

| Manufacturer: Starline S.p.a | Valve code 115-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | Pressure Class 600lb (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Integral flanges to ASME/ANSI 600RF smooth finish/RTJ |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (7) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 L7 Galvanised - (NACE MR-01-75 class III) (Dual conforms A193 B7) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 7 0.22% maximum carbon content. LF2 Class 1,-46°C charpies tested. Dual certified A105N
- 8 Temp Rating -46°C min, 280°C max pressure limitations apply at max temp
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.





















| Manufacturer: Starline S.p.a | Valve code 115-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | ANSI Class 900LB (2220PSI) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Scrd NPT/F to ANSI B1.20.1, Socketweld to ANSI B16.11 |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (7) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 L7 Galvanised - (NACE MR-01-75 class III) (Dual conforms A193 B7) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available, 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 7 0.22% maximum carbon content. LF2 Class 1,-46°C charpies tested. Dual certified A105N
- 8 Temp Rating -46°C min, 280°C max pressure limitations apply at max temp
- 9 Locking device optional, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.





















| Manufacturer: Starline S.p.a | Valve code 165-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore (9) - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 1500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel Galvanised c/w Locking Device (8) |
| End connections | Integral flanges to ASME/ANSI 1500 RF smooth finish or RTJ |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (6) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | VITON FR58/90 A.E.D. |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | A320 L7M - Galvanised - (NACE MR-01-75) (Dual conforms A193 B7M) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available, 100% Western European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 0.22% maximum carbon content. LF2 Class I, -46°C charpies tested. Dual certified A105N
- 7 Temperature: -46°C min, 155°C max (pressure limitations apply at maximum temp)
- 8 ISO mount pad
- 9 Full Bore to schedule 160 ID
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code T215-NGV-G |
|---------------------------------|---|
| Valve type | Ball valve - THREADED STAR - Full Bore (10) |
| Press/temp rating | ASME/ANSI CLASS 1500 (9) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - Forged Steel Epoxy Coated (7) c/w Locking Device (8) |
| End connections | Extended integral pup ends - special length (4" pups), Scrd NPT/F to ANSI B1.20.1, Buttweld to ANSI B16.25, Socketweld to ANSI B16.11 |
| Body material | Forged carbon steel - ASTM A350 LF2 (5) (6) Monoblock construction |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | Devlon V |
| Primary Body seal material | Graphite |
| Stem Seal | Graphite |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Body protected against corrosion by phosphating treatment
- 6 0.22% maximum carbon content, LF2 Class I, -46°C charpies tested, dual certified A105N
- 7 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Locking device optional, ISO mount pad
- 9 Temp rating -46°C to 155°C (pressure limitations apply at max temp)
- 10 Tack weld secured body joint not required, but can be arranged prior to despatch to ensure unintended disassembly during installation

rev. 02 by MT Checked LT approved BT

















| Manufacturer: Starline S.p.a | Valve code 116-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | 2220PSI (900lb) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Scrd NPT/F to ANSI B1.20.1, Socketweld to ANSI B16.11 |
| Body material | Forged stainless steel - ASTM A182 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 GR B8M bolts NACE (MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled and passivated
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temp Rating -90°C min, 280°C max pressure limitations apply at max temp (Extended stem recommended below -46°C)
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.





















| Manufacturer: Starline S.p.a | Valve code 176-TGT-G |
|---------------------------------|--|
| Valve type | Ball Valve -SPLIT STAR - Full bore - 2 pc bolted body Low temperature service |
| Press/temp rating | ASME/ANSI CLASS 150 (5) |
| Trim Construction | Floating ball - anti blowout - split body- encapsulated seats c/w hole drilled in ball upstream for low temp service |
| Valve operator | Extended stem (100mm) Lever operated - forged 316SS (6) c/w Locking Device (9) |
| End connections | Integral flanges to ASME/ANSI 150 RF smooth finish |
| Body material | Forged Stainless Steel - A182 F316/316L (dual certifed) (7) |
| Trim material | Ball - stainless steel A182 F316/316L (dual certified) |
| | Stem - stainless steel A182 F316/316L (dual certified) |
| Seat material | PTFE (Encapsulated Seats) |
| Seal material 1st Body Seal | PTFE |
| Seal material Fireseals | Graphite Stem Packing and outside #2 body seal |
| Bolting material | A320 B8M + XYLAN Coated (PTFE) - (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1b. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Temp Rating -101°C min, 280°C max. Pressure limitations apply at max temp.
- 6 316SS Lever, nut & stop pin
- 7 Pickled & passivated body. Subzero heat treated body.
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified.



















| Manufacturer: Starline S.p.a | Valve code 166-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 2500 CLASS (6000PSI) (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - stainless steel 17-4PH c/w Locking Device (8) |
| End connections | Scrd NPT/F to ANSI B1.20.1 Socketweld to ANSI B16.11 |
| Body material | Forged stainless steel - ASTM A182 316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | VITON FR58/90 A.E.D. |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | A320 GR B8M - (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available, 100% Western European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled passivated body
- 5 Valves fitted with antistatic device
- 6 Tested.
- 7 Temperature: -90°C min, 155°C max (pressure limitations apply at maximum temp) (Extended stem recommended below -46°C)
- 8 Nut & stop pin 316SS, lever 17-4PHSS, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code T5-286SGG-S |
|-----------------------------------|---|
| Valve type | Ball Valve - Three Way T-port - Standard Bore - 4 pce bolted body |
| Press/temp rating | ANSI 600 Class (1500PSI) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated -forged steel epoxy coated (7) (9) |
| End connections | Scrd BSPT (F) to BS21 Female socketweld to ANSI B16.11 |
| Body material | Forged stainless steel - ASTM A182 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| mm matenar | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | PTFE reinforced (20% carbon - 5% graphite) (4 seats) (Encapsulated seats) |
| Seal material Inside Body Seal | CGPTFE (20% Carbon 5% graphite) |
| Seal material Fireseals | Graphite stem packing, and outside Body Seal |
| Bolting material | A320 Gr B8 |

Notes: (All notes apply whether referenced or not)

- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled and passivated body
- 5 Firesafe fitted with antistatic device
- 7 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temperature 260°C max, -90°C min (pressure limitations apply at max temp) (Extended stem recommended -46°C)
- 9 Locking device optional, ISO mount pad
- 10 SIL3 certified

by MT Checked LT approved BT rev. 0

PED 97/23 EC Certificate N°: RPS 0160304/01 | Tech. File N° ST01 ATEX

ATEX 94/9 CE











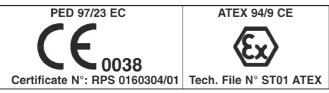


| Manufacturer: Starline S.p.a | Valve code T115-NGV-G |
|---------------------------------|--|
| Valve type | Ball valve - THREADED STAR - Threaded Body Full Bore (10) |
| Press/temp rating | ASME/ANSI CLASS 1500 (9) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - Forged Steel Epoxy Coated (7) c/w Locking Device (8) |
| End connections | Scrd NPT/F to ANSI B1.20.1, Buttweld to ANSI B16.25 Socketweld to ANSI B16.11, BSPT/F to BS21 |
| Body material | Forged carbon steel - ASTM A350 LF2 (5) (6) Monoblock construction |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | Devlon V |
| Primary Body seal material | Graphite |
| Stem Seal | Graphite |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Body protected against corrosion by phosphating treatment
- 6 0.22% maximum carbon content, LF2 Class I, -46°C charpies tested, dual certified A105N
- 7 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Locking device optional, ISO mount pad
- 9 Temp rating -46°C to 155°C (pressure limitations apply at max temp)
- 10 Tack weld secured body joint not required, but can be arranged prior to despatch to ensure unintended disassembly during installation

rev. 01 by MT Checked LT approved BT















| Manufacturer: Starline S.p.a | Valve code 175-SGS-G |
|---------------------------------|---|
| Valve type | Ball Valve -SPLIT STAR - Full bore - 2 pc bolted body |
| Press/temp rating | ASME/ANSI CLASS 150 (5) |
| Trim Construction | Floating ball - anti blowout - split body- encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Integral flanges to ASME/ANSI 150 RF smooth finish |
| Body material | Forged Carbon Steel - A350 LF2 (7) (8) |
| Trim material | Ball - stainless steel A182 F316/316L (dual certified) |
| | Stem - stainless steel A182 F316/316L (dual certified) |
| Seat material | PTFE, reinforced (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | PTFE, reinforced (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite Stem Packing and outside #2 body seal |
| Bolting material | A320 L7- Galvanised (NACE MR-01-75 Class III) (Dual conforms to A193 B7) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1b. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Temp Rating -46°C min, 280°C max. Pressure limitations apply at max temp.
- 6 1000 micron epoxy coated for offshore salt spray resistance
- 7 0.22% maximum carbon content. LF2 Class 1, -46°C charpies tested, dual conformance
- 8 Body protected against corrosion by phosphating treatment
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified.



















| Manufacturer: Starline S.p.a | Valve code 116-NGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | 2200PSI (900lb) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Integral Long ends Female Socketweld to ANSI B16.11 (11) |
| Body material | Forged stainless steel - ASTM A182 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 GR B8M bolts (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available, 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickeld and passivated body
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temp Rating -90°C min, 155°C max pressure limitations apply at max temp (extended sstem recommended below -46°C)
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.
- 11 Long ends, no disassembly required to weld, (191mm end to end dimension)





















| Manufacturer: Starline S.p.a | Valve code 169-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 2500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel (17-4PH) c/w Locking Device (8) |
| End connections | Scrd NPT/F to ANSI B1.20.1, Socketweld to ANSI B16.11 |
| Body material | Forged Duplex stainless steel - ASTM A182 F51 (4) (6) |
| Trim material | Ball - Duplex stainless steel - ASTM A182 F51 |
| | Stem - Duplex stainless steel - ASTM A182 F51 |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | James Walker AED ELAST-O-LION 985 (7) |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs, 100% Western European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 6 Corrossion test & micrographic examination on all forgings. Dye penetrant test also performed all body forgings.
- 7 Temperature: -51°C min, 155°C max (pressure limitations apply at maximum temp) (Extended stem recommended below -46°C) 1st body seal static temp conforms
- 8 316SS nut & stop pin, 17-4PHSS lever, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code 169-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore (9) - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 1500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged 316SS stainless steel c/w Locking Device (8) |
| End connections | Scrd NPT/F to ANSI B1.20.1, Socketweld to ANSI B16.11 |
| Body material | Forged Duplex stainless steel - ASTM A182 F51 (4) (6) |
| Trim material | Ball - Duplex stainless steel - ASTM A182 F51 |
| | Stem - Duplex stainless steel - ASTM A182 F51 |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | VITON FR58/90 A.E.D. |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs, 100% Western European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 6 Corrosion test, micrographic examination & dye penetrant test on all forgings
- 7 Temperature: -51°C min, 155°C max (pressure limitations apply at maximum temp) (Extended stem recommended below -46°C) 1st body seal static temp conforms
- 8 316SS lever, nut & stop pin, ISO mount pad
- 9 Full Bore to schedule 160
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code L2-285SGG-S |
|-----------------------------------|---|
| Valve type | Ball Valve - Three Way L-port - Standard Bore - 4 pce bolted body |
| Press/temp rating | ANSI 800 Class (2000PSI) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated -forged steel epoxy coated (7) (9) |
| End connections | Scrd NPT/F to ANSI B1.20.1 Female socketweld to ANSI B16.11 |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (6) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | PTFE reinforced (20% carbon - 5% graphite) (4 seats) (Encapsulated seats) |
| Seal material Inside Body Seal | CGPTFE (20% Carbon 5% graphite) |
| Seal material Fireseals | Graphite stem packing, and outside Body Seal |
| Bolting material | A320 L7 (Galvanised) - NACE MR 01-75 class III (Dual conforms to A193 B7) |

Notes: (All notes apply whether referenced or not)

- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Firesafe fitted with antistatic device
- 6 0.22% Maximum carbon content. LF2 Class 1 -46° charpies tested, dual certified A105N
- 7 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temperature 260°C max, -46°C min (pressure limitations apply at max temp)
- 9 Locking device optional, ISO mount pad
- 10 SIL3 certified

| by MT | Checked LT | approved BT | rev. 01 |
|-------|------------|-------------|---------|















| Manufacturer: Starline S.p.a | Valve code 166-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 2500 CLASS (6000PSI) (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - stainless steel 17-4PH c/w Locking Device (8) |
| End connections | Extended integral pup ends, Buttweld to ANSI B16.25 Socketweld to ANSI B16.11 |
| Body material | Forged stainless steel - ASTM A182 316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | VITON FR58/90 A.E.D. |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | A320 GR B8M - (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available, 100% Western European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled passivated body
- 5 Valves fitted with antistatic device
- 6 Tested.
- 7 Temperature: -90°C min, 155°C max (pressure limitations apply at maximum temp) (Extended stem recommended below -46°C) 1st body seal static temp conforms
- 8 Nut & stop pin 316SS, lever 17-4PHSS, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code 215-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Standard bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | ANSI class 900lb (2220PSI) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Extended Integral pup ends, Scrd NPT/F to ANSI B1.20.1, Socketweld to ANSI B16.11 |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (7) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 L7 Galvanised - (NACE MR-01-75 class III) (Dual conforms A193 B7) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 7 0.22% maximum carbon content. LF2 Class 1,-46°C charpies tested. Dual certified A105N
- 8 Temp Rating -46°C min, 260°C max pressure limitations apply at max temp
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.





















| Manufacturer: Starline S.p.a | Valve code 119-NGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | 2250PSI (900lb) (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel (6) c/w Locking Device, ISO mount pad |
| End connections | Scrd NPT/F to ANSI B1.20.1, Socketweld to ANSI B16.11 |
| Body material | Forged duplex stainless steel - ASTM A182 - F51 (5) (Pickled and passivated) |
| Trim material | Ball - duplex stainless steel - ASTM A182 - F51 |
| | Stem - duplex stainless steel - ASTM A182 - F51 |
| Seat material | DEVLON - V (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Corrosion test, dye penetrant test and micrographic examination on all Forgings
- 6 Lever, nut, stop pin etc all 316SS
- 7 Temp Rating -90°C to 155°C (pressure limitations apply at max temp, stem extension required below -46°C)
- 8 Fugitive emission prototype certified & witness tested. SIL 3 certified





















| Manufacturer: Starline S.p.a | Valve code 216-NGS-G |
|---------------------------------|---|
| Valve type | Ball Valve - SUPER STAR - Full bore to S160 - 3 pce bolted body. Inside (enclosed) body bolting |
| Press/temp rating | Pressure Class 1500lb (3700PSI) (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Extended Integral pup ends, Buttweld to ANSI B16.25, Socketweld to ANSI B16.11 |
| Body material | Forged stainless steel - ASTM A182 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 GR B8M bolts (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled and passivated body
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temp Rating -90°C min, 155°C max pressure limitations apply at max temp (Extended stem recommended below -46°C)
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.























| Manufacturer: Starline S.p.a | Valve code T216-NGV-G |
|---------------------------------|---|
| Valve type | Ball valve - THREADED STAR - Extended Integral Ends Full Bore to S160 (10) |
| Press rating | ASME ANSI CLASS 1500 (3700PSI) (9) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - Forged Steel Epoxy Coated (7) c/w Locking Device (8) |
| End connections | Extended integral special length pup ends (4" pups), Scrd NPT/F to ANSI Scrd NPT/F to ANSI B1.20.1, Female socketweld to ANSI B16.11 Buttweld to ANSI B16.25, |
| Body material | Forged carbon steel - ASTM A182 F316/316L (dual certified) (5) Monoblock construction |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | Devlon V |
| Primary Body seal material | Graphite |
| Stem Seal | Graphite |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Pickled & passivated body
- 7 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Locking device optional, ISO mount pad
- 9 Temp rating -90°C to 155°C

(pressure limitations apply at max temp, extended stem recommended below -46°C)

10 - Tack weld secured body joint not required, but can be arranged prior to despatch to ensure unintended disassembly during installation











| Manufacturer: Starline S.p.a | Valve code 165-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 2500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel Galvanised c/w locking Device (8) |
| End connections | Integral flanges to ASME/ANSI 2500 RF smooth finish or RTJ |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (6) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | VITON FR58/90 A.E.D. |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | A320 L7M - Galvanised - (NACE MR-01-75) (Dual conforms A193-B7M) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available, 100% Western European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 0.22% maximum carbon content. LF2 Class I, -46°C charpies tested.
- 7 Temperature: -46°C min, 155°C max (pressure limitations apply at maximum temp)
- 8 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code 115-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | Pressure Class 600lb (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Integral flanges to ASME/ANSI 600RF smooth finish/RTJ |
| Body material | Forged carbon steel - ASTM A350 LF2 (4) (7) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 L7M Galvanised - (NACE MR-01-75) (Dual conforms A193 B7M) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Body protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 7 0.22% maximum carbon content. LF2 Class 1,-46°C charpies tested. Dual certified A105N
- 8 Temp Rating -46°C min, 280°C max pressure limitations apply at max temp
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.





















| Manufacturer: Starline S.p.a | Valve code 179-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve -SPLIT STAR - Full bore - 2 pc bolted body |
| Press/temp rating | ASME/ANSI CLASS 150 (5) |
| Trim Construction | Floating ball - anti blowout - split body- encapsulated seat |
| Valve operator | Lever operated - forged 316SS lever c/w Locking Device (9) |
| End connections | Integral flanges to ASME/ANSI 150 RF smooth finish |
| Body material | Forged Duplex Stainless Steel - ASTM A182 F51 (7) (8) |
| Trim material | Ball - Duplex stainless steel - ASTM A182 F51 |
| | Stem - Duplex stainless steel ASTM A182 F51 |
| Seat material | PTFE, reinforced (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | PTFE, reinforced (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite Stem Packing and outside #2 body seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1b. Full traceable body & trim certs available 100% European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Temp Rating: -51°C min, 280°C max. Pressure limitations apply at max temp. (Extended stem recommended below -46°C)
- 7 Corrosion test, micrographic examination and dye penetrant test on all forgings
- 8 Pickled and passivated body
- 9 Lever, nut and stop pin 316SS, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified.



















| Manufacturer: Starline S.p.a | Valve code 116-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | Pressure Class 600lb (8) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged steel epoxy coated (6) c/w Locking Device (9) |
| End connections | Integral flanges to ASME/ANSI 600 class RF smooth finish/RTJ |
| Body material | Forged stainless steel - ASTM A182 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated Seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 GR B8M bolts (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled and passivated
- 5 Valves fitted with antistatic device
- 6 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temp Rating -90°C min, 280°C max pressure limitations apply at max temp (Extending stem recommended below -46C)
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested.





















| Manufacturer: Starline S.p.a | Valve code 166-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 2500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel 17-4PH c/w Locking Device (8) |
| End connections | Integral flanges to ASME/ANSI 2500 RF smooth finish or RTJ |
| Body material | Forged stainless steel - ASTM A182 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/316L (dual certified) |
| ırım materiai | Stem - stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | DEVLON - V (Encapsulated seats) |
| Seal material 1st Body Seal | VITON FR58/90 A.E.D. |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | A320 GR B8M - (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available, 100% Western European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 7 Temperature: -90°C min, 155°C max (pressure limitations apply at maximum temp) (Extended stem recommended below -46°C) 1st body seal static temp conforms
- 8 316SS nut & stop pin, 17-4PHSS lever, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code 136-SGS-G |
|---------------------------------|---|
| Valve type | Ball Valve - MASTER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | 2220PSI (900Lb) (8) |
| Trim Construction | Floating ball - anti blowout |
| Valve operator | Lever operated - forged steel epoxy coated (7) (9) c/w Locking Device |
| End connections | Scrd NPT/F to ANSI B1.20.1, Female socketweld to ANSI B16.11 |
| Body material | Forged stainless steel - ASTM A82 F316/316L (dual certified) (4) |
| Trim material | Ball - stainless steel - ASTM A182 F316/3116L (dual certified) |
| | Stem -stainless steel - ASTM A182 F316/316L (dual certified) |
| Seat material | PTFE reinforced (20% carbon - 5% graphite) |
| Seal material 1st Body Seal | PTFE reinforced (20% carbon - 5% graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | A320 GR B8 B8M (NACE MR-01-75) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs available 100% European manufacture
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 6 Tested
- 7 1000 micron Epoxy Coated for offshore salt spray resistance
- 8 Temperature 260°C max, -90°C min (pressure limitations apply at max temp) (Extended stem recommended below -46°C)
- 9 ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified

by MT Checked LT approved BT rev. 01

PED 97/23 EC **ATEX 94/9 CE** Certificate N°: RPS 0160304/01 | Tech. File N° ST01 ATEX













| Manufacturer: Starline S.p.a | Valve code 119-SGS-G |
|---------------------------------|--|
| Valve type | Ball Valve - SUPER STAR - Full bore - 3 pce bolted body Inside (enclosed) body bolting |
| Press/temp rating | ASME/ANSI 600 Class (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel (6) c/w Locking Device, ISO mount pad |
| End connections | Integral flanges to ASME/ANSI 600 class RF smooth finish/RTJ |
| Body material | Forged duplex stainless steel - ASTM A182 - F51 (5) (Pickled and passivated) |
| Trim motorial | Ball - duplex stainless steel - ASTM A182 - F51 |
| Trim material | Stem - duplex stainless steel - ASTM A182 - F51 |
| Seat material | CGPTFE (20% Carbon 5% Graphite) (Encapsulated seats) |
| Seal material 1st Body Seal | CGPTFE (20% Carbon 5% Graphite) |
| Seal material Fireseals | Graphite stem packing and outside #2 Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certs available 100% European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Valves fitted with antistatic device
- 5 Corrosion test, and micrographic examination on Forgings
- 6 Lever, nut, stop pin etc all 316SS
- 7 Temp Rating -51°C to 280°C (pressure limitations apply at max temp, stem extension required below -46°C)
- 8 Fugitive emission prototype certified & witness tested. SIL 3 certified





















| Manufacturer: Starline S.p.a | Valve code 169-PGE-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME/ANSI 2500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel (17-4PH) c/w Locking Device (8) |
| End connections | Integral flanges to ASME/ANSI 2500 RF smooth finish or RTJ |
| Body material | Forged Duplex stainless steel - ASTM A182 F51 (4) (6) |
| Trim material | Ball - Duplex stainless steel - ASTM A182 F51 |
| | Stem - Duplex stainless steel - ASTM A182 F51 |
| Seat material | PEEK (Encapsulated seats) |
| Seal material | AED Elast-O-Lion 985 (7) |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN/ISO 10497 ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs, 100% European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 6 Corrosion test, dye penetrant test and micrographic examination on forgings
- 7 Temperature: -51°C min, 155°C max (pressure limitations apply at maximum temp) 1st body seal static temp conforms
- 8 316SS nut & stop pin, 17-4PHSS lever, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code 169-PGE-G |
|---------------------------------|--|
| Valve type | Ball Valve - MEGA STAR - Full bore - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 1500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel (17-4PH) c/w Locking Device (8) |
| End connections | Integral flanges to ASME/ANSI 1500 RF smooth finish or RTJ |
| Body material | Forged Duplex stainless steel - ASTM A182 F51 (4) (6) |
| Trim material | Ball - Duplex stainless steel - ASTM A182 F51 |
| | Stem - Duplex stainless steel - ASTM A182 F51 |
| Seat material | PEEK (Encapsulated seats) |
| Seal material 1st Body Seal | AED - Elast-O-Lion 985 (7) |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs, 100% European manufacture to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 6 Corrosion test, micrographic examination on all forgings
- 7 Temperature: -51°C min, 155°C max (pressure limitations apply at maximum temp) 1st body seal static temp conforms
- 8 316SS nut & stop pin, 17-4PHSS lever, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified



















| Manufacturer: Starline S.p.a | Valve code 169-PGE-G |
|---------------------------------|---|
| Valve type | Ball Valve - MEGA STAR - Full bore (11) - 3pce bolted body Inside (enclosed) body bolting |
| Pressure/temp Rating | ASME ANSI 1500 CLASS (7) |
| Trim Construction | Floating ball - anti blowout - encapsulated seats |
| Valve operator | Lever operated - forged stainless steel (17-4PH) c/w Locking Device (8) |
| End connections | Integral flanges to ASME/ANSI 1500 RF smooth finish or RTJ |
| Body material | Forged Duplex stainless steel - ASTM A182 F51 (4) (6) |
| Trim material | Ball - Duplex stainless steel - ASTM A182 F51 |
| | Stem - Duplex stainless steel - ASTM A182 F51 |
| Seat material | PEEK (Encapsulated seats) |
| Seal material 1st Body Seal | AED Elast-O-Lion 985 (7) |
| Seal material Fireseals | Graphite Stem Packing and Outside Body Seal |
| Bolting material | UNS 31803 (Duplex) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1 Full traceable body & trim certs, 100% Western European manufacture, to Norsok standards
- 3 Materials of construction according to NACE MR-01-75
- 4 Pickled & passivated body
- 5 Valves fitted with antistatic device
- 6 Corrosion test, micrographic examination on forgings
- 7 Temperature: -51°C min, 155°C max (pressure limitations apply at maximum temp) 1st body seal static temp conforms
- 8 316SS nut & stop pin, 17-4PH SS lever, ISO mount pad
- 10 Fugitive emission prototype certified & witness tested. SIL3 certified
- 11 Full Bore to schedule 160 pipe ID



















| Manufacturer: Starline S.p.a | Valve code 105-NGE-G |
|---------------------------------|--|
| Valve type | Ball Valve - ULTRA STAR - Full bore to API6D - 3 pc bolted |
| Press/temp rating | ASME/ANSI CLASS 2500 |
| Trim Construction | Trunnion mounted - anti blowout stem |
| Valve operator | Gear operated - enclosed weather proof Rotork Italy (7) |
| End connections | Flanged ASME/ANSI RF Smooth Finish or RTJ |
| Body material | Forged carbon steel - A350 LF2 (4) (6) |
| | Ball - stainless steel ASTM A182 F316/316L (dual certified) |
| Trim material | Stem - stainless steel ASTM A182 F51/17-4PH SS |
| | Trunnion - stainless steel ASTM A182 F51/17-4PH SS (13) |
| | Seat - stainless steel ASTM A182 F316/316L (dual certified) |
| External Components | Drain, plug, trunnion flange & cap screws, injectors, fixtures - 316SS |
| Seat material | Devlon V |
| Seal material | Graphite James Walker, Elast-O-Lion 985 (AED) |
| Bolting material | A320 L7M (Galvanised) - NACE MR-01-75 (Dual conforms to A193 B7M) |
| Sealant Injection | To seats and stem |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certificates 100% Western European manufacture. Tested to API6D
- 3 Materials of construction according to NACE MR 01-75
- 4 Valves protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 0.22% maximum carbon content, LF2 Class I, -46°C charpies tested, dual conforming A105N. 3mm corrosion allowance
- 7 ISO mount pad, lockable (c/w gearbox). Galvanised bracket.
- 8 Temp -46°C to 155°C max (pressure limitations apply at max temp)
- 10 Fugitive emission sample prototype certified & witness tested. SIL 3 certified.
- 11 Bi-directional, self relieving seats
- 12 Double Block & Bleed capable
- 13 The complete trunnion is 316 SS including the trunnion flange and cap screws.



















| Manufacturer: Starline S.p.a | Valve code 105-NGE-G |
|---------------------------------|---|
| Valve type | Ball Valve - ULTRA STAR - Full bore - 3 pcs bolted const. |
| Press/temp rating | ASME/ANSI CLASS 600 |
| Trim Construction | Trunnion mounted - anti blowout stem |
| Valve operator | Lever operated - Forged carbon steel (9), c/w Locking Device (9) |
| End connections | Flanged ASME/ANSI RF Smooth Finish or RTJ |
| Body material | Forged carbon steel - A350 LF2 (4) (6) |
| | Ball - stainless steel ASTM A182 F316/316L (dual certified) |
| Trim material | Stem - stainless steel ASTM A182 F316/316L (dual certified) |
| | Trunnion - stainless steel ASTM A182 F316/316L (dual certified (14)) |
| | Seat - stainless steel ASTM A182 F316/316L (dual certified) |
| External Components | Drain, plug, injectors, trunnion flane & cap screws, fixtures - 316SS |
| Seat material | PTFE reinforced (20% carbon 5% Graphite) |
| Seal material | Graphite, Elast-O-Lion 985 (AED) |
| Bolting material | A320 L7M (Galvanised) - NACE MR-01-75 (Dual conforms to A193 B7M) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certificates 100% European manufacture. Tested to API6D
- 3 Materials of construction according to NACE MR 01-75
- 4 Valves protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 0.22% maximum carbon content, LF2 Class I, -46°C charpies tested, dual conforming A105N. 3mm corrosion allowance
- 7 ISO mount pad, lockable open/closed
- 8 Temp -46°C to 155°C max (pressure limitations apply at max temp)
- 9 Galvanised for offshore salt spray resistance
- 10 Fugitive emission prototype certified & witness tested. SIL 3 certified.
- 11 Bi-directional, self relieving seats
- 12 Double Block & Bleed capable
- 13 Sealant Injection facility
- 14 The complete trunnion is 316 SS including the trunnion flange and cap screws.



















| Manufacturer: Starline S.p.a | Valve code 105-NGV-G |
|---------------------------------|--|
| Valve type | Ball Valve - ULTRA STAR - Full bore - 3 pcs bolted const. |
| Press/temp rating | ASME/ANSI CLASS 600 |
| Trim Construction | Trunnion mounted - anti blowout stem |
| Valve operator | Lever operated - Forged carbon steel (9), c/w Locking Device (9) |
| End connections | Flanged ASME/ANSI RF Smooth Finish or RTJ |
| Body material | Forged carbon steel - A350 LF2 (4) (6) |
| | Ball - stainless steel ASTM A182 F316/316L (dual certified) |
| Trim material | Stem - stainless steel ASTM A182 F316/316L (dual certified) |
| | Trunnion - stainless steel ASTM A182 F316/316L (dual certified) (14) |
| | Seat - stainless steel ASTM A182 F316/316L (dual certified) |
| External Components | Drain, plug, injectors, trunnion flange & cap screws, fixtures - 316SS |
| Seat material | Devlon V |
| Seal material | Graphite, James Walker FR58/90 Viton (AED) |
| Bolting material | A320 L7M (Galvanised) - NACE MR-01-75 (Dual conforms to A193 B7M) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certificates 100% European manufacture. Tested to API6D
- 3 Materials of construction according to NACE MR 01-75
- 4 Valves protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 0.22% maximum carbon content, LF2 Class I, -46°C charpies tested, dual conforming A105N. 3mm corrosion allowance
- 7 ISO mount pad, lockable open/closed
- 8 Temp -29°C to 155°C max (pressure limitations apply at max temp)
- 9 Galvanised for offshore salt spray resistance
- 10 Fugitive emission prototype certified & witness tested. SIL 3 certified.
- 11 Bi-directional, self relieving seats
- 12 Double Block & Bleed capable
- 13 Sealant Injection facility
- 14 The complete trunnion is 316SS including the trunnion flange and cap screws



















| Manufacturer: Starline S.p.a | Valve code 105-NGE-G |
|---------------------------------|--|
| Valve type | Ball Valve - ULTRA STAR - Full bore - 3 pcs bolted |
| Press/temp rating | ASME/ANSI CLASS 1500 |
| Trim Construction | Trunnion mounted - anti blowout stem |
| Valve operator | Lever operated - Forged carbon steel (9), c/w Locking Device (9) |
| End connections | Flanged ASME/ANSI RF Smooth Finish or RTJ |
| Body material | Forged carbon steel - A350 LF2 (4) (6) |
| Trim material | Ball - stainless steel ASTM A182 F316/316L (dual certified) |
| | Stem - stainless steel ASTM A182 F316/316L (dual certified) |
| | Trunnion - stainless steel ASTM A182 F316/316L (dual certified) (14) |
| | Seat - stainless steel ASTM A182 F316/316L (dual certified) |
| External Components | Drain, plug, injectors, trunnion flange & cap screws, fixtures - 316SS |
| Seat material | Devlon V |
| Seal material | Graphite, Elast-O-Lion 985 (AED) |
| Bolting material | A320 L7M (Galvanised) - NACE MR-01-75 (Dual conforms to A193 B7M) |

Notes: (All notes apply whether referenced or not)

- 1 Certified Fire safe to API 607 API 6FA EN ISO 10497
- 2 Certification according to EN 10204/3.1. Full traceable body & trim certificates 100% European manufacture. Tested to API6D
- 3 Materials of construction according to NACE MR 01-75
- 4 Valves protected against corrosion by phosphating treatment
- 5 Valves fitted with antistatic device
- 6 0.22% maximum carbon content, LF2 Class I, -46°C charpies tested, dual conforming A105N. 3mm corrosion allowance
- 7 ISO mount pad, lockable open/closed
- 8 Temp -46°C to 155°C max (pressure limitations apply at max temp)
- 9 Galvanised for offshore salt spray resistance
- 10 Fugitive emission prototype certified & witness tested. SIL 3 certified.
- 11 Bi-directional, self relieving seats
- 12 Double Block & Bleed capable
- 13 Sealant Injection facility
- 14 The complete trunnion is 316SS including the trunnion flange and cap screws.

Checked JB rev. 02 by MT approved BT















