

Subplates/ multi-station subplates/ end plates

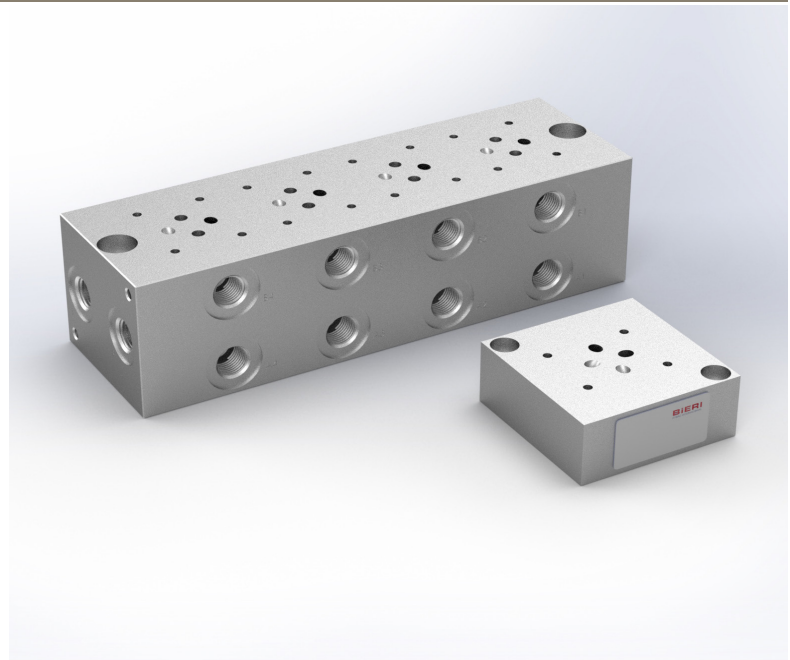
Type AP700/RP700/ EP700

NG 6 ISO

up to 25 l/min, up to **700 bar**

Features

- Subplates (AP) and multi-station subplates (RP) with threaded connections
- End plates (EP)
- Compact control design with up to six control circuits (see product information multi-station subplates, page 4) possible



Applications

- Basic elements for the build up of hydraulic circuits

Design

- All control lines with common pressure (P) and tank connection (T)
- User ports (A and B) are situated on the side of the plate

Technical data

| | |
|--|--|
| Hydraulic fluid | mineral oil according to DIN 51524 (other fluids on request) |
| Fluid temperature range | - 20 bis 80 °C |
| Ambient temperature range | - 30 to 50 °C |
| Viscosity range | 5 to 400 mm ² /s |
| Porting | NG 6 according to DIN 24340/ISO 4401/CETOP RP 121 H |
| Max. operating pressure connection P, A, B | 700 bar with G3/8" connection thread 500 bar with G1/2" connection thread |
| Max. operating pressure connection T | 350 bar |
| Max. flow rate | 25 l/min |
| Filtration (recommendation) | according to NAS 1638 class 6 resp. ISO/DIN 4406 17/15/12 |
| Weight | see overview "Product information" |
| Material | steel, stainless, galvanized |

Type code

| | | | | | | | | | | | |
|---------------------|---------|--|-----|---|---|---|----|---|---|---|---|
| Example | AP | | 700 | - | 6 | - | A1 | - | B | | 00 |
| Subplates | AP | | | | | | | | | | Design 00 ... 99 For internal purposes |
| Size | 700 bar | | | | | | | | | | |
| Nominal Size | 6 | | | | | | | | | | Index Please leave blank For internal purposes |
| Design | A1 | connection below | | | | | | | | Design revision For internal purposes | |
| | A2 | Side connection | | | | | | | | | |
| | A4 | Side connection A+B, P+T below, bore for pressure relief valve P - T | | | | | | | | | |

| | | | | | | | | | | | |
|--------------------------------|--------------------|------------------------|-----|---|---|---|--------|---|---|---|---|
| Example | RP | | 700 | - | 6 | - | R2G3/8 | - | B | | 00 |
| Multi-station subplates | RP | | | | | | | | | | Design 00 ... 99 For internal purposes |
| Size | 700 bar 500 bar | | | | | | | | | | |
| Nominal Size | 6 | | | | | | | | | | Index Please leave blank For internal purposes |
| Design | R2... | 2 control lines | | | | | | | | Design revision For internal purposes | |
| | R3... | 3 control lines | | | | | | | | | |
| | R4... | 4 control lines | | | | | | | | | |
| | R5... | 5 control lines | | | | | | | | | |
| | R6... | 6 control lines | | | | | | | | | |
| | ... G3/8 | port P and T (700 bar) | | | | | | | | | |
| | ... G1/2 | port P and T (500 bar) | | | | | | | | | |

| | | | | | | | | | | | | | |
|----------------------|---------|---|-----|---|---|---|---|---|---|---|---|--|---|
| Example | EP | | 700 | - | 6 | - | Z | - | V | - | B | | 00 |
| End plates | EP | | | | | | | | | | | | Design 00 ... 99 For internal purposes |
| Size | 700 bar | | | | | | | | | | | | |
| Nominal Size | 6 | | | | | | | | | | | | Index Please leave blank For internal purposes |
| Design | Z | P, A, B and T closed | | | | | | | | Design revision For internal purposes | | | |
| Seal material | V | FKM other seals materials on request | | | | | | | | | | | |

Product information

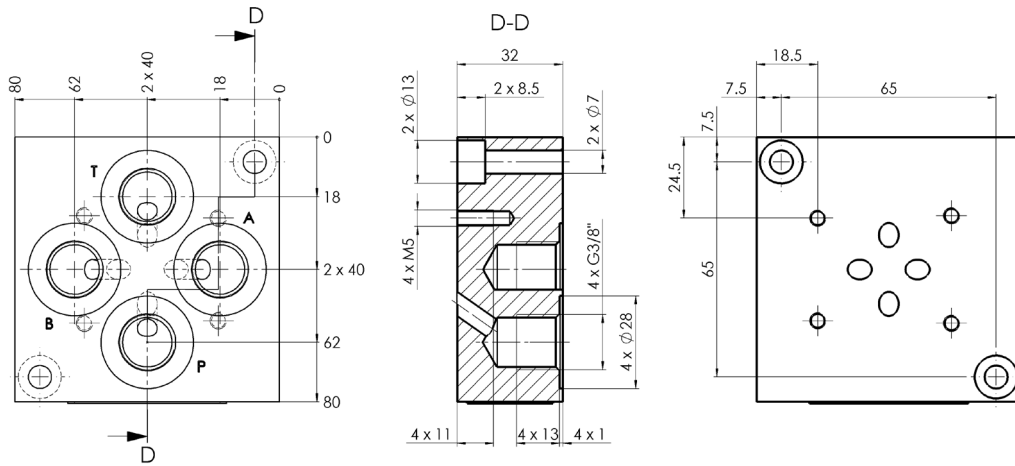
| | | | |
|-------------------------|------------|------------|-----------------------|
| Plate type | AP | | |
| Design | A1 | A2 | A4 |
| Part No. | 3641449 | 3647854 | 4733288 ¹⁾ |
| Symbol | | | |
| Weight | 1,5 kg | 1,5 kg | 1,5 kg |
| Plate type | RP | | |
| Design | R2 | R3 | R4 |
| Part No. G3/8 (700 bar) | on request | on request | on request |
| Symbol | | | |
| Weight | 5,5 kg | 7,5 kg | 9,5 kg |
| Plate type | RP | | |
| Design | R5 | R6 | |
| Part No. G3/8 (700 bar) | on request | on request | |
| Symbol | | | |
| Weight | 11,5 kg | 13,5 kg | |
| Plate type | EP | | |
| Design | Z | | |
| Part No. | 4673155 | | |
| Symbol | | | |
| Weight | 0,4 kg | | |

1) Pressure relief valve has to be ordered separately (see technical data sheet DB500-700-1000)!

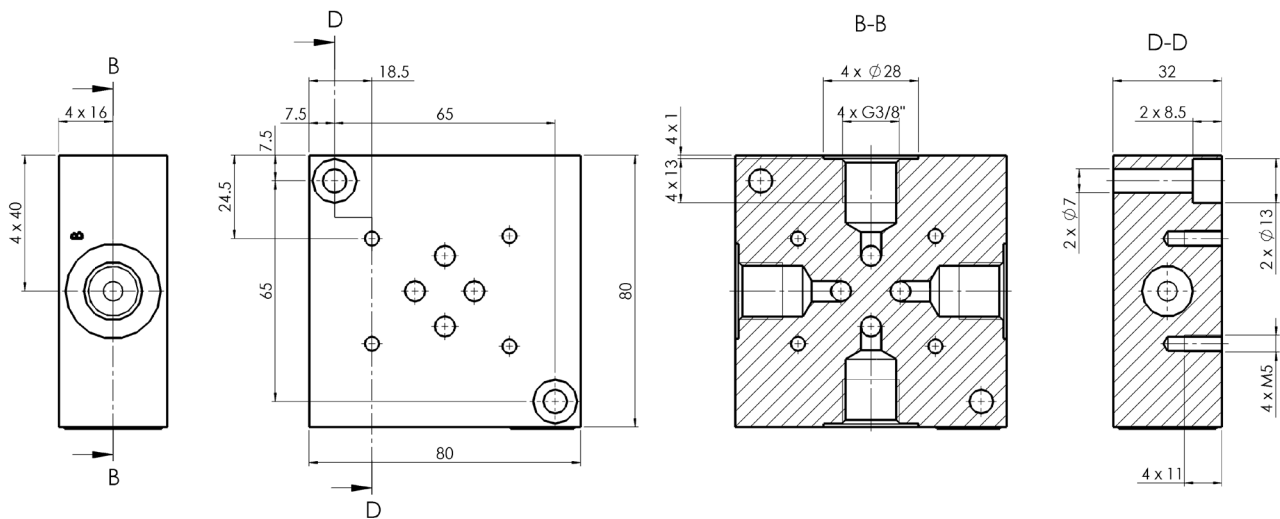
Dimensional drawings

AP700

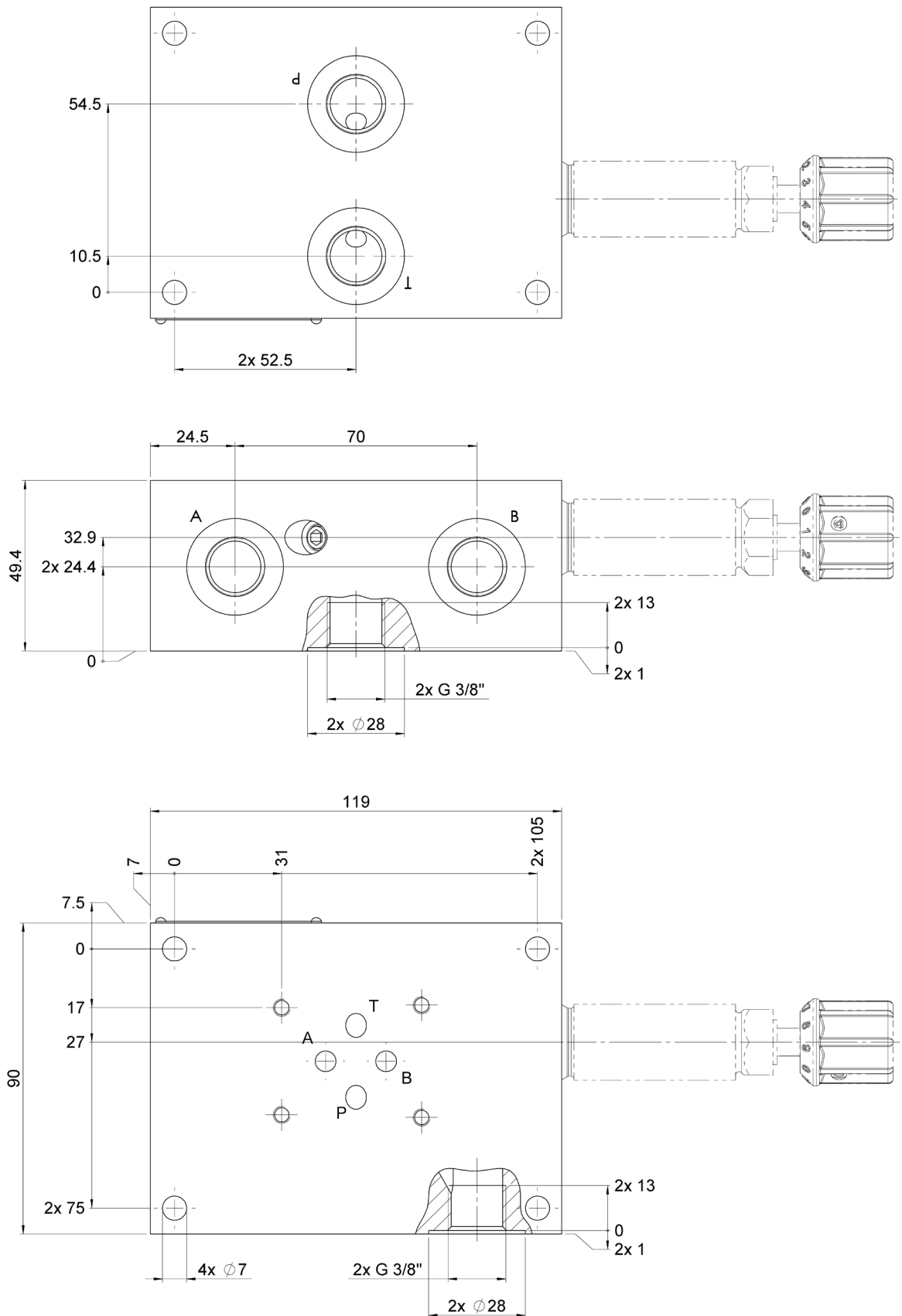
A1



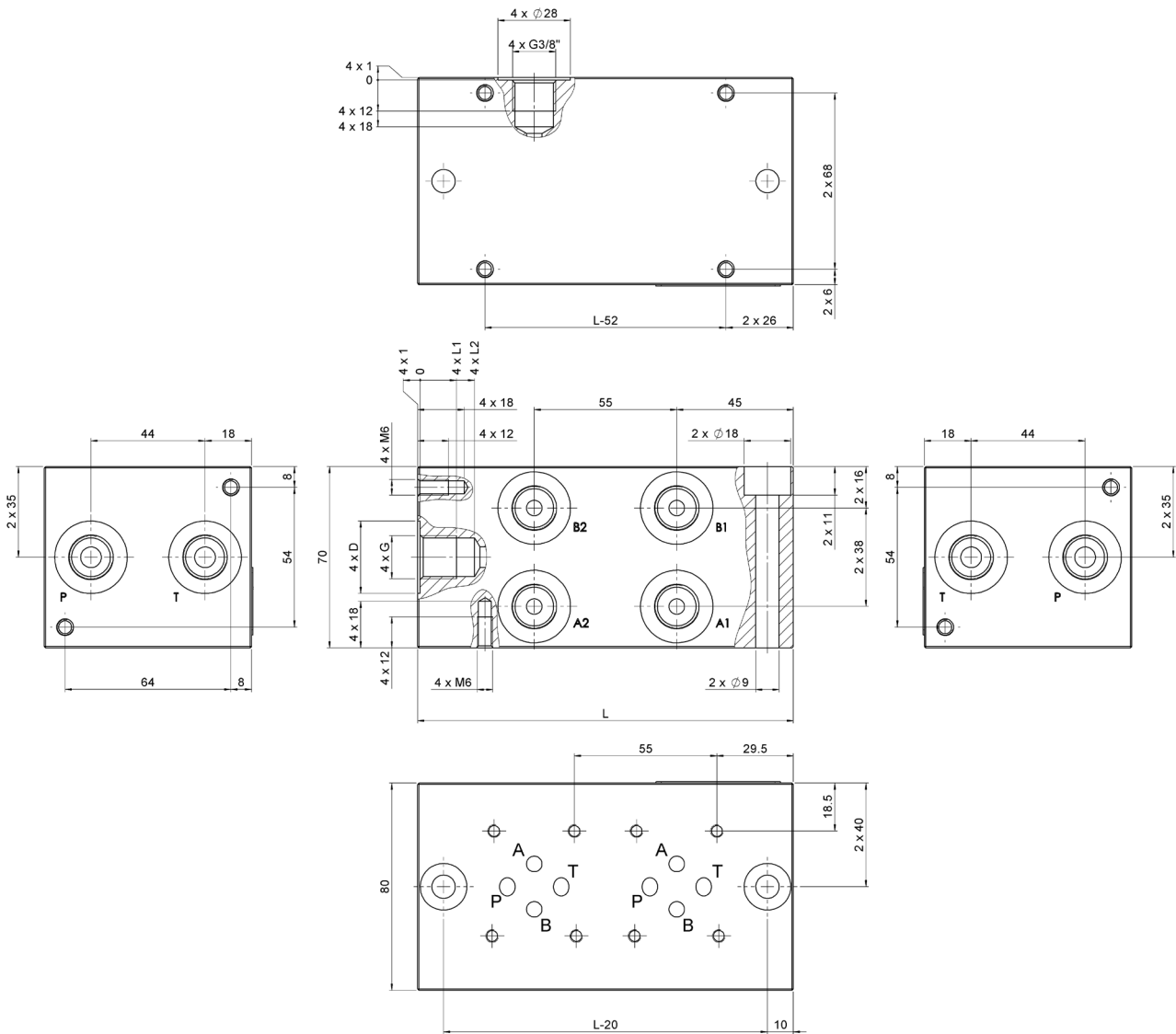
A2



A4

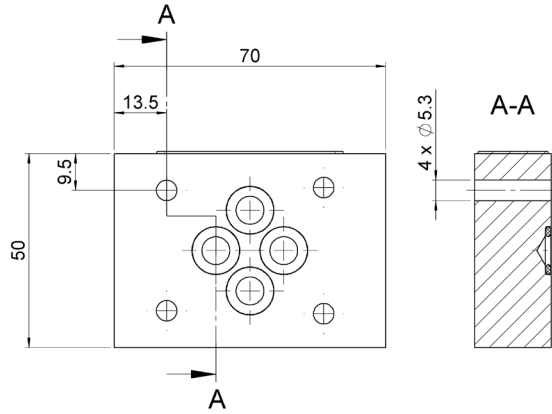


RP700/ RP500



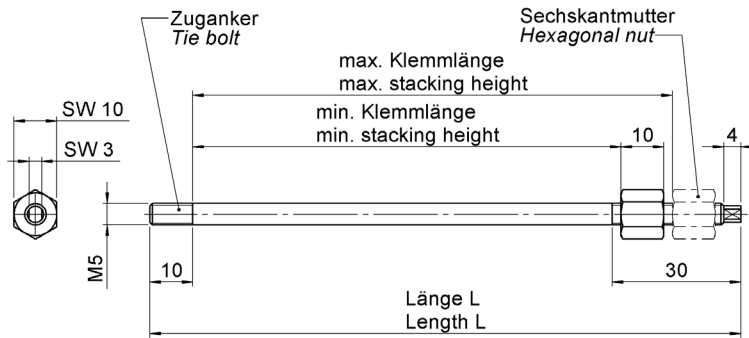
| type description | Dim. G ["] | Dim. D [mm] | Dim. L1 [mm] | Dim. L2 [mm] | Dim. L [mm] |
|---------------------|---------------|----------------|-----------------|-----------------|----------------|
| RP500-6-R2G1/2-B*00 | G1/2 | 34 | 15 | 22 | 145 |
| RP500-6-R3G1/2-B*00 | G1/2 | 34 | 15 | 22 | 200 |
| RP500-6-R4G1/2-B*00 | G1/2 | 34 | 15 | 22 | 255 |
| RP500-6-R5G1/2-B*00 | G1/2 | 34 | 15 | 22 | 310 |
| RP500-6-R6G1/2-B*00 | G1/2 | 34 | 15 | 22 | 365 |
| RP700-6-R2G3/8-B*00 | G3/8 | 28 | 14 | 21 | 145 |
| RP700-6-R3G3/8-B*00 | G3/8 | 28 | 14 | 21 | 200 |
| RP700-6-R4G3/8-B*00 | G3/8 | 28 | 14 | 21 | 255 |
| RP700-6-R5G3/8-B*00 | G3/8 | 28 | 14 | 21 | 310 |
| RP700-6-R6G3/8-B*00 | G3/8 | 28 | 14 | 21 | 365 |

EP700



Note: For each plate are 4 pcs. O-Rings, 9,25x1,78 mm, 90° ShA included!
 The connections P, A, B und T are closed!

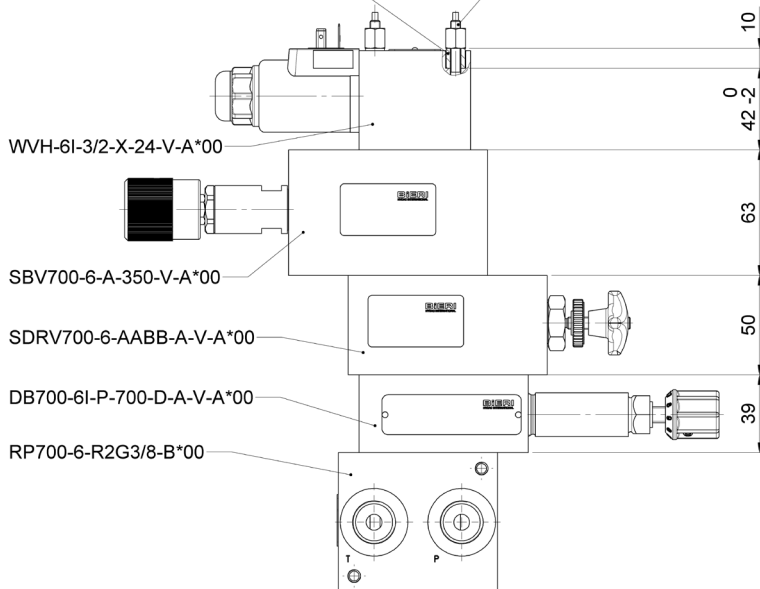
Sandwich arrangement



Calculation example tie bolt length

- 4 x Zuganker mit Sechskantmutter/ 4 x tie bolt with hexagonal nut
 oder/ or
 4 x Zylinderschraube/ 4 x socket head screw
- 4 x Hülse/ 4 x sleeve

Stacking height = 10+42+63+50+39 = **204 mm**
L (Tie bolt length) = **236 mm** (from the tie bolt-table page 8)



Mounting elements

In order to achieve proper functioning of the sandwich arrangement, the hexagon nuts must be tightened without twisting the tie bolts. To do this, hold the tie bolt against the intended spanner flat using an open-end spanner.

4 pce. socket head screws or tie bolts with hexagonal nut (and sleeve) have to be used!

Socket head screws

ISO 4762-M5 x L-12.9/ tightening torque = 10 Nm

| stacking height [mm] | length L [mm] | part no. |
|-------------------------|------------------|----------|
| 20-23 | 30 | 604592 |
| 40-43 | 50 | 6206138 |
| 50-53 | 60 | 618287 |
| 55-58 | 65 | 6087369 |
| 60-63 | 70 | 6008834 |
| 65-68 | 75 | 684509 |
| 70-73 | 80 | 602854 |
| 78-83 | 90 | 602855 |
| 90-93 | 100 | 6026686 |
| 94-103 | 110 | 6032160 |

Tie bolts

M5 x L-12.9/ tightening torque = 10 Nm

| stacking height [mm] | length L [mm] | part no. |
|-------------------------|------------------|----------|
| 100-113 | 138 | 3661156 |
| 114-127 | 152 | 3689062 |
| 128-141 | 166 | 3689064 |
| 142-155 | 180 | 3689076 |
| 156-169 | 194 | 3689079 |
| 170-183 | 208 | 3689080 |
| 184-197 | 222 | 3689081 |
| 198-211 | 236 | 3689082 |
| 212-224 | 249 | 3689083 |
| 225-237 | 262 | 3689084 |
| 238-250 | 275 | 3689085 |

Hexagonal nut

1x M5 x 2d-12, part no. 3661157

Sleeve

1x part no. 4691661 (is required for tie bolt-valve banks with WVH-6I and WVM-6I directional poppet valves)