

**Ratings (ASTM A105)**

300 p.s.i. @ 850°F  
740 p.s.i. @ 100°F

**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**

Body - 1125 p.s.i.  
Seat - 825 p.s.i.

**Air under water:**

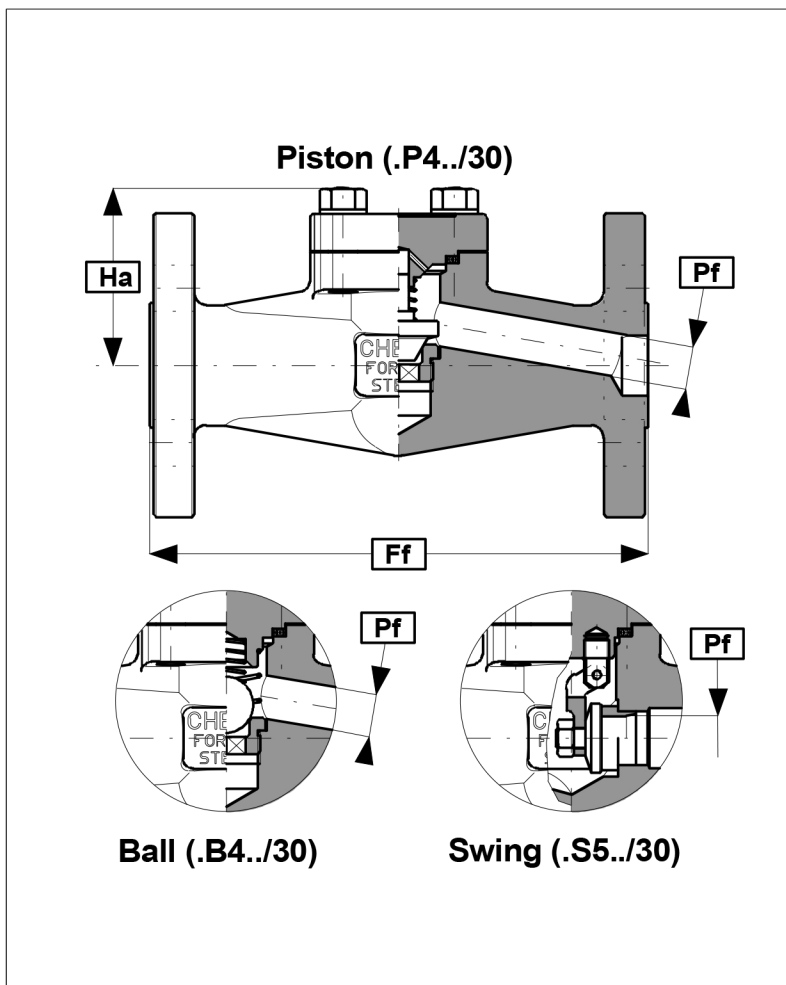
not applicable

**Standards**

**Construction** BS 5352  
**Flanged** ASME B16.5, ASME B16.10  
**Test** BS 6755 (Pt.1)

**Connections (xx)**

<b>RF</b> Raised face (std.)	<b>LF</b> Large female
<b>RJ</b> Ring joint	<b>LG</b> Large groove
<b>SF</b> Small female	<b>LM</b> Large male
<b>SG</b> Small groove	<b>LT</b> Large tongue
<b>SM</b> Small male	
<b>ST</b> Small tongue	



REDUCED BORE											
		1/2"		3/4"		1"		1.1/2"		2"	
<b>Ff (mm/in)</b>		152,4	6,00	177,8	7,00	203,2 <sup>(6)</sup>	8,00	228,6 <sup>(6)</sup>	9,00	266,7	10,50
<b>Ha (mm/in)</b>		50	1,97	56	2,20	74	2,91	100	3,94	109	4,29
<b>Pf<sup>(7)</sup>(mm/in)</b>		9	0,35	12,5	0,49	17,5	0,69	28 <sup>(4)</sup>	1,10	32 <sup>(5)</sup>	1,26
<b>Wt. (kg/lb)</b>		2,5	5,5	4,2	9,2	5,7	12,5	11,2	24,6	14,4	31,7
<b>Catal. no.</b>		Rtt52/30xx		Rtt53/30xx		Rtt54/30xx		Rtt56/30xx		Rtt57/30xx	

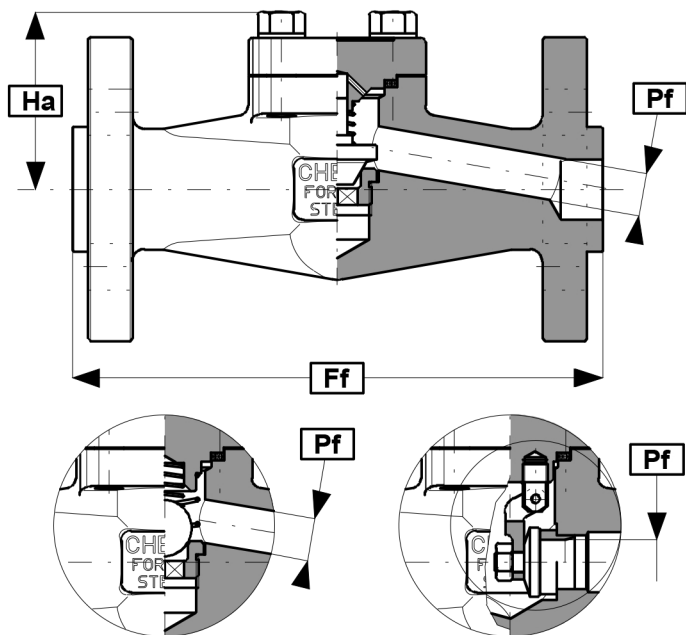
FULL BORE											
		1/2"		3/4"		1"		1.1/2"		2"	
<b>Ff (mm/in)</b>		152,4	6,00	177,8	7,00	203,2 <sup>(6)</sup>	8,00	228,6 <sup>(6)</sup>	9,00	266,7	10,50
<b>Ha (mm/in)</b>		50	1,97	56	2,20	92	3,62	110	4,33	140	5,51
<b>Pf<sup>(7)</sup>(mm/in)</b>		12,5	0,49	17,5	0,69	22,5	0,89	35	1,38	45	1,77
<b>Wt. (kg/lb)</b>		2,5	5,5	4,2	9,2	5,7	12,5	11,2	24,6	14,4	31,7
<b>Catal. no.</b>		Ftt52/30xx		Ftt53/30xx		Ftt54/30xx		Ftt56/30xx		Ftt57/30xx	

1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71, 72  
3) Flanges & face-to face dimensions on page 74, 75

4) Pf = 29,5 with integral stellited seat  
5) Pf = 35 with integral stellited seat  
6) Swing 1"=215,9 (8,50) - Swing 1.1/2" = 241,3 (9,50)

7) Dimensions for piston & ball type; for swing see page 4  
8) Code tt is replaced by kind of check valve (drawing above)

## Piston (.P4../60)



## Ball (.B4../60)

## Swing (.S5../60)

### Ratings (ASTM A105)

600 p.s.i. @ 850°F  
1480 p.s.i. @ 100°F

### Test pressure (ASTM A105)

#### Hydraulic: (minimum)

Body - 2225 p.s.i.  
Seat - 1650 p.s.i.

#### Air under water:

not applicable

### Standards

**Construction** BS 5352  
**Flanged** ASME B16.5, ASME B16.10  
**Test** BS 6755 (Pt.1)

### Connections (xx)

RF	Raised face (std.)	LF	Large female
RJ	Ring joint	LG	Large groove
SF	Small female	LM	Large male
SG	Small groove	LT	Large tongue
SM	Small male		
ST	Small tongue		

### REDUCED BORE

		1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)		165,1	6,50	190,5	7,50	215,9	8,50	241,3	9,50	292,1	11,50
Ha (mm/in)		50	1,97	56	2,20	74	2,91	100	3,94	109	4,29
Pf <sup>(6)</sup> (mm/in)		9	0,35	12,5	0,49	17,5	0,69	28 <sup>(4)</sup>	1,10	32 <sup>(5)</sup>	1,26
Wt. (kg/lb)		3,1	6,8	5	11,0	7,3	16,1	12	26,4	16,6	36,5
Catal. no.		Rtt52/60xx		Rtt53/60xx		Rtt54/60xx		Rtt56/60xx		Rtt57/60xx	

### FULL BORE

		1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)		165,1	6,50	190,5	7,50	215,9	8,50	241,3	9,50	292,1	11,50
Ha (mm/in)		50	1,97	56	2,20	92	3,62	110	4,33	140	5,51
Pf <sup>(6)</sup> (mm/in)		12,5	0,49	17,5	0,69	22,5	0,89	35	1,38	45	1,77
Wt. (kg/lb)		3,1	6,8	5	11,0	7,3	16,1	12	26,4	16,6	36,5
Catal. no.		Ftt52/60xx		Ftt53/60xx		Ftt54/60xx		Ftt56/60xx		Ftt57/60xx	

1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
3) Flanges & face-to-face dimensions on page 74,75

4) Pf = 29,5 with integral stellited seat  
5) Pf = 35 with integral stellited seat  
6) Dimensions for piston & ball type; for swing see page 4

7) Code tt is replaced by kind of check valve (drawing above)

### Ratings (ASTM A105)

800 p.s.i. @ 850°F  
1975 p.s.i. @ 100°F

### Test pressure (ASTM A105)

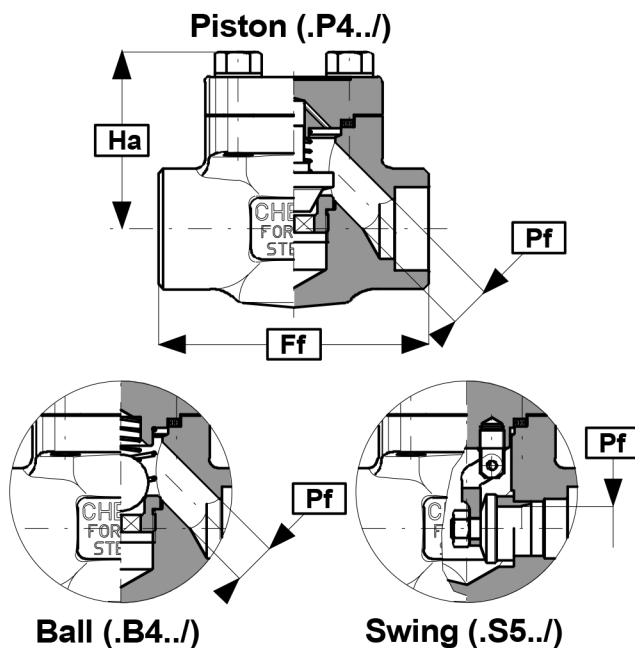
**Hydraulic: (minimum)**  
Body - 3000 p.s.i.  
Seat - 2175 p.s.i.  
**Air under water:**  
not applicable

### Standards

<b>Construction</b>	BS 5352
<b>Socket weld</b>	ASME B16.11
<b>Threaded</b>	ASME B1.20.1
<b>Butt weld</b>	ASME B16.25
<b>Test</b>	BS 6755 (Pt.1)

### Connections (xx)

<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B4</b> Butt weld 40	



### REDUCED BORE

		1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
<b>Ff (mm/in)</b>		80 3,15	90 3,54	110 4,33	127 5,00	155 6,10	170 6,69
<b>Ha (mm/in)</b>		50 1,97	56 2,20	74 2,91	79 3,11	100 3,94	109 4,29
<b>Pf<sup>(7)</sup>(mm/in)</b>		9 0,35	12,5 0,49	17,5 0,69	22,5 0,89	28 <sup>(4)</sup> 1,10	32 <sup>(5)</sup> 1,26
<b>Wt. (kg/lb)</b>		1,1 2,4	1,8 4,0	2,6 5,7	3,6 7,9	5,5 12,1	8,4 18,5
<b>Catal. no.</b>		Rtt52/xx	Rtt53/xx	Rtt54/xx	Rtt55/xx	Rtt56/xx	Rtt57/xx

### FULL BORE

	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
<b>Ff (mm/in)</b>	80 3,15	80 3,15	90 3,54	110 4,33	127 5,00	155 6,10	170 6,69	210 8,27
<b>Ha (mm/in)</b>	50 1,97	50 1,97	56 2,20	74 2,91	79 3,11	100 3,94	109 4,29	135 5,31
<b>Pf<sup>(7)</sup>(mm/in)</b>	6,5 0,26	9 0,35	12,5 0,49	17,5 0,69	22,5 0,89	28 <sup>(4)</sup> 1,10	32 <sup>(5)</sup> 1,26	38 <sup>(6)</sup> 1,50
<b>Wt. (kg/lb)</b>	1,1 2,4	1,1 2,4	1,8 4,0	2,6 5,7	3,6 7,9	5,5 12,1	8,4 18,5	11,8 26,0
<b>Catal. no.</b>	Ftt10/xx	Ftt11/xx	Ftt12/xx	Ftt13/xx	Ftt14/xx	Ftt15/xx	Ftt16/xx	Ftt17/xx

1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
3) SW, NPT & BW dimensions on page 73

4) Pf = 29,5 with integral stellited seat  
5) Pf = 35 with integral stellited seat  
6) Pf = 42 with integral stellited seat

7) Dimensions for piston & ball type; for swing see pag.4  
8) Code tt is replaced by kind of check valve (drawing above)

**Ratings (ASTM A105)**

800 p.s.i. @ 850°F  
1975 p.s.i. @ 100°F

**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**

Body - 3000 p.s.i.  
Seat - 2175 p.s.i.

**Air under water:**

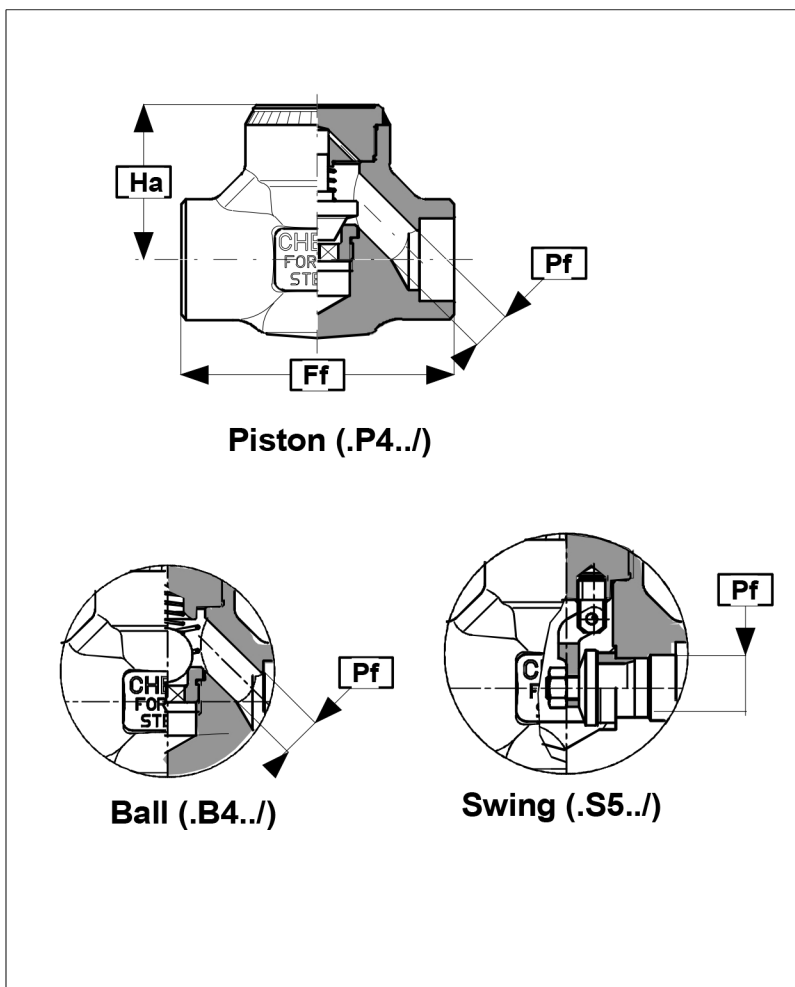
not applicable

**Standards**

**Construction** BS 5352  
**Socket weld** ASME B16.11  
**Threaded** ASME B1.20.1  
**Butt weld** ASME B16.25  
**Test** BS 6755 (Pt.1)

**Connections (xx)**

<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B4</b> Butt weld 40	


**REDUCED BORE**

		1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
<b>Ff (mm/in)</b>		<b>80</b> 3,15		<b>90</b> 3,54		<b>110</b> 4,33		<b>127</b> 5,00		<b>155</b> 6,10		<b>170</b> 6,69	
<b>Ha (mm/in)</b>		<b>48</b> 1,89		<b>51</b> 2,01		<b>63</b> 2,48		<b>71</b> 2,80		<b>86</b> 3,39		<b>99</b> 3,90	
<b>Pf (mm/in)</b>		<b>9</b> 0,35		<b>12,5</b> 0,49		<b>17,5</b> 0,69		<b>22,5</b> 0,89		<b>28<sup>(4)</sup></b> 1,10		<b>32<sup>(5)</sup></b> 1,26	
<b>Wt. (kg/lb)</b>		<b>0,8</b> 1,8		<b>1,1</b> 2,4		<b>2,0</b> 4,4		<b>3,3</b> 7,3		<b>4,9</b> 10,8		<b>7,3</b> 16,1	
<b>Catal. no.</b>		<b>Rtt452WC/xx</b>		<b>Rtt453WC/xx</b>		<b>Rtt454WC/xx</b>		<b>Rtt455WC/xx</b>		<b>Rtt456WC/xx</b>		<b>Rtt457WC/xx</b>	

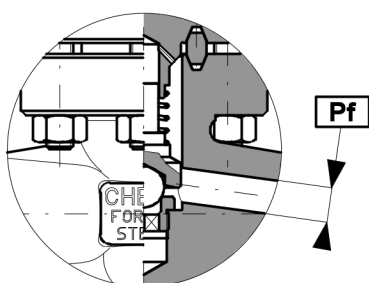
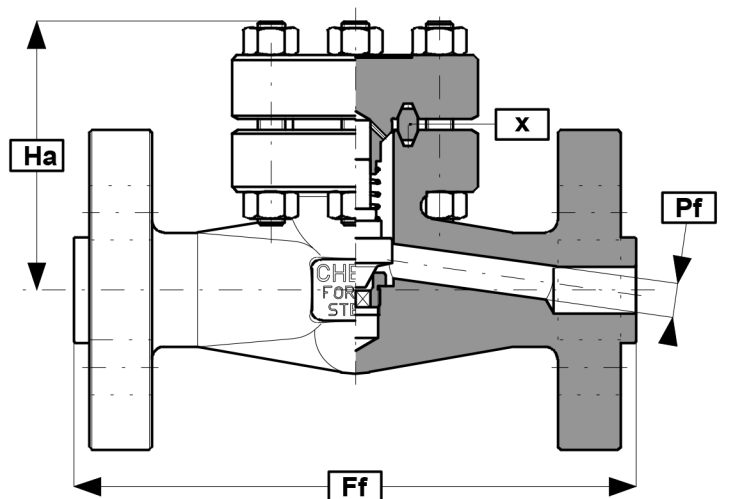
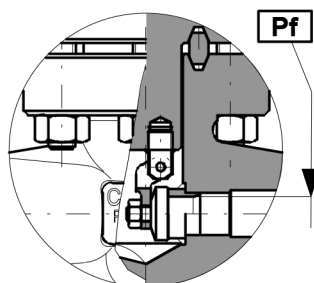
**FULL BORE**

	1/4"		3/8"		1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
<b>Ff (mm/in)</b>	<b>80</b> 3,15		<b>80</b> 3,15		<b>90</b> 3,54		<b>110</b> 4,33		<b>127</b> 5,00		<b>155</b> 6,10		<b>170</b> 6,69		<b>210</b> 8,27	
<b>Ha (mm/in)</b>	<b>48</b> 1,89		<b>48</b> 1,89		<b>51</b> 2,01		<b>63</b> 2,48		<b>71</b> 2,80		<b>86</b> 3,39		<b>99</b> 3,90		<b>121</b> 4,76	
<b>Pf (mm/in)</b>	<b>6,5</b> 0,26		<b>9</b> 0,35		<b>12,5</b> 0,49		<b>17,5</b> 0,69		<b>22,5</b> 0,89		<b>28<sup>(4)</sup></b> 1,10		<b>32<sup>(5)</sup></b> 1,26		<b>38<sup>(6)</sup></b> 1,50	
<b>Wt. (kg/lb)</b>	<b>0,8</b> 1,8		<b>0,8</b> 1,8		<b>1,1</b> 2,4		<b>2,0</b> 4,4		<b>3,3</b> 7,3		<b>4,9</b> 10,8		<b>7,3</b> 16,1		<b>11,9</b> 26,2	
<b>Catal. no.</b>	<b>Ftt410WC/xx</b>		<b>Ftt411WC/xx</b>		<b>Ftt412WC/xx</b>		<b>Ftt413WC/xx</b>		<b>Ftt414WC/xx</b>		<b>Ftt415WC/xx</b>		<b>Ftt416WC/xx</b>		<b>Ftt417WC/xx</b>	

1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71, 72  
3) SW, NPT & BW dimensions on page 73

4) Pf = 29,5 with integral stellite seat  
5) Pf = 35 with integral stellite seat  
6) Pf = 42 with integral stellite seat



**Piston (P.../150)**

**Ball (B.../150)**

**Swing (S.../150)**
**Ratings (ASTM A105)**

 1500 p.s.i. @ 850°F  
 3705 p.s.i. @ 100°F

**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**  
 Body - 5575 p.s.i.  
 Seat - 4100 p.s.i.  
**Air under water:**  
 not applicable

**Standards**
**Construction** BS 5352  
**Flanged** ASME B16.5, ASME B16.10  
**Test** BS 6755 (Pt.1)

**Connections (xx)**

<b>RF</b>	Raised face (std.)	<b>LF</b>	Large female
<b>RJ</b>	Ring joint	<b>LG</b>	Large groove
<b>SF</b>	Small female	<b>LM</b>	Large male
<b>SG</b>	Small groove	<b>LT</b>	Large tongue
<b>SM</b>	Small male		
<b>ST</b>	Small tongue		

**X )Gasket=Spiral wound. RJ gasket available on request.**
**STANDARD BORE**

	1/2"		3/4"		1"		1.1/2"		2"	
<b>Ff (mm/in)</b>	215,9	8,50	228,6	9,00	254,0	10,00	304,8	12,00	368,3	14,50
<b>Ha (mm/in)</b>	93	3,66	109	4,29	122	4,80	158	6,22	171	6,73
<b>Pf<sup>4)</sup>(mm/in)</b>	11	0,43	14,5	0,57	19	0,75	31	1,22	37,5	1,48
<b>Wt. (kg/lb)</b>	7,5	16,5	10,9	24,0	14,4	31,7	30,3	67,0	44,0	96,8
<b>Catal. no.</b>	t852/150xx		t853/150xx		t854/150xx		t856/150xx		t857/150xx	


 1) Standard and alternative valve materials on page 67, type B  
 2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
 3) Flanges & face-to-face dimensions on page 74,75

 4) Dimensions for piston & ball type; swing see page 25  
 5) Code t is replaced by kind of check valve (drawing above)

**Ratings (ASTM A105)**

 1500 p.s.i. @ 850°F  
 3705 p.s.i. @ 100°F

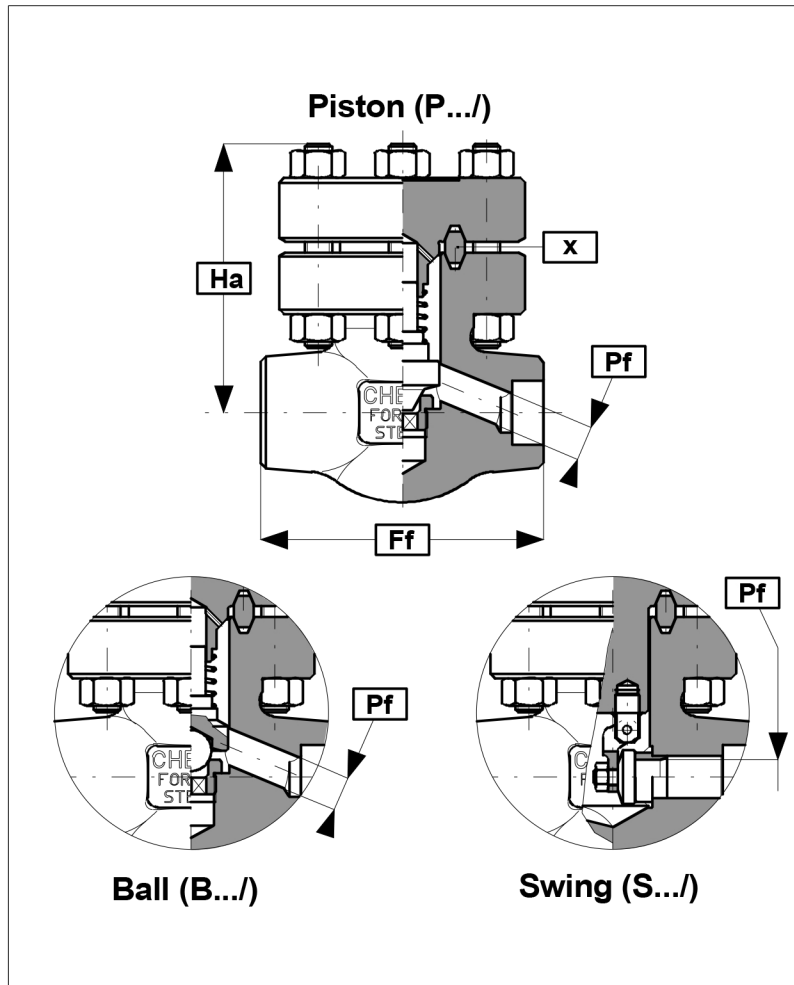
**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**  
 Body - 5575 p.s.i.  
 Seat - 4100 p.s.i.  
**Air under water:**  
 not applicable

**Standards**

<b>Construction</b>	BS 5352
<b>Socket weld</b>	ASME B16.11
<b>Threaded</b>	ASME B1.20.1
<b>Butt weld</b>	ASME B16.25
<b>Test</b>	BS 6755 (Pt.1)

**Connections (xx)**

<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	


**X) Gasket=Spiral wound. RJ gasket available on request.**

		STANDARD BORE									
		1/2"		3/4"		1"		1.1/2"		2"	
<b>Ff (mm/in)</b>		<b>110</b>	4,33	<b>115</b>	4,53	<b>130</b>	5,12	<b>210</b>	8,27	<b>240</b>	9,45
<b>Ha (mm/in)</b>		<b>93</b>	3,66	<b>109</b>	4,29	<b>122</b>	4,80	<b>158</b>	6,22	<b>171</b>	6,73
<b>Pf<sup>(4)</sup>(mm/in)</b>		<b>11</b>	0,43	<b>14,5</b>	0,57	<b>19</b>	0,75	<b>31</b>	1,22	<b>37,5</b>	1,48
<b>Wt. (kg/lb)</b>		<b>3,8</b>	8,4	<b>5,9</b>	13,0	<b>6,8</b>	15,0	<b>18,8</b>	41,4	<b>23,7</b>	52,1
<b>Catal. no.</b>		<b>t852/xx</b>		<b>t853/xx</b>		<b>t854/xx</b>		<b>t856/xx</b>		<b>t857/xx</b>	


1) Standard and alternative valve materials on page 67, type B  
 2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
 3) SW, NPT & BW dimensions on page 73

4) Dimensions for piston & ball type; swing see page 25  
 5) Code t is replaced by kind of check valve (drawing above)

### Ratings (ASTM A105)

1500 p.s.i. @ 850°F  
3705 p.s.i. @ 100°F

### Test pressure (ASTM A105)

#### Hydraulic: (minimum)

Body - 5575 p.s.i.

Seat - 4100 p.s.i.

#### Air under water:

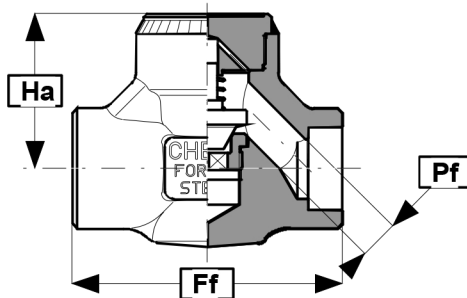
not applicable

### Standards

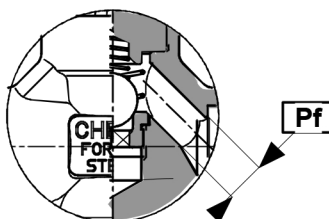
Construction	BS 5352
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

### Connections (xx)

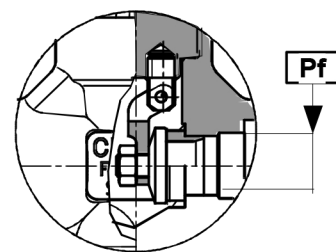
<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	



**Piston (.P.../)**



**Ball (.B.../)**



**Swing (.S.../)**

### STANDARD BORE

	1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)	90	3,54	110	4,33	127	5,00	170	6,69	210	8,26
Ha (mm/in)	51	2,01	57	2,24	62	2,44	90	3,54	117	4,61
Pf (mm/in)	11	0,43	14,5	0,57	19	0,75	31	1,22	37,5	1,48
Wt. (kg/lb)	1,4	3,1	2,4	5,3	3,8	8,4	8,0	17,6	14,5	31,9
Catal. no.	t852WC/xx		t853WC/xx		t854WC/xx		t856WC/xx		t857WC/xx	


1) Standard and alternative valve materials on page 67, type B

2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72

3) SW, NPT & BW dimensions on page 73

4) Dimensions for piston & ball type; for swing see page 27

5) Code t is replaced by kind of check valve (drawing above)

**Ratings (ASTM A105)**

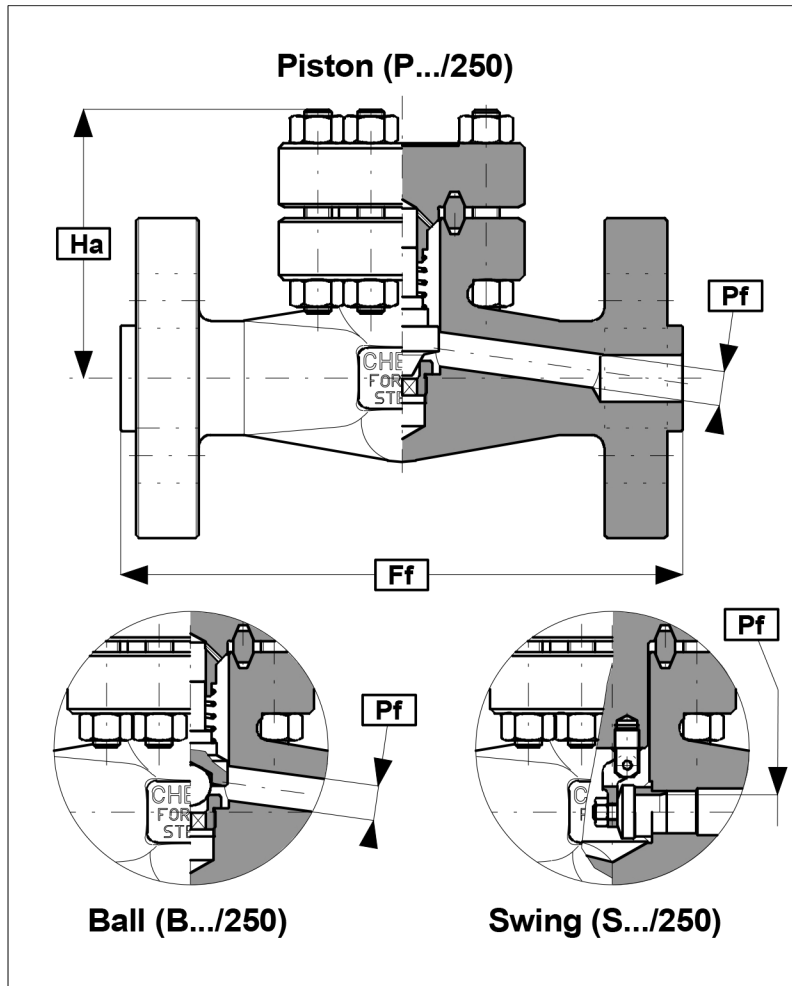
 2500 p.s.i. @ 850°F  
 6170 p.s.i. @ 100°F

**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**  
 Body - 9275 p.s.i.  
 Seat - 6800 p.s.i.  
**Air under water:**  
 not applicable

**Standards**
**Construction**      *founded on ASME B16.34*  
**Flanged**            ASME B16.5, ASME B16.10  
**Test**                 API 598-ASME B16.34

**Connections (xx)**

<b>RF</b> Raised face (std.)	<b>LF</b> Large female
<b>RJ</b> Ring joint	<b>LG</b> Large groove
<b>SF</b> Small female	<b>LM</b> Large male
<b>SG</b> Small groove	<b>LT</b> Large tongue
<b>SM</b> Small male	
<b>ST</b> Small tongue	


**STANDARD BORE**

	1/2"		3/4"		1"		1.1/2"		2"	
<b>Ff (mm/in)</b>	263,5	10,37	273,0	10,75	308,0	12,13	384,2	15,13	450,8	17,75
<b>Ha (mm/in)</b>	93	3,66	109	4,29	122	4,80	158	6,22	171	6,73
<b>Pf<sup>(4)</sup>(mm/in)</b>	10	0,39	13	0,51	18	0,71	25	0,98	34	1,33
<b>Wt. (kg/lb)</b>	8,5	18,7	12,5	27,5	19,2	42,2	40,8	89,8	59,0	129,8
<b>Catal. no.</b>	t1252/250xx		t1253/250xx		t1254/250xx		t1256/250xx		t1257/250xx	

 1) Standard and alternative valve materials on page 67, type B  
 2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
 3) Flanges & face-to-face dimensions on page 73, 74

 4) Dimensions for piston & ball type; swing on page 34  
 5) Code tt is replaced by kind of check valve (drawing above)

### Ratings (ASTM A105)

2500 p.s.i. @ 850°F  
6170 p.s.i. @ 100°F

### Test pressure (ASTM A105)

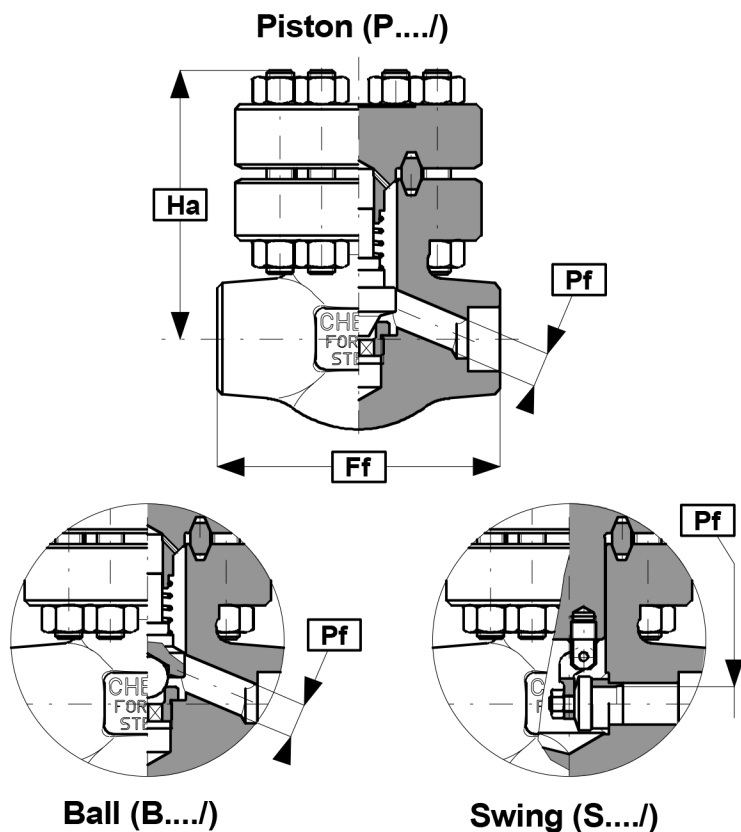
Hydraulic: (minimum)  
Body - 9275 p.s.i.  
Seat - 6800 p.s.i.  
Air under water:  
not applicable

### Standards

Construction	founded on ASME B16.34
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	API 598-ASME B16.34

### Connections (xx)

<b>SW</b> Socket weld	<b>BX</b> Butt weld XXS
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	

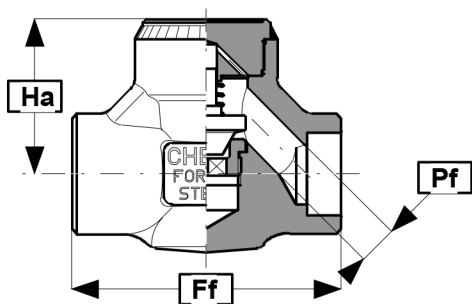
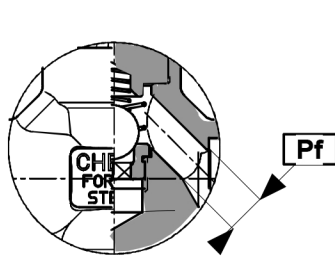
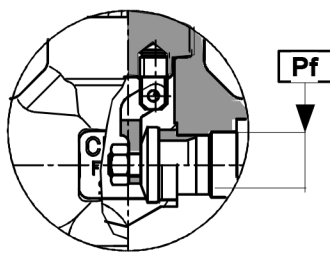


### STANDARD BORE

		1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)		110	4,33	115	4,53	130	5,12	210	8,27	240	9,45
Ha (mm/in)		93	3,66	109	4,29	122	4,80	158	6,22	171	6,73
Pf <sup>4)</sup> (mm/in)		10	0,39	13	0,51	18	0,71	25	0,98	34	1,33
Wt. (kg/lb)		4,0	8,8	6,2	13,6	7,2	15,8	19,4	42,7	24,5	53,9
Catal. no.		t1252/xx		t1253/xx		t1254/xx		t1256/xx		t1257/xx	

1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
3) SW, NPT & BW dimensions on page 73

4) Dimensions for piston & ball type;swing see page 34  
5) Code t is replaced by kind of check valve (drawing above)


**Piston (.P.../)**

**Ball (.B.../)**

**Swing (.S.../)**
**Ratings (ASTM A105)**

 2500 p.s.i. @ 850°F  
 6170 p.s.i. @ 100°F

**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**  
 Body - 9275 p.s.i.  
 Seat - 6800 p.s.i.  
**Air under water:**  
 not applicable

**Standards**

<b>Construction</b>	<i>founded on</i> ASME B16.34
<b>Socket weld</b>	ASME B16.11
<b>Threaded</b>	ASME B1.20.1
<b>Butt weld</b>	ASME B16.25
<b>Test</b>	API 598-ASME B16.34

**Connections (xx)**

<b>SW</b> Socket weld	<b>BX</b> Butt weld XXS
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	

**STANDARD BORE**

		1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)		110	4,33	127	5,00	155	6,10	210	8,27	240	9,45
Ha (mm/in)		60	2,36	71	2,80	85	3,35	120	4,72	130	5,12
Pf (mm/in)		10	0,39	13	0,51	18	0,71	25	0,98	34	1,33
Wt. (kg/lb)		2,0	4,4	3,2	7,0	4,8	10,6	9,6	21,1	16	35,2
Catal. no.		t1252WC/xx		t1253WC/xx		t1254WC/xx		t1256WC/xx		t1257WC/xx	


1) Standard and alternative valve materials on page 67, type B  
 2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
 3) SW, NPT & BW dimensions on page 73

4) Dimensions for piston & ball type; for swing see page 35  
 5) Code t is replaced by kind of check valve (drawing above)

**Ratings (ASTM A105)**

 4010 p.s.i. @ 850°F  
 11110 p.s.i. @ 100°F

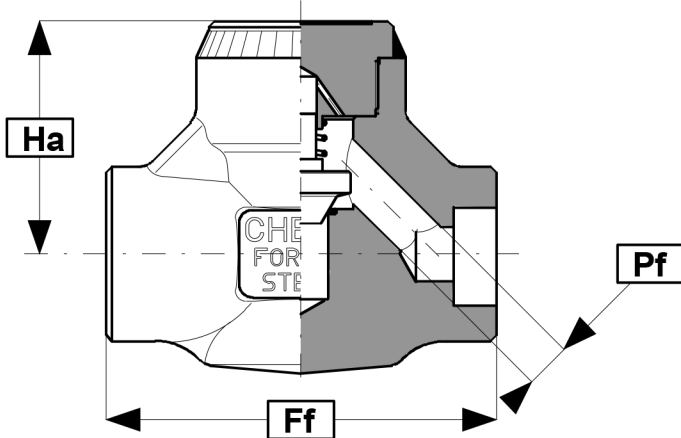
**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**  
 Body - 16650 p.s.i.  
 Seat - 12210 p.s.i.  
**Air under water:**  
 not applicable

**Standards**

<b>Construction</b>	ASME B16.34
<b>Socket weld</b>	ASME B16.11
<b>Threaded</b>	ASME B1.20.1
<b>Butt weld</b>	ASME B16.25
<b>Test</b>	API 598-ASME B16.34

**Connections (xx)**

<b>SW</b> Socket weld	<b>BX</b> Butt weld XXS
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	


**STANDARD BORE**

			1/2"		3/4"		1"			1.1/2"		2"	
<b>Ff (mm/in)</b>			127	5,00	155	6,10	170	6,69		240	9,45	240	9,45
<b>Ha (mm/in)</b>			75	2,95	90	3,54	125	4,92		145	5,71	140	5,51
<b>Pf (mm/in)</b>			7	0,28	11	0,43	15	0,59		25	0,98	30	1,33
<b>Wt. (kg/lb)</b>			3,2	7,0	4,8	10,6	8	17,6		16	35,2	26	57,2
<b>Catal. no.</b>			P2252WC/xx		P2253WC/xx		P2254WC/xx			P2256WC/xx		P2257WC/xx	


1) Standard and alternative valve materials on page 67, type B  
 2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
 3) SW, NPT & BW dimensions on page 73  
 4) Dimensions for piston & ball type; for swing see page 35  
 5) Code t is replaced by kind of check valve (drawing above)



### Ratings (ASTM A105)

1500 p.s.i. @ 850°F  
3705 p.s.i. @ 100°F

### Test pressure (ASTM A105)

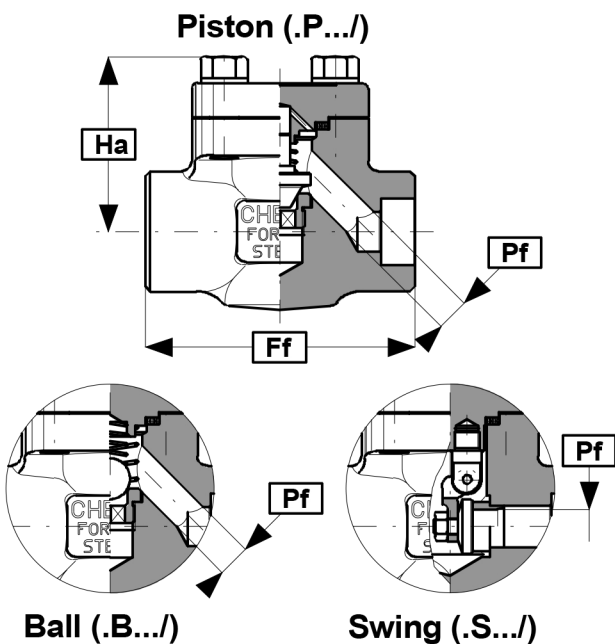
Hydraulic: (minimum)  
Body - 5575 p.s.i.  
Seat - 4100 p.s.i.  
Air under water:  
not applicable

### Standards

Construction	founded on API 602
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	founded on API 598

### Connections (xx)

<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	

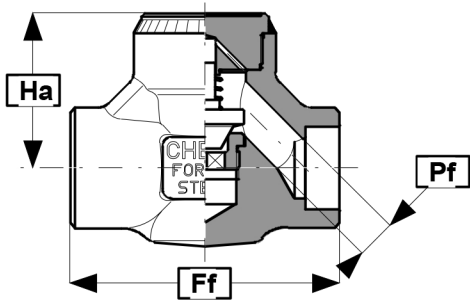


### CONVENTIONAL BORE

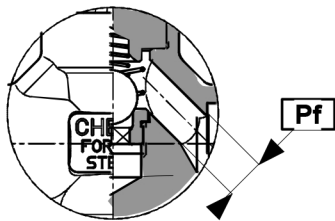
	1/4"		3/8"		1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
Ff (mm/in)	90	3,54	90	3,54	90	3,54	110	4,33	127	5,00	155	6,10	170	6,69	210	8,27
Ha (mm/in)	56	2,20	56	2,20	56	2,20	74	2,91	79	3,11	100	3,94	109	4,29	135	5,31
Pf <sup>(4)</sup> (mm/in)	6,5	0,26	9	0,35	10	0,39	13,5	0,53	18	0,71	24	0,94	28	1,10	35	1,38
Wt. (kg/lb)	2,2	4,8	2,2	4,8	2,2	4,8	3,0	6,6	4,1	9,0	6,2	13,6	9,4	20,7	13,3	29,26
Catal. no.	Xt850/xx		Xt851/xx		Xt852/xx		Xt853/xx		Xt854/xx		Xt855/xx		Xt856/xx		Xt857/xx	

1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71, 72  
3) SW, NPT & BW dimensions on page 73

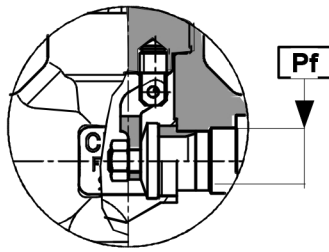
4) Dimensions for piston & ball type; for swing see page 19  
5) Code t is replaced by kind of check valve (drawing above)



**Piston (.P.../)**



**Ball (.B.../)**



**Swing (.S.../)**

### Ratings (ASTM A105)

1500 p.s.i. @ 850°F  
3705 p.s.i. @ 100°F

### Test pressure (ASTM A105)

Hydraulic: (minimum)  
Body - 5575 p.s.i.  
Seat - 4100 p.s.i.  
Air under water:  
not applicable

### Standards

Construction	founded on API 602
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	founded on API 598

### Connections (xx)

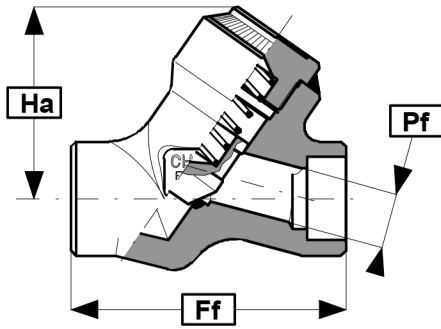
<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	

### CONVENTIONAL BORE

	1/4"		3/8"		1/2"		3/4"		1"		1.1/4"		1.1/2"		2"	
Ff (mm/in)	90	3,54	90	3,54	90	3,54	110	4,33	127	5,00	155	6,10	170	6,69	210	8,27
Ha (mm/in)	50	1,97	50	1,97	50	1,97	56	2,20	67	2,64	82	3,23	99	3,90	121	4,76
Pf (mm/in)	6,5	0,26	9	0,35	10	0,39	13,5	0,53	18	0,71	24	0,94	29	1,14	35	1,38
Wt. (kg/lb)	1,4	3,1	1,4	3,1	1,4	3,1	2,3	5,1	3,8	8,4	5,6	12,3	8,3	18,3	13,4	29,5
Catal. no.	Xt850WC/xx		Xt851WC/xx		Xt852WC/xx		Xt853WC/xx		Xt854WC/xx		Xt855WC/xx		Xt856WC/xx		Xt857WC/xx	


1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
3) SW, NPT & BW dimensions on page 73

4) Dimensions for piston & ball type; for swing see page 19  
5) Code t is replaced by kind of check valve (drawing above)



**Ratings (ASTM A105)**

800 p.s.i. @ 850°F  
1975 p.s.i. @ 100°F

**Test pressure (ASTM A105)**

Hydraulic: (minimum)  
Body - 3000 p.s.i.  
Seat - 2175 p.s.i.  
Air under water:  
not applicable

**Standards**

Construction BS 5352  
Socket weld ASME B16.11  
Threaded ASME B1.20.1  
Butt weld ASME B16.25  
Test BS 6755 (Pt.1)

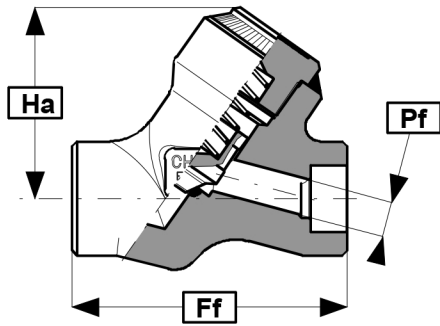
**Connections (xx)**

<b>SW</b> Socket weld	<b>B8</b> Butt weld 80
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B4</b> Butt weld 40	

**STANDARD BORE**

	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
Ff (mm/in)	80 3,15	80 3,15	80 3,15	100 3,94	110 4,33	120 4,72	160 6,30	190 7,48
Ha (mm/in)	58 2,28	58 2,28	58 2,28	74 2,91	80 3,15	86 3,39	118 4,65	142 5,59
Pf (mm/in)	8 0,31	9 0,35	12,5 0,49	18 0,7	22,5 0,89	29,5 1,16	35 1,38	45,5 1,79
Wt. (kg/lb)	1,5 3,3	1,5 3,3	1,5 3,3	2,5 5,5	3,0 6,6	5,5 12,1	6,0 13,2	9,0 19,8
Catal. no.	YP410WC/xx	YP411WC/xx	YP412WC/xx	YP413WC/xx	YP414WC/xx	YP415WC/xx	YP416WC/xx	YP417WC/xx


1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
3) SW, NPT & BW dimensions on page 73



### Ratings (ASTM A105)

1500 p.s.i. @ 850°F  
3705 p.s.i. @ 100°F

### Test pressure (ASTM A105)

Hydraulic: (minimum)  
Body - 5575 p.s.i.  
Seat - 4100 p.s.i.  
Air under water:  
not applicable

### Standards

Construction	BS 5352-ASME B16.34
Socket weld	ASME B16.11
Threaded	ASME B1.20.1
Butt weld	ASME B16.25
Test	BS 6755 (Pt.1)

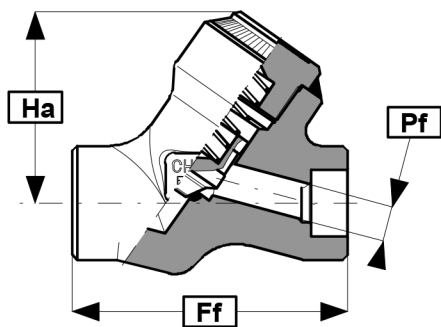
### Connections (xx)

<b>SW</b> Socket weld	<b>B6</b> Butt weld 160
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B8</b> Butt weld 80	

### STANDARD BORE

			1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
Ff (mm/in)			100 3,94	110 4,33	120 4,72	160 6,30	190 7,48	190 7,48
Ha (mm/in)			80 3,15	87 3,43	90 3,54	121 4,76	146 5,75	146 5,75
Pf (mm/in)			12 0,47	16 0,63	20 0,79	28 1,10	32 1,26	43 1,69
Wt. (kg/lb)			2,5 5,5	3,0 6,6	4,5 9,9	5,5 12,1	8 17,6	9,5 20,9
Catal. no.			YP852WC/xx	YP853WC/xx	YP854WC/xx	YP855WC/xx	YP856WC/xx	YP857WC/xx


1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70, 71,72  
3) SW, NPT & BW dimensions on page 73



### Ratings (ASTM A105)

2500 p.s.i. @ 850°F  
6170 p.s.i. @ 100°F

### Test pressure (ASTM A105)

Hydraulic: (minimum)  
Body - 9275 p.s.i.  
Seat - 6800 p.s.i.  
Air under water:  
not applicable

### Standards

<b>Construction</b>	<i>founded on ASME B16.34</i>
<b>Socket weld</b>	ASME B16.11
<b>Threaded</b>	ASME B1.20.1
<b>Butt weld</b>	ASME B16.25
<b>Test</b>	<i>founded on API 598-ASME B16.34</i>

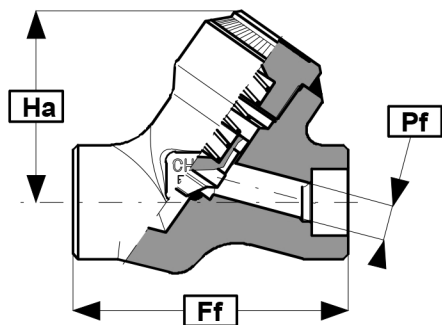
### Connections (xx)

<b>SW</b> Socket weld	<b>BX</b> Butt weld XXS
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	

### STANDARD BORE

			1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
Ff (mm/in)			110 4,33	120 4,72	120 4,72	190 7,48	190 7,48	210 8,27
Ha (mm/in)			87 3,43	92 3,62	92 3,62	146 5,75	146 5,75	158 6,22
Pf (mm/in)			10 0,39	13 0,51	18 0,73	24 0,97	28 1,14	35 1,38
Wt. (kg/lb)			3,2 7,0	4,5 9,9	4,5 9,9	9,5 20,9	9,5 20,9	12,0 26,4
Catal. no.			YP1252WC/xx	YP1253WC/xx	YP1254WC/xx	YP1255WC/xx	YP1256WC/xx	YP1257WC/xx


1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70,71,72  
3) SW, NPT & BW dimensions on page 73



**Ratings (ASTM A105)**

4010 p.s.i. @ 850°F  
11110 p.s.i. @ 100°F

**Test pressure (ASTM A105)**

**Hydraulic:** (minimum)  
Body - 16650 p.s.i.  
Seat - 12210 p.s.i.  
**Air under water:**  
not applicable

**Standards**

<b>Construction</b>	ASME B16.34
<b>Socket weld</b>	ASME B16.11
<b>Threaded</b>	ASME B1.20.1
<b>Butt weld</b>	ASME B16.25
<b>Test</b>	API 598-ASME B16.34

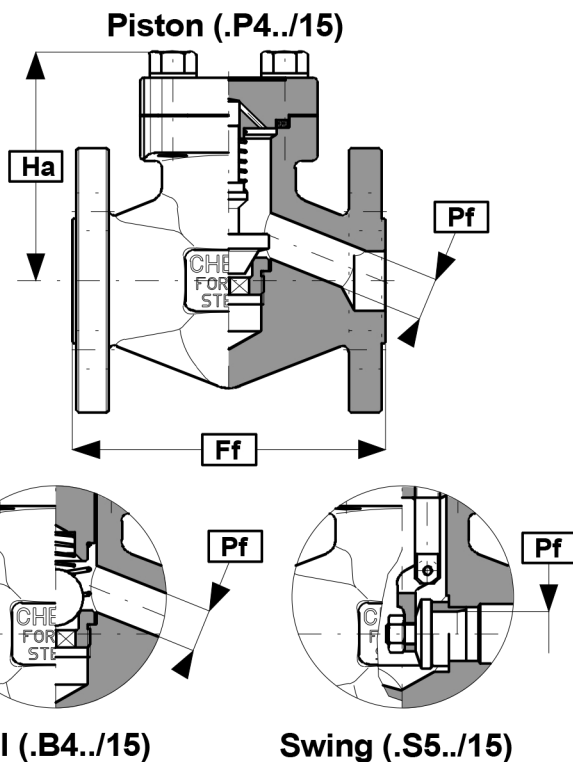
**Connections (xx)**

<b>SW</b> Socket weld	<b>BX</b> Butt weld XXS
<b>TH</b> Threaded NPT	
<b>TS</b> Sw/NPT	
<b>SE</b> Sw (in)/NPT	
<b>SU</b> Sw (out)/NPT	
<b>B6</b> Butt weld 160	

**STANDARD BORE**

			<b>1/2"</b>	<b>3/4"</b>	<b>1"</b>		<b>1.1/2"</b>	<b>2"</b>
<b>Ff (mm/in)</b>			<b>120</b> 4,72	<b>160</b> 6,30	<b>190</b> 7,48		<b>210</b> 8,27	<b>230</b> 9,06
<b>Ha (mm/in)</b>			<b>90</b> 3,54	<b>120</b> 4,72	<b>145</b> 5,71		<b>160</b> 6,30	<b>200</b> 7,87
<b>Pf (mm/in)</b>			<b>7</b> 0,28	<b>11</b> 0,43	<b>14</b> 0,55		<b>25</b> 0,98	<b>30</b> 1,18
<b>Wt. (kg/lb)</b>			<b>4,5</b> 9,9	<b>7,5</b> 16,5	<b>9,5</b> 20,9		<b>12,0</b> 26,4	<b>23,0</b> 50,6
<b>Catal. no.</b>			<b>YP2252WC/xx</b>	<b>YP2253WC/xx</b>	<b>YP2254WC/xx</b>		<b>YP2256WC/xx</b>	<b>YP2257WC/xx</b>


1) Standard and alternative valve materials on page 67, type B  
2) Complete Pressure-Temperature ratings on page 68, 69, 70,71,72  
3) SW, NPT & BW dimensions on page 73


**Ratings (ASTM A105)**

 150 p.s.i. @ 550°F  
 285 p.s.i. @ 100°F

**Test pressure (ASTM A105)**
**Hydraulic: (minimum)**

Body - 450 p.s.i.

Seat - 325 p.s.i.

**Air under water:**

not applicable

**Standards**

<b>Construction</b>	BS 5352
<b>Flanged</b>	ASME B16.5, ASME B16.10
<b>Test</b>	BS 6755 (Pt.1)

**Connections (xx)**

RF	Raised face (std.)
FF	Flat finish

**REDUCED BORE**

		1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)		107,9	4,25	117,5	4,63	127,0	5,00	165,1	6,50	203,2	8,00
Ha (mm/in)		84	3,31	87	3,43	92	3,62	97	3,82	124	4,88
Pf <sup>(6)</sup> (mm/in)		9	0,35	12,5	0,49	17,5	0,69	28 <sup>(4)</sup>	1,10	32 <sup>(5)</sup>	1,26
Wt. (kg/lb)		2,6	5,7	3,8	8,4	5,1	11,2	8,4	18,5	14,2	31,2
Catal. no.		Rtt52/15xx		Rtt53/15xx		Rtt54/15xx		Rtt56/15xx		Rtt57/15xx	

**FULL BORE**

		1/2"		3/4"		1"		1.1/2"		2"	
Ff (mm/in)		107,9	4,25	117,5	4,63	127,0	5,00	165,1	6,50	203,2	6,50
Ha (mm/in)		84	3,31	87	3,43	92	3,62	110	4,33	124	4,88
Pf <sup>(6)</sup> (mm/in)		12,5	0,49	17,5	0,69	22,5	0,89	32	1,38	38	1,50
Wt. (kg/lb)		2,6	5,7	3,8	8,4	5,1	11,2	8,4	18,5	14,7	31,2
Catal. no.		Ftt12/15xx		Ftt13/15xx		Ftt14/15xx		Ftt16/15xx		Ftt17/15xx	

1) Standard and alternative valve materials on page 67, type B  
 2) Complete Pressure-Temperature ratings on page 68, 69, 70,71,72  
 3) Flanges & face-to-face dimensions on page 74,75

4) Pf = 29,5 with integral stellited seat  
 5) Pf = 35 with integral stellited seat  
 6) Dimensions for piston & ball type; for swing see page 4

7) Code tt is replaced by kind of check valve (drawing above)