

equipment list

Heller_Dynam_Bed_2L2C

| device tag | number | denomination | Type | Manufacturer | Heller no. | device tag | number | denomination | Type | Manufacturer | Heller no. |
|-------------|--------|---------------------------|--------------------------------------|------------------------|------------|-------------|--------|---------------------------|------------------------------|------------------------|------------|
| +H1-100.1 | 1 | start-up valve | MS9-EM-G-VS 562178 | Festo | 01.107653 | +H1-102.1-1 | 1 | filter element | MS4-LFP-C 534501 | Festo | 01.109899 |
| +H1-100.2 | 1 | silencer | U-1 B 151990 | Festo | 01.107197 | +H1-102.2 | 1 | superfine air filter | MS4-LFM-1/4-AUV 535768 | Festo | 01.106321 |
| +H1-100.3 | 1 | filter pressure regulator | MS9-LFR-G-D6-CUV-DI-A4 562531 | Festo | 01.109059 | +H1-102.2-1 | 1 | filter element | MS4/D-MINI-LFM-A 162674 | Festo | 01.086419 |
| +H1-100.3-1 | 1 | filter element | MS9-LFP-C 570309 | Festo | 01.107824 | +M-102.3 | 1 | distributor block | FR-4-1/8-B 6701 | Festo | 01.034751 |
| +H1-100.4 | 1 | pressure gauge | MA-50-10-1/4 359873 | Festo | 01.092062 | | 1 | pressure regulator valve | MS4-LR-1/4-D5-A4 527690 | Festo | 01.106323 |
| +H1-100.5 | 1 | porting block | MS9-FRM-G-VS 564145 | Festo | 01.107195 | +H1-102.4 | 1 | pressure gauge | MA-50-2,5-1/4-EN 162837 | Festo | 01.105605 |
| +H1-100.6 | 1 | start-up valve | MS9-EE-G-V24P-VS 562177 | Festo | 01.107655 | +H1-102.5 | 1 | activated carbon filter | MS4-LFX-1/4-R 529467 | Festo | 01.109998 |
| +H1-100.7 | 1 | silencer | U-1 B 151990 | Festo | 01.107197 | +H1-102.5-1 | 1 | filter element | MS4/D-MINI-LFX 532912 | Festo | 01.106336 |
| +H1-100.9 | 1 | plate | Filterelement en | Heller Maschinenfabrik | 10.500975 | +H1-102.7 | 1 | plate | Filterelement Festo en | Heller Maschinenfabrik | 10.500964 |
| +H1-100.10 | 1 | manifold | MS9-AGF 552956 | Festo | 01.107189 | +H1-102.8 | 1 | plate | Filterelement Festo en | Heller Maschinenfabrik | 10.500965 |
| +H1-100.11 | 1 | fastening angle | MS9-WP 552947 | Festo | 01.107190 | +H1-102.9 | 1 | plate | Filterelement Festo en | Heller Maschinenfabrik | 10.500966 |
| +H1-100.12 | 1 | fastening angle | MS9-WP 552947 | Festo | 01.107190 | +H1-102.10 | 1 | fastening angle | MS4-WP 532184 | Festo | 01.106320 |
| +H1-100.30 | 1 | distributor block | FR-8-1/4 2078 | Festo | 01.035408 | +H1-102.11 | 1 | fastening angle | MS4-WP 532184 | Festo | 01.106320 |
| +H1-100.31 | 1 | hose line | S100-CR-CR-0140 DN2 1400mm 250bar | Hydrotechnik | 01.098903 | +M-102.12 | 1 | plastic pipe | PUN-6x1-BL 159664 | Festo | 01.092357 |
| +H1-100.32 | 1 | pressure switch | PN7094 -1-10bar, G1/4 | IFM Electronic | 01.111724 | +M-102.13 | 1 | connecting piece | 226-270-02 | Heidenhain | 01.064398 |
| +H1-100.33 | 1 | Condensate separator | | Heller Maschinenfabrik | 00.789878 | +MC-102.14 | 1 | connecting piece | 226-270-02 | Heidenhain | 01.064398 |
| +H1-100.34 | 1 | ball valve | QH-1/4 9541 | Festo | 01.101540 | +M-102.15 | 1 | connecting piece | 226-270-02 | Heidenhain | 01.064398 |
| +H1-100.35 | 1 | silencer | AMTE-M-LH-G1 1205865 | Festo | 01.112166 | +H1-103.1 | 1 | porting block | MS6-FRM-1/2 529853 | Festo | 01.104403 |
| +H1-100.36 | 1 | shut-off valve | HE-G1-LO 197136 | Festo | 01.093956 | +H1-103.2 | 1 | pressure regulator valve | MS6-LRPB-1/2-D2-A8 535007 | Festo | 01.109947 |
| +H1-100.37 | 1 | flow control switch | SD6001 0,25-75 Nm3/h M12x1 NPT | IFM Electronic | 01.112294 | +H1-103.3 | 1 | pressure gauge | MAP-40-1-1/8-EN 161126 | Festo | 01.083257 |
| +H2-100.40 | 1 | distributor block | FR-4-1/2-B 6704 | Festo | 01.035406 | +H1-103.10 | 1 | fastening angle | MS6-WP 532195 | Festo | 01.106329 |
| +H1-100.49 | 1 | plastic pipe | PUN-12x2-BL 159670 | Festo | 01.089975 | +H1-103.11 | 1 | fastening angle | MS6-WP 532195 | Festo | 01.106329 |
| +H1-101.1 | 1 | superfine air filter | MS6-LFM-3/8-AUV 529673 | Festo | 01.107200 | +M-106.1 | 1 | connecting piece | 226-270-02 | Heidenhain | 01.064398 |
| +H1-101.1-1 | 1 | filter element | MS6-LFM-A 532909 | Festo | 01.107201 | +H1-107.1 | 1 | pressure regulator valve | MS4-LRB-1/4-D6-A8 527692 | Festo | 01.109945 |
| +H1-101.10 | 1 | fastening angle | MS6-WP 532195 | Festo | 01.106329 | +H1-107.2 | 1 | pressure gauge | MAP-40-1-1/8-EN 161126 | Festo | 01.083257 |
| +H1-101.11 | 1 | fastening angle | MS6-WP 532195 | Festo | 01.106329 | +H1-110.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +H1-101.13 | 1 | plate | Filterelement Festo en | Heller Maschinenfabrik | 10.500967 | +H1-110.2 | 1 | directional control valve | MDH-5/3E-D-1-M12-C 197126 | Festo | 01.095685 |
| +H1-102.1 | 1 | compressed air filter | MS4-LF-1/4-CRV 529397 | Festo | 01.109999 | +H1-111.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34, beachten!
Attention! Observe DIN 34
Atenção! Leia a DIN 34

< &H+TM/1

0.a >

| | | | | | | | | | | | |
|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|--|------------------------|----------------------|---------------|
| ART DER ÄNDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ/ PROJ. | 54800.00 | <div style="text-align: center;"> <h2>HELLER</h2> <p>Device tag list pneumatic</p> </div> | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | |
| CAD-System | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F |
| ePLAN 2.2.5 | | ERS./REP. | BEARB./CHG./ALT. | 14.07.2016 | AHFE/ZAJ | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | | INV-NR/INV-NO/NO-INV | Machine | =M54800 |
| | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 14.07.2016 | AHFE/ZAJ | WERKSTÜCK/ PART/PEÇA | | | Document type | &P pneumatic diagram | |
| | | | | | | | | | Mounting position | | |
| | | | | | | | | | Page name | 0 | |

equipment list

Heller_Dynam_Bed_2L2C

| device tag | number | denomination | Type | Manufacturer | Heller no. | device tag | number | denomination | Type | Manufacturer | Heller no. |
|------------|--------|---------------------------|--------------------------------|--------------|------------|-------------|--------|---------------------------|------------------------------|----------------|------------|
| +H1-111.2 | 1 | directional control valve | MDH-5/2-D-1-M12-FR-C 533010 | Festo | 01.095684 | | 1 | safety hood | FH 4500 | Festo | 01.087928 |
| +H1-112.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 | +GMS-131.3 | 1 | directional control valve | 3/2, G1/8 0 820 402 002 | AVENTICS | 01.076981 |
| +H1-113.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 | +GMS-131.4 | 1 | silencer | U-1/8 2307 | Festo | 01.034261 |
| +H1-113.2 | 1 | directional control valve | JMDH-5/2-D-1-M12-C 532687 | Festo | 01.095683 | +GMS-131.5 | 1 | plastic pipe | PUN-8x1,25-BL 159666 | Festo | 01.092358 |
| +MU-113.3 | 1 | plastic pipe | PUN-10x1,5-BL 159668 | Festo | 01.092359 | +GMS-131.6 | 1 | plastic pipe | PUN-8x1,25-BL 159666 | Festo | 01.092358 |
| +MU-113.4 | 1 | plastic pipe | PUN-10x1,5-BL 159668 | Festo | 01.092359 | +GMS-131.7 | 1 | plastic pipe | PUN-8x1,25-BL 159666 | Festo | 01.092358 |
| +MU-113.5 | 1 | throttle check valve | GRLA-1/4-B 151172 | Festo | 01.032677 | +GMS-131.8 | 1 | pneumatic cylinder | D40xH10 0 822 010 551 | AVENTICS | 01.092306 |
| +MU-113.6 | 1 | throttle check valve | GRLA-1/4-B 151172 | Festo | 01.032677 | +H1-132.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +MU-113.10 | 1 | pneumatic cylinder | DNC 50-50 PPV 163366 | Festo | 01.099235 | +H1-132.2 | 1 | cover plate | NDV-1-ISO 9489 | Festo | 01.083700 |
| +H1-115.1 | 1 | end plate | NEV-1DA/DB-ISO 320839 | Festo | 01.110979 | +H1-135.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +H1-115.2 | 1 | end plate | NEV-3DA/DB-ISO 320840 | Festo | 01.110981 | +H1-135.2 | 1 | cover plate | NDV-1-ISO 9489 | Festo | 01.083700 |
| +H1-115.4 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 | +H1-160.1 | 1 | input module | 19 504 230 | Norgren | 01.095501 |
| +H1-115.5 | 1 | directional control valve | MDH-5/2-D-1-M12-FR-C 533010 | Festo | 01.095684 | +H1-160.1-1 | 1 | pressure regulator valve | 19 24 001 | Norgren | 01.095502 |
| +H1-115.7 | 1 | connecting set | MS4-6-AMV 543489 | Festo | 01.109948 | +H1-160.1-2 | 1 | pressure gauge | 01 00 930 | Norgren | 01.095503 |
| +H1-115.8 | 1 | pressure regulator valve | MS4-LRB-1/4-D6-A8 527692 | Festo | 01.109945 | +H1-160.2 | 1 | directional control valve | MDH-5/3E-D-1-M12-C 197126 | Festo | 01.095685 |
| +H1-115.9 | 1 | pressure gauge | MA-40-10-1/8-EN 162835 | Festo | 01.109949 | +H1-160.3 | 1 | function module | 19 50 426 | Norgren | 01.095504 |
| +H1-115.10 | 1 | plug | NSC-1/4-1-ISO 11550 | Festo | 01.108866 | +H1-160.4 | 1 | adapter | 19 50 447 | Norgren | 01.095500 |
| +H1-115.13 | 1 | intermediate plate | ISO3-1 3815065 | Festo | 01.110980 | +H1-160.5 | 1 | pressure switch | PN7094 -1-10bar, G1/4 | IFM Electronic | 01.111724 |
| +H1-115.14 | 1 | silencer | AMTE-M-LH-G38 1205862 | Festo | 01.112270 | +H1-160.6 | 1 | function module | 19 50 426 | Norgren | 01.095504 |
| +H1-115.15 | 1 | silencer | AMTE-M-LH-G38 1205862 | Festo | 01.112270 | +H1-160.7 | 1 | adapter | 19 50 447 | Norgren | 01.095500 |
| +H1-116.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 | +H1-160.8 | 1 | pressure switch | PN7094 -1-10bar, G1/4 | IFM Electronic | 01.111724 |
| +H1-116.2 | 1 | cover plate | NDV-1-ISO 9489 | Festo | 01.083700 | +H1-160.9 | 1 | function module | 19 50 426 | Norgren | 01.095504 |
| +H1-117.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 | +H1-160.10 | 1 | adapter | 19 50 447 | Norgren | 01.095500 |
| +H1-117.2 | 1 | cover plate | NDV-1-ISO 9489 | Festo | 01.083700 | +H1-160.11 | 1 | pressure switch | PN7094 -1-10bar, G1/4 | IFM Electronic | 01.111724 |
| +H1-121.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 | +H1-160.12 | 1 | function module | 19 50 429 | Norgren | 01.095505 |
| +H1-121.2 | 1 | directional control valve | MDH-5/2-D-1-M12-FR-C 533010 | Festo | 01.095684 | +H1-160.13 | 1 | adapter | 19 50 447 | Norgren | 01.095500 |
| +H1-122.2 | 1 | cover plate | NDV-1-ISO 9489 | Festo | 01.083700 | +H1-160.14 | 1 | pressure switch | PN7094 -1-10bar, G1/4 | IFM Electronic | 01.111724 |
| +GMS-131.1 | 1 | directional control valve | F-5-1/4-B 8992 | Festo | 01.087927 | +H1-161.1 | 1 | subplate | NAV-1/2-3C-ISO 10175 | Festo | 01.082248 |

Änderungen nur im CAD-Original!
 Changes in CAD only!
 Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
 Schutzvermerk nach DIN 34 beachten!
 Attention! Observe DIN 34
 Atenção! Observe DIN 34

| | | | | | | | | | | | | | | | |
|---|--|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|--|------------------------|----------------------|-------------------|----------------------|---------------|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ./PROJ. | 54800.00 | <div style="text-align: center;"> <h2>HELLER</h2> <p>BENENNUNG/NAME/DENOMINAÇÃO</p> <p>Device tag list pneumatic</p> </div> | KUNDE/CUSTOMER/CLIENTE | Paccar, Columbus USA | PLAN/PLAN/PLANO | project | MP.05480000_F |
| CAD-System | | | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | INV-NR/INV-NO/NO-INV | | Machine | =M54800 | |
| ePLAN 2.2.5 | | | | ERS./REP. | BEARB./CHG./ALT. | 14.07.2016 | AHFE/ZAJ | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | | | | Document type | &P pneumatic diagram | |
| | | | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 14.07.2016 | AHFE/ZAJ | WERKSTÜCK/ PART/PEÇA | | | | | Mounting position | | |
| | | | | | | | | | | | | Page name | 0.a | A3 | |

equipment list

Heller_Dynam_Bed_2L2C

| device tag | number | denomination | Type | Manufacturer | Heller no. |
|---------------|--------|----------------------------|----------------------------------|--------------|------------|
| +H1-161.2 | 1 | cover plate | NDV-3-ISO 10340 | Festo | 01.100120 |
| +ATC-181.1 | 1 | manifold | AXT512-1A-B04F - ISO5599-1 Gr. 2 | SMC | 01.111800 |
| +ATC-181.2 | 1 | directional control valve | EVS7-8-FJG-D-3CVO-Q ISO2 | SMC | 01.102540 |
| +ATC-181.2-1 | 1 | connector adapter | 7000-41301-0000000-M12 | SMC | 01.102531 |
| +ATC-181.2-2 | 1 | connector adapter | 7000-41301-0000000-M12 | SMC | 01.102531 |
| +ATC-181.3 | 1 | end plate | AXT512-LA-04F - ISO5599-1 Gr. 2 | SMC | 01.111802 |
| +ATC-181.4 | 1 | silencer | AN400-04 G1/2 | SMC | 01.103674 |
| +ATC-181.5 | 1 | throttle check valve | ASP63F-04-12S | SMC | 01.102541 |
| +ATC-181.6 | 1 | pneumatic cylinder | RHCL40-880-DCL018HL | SMC | 01.102879 |
| +ATC-181.7 | 1 | silencer | AN400-04 G1/2 | SMC | 01.103674 |
| +ATC-181.11 | 1 | manifold | AXT512-1A-B04F - ISO5599-1 Gr. 2 | SMC | 01.111800 |
| +ATC-181.12 | 1 | directional control valve | EVS7-8-FG-S-3CVO-Q ISO2 | SMC | 01.110658 |
| +ATC-181.12-1 | 1 | connector adapter | 7000-41301-0000000-M12 | SMC | 01.102531 |
| +ATC-181.13 | 1 | end plate | AXT512-RA-04F - ISO5599-1 Gr. 2 | SMC | 01.111801 |
| +ATC-181.14 | 1 | throttle check valve | AS 3201 F-03-12S | SMC | 01.110661 |
| +GOS-184.1 | 1 | directional control valve | F-3-1/4-B 8984 | Festo | 01.102129 |
| +GOS-184.2 | 1 | silencer | U-1/4 B 6842 | Festo | 01.078584 |
| +GOS-184.4 | 1 | nozzle | D=1,2 - M5 K861 | Solex | 01.091653 |
| +GOS-184.5 | 1 | nozzle | D=1,2 - M5 K861 | Solex | 01.091653 |
| +H1-185.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +H1-185.2 | 1 | directional control valve | MDH-5/3E-D-1-M12-C 197126 | Festo | 01.095685 |
| +GMS-185.3 | 1 | throttle check valve | GRLA-1/8-QS-8-RS-B 162966 | Festo | 01.096680 |
| +GMS-185.4 | 1 | throttle check valve | GRLA-1/8-QS-8-RS-B 162966 | Festo | 01.096680 |
| +GMS-185.5 | 1 | pilot operated check valve | HGL-1/8 12938 | Festo | 01.077466 |
| +GMS-185.6 | 1 | pneumatic cylinder | RHCL40-525-DCM1071M | SMC | 01.102878 |
| +H1-185.7 | 1 | end plate | NEV-1DA/DB-ISO 10174 | Festo | 01.065868 |
| +H1-185.8 | 1 | silencer | AMTE-M-LH-G38 1205862 | Festo | 01.112270 |
| +H1-185.9 | 1 | silencer | AMTE-M-LH-G38 1205862 | Festo | 01.112270 |

| device tag | number | denomination | Type | Manufacturer | Heller no. |
|------------|--------|---------------------------|---|--------------|------------|
| +H1-185.11 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +H1-185.12 | 1 | directional control valve | MDH-5/2-D-1-M12-FR-C 533010 | Festo | 01.095684 |
| +H1-185.13 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +H1-185.14 | 1 | cover plate | NDV-1-ISO 9489 | Festo | 01.083700 |
| +H1-187.1 | 1 | subplate | NAV-1/4-1C-ISO 10173 | Festo | 01.065867 |
| +H1-187.2 | 1 | directional control valve | JMDH-5/2-D-1-M12-C 532687 | Festo | 01.095683 |
| +GMS-187.3 | 1 | throttle check valve | GRLA-1/8-QS-8-RS-B 162966 | Festo | 01.096680 |
| +GMS-187.4 | 1 | throttle check valve | GRLA-1/8-QS-8-RS-B 162966 | Festo | 01.096680 |
| +GMS-187.5 | 1 | pneumatic cylinder | D32x40H 0 822 240 0/. | AVENTICS | 01.098050 |
| +H1-187.6 | 1 | end plate | NEV-1DA/DB-ISO 10174 | Festo | 01.065868 |
| +H1-187.7 | 1 | silencer | AMTE-M-LH-G38 1205862 | Festo | 01.112270 |
| +H1-187.8 | 1 | silencer | AMTE-M-LH-G38 1205862 | Festo | 01.112270 |
| +GLS-190.1 | 1 | blowing valve | LSP-1/4-D 35528 | Festo | 01.100460 |
| +GLS-190.2 | 1 | coiled hose | HJP06 M005/2AF151 DN10 2xG1/4a L=5000 gelb | Stäubli | 01.107894 |
| +GLS-190.3 | 1 | coupling | DN6, G1/4 LP-006-2-WR513-11-1 | Walther | 01.089276 |
| +GLS-190.4 | 1 | coupling | DN6, G1/4A LP-006-0-WR013-11-1 | Walther | 01.094650 |

Änderungen nur im CAD-Original!
 Changes in CAD only!
 Mudanças no original CAD somente!

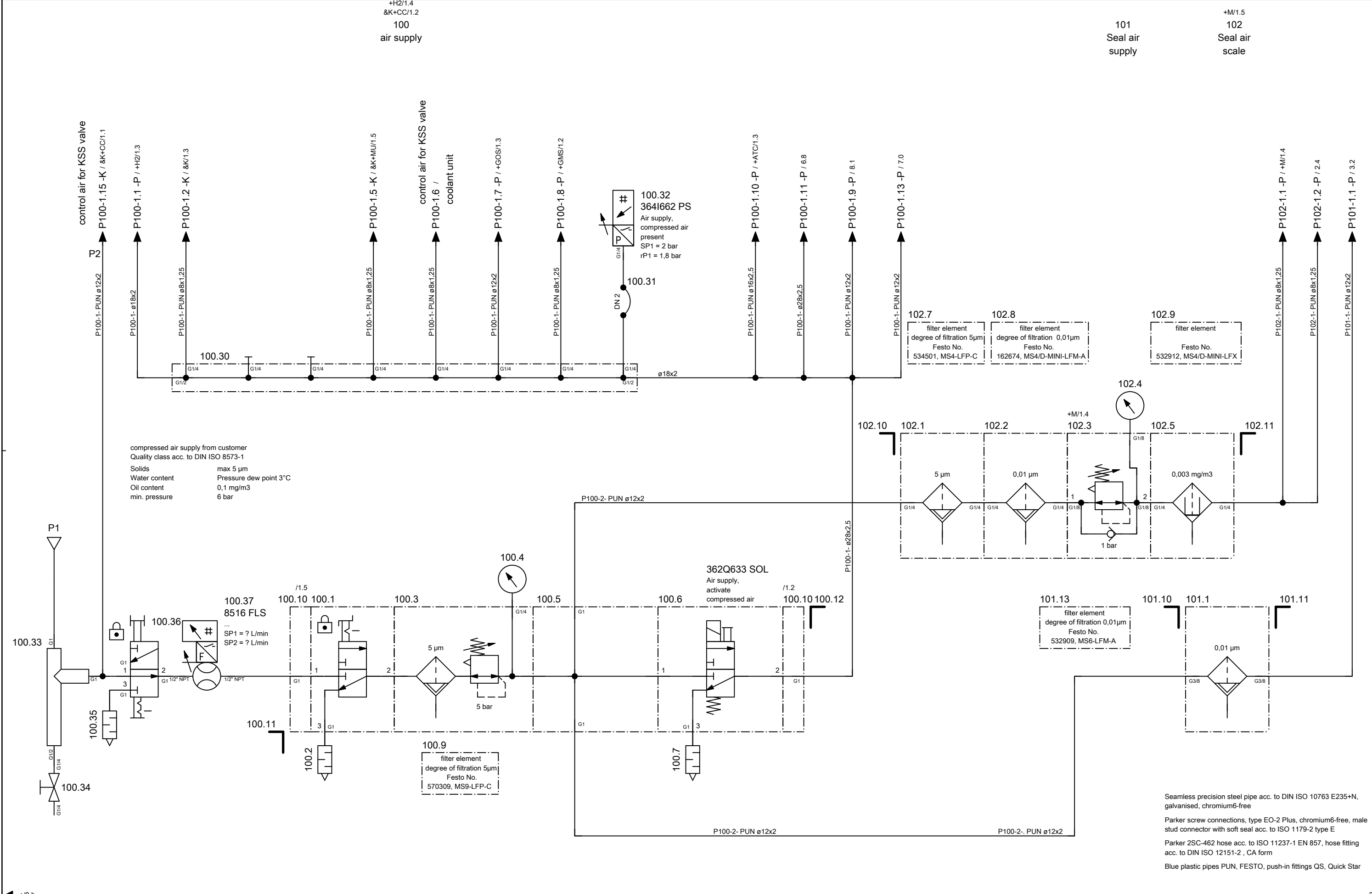
© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
 Schutzvermerk nach DIN 34 beachten!
 Attention! Observe DIN 34
 Atenção! Leia o DIN 34

| | | | | | | | | | |
|--|--|--|---|---|--|--|--|---|---------|
| ART DER ÄNDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO CAD-System ePLAN 2.2.5 | | URSPR./ORIG. ERS./REP. ERS.D./REP.W. | INDEX ZONE/ZONA DATUM/DATE NAME/NOME | PROJ./PROJ./PROJ. 54800.00 M-NR/M-NO/ M-NO M54800 TYP/TYP/ TIPO H 10000 MC - A-Axis WERKSTÜCK/ PART/PEÇA | <div style="text-align: center; font-weight: bold; font-size: 1.2em;">HELLER</div> BENENNUNG/NAME/DENOMINAÇÃO Device tag list pneumatic | KUNDE/CUSTOMER/CLIENTE Paccar, Columbus USA INV-NR/INV-NO/NO-INV | PLAN/PLAN/PLANO project Machine Document type Mounting position Page name | MP.05480000_F =M54800 &P pneumatic diagram 0.b | +H1/1 → |
|--|--|--|---|---|--|--|--|---|---------|

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atenção DIN 34

Heller_2L

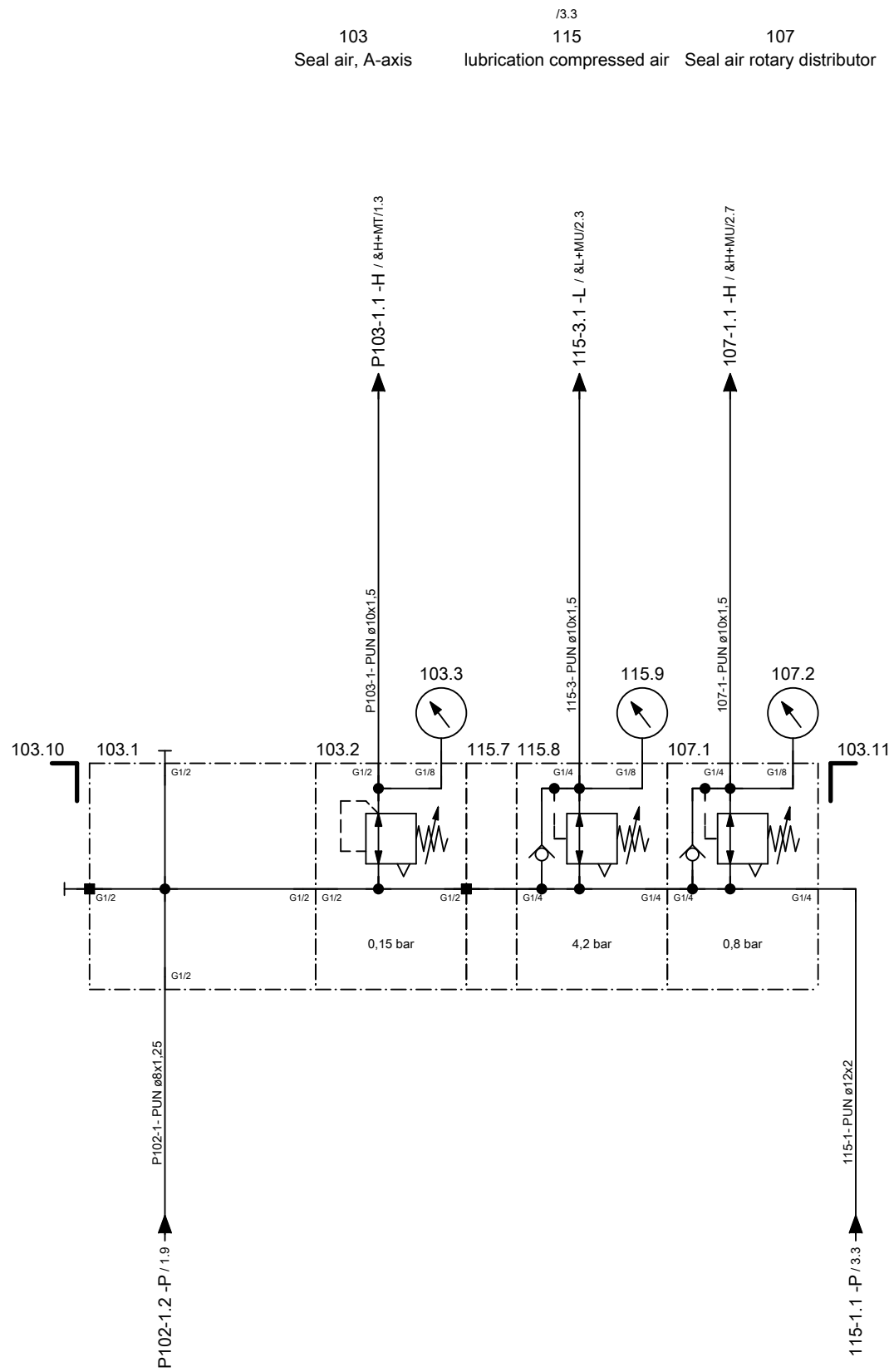


| | | | | | | | | | | | | |
|--|--|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|-------------------|------------------------|----------------------|
| ART DER ÄNDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ./PROJ. | 44800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO |
| CAD-System | | | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project |
| ePLAN 2.2.5 | | | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | Machine | =M54800 |
| | | | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | WERKSTÜCK/ PART/PEÇA | | | Document type | &P pneumatic diagram |
| | | | | | | | | | | | Mounting position | +H1 HELP1 |
| | | | | | | | | | | | Page name | 1 |

Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atente DIN 34



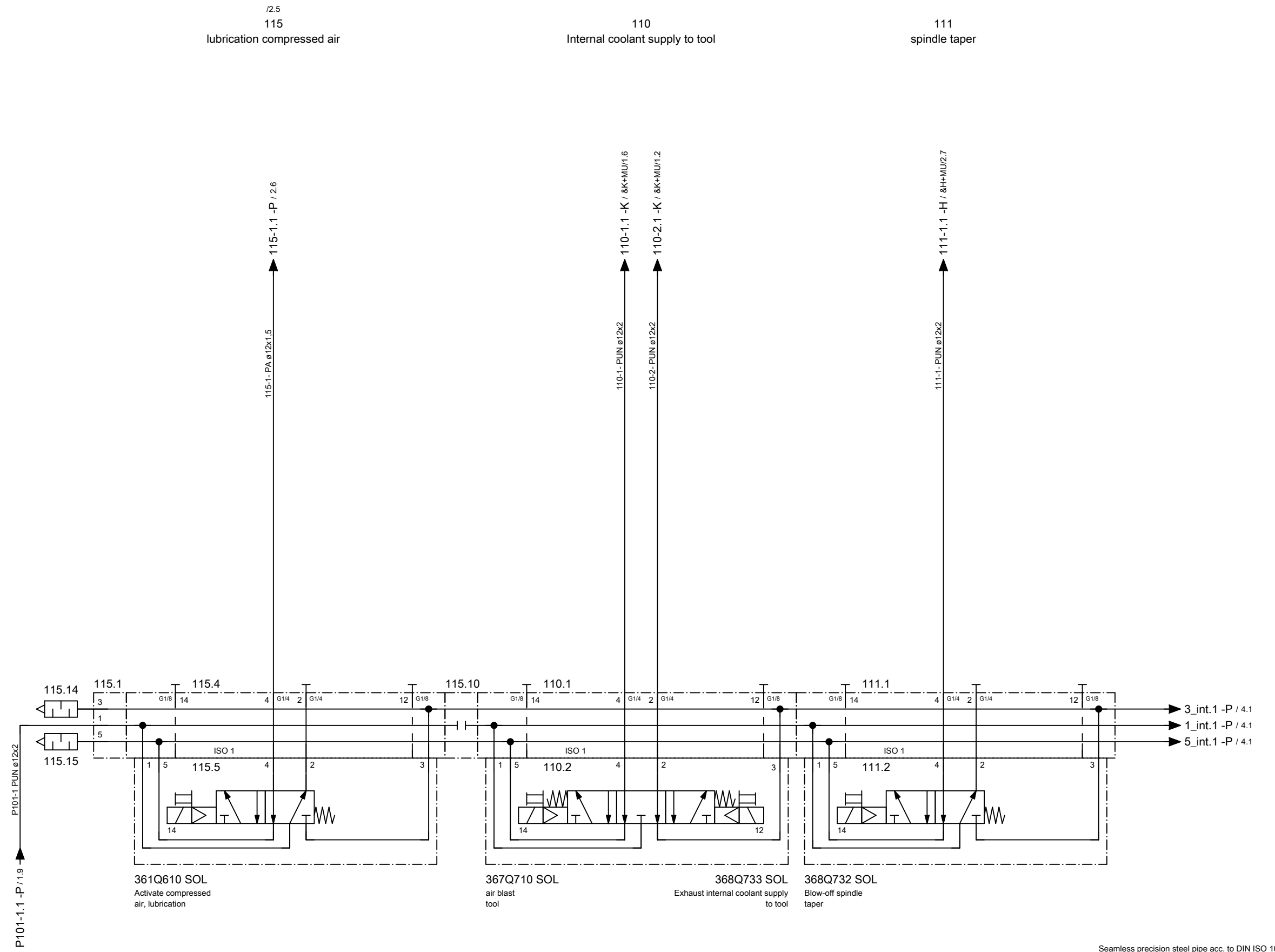
Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

| | | | | | | | | | | | |
|---|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|-------------------|------------------------|-----------------|---------------|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ./PROJ. | 54800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | |
| CAD-System | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR./M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F |
| ePLAN 2.2.5 | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | TYP./TYPE/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | INV-NR./INV-NO/NO-INV | Machine | =M54800 |
| | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | WERKSTÜCK/ PART/PEÇA | | | 13.503596 | Document type | &P |
| | | | | | | | | | Mounting position | +H1 | HELP1 |
| | | | | | | | | | Page name | 2 | |

Heller_2L

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atenção DIN 34



Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

| | | | | | | | | | |
|---|--|---------------|-------------------|------------|-----------|---------------------|-------------------|------------------------|----------------------|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ./PROJ. | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO |
| CAD-System | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | | Paccar, Columbus USA | project |
| ePLAN 2.2.5 | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | M54800 | pneumatic diagram | INV-NR/INV-NO/NO-INV | Machine |
| | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | H 10000 MC - A-Axis | | 13.503939 | Document type |
| | | | | | | | | Mounting position | &P pneumatic diagram |
| | | | | | | | | Page name | +H1 HELP1 |
| | | | | | | | | | 3 |

Heller_2L

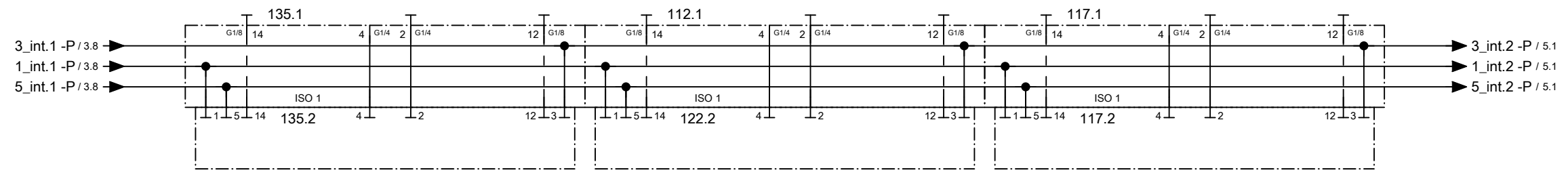
Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atente DIN 34

135
Air
for tool cleaning

112
Air for multi-spindle head

117
Multi-spindle head location pad



Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

← 3

5 →

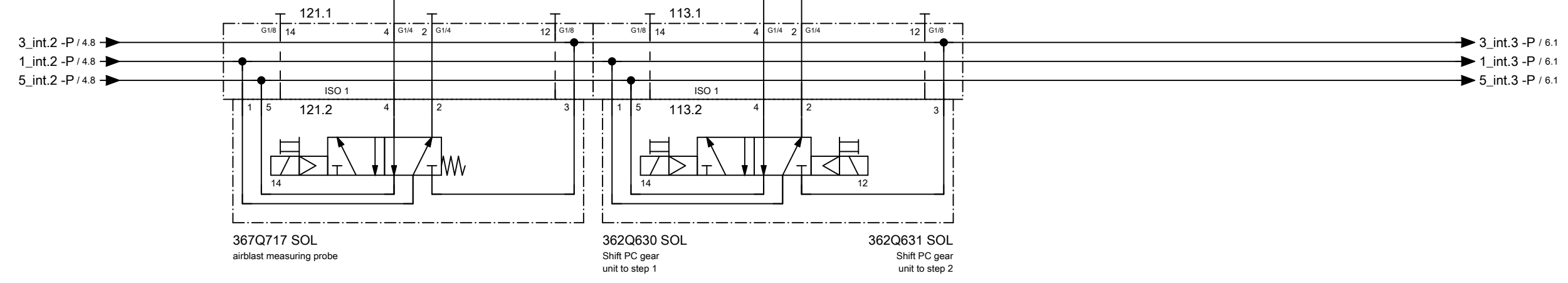
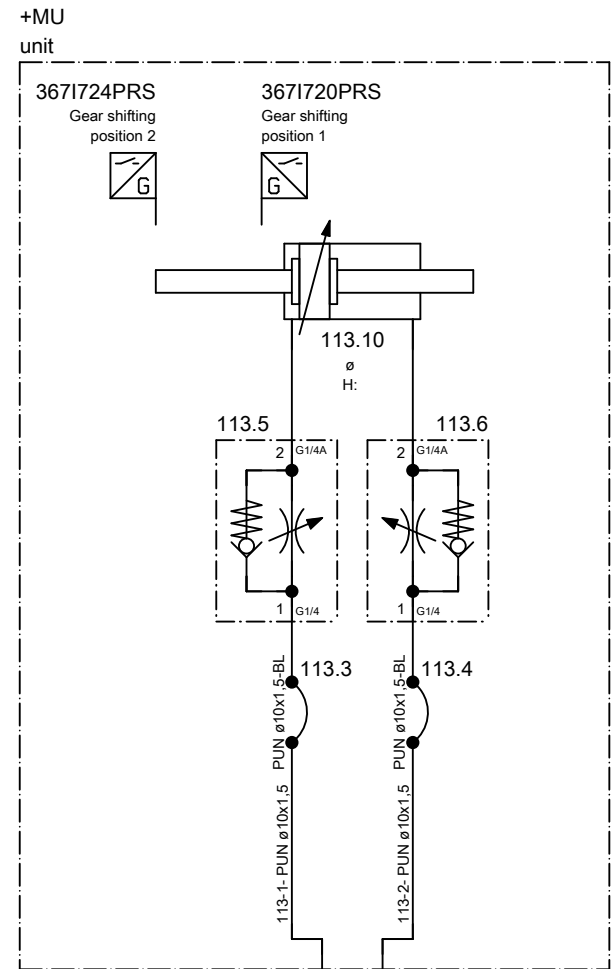
| | | | | | | | | | | | | | |
|-------------|--|---------------|-------------------|------------|-----------|---------------------|-----------|-------------------------|---------------------|-------------------|-------------------------|-------------------|----------------------|
| CAD-System | | URSPR./ORIG. | GEPR./CHECK./REG. | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ./PROJ. | 54800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | |
| ePLAN 2.2.5 | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | M54800 | | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F |
| Heller_2L | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | H 10000 MC - A-Axis | | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | INV-NR/INV-NO/NO-INV | Machine | =M54800 |
| | | | | | | | | WERKSTÜCK/ PART/PEÇA | | | 13.503939, 3x 13.503944 | Document type | &P pneumatic diagram |
| | | | | | | | | | | | | Mounting position | +H1 HELP1 |
| | | | | | | | | | | | | Page name | 4 |

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atenção DIN 34

121
airblast measuring probe

113
gear shift



Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

| | | | | | | | | | |
|---|--|---|--|------------------------------------|--|--|--|---|--|
| PROJ./PROJ./PROJ. 54800.00 M-NR/M-NO/M-NO M54800 TYP/TYPE/TIPO H 10000 MC - A-Axis WERKSTÜCK/PART/PEÇA | | | | HELLER pneumatic diagram | | KUNDE/CUSTOMER/CLIENTE Paccar, Columbus USA INV-NR/INV-NO/NO-INV 13.503063, 13.503064 | | PLAN/PLAN/PLANO project MP.05480000_F Machine =M54800 Document type &P pneumatic diagram Mounting position +H1 HELP1 Page name 5 | |
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO CAD-System ePLAN 2.2.5 | | Index ZONE/ZONA DATUM/DATE NAME/NOME GEPR./CHECK./REG. BEARB./CHG./ALT. 13.07.2016 AHFE/ZAJ ERS./REP. GEZ./DRAWN/DES. 15.03.2016 AHFE/HOP | | | | | | | |

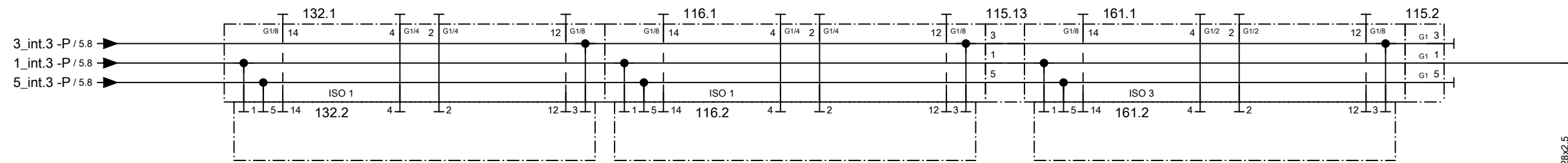
Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atente DIN 34

132
Tool in gripper

116
Air
for spindle nozzles

161
Blow off work
area



P100-1-ø28x2,5
P100-1.11 -P / 1.5

Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

← 5

7 →

| | | | | | | | | | | | | | |
|---|--|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|-------------------|---------------------------------------|-----------------|---------------|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ/ PROJ. | 54800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | |
| CAD-System | | | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F |
| ePLAN 2.2.5 | | | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | INV-NR/INV-NO/NO-INV | Machine | =M54800 |
| | | | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | WERKSTÜCK/ PART/PEÇA | | | 13.503939, 2x 13.503944, 13.503946 | Document type | &P |
| | | | | | | | | | | | Mounting position | +H1 | HELP1 |
| | | | | | | | | | | | Page name | 6 | |

Heller_2L

A3

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

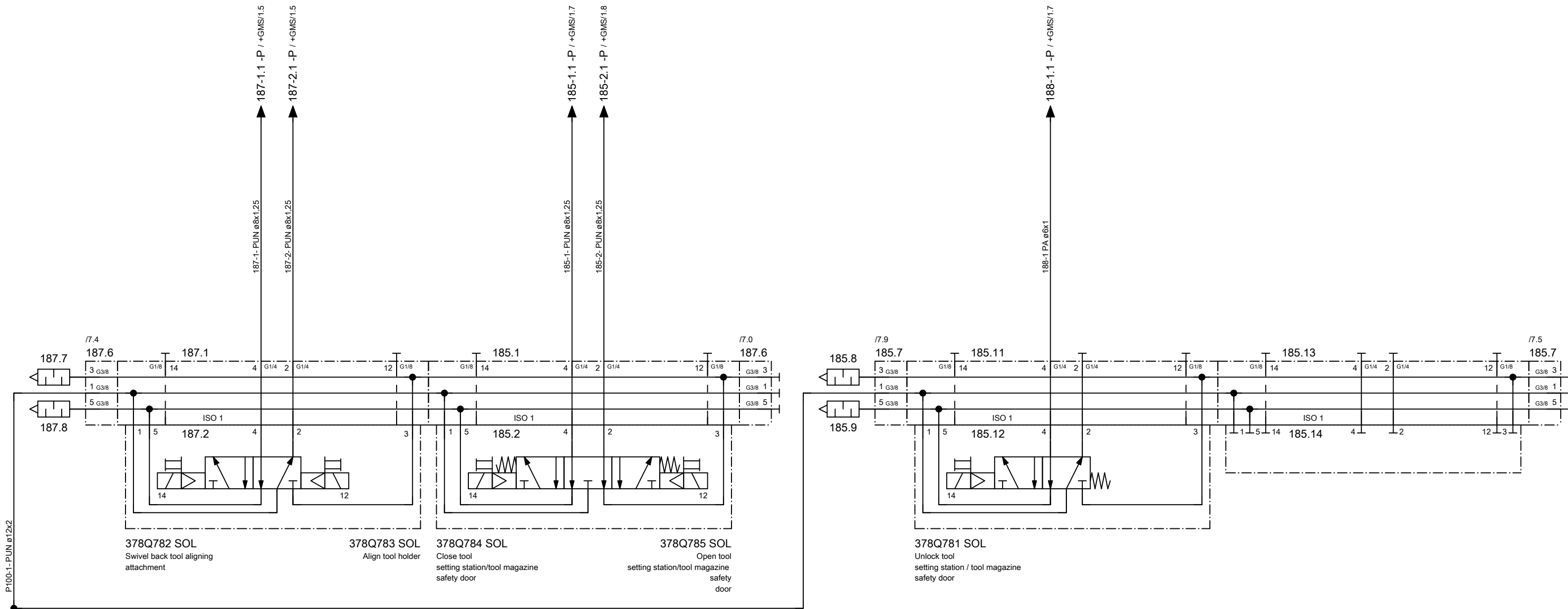
© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atenção DIN 34

Heller_2L

+GMS/1.5
187
Tool aligning attachment

+GMS/1.8
185
Tool loading
station/tool magazine safety door

+GMS/1.8
185
Tool loading
station/tool magazine safety door



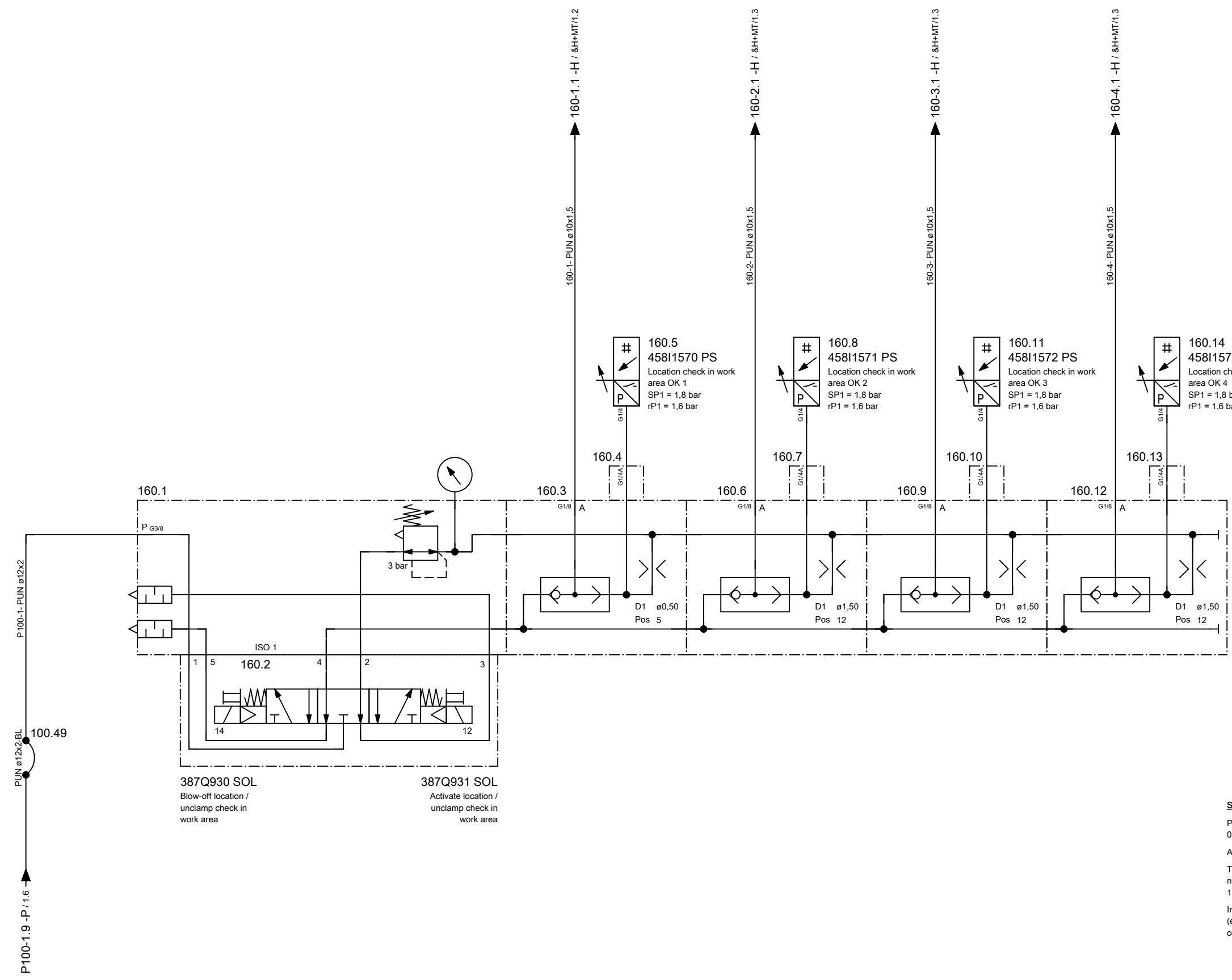
Seamless precision steel pipe acc. to DIN ISO 10763 E235+N, galvanised, chromium6-free
Parker screw connections, type EO-2 Plus, chromium6-free, male stud connector with soft seal acc. to ISO 1179-2 type E
Parker 2SC-462 hose acc. to ISO 11237-1 EN 857, hose fitting acc. to DIN ISO 12151-2, CA form
Blue plastic pipes PUN, FESTO, push-in fittings QS, Quick Star

| | | | | | | | | | | | | | | | |
|---|--|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|-----------------|----------------------------|----------------------|----------------------|---------------|----------------------|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ/ PROJ. | 54800.00 | <h1>HELLER</h1> | KUNDE/CUSTOMER/CLIENTE | Paccar, Columbus USA | PLAN/PLAN/PLANO | project | MP.05480000_F |
| CAD-System | | | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | BENENNUNG/NAME/DENOMINAÇÃO | INV-NR/INV-NO/NO-INV | 13.503942, 13.503943 | Machine | =M54800 |
| ePLAN 2.2.5 | | | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | | | | | Document type | &P pneumatic diagram |
| | | | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | WERKSTÜCK/ PART/PEÇA | | | | | Mounting position | +H1 HELP1 | |
| | | | | | | | | | | | | | Page name | 7 | |

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atenção DIN 34

160
Location/unclamp check
work area



| nozzle wheel | nozzle ø |
|--------------|----------|
| 0 | 0,00 |
| 1 | 0,30 |
| 2 | 0,35 |
| 3 | 0,40 |
| 4 | 0,45 |
| 5 | 0,50 |
| 6 | 0,55 |
| 7 | 0,60 |
| 8 | 0,70 |
| 9 | 0,80 |
| 10 | 1,00 |
| 11 | 1,20 |
| 12 | 1,50 |
| 13 | 1,70 |
| 14 | 2,00 |
| 15 | 2,50 |

setting up the location check

Place the feeler gauge with a maximum tolerance (e.g. 0,03 mm) between workpiece and support.
Attention: do not cover discharge nozzle!
Turn nozzle wheel so many positions to the left (higher number = larger nozzle diameter) until a pressure of 1,8 bar (+ 0,2 bar) is set on the measuring connection.
Insert feeler gauge above max permissible tolerance (e.g. 0,04 mm) The pressure on the measuring connection C must be clearly below 1,8 bar.

| | | | | | | | | | |
|---|--|---|---|--|--|---|--|---|--|
| PROJ./PROJ./PROJ. 54800.00 M-NR/M-NO/M-NO M54800 TYP/TYPO/ TIPO H 10000 MC - A-Axis WERKSTÜCK/ PART/PEÇA | | | | HELLER BENENNUNG/NAME/DENOMINAÇÃO pneumatic diagram | | KUNDE/CUSTOMER/CLIENTE Paccar, Columbus USA INV-NR/INV-NO/NO-INV 13.503887 | | PLAN/PLAN/PLANO project MP.05480000_F Machine =M54800 Document type &P pneumatic diagram Mounting position +H1 HELP1 Page name 8 | |
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO CAD-System ePLAN 2.2.5 | | Index GEPR./CHECK./REG. BEARB./CHG./ALT. GEZ./DRAWN/DES. | ZONE/ZONA DATUM/DATE 13.07.2016 15.03.2016 | NAME/NOME AHFE/ZAJ AHFE/HOP | | | | | |

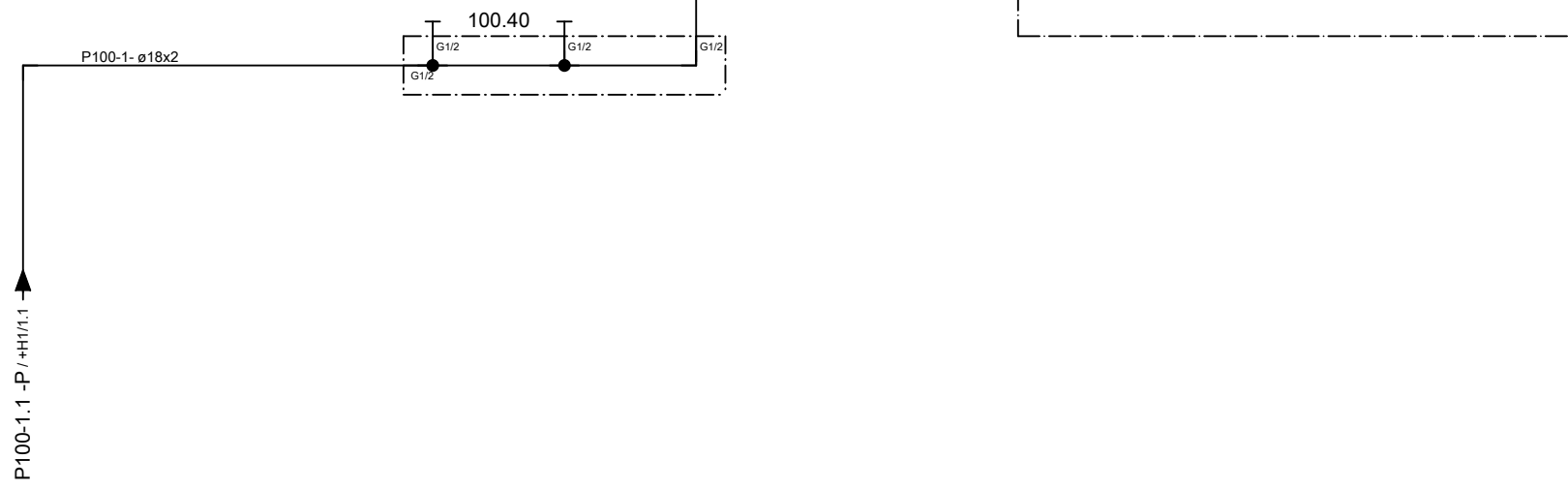
Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72822 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atente DIN 34

+H1/1.3
100
air supply

190
blowing valve

+GLS
guarding - loading station



← +H1/8

+M/1 →

| | | | | | | | | | | | | | |
|---|--|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|-------------------|------------------------|-----------------|-------------------|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ/ PROJ. | 54800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | |
| CAD-System | | | | URSPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F |
| ePLAN 2.2.5 | | | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | TYP/TYPER/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | INV-NR/INV-NO/NO-INV | Machine | =M54800 |
| | | | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | WERKSTÜCK/ PART/PEÇA | | | Document type | &P | pneumatic diagram |
| | | | | | | | | | | | Mounting position | +H2 | HELP2 |
| | | | | | | | | | | | Page name | 1 | |

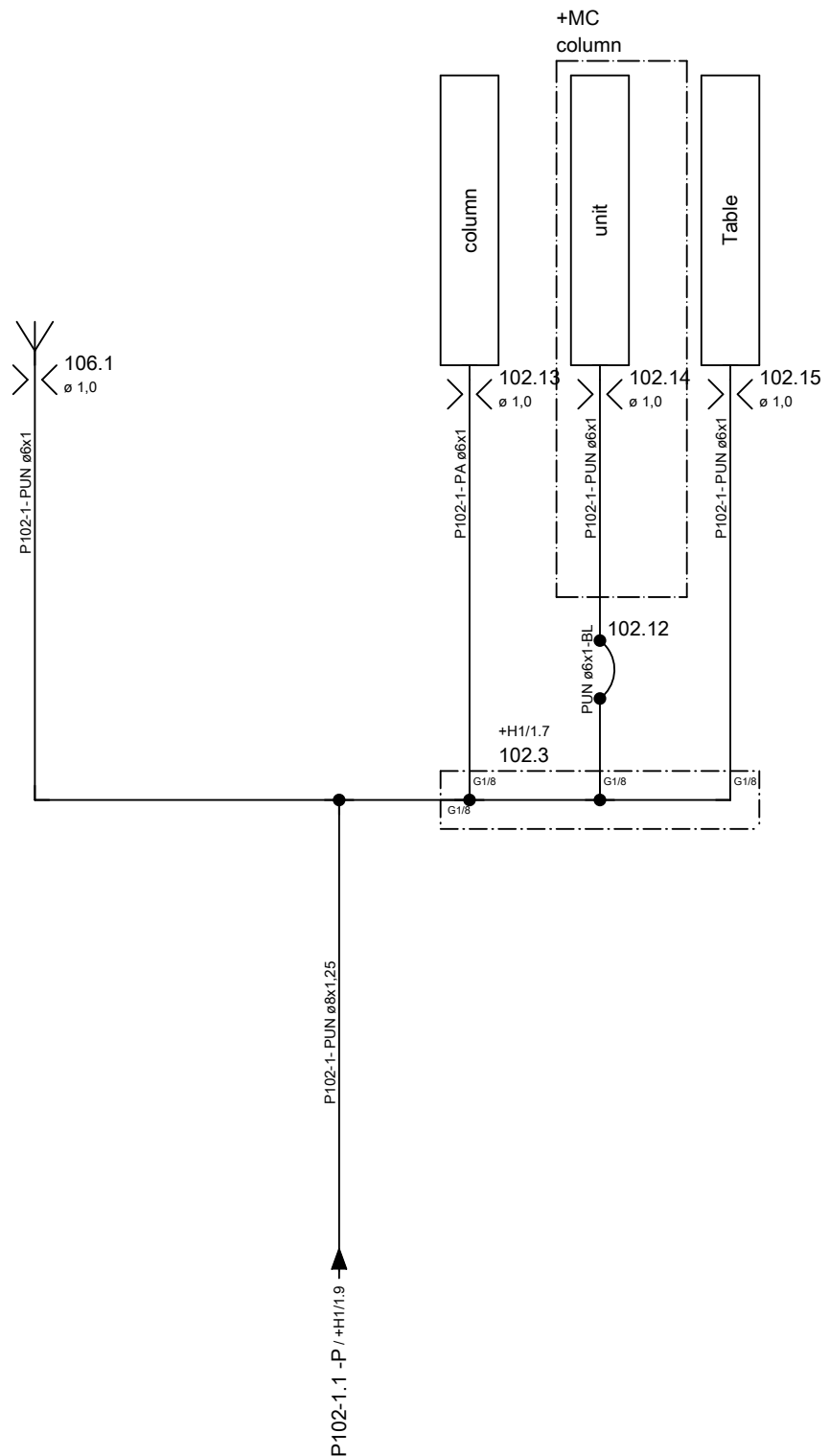
Heller_2L

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72622 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atente DIN 34

106
seal air of tool break monitoring

+H1/1.8
102
Seal air
scale



← +H2/1

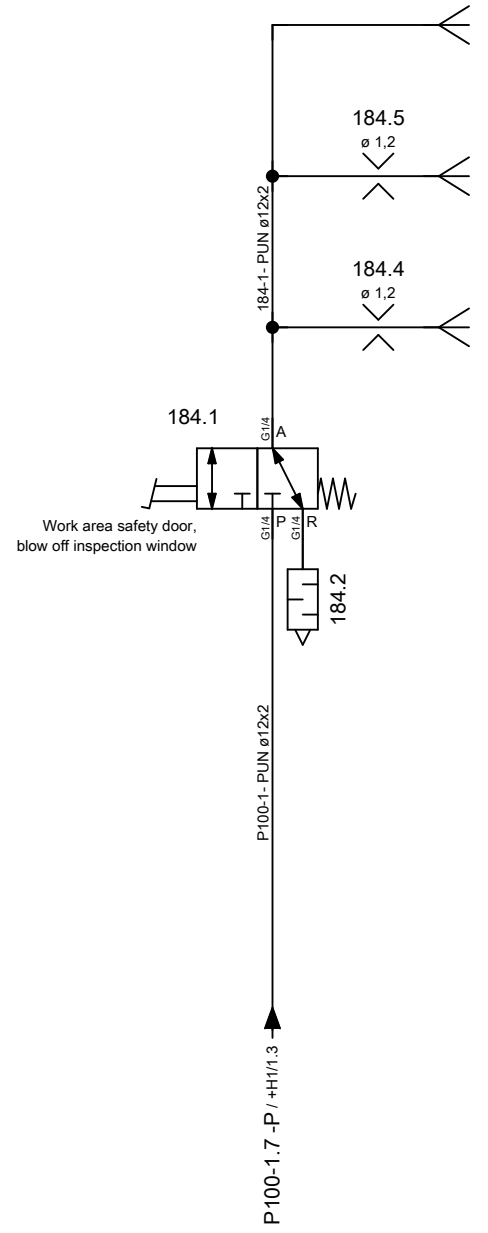
+GOS/1 →

| | | | | | | | | | | | | | | | |
|---|--|--|--|---------------|-------------------|------------|-----------|-------------------------|---------------------|-------------------|------------------------|-------------------|---------------|-------------------|----|
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO | | | | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ. PROJ. | 54800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | | | |
| CAD-System | | | | URSPPR./ORIG. | GEPR./CHECK./REG. | | | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F | | |
| ePLAN 2.2.5 | | | | ERS./REP. | BEARB./CHG./ALT. | 13.07.2016 | AHFE/ZAJ | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | INV-NR/INV-NO/NO-INV | Machine | =M54800 | | |
| | | | | ERS.D./REP.W. | GEZ./DRAWN/DES. | 15.03.2016 | AHFE/HOP | WERKSTÜCK/ PART/PEÇA | | | | Document type | &P | pneumatic diagram | |
| | | | | | | | | | | | | Mounting position | +M | machine | A3 |
| | | | | | | | | | | | | Page name | 1 | | |

Heller_2L

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72622 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atente DIN 34



184
Work area safety door,
inspection window

186
Work area
safety door lock

← +M/1

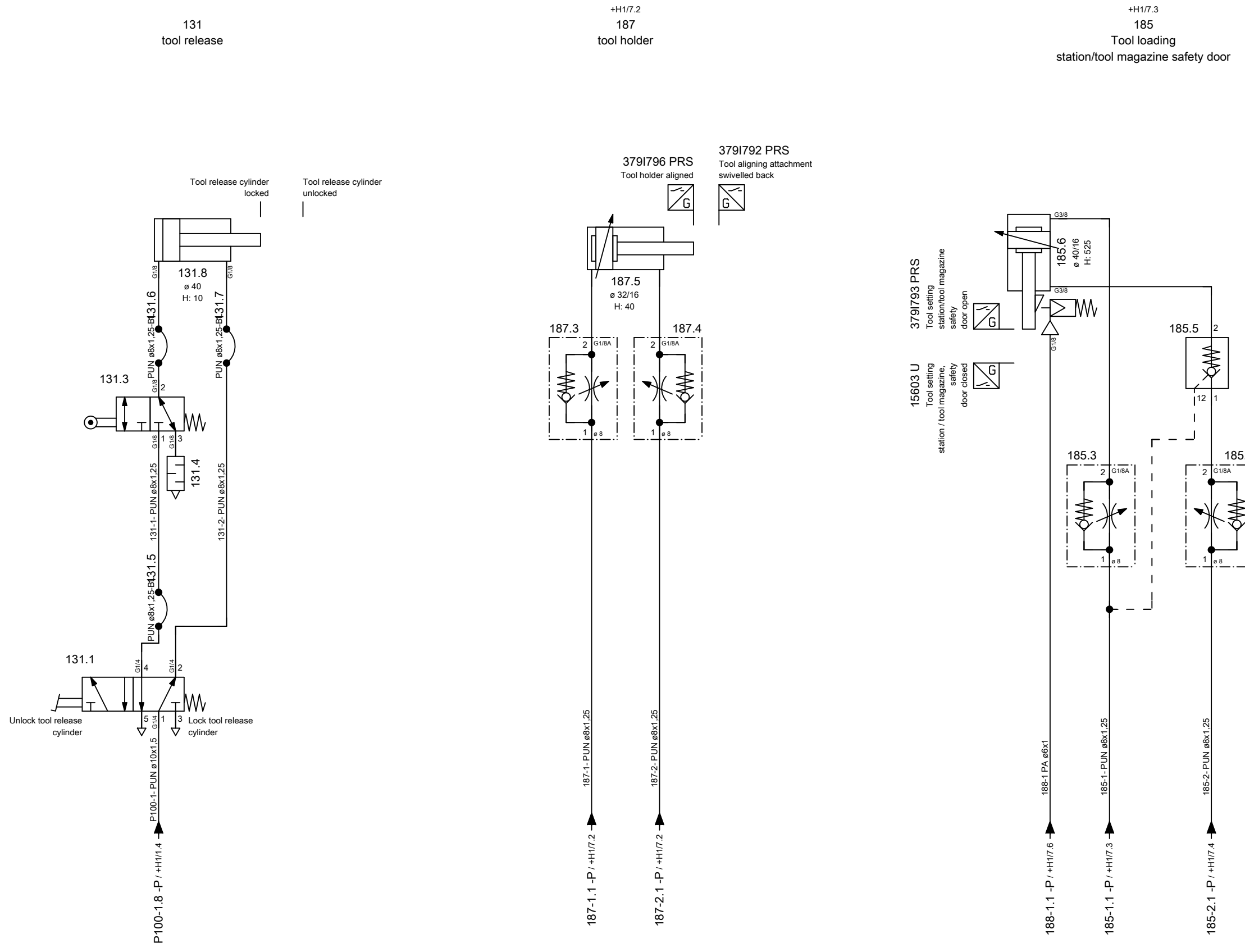
+GMS/1 →

| | | | | | | | | | | | | | |
|-------------|--|---------------|-------------------|-------|-----------|------------|-----------|-------------------------|---------------------|-------------------|------------------------|-----------------|---------------------------|
| CAD-System | | URSPPR./ORIG. | GEPR./CHECK./REG. | Index | ZONE/ZONA | DATUM/DATE | NAME/NOME | PROJ./PROJ/ PROJ. | 54800.00 | HELLER | KUNDE/CUSTOMER/CLIENTE | PLAN/PLAN/PLANO | |
| ePLAN 2.2.5 | | ERS./REP. | BEARB./CHG./ALT. | | | 13.07.2016 | AHFE/ZAJ | M-NR/M-NO/ M-NO | M54800 | | Paccar, Columbus USA | project | MP.05480000_F |
| | | ERS.D./REP.W. | GEZ./DRAWN/DES. | | | 15.03.2016 | AHFE/HOP | TYP/TYPE/ TIPO | H 10000 MC - A-Axis | pneumatic diagram | INV-NR/INV-NO/NO-INV | Machine | =M54800 |
| | | | | | | | | WERKSTÜCK/ PART/PEÇA | | | | Document type | &P |
| | | | | | | | | | | | Mounting position | +GOS | guarding - operating side |
| | | | | | | | | | | | Page name | 1 | |
| | | | | | | | | | | | | | A3 |

Heller_2L

Änderungen nur im CAD-Original!
Changes in CAD only!
Mudanças no original CAD somente!

© Copyright reserved - Gebr. HELLER Maschinenfabrik GmbH, D-72622 Nürtingen
Schutzvermerk nach DIN 34 beachten!
Attention! Observe DIN 34
Atenção! Atenção DIN 34



← +GOS/1 +ATC/1 →

| | | | | | | | |
|---|-------------------|-------|-----------|---|-----------|--|--|
| PROJ./PROJ./PROJ. 54800.00 M-NR./M-NO./M-NO. M54800 TYP./TIPO H 10000 MC - A-Axis | | | | HELLER Paccar, Columbus USA | | PLAN/PLAN/PLANO project MP.05480000_F Machine =M54800 | |
| ART DER AENDERUNG/REVISION/DESCRIÇÃO DE ALTERAÇÃO CAD-System ePLAN 2.2.5 | | | | BENENNUNG/NAME/DENOMINAÇÃO pneumatic diagram | | INV-NR./INV-NO/NO-INV Document type &P pneumatic diagram Mounting position +GMS guarding - Page name 1 magazin/maintenance side | |
| URS./ORIG. | GEPR./CHECK./REG. | INDEX | ZONE/ZONA | DATUM/DATE | NAME/NOME | | |
| ERS./REP. | BEARB./CHG./ALT. | | | 13.07.2016 | AHFE/ZAJ | | |
| ERS.D./REP.W. | GEZ./DRAWN/DES. | | | 15.03.2016 | AHFE/HOP | | |