

-Schutzvermerk nach DIN ISO 16016 beachten-

| Item | Designation | Material | Certificate DIN EN 10204 | Part group EG / PG |
|-------|--------------------|---|--------------------------------|-----------------------|
| 1 | Body | A 352 - LCC / 1.6220, DIN EN 10213 or | 3.1 | 1 |
| | | A 350 - LF2 / 1.0566 *, DIN 17103 | | |
| 2 | Disc | AISI 316 Ti / 1.4571, DIN EN 10272; Stellite 6 or | 3.1 | 2 |
| | | A 350 - LF2 / 1.0566 *, DIN 17103; Stellite 6 | | |
| 3 | Bellows | Hastelloy C276 / 2.4819 | 3.1 | 3 |
| 3.1 | Bellows ring | Hastelloy C276 / 2.4819 | - | 2 |
| 3.2 | Bellows ring | Hastelloy C276 / 2.4819 | - | 2 |
| 4.1 | Stud bolt | A320-L7 / A193-B7 | 3.1 | 1 |
| 4.2 | Hexagon nut | A194-7L | 3.1 | 1 |
| 6 | Gland follower | A 352 - LC3 / 1.5638, DIN EN 10213 | - | 2 |
| 6.1 | Stud bolt | A320-L7 / A193-B7 | 3.1 | 3 |
| 6.2 | Hexagon nut | A194-7L | 3.1 | 3 |
| 6.3 | Plain washer | 140HV-A4 | - | 3 |
| 6.4 | Wiper | NBR 90 | - | 3 |
| 6.5 | O-ring | NBR 70 | - | 3 |
| 7 | Lower stem | AISI 316 Ti / 1.4571, DIN EN 10272 | 3.1 | 2 |
| 7.1 | Grooved dowel | X8CrNiS18-9 / 1.4305, DIN EN ISO 3506-1 | - | 3 |
| 8 | Coupling | AISI 316 Ti / 1.4571, DIN EN 10272 | - | 2 |
| 8.4 | Hexagon nut | X5CrNiMo17-12-2 / A4, DIN EN ISO 3506-2 | - | 3 |
| 8.5 | Clamp | AISI 304 / 1.4301 | - | 3 |
| 8.6 | Coupling | AISI 316 Ti / 1.4571, DIN EN 10272 | - | 3 |
| 9 | Yoke | A 105 / 1.0460 zinc coated - tlp., DIN EN 10060 | - | 2 |
| 12 | Pillar | AISI 431 / 1.4057, DIN EN 10272 | - | 2 |
| 12.1 | Hexagon nut | A194-8M / A4 - 70, DIN EN ISO 3506-2 | 3.1 | 3 |
| 15 | Packing | PTFE | - | 3 |
| 18 | Bonnet gasket | Stainless steel / PTFE | - | 3 |
| 24 | Seat | AISI 316 Ti / 1.4571, DIN EN 10272; Stellite 21 | 3.1 | 1 |
| 30 | Pneumatic-Actuator | Fa. Phönix or other, diaphragm type, spring return | - | 3 |
| 95 | Name plate | Gravoxal blue Nr. 605 | - | 2 |
| 95.1 | Cylindrical bolt | A4 - 70, DIN EN ISO 3506-1 | - | 3 |
| 95.2 | Pin | AISI 321 / 1.4541, DIN EN 10088 | - | 1 |
| 95.3 | Threaded pin | A 182 - F316 / 1.4401, DIN EN ISO 3506-1 | - | 3 |
| 95.4 | Hexagon nut | A2 - 70, DIN EN ISO 3506-2 | - | 3 |
| 95.5 | Clamping device | A4 | - | 3 |
| 119 | Holding device | AISI 316 Ti / 1.4571, DIN EN 10088-2 | - | 3 |
| 119.1 | Countersunk screw | A4 - 70, DIN EN ISO 3506-1 | - | 3 |

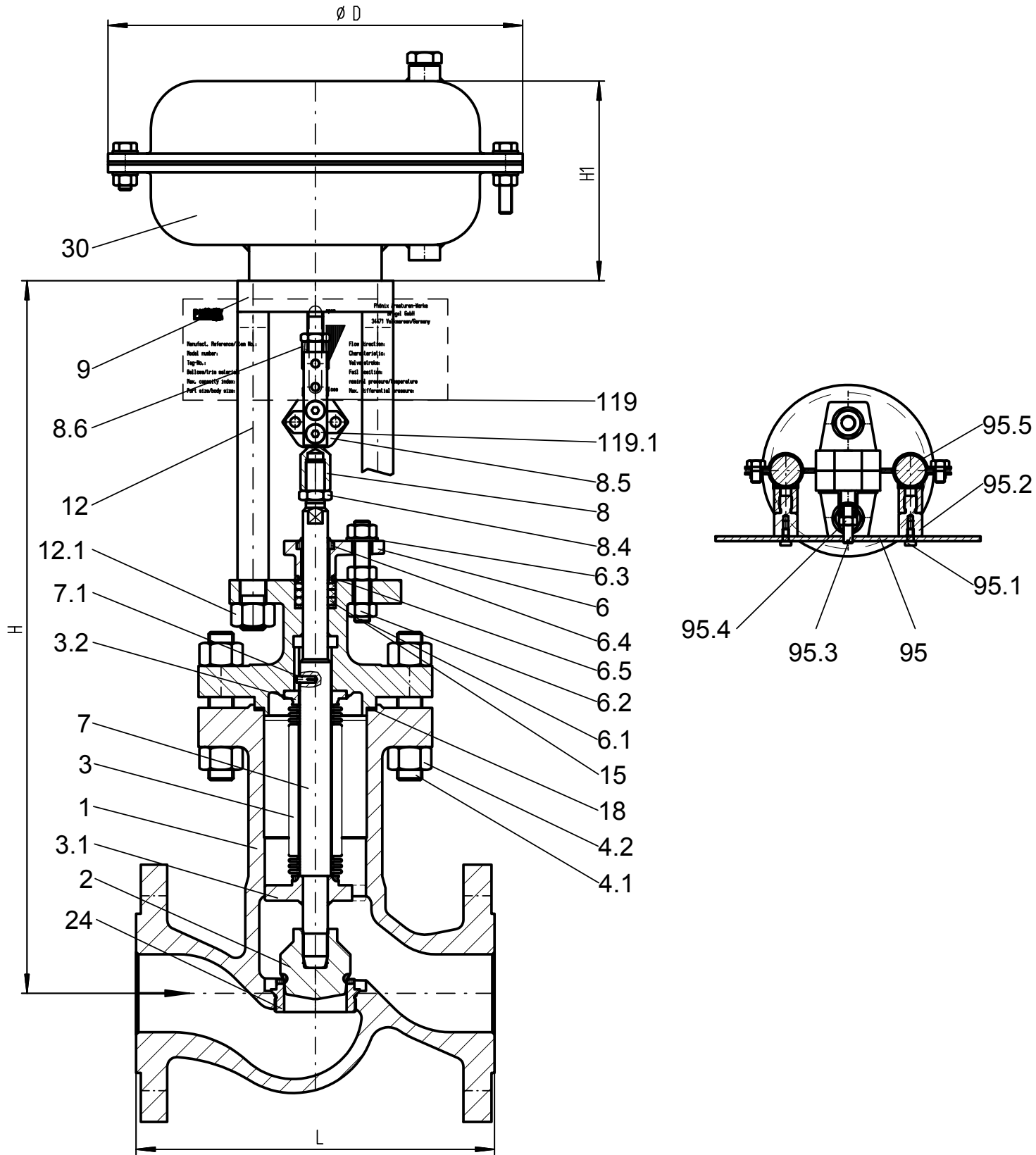
 = Spare part

* = A 350 - LF2 / 1.0566 ≤ DN50

| DN | L | H | H1 | Ø D | P-Actuator | Type |
|-----|-----|-----|-----|-----|------------|------|
| 25 | 160 | 413 | 129 | 226 | MA.0,5 | EC8 |
| 40 | 200 | 457 | 129 | 266 | MA.1 | EC8 |
| 50 | 230 | 457 | 129 | 266 | MA.1 | EC8 |
| 80 | 310 | 709 | 201 | 343 | MA.2 | EC9 |
| 100 | 350 | 712 | 352 | 610 | MA.3 | EC9 |
| 150 | 480 | 955 | 352 | 610 | MA.3 | EC9 |

Type 350 EC8 and EC9
control valves

APPENDIX 2-1



APPENDIX 2-1

| | | | | | | | |
|--|------------|--|----------------------|-------------------------------------|----------------|--------|------|
| Gez.: | 22.05.2019 | Stobbe | Rohrteil-Zeichnung: | | | | |
| Gepr.: | | | Vorbearbeitungsteil: | | | | |
| PHÖNIX ARMATUREN-WERKE Bregel GmbH 34471 Volkmarsen GERMANY | | Benennung: EC8-9 Feineinstellventil / Control valve | | 0 | Hicad-Original | | |
| | | DN:25-150 PN:40 NPS: Class: | | Ind. | Änderung | Datum | Name |
| | | | | Zeichnungs-Nr.: EC8-9.015 | | Blatt: | |
| Maßstab: 1:3.5 | | Ursprung: EC8.015011045 | | Änderungsnummer: | | | |

-Schutzvermerk nach DIN ISO 16016 beachten-

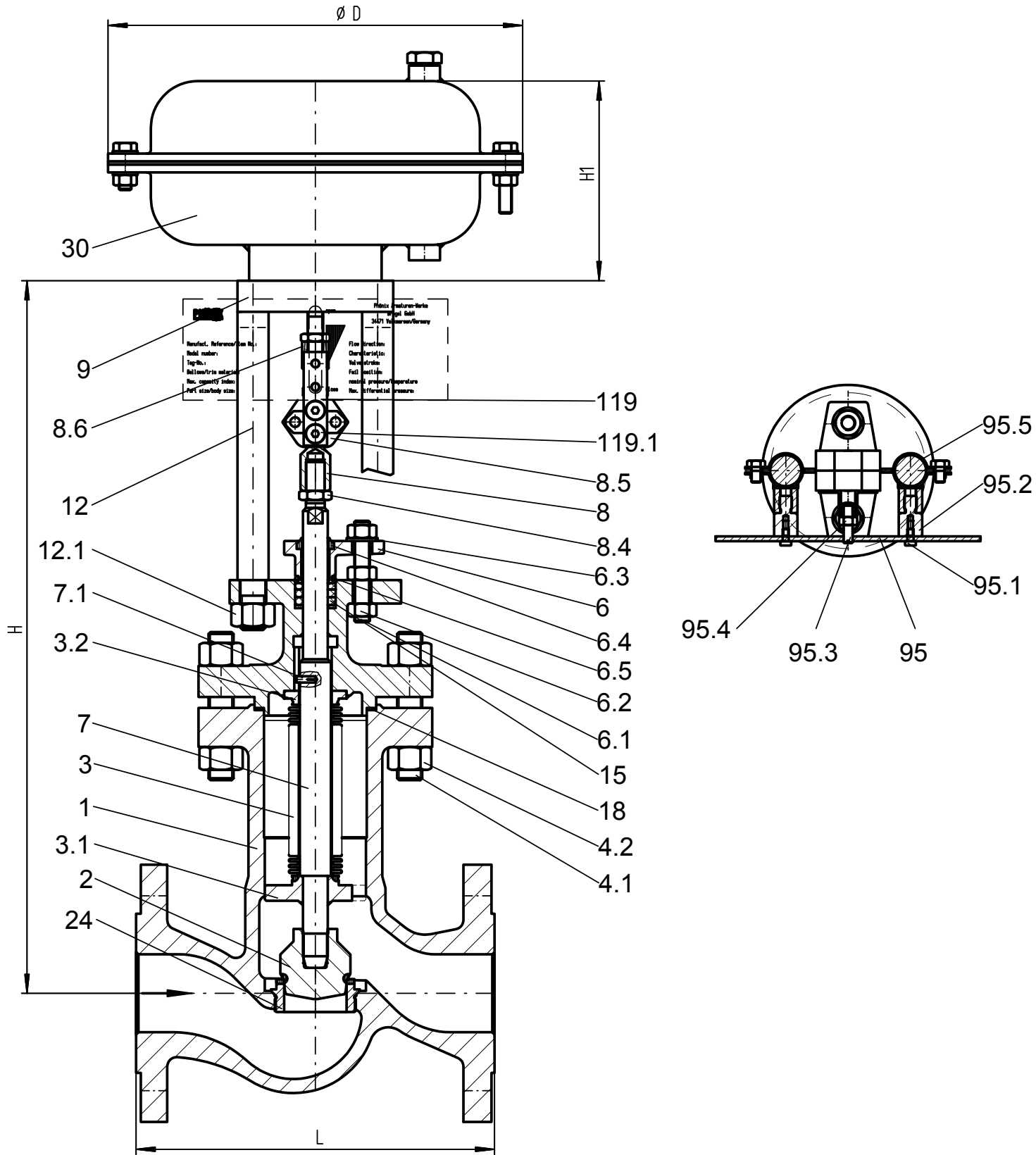
| Item | Designation | Material | Certificate DIN EN 10204 | Part group EG / PG |
|-------|--------------------|---|--------------------------------|-----------------------|
| 1 | Body | A 352 - LCC / 1.6220, DIN EN 10213 or | 3.1 | 1 |
| | | A 350 - LF2 / 1.0566 *, DIN 17103 | | |
| 2 | Disc | AISI 316 Ti / 1.4571, DIN EN 10272; Stellite 6 or | 3.1 | 2 |
| | | A 350 - LF2 / 1.0566 *, DIN 17103; Stellite 6 | | |
| 3 | Bellows | Hastelloy C276 / 2.4819 | 3.1 | 3 |
| 3.1 | Bellows ring | Hastelloy C276 / 2.4819 | - | 2 |
| 3.2 | Bellows ring | Hastelloy C276 / 2.4819 | - | 2 |
| 4.1 | Stud bolt | A320-L7 / A193-B7 | 3.1 | 1 |
| 4.2 | Hexagon nut | A194-7L | 3.1 | 1 |
| 6 | Gland follower | A 352 - LC3 / 1.5638, DIN EN 10213 | - | 2 |
| 6.1 | Stud bolt | A320-L7 / A193-B7 | 3.1 | 3 |
| 6.2 | Hexagon nut | A194-7L | 3.1 | 3 |
| 6.3 | Plain washer | 140HV-A4 | - | 3 |
| 6.4 | Wiper | NBR 90 | - | 3 |
| 6.5 | O-ring | NBR 70 | - | 3 |
| 7 | Lower stem | AISI 316 Ti / 1.4571, DIN EN 10272 | 3.1 | 2 |
| 7.1 | Grooved dowel | X8CrNiS18-9 / 1.4305, DIN EN ISO 3506-1 | - | 3 |
| 8 | Coupling | AISI 316 Ti / 1.4571, DIN EN 10272 | - | 2 |
| 8.4 | Hexagon nut | A4, DIN EN ISO 3506-2 | - | 3 |
| 8.5 | Clamp | AISI 304 / 1.4301 | - | 3 |
| 8.6 | Coupling | AISI 316 Ti / 1.4571, DIN EN 10272 | - | 3 |
| 9 | Yoke | A 105 / 1.0460 zinc coated - tlp., DIN EN 10060 | - | 2 |
| 12 | Pillar | AISI 431 / 1.4057, DIN EN 10272 | - | 2 |
| 12.1 | Hexagon nut | A194-8M / A4 - 70, DIN EN ISO 3506-2 | 3.1 | 3 |
| 15 | Packing | PTFE | - | 3 |
| 18 | Bonnet gasket | Stainless steel / PTFE | - | 3 |
| 24 | Seat | AISI 316 Ti / 1.4571, DIN EN 10272; Stellite 6 | 3.1 | 1 |
| 30 | Pneumatic-Actuator | Fa. Phönix or other, diaphragm type, spring return | - | 3 |
| 95 | Name plate | Gravoxal blue Nr. 605 | - | 2 |
| 95.1 | Cylindrical bolt | A4 - 70, DIN EN ISO 3506-1 | - | 3 |
| 95.2 | Pin | AISI 321 / 1.4541, DIN EN 10088 | - | 1 |
| 95.3 | Threaded pin | A 182 - F316 / 1.4401, DIN EN ISO 3506-1 | - | 3 |
| 95.4 | Hexagon nut | A2 - 70, DIN EN ISO 3506-2 | - | 3 |
| 95.5 | Clamping device | X5CrNiMo17-12-2 / A4 | - | 3 |
| 119 | Holding device | AISI 316 Ti / 1.4571, DIN EN 10088-2 | - | 3 |
| 119.1 | Countersunk screw | A4 - 70, DIN EN ISO 3506-1 | - | 3 |

⬡ = Spare part

* = A 350 - LF2 / 1.0566 ≤ NPS2

| NPS | L | H | H1 | Ø D | P-Actuator | Type |
|-------|-----|-----|-----|-----|------------|------|
| 1 | 203 | 413 | 129 | 226 | MA.0,5 | EC8 |
| 1 1/2 | 229 | 457 | 129 | 266 | MA.1 | EC8 |
| 2 | 267 | 457 | 129 | 266 | MA.1 | EC8 |
| 3 | 318 | 709 | 356 | 343 | MA.2T | EC9 |
| 4 | 356 | 788 | 352 | 610 | MA.3 | EC9 |
| 6 | 444 | 962 | 613 | 610 | MA.3T | EC9 |

Type 350 EC8 and EC9
control valves

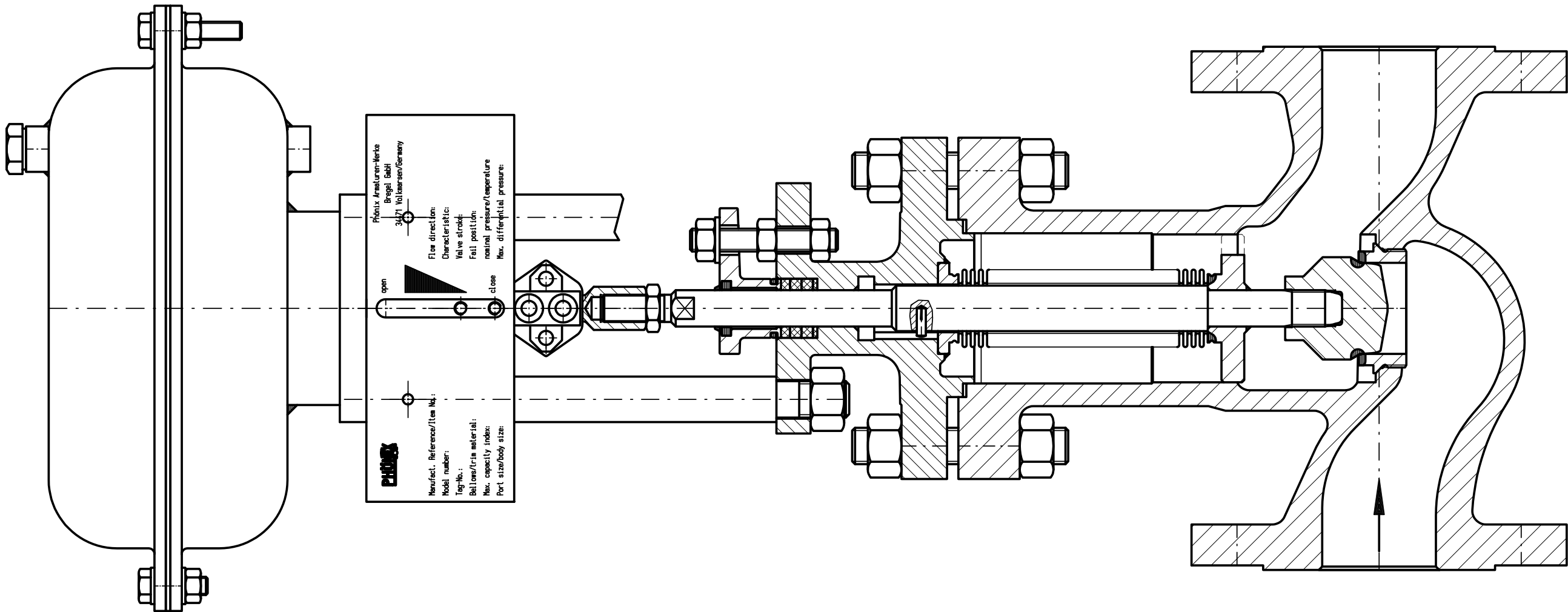


APPENDIX 2-2

APPENDIX 2-2

| | | | | | | | |
|--|------------|--|----------------------|------------------|-------------------------------------|------------------------|------|
| Gez.: | 23.05.2019 | Stobbe | Rohrteil-Zeichnung: | | | | |
| Gepr.: | | | Vorbearbeitungsteil: | | | | |
| PHÖNIX ARMATUREN-WERKE Bregel GmbH 34471 Volkmarsen GERMANY | | Benennung: EC8-9 Feineinstellventil / Control valve | | 0 | Hicad-Original | | |
| | | DN: | | PN: | Änderung | Datum | Name |
| | | NPS:1-6 | | Class:300 | Zeichnungs-Nr.: EC8-9.056 | | |
| Maßstab: 1:3.5 | | Ursprung: | | Ersatz für: | | CAD: C: V-00085457.SZA | |
| | | | | Änderungsnummer: | | | |

APPENDIX 2-3

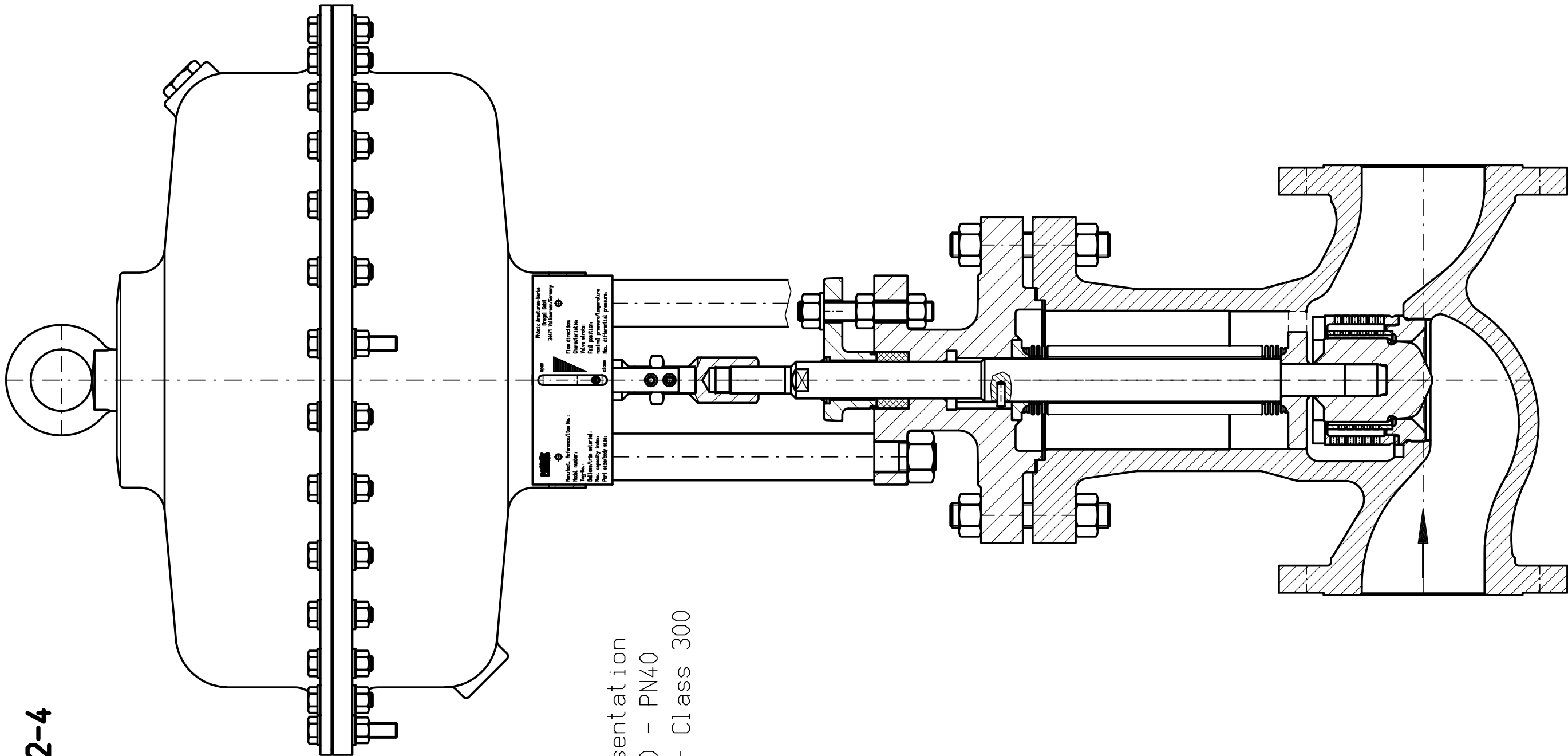


Type 350.EC8
generalized representation
DN25, DN40, DN50 - PN40
NPS1, NPS1½, NPS2 - Class 300

APPENDIX 2-3

| | | | | | | |
|---|------------|--------|-----------------------------|-------|------------------------|----------------|
| Gez.: | 05.06.2019 | Stobbe | Rohteil-Zeichnung: | | | |
| Gepr.: | | | Vorbearbeitungsteil: | | | |
| PHONIX ARMATUREN-WERKE Bregel GmbH 34471 Volkmarsen GERMANY | | | Benennung: Control valve | | 0 | Hiced-Original |
| | | | | | Ind. | Änderung |
| | | | Zeichnungs-Nr.: EC8 | | Datum | |
| Maßstab: 1:2 | | | DN:25-50 | PN:40 | NPS:1-2 | Class:300 |
| Ursprung: | | | Ersatz für: | | Änderungsnummer: | |
| | | | | | Name | |
| | | | | | Blatt: | |
| | | | | | CAD: C:\V-00085497.SZA | |

APPENDIX 2-4



Type 350. EC9
generalized representation
DN80, DN100, DN150 - PN40
NPS3, NPS4, NPS6 - Class 300

APPENDIX 2-4

| | | | | | | | |
|---|------------|-----------|-----------------------------|--|------------------------|----------|-------|
| Gez.: | 05.06.2019 | Stobbe | Rohteil-Zeichnung: | | | | |
| Gepr.: | | | Vorbereitungsteil: | | | | |
| PHÖNIX ARMATUREN-WERKE Bregel GmbH 34471 Volkmarsen GERMANY | | | Benennung: Control valve | | 0 Hicad-Original | | |
| | | | | | Ind. | Änderung | Datum |
| | | | | | Zeichnungs-Nr.: EC9 | | |
| | | | | | CAD: C:\V-00085498.SZA | | |
| | | | | | Blatt: | | |
| Maßstab: 1:2 | | Ursprung: | Ersatz für: | | Änderungsnummer: | | |