F	6.0-7.4 F	7.4-8.9 F	8.9-10.0 F	
DN65	H1	H2	H3	H4	H5	HD	HC	H6	H7	HB	H8	H9	HA
	0.3-0.6 FG	0.6-0.9 FG	0.9-1.4 FG	1.4-1.7 FG	1.7-2.2 FG	2.2-2.6 FG	2.6-3.0 FG	3.0-3.5 F	3.5-4.3 F	4.3-4.95 F	4.95-5.75 F	5.75-6.95 F	6.95-7.8 F
DN80	J1	J2	J3	J4	J5	J6	J9	J7	JA	JB	J8	JC	
	0.3-0.65 FG	0.65-0.9 FG	0.9-1.15 FG	1.15-1.5 FG	1.5-1.8 FG	1.8-2.3 FG	2.3-2.8 FG	2.8-3.1 FG	3.1-3.5 F	3.5-4.1 F	4.1-5.05 F	5.05-5.9 F	
DN100	K9	K1	K2	K3	K4	K5	K6	KB	K7	KA	K8		
	0.45-0.60 F 0.45-0.50 G	0.75-0.95 F	0.95-1.2 F	1.2-1.6 F	1.6-2.0 F	0.3-0.45 F 0.4-0.45 G	0.6-0.75 F 0.5-0.70 G	2.0-2.35 F	2.35-2.75 F	2.75-3.35 F	>3.35-3.80 F		

**Note: Exact relief set point is required when order submitted to factory. Certificate of pressure setting is supplied with valve.**

**F = Rated for fluid pressure relief**

**G = Rated for gas pressure relief**

# Control Units for all Valves



Control Units are identified with a 4 digit code.

For valve models available with control units, please specify the four digit code per the below example:

IDENTIFIER POSITION	1 & 2	3	4
EXAMPLE CODE	C4	1	Y
EXAMPLE VALVE KEY CODE	SV1-316L-T-T20-A1-C41Y-30-R-E-10-A0		

## COMMON CONFIGURATIONS

CONTROL UNIT IDENTIFIER	CU TYPE	COMMUNICATION TYPE	SOLENOIDS	COMMON VALVE TYPE AVAILABLE
AA0A	None	None	0 solenoids	AP, CPV, DKR, MS/MSP, PR, RUF, SI, SV/SVS, SW, SWmini, UF/UFR, VPN, VRA
HP0N	Prox Holder Bracket	None	0 solenoids	AP, DA, DE, MS/MSP, SD/SDMS, SW, SWcip, SWmini
C41W	CU4	Direct Connect 24V DC	1 solenoids	DE, DKR, MS/MSP, SV/SVS, SW, SWcip, SWmini
C49W	CU4	Direct Connect 24V DC	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
C43W	CU4	Direct Connect 24V DC	3 solenoids	DA
C41U	CU4	Direct Connect 110V AC	1 solenoids	DE, DKR, MS/MSP, SV/SVS, SW, SWcip, SWmini
C49U	CU4	Direct Connect 110V AC	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
C43U	CU4	Direct Connect 110V AC	3 solenoids	DA
C41T	CU4	AS-i 31	1 solenoids	DE, DKR, MS/MSP, SV/SVS, SW, SWcip, SWmini
C49T	CU4	AS-i 31	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
C43T	CU4	AS-i 31	3 solenoids	DA
C41Y	CU4	AS-i 62	1 solenoids	DE, DKR, MS/MSP, SV/SVS, SW, SWcip, SWmini
C49Y	CU4	AS-i 62	1 solenoid w/NOT Element	MS, SD/SDMS, SW, SWcip
C43Y	CU4	AS-i 62	3 solenoids w/SLD	DA
CP1Y	CU4plus	AS-i 62	1 solenoids	DE, DKR, MS, MSP, SV/SVS, SW, SWcip, SWmini
CP9Y	CU4plus	AS-i 62	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
CP3Y	CU4plus	AS-i 62	3 solenoids	DA
C31Z	CU3	DeviceNet™	1 solenoids	DE, DKR, MS/MSP, SV/SVS, SW, SWcip, SWmini
C39Z	CU3	DeviceNet™	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
C33Z	CU3	DeviceNet™	3 solenoids	DA
C31V	CU3	Profibus	1 solenoids	DE, MS/MSP, SV/SVS, SW, SWcip, SWmini
C39V	CU3	Profibus	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
C33V	CU3	Profibus	3 solenoids	DA
CX1W	ATEX CU	Direct Connect 24V DC	1 solenoids	DE, MS/MSP, SV/SVS, SW, SWcip
CX9W	ATEX CU	Direct Connect 24V DC	1 solenoid w/NOT Element	MS, SV/SVS, SD/SDMS, SW, SWcip
CX3W	ATEX CU	Direct Connect 24V DC	3 solenoids	DA

CONTROL UNIT TYPE	DESCRIPTION
C4	CU4 model with 2 Hall sensors for feedback
CP	CU4plus model with Teach-in/Linear sensor for feedback and SLD (only for AS-i 62)
C3	CU3 model with 2 Hall sensors for feedback (only for DeviceNet™ and Profibus)
CX	ATEX certified CU model with 2 sensors for feedback (only for Direct Connect 24V or 12V DC)
HP	Prox holder bracket compatible with 1 or 2 feedback positions. Sensors ordered separately

**SLD = Seat Lift Detection for Mix Proof Valves**

To order spare control units, it is necessary to provide the valve model and size. Please contact factory or local sales agent.



## Global locations

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