



QUADAX<sup>®</sup> 4-OFFSET BUTTERFLY VALVE EQ -

# TECHNICAL BROCHURE

DIN, EN, ISO PN 10-250 / ANSI CLASS 150-1500

[quadax.de](http://quadax.de)



## GENERAL INFORMATION

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Shut-off valve:     | 4-Offset (TOV upgradet)                                                        |
| Seal:               | Metal                                                                          |
| Pressure ratings:   | PN 10 – 250 / ANSI 150 – 1500                                                  |
| Nominal diameters:  | DN 50 – 1800, NPS 2" – 72"                                                     |
| Temperatures:       | -270°C to +800°C                                                               |
| Face-to-face length | EN 558, API 609, ISO 5752, B16.10;                                             |
| Housing materials:  | Steel, stainless steel, brass, special steels e.g. Monel, Duplex, Hastelloy... |

### Additional available:

- General drawings
- Torque values
- Tightening torques
- ISO flange 5211
- Operating and maintenance instructions
- Actuator orientation
- Coating data sheet
- Disc protrusion

Additional technical data sheets available on request:  
Shaft connection, pressure & temperature tables; bill of materials (BOM), bolt tightening torques, spare parts lists, operation & maintenance instructions, EC Machinery Directive,

## DETAILS / CONSTRUCTION / STRUCTURE

|                                                                                              |
|----------------------------------------------------------------------------------------------|
| Flanges according to DIN EN 1092 in PN 10/16/25/40/63/100/160/250                            |
| Flanges according to ANSI B16.5, 150/300/600/900/1500/ASME 16.34                             |
| 4-OFFSET, round seat and sealing geometry, OCT                                               |
| Torque-sealing function, open/close, control, ESD function                                   |
| Cone to cone, jam and friction-free                                                          |
| QUADAX standard TRIM is "full rated"                                                         |
| Special version REDUCED TRIM, Δp A=20 bar , X=52, B=102, C=160                               |
| One-piece body with ISO 5211 mounting flange                                                 |
| Body seat standard Inconel 625 hardened                                                      |
| Optional Stellite 21                                                                         |
| Bearing protector                                                                            |
| Seal ring as graphite or all metal lamella, Inconel O-ring, ball shape                       |
| Blowout-proof, one-piece shaft (API 609)                                                     |
| Face-to-face length according to EN 558-1 R13, 14, 16, 20, R110                              |
| API 609 T2, ISO 5752, ANSI B 16.10                                                           |
| TA Air, ISO 15848-1&2, API 641, EPA-21                                                       |
| CE / PED, Firesafe, ATEX Zone 1, S.I.L., ISO 9001, ISO 5211, CRN, EAC; TSG                   |
| Test standards EN 12266-1; API 598, ISO 5208, API 6D, BS 6436, EN 16668; ISO 28921, FCI 70-2 |
| Horizontal shaft orientation (recommended)                                                   |
| Corrosion protection min C1 – C5M                                                            |

## OPTIONS

|                                    |
|------------------------------------|
| Own automation                     |
| Sealed bearing desing              |
| High-performance bearing bush      |
| Steam jacket                       |
| Bonnet extension (insulating part) |
| With integrated cold box flange    |
| Stuffing box with life loaded      |
| Hydrogen version                   |
| Oxygen version (Cleaned & BAM)     |
| Sniffer- & Flushing connection     |

## BODY CONFIGURATION



**QUADAX® –  
DOUBLE FLANGE  
VERSION**



**QUADAX® –  
FLANGED VERSION**



**QUADAX® –  
WELDED VERSION**



**QUADAX® –  
GATE VALVE  
REPLACEMENT**



**QUADAX® –  
TOP ENTRY**

**Nominal diameter range:** 2" to 72" / DN 50 to DN 1800

**Pressure ratings:** 150 to 1500 / PN 10 to PN 250

**Temperature range:** -270°C to +800°C

**Housing material:** A216 WCB, A351 CF8M, Inconel, Hastelloy, Duplex, Monel, Copper

**Seat material:** Inconel 625 clad, Stellite 21, others on request

**Tightness:** EN 12266-1 / API 609 soft seated (bubble tight)

**Emission:** TA Luft / ISO 15848-1 (A) (BH & API 641)

## HIGHEST PERFORMANCE AND MAXIMUM ECONOMIC EFFICIENCY



### EXTREME TEMPERATURE RANGES

Uniform wall thickness all round seat  
and sealing ring

Extreme temperatures from  
-270°C to +800°C

Even large temperature differences are  
compensated



### REDUCED PROCESS COSTS

Higher kvs/cvs values and thus lower  
energy loss

Smaller dimensioning of the nominal pipe  
diameter

Smaller actuators due to optimised  
torque requirements

Combination of shut-off and control

Reduced maintenance costs



### HIGHEST TIGHTNESS

Meets the highest sealing  
requirements

Bubble-tight sealing even in  
cryogenic applications

Innovative and patented seat sealing  
design



### INCREASED PROCESS RELIABILITY

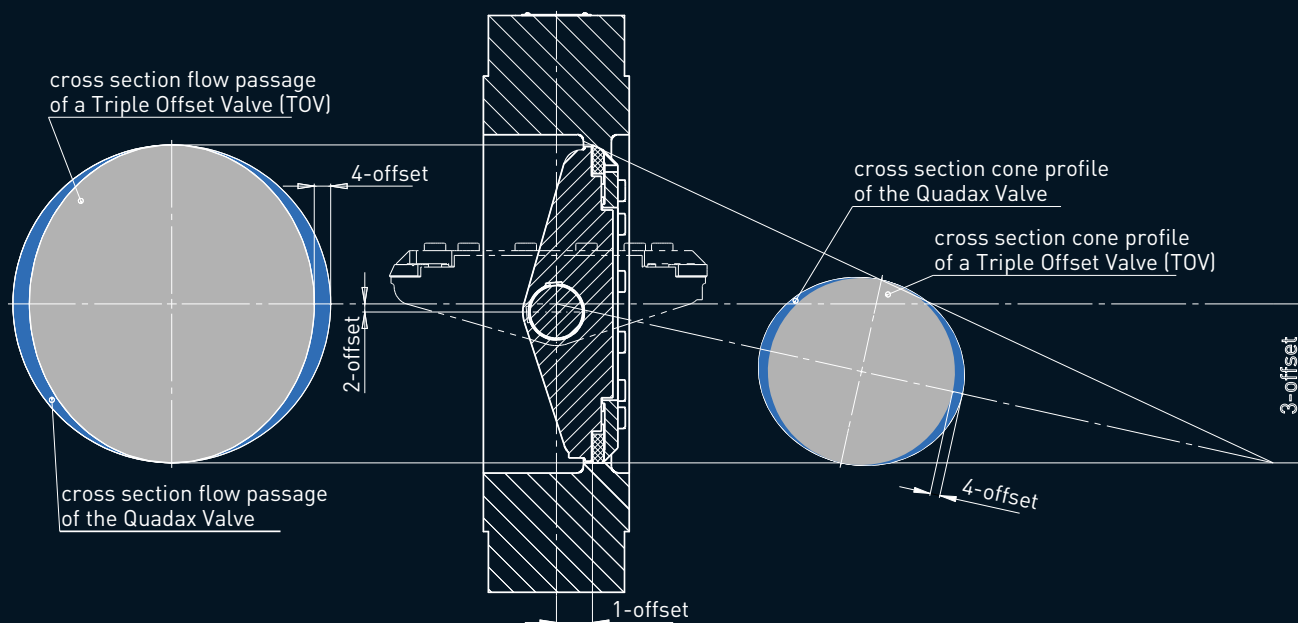
Low friction and wear-resistant

Reduced risk of failure

Jamming-free seat geometry

Increased lifespan and functionality

Quick acting < 1 second



## SUITABLE FOR ALL APPLICATIONS **SEAL RING OPTIONS**

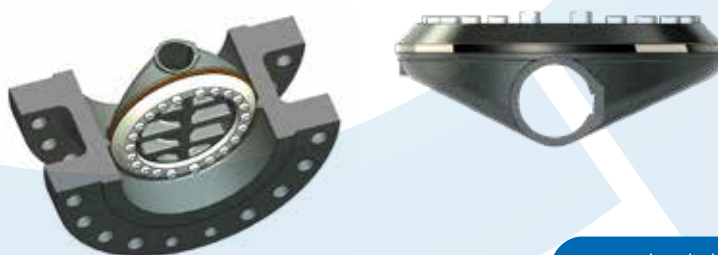
QUADAX® PREMIUM VALVES -  
 THE RIGHT SOLUTION FOR EVERY APPLICATION.



- GRAPHITE/STAINLESS STEEL LAMELLA
- ALL-STAINLESS STEEL LAMELLA
- INCONEL O-RING
- SOLID BALL SHAPE SEAL RING
- PTFE/STAINLESS STEEL LAMELLA
- PTFE O-RING

Additional versions on request

**VON -270 °C / -454 °F  
 BIS +800 °C / 1472 °F**





# MADE FOR THE **EXTREME**

## QUADAX PREMIUM VALVES

QUADAX<sup>®</sup> DATA SHEET - EQ

**DOUBLE-FLANGED** DIMENSION & WEIGHT

DIN, EN, ISO PN 10-250 / ANSI class 150-1500

01

[quadax.de](http://quadax.de)

MADE FOR THE **EXTREME**

With manual gearbox FTF EN 558 R16 / API 609 Table 5 Cat. B  
 Flange according to EN 12516 / ASME B16.5 \_ 16.34



## GENERAL INFORMATION

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Shut-off valve:     | 4-Offset (TOV upgradet)                                                        |
| Seal:               | Metal                                                                          |
| Pressure ratings:   | PN 10 – 250 / ANSI 150 – 1500                                                  |
| Nominal diameters:  | DN 50 – 1800, NPS 2" – 72"                                                     |
| Temperatures:       | -270°C to +800°C                                                               |
| Face-to-face length | EN 558, API 609, ISO 5752, B16.10;                                             |
| Housing materials:  | Steel, stainless steel, brass, special steels e.g. Monel, Duplex, Hastelloy... |

## DETAILS / CONSTRUCTION / STRUCTURE

Flanges according to DIN EN 1092 in PN 10/16/25/40/63/100/160/250

Flanges according to ANSI B16.5, 150/300/600/900/1500/ASME 16.34

4-OFFSET, round seat and sealing geometry, OCT

Torque-sealing function, open/close, control, ESD function

Cone to cone, jam and friction-free

QUADAX standard TRIM is "full rated"

Special version REDUCED TRIM,  
 $\Delta p$  A=20 bar , X=52, B=102, C=160

One-piece body with ISO 5211 mounting flange

Body seat standard Inconel 625 hardened

Optional Stellite 21

Bearing protector

Seal ring as graphite or all metal lamella, Inconel O-ring, ball shape

Blowout-proof, one-piece shaft (API 609)

Face-to-face length according to EN 558-1 R13, 14

API 609 T2, ISO 5752, API 609 Table 3a

TA Air 2021, ISO 15848-1&2, API 641, EPA-21

CE / PED, Firesafe, ATEX Zone 1, S.I.L., ISO 9001, ISO 5211, CRN, EAC; TSG

Test standards EN 12266-1; API 598, ISO 5208, API 6D, BS 6436, EN 16668; ISO 28921, FCI 70-2

Horizontal shaft orientation (recommended)

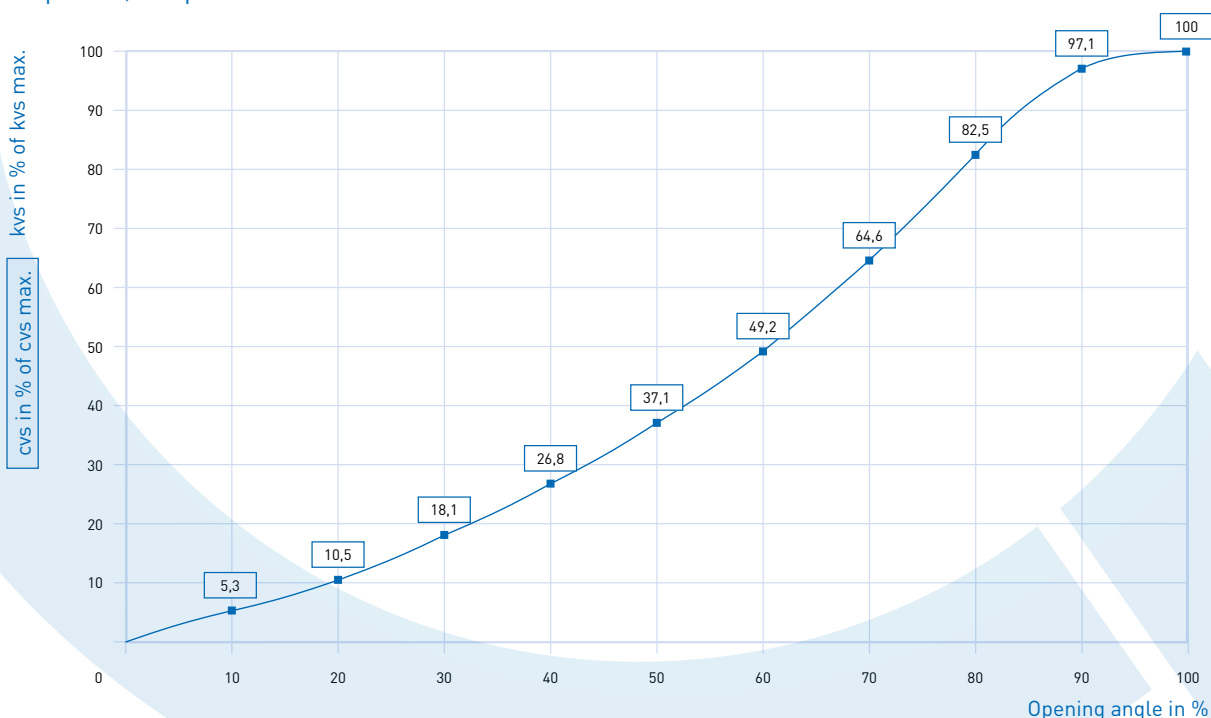
Corrosion protection min C1 – C5M

### kvs curve

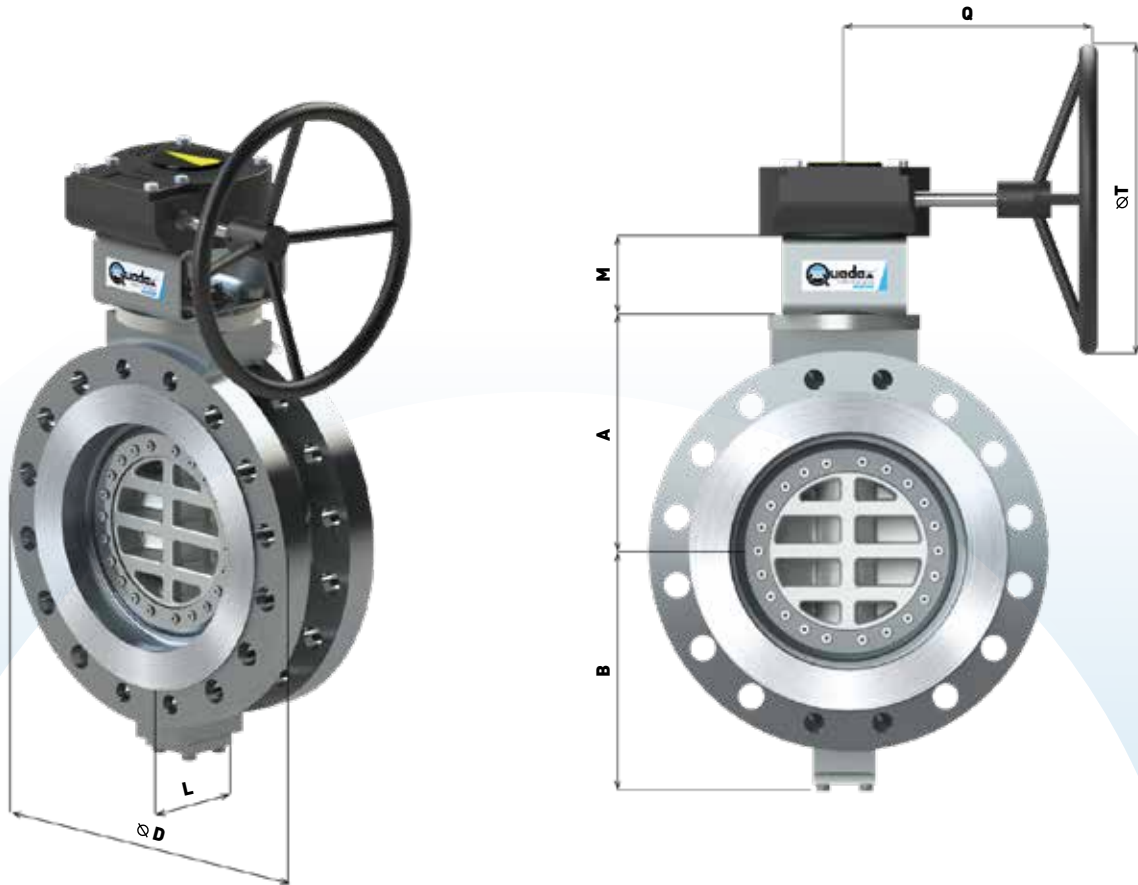
Flow measurement with water at  
 $\Delta p$  1 bar, temperature 20 °C

### cvs curve

Flow measurement with water at  
 $\Delta p$  14.5 psi, temperature 68 °F



With manual gearbox FTF EN 558 R16 / API 609 Table 5 Cat. B  
 Flange according to EN 12516 / ASME B16.5 \_ 16.34



Trim X/A, all dimensions in mm, weights in kg

|        |     | EN558-1R13<br>PN 10/16 ANSI 150 |     |     |     | PN 10 |      |      |     |         | PN 16 |      |      |     |         | ANSI 150 |      |      |     |         |      |
|--------|-----|---------------------------------|-----|-----|-----|-------|------|------|-----|---------|-------|------|------|-----|---------|----------|------|------|-----|---------|------|
| DN     | ND  | A                               | B   | F   | M   | L     | D    | Q    | T   | Gewicht | L     | D    | Q    | T   | Gewicht | L        | D    | Q    | T   | Gewicht |      |
| Trim X | 50  | 2"                              | 105 | 109 | F07 | 60    | 108  | 165  | 158 | 200     | 15    | 108  | 165  | 158 | 200     | 15       | 108  | 165  | 158 | 200     | 15   |
|        | 65  | 2,5"                            | 128 | 132 | F07 | 60    | 114  | 200  | 217 | 200     | 23    | 114  | 200  | 217 | 200     | 23       | 114  | 190  | 217 | 200     | 22   |
|        | 80  | 3"                              | 128 | 132 | F07 | 60    | 114  | 200  | 217 | 200     | 24    | 114  | 200  | 217 | 200     | 24       | 114  | 200  | 217 | 200     | 24   |
|        | 100 | 4"                              | 162 | 161 | F10 | 80    | 127  | 230  | 217 | 200     | 33    | 127  | 230  | 217 | 200     | 33       | 127  | 230  | 217 | 200     | 33   |
|        | 125 | 5"                              | 190 | 189 | F12 | 80    | 140  | 270  | 217 | 200     | 45    | 140  | 270  | 217 | 200     | 45       | 140  | 254  | 217 | 200     | 43   |
|        | 150 | 6"                              | 203 | 207 | F14 | 80    | 140  | 295  | 282 | 300     | 59    | 140  | 295  | 282 | 300     | 59       | 140  | 295  | 282 | 300     | 58   |
|        | 200 | 8"                              | 240 | 244 | F16 | 100   | 152  | 352  | 282 | 300     | 77    | 152  | 352  | 282 | 300     | 76       | 152  | 352  | 282 | 300     | 78   |
|        | 250 | 10"                             | 279 | 284 | F16 | 100   | 165  | 405  | 282 | 300     | 104   | 165  | 405  | 285 | 400     | 110      | 165  | 405  | 305 | 500     | 113  |
| Trim A | 300 | 12"                             | 305 | 310 | F16 | 100   | 178  | 455  | 285 | 400     | 123   | 178  | 455  | 305 | 500     | 126      | 178  | 485  | 346 | 500     | 152  |
|        | 350 | 14"                             | 320 | 325 | F16 | 100   | 190  | 515  | 346 | 500     | 165   | 190  | 520  | 346 | 700     | 175      | 190  | 550  | 346 | 700     | 202  |
|        | 400 | 16"                             | 345 | 356 | F25 | 200   | 216  | 565  | 346 | 500     | 253   | 216  | 580  | 346 | 700     | 268      | 216  | 590  | 348 | 500     | 278  |
|        | 450 | 18"                             | 373 | 384 | F25 | 200   | 222  | 615  | 346 | 700     | 287   | 222  | 640  | 348 | 500     | 306      | 222  | 640  | 348 | 700     | 319  |
|        | 500 | 20"                             | 397 | 408 | F25 | 200   | 229  | 670  | 348 | 500     | 295   | 229  | 725  | 348 | 700     | 344      | 229  | 700  | 417 | 500     | 357  |
|        | 600 | 24"                             | 482 | 483 | F30 | 200   | 267  | 780  | 417 | 500     | 513   | 267  | 840  | 417 | 700     | 565      | 267  | 813  | 417 | 700     | 562  |
|        | 700 | 28"                             | 580 | 594 | F35 | 200   | 292  | 895  | 430 | 700     | 734   | 292  | 910  | 470 | 800     | 762      | 292  | 927  | 470 | 800     | 814  |
|        | 750 | 30"                             | 580 | 594 | F35 | 200   | 318  | 970  | 430 | 700     | 876   | 318  | 970  | 470 | 800     | 902      | 318  | 985  | 470 | 800     | 1025 |
|        | 800 | 32"                             | 660 | 673 | F35 | 200   | 318  | 1085 | 470 | 800     | 1047  | 318  | 1085 | 470 | 800     | 1062     | 318  | 1060 | 470 | 800     | 1193 |
|        | 900 | 36"                             | 730 | 744 | F35 | 200   | 330  | 1125 | 491 | 500     | 1184  | 330  | 1125 | 491 | 800     | 1225     | 330  | 1168 | 491 | 800     | 1446 |
| 1000   | 40" | 817                             | 833 | F40 | 200 | 410   | 1255 | 491  | 800 | 1801    | 410   | 1255 | 491  | 800 | 1858    | 410      | 1290 | 541  | 900 | 2121    |      |

With manual gearbox FTF EN 558 R16 / API 609 Table 5 Cat. B  
Flange according to EN 12516 / ASME B16.5 \_ 16.34

Trim X, all dimensions in mm, weights in kg

|      |      | EN558-1R13<br>PN 25/40 ANSI 300 |     |     |     | PN 25 |      |     |     |         | PN 40 |      |     |     |         | ANSI 300 |      |     |     |         |
|------|------|---------------------------------|-----|-----|-----|-------|------|-----|-----|---------|-------|------|-----|-----|---------|----------|------|-----|-----|---------|
| DN   | ND   | A                               | B   | F   | M   | L     | D    | Q   | T   | Gewicht | L     | D    | Q   | T   | Gewicht | L        | D    | Q   | T   | Gewicht |
| 50   | 2"   | 105                             | 109 | F07 | 60  | 108   | 165  | 158 | 200 | 15      | 108   | 165  | 158 | 200 | 15      | 108      | 165  | 158 | 200 | 16      |
| 65   | 2,5" | 128                             | 132 | F07 | 60  | 114   | 200  | 217 | 200 | 23      | 114   | 200  | 217 | 200 | 23      | 114      | 210  | 217 | 200 | 25      |
| 80   | 3"   | 128                             | 132 | F07 | 60  | 114   | 200  | 217 | 200 | 24      | 114   | 200  | 217 | 200 | 24      | 114      | 210  | 217 | 200 | 26      |
| 100  | 4"   | 162                             | 161 | F10 | 80  | 127   | 230  | 217 | 200 | 32      | 127   | 230  | 217 | 200 | 32      | 127      | 254  | 217 | 200 | 39      |
| 125  | 5"   | 190                             | 189 | F12 | 80  | 140   | 270  | 217 | 200 | 45      | 140   | 270  | 217 | 200 | 45      | 140      | 280  | 237 | 200 | 61      |
| 150  | 6"   | 203                             | 207 | F14 | 80  | 140   | 295  | 282 | 300 | 58      | 140   | 295  | 311 | 300 | 72      | 140      | 320  | 311 | 300 | 82      |
| 200  | 8"   | 240                             | 244 | F16 | 100 | 152   | 352  | 285 | 400 | 83      | 152   | 380  | 326 | 400 | 108     | 152      | 380  | -   | -   | -       |
| 250  | 10"  | 279                             | 284 | F16 | 100 | 165   | 425  | 305 | 500 | 123     | 165   | 450  | 348 | 500 | 146     | 165      | 445  | 348 | 500 | 152     |
| 300  | 12"  | 305                             | 310 | F16 | 100 | 178   | 485  | 346 | 500 | 152     | 178   | 515  | 346 | 700 | 193     | 178      | 515  | 348 | 500 | 196     |
| 350  | 14"  | 325                             | 336 | F25 | 200 | 190   | 550  | 348 | 500 | 226     | 190   | 585  | 348 | 700 | 282     | 190      | 585  | 417 | 500 | 301     |
| 400  | 16"  | 385                             | 386 | F30 | 200 | 216   | 620  | 348 | 700 | 328     | 216   | 660  | 417 | 500 | 398     | 216      | 660  | 417 | 700 | 402     |
| 450  | 18"  | 405                             | 406 | F30 | 200 | 222   | 680  | 417 | 500 | 417     | 222   | 680  | 417 | 700 | 416     | 222      | 710  | 417 | 700 | 444     |
| 500  | 20"  | 440                             | 444 | F35 | 200 | 229   | 725  | 417 | 500 | 492     | 229   | 770  | 417 | 700 | 558     | 229      | 770  | 430 | 700 | 578     |
| 600  | 24"  | 530                             | 544 | F35 | 200 | 267   | 845  | 430 | 700 | 695     | 267   | 908  | 470 | 800 | 847     | 267      | 908  | 470 | 800 | 861     |
| 700  | 28"  | 630                             | 646 | F40 | 200 | 292   | 960  | 491 | 500 | 1050    | 292   | 995  | 491 | 800 | 1180    | 292      | 1035 | 491 | 800 | 1297    |
| 750  | 30"  | 630                             | 646 | F40 | 200 | 318   | 1020 | 491 | 500 | 1213    | 318   | 1080 | 491 | 800 | 1411    | 318      | 1090 | 491 | 800 | 1520    |
| 800  | 32"  | 700                             | 716 | F40 | 200 | 318   | 1085 | 491 | 800 | 1296    | 318   | 1140 | 541 | 900 | 1595    | 318      | 1149 | -   | -   | -       |
| 900  | 36"  | 830                             | 836 | F48 | 200 | 330   | 1185 | 541 | 900 | 1824    | 330   | 1250 | -   | -   | -       | 330      | 1270 | -   | -   | -       |
| 1000 | 40"  | 920                             | 929 | F48 | -   | 410   | 1320 | -   | -   | -       | 410   | 1360 | -   | -   | -       | 410      | 1240 | -   | -   | -       |

Subject to technical modifications

Trim C/B, all dimensions in mm, weights in kg

|        |     | EN558-1R14<br>PN 63/100 ANSI 600 |     |     |     | PN 63 |     |     |     |     | PN 100  |     |     |     |     | ANSI 600 |     |     |     |     |         |
|--------|-----|----------------------------------|-----|-----|-----|-------|-----|-----|-----|-----|---------|-----|-----|-----|-----|----------|-----|-----|-----|-----|---------|
| Trim C | DN  | ND                               | A   | B   | F   | M     | L   | D   | Q   | T   | Gewicht | L   | D   | Q   | T   | Gewicht  | L   | D   | Q   | T   | Gewicht |
|        | 80  | 3"                               | 143 | 139 | F14 | 80    | 180 | 230 | 217 | 200 | 39      | 180 | 230 | 278 | 200 | 59       | 180 | 230 | -   | -   | -       |
|        | 100 | 4"                               | 170 | 176 | F14 | 80    | 190 | 275 | 278 | 200 | 82      | 190 | 275 | -   | -   | -        | 190 | 275 | -   | -   | -       |
|        | 150 | 6"                               | 203 | 205 | F16 | 100   | 210 | 355 | 313 | 300 | 116     | 210 | 355 | 382 | 300 | 132      | 210 | 355 | 382 | 300 | 138     |
|        | 200 | 8"                               | 255 | 257 | F16 | 100   | 230 | 430 | 397 | 400 | 172     | 230 | 430 | 397 | 400 | 182      | 230 | 430 | 397 | 400 | 191     |
|        | 250 | 10"                              | 279 | 287 | F25 | 200   | 250 | 508 | 417 | 500 | 261     | 250 | 508 | 430 | 500 | 285      | 250 | 508 | 430 | 500 | 294     |
| Trim B | 300 | 12"                              | 335 | 343 | F30 | 200   | 270 | 585 | 417 | 500 | 359     | 270 | 585 | 417 | 700 | 383      | 270 | 585 | 417 | 700 | 388     |
|        | 350 | 14"                              | 368 | 389 | F35 | 200   | 290 | 655 | 417 | 700 | 479     | 290 | 655 | 470 | 800 | 546      | 290 | 655 | 470 | 800 | 552     |
|        | 400 | 16"                              | 435 | 446 | F35 | 200   | 310 | 715 | 470 | 800 | 644     | 310 | 715 | -   | -   | -        | 310 | 715 | 470 | 800 | 691     |
|        | 450 | 18"                              | 415 | 406 | F40 | 200   | -   | -   | -   | -   | -       | -   | -   | -   | -   | -        | 330 | 745 | 491 | 800 | 835     |
|        | 500 | 20"                              | 528 | 541 | F40 | 200   | 350 | 870 | 491 | 500 | 1030    | 350 | 870 | 491 | 800 | 1136     | 350 | 870 | 491 | 800 | 1136    |
|        | 600 | 24"                              | 596 | 609 | F40 | 200   | 390 | 940 | 491 | 800 | 1340    | -   | -   | -   | -   | -        | 390 | 940 | -   | -   | -       |

Subject to technical modifications

# QUADAX® DATA SHEET - EQ

## DOUBLE-FLANGED DIMENSION & WEIGHT



With manual gearbox FTF EN 558 R16 / API 609 Table 5 Cat. B  
Flange according to EN 12516 / ASME B16.5 \_ 16.34

Trim X/A, all dimensions in mm, weights in kg

|        | DN   | ND   | EN558-1R14<br>PN 10/16 ANSI 150 |     |     |     | PN 10 |      |     |     |         | PN 16 |      |     |     |         | ANSI 150 |      |     |     |         |
|--------|------|------|---------------------------------|-----|-----|-----|-------|------|-----|-----|---------|-------|------|-----|-----|---------|----------|------|-----|-----|---------|
|        |      |      | A                               | B   | F   | M   | L     | D    | Q   | T   | Gewicht | L     | D    | Q   | T   | Gewicht | L        | D    | Q   | T   | Gewicht |
| Trim X | 50   | 2"   | 105                             | 109 | F07 | 60  | 150   | 165  | 158 | 200 | 17      | 150   | 165  | -   | -   | -       | 150      | 165  | 158 | 200 | 17      |
|        | 65   | 2.5" | 128                             | 132 | F07 | 60  | 180   | 200  | 217 | 200 | 29      | 180   | 200  | 217 | 200 | 29      | 180      | 200  | 217 | 200 | 26      |
|        | 80   | 3"   | 128                             | 132 | F07 | 60  | 180   | 200  | 217 | 200 | 29      | 180   | 200  | 217 | 200 | 29      | 180      | 200  | 217 | 200 | 26      |
|        | 100  | 4"   | 162                             | 161 | F10 | 80  | 190   | 230  | 217 | 200 | 37      | 190   | 230  | 217 | 200 | 37      | 190      | 230  | 217 | 200 | 39      |
|        | 125  | 5"   | 190                             | 189 | F12 | 80  | 200   | 270  | 217 | 200 | 50      | 200   | 270  | 217 | 200 | 50      | 200      | 254  | 217 | 200 | 46      |
|        | 150  | 6"   | 203                             | 207 | F14 | 80  | 210   | 300  | 282 | 300 | 69      | 210   | 300  | 282 | 300 | 69      | 210      | 295  | 282 | 300 | 79      |
|        | 200  | 8"   | 240                             | 244 | F16 | 100 | 230   | 360  | 282 | 300 | 93      | 230   | 360  | 282 | 300 | 92      | 230      | 352  | 282 | 300 | 87      |
|        | 250  | 10"  | 279                             | 284 | F16 | 100 | 250   | 405  | 282 | 300 | 110     | 250   | 405  | 285 | 400 | 116     | 250      | 405  | 305 | 500 | 129     |
| Trim A | 300  | 12"  | 305                             | 310 | F16 | 100 | 270   | 460  | 285 | 400 | 138     | 270   | 460  | 305 | 500 | 141     | 270      | 485  | 346 | 500 | 166     |
|        | 350  | 14"  | 320                             | 325 | F16 | 100 | 290   | 515  | 346 | 500 | 183     | 290   | 515  | 346 | 700 | 190     | 290      | 550  | 346 | 700 | 216     |
|        | 400  | 16"  | 345                             | 356 | F25 | 200 | 310   | 580  | 346 | 500 | 292     | 310   | 590  | 346 | 700 | 307     | 310      | 590  | 348 | 500 | 315     |
|        | 450  | 18"  | 373                             | 384 | F25 | 200 | 330   | 615  | 346 | 700 | 327     | 330   | 640  | 348 | 500 | 348     | 330      | 640  | 348 | 700 | 361     |
|        | 500  | 20"  | 397                             | 408 | F25 | 200 | 350   | 715  | 348 | 500 | 338     | 350   | 715  | 348 | 700 | 362     | 350      | 700  | 417 | 500 | 386     |
|        | 600  | 24"  | 482                             | 483 | F30 | 200 | 390   | 780  | 417 | 500 | 567     | 390   | 845  | 417 | 700 | 637     | 390      | 813  | 417 | 700 | 636     |
|        | 700  | 28"  | 580                             | 594 | F35 | 200 | 430   | 910  | 430 | 700 | 794     | 430   | 910  | 470 | 800 | 826     | 430      | 927  | 470 | 800 | 939     |
|        | 750  | 30"  | 580                             | 594 | F35 | 200 | 470   | 970  | 430 | 700 | 973     | 470   | 970  | 470 | 800 | 1071    | 470      | 985  | 470 | 800 | 1147    |
|        | 800  | 32"  | 660                             | 673 | F35 | 200 | 470   | 1085 | 470 | 800 | 1138    | 470   | 1085 | 470 | 800 | 1173    | 470      | 1060 | 470 | 800 | 1271    |
|        | 900  | 36"  | 730                             | 744 | F35 | 200 | 510   | 1115 | 491 | 500 | 1330    | 510   | 1125 | 491 | 800 | 1463    | 510      | 1168 | 491 | 800 | 1580    |
|        | 1000 | 40"  | 817                             | 833 | F40 | 200 | 550   | 1255 | 491 | 800 | 1943    | 550   | 1255 | 491 | 800 | 2012    | 550      | 1290 | 541 | 900 | 2161    |

Subject to technical modifications

Trim X, all dimensions in mm, weights in kg

|  | DN   | ND   | EN558-1R14<br>PN 25/40 ANSI 300 |     |     |     | PN 25 |      |     |     |         | PN 40 |      |     |     |         | ANSI 300 |      |     |     |         |
|--|------|------|---------------------------------|-----|-----|-----|-------|------|-----|-----|---------|-------|------|-----|-----|---------|----------|------|-----|-----|---------|
|  |      |      | A                               | B   | F   | M   | L     | D    | Q   | T   | Gewicht | L     | D    | Q   | T   | Gewicht | L        | D    | Q   | T   | Gewicht |
|  | 50   | 2"   | 105                             | 109 | F07 | 60  | 150   | 165  | 158 | 200 | 17      | 150   | 165  | 158 | 200 | 17      | 150      | 165  | -   | -   | -       |
|  | 65   | 2.5" | 128                             | 132 | F07 | 60  | 180   | 200  | 217 | 200 | 29      | 180   | 200  | 217 | 200 | 29      | 180      | 210  | 217 | 200 | 31      |
|  | 80   | 3"   | 128                             | 132 | F07 | 60  | 180   | 200  | 217 | 200 | 29      | 180   | 200  | 217 | 200 | 29      | 180      | 210  | -   | -   | -       |
|  | 100  | 4"   | 162                             | 161 | F10 | 80  | 190   | 230  | 217 | 200 | 38      | 190   | 230  | 217 | 200 | 38      | 190      | 254  | 217 | 200 | 49      |
|  | 125  | 5"   | 190                             | 189 | F12 | 80  | 200   | 270  | 217 | 200 | 52      | 200   | 270  | 217 | 200 | 52      | 200      | 280  | 237 | 200 | 72      |
|  | 150  | 6"   | 203                             | 207 | F14 | 80  | 210   | 300  | 282 | 300 | 71      | 210   | 300  | 311 | 300 | 85      | 210      | 320  | -   | -   | -       |
|  | 200  | 8"   | 240                             | 244 | F16 | 100 | 230   | 360  | 285 | 400 | 103     | 230   | 380  | 326 | 400 | 120     | 230      | 380  | 282 | 300 | 111     |
|  | 250  | 10"  | 279                             | 284 | F16 | 100 | 250   | 450  | 305 | 500 | 143     | 250   | 450  | 348 | 500 | 159     | 250      | 445  | 348 | 500 | 179     |
|  | 300  | 12"  | 305                             | 310 | F16 | 200 | 270   | 515  | 346 | 500 | 187     | 270   | 515  | 470 | 800 | 278     | 270      | 515  | 348 | 500 | 233     |
|  | 350  | 14"  | 325                             | 336 | F25 | 200 | 290   | 550  | 348 | 500 | 246     | 290   | 585  | 348 | 700 | 323     | 290      | 585  | 417 | 500 | 355     |
|  | 400  | 16"  | 385                             | 386 | F30 | 200 | 310   | 660  | 348 | 700 | 392     | 310   | 660  | 417 | 500 | 443     | 310      | 660  | 417 | 700 | 468     |
|  | 450  | 18"  | 405                             | 406 | F30 | 200 | 330   | 680  | 417 | 500 | 468     | 330   | 680  | 417 | 700 | 467     | 330      | 710  | 417 | 700 | 541     |
|  | 500  | 20"  | 440                             | 444 | F35 | 200 | 350   | 770  | 417 | 500 | 634     | 350   | 770  | 417 | 700 | 658     | 350      | 770  | 430 | 700 | 687     |
|  | 600  | 24"  | 530                             | 544 | F35 | 200 | 390   | 890  | 430 | 700 | 878     | 390   | 890  | 470 | 800 | 954     | 390      | 908  | 470 | 800 | 1075    |
|  | 700  | 28"  | 630                             | 646 | F40 | 200 | 430   | 960  | 491 | 500 | 1150    | 430   | 995  | 491 | 800 | 1306    | 430      | 1035 | 491 | 800 | 1519    |
|  | 750  | 30"  | 630                             | 646 | F40 | 200 | 470   | 1020 | 491 | 500 | 1355    | 470   | 1080 | 491 | 800 | 1577    | 470      | 1090 | 491 | 800 | 1779    |
|  | 800  | 32"  | 700                             | 716 | F40 | 200 | 470   | 1085 | 491 | 800 | 1388    | 470   | 1140 | 541 | 900 | 1760    | 470      | 1149 | -   | -   | -       |
|  | 900  | 36"  | 830                             | 836 | F48 | 200 | 510   | 1185 | 541 | 900 | 1923    | 510   | 1250 | 491 | 800 | 2175    | 510      | 1270 | -   | -   | -       |
|  | 1000 | 40"  | 920                             | 929 | F48 | -   | 550   | 1320 | -   | -   | -       | 550   | 1360 | -   | -   | -       | 550      | 1240 | -   | -   | -       |

Subject to technical modifications



# **MADE FOR THE XTREME**

## **QUADAX PREMIUM VALVES**

QUADAX<sup>®</sup> DATA SHEET - EQ  
**LUG TYPE** DIMENSION & WEIGHT

DIN, EN, ISO PN 10-250 / ANSI class 150-1500

# 02

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MADE FOR THE XTREME

With manual gearbox FTF EN 558 R16 / API 609 Table 3a  
Flange according to EN 12516 / ASME B16.5 \_ 16.34



## GENERAL INFORMATION

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Shut-off valve:     | 4-Offset (TOV upgradet)                                                        |
| Seal:               | Metal                                                                          |
| Pressure ratings:   | PN 10 – 250 / ANSI 150 – 1500                                                  |
| Nominal diameters:  | DN 50 – 1800, NPS 2" – 72"                                                     |
| Temperatures:       | -270°C to +800°C                                                               |
| Face-to-face length | EN 558, API 609, ISO 5752, B16.10;                                             |
| Housing materials:  | Steel, stainless steel, brass, special steels e.g. Monel, Duplex, Hastelloy... |

## DETAILS / CONSTRUCTION / STRUCTURE

Flanges according to DIN EN 1092 in PN 10/16/25/40/63/100/160/250

Flanges according to ANSI B16.5, 150/300/600/900/1500/ASME 16.34

4-OFFSET, round seat and sealing geometry, OCT

Torque-sealing function, open/close, control, ESD function

Cone to cone, jam and friction-free

QUADAX standard TRIM is "full rated"

Special version REDUCED TRIM,  
 $\Delta p$  A=20 bar , X=52, B=102, C=160

One-piece body with ISO 5211 mounting flange

Body seat standard Inconel 625 hardened

Optional Stellite 21

Bearing protector

Seal ring as graphite or all metal lamella, Inconel O-ring, ball shape

Blowout-proof, one-piece shaft (API 609)

Face-to-face length according to EN 558-1 R13, 14

API 609 T2, ISO 5752, API 609 Table 3a

TA Air 2021, ISO 15848-1&2, API 641, EPA-21

CE / PED, Firesafe, ATEX Zone 1, S.I.L., ISO 9001, ISO 5211, CRN, EAC; TSG

Test standards EN 12266-1; API 598, ISO 5208, API 6D, BS 6436, EN 16668;  
ISO 28921, FCI 70-2

Horizontal shaft orientation (recommended)

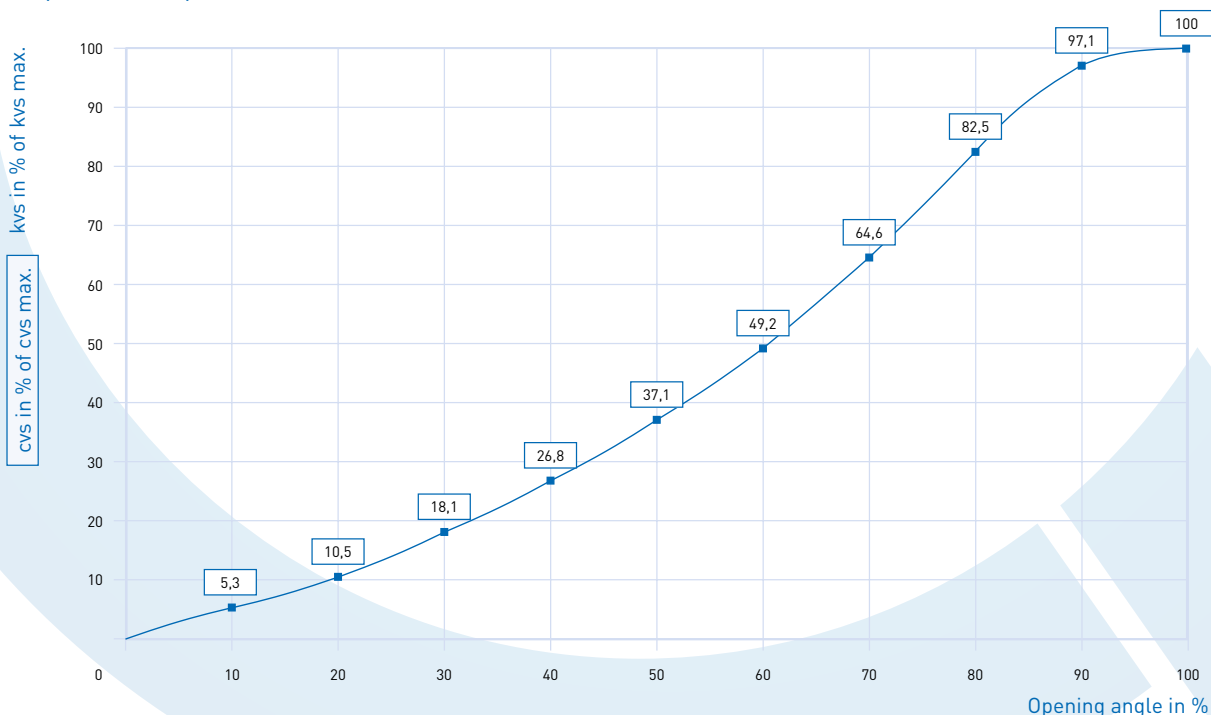
Corrosion protection min C1 – C5M

### kvs curve

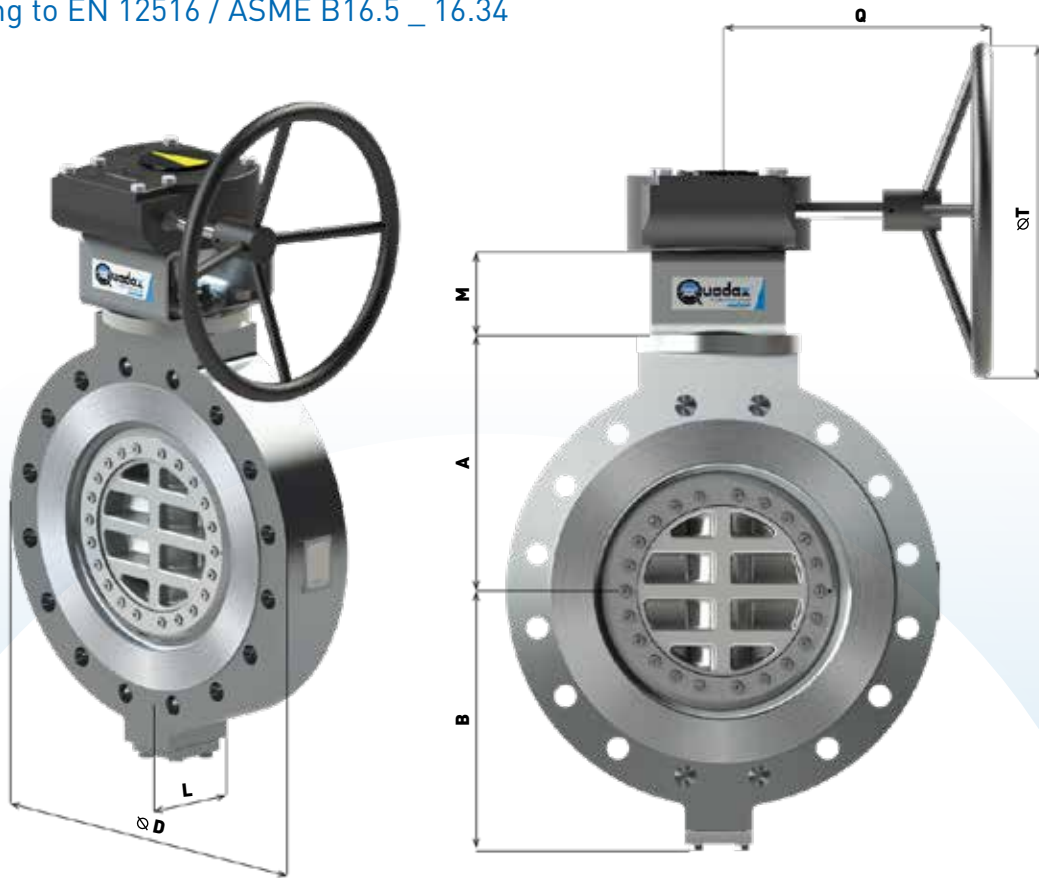
Flow measurement with water at  
 $\Delta p$  1 bar, temperature 20 °C

### cvs curve

Flow measurement with water at  
 $\Delta p$  14.5 psi, temperature 68 °F



With manual gearbox FTF EN 558 R16 / API 609 Table 3a  
Flange according to EN 12516 / ASME B16.5 \_ 16.34



Trim X/A, all dimensions in mm, weights in kg

|        |     | PN 10/16<br>ANSI 150 |     |     |     | PN 10 |      |      |     |      | PN 16   |      |      |     |      | ANSI 150 |      |      |     |      |         |
|--------|-----|----------------------|-----|-----|-----|-------|------|------|-----|------|---------|------|------|-----|------|----------|------|------|-----|------|---------|
|        | DN  | ND                   | A   | B   | F   | M     | L    | D    | Q   | T    | Gewicht | L    | D    | Q   | T    | Gewicht  | L    | D    | Q   | T    | Gewicht |
| Trim X | 50  | 2"                   | 105 | 109 | F07 | 60    | 44   | 165  | 158 | 200  | 12      | 44   | 165  | 158 | 200  | 12       | 44   | 165  | 158 | 200  | 13      |
|        | 65  | 2,5"                 | 128 | 132 | F07 | 60    | 64   | 200  | 217 | 200  | 22      | 64   | 200  | 217 | 200  | 22       | 48   | 190  | 217 | 200  | 18      |
|        | 80  | 3"                   | 128 | 132 | F07 | 60    | 64   | 200  | 217 | 200  | 22      | 64   | 200  | 217 | 200  | 22       | 48   | 190  | 217 | 200  | 18      |
|        | 100 | 4"                   | 162 | 161 | F10 | 80    | 64   | 230  | 217 | 200  | 29      | 64   | 230  | 217 | 200  | 29       | 54   | 230  | 217 | 200  | 26      |
|        | 125 | 5"                   | 190 | 189 | F12 | 80    | 70   | 250  | 217 | 200  | 36      | 70   | 250  | 217 | 200  | 36       | 58   | 254  | 217 | 200  | 33      |
|        | 150 | 6"                   | 203 | 207 | F14 | 80    | 76   | 295  | 282 | 300  | 52      | 76   | 295  | 282 | 300  | 52       | 57   | 280  | 282 | 300  | 44      |
|        | 200 | 8"                   | 240 | 244 | F16 | 100   | 89   | 352  | 282 | 300  | 77      | 89   | 352  | 282 | 300  | 77       | 64   | 352  | 282 | 300  | 66      |
|        | 250 | 10"                  | 279 | 284 | F16 | 100   | 114  | 405  | 282 | 300  | 117     | 114  | 405  | 285 | 400  | 123      | 71   | 405  | 305 | 500  | 97      |
| Trim A | 300 | 12"                  | 305 | 310 | F16 | 100   | 114  | 455  | 285 | 400  | 138     | 114  | 455  | 305 | 500  | 137      | 81   | 485  | 346 | 500  | 136     |
|        | 350 | 14"                  | 320 | 325 | F16 | 100   | 127  | 515  | 346 | 500  | 195     | 127  | 515  | 346 | 700  | 195      | 92   | 550  | 346 | 700  | 182     |
|        | 400 | 16"                  | 345 | 356 | F25 | 200   | 140  | 565  | 346 | 500  | 264     | 140  | 590  | 346 | 700  | 285      | 102  | 590  | 348 | 500  | 240     |
|        | 450 | 18"                  | 373 | 384 | F25 | 200   | 149  | 615  | 346 | 700  | 311     | 149  | 640  | 348 | 500  | 333      | 114  | 640  | 348 | 700  | 289     |
|        | 500 | 20"                  | 397 | 408 | F25 | 200   | 152  | 670  | 348 | 500  | 348     | 152  | 725  | 348 | 700  | 406      | 127  | 700  | 417 | 500  | 359     |
|        | 600 | 24"                  | 482 | 483 | F30 | 200   | 178  | 780  | 417 | 500  | 531     | 178  | 845  | 417 | 700  | 629      | 154  | 815  | 417 | 700  | 540     |
|        | 700 | 28"                  | 580 | 594 | F35 | 200   | 229  | 895  | 430 | 700  | 860     | 229  | 910  | 470 | 800  | 906      | 229  | 925  | 470 | 800  | 937     |
|        | 750 | 30"                  | 580 | 594 | F35 | 200   | 241  | 970  | 430 | 700  | 1088    | 241  | 970  | 470 | 800  | 1103     | 241  | 985  | 470 | 800  | 1116    |
|        | 800 | 32"                  | 660 | 673 | F35 | 200   | 241  | 1085 | 470 | 800  | 1363    | 241  | 1085 | 470 | 800  | 1377     | 241  | 1060 | 470 | 800  | 1306    |
|        | 900 | 36"                  | 730 | 744 | F35 | 200   | 241  | 1115 | 491 | 500  | 1422    | 241  | 1125 | 491 | 800  | 1453     | 241  | 1170 | 491 | 800  | 1583    |
| 1000   | 40" | 817                  | 833 | F40 | 200 | 300   | 1255 | 491  | 800 | 2120 | 300     | 1255 | 491  | 800 | 2118 | 300      | 1290 | 541  | 900 | 2351 |         |

Subject to technical modifications

With manual gearbox FTF EN 558 R16 / API 609 Table 3a  
Flange according to EN 12516 / ASME B16.5 \_ 16.34

| Trim X, all dimensions in mm, weights in kg |      |                      |     |     |     |       |      |     |     |         |       |      |     |     |         |          |      |     |     |         |
|---------------------------------------------|------|----------------------|-----|-----|-----|-------|------|-----|-----|---------|-------|------|-----|-----|---------|----------|------|-----|-----|---------|
| DN                                          | ND   | PN 25/40<br>ANSI 300 |     |     |     | PN 25 |      |     |     |         | PN 40 |      |     |     |         | ANSI 300 |      |     |     |         |
|                                             |      | A                    | B   | F   | M   | L     | D    | Q   | T   | Gewicht | L     | D    | Q   | T   | Gewicht | L        | D    | Q   | T   | Gewicht |
| 50                                          | 2"   | 105                  | 109 | F07 | 60  | 44    | 165  | 158 | 200 | 12      | 44    | 165  | 158 | 200 | 12      | 44       | 165  | 158 | 200 | 12      |
| 65                                          | 2,5" | 128                  | 132 | F07 | 60  | 64    | 200  | 217 | 200 | 22      | 64    | 200  | 217 | 200 | 22      | 48       | 210  | 217 | 200 | 19      |
| 80                                          | 3"   | 128                  | 132 | F07 | 60  | 64    | 200  | 217 | 200 | 22      | 64    | 200  | 217 | 200 | 22      | 48       | 210  | 217 | 200 | 19      |
| 100                                         | 4"   | 162                  | 161 | F10 | 80  | 64    | 230  | 217 | 200 | 28      | 64    | 230  | 217 | 200 | 28      | 54       | 254  | 217 | 200 | 28      |
| 125                                         | 5"   | 190                  | 189 | F12 | 80  | 70    | 270  | 217 | 200 | 39      | 70    | 270  | 217 | 200 | 39      | 58       | 280  | 237 | 200 | 46      |
| 150                                         | 6"   | 203                  | 207 | F14 | 80  | 76    | 295  | 282 | 300 | 53      | 76    | 295  | 311 | 300 | 67      | 59       | 320  | 311 | 300 | 65      |
| 200                                         | 8"   | 240                  | 244 | F16 | 100 | 89    | 352  | 285 | 400 | 83      | 89    | 375  | 326 | 400 | 97      | 73       | 380  | -   | -   | -       |
| 250                                         | 10"  | 279                  | 284 | F16 | 100 | 114   | 425  | 305 | 500 | 132     | 114   | 450  | 348 | 500 | 153     | 83       | 445  | 348 | 500 | 126     |
| 300                                         | 12"  | 305                  | 310 | F16 | 100 | 114   | 485  | 346 | 500 | 165     | 114   | 515  | 346 | 700 | 183     | 92       | 515  | 348 | 500 | 160     |
| 350                                         | 14"  | 325                  | 336 | F25 | 200 | 127   | 550  | 348 | 500 | 244     | 127   | 585  | 348 | 700 | 269     | 117      | 585  | 417 | 500 | 274     |
| 400                                         | 16"  | 385                  | 386 | F30 | 200 | 140   | 620  | 348 | 700 | 333     | 140   | 660  | 417 | 500 | 384     | 133      | 660  | 417 | 700 | 376     |
| 450                                         | 18"  | 405                  | 406 | F30 | 200 | 149   | 680  | 417 | 500 | 410     | 149   | 680  | 417 | 700 | 416     | 149      | 710  | 417 | 700 | 446     |
| 500                                         | 20"  | 440                  | 444 | F35 | 200 | 152   | 725  | 417 | 500 | 487     | 152   | 770  | 417 | 700 | 540     | 159      | 770  | 430 | 700 | 568     |
| 600                                         | 24"  | 530                  | 544 | F35 | 200 | 178   | 845  | 430 | 700 | 729     | 178   | 908  | 470 | 800 | 828     | 181      | 908  | 470 | 800 | 858     |
| 700                                         | 28"  | 630                  | 646 | F40 | 200 | 229   | 960  | 491 | 500 | 1216    | 229   | 995  | 491 | 800 | 1291    | 229      | 1035 | 491 | 800 | 1408    |
| 750                                         | 30"  | 630                  | 646 | F40 | 200 | 241   | 1020 | 491 | 500 | 1395    | 241   | 1080 | 491 | 800 | 1534    | 241      | 1090 | 491 | 800 | 1526    |
| 800                                         | 32"  | 700                  | 716 | F40 | 200 | 241   | 1085 | 491 | 800 | 1526    | 241   | 1140 | 541 | 900 | 1770    | 241      | 1150 | -   | -   | -       |
| 900                                         | 36"  | 830                  | 836 | F48 | 200 | 241   | 1185 | 541 | 900 | 2079    | 241   | 1250 | -   | -   | -       | 241      | 1270 | -   | -   | -       |
| 1000                                        | 40"  | 920                  | 929 | F48 | -   | 300   | 1320 | -   | -   | -       | 300   | 1360 | -   | -   | -       | 300      | 1240 | -   | -   | -       |

Subject to technical modifications

| Trim C/B, all dimensions in mm, weights in kg |     |                       |     |     |     |       |     |     |     |         |        |     |     |     |         |          |     |     |     |         |
|-----------------------------------------------|-----|-----------------------|-----|-----|-----|-------|-----|-----|-----|---------|--------|-----|-----|-----|---------|----------|-----|-----|-----|---------|
| DN                                            | ND  | PN 63/100<br>ANSI 600 |     |     |     | PN 63 |     |     |     |         | PN 100 |     |     |     |         | ANSI 600 |     |     |     |         |
|                                               |     | A                     | B   | F   | M   | L     | D   | Q   | T   | Gewicht | L      | D   | Q   | T   | Gewicht | L        | D   | Q   | T   | Gewicht |
| 100                                           | 4"  | 170                   | 176 | F14 | 80  | 64    | 275 | 278 | 200 | 54      | 64     | 275 | -   | -   | -       | 64       | 275 | -   | -   | -       |
| 150                                           | 6"  | 203                   | 205 | F16 | 100 | 78    | 355 | 313 | 300 | 87      | 78     | 355 | 382 | 300 | 102     | 78       | 355 | 382 | 300 | 102     |
| 200                                           | 8"  | 255                   | 257 | F16 | 100 | 102   | 430 | 397 | 400 | 148     | 102    | 430 | 397 | 400 | 148     | 102      | 430 | 397 | 400 | 146     |
| 250                                           | 10" | 279                   | 287 | F25 | 200 | 117   | 508 | 417 | 500 | 226     | 117    | 508 | 430 | 500 | 236     | 117      | 508 | 430 | 500 | 238     |
| 300                                           | 12" | 335                   | 343 | F30 | 200 | 140   | 585 | 417 | 500 | 329     | 140    | 585 | 417 | 700 | 331     | 140      | 585 | 417 | 700 | 315     |
| 350                                           | 14" | 368                   | 389 | F35 | 200 | 155   | 655 | 417 | 700 | 432     | 155    | 655 | 470 | 800 | 459     | 155      | 655 | 470 | 800 | 468     |
| 400                                           | 16" | 435                   | 446 | F35 | 200 | 178   | 715 | 470 | 800 | 608     | 178    | 715 | -   | -   | -       | 178      | 715 | 470 | 800 | 606     |
| 450                                           | 18" | 415                   | 406 | F40 | 200 | -     | -   | -   | -   | -       | -      | -   | -   | -   | -       | 200      | 745 | 491 | 800 | 763     |
| 500                                           | 20" | 528                   | 541 | F40 | 200 | 216   | 870 | 491 | 500 | 1071    | 216    | 870 | 491 | 800 | 1074    | 216      | 870 | 491 | 800 | 1073    |
| 600                                           | 24" | 596                   | 609 | F40 | 200 | 232   | 940 | 491 | 800 | 1312    | -      | -   | -   | -   | -       | 232      | 940 | -   | -   | -       |

Subject to technical modifications



# MADE FOR THE **EXTREME**

## QUADAX PREMIUM VALVES

QUADAX<sup>®</sup> DATA SHEET - EQ

**GATE VALVE REPLACEMENT** DIMENSION & WEIGHT

DIN, EN, ISO PN 10-250 / ANSI class 150-1500

03

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MADE FOR THE **EXTREME**

# QUADAX® DATA SHEET - EQ

## GATE VALVE REPLACEMENT

### DIMENSION & WEIGHT



With manual gearbox FTF ANSI B16.10  
Flange according to ASME B16.5 \_ 16.34



#### GENERAL INFORMATION

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Shut-off valve:     | 4-Offset (TOV upgradet)                                                        |
| Seal:               | Metal                                                                          |
| Pressure ratings:   | PN 10 – 250 / ANSI 150 – 1500                                                  |
| Nominal diameters:  | DN 50 – 1800, NPS 2" – 72"                                                     |
| Temperatures:       | -270°C to +800°C                                                               |
| Face-to-face length | EN 558, API 609, ISO 5752, B16.10;                                             |
| Housing materials:  | Steel, stainless steel, brass, special steels e.g. Monel, Duplex, Hastelloy... |

#### DETAILS / CONSTRUCTION / STRUCTURE

Flanges according to DIN EN 1092 in PN 10/16/25/40/63/100/160/250

Flanges according to ANSI B16.5, 150/300/600/900/1500/ASME 16.34

4-OFFSET, round seat and sealing geometry, OCT

Torque-sealing function, open/close, control, ESD function

Cone to cone, jam and friction-free

QUADAX standard TRIM is "full rated"

Special version REDUCED TRIM,  
 $\Delta p$  A=20 bar, X=52, B=102, C=160

One-piece body with ISO 5211 mounting flange

Body seat standard Inconel 625 hardened

Optional Stellite 21

Bearing protector

Seal ring as graphite or all metal lamella, Inconel O-ring, ball shape

Blowout-proof, one-piece shaft (API 609)

Face-to-face length according to ANSI B16.10

TA Air 2021, ISO 15848-1&2, API 641, EPA-21

CE / PED, Firesafe, ATEX Zone 1, S.I.L., ISO 9001, ISO 5211, CRN, EAC; TSG  
Test standards EN 12266-1; API 598, ISO 5208, API 6D, BS 6436, EN 16668;  
ISO 28921, FCI 70-2

Horizontal shaft orientation (recommended)

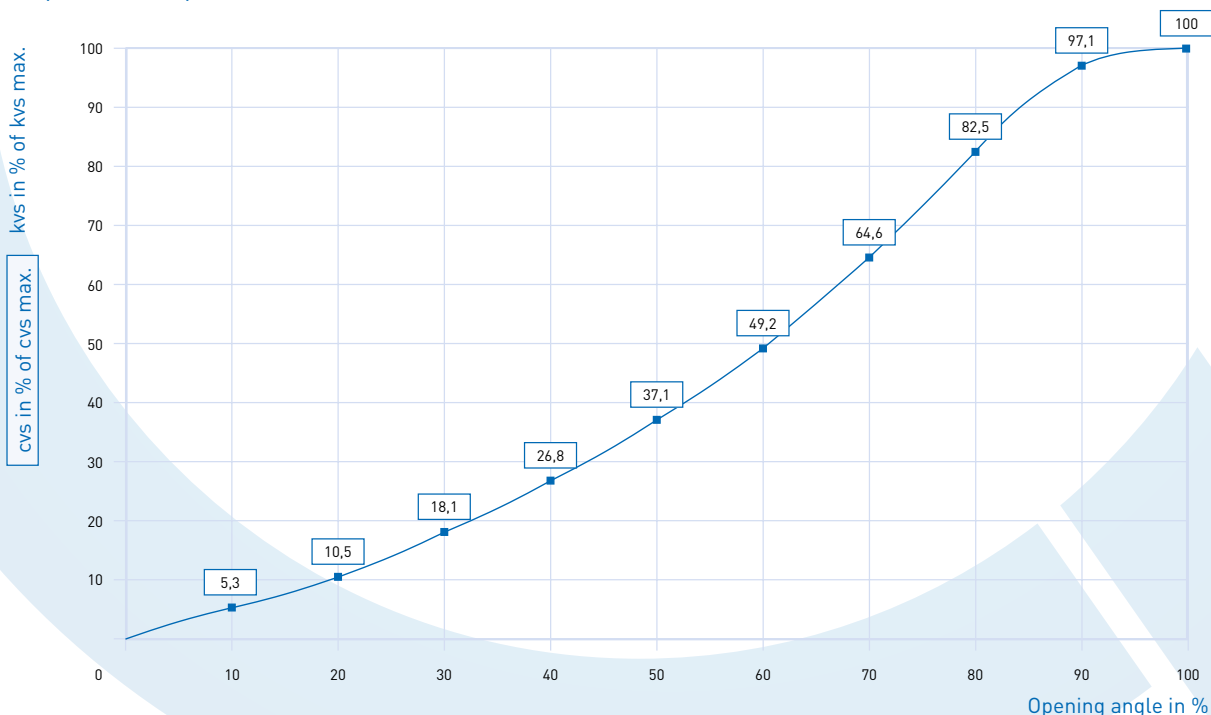
Corrosion protection min C1 – C5M

#### kvs curve

Flow measurement with water at  
 $\Delta p$  1 bar, temperature 20 °C

#### cvs curve

Flow measurement with water at  
 $\Delta p$  14.5 psi, temperature 68 °F



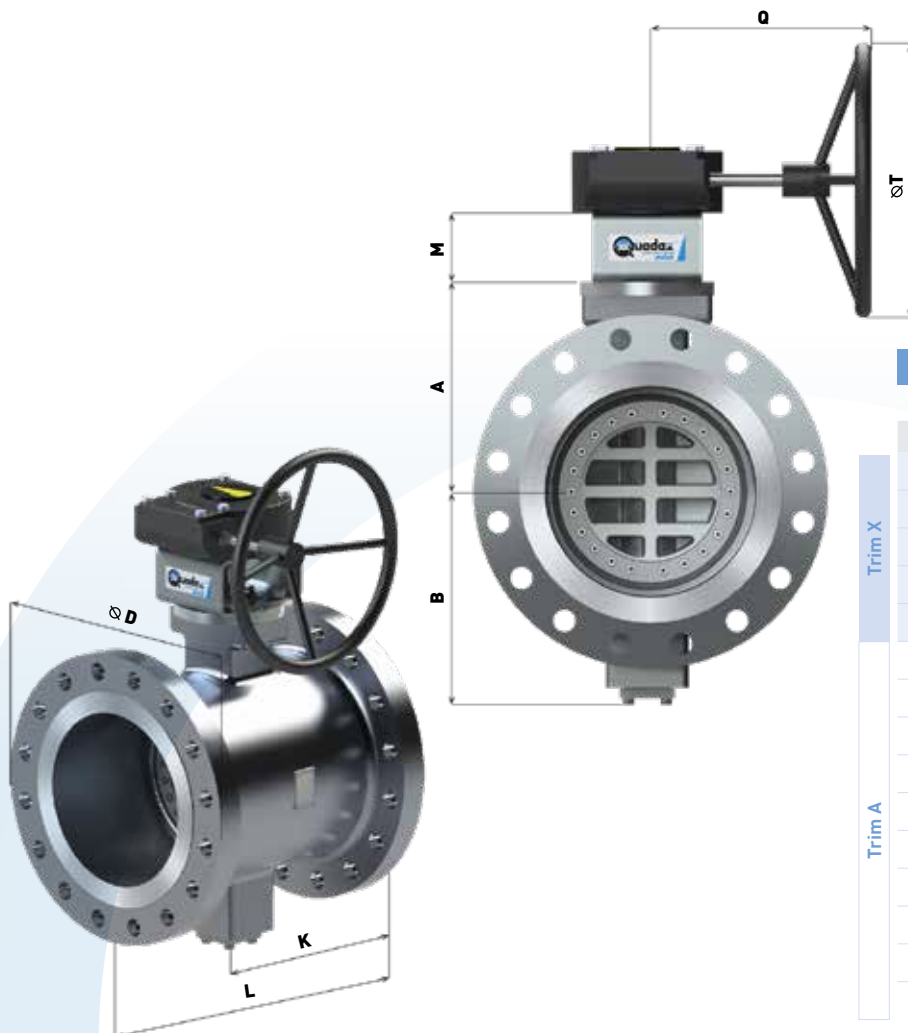
# QUADAX® DATA SHEET - EQ

## GATE VALVE REPLACEMENT

### DIMENSION & WEIGHT



With manual gearbox FTF ANSI B16.10  
Flange according to ASME B16.5 \_ 16.34



Trim X/A, all dimensions in mm, weights in kg

| ND  | ANSI 150 |     |     |     |     |     |      |     |     |         |
|-----|----------|-----|-----|-----|-----|-----|------|-----|-----|---------|
|     | A        | B   | F   | M   | L   | K   | D    | Q   | T   | Gewicht |
| 3"  | 128      | 132 | F07 | 60  | 203 | 101 | 190  | 217 | 200 | 26      |
| 4"  | 162      | 161 | F10 | 80  | 229 | 114 | 230  | 217 | 200 | 37      |
| 6"  | 203      | 207 | F14 | 80  | 267 | 125 | 280  | 282 | 300 | 63      |
| 8"  | 240      | 244 | F16 | 100 | 292 | 134 | 352  | 282 | 300 | 97      |
| 10" | 279      | 284 | F16 | 100 | 330 | 151 | 405  | 305 | 500 | 146     |
| 12" | 305      | 310 | F16 | 100 | 356 | 168 | 485  | 346 | 500 | 205     |
| 14" | 320      | 325 | F16 | 100 | 381 | 176 | 550  | 346 | 700 | 280     |
| 16" | 345      | 356 | F25 | 200 | 406 | 190 | 590  | 348 | 500 | 350     |
| 18" | 373      | 384 | F25 | 200 | 432 | 216 | 640  | 348 | 700 | 402     |
| 20" | 397      | 408 | F25 | 200 | 457 | 228 | 700  | 417 | 500 | 529     |
| 24" | 482      | 483 | F30 | 200 | 508 | 254 | 815  | 417 | 700 | 711     |
| 28" | 580      | 594 | F35 | 200 | 610 | 305 | 927  | 470 | 800 | 1021    |
| 30" | 580      | 594 | F35 | 200 | 610 | 305 | 985  | 470 | 800 | 1288    |
| 32" | 660      | 673 | F35 | 200 | 660 | 330 | 1060 | 470 | 800 | 1406    |
| 36" | 730      | 744 | F35 | 200 | 711 | 355 | 1168 | 491 | 800 | 1984    |

Subject to technical modifications

Trim X, all dimensions in mm, weights in kg

| ND  | ANSI 300 |     |     |     |      |     |      |     |     |         |
|-----|----------|-----|-----|-----|------|-----|------|-----|-----|---------|
|     | A        | B   | F   | M   | L    | K   | D    | Q   | T   | Gewicht |
| 3"  | 128      | 132 | F07 | 60  | 282  | 102 | 210  | 217 | 200 | 32      |
| 4"  | 162      | 161 | F10 | 80  | 305  | 110 | 254  | 217 | 200 | 49      |
| 6"  | 203      | 207 | F14 | 80  | 403  | 125 | 320  | 311 | 300 | 102     |
| 8"  | 240      | 244 | F16 | -   | 419  | 134 | 380  | -   | -   | -       |
| 10" | 279      | 284 | F16 | 100 | 457  | 151 | 445  | 348 | 500 | 212     |
| 12" | 305      | 310 | F16 | 100 | 502  | 168 | 515  | 348 | 500 | 276     |
| 14" | 325      | 336 | F25 | 200 | 762  | 176 | 585  | 417 | 500 | 496     |
| 16" | 385      | 386 | F30 | 200 | 838  | 190 | 660  | 417 | 700 | 659     |
| 18" | 405      | 406 | F30 | 200 | 914  | 217 | 710  | 417 | 700 | 793     |
| 20" | 440      | 444 | F35 | 200 | 991  | 240 | 770  | 430 | 700 | 1038    |
| 24" | 530      | 544 | F35 | 200 | 1143 | 290 | 908  | 470 | 800 | 1595    |
| 28" | 630      | 646 | F40 | 200 | 1346 | 345 | 1035 | 491 | 800 | 2130    |
| 30" | 630      | 646 | F40 | 200 | 1397 | 375 | 1090 | 491 | 800 | 2597    |
| 32" | 700      | 716 | F40 | -   | 1524 | 395 | 1149 | -   | -   | -       |
| 36" | 830      | 836 | F48 | -   | 1727 | 445 | 1270 | -   | -   | -       |

Subject to technical modifications

Trim C/B, all dimensions in mm, weights in kg

| ND  | ANSI 600 |     |     |     |      |     |     |     |     |         |
|-----|----------|-----|-----|-----|------|-----|-----|-----|-----|---------|
|     | A        | B   | F   | M   | L    | K   | D   | Q   | T   | Gewicht |
| 3"  | 143      | 139 | F14 | -   | 384  | 103 | 210 | -   | -   | -       |
| 4"  | 170      | 176 | F14 | -   | 462  | 111 | 273 | -   | -   | -       |
| 6"  | 203      | 205 | F16 | 100 | 559  | 153 | 355 | 382 | 300 | 158     |
| 8"  | 255      | 257 | F16 | 100 | 660  | 165 | 420 | 397 | 400 | 230     |
| 10" | 279      | 287 | F25 | 200 | 787  | 196 | 508 | 430 | 500 | 380     |
| 12" | 335      | 343 | F30 | 200 | 838  | 194 | 560 | 417 | 700 | 548     |
| 14" | 368      | 389 | F35 | 200 | 889  | 207 | 605 | 470 | 800 | 690     |
| 16" | 435      | 446 | F35 | 200 | 991  | 283 | 685 | 470 | 800 | 1001    |
| 18" | 415      | 406 | F40 | 200 | 1092 | 240 | 745 | 491 | 800 | 1153    |
| 20" | 528      | 541 | F40 | 200 | 1194 | 251 | 815 | 491 | 800 | 1449    |
| 24" | 596      | 609 | F40 | -   | 1397 | 299 | 940 | -   | -   | -       |

Subject to technical modifications



# **MADE FOR THE XTREME**

## **QUADAX PREMIUM VALVES**

QUADAX<sup>®</sup> DATA SHEET - EQ

**WELD END** DIMENSION & WEIGHT

DIN, EN, ISO PN 10-250 / ANSI class 150-1500

**04**

[quadax.de](http://quadax.de)

MADE FOR THE XTREME

With manual gearbox FTF EN 558 R14 / API 609 Table 3a



## GENERAL INFORMATION

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Shut-off valve:     | 4-Offset (TOV upgradet)                                                        |
| Seal:               | Metal                                                                          |
| Pressure ratings:   | PN 10 – 250 / ANSI 150 – 1500                                                  |
| Nominal diameters:  | DN 50 – 1800, NPS 2" – 72"                                                     |
| Temperatures:       | -270°C to +800°C                                                               |
| Face-to-face length | EN 558, API 609, ISO 5752, B16.10;                                             |
| Housing materials:  | Steel, stainless steel, brass, special steels e.g. Monel, Duplex, Hastelloy... |

## DETAILS / CONSTRUCTION / STRUCTURE

Flanges according to DIN EN 1092 in PN 10/16/25/40/63/100/160/250

Flanges according to ANSI B16.5, 150/300/600/900/1500/ASME 16.34

4-OFFSET, round seat and sealing geometry, OCT

Torque-sealing function, open/close, control, ESD function

Cone to cone, jam and friction-free

QUADAX standard TRIM is "full rated"

Special version REDUCED TRIM,  
 $\Delta p$  A=20 bar, X=52, B=102, C=160

One-piece body with ISO 5211 mounting flange

Body seat standard Inconel 625 hardened

Optional Stellite 21

Bearing protector

Seal ring as graphite or all metal lamella, Inconel O-ring, ball shape

Blowout-proof, one-piece shaft (API 609)

Face-to-face length according to EN 558-1 R13, 14

API 609 T2, ISO 5752, API 609 Table 3a oder ANSI B16.10

TA Air 2021, ISO 15848-1&2, API 641, EPA-21

CE / PED, Firesafe, ATEX Zone 1, S.I.L., ISO 9001, ISO 5211, CRN, EAC; TSG

Test standards EN 12266-1; API 598, ISO 5208, API 6D, BS 6436, EN 16668; ISO 28921, FCI 70-2

Horizontal shaft orientation (recommended)

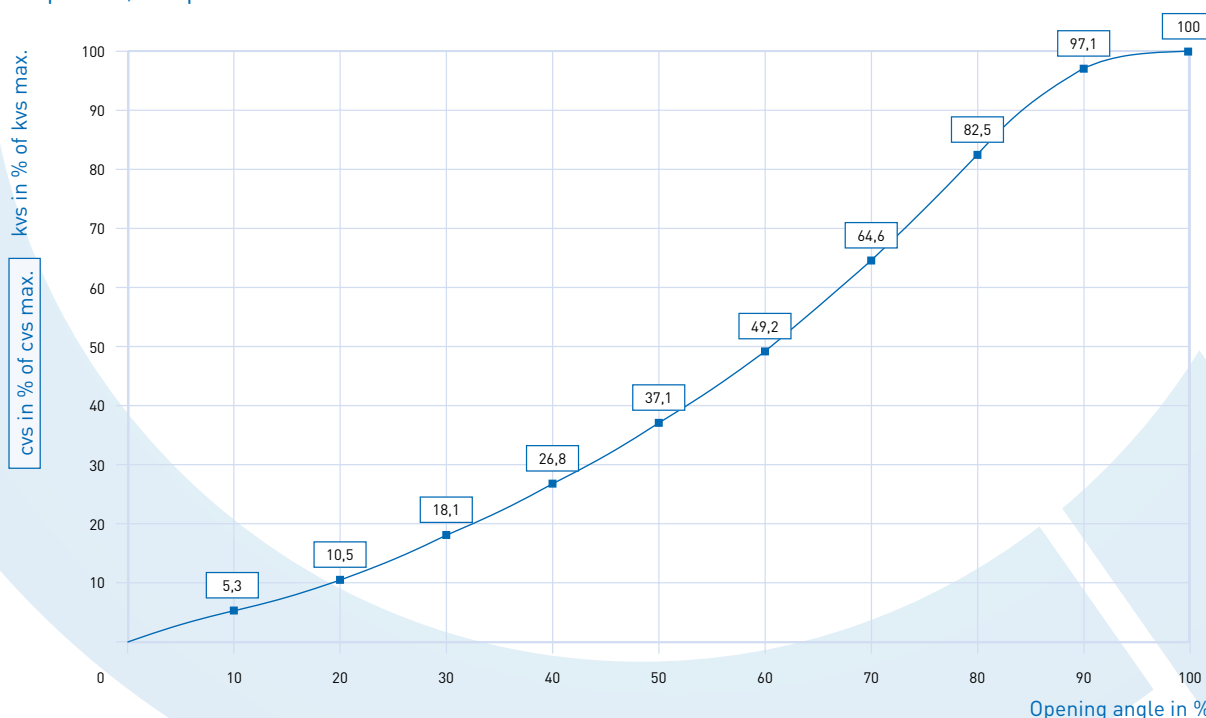
Corrosion protection min C1 – C5M

### kvs curve

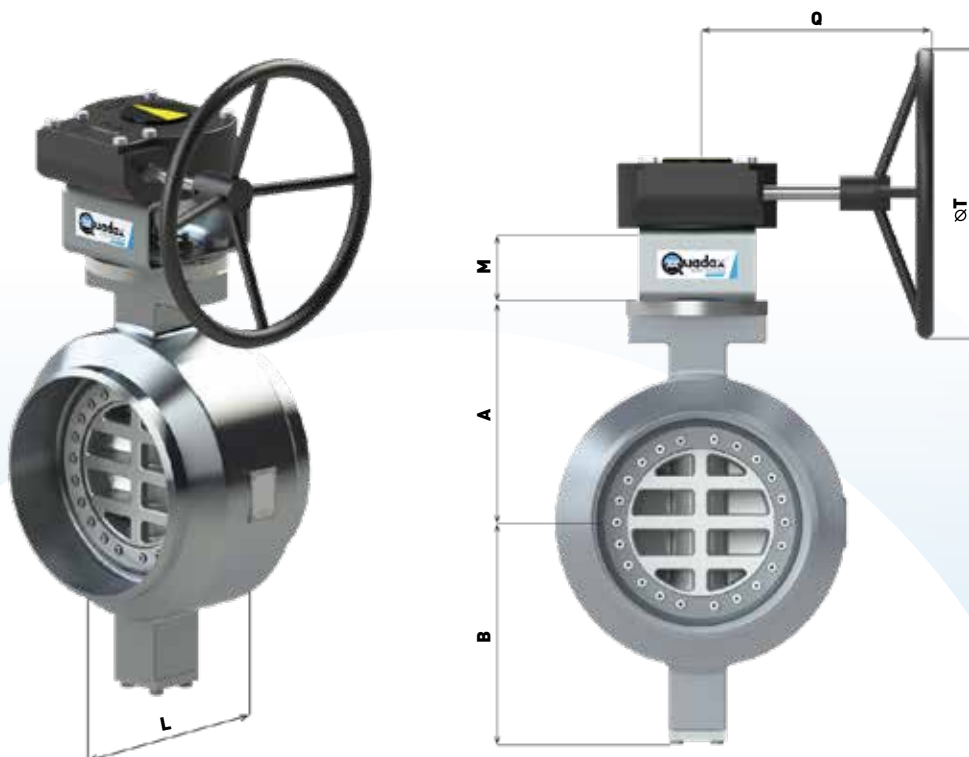
Flow measurement with water at  
 $\Delta p$  1 bar, temperature 20 °C

### cvs curve

Flow measurement with water at  
 $\Delta p$  14.5 psi, temperature 68 °F



With manual gearbox FTF EN 558 R14 / API 609 Table 3a



Trim X/A, all dimensions in mm, weights in kg

|        | DN   | ND   | PN 10/16 ANSI 150 |     |     |     | PN 10 |     |     |         | PN 16 |     |     |         | ANSI 150 |     |     |         |
|--------|------|------|-------------------|-----|-----|-----|-------|-----|-----|---------|-------|-----|-----|---------|----------|-----|-----|---------|
|        |      |      | A                 | B   | F   | M   | L     | Q   | T   | Gewicht | L     | Q   | T   | Gewicht | L        | Q   | T   | Gewicht |
| Trim X | 50   | 2"   | 105               | 109 | F07 | 60  | 150   | 158 | 200 | 12      | 150   | 158 | 200 | 12      | 150      | 158 | 200 | 12      |
|        | 65   | 2.5" | 128               | 132 | F07 | 60  | 180   | 217 | 200 | 19      | 180   | 217 | 200 | 19      | 180      | 217 | 200 | 19      |
|        | 80   | 3"   | 128               | 132 | F07 | 60  | 180   | 217 | 200 | 19      | 180   | 217 | 200 | 19      | 180      | 217 | 200 | 19      |
|        | 100  | 4"   | 162               | 161 | F10 | 80  | 190   | 217 | 200 | 24      | 190   | 217 | 200 | 24      | 190      | 217 | 200 | 24      |
|        | 125  | 5"   | 190               | 189 | F12 | 80  | 200   | 217 | 200 | 34      | 200   | 217 | 200 | 34      | 200      | 217 | 200 | 34      |
|        | 150  | 6"   | 203               | 207 | F14 | 80  | 210   | 282 | 300 | 50      | 210   | 282 | 300 | 50      | 210      | 282 | 300 | 50      |
|        | 200  | 8"   | 240               | 244 | F16 | 100 | 230   | 282 | 300 | 70      | 230   | 282 | 300 | 70      | 230      | 282 | 300 | 70      |
|        | 250  | 10"  | 279               | 284 | F16 | 100 | 250   | 282 | 300 | 107     | 250   | 285 | 400 | 114     | 250      | 305 | 500 | 115     |
| Trim A | 300  | 12"  | 305               | 310 | F16 | 100 | 270   | 285 | 400 | 121     | 270   | 305 | 500 | 122     | 270      | 346 | 500 | 130     |
|        | 350  | 14"  | 320               | 325 | F16 | 100 | 290   | 346 | 500 | 156     | 290   | 346 | 700 | 158     | 290      | 346 | 700 | 158     |
|        | 400  | 16"  | 345               | 356 | F25 | 200 | 310   | 346 | 500 | 228     | 310   | 346 | 700 | 230     | 310      | 348 | 500 | 230     |
|        | 450  | 18"  | 373               | 384 | F25 | 200 | 330   | 346 | 700 | 273     | 330   | 348 | 500 | 273     | 330      | 348 | 700 | 275     |
|        | 500  | 20"  | 397               | 408 | F25 | 200 | 350   | 348 | 500 | 307     | 350   | 348 | 700 | 309     | 350      | 417 | 500 | 325     |
|        | 600  | 24"  | 482               | 483 | F30 | 200 | 390   | 417 | 500 | 478     | 390   | 417 | 700 | 480     | 390      | 417 | 700 | 480     |
|        | 700  | 28"  | 580               | 594 | F35 | 200 | 430   | 430 | 700 | 591     | 430   | 470 | 800 | 608     | 430      | 470 | 800 | 608     |
|        | 750  | 30"  | 580               | 594 | F35 | 200 | 470   | 430 | 700 | 813     | 470   | 470 | 800 | 830     | 470      | 470 | 800 | 830     |
|        | 800  | 32"  | 660               | 673 | F35 | 200 | 470   | 470 | 800 | 843     | 470   | 470 | 800 | 844     | 470      | 470 | 800 | 844     |
|        | 900  | 36"  | 730               | 744 | F35 | 200 | 510   | 491 | 500 | 1025    | 510   | 491 | 800 | 1028    | 510      | 491 | 800 | 1028    |
|        | 1000 | 40"  | 817               | 833 | F40 | 200 | 550   | 491 | 800 | 1416    | 550   | 491 | 800 | 1416    | 550      | 541 | 900 | 1504    |

Subject to technical modifications

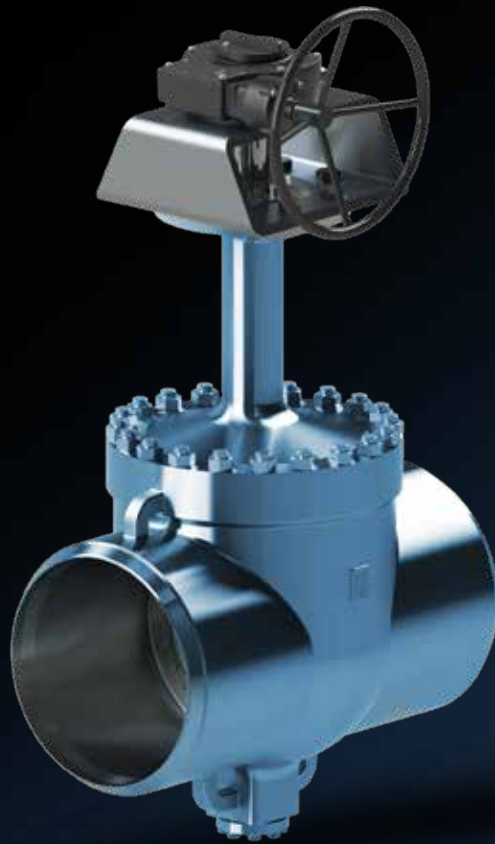
With manual gearbox FTF EN 558 R14 / API 609 Table 3a

| Trim X, all dimensions in mm, weights in kg |      |                                 |     |     |     |       |     |     |         |       |     |     |         |          |     |     |         |
|---------------------------------------------|------|---------------------------------|-----|-----|-----|-------|-----|-----|---------|-------|-----|-----|---------|----------|-----|-----|---------|
|                                             |      | EN558-1R14<br>PN 25/40 ANSI 300 |     |     |     | PN 25 |     |     |         | PN 40 |     |     |         | ANSI 300 |     |     |         |
| DN                                          | ND   | A                               | B   | F   | M   | L     | Q   | T   | Gewicht | L     | Q   | T   | Gewicht | L        | Q   | T   | Gewicht |
| 50                                          | 2"   | 105                             | 109 | F07 | 60  | 150   | 158 | 200 | 12      | 150   | 158 | 200 | 12      | 150      | 158 | 200 | 12      |
| 65                                          | 2,5" | 128                             | 132 | F07 | 60  | 180   | 217 | 200 | 19      | 180   | 217 | 200 | 19      | 180      | 217 | 200 | 19      |
| 80                                          | 3"   | 128                             | 132 | F07 | 60  | 180   | 217 | 200 | 19      | 180   | 217 | 200 | 19      | 180      | 217 | 200 | 19      |
| 100                                         | 4"   | 162                             | 161 | F10 | 80  | 190   | 217 | 200 | 24      | 190   | 217 | 200 | 24      | 190      | 217 | 200 | 24      |
| 125                                         | 5"   | 190                             | 189 | F12 | 80  | 200   | 217 | 200 | 34      | 200   | 217 | 200 | 34      | 200      | 237 | 200 | 44      |
| 150                                         | 6"   | 203                             | 207 | F14 | 80  | 210   | 282 | 300 | 50      | 210   | 311 | 300 | 64      | 210      | 311 | 300 | 64      |
| 200                                         | 8"   | 240                             | 244 | F16 | 100 | 230   | 285 | 400 | 77      | 230   | 326 | 400 | 85      | 230      | -   | -   | -       |
| 250                                         | 10"  | 279                             | 284 | F16 | 100 | 250   | 305 | 500 | 115     | 250   | 348 | 500 | 125     | 250      | 348 | 500 | 125     |
| 300                                         | 12"  | 305                             | 310 | F16 | 100 | 270   | 346 | 500 | 149     | 270   | 346 | 700 | 151     | 270      | 348 | 500 | 151     |
| 350                                         | 14"  | 325                             | 336 | F25 | 200 | 290   | 348 | 500 | 213     | 290   | 348 | 700 | 215     | 290      | 417 | 500 | 231     |
| 400                                         | 16"  | 385                             | 386 | F30 | 200 | 310   | 348 | 700 | 277     | 310   | 417 | 500 | 293     | 310      | 417 | 700 | 295     |
| 450                                         | 18"  | 405                             | 406 | F30 | 200 | 330   | 417 | 500 | 313     | 330   | 417 | 700 | 315     | 330      | 417 | 700 | 315     |
| 500                                         | 20"  | 440                             | 444 | F35 | 200 | 350   | 417 | 500 | 408     | 350   | 417 | 700 | 410     | 350      | 430 | 700 | 420     |
| 600                                         | 24"  | 530                             | 544 | F35 | 200 | 390   | 430 | 700 | 618     | 390   | 470 | 800 | 635     | 390      | 470 | 800 | 636     |
| 700                                         | 28"  | 630                             | 646 | F40 | 200 | 430   | 491 | 500 | 1004    | 430   | 491 | 800 | 1007    | 430      | 491 | 800 | 1007    |
| 750                                         | 30"  | 630                             | 646 | F40 | 200 | 470   | 491 | 500 | 1044    | 470   | 491 | 800 | 1047    | 470      | 491 | 800 | 1047    |
| 800                                         | 32"  | 700                             | 716 | F40 | 200 | 470   | 491 | 800 | 1248    | 470   | 541 | 900 | 1336    | 470      | -   | -   | -       |
| 900                                         | 36"  | 830                             | 836 | F48 | 200 | 510   | 541 | 900 | 1723    | 510   | -   | -   | -       | 510      | -   | -   | -       |
| 1000                                        | 40"  | 920                             | 929 | F48 | -   | 550   | -   | -   | -       | 550   | -   | -   | -       | 550      | -   | -   | -       |

Subject to technical modifications

| Trim C/B, all dimensions in mm, weights in kg |     |     |     |     |     |       |     |     |         |        |     |     |         |          |     |     |         |     |
|-----------------------------------------------|-----|-----|-----|-----|-----|-------|-----|-----|---------|--------|-----|-----|---------|----------|-----|-----|---------|-----|
| EN558-1R14<br>PN 63/100 ANSI 600              |     |     |     |     |     | PN 63 |     |     |         | PN 100 |     |     |         | ANSI 600 |     |     |         |     |
| DN                                            | ND  | A   | B   | F   | M   | L     | Q   | T   | Gewicht | L      | Q   | T   | Gewicht | L        | Q   | T   | Gewicht |     |
| Trim C                                        | 80  | 3"  | 143 | 139 | F14 | 80    | 180 | 217 | 200     | 22     | 180 | 278 | 200     | 41       | 180 | 217 | 200     | 22  |
|                                               | 100 | 4"  | 170 | 176 | F14 | 80    | 190 | 278 | 200     | 49     | 190 | -   | -       | -        | 190 | 217 | 200     | 29  |
|                                               | 150 | 6"  | 203 | 205 | F16 | 100   | 210 | 313 | 300     | 76     | 210 | 382 | 300     | 91       | 210 | -   | -       | -   |
|                                               | 200 | 8"  | 255 | 259 | F16 | 100   | 230 | 397 | 400     | 117    | 230 | 397 | 400     | 117      | 230 | -   | -       | -   |
| Trim B                                        | 250 | 10" | 279 | 287 | F25 | 200   | 250 | 417 | 500     | 178    | 250 | 430 | 500     | 188      | 250 | 348 | 500     | 147 |
|                                               | 300 | 12" | 335 | 343 | F30 | 200   | 270 | 417 | 500     | 246    | 270 | 417 | 700     | 248      | 270 | 348 | 700     | 215 |
|                                               | 350 | 14" | 368 | 389 | F35 | 200   | 290 | 417 | 700     | 325    | 290 | 470 | 800     | 352      | 290 | 417 | 700     | 307 |
|                                               | 400 | 16" | 435 | 446 | F35 | 200   | 310 | 470 | 800     | 451    | 310 | -   | -       | -        | 310 | 430 | 700     | 418 |
|                                               | 450 | 18" | 415 | 406 | F40 | 200   | 330 | 470 | 800     | 455    | 330 | -   | -       | -        | 330 | 430 | 700     | 407 |
|                                               | 500 | 20" | 528 | 541 | F40 | 200   | 350 | 491 | 500     | 685    | 350 | 491 | 800     | 688      | 350 | 470 | 800     | 596 |
|                                               | 600 | 24" | 596 | 609 | F40 | 200   | 390 | 491 | 800     | 918    | 390 | -   | -       | -        | 390 | 470 | 800     | 827 |

Subject to technical modifications



# MADE FOR THE **EXTREME**

## QUADAX PREMIUM VALVES

QUADAX<sup>®</sup> DATA SHEET - EQ

**TOP ENTRY** DIMENSION & WEIGHT

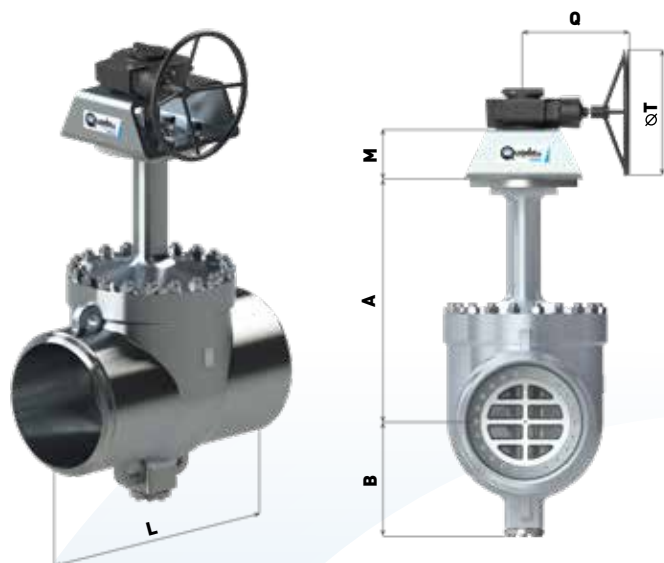
DIN, EN, ISO PN 10-250 / ANSI class 150-1500

# 05

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MADE FOR THE **EXTREME**

With manual gearbox FTF ANSI B16.10



## GENERAL INFORMATION

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Shut-off valve:     | 4-Offset (TOV upgradet)                                                        |
| Seal:               | Metal                                                                          |
| Pressure ratings:   | PN 10 – 250 / ANSI 150 – 1500                                                  |
| Nominal diameters:  | DN 50 – 1800, NPS 2" – 72"                                                     |
| Temperatures:       | -270°C to +800°C                                                               |
| Face-to-face length | EN 558, API 609, ISO 5752, B16.10;                                             |
| Housing materials:  | Steel, stainless steel, brass, special steels e.g. Monel, Duplex, Hastelloy... |

## DETAILS / CONSTRUCTION / STRUCTURE

Flanges according to DIN EN 1092 in PN 10/16/25/40/63/100/160/250

Flanges according to ANSI B16.5, 150/300/600/900/1500/ASME 16.34

4-OFFSET, round seat and sealing geometry, OCT

Torque-sealing function, open/close, control, ESD function

Cone to cone, jam and friction-free

QUADAX standard TRIM is "full rated"

Special version REDUCED TRIM,  
Δp A=20 bar , X=52, B=102, C=160

One-piece body with ISO 5211 mounting flange

Body seat standard Inconel 625 hardened

Optional Stellite 21

Bearing protector

Seal ring as graphite or all metal lamella, Inconel O-ring, ball shape

Blowout-proof, one-piece shaft (API 609)

Face-to-face length according to ANSI B16.10

TA Air 2021, ISO 15848-1&2, API 641, EPA-21

CE / PED, Firesafe, ATEX Zone 1, S.I.L., ISO 9001, ISO 5211, CRN, EAC; TSG

Test standards EN 12266-1; API 598, ISO 5208, API 6D, BS 6436, EN 16668;  
ISO 28921, FCI 70-2

Horizontal shaft orientation (recommended)

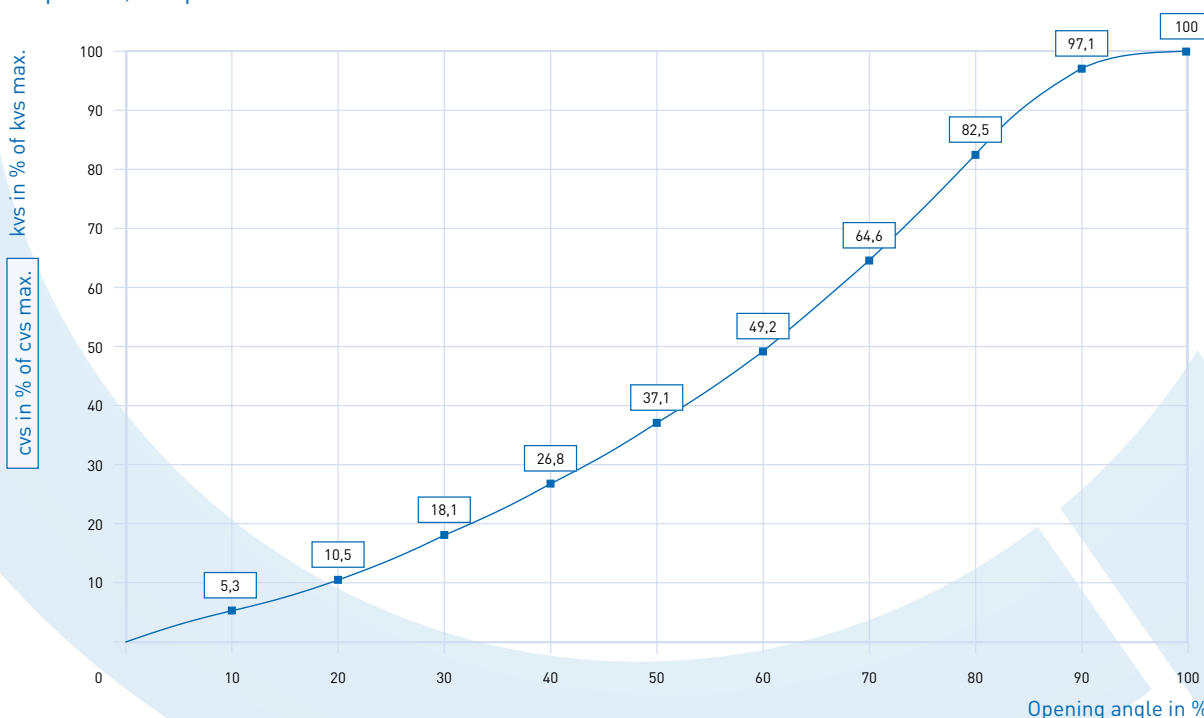
Corrosion protection min C1 – C5M

### kvs curve

Flow measurement with water at  
Δp 1 bar, temperature 20 °C

### cvs curve

Flow measurement with water at  
Δp 14.5 psi, temperature 68 °F



With manual gearbox FTF ANSI B16.10

| Trim X, all dimensions in mm, weights in kg |     |                   |     |     |     |       |     |     |         |       |     |     |         |          |     |     |         |
|---------------------------------------------|-----|-------------------|-----|-----|-----|-------|-----|-----|---------|-------|-----|-----|---------|----------|-----|-----|---------|
| DN                                          | ND  | PN 10/16 ANSI 150 |     |     |     | PN 10 |     |     |         | PN 16 |     |     |         | ANSI 150 |     |     |         |
|                                             |     | A                 | B   | F   | M   | L     | Q   | T   | Gewicht | L     | Q   | T   | Gewicht | L        | Q   | T   | Gewicht |
| 100                                         | 4"  | 662               | 169 | F10 | 80  | 305   | 158 | 200 | 46      | 305   | 158 | 200 | 46      | 305      | 217 | 200 | 47      |
| 125                                         | 5"  | 690               | 192 | F12 | 80  | 381   | 217 | 200 | 53      | 381   | 217 | 200 | 53      | -        | -   | -   | -       |
| 150                                         | 6"  | 703               | 213 | F14 | 80  | 403   | 282 | 300 | 92      | 403   | 282 | 300 | 92      | 403      | 282 | 300 | 92      |
| 200                                         | 8"  | 740               | 250 | F16 | 100 | 419   | 282 | 300 | 136     | 419   | 285 | 400 | 143     | 419      | 285 | 400 | 143     |
| 250                                         | 10" | 779               | 287 | F16 | 100 | 457   | 285 | 400 | 200     | 457   | 305 | 500 | 201     | 457      | 346 | 500 | 209     |
| 300                                         | 12" | 805               | 316 | F16 | 100 | 502   | 346 | 500 | 360     | 502   | 346 | 500 | 360     | 502      | 346 | 700 | 362     |
| 350                                         | 14" | 825               | 342 | F25 | 200 | 762   | 346 | 700 | 459     | 762   | 348 | 500 | 459     | 762      | 348 | 700 | 461     |
| 400                                         | 16" | 885               | 392 | F30 | 200 | 838   | 346 | 700 | 617     | 838   | 417 | 500 | 635     | 838      | 417 | 500 | 635     |
| 450                                         | 18" | 905               | 409 | F30 | 200 | 914   | 417 | 500 | 730     | 914   | 417 | 500 | 730     | 914      | 417 | 500 | 730     |
| 500                                         | 20" | 940               | 450 | F35 | 200 | 991   | 417 | 500 | 992     | 991   | 417 | 500 | 992     | 991      | 417 | 700 | 994     |
| 600                                         | 24" | 1030              | 547 | F35 | 200 | 1143  | 430 | 500 | 1625    | 1143  | 430 | 700 | 1627    | 1143     | 430 | 700 | 1627    |
| 700                                         | 28" | 1130              | 652 | F40 | 200 | 1346  | 491 | 500 | 2557    | 1346  | 491 | 500 | 2557    | 1346     | 491 | 500 | 2557    |
| 750                                         | 30" | 1130              | 652 | F40 | 200 | 1397  | 491 | 500 | 2598    | 1397  | 491 | 500 | 2598    | 1397     | 491 | 800 | 2601    |
| 800                                         | 32" | 1200              | 722 | F40 | 200 | 1524  | 491 | 800 | 3208    | 1524  | 491 | 800 | 3208    | 1524     | 491 | 800 | 3208    |
| 900                                         | 36" | 1330              | 845 | F48 | 200 | 1727  | 491 | 800 | 4538    | 1727  | 541 | 900 | 4628    | 1727     | 541 | 900 | 4628    |

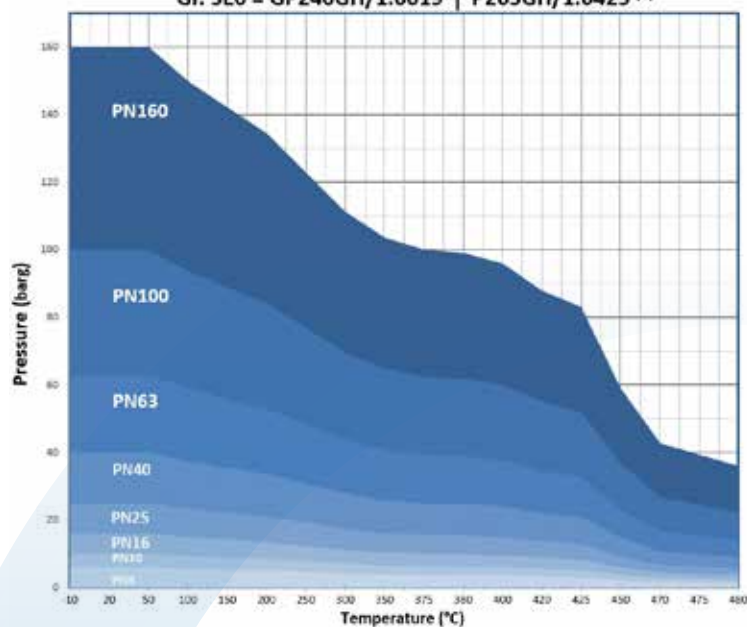
| Trim X, all dimensions in mm, weights in kg |     |                   |     |     |     |       |     |     |         |       |     |     |         |          |     |     |         |
|---------------------------------------------|-----|-------------------|-----|-----|-----|-------|-----|-----|---------|-------|-----|-----|---------|----------|-----|-----|---------|
| DN                                          | ND  | PN 25/40 ANSI 300 |     |     |     | PN 25 |     |     |         | PN 40 |     |     |         | ANSI 300 |     |     |         |
|                                             |     | A                 | B   | F   | M   | L     | Q   | T   | Gewicht | L     | Q   | T   | Gewicht | L        | Q   | T   | Gewicht |
| 100                                         | 4"  | 662               | 169 | F10 | 80  | 305   | 217 | 200 | 47      | 305   | 217 | 200 | 47      | 305      | 217 | 200 | 47      |
| 125                                         | 5"  | 690               | 192 | F12 | 80  | 381   | 217 | 200 | 53      | 381   | 278 | 200 | 71      | -        | -   | -   | -       |
| 150                                         | 6"  | 703               | 213 | F14 | 80  | 403   | 270 | 300 | 98      | 403   | 311 | 300 | 106     | 403      | #NV | #NV | -       |
| 200                                         | 8"  | 740               | 250 | F16 | 100 | 419   | 326 | 400 | 151     | 419   | 305 | 500 | 144     | 419      | 305 | 700 | 146     |
| 250                                         | 10" | 779               | 287 | F16 | 100 | 457   | 346 | 500 | 209     | 457   | 348 | 500 | 211     | 457      | 348 | 500 | 211     |
| 300                                         | 12" | 805               | 316 | F16 | 100 | 502   | 346 | 700 | 362     | 502   | 348 | 500 | 362     | 502      | 417 | 500 | 377     |
| 350                                         | 14" | 825               | 342 | F25 | 200 | 762   | 348 | 700 | 461     | 762   | 417 | 500 | 477     | 762      | 417 | 700 | 479     |
| 400                                         | 16" | 885               | 392 | F30 | 200 | 838   | 417 | 500 | 635     | 838   | 417 | 700 | 637     | 838      | 430 | 700 | 647     |
| 450                                         | 18" | 905               | 409 | F30 | 200 | 914   | 417 | 500 | 730     | 914   | 417 | 700 | 732     | 914      | 430 | 700 | 742     |
| 500                                         | 20" | 940               | 450 | F35 | 200 | 991   | 417 | 700 | 994     | 991   | 430 | 700 | 1004    | 991      | 470 | 800 | 1021    |
| 600                                         | 24" | 1030              | 547 | F35 | 200 | 1143  | 470 | 800 | 1644    | 1143  | 470 | 800 | 1645    | 1143     | 470 | 800 | 1645    |
| 700                                         | 28" | 1130              | 652 | F40 | 200 | 1346  | 491 | 800 | 2560    | 1346  | 491 | 800 | 2560    | 1346     | 541 | 900 | 2648    |
| 750                                         | 30" | 1130              | 652 | F40 | 200 | 1397  | 491 | 800 | 2601    | 1397  | 491 | 800 | 2601    | 1397     | 541 | 900 | 2689    |
| 800                                         | 32" | 1200              | 722 | F40 | 200 | 1524  | 491 | 800 | 3208    | 1524  | 665 | 500 | 3273    | 1524     | 669 | 500 | 3279    |
| 900                                         | 36" | 1330              | 845 | F48 | 200 | 1727  | 665 | 500 | 4689    | 1727  | 669 | 500 | 4691    | 1727     | 734 | 700 | 4796    |

Subject to technical modifications

## QUADAX P&T RATING (pressure & temperature)

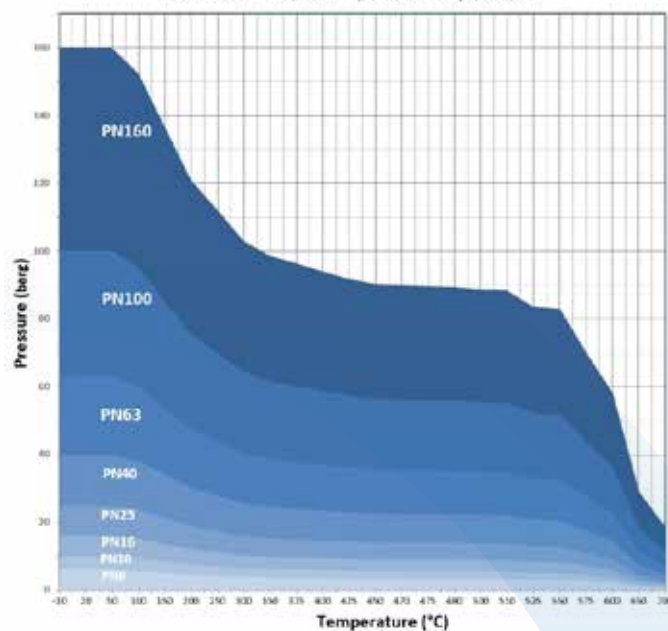
### PED DIN 12516 - PN

Gr. 3E0 = GP240GH/1.0619 | P265GH/1.0425 <sup>(P)</sup>



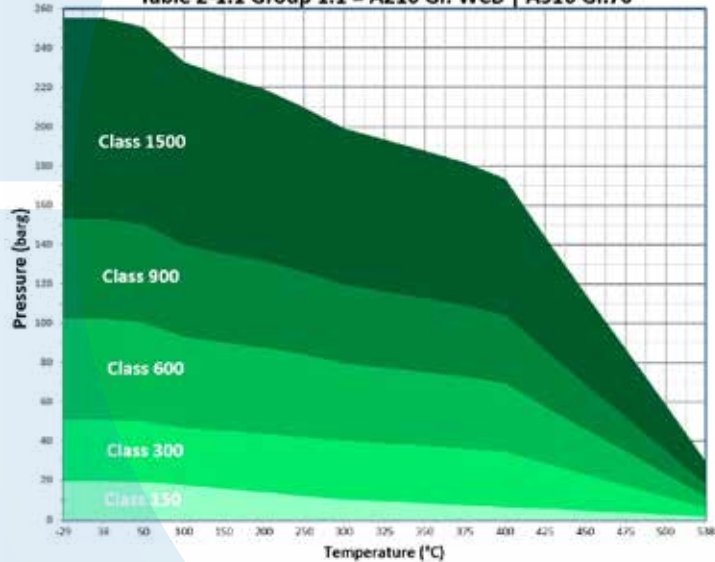
### PED DIN 12516 - PN

Gr. 14E0 = 1.4401 <sup>(P)</sup> | 1.4436 <sup>(P)</sup> | 1.4408



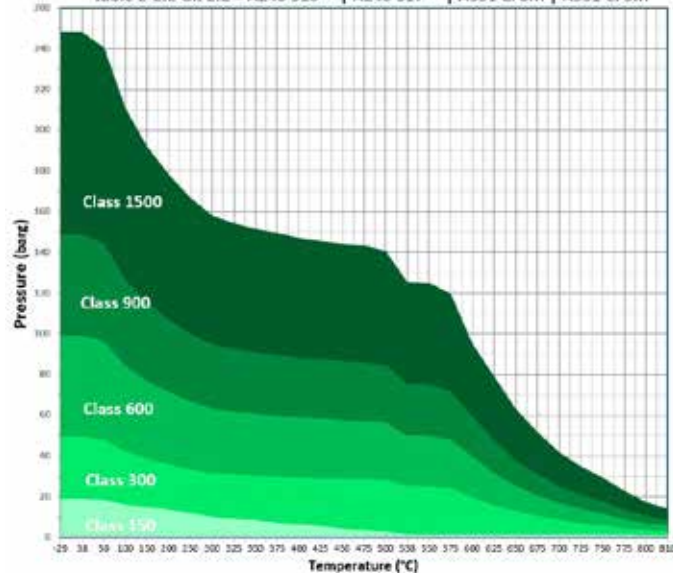
### ASME B16.34

Table 2-1.1 Group 1.1 = A216 Gr. WCB | A516 Gr.70



### ASME B16.34

Table 2-2.2 Gr. 2.2 = A240 316 <sup>(P)</sup> | A240 317 <sup>(P)</sup> | A351 CF8M | A351 CF3M



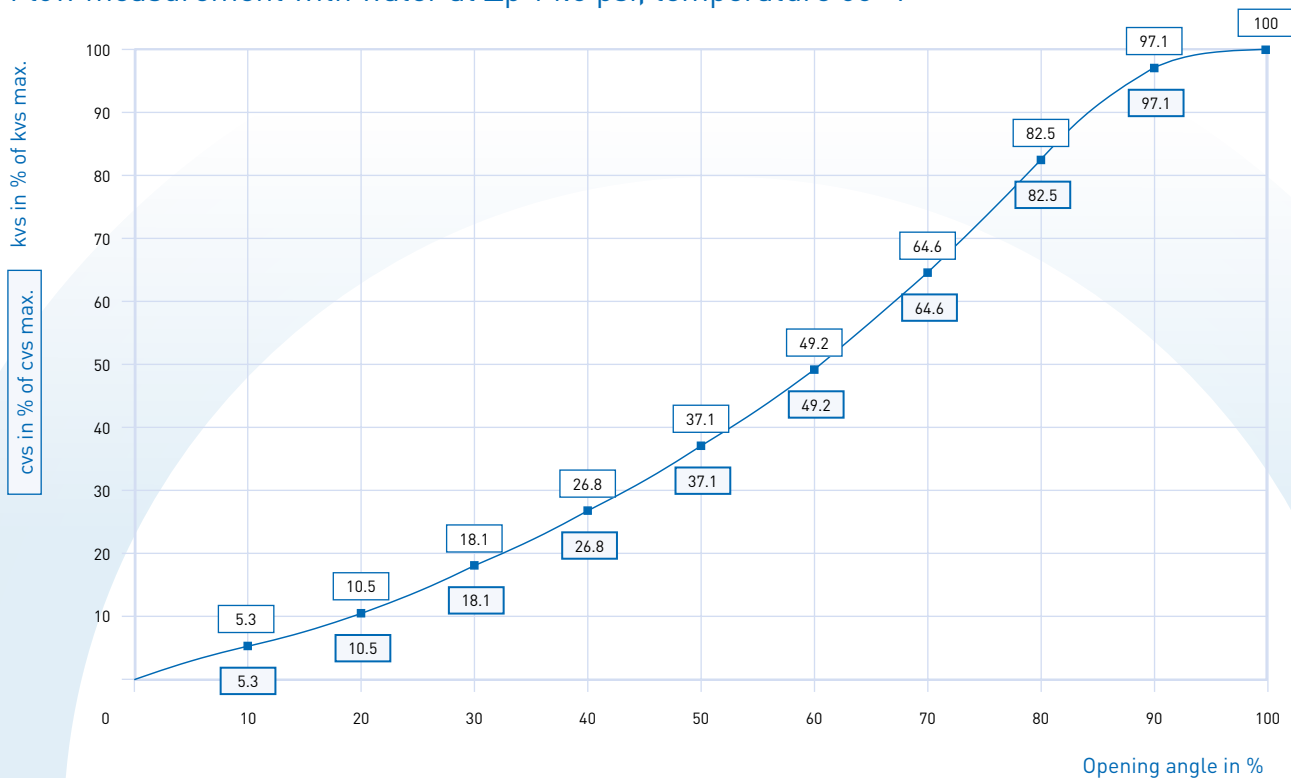
Additional materials and information available on request

## kvs curve

Flow measurement with water at  $\Delta p$  1 bar, temperature 20 °C

## cvs curve

Flow measurement with water at  $\Delta p$  14.5 psi, temperature 68 °F



|               |                         | DN 50 | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 | DN 250 | DN 300 | DN 350 | DN 400 | DN 450 | DN 500 | DN 600 | DN 700 | DN 750 | DN 800 | DN 900 | DN 1000 |
|---------------|-------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| <b>Trim A</b> | $\Delta p$ max. 20 bar  | -     | -     | -     | -      | -      | -      | -      | -      | 3837   | 5478   | 7944   | 10735  | 12921  | 20651  | 25473  | 32661  | 36123  | 47565  | 56131   |
| <b>Trim X</b> | $\Delta p$ max. 52 bar  | 38    | 118   | 118   | 258    | 418    | 654    | 1445   | 2451   | 3720   | 5120   | 7321   | 9986   | 12118  | 19253  | 23081  | 30015  | 33343  | 43215  | 51398   |
| <b>Trim B</b> | $\Delta p$ max. 104 bar | -     | -     | -     | -      | -      | -      | 1254   | 2123   | 3180   | 4459   | 6282   | 8738   | 10245  | 16458  | 19826  | 22286  | 28632  | 38954  | 44444   |
| <b>Trim C</b> | $\Delta p$ max. 155 bar | -     | 101   | 101   | 208    | 344    | 576    | 1164   | 1916   | 2926   | 3962   | 5659   | 7989   | 9442   | 15002  | 18231  | 21026  | 26779  | 34693  | 40870   |

### kvs-value [m³/h]

|               |                          |    |     |     |     |     |     |      |      |      |      |      |       |       |       |       |       |       |       |       |
|---------------|--------------------------|----|-----|-----|-----|-----|-----|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Trim A</b> | $\Delta p$ max. 290 psi  | -  | -   | -   | -   | -   | -   | -    | -    | 4462 | 6370 | 9237 | 12483 | 15024 | 24013 | 29620 | 37978 | 42003 | 55308 | 65269 |
| <b>Trim X</b> | $\Delta p$ max. 754 psi  | 44 | 137 | 137 | 300 | 486 | 760 | 1680 | 2850 | 4314 | 5953 | 8513 | 11612 | 14091 | 22387 | 26838 | 31702 | 38771 | 50250 | 59765 |
| <b>Trim B</b> | $\Delta p$ max. 1500 psi | -  | -   | -   | -   | -   | -   | 1458 | 2469 | 3698 | 5185 | 7305 | 10160 | 11913 | 19137 | 23053 | 25914 | 33293 | 45295 | 51679 |
| <b>Trim C</b> | $\Delta p$ max. 2250 psi | -  | 117 | 117 | 242 | 400 | 670 | 1353 | 2228 | 3402 | 4607 | 6580 | 9290  | 10979 | 17444 | 21199 | 24658 | 31138 | 40341 | 47523 |

### cvs-value [gal/min]

Subject to technical modifications

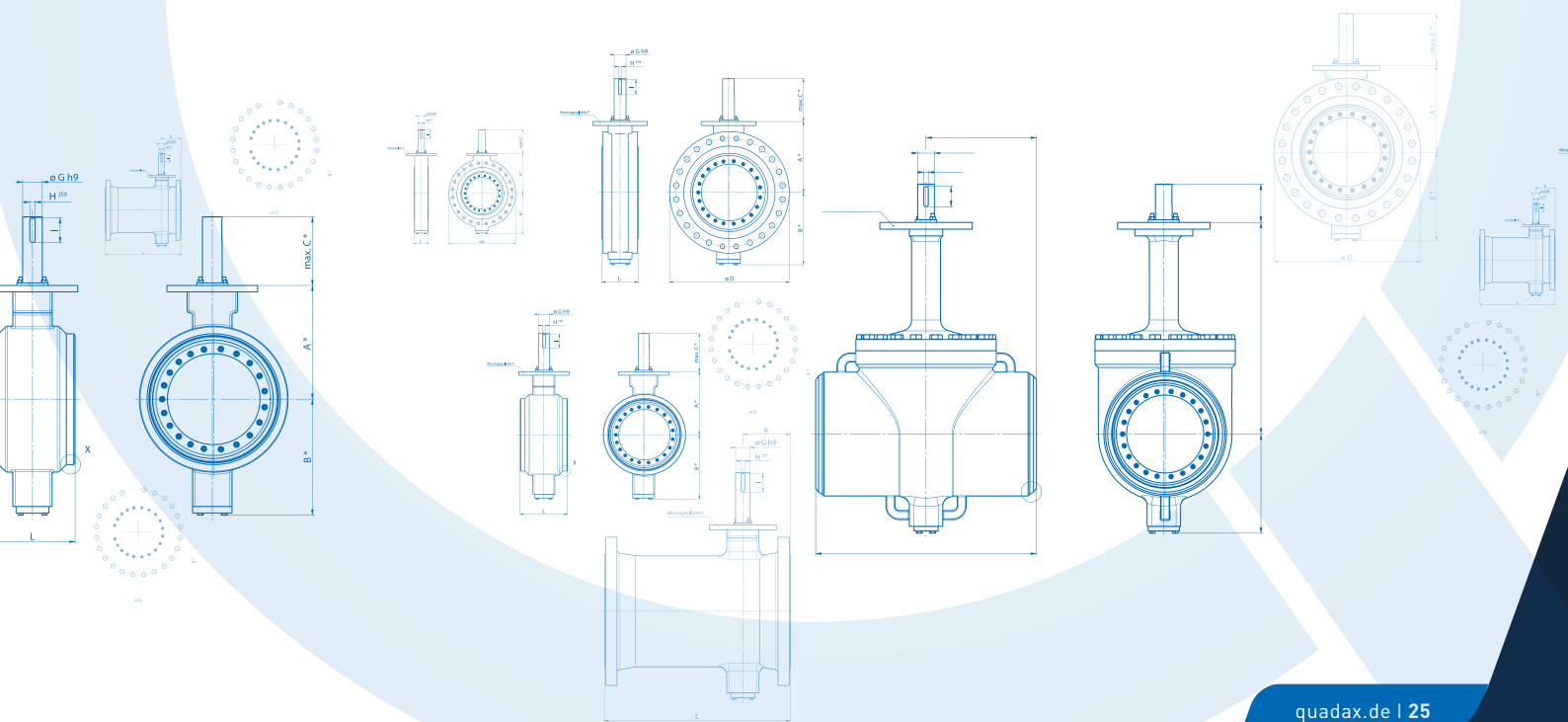
QUADAX seat tightness according to EN 12266-1/(API 598)

Max. permissible leakage / Comparison table

| DN   | NPS | QUADAX         |                      | EN 12266-1     | EN 12266-1       | API 598<br>metal seated | API 598<br>metal seated | API 598<br>soft seated | FCI 70-2<br>Class VI |
|------|-----|----------------|----------------------|----------------|------------------|-------------------------|-------------------------|------------------------|----------------------|
|      |     | Water          | Air                  | Water          | Air              | Water                   | Air                     | Air                    | Air                  |
| 50   | 2   | 0              | 0                    | 0              | 0                | 0                       | 0                       | 0                      | 0.9                  |
| 65   | 2.5 | 0              | 0                    | 0              | 0                | 5                       | 10                      | 0                      | 1.7                  |
| 80   | 3   | 0              | 0                    | 0              | 0                | 6                       | 12                      | 0                      | 4                    |
| 100  | 4   | 0              | 0                    | 0              | 0                | 8                       | 16                      | 0                      | 6.75                 |
| 125  | 5   | 0              | 0                    | 0              | 0                | 10                      | 20                      | 0                      | 11.1                 |
| 150  | 6   | 0              | 0                    | 0              | 0                | 12                      | 24                      | 0                      | 16                   |
| 200  | 8   | 0              | 0                    | 0              | 0                | 16                      | 32                      | 0                      | 21.6                 |
| 250  | 10  | 0              | 0                    | 0              | 0                | 20                      | 40                      | 0                      | 28.4                 |
| 300  | 12  | 0              | 0                    | 0              | 0                | 24                      | 48                      | 0                      | not defined          |
| 350  | 14  | 0              | 0                    | 0              | 0                | 28                      | 56                      | 0                      |                      |
| 400  | 16  | 0              | 0                    | 0              | 0                | 32                      | 64                      | 0                      |                      |
| 450  | 18  | 0              | 0                    | 0              | 0                | 36                      | 72                      | 0                      |                      |
| 500  | 20  | 0              | 0                    | 0              | 0                | 40                      | 80                      | 0                      |                      |
| 600  | 24  | 0              | 0                    | 0              | 0                | 48                      | 96                      | 0                      |                      |
| 650  | 26  | 0              | 0*                   | 0              | 0                | 52                      | 104                     | 0                      |                      |
| 700  | 28  | 0              | 0*                   | 0              | 0                | 56                      | 112                     | 0                      |                      |
| 750  | 30  | 0*             | 0*                   | 0              | 0                | 60                      | 120                     | 0                      |                      |
| 800  | 32  | 0*             | 0*                   | 0              | 0                | 64                      | 128                     | 0                      |                      |
| 900  | 36  | 0*             | 0*                   | 0              | 0                | 72                      | 144                     | 0                      | 3.0 bar              |
| 1000 | 40  | 0*             | 0*                   | 0              | 0                | 80                      | 160                     | 0                      |                      |
|      |     | 1.1 x PN       | 6 bar                | 1.1 x PN       | 6 bar            | Table 5                 | Table 5                 |                        |                      |
|      |     | Drops / Minute | "Bubbles/<br>Minute" | Drops / Minute | Bubbles / Minute | Drops / Minute          | Drops / Minute          | Drops / Minute         | Bubbles / Minute     |

Specifications apply to TRIM X in FCT direction, standard seal ring and gearbox

0\* Order-related

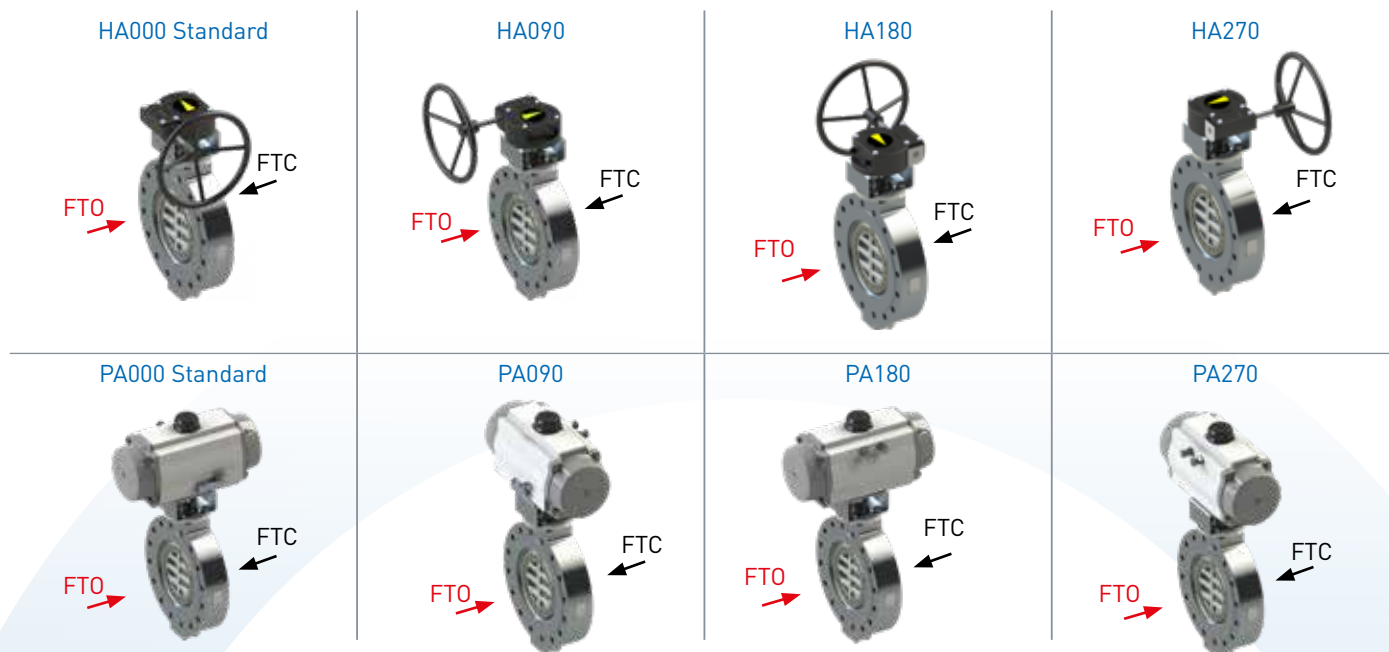


# QUADAX® DATA SHEET - EQ

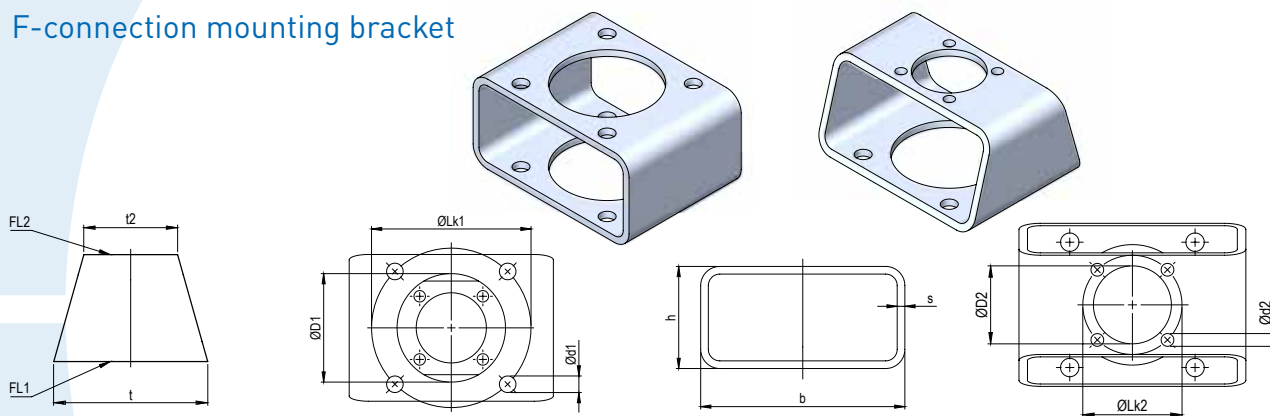
## ACTUATOR ORIENTATION

### F-CONNECTION MOUNTING BRACKET

#### Actuator orientation (examples)



#### F-connection mounting bracket



#### Dimensions - hole pattern

| Designation | Bridge dimensions |     |     |     |   | Hole pattern flange 1 |      |                  | Hole pattern flange 2 |      |                  | Weight |
|-------------|-------------------|-----|-----|-----|---|-----------------------|------|------------------|-----------------------|------|------------------|--------|
| FL1/FL2     | b                 | h   | t   | t2  | s | Ø Lk1                 | Ø D1 | Quantity<br>x d1 | Ø Lk2                 | Ø D2 | Quantity<br>x d2 | Kg     |
| F07/F07     | 100               | 60  | 70  | 70  | 5 | 70                    | 55   | 4x Ø9            | 70                    | 55   | 4x Ø9            | 1.0    |
| F10/F07     | 120               | 80  | 95  | 70  | 5 | 102                   | 70   | 4x Ø11           | 70                    | 55   | 4x Ø9            | 1.0    |
| F10/F10     | 120               | 80  | 95  | 95  | 5 | 102                   | 70   | 4x Ø11           | 102                   | 70   | 4x Ø11           | 1.0    |
| F12/F07     | 160               | 80  | 115 | 70  | 6 | 125                   | 85   | 4x Ø13           | 70                    | 55   | 4x Ø9            | 2.0    |
| F12/F10     | 160               | 80  | 115 | 95  | 6 | 125                   | 85   | 4x Ø13           | 102                   | 70   | 4x Ø11           | 2.0    |
| F12/F12     | 160               | 80  | 115 | 115 | 6 | 125                   | 85   | 4x Ø13           | 125                   | 85   | 4x Ø13           | 2.0    |
| F14/F07     | 160               | 80  | 135 | 70  | 6 | 140                   | 100  | 4x Ø17           | 70                    | 55   | 4x Ø9            | 2.0    |
| F14/F10     | 160               | 80  | 135 | 95  | 6 | 140                   | 100  | 4x Ø17           | 102                   | 70   | 4x Ø11           | 2.0    |
| F14/F12     | 160               | 80  | 135 | 115 | 6 | 140                   | 100  | 4x Ø17           | 125                   | 85   | 4x Ø13           | 2.0    |
| F14/F14     | 160               | 80  | 135 | 135 | 6 | 140                   | 100  | 4x Ø17           | 140                   | 100  | 4x Ø17           | 2.0    |
| F16/F10     | 200               | 100 | 160 | 95  | 6 | 165                   | 130  | 4x Ø21           | 102                   | 70   | 4x Ø11           | 3.0    |
| F16/F12     | 200               | 100 | 160 | 115 | 6 | 165                   | 130  | 4x Ø21           | 125                   | 85   | 4x Ø13           | 3.0    |
| F16/F14     | 200               | 100 | 160 | 135 | 6 | 165                   | 130  | 4x Ø21           | 140                   | 100  | 4x Ø17           | 3.0    |
| F16/F16     | 200               | 100 | 160 | 160 | 6 | 165                   | 130  | 4x Ø21           | 165                   | 130  | 4x Ø21           | 3.0    |

# QUADAX® DATA SHEET - EQ

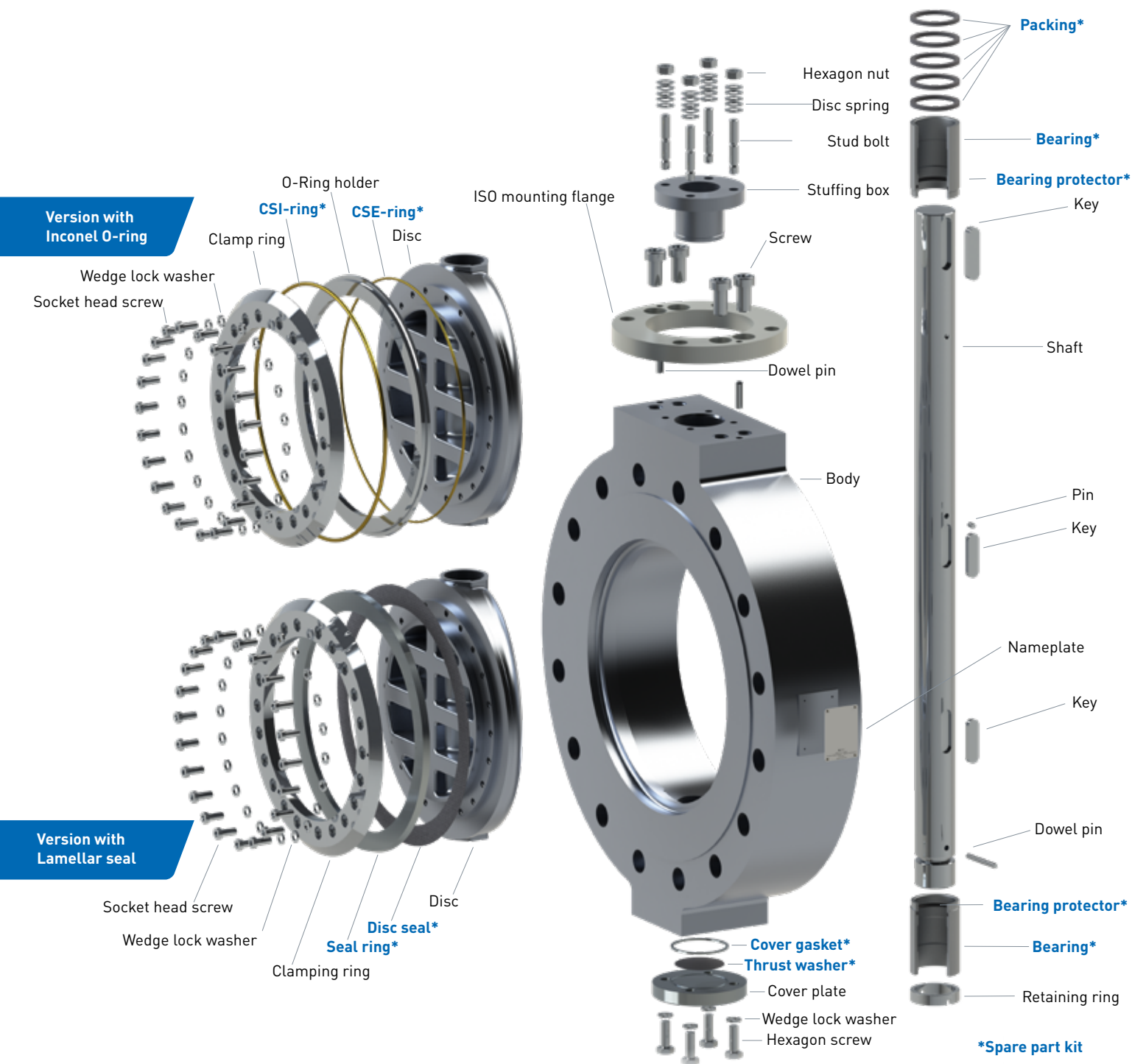
## QUADAX TYPE CODE SERIES EQ ...



| EQ | Style                                          | Version (series) | Nominal diameter | Pressure rating | Flange type                      | Housing                              | Cover | Stuffing box material | Shaft                       | TRIM                          | Clamping ring                        | Disc | Seat                    | Sealing ring                          |
|----|------------------------------------------------|------------------|------------------|-----------------|----------------------------------|--------------------------------------|-------|-----------------------|-----------------------------|-------------------------------|--------------------------------------|------|-------------------------|---------------------------------------|
| EQ | I                                              | 1                | 500              | 4               | X                                | F                                    | F     | F                     | X                           | X                             | X                                    | X    | X                       | J                                     |
|    | A = Lug type API 609 Category B Table 3A       | 1                | 50               | 0 = PN 6        | X = RF Ra 3,2 - 6,3              | X = GP240GH/GSC-25/A216 WCB          |       |                       | X = 1.4057/AISI 431         | X = 52 bar [direct mounting]  | X = GP240GH/GSC-25/A216 WCB          |      | X = Inconel 625 drummed | X = 1.4571 / Graphite                 |
|    | B = Double Block and Bleed                     |                  | 65               | 1 = PN 10       | B = NUT EN 1092 Type D           | B = P265GH/HII/A516 Gr.60            |       |                       | B = 1.4571/AISI 316Ti       | A = 20 bar [direct mounting]  | B = P265GH/HII/A516 Gr.60 + ENP      |      | B = Stellite 21         | B = 1.4462 / Graphite                 |
|    | E = Top Entry BW ends / ANSI B16.10 (acc #300) |                  | 80               | 2 = PN 16       | C = groove B16.5 RTJ             | C = 1.7357/A217 WC6                  |       |                       | C = 1.4980/AISI 660         | B = 104 bar [direct mounting] | C = 1.7357/WC6 + ENP                 |      | C = Inconel 625         | C = 1.4571 Laminated                  |
|    | F = Double flange EN558 R14                    |                  | 100              | 3 = PN 25       | D = Raised face EN 1092 Type E   | D = 1.7379/A217 WC9                  |       |                       | D = 1.4923                  | C = 155 bar [direct mounting] | D = 1.7379/WC9 + ENP                 |      | D = Monel               | D = 1.4462 Laminated                  |
|    | G = Gate valve replace ANSI B16.10             |                  | 125              | 4 = PN 40       | E = Recessed face EN 1092 Type F | E = 1.4552/A351 CF8C                 |       |                       | E = 1.4462/AISI 318 LN      | H = 20 bar (coupling)         | E = P265GH/HII/A516 Gr.60            |      | E = Hastelloy           | E = 1.4571 / PTFE                     |
|    | H = Double flange DIN3202 F5                   |                  | 150              | 5 = PN 63       | S = Special version              | F = 1.4408/A351 CF8M [AISI 316]      |       |                       | F = 1.4404/1.4435/AISI 316L | J = 52 bar (coupling)         | F = 1.7357/A217 WC6                  |      | S = Special version     | F = 1.4462 / PTFE                     |
|    | I = Double flange DIN3202 F16 [EN558-1R13]     |                  | 200              | 6 = PN 100      |                                  | G = 1.4988/Gr>16% NACE               |       |                       | G = 1.4401/AISI 316         | K = 104 bar (coupling)        | G = 1.7379/A217 WC9                  |      |                         | G = 1.4571 100bar lam.                |
|    | K = Lug EN 558-R16                             |                  | 250              | 7 = PN 160      |                                  | H = 1.4571/A316Ti                    |       |                       | H = 1.4541/AISI 321         | L = 155 bar (coupling)        | H = 1.4552/A351 CF8C                 |      |                         | H = 1.4462 100bar Lam.                |
|    | S = Buttweld EN 558 R14                        |                  | 300              |                 |                                  | I = 1.4401/1.4404/A240 316/A240 316L |       |                       | I = 2.4856/Inconel 625      |                               | I = 1.4408/A351 CF8M [AISI 316]      |      |                         | I = 1.4571 PTFE O-Ring                |
|    | W = Wafer [API] EN 558 R16                     |                  | 350              | A = class 150   |                                  | J = 1.6220 +QT/A352 LCB / LCC        |       |                       | J = Nitronic 50/AISI XM-19  |                               | J = 1.4988/Gr>16% NACE               |      |                         | J = 1.4571 Inconel O-Ring             |
|    |                                                |                  | 400              | B = class 300   |                                  | K = 1.5415/16Mo3/A204 Gr.A           |       |                       | K = 1.4542/17.4ph1150M      |                               | K = 1.4571/A316Ti                    |      |                         | K = 2.4856 Inconel / Graphite         |
|    |                                                |                  | 450              | C = class 600   |                                  | L = 1.4470/Duplex/A890/A995 Gr. 4A   |       |                       | L = 2.4375/Monel K-500      |                               | L = 1.4401/1.4404/A240 316/A240 316L |      |                         | L = G-CuZn34Al2 2.0596 Inconel O-Ring |
|    |                                                |                  | 500              | D = class 900   |                                  | M = 2.4856/Inconel 625               |       |                       | S = Special version         |                               | M = 1.6220 +QT/A352 LCB / LCC        |      |                         | M = 1.4404 Inconel O-Ring             |
|    |                                                |                  | 600              | E = class 1500  |                                  | N = Brass/G-CuZn34Al2/2.0596.01      |       |                       |                             |                               | N = 1.5415/16Mo3/A204 Gr.A           |      |                         | N = 1.4988 Inconel O-Ring             |
|    |                                                |                  | 700              |                 |                                  | O = 1.4469/S.Duplex/A890/A995 Gr. 5A |       |                       |                             |                               | O = 1.4470/Duplex/A890/A995 Gr. 4A   |      |                         | O = 1.4410 / Graphite                 |
|    |                                                |                  | .....            |                 |                                  | P = 2.4858/Inconel 825               |       |                       |                             |                               | P = 2.4856/Inconel 625               |      |                         | P = Spherical profile 1.4571          |
|    |                                                |                  | 1800             |                 |                                  | Q = 1.4409/A351 CF3M [AISI 316L]     |       |                       |                             |                               | Q = Brass/G-CuZn34Al2/2.0596.01      |      |                         | Q = Spherical profile 1.4462          |
|    |                                                |                  |                  |                 |                                  | R = 1.4410/S.Duplex/UNS S32750       |       |                       |                             |                               | R = 1.4469/S.Duplex/A890/A995 Gr. 5A |      |                         | R = Spherical profile 1.4980          |
|    |                                                |                  |                  |                 |                                  | T = Hastelloy                        |       |                       |                             |                               | T = 2.4858/Inconel 825               |      |                         | S = Special version                   |
|    |                                                |                  |                  |                 |                                  | U = Monel                            |       |                       |                             |                               | 1.4409/A351 CF3M [AISI 316L]         |      |                         |                                       |
|    |                                                |                  |                  |                 |                                  | S = Special version                  |       |                       |                             |                               | 1.4410/S.Duplex/UNS S32750           |      |                         |                                       |
|    |                                                |                  |                  |                 |                                  |                                      |       |                       |                             |                               |                                      |      |                         |                                       |
|    |                                                |                  |                  |                 |                                  |                                      |       |                       |                             |                               | T = Hastelloy                        |      |                         |                                       |
|    |                                                |                  |                  |                 |                                  |                                      |       |                       |                             |                               | U = Monel                            |      |                         |                                       |
|    |                                                |                  |                  |                 |                                  |                                      |       |                       |                             |                               | S = Special version                  |      |                         |                                       |

Example type code  
EQI 1 500 4 XF XXXXJ

# QUADAX® SECTIONAL VIEW - EQ EXPLODED VIEW



## QUADAX Material Bill of Materials (BOM)

| Housing material       | Disc material          | Shaft material | Seat material | Sealing ring     |
|------------------------|------------------------|----------------|---------------|------------------|
| Carbon steel 1.0619    | Carbon steel 1.0619    | 1.4057         | Inconell 625  | 1.4571/Grafit    |
| Stainless steel 1.4408 | Stainless steel 1.4408 | 1.4571         | Stellite 21   | 1.4571 lamella   |
| 16Mo3                  | Bronze                 | 1.4980         | Special       | Inconel O-ring   |
| Bronze                 | Monel                  | Nitronic 50    |               | Duplex/graphite  |
| Monel                  | Inconell               | 17-4 ph        |               | Inconel/graphite |
| Inconell               | Hastelloy              | Monel K500     |               | ball shape       |
| Hastelloy              | Duplex                 | Hastelloy      |               |                  |
| Duplex                 | HT steels              |                |               |                  |
| HT steels              |                        |                |               |                  |

Additional versions on request