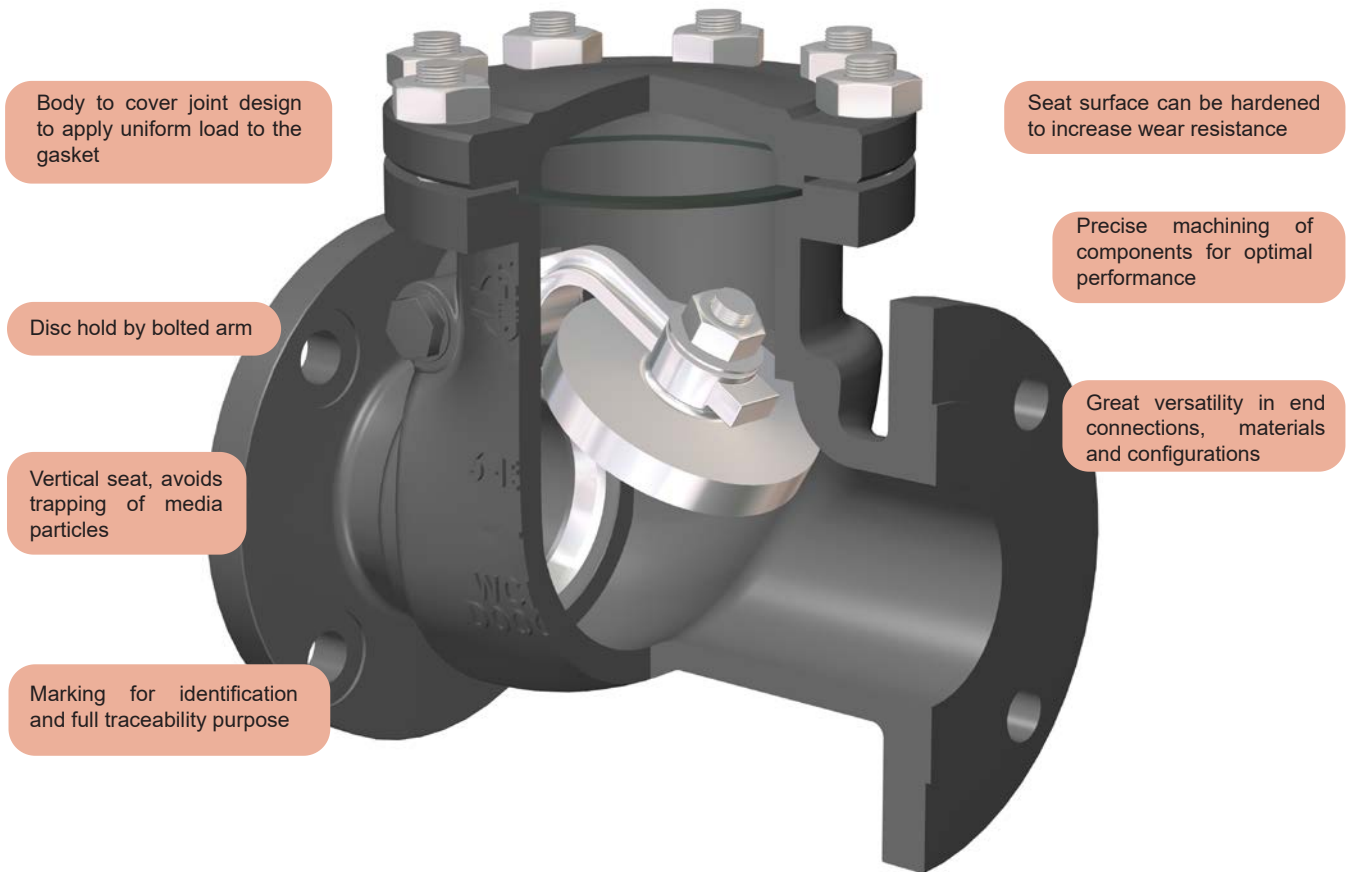


SERIES 3S/31 ANSI RANGE

Check Valves are self-acting valves used for preventing the reverse of flow in a piping system. Series 3S are Swing Check Valves that operate by means of its articulated disc. They are featured by its rugged and simple design and easy maintenance.



Body to cover joint design to apply uniform load to the gasket

Seat surface can be hardened to increase wear resistance

Disc hold by bolted arm

Precise machining of components for optimal performance

Vertical seat, avoids trapping of media particles

Great versatility in end connections, materials and configurations

Marking for identification and full traceability purpose

Main Features / Reference Standards

Design: API 6D / BS 1868
 Pressure Rating: 150/300/600/900/1500/2500#
 Face to face length: ASME B16.10
 Valve end connections: Flanged RF or RTJ to ASME B16.5 (size ≤ 24") / ASME B16.47 (size > 24")
 Welded BW to ASME B16.25
 Marking: MSS SP-25
 Inspections & Tests: API 598
 Primer painted grey color similar to RAL 7037 for protection during storage and transport (carbon steel body/bonnet)
 Product compliant with Directive 2014/68/EU on Pressure Equipment (PED) for European Union territory

Main Duties / Limits of use

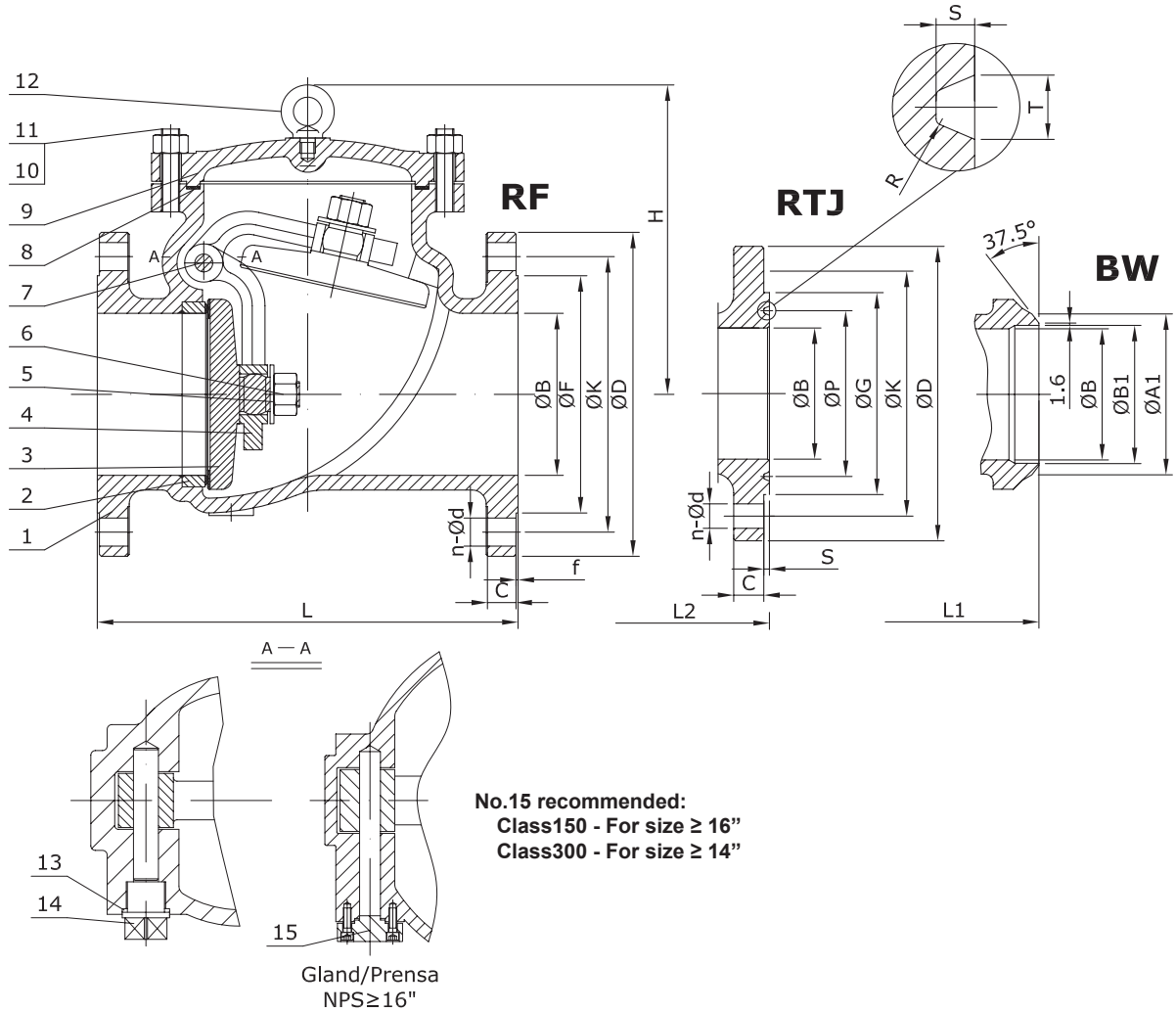
Fluids compatible with materials of construction. Questions referring to chemical resistance, please consult us
 Pressure / Temperature Rating to ASME B16.34. See section "Engineering & Performance Data"
 For products compliant with Directive 2014/68/EU, observe also limits acc. to Annex II tables 6 & 8 (gases & liquids group 1*) and tables 7 & 9 (gases & liquids group 2*) up to category III
 *Classification of fluids (group 1 or 2) acc. to Directive 2014/68/EU, Article 13

Options

Diverse materials of construction and trim combinations, special designs, execution for aggressive atmosphere, compliance with NACE MR0175, etc. Please consult us

Main Parts and Materials

SERIES 3S ANSI RANGE
Class 150&300



| Nº | Part name | A216 WCB (3SA0_) | A352 LCB | | A217 WC1 (3SB1_) | A217 WC6 (3SB8_) | A217 WC9 (3SB9_) | A217 C5 (3SC2_) | A217 C12 (3SC4_) |
|----|----------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|
| | | | Trim 2 (3SA82_) | Trim 12 (3SA8G_) | | | | | |
| 1 | Body | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 2 | Seat Ring | A105 | A182 F304 | A182 F316+HF | A182 F1+HF | A182 F11+HF | A182 F22+HF | A182 F5+HF | A182 F9+HF |
| 3 | Disc | A216 WCB | A351 CF8 | A351 CF8M | A217 WC1+HF | A217 WC6+HF | A217 WC9+HF | A217 C5+HF | A217 C12+HF |
| 4 | Hinge | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 5 | Washer | SS304 | SS304 | SS316 | SS304 | | SS304 | | |
| 6 | Disc Nut (1) | A194 2H | A194 4 | | A194 4 | | A194 4 | | |
| 7 | Hinge Pin | A182 F6a | A182 F304 | A182 F316 | A182 F6a | | A182 F6a | | |
| 8 | Gasket | SS304 +Graphite | SS304 +Graphite | SS316 +Graphite | SS304 +Graphite | | SS304 +Graphite | | |
| 9 | Cover | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 10 | Cover Bolt (1) | A193 B7 | A320 L7 | | A193 B16 | | A193 B16 | | |
| 11 | Cover Nut (1) | A194 2H | A194 4 | | A194 4 | | A194 4 | | |
| 12 | Eye Bolt | Carbon Steel | Carbon Steel | | Carbon Steel | | Carbon Steel | | |
| 13 | Gasket | SS304 | SS304 | SS316 | SS304 | | SS304 | | |
| 14 | Plug | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |
| 15 | Gland | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |

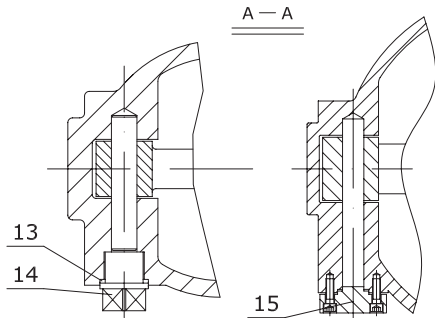
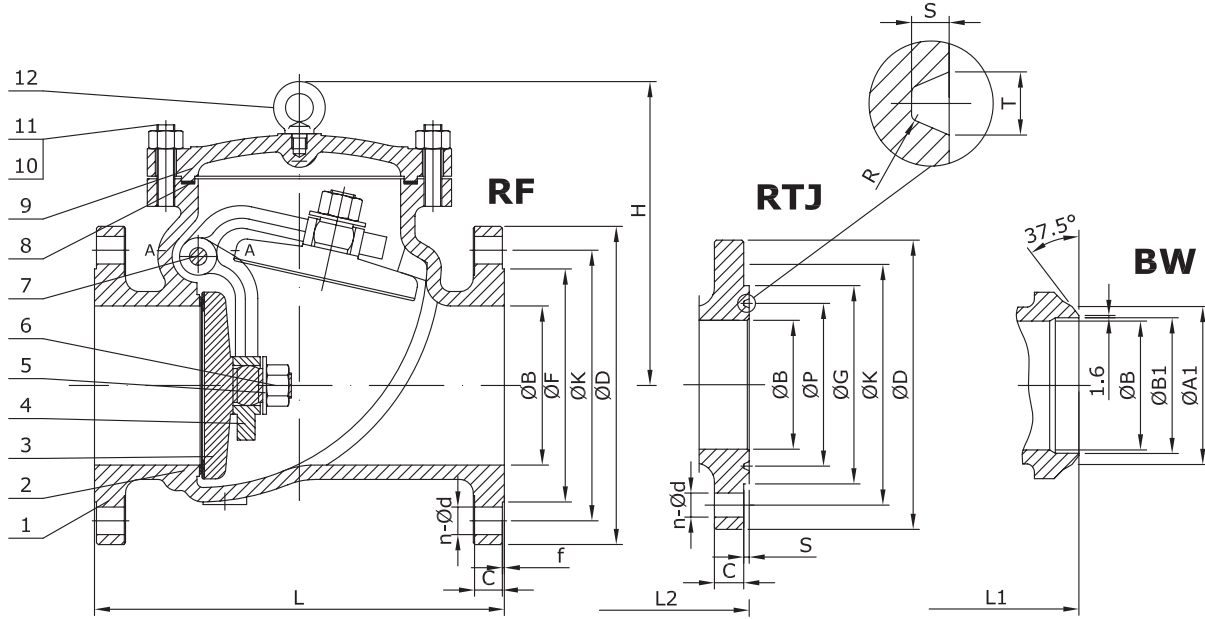
(1) Bolting material for NACE MR0175 compliance available (i.e. B7M / 2HM for WCB bodies)

| Fig. 3SA0_ | Seat Surface | Disc Surface |
|-----------------|--------------|---------------|
| TRIM #1 (3SA01) | A105+13Cr | A216 WCB+13Cr |
| TRIM #5 (3SA05) | A105+HF | A216 WCB+HF |
| TRIM #8 (3SA08) | A105+HF | A216 WCB+13Cr |

HF = Hard faced

Main Parts and Materials

SERIES 3S ANSI RANGE
Class 150&300



No.15 recommended:
Class150 - For size ≥ 16"
Class300 - For size ≥ 14"

Gland/Prensa
NPS≥16"

| Nº | Part name | CF8 (3SI2_) | CF8M (3SI0_) | CF3 (3SI1_) | CF3M (3SI7_) |
|----|------------|----------------|----------------|-----------------|-----------------|
| 1 | Body | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 2 | Seat Ring | Integral SS304 | Integral+HF | Integral SS304L | Integral+HF |
| 3 | Disc | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 4 | Hinge | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 5 | Washer | SS304 | SS316 | SS304L | SS316L |
| 6 | Disc Nut | A194 8 | A194 8M | A194 8M | |
| 7 | Hinge Pin | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 8 | Gasket | SS304+Graphite | SS316+Graphite | SS316+Graphite | SS316L+Graphite |
| 9 | Cover | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 10 | Cover Bolt | A193 B8 | A193 B8M | A193 B8M | |
| 11 | Cover Nut | A194 8 | A194 8M | A194 8M | |
| 12 | Eye Bolt | Carbon Steel | | Carbon Steel | |
| 13 | Gasket | SS304 | SS316 | SS304L | SS316L |
| 14 | Plug | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 15 | Gland | A182 F304 | A182 F316 | A182 F304L | A182 F316L |

Main Valve Parameters - Class 150

SERIES 3S ANSI RANGE

| Nominal Size | | inch | 2" | 2-1/2" | 3" | 4" | 5" | 6" | 8" | 10" | 12" | 14" |
|----------------|-----------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|--------|--------|------------|
| DN | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 |
| End connection | RF | L | 203 | 216 | 241 | 292 | 330 | 356 | 495 | 622 | 698 | 787 |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 203 | 254 | 305 | 337 |
| | | ØD | 150 | 180 | 190 | 230 | 255 | 280 | 345 | 405 | 485 | 535 |
| | | ØK | 120,7 | 139,7 | 152,4 | 190,5 | 215,9 | 241,3 | 298,5 | 362 | 431,8 | 476,3 |
| | | ØF | 92,1 | 104,8 | 127 | 157,2 | 185,7 | 215,9 | 269,9 | 323,8 | 381 | 412,8 |
| | | C | 14,3 | 15,9 | 17,5 | 22,3 | 22,3 | 23,9 | 27 | 28,6 | 30,2 | 33,4 |
| | | f | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | n-Ød | 4 - 3/4 | 4 - 3/4 | 4 - 3/4 | 8 - 3/4 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 12 - 1 | 12 - 1 | 12 - 1 1/8 |
| | BW | L1 | 203 | 216 | 241 | 292 | 330 | 356 | 495 | 622 | 698 | 787 |
| | | Schedule No.(1) | 40 | - | 40 | 40 | - | 40 | 40 | 40 | STD | STD |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 203 | 254 | 305 | 337 |
| | | ØA1 | 60,3 | - | 91 | 117 | - | 172 | 223 | 278 | 329 | 362 |
| | | ØB1 | 52,48 | - | 78 | 102 | - | 154 | 203 | 254,5 | 305 | 336,5 |
| | RTJ | L2 | 216 | 229 | 254 | 305 | 343 | 369 | 508 | 635 | 711 | 800 |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 203 | 254 | 305 | 337 |
| | | ØD | 150 | 180 | 190 | 230 | 255 | 280 | 345 | 405 | 485 | 535 |
| | | ØK | 120,7 | 139,7 | 152,4 | 190,5 | 215,9 | 241,3 | 298,5 | 362 | 431,8 | 476,3 |
| | | ØG | 102 | 121 | 133 | 171 | 194 | 219 | 273 | 330 | 406 | 425 |
| | | ØP | 82,55 | 101,6 | 114,3 | 149,23 | 171,45 | 193,68 | 247,65 | 304,8 | 381 | 396,88 |
| | | C | 17,5 | 20,7 | 22,3 | 22,3 | 22,3 | 23,9 | 27 | 28,6 | 30,2 | 33,4 |
| | | n-Ød | 4 - 3/4 | 4 - 3/4 | 4 - 3/4 | 8 - 3/4 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 12 - 1 | 12 - 1 | 12 - 1 1/8 |
| | | T | 8,74 | 8,74 | 8,74 | 8,74 | 8,74 | 8,74 | 8,74 | 8,74 | 8,74 | 8,74 |
| | | S | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 | 6,35 |
| | R | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | |
| | H | | 127 | 144 | 156 | 177 | 210 | 235 | 340 | 410 | 456 | 475 |
| | Kvs-value | | 86 | 177 | 244 | 444 | 801 | 1064 | 1949 | 3051 | 4530 | 5556 |
| | Approx. Weight RF (2) | | 13 | 19 | 23 | 36 | 51 | 62 | 115 | 180 | 275 | 351 |
| | Approx. Weight BW | | 10 | 14 | 18 | 28 | 40 | 49 | 93 | 151 | 231 | 295 |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 150

SERIES 3S ANSI RANGE



| Nominal Size | | inch | 16" | 18" | 20" | 24" | 26" | 28" | 30" | 32" | 36" |
|----------------|-----------------------|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| DN | | | 400 | 450 | 500 | 600 | 650 | 700 | 750 | 800 | 900 |
| End connection | RF | L | 864 | 978 | 978 | 1295 | 1295 | 1448 | 1524 | 1727 (3) | 1956 |
| | | ØB | 387 | 438 | 489 | 591 | 633 | 684 | 735 | 779 | 874 |
| | | ØD | 595 | 635 | 700 | 815 | 870 | 925 | 985 | 1060 | 1170 |
| | | ØK | 539,8 | 577,9 | 635 | 749,3 | 806,4 | 863,6 | 914,4 | 977,9 | 1085,8 |
| | | ØF | 469,9 | 533,4 | 584,2 | 692,2 | 749 | 800 | 857 | 914 | 1022 |
| | | C | 35 | 38,1 | 41,3 | 46,1 | 66,7 | 69,9 | 73,1 | 79,4 | 88,9 |
| | | f | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | n-Ød | 16 - 1 1/8 | 16 - 1 1/4 | 20 - 1 1/4 | 20 - 1 3/8 | 24 - 1 3/8 | 28 - 1 3/8 | 28 - 1 3/8 | 28 - 1 5/8 | 32 - 1 5/8 |
| | BW | L1 | 864 | 978 | 978 | 1295 | 1295 | 1448 | 1524 | 1727 (3) | 1956 |
| | | Schedule No.(1) | STD | STD | STD | STD | 20 | 20 | 20 | 20 | 20 |
| | | ØB | 387 | 438 | 489 | 591 | 633 | 684 | 735 | 779 | 874 |
| | | ØA1 | 413 | 464 | 516 | 619 | 670 | 721 | 772 | 825 | 927 |
| | | ØB1 | 387,5 | 438 | 489 | 590,5 | 635 | 686 | 736,5 | 787,5 | 889 |
| | RTJ | L2 | 877 | 991 | 991 | 1308 | - | - | - | - | - |
| | | ØB | 387 | 438 | 489 | 591 | 633 | 684 | 735 | 779 | 874 |
| | | ØD | 595 | 635 | 700 | 815 | 870 | 925 | 985 | 1060 | 1170 |
| | | ØK | 539,8 | 577,9 | 635 | 749,3 | 806,4 | 863,6 | 914,4 | 977,9 | 1085,8 |
| | | ØG | 483 | 546 | 597 | 711 | 810 | 861 | 917 | 984 | 1092 |
| | | ØP | 454,03 | 517,53 | 558,8 | 673,1 | 749,3 | 800,1 | 857,25 | 914,4 | 1022,35 |
| | | C | 35 | 38,1 | 41,3 | 46,1 | 66,7 | 69,9 | 73,1 | 79,4 | 88,9 |
| | | n-Ød | 16 - 1 1/8 | 16 - 1 1/4 | 20 - 1 1/4 | 20 - 1 3/8 | 24 - 1 3/8 | 28 - 1 3/8 | 28 - 1 3/8 | 28 - 1 5/8 | 32 - 1 5/8 |
| | | T | 8,74 | 8,74 | 8,74 | 8,74 | 19,84 | 19,84 | 19,84 | 23,01 | 23,01 |
| | | S | 6,35 | 6,35 | 6,35 | 6,35 | 12,7 | 12,7 | 12,7 | 14,27 | 14,27 |
| | R | 0,8 | 0,8 | 0,8 | 0,8 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | |
| | H | | 552 | 572 | 660 | 740 | 785 | 838 | 889 | 1012 | 1090 |
| | Kvs-value | | 7363 | 9829 | 12222 | 17833 | 21509 | 25225 | 28983 | 36863 | 52624 |
| | Approx. Weight RF (2) | | 460 | 575 | 740 | 1350 | 1800 | 2350 | 2650 | 3000 | 3690 |
| | Approx. Weight BW | | 390 | 498 | 648 | 1208 | 1628 | 2128 | 2411 | 2694 | 3250 |

- (1) Other schedule nos. on request
- (2) RTJ weight increases approx. by 10%
- (3) Acc. to manufacturer standard

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 300

SERIES 3S ANSI RANGE



| Nominal Size | | inch | 2" | 2-1/2" | 3" | 4" | 5" | 6" | 8" | 10" | 12" | |
|-------------------|-----------------------|-----------------|---------|---------|---------|---------|---------|---------|----------|--------|------------|------------|
| DN | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | |
| End connection | RF | L | 267 | 292 | 318 | 356 | 400 | 444 | 533 | 622 | 711 | |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 203 | 254 | 305 | |
| | | ØD | 165 | 190 | 210 | 255 | 280 | 320 | 380 | 445 | 520 | |
| | | ØK | 127 | 149,2 | 168,3 | 200 | 235 | 269,9 | 330,2 | 387,4 | 450,8 | |
| | | ØF | 92,1 | 104,8 | 127 | 157,2 | 185,7 | 215,9 | 269,9 | 323,8 | 381 | |
| | | C | 20,7 | 23,9 | 27 | 30,2 | 33,4 | 35 | 39,7 | 46,1 | 49,3 | |
| | | f | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | n-Ød | 8 - 3/4 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 12 - 7/8 | 12 - 1 | 16 - 1 1/8 | 16 - 1 1/4 |
| | BW | L1 | 267 | 292 | 318 | 356 | 400 | 444 | 533 | 622 | 711 | |
| | | Schedule No.(1) | 40 | - | 40 | 40 | - | 40 | 40 | 40 | STD | |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 203 | 254 | 305 | |
| | | ØA1 | 60,3 | - | 91 | 117 | - | 172 | 223 | 278 | 329 | |
| | | ØB1 | 52,48 | - | 78 | 102 | - | 154 | 203 | 254,5 | 305 | |
| | RTJ | L2 | 283 | 308 | 334 | 372 | 416 | 460 | 549 | 638 | 727 | |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 203 | 254 | 305 | |
| | | ØD | 165 | 190 | 210 | 255 | 280 | 320 | 380 | 445 | 520 | |
| | | ØK | 127 | 149,2 | 168,3 | 200 | 235 | 269,9 | 330,2 | 387,4 | 450,8 | |
| | | ØG | 108 | 127 | 146 | 175 | 210 | 241 | 302 | 356 | 413 | |
| | | ØP | 82,55 | 101,6 | 123,83 | 149,23 | 180,98 | 211,12 | 269,88 | 323,85 | 381 | |
| | | C | 20,7 | 23,9 | 27 | 30,2 | 33,4 | 35 | 39,7 | 46,1 | 49,3 | |
| | | n-Ød | 8 - 3/4 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 8 - 7/8 | 12 - 7/8 | 12 - 1 | 16 - 1 1/8 | 16 - 1 1/4 |
| | | T | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 |
| | | S | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 |
| | | R | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 |
| | H | | 137 | 162 | 180 | 205 | 268 | 315 | 370 | 430 | 465 | |
| | Kvs-value | | 86 | 177 | 244 | 440 | 799 | 1064 | 1953 | 3056 | 4568 | |
| | Approx. Weight RF (2) | | 17 | 27 | 34 | 55 | 83 | 104 | 176 | 258 | 420 | |
| Approx. Weight BW | | 12 | 20 | 26 | 42 | 64 | 81 | 140 | 209 | 346 | | |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 300

SERIES 3S ANSI RANGE



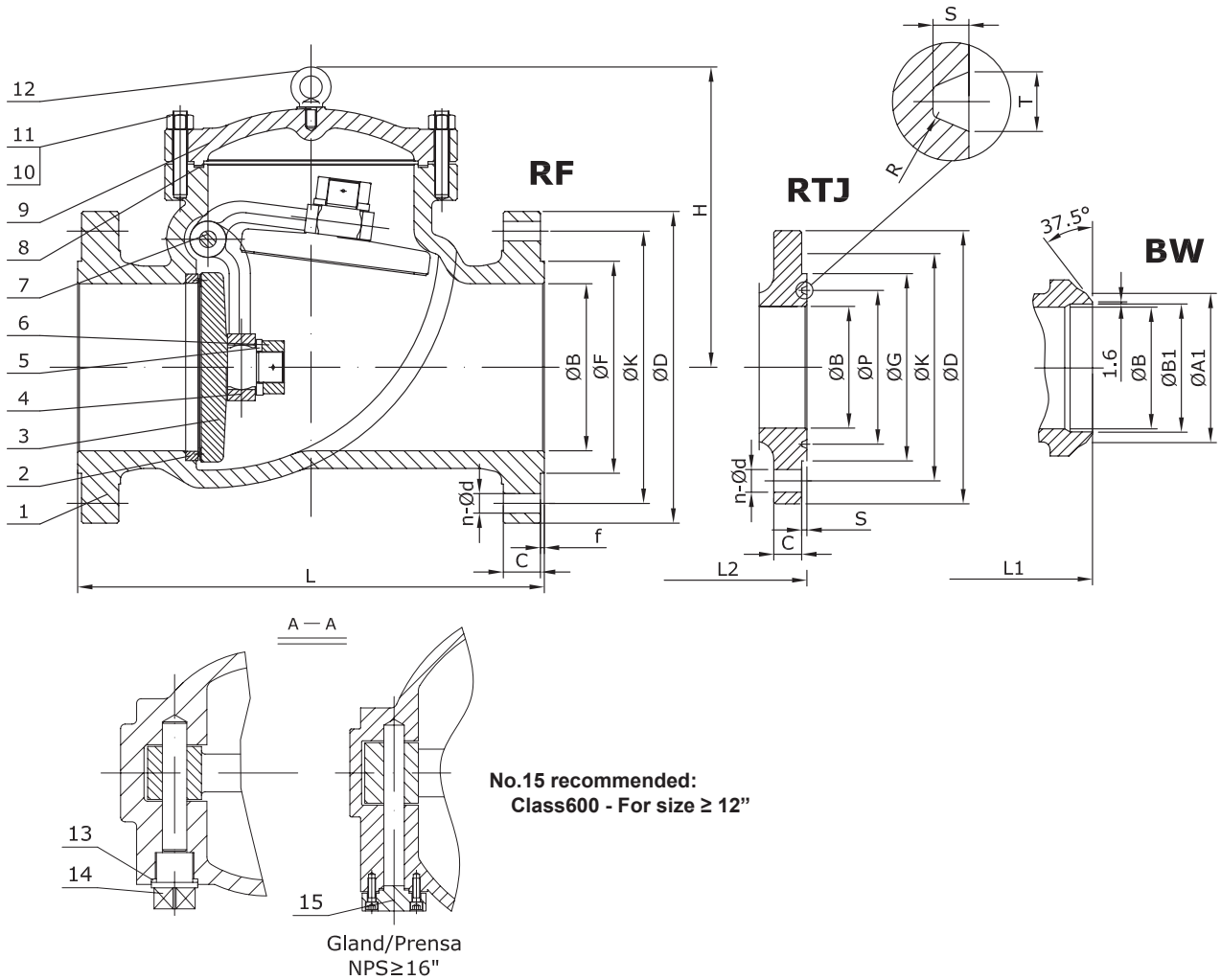
| Nominal Size | | inch | 14" | 16" | 18" | 20" | 24" | 26" | 28" | 30" | 32" |
|----------------|-----------------------|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|
| DN | | | 350 | 400 | 450 | 500 | 600 | 650 | 700 | 750 | 800 |
| End connection | RF | L | 838 | 864 | 978 | 1016 | 1346 | 1346 | 1499 | 1594 | 1727 (3) |
| | | ØB | 337 | 387 | 432 | 483 | 584 | 633 | 684 | 735 | 779 |
| | | ØD | 585 | 650 | 710 | 775 | 915 | 970 | 1035 | 1090 | 1150 |
| | | ØK | 514,4 | 571,5 | 628,6 | 685,8 | 812,8 | 876,3 | 939,8 | 997 | 1054,1 |
| | | ØF | 412,8 | 469,9 | 533,4 | 584,2 | 692,2 | 749 | 800 | 857 | 914 |
| | | C | 52,4 | 55,6 | 58,8 | 62 | 68,3 | 77,8 | 84,2 | 90,5 | 96,9 |
| | | f | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | n-Ød | 20 - 1 1/4 | 20 - 1 3/8 | 24 - 1 3/8 | 24 - 1 3/8 | 24 - 1 5/8 | 28 - 1 3/4 | 28 - 1 3/4 | 28 - 1 7/8 | 28 - 2 |
| | BW | L1 | 838 | 864 | 978 | 1016 | 1346 | 1346 | 1499 | 1594 | 1727 (3) |
| | | Schedule No.(1) | STD | STD | STD | STD | STD | 20 | 20 | 20 | 20 |
| | | ØB | 337 | 387 | 432 | 483 | 584 | 633 | 684 | 735 | 779 |
| | | ØA1 | 362 | 413 | 464 | 516 | 619 | 670 | 721 | 772 | 825 |
| | | ØB1 | 336,5 | 387,5 | 438 | 489 | 590,5 | 635 | 686 | 736,5 | 787,5 |
| | RTJ | L2 | 854 | 880 | 994 | 1035 | 1368 | 1374 | 1524 | 1619 | 1755 |
| | | ØB | 337 | 387 | 432 | 483 | 584 | 633 | 684 | 735 | 779 |
| | | ØD | 585 | 650 | 710 | 775 | 915 | 970 | 1035 | 1090 | 1150 |
| | | ØK | 514,4 | 571,5 | 628,6 | 685,8 | 812,8 | 876,3 | 939,8 | 997 | 1054,1 |
| | | ØG | 457 | 508 | 575 | 635 | 749 | 810 | 861 | 917 | 984 |
| | | ØP | 419,1 | 469,9 | 533,4 | 584,2 | 692,15 | 749,3 | 800,1 | 857,25 | 914,4 |
| | | C | 52,4 | 55,6 | 58,8 | 62 | 68,3 | 77,8 | 84,2 | 90,5 | 96,9 |
| | | n-Ød | 20 - 1 1/4 | 20 - 1 3/8 | 24 - 1 3/8 | 24 - 1 3/8 | 24 - 1 5/8 | 28 - 1 3/4 | 28 - 1 3/4 | 28 - 1 7/8 | 28 - 2 |
| | | T | 11,91 | 11,91 | 11,91 | 13,49 | 16,66 | 19,84 | 19,84 | 19,84 | 23,01 |
| | | S | 7,92 | 7,92 | 7,92 | 9,53 | 11,13 | 12,7 | 12,7 | 12,7 | 14,27 |
| | R | 0,8 | 0,8 | 0,8 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | |
| | H | | 505 | 554 | 620 | 680 | 770 | 770 | 889 | 977 | 1016 |
| | Kvs-value | | 5564 | 7368 | 9534 | 11910 | 17453 | 21368 | 24573 | 28983 | 36094 |
| | Approx. Weight RF (2) | | 516 | 780 | 1150 | 1350 | 2100 | 2600 | 2900 | 3200 | 4900 |
| | Approx. Weight BW | | 415 | 647 | 984 | 1145 | 1804 | 2254 | 2492 | 2713 | 4338 |

- (1) Other schedule nos. on request
- (2) RTJ weight increases approx. by 10%
- (3) Acc. to manufacturer standard

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 3S ANSI RANGE
Class 600



| Nº | Part name | A216 WCB (3SA0_) | A352 LCB | | A217 WC1 (3SB1_) | A217 WC6 (3SB8_) | A217 WC9 (3SB9_) | A217 C5 (3SC2_) | A217 C12 (3SC4_) |
|----|----------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|
| | | | Trim 2 (3SA82_) | Trim 12 (3SA8G_) | | | | | |
| 1 | Body | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 2 | Seat Ring | A105 | A182 F304 | A182 F316+HF | A182 F1+HF | A182 F11+HF | A182 F22+HF | A182 F5+HF | A182 F9+HF |
| 3 | Disc | A216 WCB | A351 CF8 | A351 CF8M | A217 WC1+HF | A217 WC6+HF | A217 WC9+HF | A217 C5+HF | A217 C12+HF |
| 4 | Hinge | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 5 | Washer | SS304 | SS304 | SS316 | SS304 | | SS304 | | |
| 6 | Disc Nut (1) | A194 2H | A194 4 | | A194 4 | | A194 4 | | |
| 7 | Hinge Pin | A182 F6a | A182 F304 | A182 F316 | A182 F6a | | A182 F6a | | |
| 8 | Gasket | SS304 +Graphite | SS304 +Graphite | SS316 +Graphite | SS304 +Graphite | | SS304 +Graphite | | |
| 9 | Cover | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 10 | Cover Bolt (1) | A193 B7 | A320 L7 | | A193 B16 | | A193 B16 | | |
| 11 | Cover Nut (1) | A194 2H | A194 4 | | A194 4 | | A194 4 | | |
| 12 | Eye Bolt | Carbon Steel | Carbon Steel | | Carbon Steel | | Carbon Steel | | |
| 13 | Gasket | SS304 | SS304 | SS316 | SS304 | | SS304 | | |
| 14 | Plug | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |
| 15 | Gland | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |

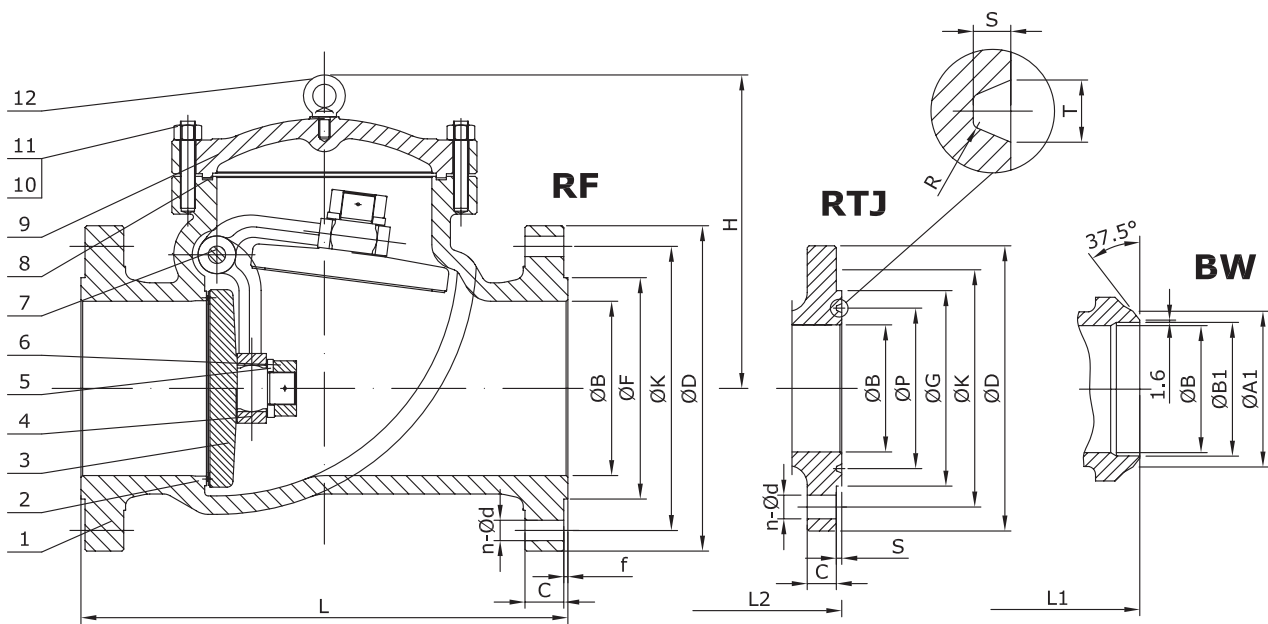
(1) Bolting material for NACE MR0175 compliance available (i.e. B7M / 2HM for WCB bodies)

| Fig. 3SA0_ | Seat Surface | Disc Surface |
|-----------------|--------------|---------------|
| TRIM #1 (3SA01) | A105+13Cr | A216 WCB+13Cr |
| TRIM #5 (3SA05) | A105+HF | A216 WCB+HF |
| TRIM #8 (3SA08) | A105+HF | A216 WCB+13Cr |

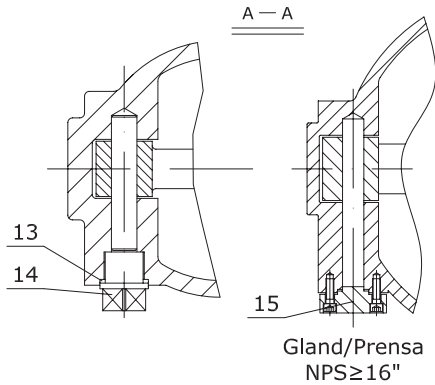
HF = Hard faced

Main Parts and Materials

SERIES 3S ANSI RANGE
Class 600



No.15 recommended:
Class600 - For size ≥ 12"



Gland/Prensa
NPS ≥ 16"

| Nº | Part name | CF8 (3SI2_) | CF8M (3SI0_) | CF3 (3SI1_) | CF3M (3SI7_) |
|----|------------|----------------|----------------|-----------------|-----------------|
| 1 | Body | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 2 | Seat Ring | Integral SS304 | Integral+HF | Integral SS304L | Integral+HF |
| 3 | Disc | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 4 | Hinge | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 5 | Washer | SS304 | SS316 | SS304L | SS316L |
| 6 | Disc Nut | A194 8 | A194 8M | A194 8M | |
| 7 | Hinge Pin | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 8 | Gasket | SS304+Graphite | SS316+Graphite | SS316+Graphite | SS316L+Graphite |
| 9 | Cover | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 10 | Cover Bolt | A193 B8 | A193 B8M | A193 B8M | |
| 11 | Cover Nut | A194 8 | A194 8M | A194 8M | |
| 12 | Eye Bolt | Carbon Steel | | Carbon Steel | |
| 13 | Gasket | SS304 | SS316 | SS304L | SS316L |
| 14 | Plug | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 15 | Gland | A182 F304 | A182 F316 | A182 F304L | A182 F316L |

Main Valve Parameters - Class 600

SERIES 3S ANSI RANGE



| Nominal Size | | inch | 2" | 2-1/2" | 3" | 4" | 5" | 6" | 8" | 10" |
|----------------|-----------------------|-----------------|---------|---------|---------|--------|-----------|------------|----------|------------|
| DN | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 |
| End connection | RF | L | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 200 | 248 |
| | | ØD | 165 | 190 | 210 | 275 | 330 | 355 | 420 | 510 |
| | | ØK | 127 | 149,2 | 168,3 | 215,9 | 266,7 | 292,1 | 349,2 | 431,8 |
| | | ØF | 92,1 | 104,8 | 127 | 157,2 | 185,7 | 215,9 | 269,9 | 323,8 |
| | | C | 25,4 | 28,6 | 31,8 | 38,1 | 44,5 | 47,7 | 55,6 | 63,5 |
| | | f | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | n-Ød | 8 - 3/4 | 8 - 7/8 | 8 - 7/8 | 8 - 1 | 8 - 1 1/8 | 12 - 1 1/8 | 12 - 1/4 | 16 - 1 3/8 |
| | BW | L1 | 292 | 330 | 356 | 432 | 508 | 559 | 660 | 787 |
| | | Schedule No.(1) | 80 | - | 80 | 80 | - | 80 | 80 | 80 |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 200 | 248 |
| | | ØA1 | 60,3 | - | 91 | 117 | - | 172 | 223 | 278 |
| | | ØB1 | 49,22 | - | 73,5 | 97 | - | 146,5 | 193,5 | 243 |
| | RTJ | L2 | 295 | 346 | 372 | 448 | 524 | 562 | 663 | 790 |
| | | ØB | 51 | 65,375 | 76 | 102 | 128,25 | 152 | 200 | 248 |
| | | ØD | 165 | 190 | 210 | 275 | 330 | 355 | 420 | 510 |
| | | ØK | 127 | 149,2 | 168,3 | 215,9 | 266,7 | 292,1 | 349,2 | 431,8 |
| | | ØG | 108 | 127 | 146 | 175 | 210 | 241 | 302 | 356 |
| | | ØP | 82,55 | 101,6 | 123,83 | 149,23 | 180,98 | 211,12 | 269,88 | 323,85 |
| | | C | 25,4 | 28,6 | 31,8 | 38,1 | 44,5 | 47,7 | 55,6 | 63,5 |
| | | n-Ød | 8 - 3/4 | 8 - 7/8 | 8 - 7/8 | 8 - 1 | 8 - 1 1/8 | 12 - 1 1/8 | 12 - 1/4 | 16 - 1 3/8 |
| | | T | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 |
| | | S | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 |
| | R | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | |
| | H | | 142 | 189 | 223 | 256 | 300 | 332 | 409 | 478 |
| | Kvs-value | | 86 | 177 | 244 | 444 | 801 | 1064 | 1889 | 2906 |
| | Approx. Weight RF (2) | | 22 | 34 | 43 | 78 | 122 | 155 | 285 | 485 |
| | Approx. Weight BW | | 15 | 24 | 30 | 55 | 87 | 111 | 221 | 382 |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 600

SERIES 3S ANSI RANGE



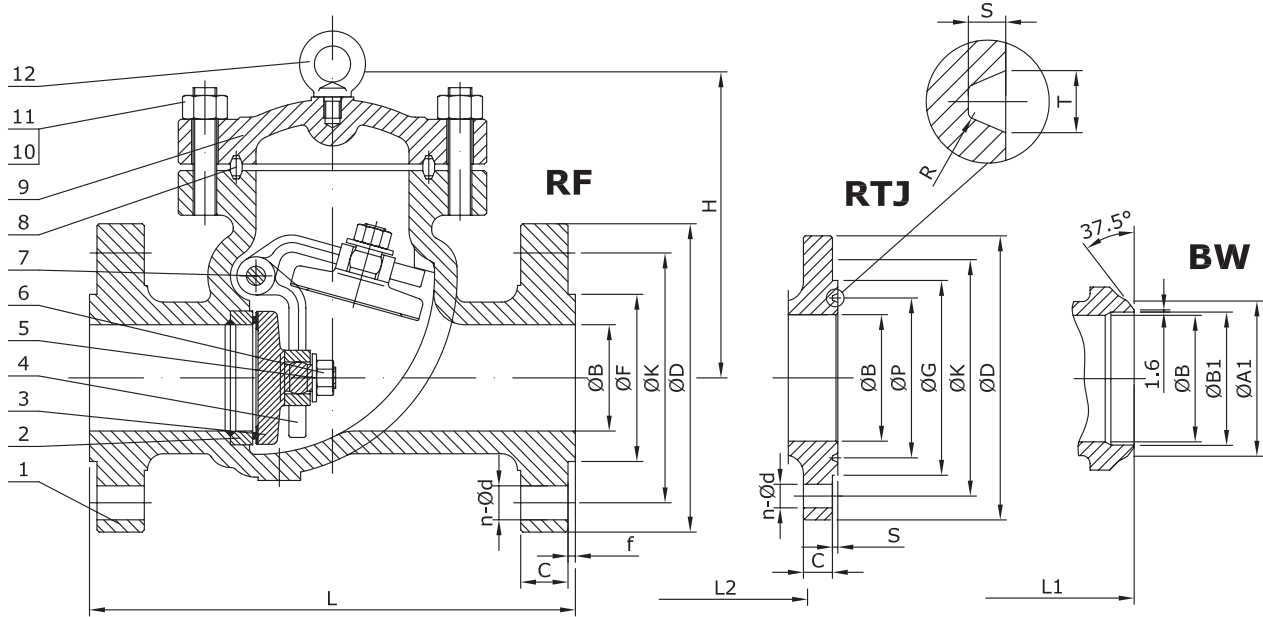
| Nominal Size | | inch | 12" | 14" | 16" | 18" | 20" | 24" | 26" | 28" | |
|----------------|-----------------------|-----------------|------------|------------|------------|------------|------------|--------|--------|------------|-------|
| DN | | | 300 | 350 | 400 | 450 | 500 | 600 | 650 | 700 | |
| End connection | RF | L | 838 | 889 | 991 | 1092 | 1194 | 1397 | 1448 | 1600 | |
| | | ØB | 299 | 327 | 375 | 419 | 464 | 559 | 603 | 648 | |
| | | ØD | 560 | 605 | 685 | 745 | 815 | 940 | 1015 | 1075 | |
| | | ØK | 489 | 527 | 603,2 | 654 | 723,9 | 838,2 | 914,4 | 965,2 | |
| | | ØF | 381 | 412,8 | 469,9 | 533,4 | 584,2 | 692,2 | 749 | 800 | |
| | | C | 66,7 | 69,9 | 76,2 | 82,6 | 88,9 | 101,6 | 108 | 111,2 | |
| | | f | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | n-Ød | 20 - 1 3/8 | 20 - 1 1/2 | 20 - 1 5/8 | 20 - 1 3/4 | 24 - 1 3/4 | 24 - 2 | 28 - 2 | 28 - 2 1/8 | |
| | BW | L1 | 838 | 889 | 991 | 1092 | 1194 | 1397 | 1448 | 1600 | |
| | | Schedule No.(1) | 80 | 80 | 80 | 80 | 80 | 80 | - | - | |
| | | ØB | 299 | 327 | 375 | 419 | 464 | 559 | 603 | 648 | |
| | | ØA1 | 329 | 362 | 413 | 464 | 516 | 619 | - | - | |
| | | ØB1 | 289 | 317,5 | 363,5 | 409,5 | 455,5 | 547,5 | - | - | |
| | | L2 | 841 | 892 | 994 | 1095 | 1200 | 1407 | 1461 | 1613 | |
| | | ØB | 299 | 327 | 375 | 419 | 464 | 559 | 603 | 648 | |
| | | ØD | 560 | 605 | 685 | 745 | 815 | 940 | 1015 | 1075 | |
| | | ØK | 489 | 527 | 603,2 | 654 | 723,9 | 838,2 | 914,4 | 965,2 | |
| | | RTJ | ØG | 413 | 457 | 508 | 575 | 635 | 749 | 810 | 861 |
| | | | ØP | 981 | 419,1 | 469,9 | 533,4 | 584,2 | 692,15 | 749,3 | 800,1 |
| | | | C | 66,7 | 69,9 | 76,2 | 82,6 | 88,9 | 101,6 | 108 | 111,2 |
| | n-Ød | | 20 - 1 3/8 | 20 - 1 1/2 | 20 - 1 5/8 | 20 - 1 3/4 | 24 - 1 3/4 | 24 - 2 | 28 - 2 | 28 - 2 1/8 | |
| | T | | 11,91 | 11,91 | 11,91 | 11,91 | 13,49 | 16,66 | 19,84 | 19,84 | |
| | S | | 7,92 | 7,92 | 7,92 | 7,92 | 9,53 | 11,13 | 12,7 | 12,7 | |
| | R | | 0,8 | 0,8 | 0,8 | 0,8 | 1,5 | 1,5 | 1,5 | 1,5 | |
| | H | | 539 | 609 | 660 | 769 | 890 | 954 | 1025 | 1062 | |
| | Kvs-value | | | 4376 | 5256 | 6897 | 8983 | 10987 | 15966 | 21026 | 25598 |
| | Approx. Weight RF (2) | | | 615 | 920 | 1250 | 1800 | 2350 | 3300 | 3700 | 4500 |
| | Approx. Weight BW | | | 493 | 740 | 1022 | 1512 | 1996 | 2862 | 3125 | 3854 |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 3S ANSI RANGE
Class 900



No.15 recommended:
Class900 - For size ≥ 6"

Gland/Prensa
NPS ≥ 16"

| Nº | Part name | A216 WCB (3SA0_) | A352 LCB | | A217 WC1 (3SB1_) | A217 WC6 (3SB8_) | A217 WC9 (3SB9_) | A217 C5 (3SC2_) | A217 C12 (3SC4_) |
|----|----------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|
| | | | Trim 15 (3SA8K_) | Trim 16 (3SA8L_) | | | | | |
| 1 | Body | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 2 | Seat Ring | A105 | A182 F304+HF | A182 F316+HF | A182 F1+HF | A182 F11+HF | A182 F22+HF | A182 F5+HF | A182 F9+HF |
| 3 | Disc | A216 WCB | A351 CF8+HF | A351 CF8M+HF | A217 WC1+HF | A217 WC6+HF | A217 WC9+HF | A217 C5+HF | A217 C12+HF |
| 4 | Hinge | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 5 | Washer | SS304 | SS304 | SS316 | | SS304 | | SS304 | |
| 6 | Disc Nut (1) | A194 2H | A194 4 | | | A194 4 | | A194 4 | |
| 7 | Hinge Pin | A182 F6a | A182 F304 | Nitronic 50 | | A182 F6a | | A182 F6a | |
| 8 | Gasket | SS304 | SS304 | SS316 | | SS304 | | SS304 | |
| 9 | Cover | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 10 | Cover Bolt (1) | A193 B7 | A320 L7 | | | A193 B16 | | A193 B16 | |
| 11 | Cover Nut (1) | A194 2H | A194 4 | | | A194 4 | | A194 4 | |
| 12 | Eye Bolt | Carbon Steel | Carbon Steel | | | Carbon Steel | | Carbon Steel | |
| 13 | Gasket | SS304 | SS304 | SS316 | | SS304 | | SS304 | |
| 14 | Plug | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |
| 15 | Gland | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |

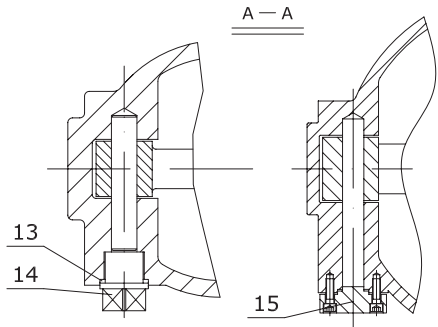
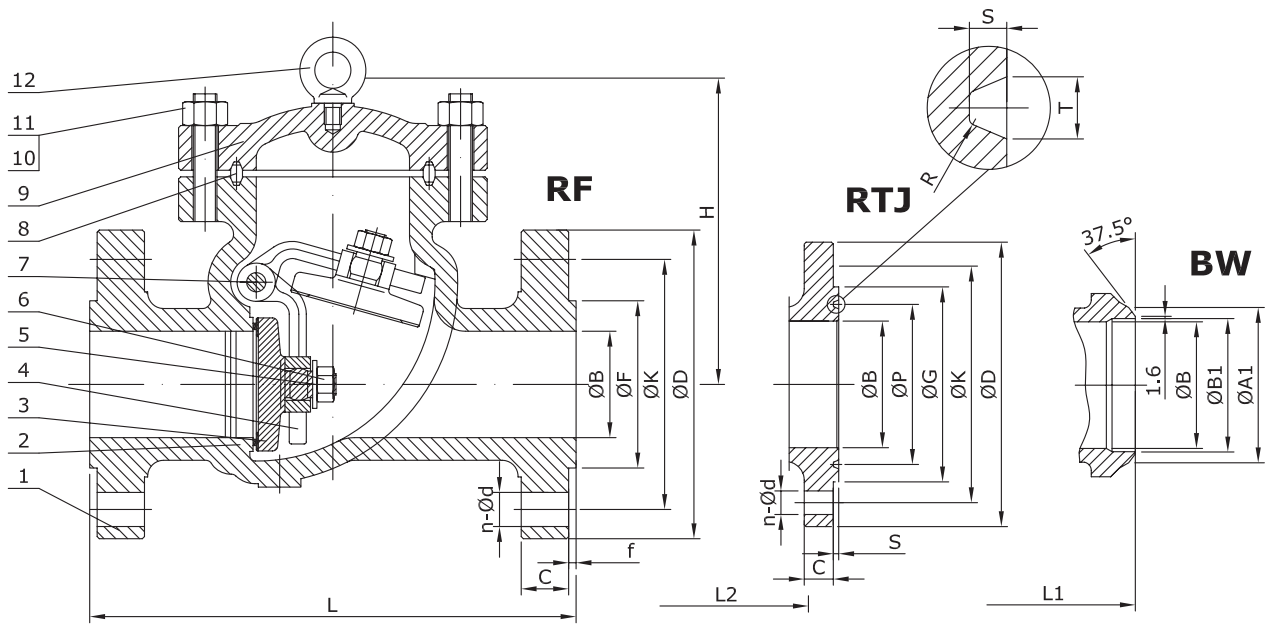
(1) Bolting material for NACE MR0175 compliance available (i.e. B7M / 2HM for WCB bodies)

| Fig. 3SA0_ | Seat Surface | Disc Surface |
|-----------------|--------------|---------------|
| TRIM #1 (3SA01) | A105+13Cr | A216 WCB+13Cr |
| TRIM #5 (3SA05) | A105+HF | A216 WCB+HF |
| TRIM #8 (3SA08) | A105+HF | A216 WCB+13Cr |

HF = Hard faced

Main Parts and Materials

SERIES 3S ANSI RANGE
Class 900



No.15 recommended:
Class900 - For size ≥ 6"

Gland/Prensa
NPS ≥ 16"

| Nº | Part name | CF8 (3SI2_) | CF8M (3SI0_) | CF3 (3SI1_) | CF3M (3SI7_) |
|----|------------|--------------|--------------|--------------|--------------|
| 1 | Body | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 2 | Seat | Integral+HF | Integral+HF | Integral+HF | Integral+HF |
| 3 | Disc | A351 CF8+HF | A351 CF8M+HF | A351 CF3+HF | A351 CF3M+HF |
| 4 | Hinge | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 5 | Washer | SS304 | SS316 | SS304L | SS316L |
| 6 | Disc Nut | A194 8 | A194 8M | A194 8M | A194 8M |
| 7 | Hinge Pin | A182 F304 | Nitronic 50 | A182 F304L | Nitronic 50 |
| 8 | Gasket | SS304 | SS316 | SS316 | SS316L |
| 9 | Cover | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 10 | Cover Bolt | A193 B8 | A193 B8M | A193 B8M | A193 B8M |
| 11 | Cover Nut | A194 8 | A194 8M | A194 8M | A194 8M |
| 12 | Eye Bolt | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Steel |
| 13 | Gasket | SS304 | SS316 | SS304L | SS316L |
| 14 | Plug | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 15 | Gland | A182 F304 | A182 F316 | A182 F304L | A182 F316L |

Information / restriction of technical rules need to be observed!
Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve
Product suitability must be verified, contact manufacturer for information

Main Valve Parameters - Class 900

SERIES 3S ANSI RANGE



| Nominal Size | | inch | 2" | 2-1/2" | 3" | 4" | 5" | 6" | 8" | |
|----------------|-----------------------|-----------------|---------|--------|---------|-----------|-----------|------------|------------|--------|
| DN | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | |
| End connection | RF | L | 368 | 419 | 381 | 457 | 559 | 610 | 737 | |
| | | ØB | 48 | 62,375 | 73 | 98 | 123,2 | 146 | 191 | |
| | | ØD | 215 | 245 | 240 | 290 | 350 | 380 | 470 | |
| | | ØK | 165,1 | 190,5 | 190,5 | 235 | 279,4 | 317,5 | 393,7 | |
| | | ØF | 92,1 | 104,8 | 127 | 157,2 | 185,7 | 215,9 | 269,9 | |
| | | C | 38,1 | 41,3 | 38,1 | 44,5 | 50,8 | 55,6 | 63,5 | |
| | | f | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | n-Ød | 8 - 7/8 | 8 - 1 | 8 - 7/8 | 8 - 1 1/8 | 8 - 1 1/4 | 12 - 1 1/8 | 12 - 1 3/8 | |
| | BW | L1 | 368 | 419 | 381 | 457 | 559 | 610 | 737 | |
| | | Schedule No.(1) | 160 | - | 160 | 120 | - | 120 | 100 | |
| | | ØB | 48 | 62,375 | 73 | 98 | 123,2 | 146 | 191 | |
| | | ØA1 | 60,3 | - | 91 | 117 | - | 172 | 223 | |
| | | ØB1 | 38,16 | - | 66,5 | 92 | - | 140 | 189 | |
| | | L2 | 371 | 422 | 384 | 460 | 562 | 613 | 740 | |
| | | ØB | 48 | 62,375 | 73 | 98 | 123,2 | 146 | 191 | |
| | | ØD | 215 | 245 | 240 | 290 | 350 | 380 | 470 | |
| | | ØK | 165,1 | 190,5 | 190,5 | 235 | 279,4 | 317,5 | 393,7 | |
| | | ØG | 124 | 137 | 156 | 181 | 216 | 241 | 308 | |
| | | RTJ | ØP | 95,25 | 107,95 | 123,83 | 149,23 | 180,98 | 211,12 | 269,88 |
| | | | C | 38,1 | 41,3 | 38,1 | 44,5 | 50,8 | 55,6 | 63,5 |
| | n-Ød | | 8 - 7/8 | 8 - 1 | 8 - 7/8 | 8 - 1 1/8 | 8 - 1 1/4 | 12 - 1 1/8 | 12 - 1 3/8 | |
| | T | | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | 11,91 | |
| | S | | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | 7,92 | |
| | R | | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | |
| | H | | 175 | 220 | 254 | 314 | 353 | 381 | 533 | |
| | Kvs-value | | 86 | 164 | 222 | 415 | 736 | 974 | 1718 | |
| | Approx. Weight RF (2) | 70 | 86 | 98 | 135 | 201 | 250 | 450 | | |
| | Approx. Weight BW | 56 | 70 | 81 | 107 | 155 | 190 | 348 | | |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 900

SERIES 3S ANSI RANGE



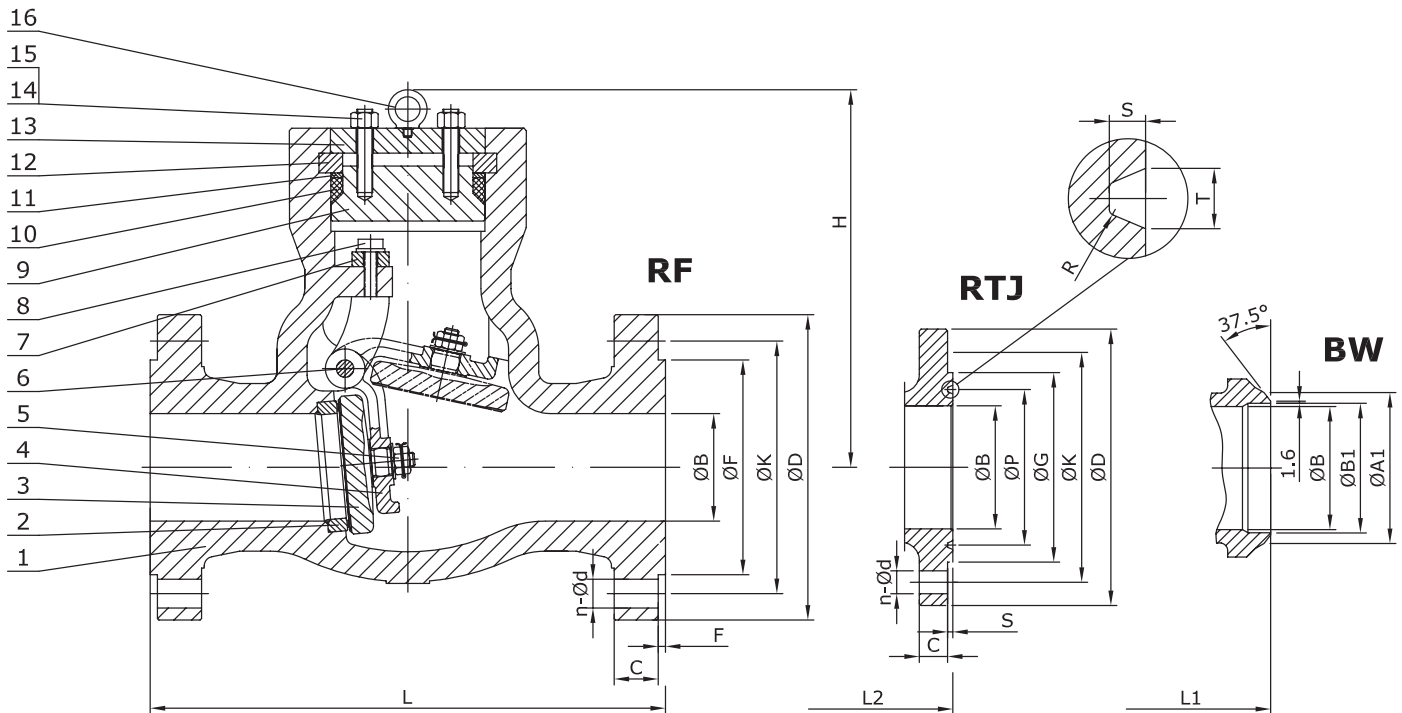
| Nominal Size | | inch | 10" | 12" | 14" | 16" | 18" | 20" | 24" | |
|----------------|-----------------------|-----------------|------------|------------|------------|------------|------------|--------|------------|--------|
| DN | | | 250 | 300 | 350 | 400 | 450 | 500 | 600 | |
| End connection | RF | L | 838 | 965 | 1029 | 1130 | 1219 | 1321 | 1549 | |
| | | ØB | 238 | 282 | 311 | 356 | 400 | 445 | 533 | |
| | | ØD | 545 | 610 | 640 | 705 | 785 | 855 | 1040 | |
| | | ØK | 469,9 | 533,4 | 558,8 | 616 | 685,8 | 749,3 | 901,7 | |
| | | ØF | 323,8 | 381 | 412,8 | 469,9 | 533,4 | 584,2 | 692,2 | |
| | | C | 69,9 | 79,4 | 85,8 | 88,9 | 101,6 | 108 | 139,7 | |
| | | f | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | n-Ød | 16 - 1 3/8 | 20 - 1 3/8 | 20 - 1 1/2 | 20 - 1 5/8 | 20 - 1 7/8 | 20 - 2 | 20 - 2 1/2 | |
| | BW | L1 | 838 | 965 | 1029 | 1130 | 1219 | 1321 | 1549 | |
| | | Schedule No.(1) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| | | ØB | 238 | 282 | 311 | 356 | 400 | 445 | 533 | |
| | | ØA1 | 278 | 329 | 362 | 413 | 464 | 516 | 619 | |
| | | ØB1 | 236,5 | 281 | 308 | 354 | 398,5 | 443 | 532 | |
| | | L2 | 841 | 968 | 1039 | 1140 | 1232 | 1334 | 1568 | |
| | | ØB | 238 | 282 | 311 | 356 | 400 | 445 | 533 | |
| | | ØD | 545 | 610 | 640 | 705 | 785 | 855 | 1040 | |
| | | ØK | 469,9 | 533,4 | 558,8 | 616 | 685,8 | 749,3 | 901,7 | |
| | | RTJ | ØG | 362 | 419 | 467 | 524 | 594 | 648 | 772 |
| | | | ØP | 323,85 | 381 | 419,1 | 469,9 | 533,4 | 584,2 | 692,15 |
| | | | C | 69,9 | 79,4 | 85,8 | 88,9 | 101,6 | 108 | 139,7 |
| | n-Ød | | 16 - 1 3/8 | 20 - 1 3/8 | 20 - 1 1/2 | 20 - 1 5/8 | 20 - 1 7/8 | 20 - 2 | 20 - 2 1/2 | |
| | T | | 11,91 | 11,91 | 16,66 | 16,66 | 19,84 | 19,84 | 26,97 | |
| | S | | 7,92 | 7,92 | 11,13 | 11,13 | 12,7 | 12,7 | 15,88 | |
| | R | | 0,8 | 0,8 | 1,5 | 1,5 | 1,5 | 1,5 | 2,4 | |
| | H | | 558 | 609 | 736 | 762 | 863 | 939 | 1066 | |
| | Kvs-value | | | 2684 | 3923 | 4756 | 6214 | 8184 | 10103 | 14547 |
| | Approx. Weight RF (2) | | | 840 | 1180 | 1680 | 1980 | 2400 | 3200 | 5500 |
| | Approx. Weight BW | | | 698 | 984 | 1457 | 1711 | 2040 | 2752 | 4684 |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 31 ANSI RANGE
Class 1500&2500



| N° | Part name | A216 WCB (31A0_) | A352 LCB | | A217 WC1 (3SB1_) | A217 WC6 (3SB8_) | A217 WC9 (3SB9_) | A217 C5 (3SC2_) | A217 C12 (3SC4_) |
|----|---------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|
| | | | Trim 15 (31A8K_) | Trim 16 (31A8L_) | | | | | |
| 1 | Body | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 2 | Seat Ring | A105 | A182 F304 +HF | A182 F316 +HF | A182 F1 +HF | A182 F11 +HF | A182 F22 +HF | A182 F5 +HF | A182 F9 +HF |
| 3 | Disc | A216 WCB | A351 CF8 +HF | A351 CF8M +HF | A217 WC1 +HF | A217 WC6 +HF | A217 WC9 +HF | A217 C5 +HF | A217 C12 +HF |
| 4 | Hinge | A216 WCB | A352 LCB | | A217 WC1 | A217 WC6 | A217 WC9 | A217 C5 | A217 C12 |
| 5 | Disc Nut (1) | A194 2H | A194 4 | | | A194 4 | | A194 4 | |
| 6 | Hinge Pin | A182 F6a | A182 F304 | Nitronic 50 | | A182 F6a | | A182 F6a | |
| 7 | Gasket | SS304 | SS304 | SS316 | | SS304 | | SS304 | |
| 8 | Bolt (1) | A193 B7 | A320 L7 | | | A193 B16 | | A193 B16 | |
| 9 | Cover | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |
| 10 | Gasket | SS304 +Graphite | SS304 +Graphite | SS316 +Graphite | | SS304 +Graphite | | SS304 +Graphite | |
| 11 | Gasket Washer | A182 F6a | A182 F304 | A182 F316 | | A182 F6a | | A182 F6a | |
| 12 | Split Ring | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |
| 13 | Retainer Ring | A105 | A350 LF2 | | A182 F1 | A182 F11 | A182 F22 | A182 F5 | A182 F9 |
| 14 | Bolt (1) | A193 B7 | A320 L7 | | | A193 B16 | | A193 B16 | |
| 15 | Nut (1) | A194 2H | A194 4 | | | A194 4 | | A194 4 | |
| 16 | Eye Bolt | Carbon Steel | Carbon Steel | | | Carbon Steel | | Carbon Steel | |

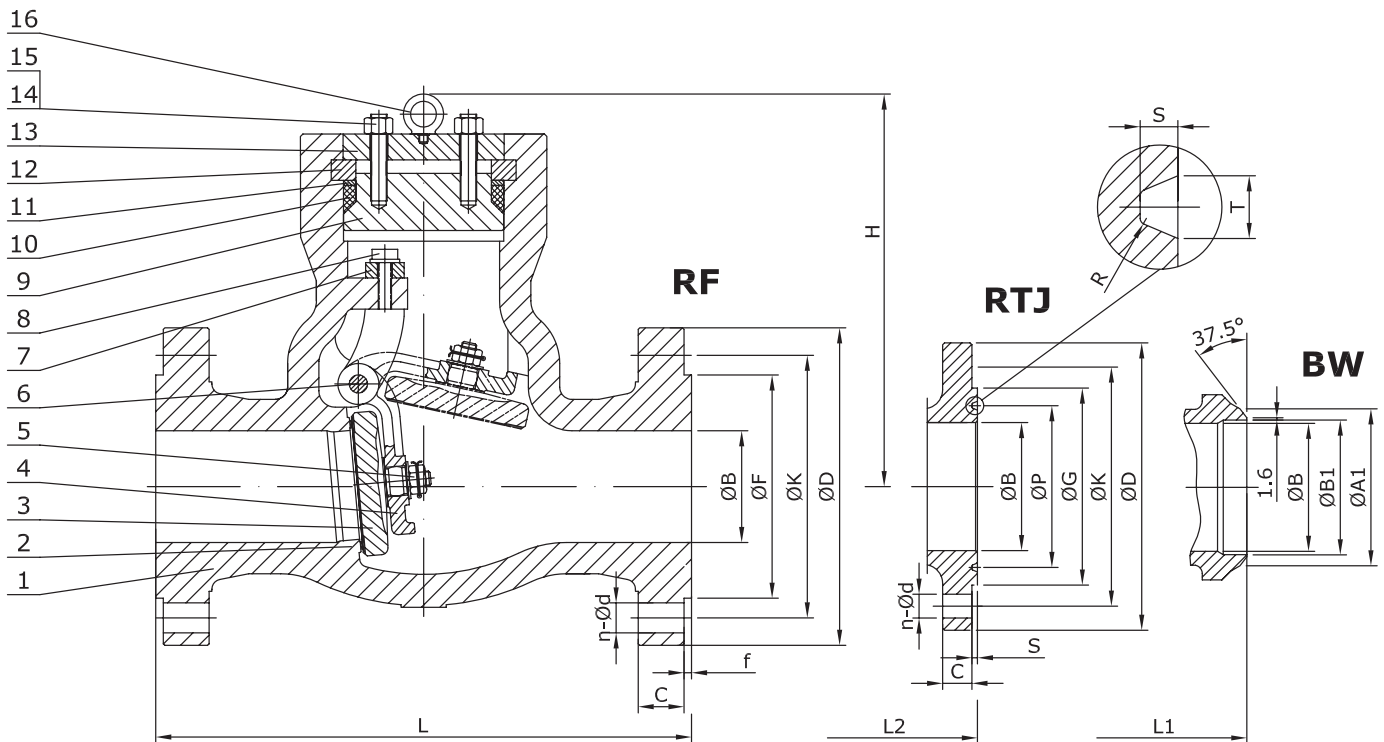
(1) Bolting material for NACE MR0175 compliance available (i.e. B7M / 2HM for WCB bodies)

| Fig. 31A0_ | Seat Surface | Disc Surface |
|-----------------|--------------|---------------|
| TRIM #1 (31A01) | A105+13Cr | A216 WCB+13Cr |
| TRIM #5 (31A05) | A105+HF | A216 WCB+HF |
| TRIM #8 (31A08) | A105+HF | A216 WCB+13Cr |

HF = Hard faced

Main Parts and Materials

SERIES 31 ANSI RANGE
Class 1500&2500



| Nº | Part name | CF8 (31I2_) | CF8M (31I0_) | CF3 (31I1_) | CF3M (31I7_) |
|----|---------------|----------------|----------------|----------------|-----------------|
| 1 | Body | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 2 | Seat Ring | Integral+HF | Integral+HF | Integral+HF | Integral+HF |
| 3 | Disc | A351 CF8+HF | A351 CF8M+HF | A351 CF3+HF | A351 CF3M+HF |
| 4 | Hinge | A351 CF8 | A351 CF8M | A351 CF3 | A351 CF3M |
| 5 | Disc Nut | A194 8 | A194 8M | A194 8M | A194 8M |
| 6 | Hinge Pin | A182 F304 | Nitronic 50 | A182 F304L | Nitronic 50 |
| 7 | Gasket | SS304 | SS316 | SS304L | SS316L |
| 8 | Bolt | A193 B8 | A193 B8M | A193 B8M | A193 B8M |
| 9 | Cover | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 10 | Gasket | SS304+Graphite | SS316+Graphite | SS316+Graphite | SS316L+Graphite |
| 11 | Gasket Washer | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 12 | Split Ring | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 13 | Retainer Ring | A182 F304 | A182 F316 | A182 F304L | A182 F316L |
| 14 | Bolt | A193 B8 | A193 B8M | A193 B8M | A193 B8M |
| 15 | Nut | A194 8 | A194 8M | A194 8M | A194 8M |
| 16 | Eye Bolt | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Steel |

Main Valve Parameters - Class 1500

SERIES 31 ANSI RANGE

| Nominal Size | | inch | 2" | 2-1/2" | 3" | 4" | 5" | 6" | 8" | 10" | 12" | 14" | 16" | |
|-----------------------|---------|-----------------|---------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-------|
| DN | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | |
| End connection | RF | L | 368 | 419 | 470 | 546 | 673 | 705 | 832 | 991 | 1130 | 1257 | 1384 | |
| | | ØB | 48 | 60,65 | 70 | 92 | 115,1 | 136 | 178 | 222 | 263 | 289 | 330 | |
| | | ØD | 215 | 245 | 265 | 310 | 375 | 395 | 485 | 585 | 675 | 750 | 825 | |
| | | ØK | 165,1 | 190,5 | 203,2 | 241,3 | 292,1 | 317,5 | 393,7 | 482,6 | 571,5 | 635 | 704,8 | |
| | | ØF | 92,1 | 104,8 | 127 | 157,2 | 185,7 | 215,9 | 269,9 | 323,8 | 381 | 412,8 | 469,9 | |
| | | C | 38,1 | 41,3 | 47,7 | 54 | 73,1 | 82,6 | 92,1 | 108 | 123,9 | 133,4 | 146,1 | |
| | | f | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | n-Ød | 8 - 7/8 | 8 - 1 | 8 - 1 1/4 | 8 - 1 3/8 | 8 - 1 5/8 | 12 - 1 1/2 | 12 - 1 3/4 | 12 - 2 | 16 - 2 1/8 | 16 - 2 3/8 | 16 - 2 5/8 | |
| | BW | L1 | 368 | 419 | 470 | 546 | 673 | 705 | 832 | 991 | 1130 | 1257 | 1384 | |
| | | Schedule No.(1) | 160 | - | 160 | 120 | - | 120 | 120 | 120 | 120 | 120 | 120 | |
| | | ØB | 48 | 60,65 | 70 | 92 | 115,1 | 136 | 178 | 222 | 263 | 289 | 330 | |
| | | ØA1 | 60,3 | - | 91 | 117 | - | 172 | 223 | 278 | 329 | 362 | 413 | |
| | | ØB1 | 38,16 | - | 66,5 | 92 | - | 140 | 182,5 | 230 | 273 | 300 | 344,5 | |
| | | L2 | 371 | 422 | 473 | 549 | 676 | 711 | 842 | 1001 | 1146 | 1276 | 1406 | |
| | | ØB | 48 | 60,65 | 70 | 92 | 115,1 | 136 | 178 | 222 | 263 | 289 | 330 | |
| | | ØD | 215 | 245 | 265 | 310 | 375 | 395 | 485 | 585 | 675 | 750 | 825 | |
| | | ØK | 165,1 | 190,5 | 203,2 | 241,3 | 292,1 | 317,5 | 393,7 | 482,6 | 571,5 | 635 | 704,8 | |
| | | RTJ | ØG | 124 | 137 | 168 | 194 | 229 | 248 | 318 | 371 | 438 | 489 | 546 |
| | | | ØP | 95,25 | 107,95 | 136,53 | 161,93 | 193,68 | 211,14 | 269,88 | 323,85 | 381 | 419,1 | 469,9 |
| | | | C | 38,1 | 41,3 | 47,7 | 54 | 73,1 | 82,6 | 92,1 | 108 | 123,9 | 133,4 | 146,1 |
| n-Ød | 8 - 7/8 | | 8 - 1 | 8 - 1 1/4 | 8 - 1 3/8 | 8 - 1 5/8 | 12 - 1 1/2 | 12 - 1 3/4 | 12 - 2 | 16 - 2 1/8 | 16 - 2 3/8 | 16 - 2 5/8 | | |
| T | 11,91 | | 11,91 | 11,91 | 11,91 | 11,91 | 13,49 | 16,66 | 16,66 | 23,01 | 26,97 | 30,18 | | |
| S | 7,92 | | 7,92 | 7,92 | 7,92 | 7,92 | 9,53 | 11,13 | 11,13 | 14,27 | 15,88 | 17,48 | | |
| R | 0,8 | | 0,8 | 0,8 | 0,8 | 0,8 | 1,5 | 1,5 | 1,5 | 1,5 | 2,4 | 2,4 | | |
| H | 200 | | 249 | 285 | 320 | 395 | 450 | 561 | 660 | 750 | 850 | 955 | | |
| Kvs-value | | | 65 | 146 | 205 | 363 | 646 | 855 | 1496 | 2338 | 3410 | 4103 | 5355 | |
| Approx. Weight RF (2) | | | 70 | 105 | 130 | 300 | 386 | 450 | 600 | 1190 | 1530 | 1854 | 2060 | |
| Approx. Weight BW | | | 56 | 83 | 104 | 264 | 323 | 366 | 457 | 945 | 1166 | 1343 | 1380 | |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 2500

SERIES 31 ANSI RANGE



| Nominal Size | | inch | 2" | 2-1/2" | 3" | 4" | 5" | 6" | 8" | 10" | 12" |
|----------------|-----------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| DN | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 |
| End connection | RF | L | 451 | 508 | 578 | 673 | 794 | 914 | 1022 | 1270 | 1422 |
| | | ØB | 38 | 48,925 | 57 | 73 | 92,95 | 111 | 146 | 184 | 219 |
| | | ØD | 235 | 265 | 305 | 355 | 420 | 485 | 550 | 675 | 760 |
| | | ØK | 171,4 | 196,8 | 228,6 | 273 | 323,8 | 368,3 | 438,2 | 539,8 | 619,1 |
| | | ØF | 92,1 | 104,8 | 127 | 157,2 | 185,7 | 215,9 | 269,9 | 323,8 | 381 |
| | | C | 50,9 | 57,2 | 66,7 | 76,2 | 92,1 | 108 | 127 | 165,1 | 184,2 |
| | | f | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | n-Ød | 8 - 1 1/8 | 8 - 1 1/4 | 8 - 1 3/8 | 8 - 1 5/8 | 8 - 1 7/8 | 8 - 2 1/8 | 12 - 2 1/8 | 12 - 2 5/8 | 12 - 2 7/8 |
| | BW | L1 | 451 | 508 | 578 | 673 | 794 | 914 | 1022 | 1270 | 1422 |
| | | Schedule No.(1) | 160 | - | 160 | 160 | - | 160 | 160 | 160 | 160 |
| | | ØB | 38 | 48,925 | 57 | 73 | 92,95 | 111 | 146 | 184 | 219 |
| | | ØA1 | 60,3 | - | 91 | 117 | - | 172 | 223 | 278 | 329 |
| | | ØB1 | 42,82 | - | 66,5 | 87,5 | - | 132 | 173 | 216 | 257 |
| | | L2 | 454 | 511 | 581 | 676 | 797 | 918 | 1027 | 1276 | 1430 |
| | | ØB | 38 | 48,925 | 57 | 73 | 92,95 | 111 | 146 | 184 | 219 |
| | | ØD | 235 | 265 | 305 | 355 | 420 | 485 | 550 | 675 | 760 |
| | | ØK | 171,4 | 196,8 | 228,6 | 273 | 323,8 | 368,3 | 438,2 | 539,8 | 619,1 |
| | | ØG | 133 | 149 | 168 | 203 | 241 | 279 | 340 | 425 | 495 |
| | | ØP | 101,6 | 111,13 | 127 | 157,18 | 190,5 | 228,6 | 279,4 | 342,9 | 406,4 |
| | | C | 50,9 | 57,2 | 66,7 | 76,2 | 92,1 | 108 | 127 | 165,1 | 184,2 |
| | RTJ | n-Ød | 8 - 1 1/8 | 8 - 1 1/4 | 8 - 1 3/8 | 8 - 1 5/8 | 8 - 1 7/8 | 8 - 2 1/8 | 12 - 2 1/8 | 12 - 2 5/8 | 12 - 2 7/8 |
| | | T | 11,91 | 13,49 | 13,49 | 16,66 | 19,84 | 19,84 | 23,01 | 30,18 | 33,32 |
| | | S | 7,92 | 9,53 | 9,53 | 11,13 | 12,7 | 12,7 | 14,27 | 17,48 | 17,48 |
| | | R | 0,8 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 2,4 | 2,4 |
| | | H | 280 | 297 | 310 | 370 | 436 | 485 | 544 | 710 | 800 |
| | | Kvs-value | 41 | 74 | 98 | 167 | 304 | 406 | 726 | 1154 | 1684 |
| | Approx. Weight RF (2) | 88 | 135 | 170 | 400 | 486 | 550 | 900 | 1600 | 2300 | |
| | Approx. Weight BW | 65 | 96 | 118 | 321 | 334 | 344 | 869 | 1018 | 1470 | |

(1) Other schedule nos. on request
 (2) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Weights in kg
 For more information about flanged and welded ends refer to page 16