



# W265 HTST Flow Diversion Valve

## Application

For use in HTST (High Pressure Short Time) systems for diverting product to forward flow after reaching legal pasteurization temperatures.

WCB's Non-Slamming design prevents water hammer or hydraulic shock conditions caused by traditional flow diversion valves, extending the life of the valve and surrounding process equipment.

## Materials

Product Wetted: ASTM 316L (UNS-S31603); (DIN-1.4404)

Non-Product: ASTM 304 (UNS-S30400); (DIN-1.4301)

Seat Material: TEF-FLOW™ P (Std) See Page 2:4 for other available seat options

Elastomers: Fluoroelastomer (FKM) -Std  
EPDM -Opt

Finish: < 32Ra (<0.8 mm)

*Other finishes available upon request*

## Maximum Pressure Rating

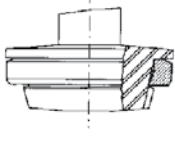
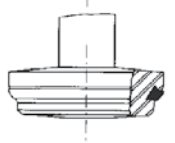
### Standard

Valve Size w/ pressure at	1.0/1.5" (25/38mm)	2.0" (51mm)	2.5" (64mm)	3.0" (76mm)	4.0" (102mm)	6.0" <sup>**</sup> (152mm)
70°F (20°C)	500 psi (34.5 bar)	450 psi (31 bar)	400 psi (28 bar)	350 psi (24 bar)	200 psi (14 bar)	150 psi (10 bar)
160/180°F (71/82°C)	375 psi (26 bar)	350 psi (24 bar)	300 psi (17 bar)	250 psi (17 bar)	150 psi (10 bar)	100 psi (6 bar)
250°F (121°C)	250 psi (17 bar)	250 psi (17 bar)	200 psi (14 bar)	150 psi (10 bar)	125 psi (8 bar)	75 psi (5 bar)

### Valve with High Pressure Adapter and Clamps

Valve Size w/ pressure at	1.0/1.5" (25/38mm)	2.0" (51mm)	2.5" (64mm)	3.0" (76mm)	4.0" (102mm)	6.0" <sup>**</sup> (152mm)
70°F (20°C)	1220 psi (84 bar)	900 psi (62 bar)	720 psi (49 bar)	---	---	---
160/180°F (71/82°C)	1160 psi (80 bar)	855 psi (60 bar)	690 psi (47 bar)	---	---	---
250°F (121°C)	1100 psi (75 bar)	830 psi (57 bar)	660 psi (45 bar)	---	---	---

## Seat Options

Seat Type	Maximum Temperature	
	TEF-FLOW™ "P" (TFP)	280oF (137oC)
	Tri Ring (TR) EPDM, FKM	Oper. 280oF (137oC) EPDM Steril. 275oF (135oC) EPDM Oper. 350oF (176oC) FKM Steril. Consult Factory FKM

*For higher temperature applications than those listed, please consult the factory.*

## Control Tops



**The W265 HTST valve assembly comes complete with 1 or 2 Microswitches in each valve control module to meet PMO requirements for position indication. Solenoids optional.**

### Features

- Transparent Control Top keeps all electrical components visible.
- Maintainable! Designed with the user in mind, making assembly and troubleshooting worry free and easy!
- WCB uses the industry's most widely recognized electrical components, so access to "off-the-shelf" replacement parts is easy, ensuring quick delivery and less down time!
- NEMA 4x (IP64)

### Connector Options

- S/O Cord Grip for hard wire (std)
- Quick Disconnect Pin Connectors

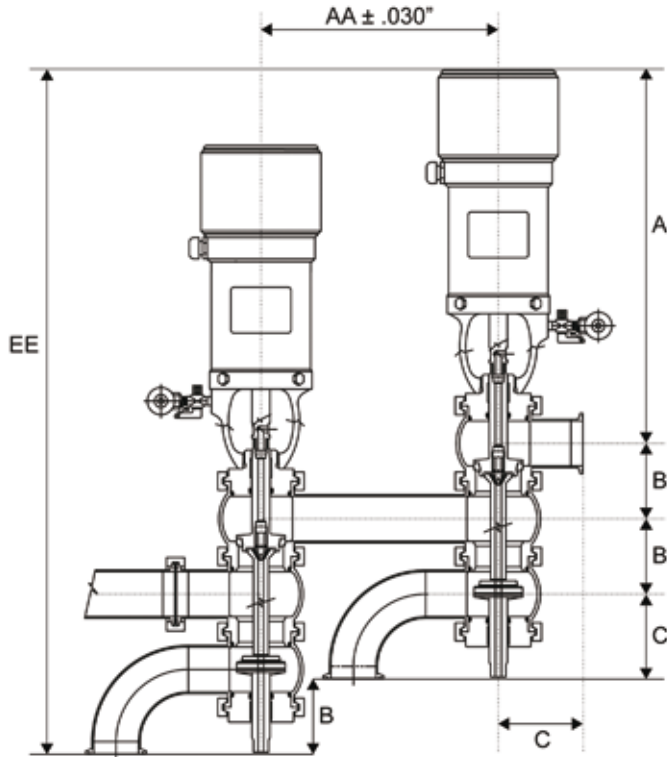
### Position Indication

- Microswitches 24VDC, 110VAC

### Solenoid Valves

- 24VDC or 110V

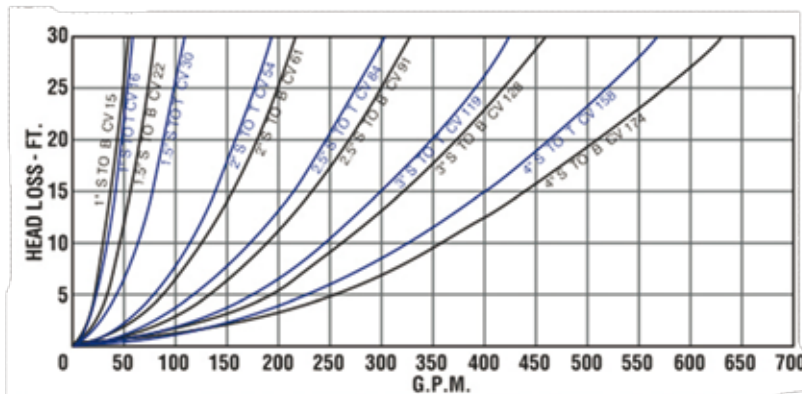
# Dimensions



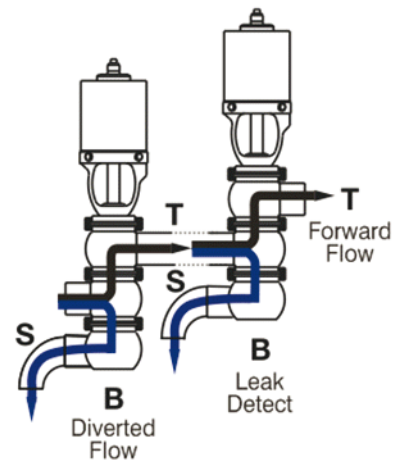
Valve Size Inch (mm)	A 4" actuator	A 5" actuator	A 6" actuator	B	C I-Line	C S-Line
1.0 (25)	16.60 (422)	17.91 (455)	19.67 (500)	2.63 (52)	3.75 (95)	3.12 (79)
1.5 (40)	16.60 (422)	17.91 (455)	19.67 (500)	2.63 (52)	3.19 (81)	2.75 (70)
2.0 (50)	16.85 (428)	18.16 (461)	19.92 (506)	3.13 (79)	4.03 (102)	3.5 (89)
2.5 (65)	---	18.41 (468)	20.17 (512)	3.63 (92)	4.16 (106)	3.5 (89)
3.0 (80)	---	---	20.42 (519)	4.13 (105)	4.47 (113)	3.75 (95)
4.0 (100)	---	---	20.90 (531)	5.11 (130)	5.22 (132)	4.5 (114)

Valve Size Inch (mm)	Actuator	AA	EE	
			I-Line	S-Line
1.0 (25)	4 (102)	7.76 (197)	28.24 (717)	27.61 (701)
1.5 (40)	4 (102)	8.76 (222)	27.68 (703)	27.24 (692)
2.0 (50)	4 (102)	9.85 (250)	30.27 (769)	29.74 (755)
2.5 (65)	5 (127)	11.23 (285)	33.46 (850)	32.80 (833)
3.0 (80)	6 (152)	12.87 (327)	37.28 (947)	36.56 (929)
4.0 (100)	6 (152)	16.11 (409)	41.45 (1053)	40.73 (1035)

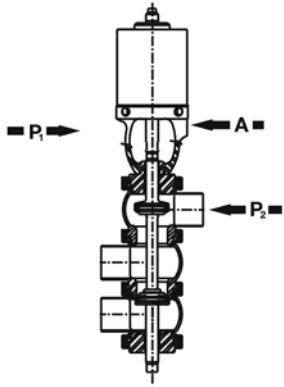
# Pressure Loss Curves



## Model W265



# W265 Holding Pressure Charts



		Actuator Size (in)	Valve Size - Pressure in PSI*					
			1"	1.5"	2"	2.5"	3"	4"
Port P1, actuator spring holds closed against:		4AR	214	162	76	50	34	19
		5AR	336	289	139	87	59	32
		6LAR	---	418	200	126	85	46
		6SAR	---	---	367	239	85	89
Port P2, Air to Port A, will raise Stem against:	50PSI	4AR	223	275	138	79	53	29
	50PSI	5AR	223	403	200	117	79	43
	50PSI	6LAR	---	---	285	117	113	61
	75PSI	6SAR	---	---	361	200	135	73
Port P1, Air to Port A, (with stem raised), will hold against:	50PSI	4AR	93	113	48	29	19	10
	50PSI	5AR	241	259	120	73	48	26
	50PSI	6LAR	416	433	206	125	83	45
	75PSI	6SAR	102	167	58	35	22	10

*If pressure rating is higher than documented in tables consult factory before exceeding.  
 Normal air supply requirement: 50 psi for 4 and 5 inch actuator, 6 inch light spring actuator.  
 75 psi for 6 inch standard actuator*

$$* \text{ Bar} = \frac{\text{PSI}}{14.5}$$



**PROCESS EQUIPMENT**

Your local contact:



SPX Process Equipment  
 611 Sugar Creek Road  
 Delavan, WI 53115  
 Phone: (800)252-5200 or (262)728-1900 Fax: (800)252-5012 or (262)728-4904  
 E-mail: wcb@spx.com

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