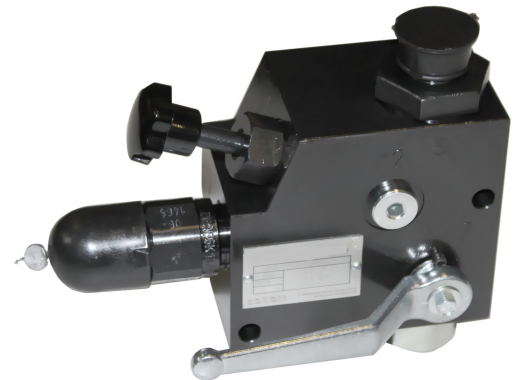


BLOQUE DE SEGURIDAD
safety block for accumulator

TIPO OLAER
B10X

APPLICATION

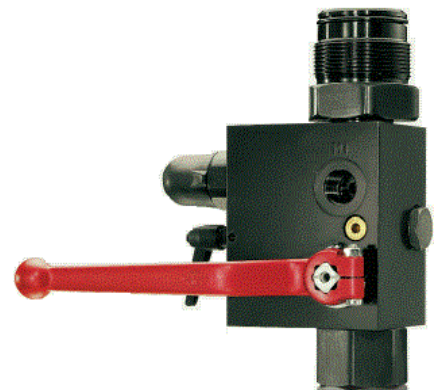
Hydraulic accumulator protection and cut-off unit is used for connecting hydraulic accumulator to the system while meeting safety requirements.



DESIGN DESCRIPTION

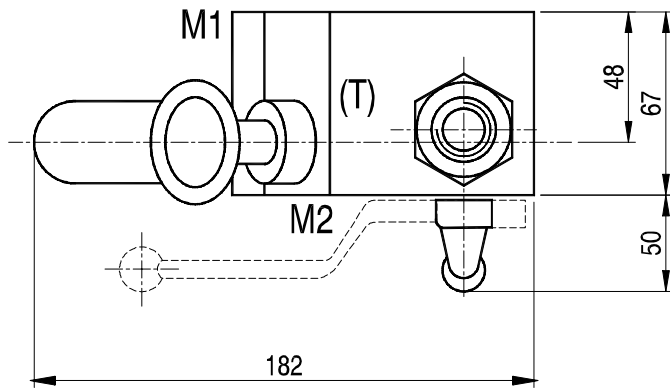
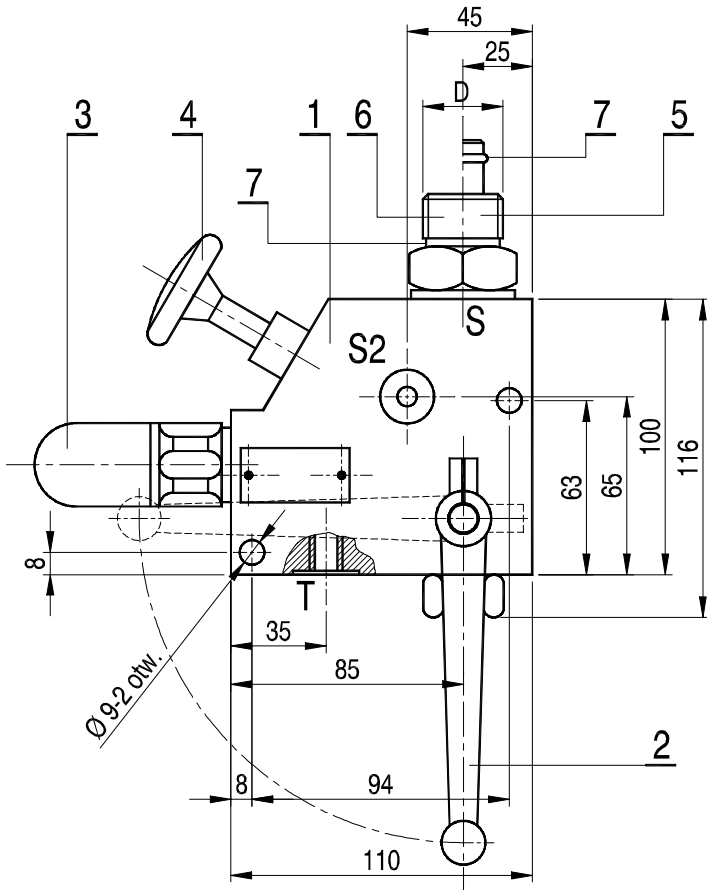
The unit consists of a housing incorporating the following sub-units:

- ball cut-off valve for connecting and disconnecting the accumulator with the hydraulic system
- manual relief valve for safe unloading of accumulator after cut-off
- safety valve for system protection - may be approved by UDT, with CE approval. If a unit with CE or UDT approval valve is ordered, it is set to required pressure and sealed.



TECHNICAL DATA

| | |
|-----------------------------------|-------------------------|
| Working fluid | Mineral oil |
| Optimum working temperature range | 258 up to 343 K |
| Max working pressure | 33 MPa |
| Housing construction material | Steel |
| Safety valve type | DBDS6K... wg WK 450 610 |
| Required oil filtration | up to 16 μm |
| Weight | 5 |

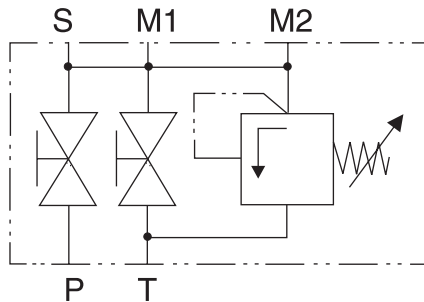


- 1- Unit
- 2- Accumulator cut-off valve
- 3- Safety valve
- 4- Manual relief valve
- 5- Accumulator connection Hydac (H)
- 6- Accumulator connection Eppensteiner (E)
- 7- Sealing ring

Connection dimensions:

- M1; M2** - G1/4 - pressure gauge connections
 - P** - G1/2 - pump connection
 - T** - G3/8 - tank connection
 - S (D)** - accumulator connection
- for Eppensteiner accumulators:
G1/2; G3/4; G1 1/4; G2
 for Hydac accumulators
G3/4; G1; G1 1/4

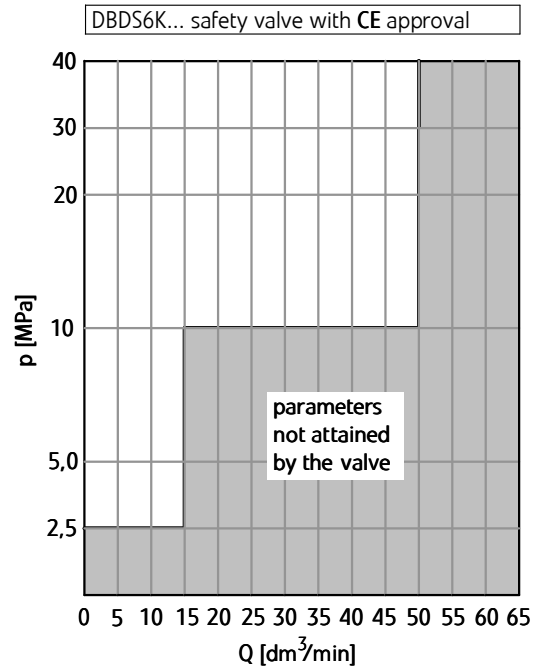
SYMBOL



PERFORMANCE CURVES

measured at viscosity $\nu = 41 \text{ mm}^2/\text{s}$
and temperature $t = 50 \text{ }^\circ\text{C}$

DBDS6K... safety valve flow lines



| | | | | | | |
|------------|---|--|--|--|--|----------|
| B10 | / | | | | | ★ |
|------------|---|--|--|--|--|----------|

Series number

(10-19) - installation and connection dimensions
unchanged = 1X
series 13 = **13**

Safety valve approval

no approval = no designation
with CE approval = C

Safety valve setting

up to 2,5 MPa = 25
up to 5 MPa = 50
up to 10 MPa = 100
up to 20 MPa = 200
up to 31,5 MPa = 315
up to 33 MPa = 330
up to 36 MPa = 360

for valves with CE approval specify pressure setting
(factory setting and sealing)

Accumulator connections

for Eppensteiner accumulators

G1/2 thread = E1

G3/4 thread = **E2**

G1 1/4 thread = E3

G2 thread = E4

for Hydac accumulators

G3/4 thread = H1

G1 thread = H2

G1 1/4 thread = H3

Further requirements in clear text
(to be agreed with the manufacturer)



BLOQUE DE SEGURIDAD

safety block for accumulator

TIPO OLAER

B20X

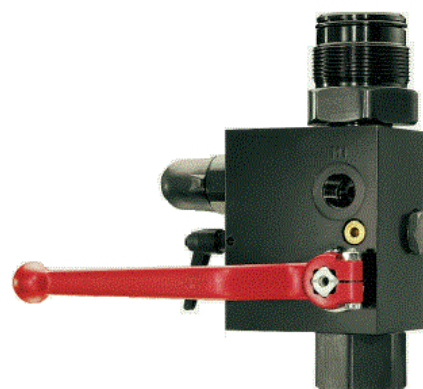
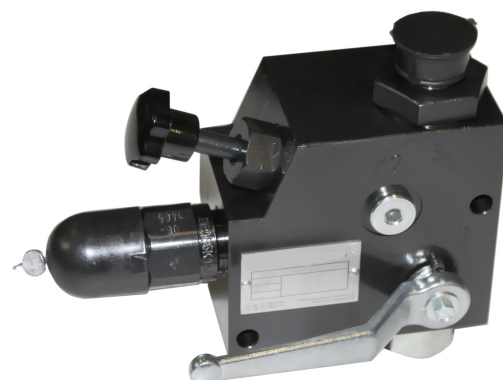
APPLICATION

Safety block is used to connect a hydraulic accumulator to a hydraulic circuit keeping safety rules.

DESIGN DESCRIPTION

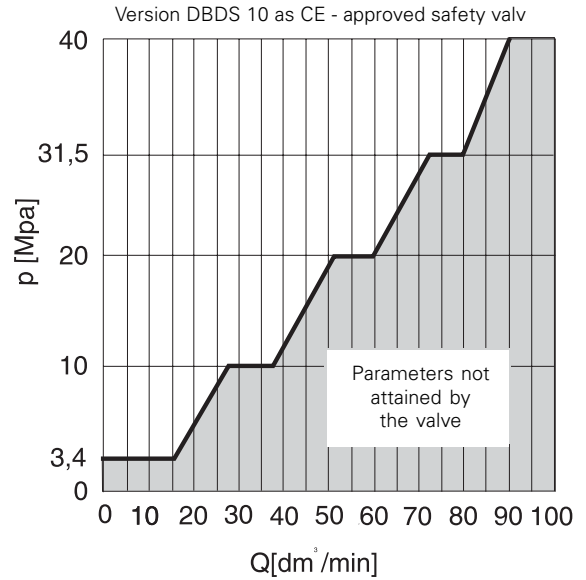
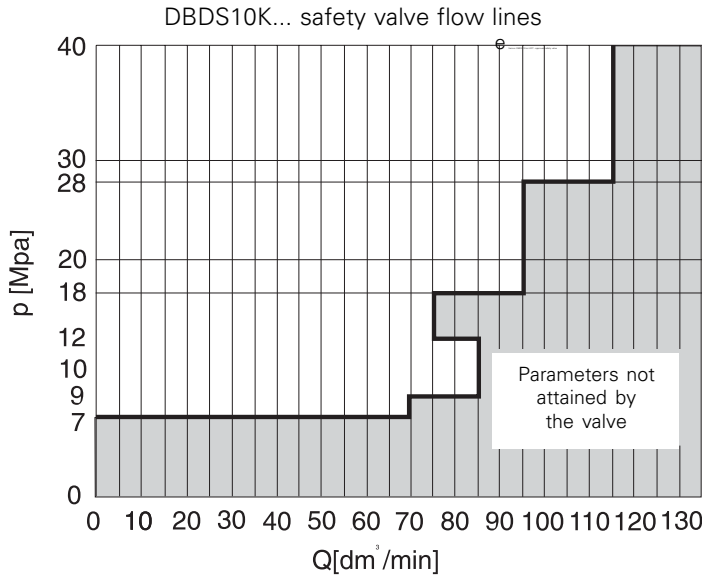
The unit consists of a housing incorporating the following sub-units:

- ball cut-off valve for connecting and disconnecting the accumulator with the hydraulic system
- manual relief valve for safe unloading of accumulator after cut-off
- the valve can be with UDT or CE certificate or without any certificate. If the valve is ordered with the certificate it is set at the pressure required and sealed.
- solenoid directional valve for electric control of accumulator unloading (in directional valve version)
- threaded flange for connecting the unit to the accumulator (standard flanges enable connecting an EPE accumulator)



| | |
|-----------------------------------|--------------------------------------|
| Rated dimensions | 20 |
| Rated flow (at v=6 m/s) | 150 dm ³ /min; |
| Working fluid | Mineral oil |
| Optimum working temperature range | 258 up to 343 K |
| Max working pressure | 33 MPa |
| Housing construction material | steel |
| Overflow valve type | DBDS10K... wg WK 450 610 |
| Required oil filtration | up to 16 μm |
| Solenoid directional valve type | 2 RED6C1-01/2M1... NZ4 wg WK 494 920 |
| Directional control valve voltage | 12VDC; 24V DC or 220V 50 Hz |
| Solenoid power rating | 26W |
| Weight | 6,4 up to 6,9 kg |

PERFORMANCE CURVES



Relief manner:

Manual = M
Manual and electric = R

Electric directional valve control voltage (version R only)

12 VDC = G12
24 VDC = G24
220V 50Hz = W220R

Overflow valve type:

No valve = A
With preset valve (no approval) = B
With sealed valve (with CE approval) = C
With sealed valve (UDT - approved) = E

Safety valve setting

up to 2,5 MPa 25
up to 5 MPa 50
up to 10 MPa 100
up to 20 MPa 200
up to 31,5 MPa 315
up to 33 MPa 330
For UDT or with CE approval approved units, specify pressure setting (factory setting and sealing)

Accumulator connections

G2 connection = G
G 1/4 connection = G1
M 50x1,5 connection = M

Sealing

oilproof = P
viton = V

Further requirements in clear text
(to be agreed upon with the manufacturer)

BLOQUE DE SEGURIDAD

safety block for accumulator

TIPO OLAER
B25X-B32X

APPLICATION

Safety block is used to connect a hydraulic accumulator to a hydraulic circuit keeping safety rules.

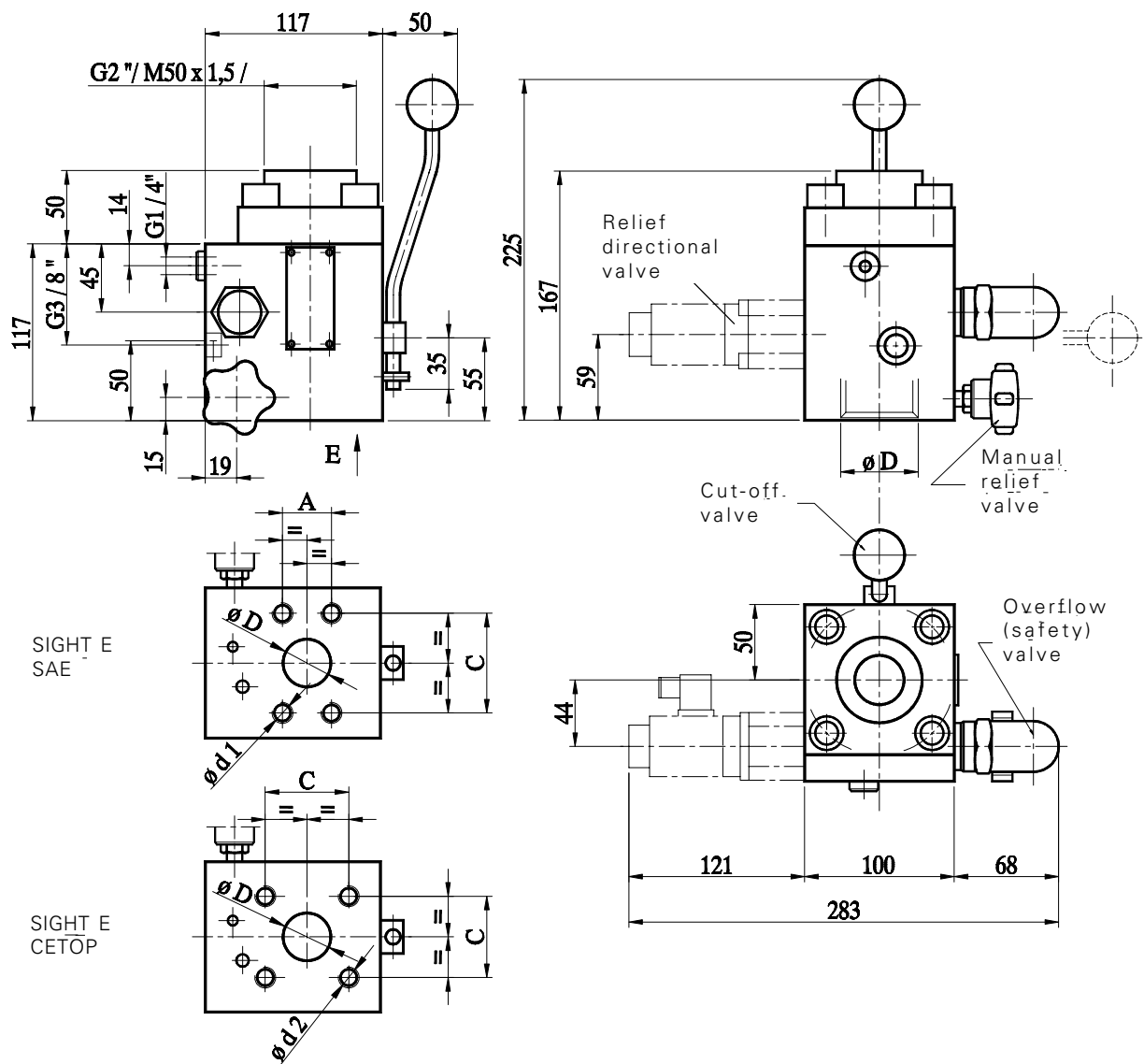
DESIGN DESCRIPTION

The unit consists of a housing incorporating the following sub-units:

- ball cut-off valve for connecting and disconnecting the accumulator with the hydraulic system
- manual relief valve for safe unloading of accumulator after cut-off
- the valve can be with UDT or CE certificate or without any certificate. If the valve is ordered with the certificate, it is set at the pressure required and sealed.
- solenoid directional valve for electric control of accumulator unloading (in directional valve version)
- threaded flange for connecting the unit to the accumulator (standard flanges enable connecting an EPE accumulator)



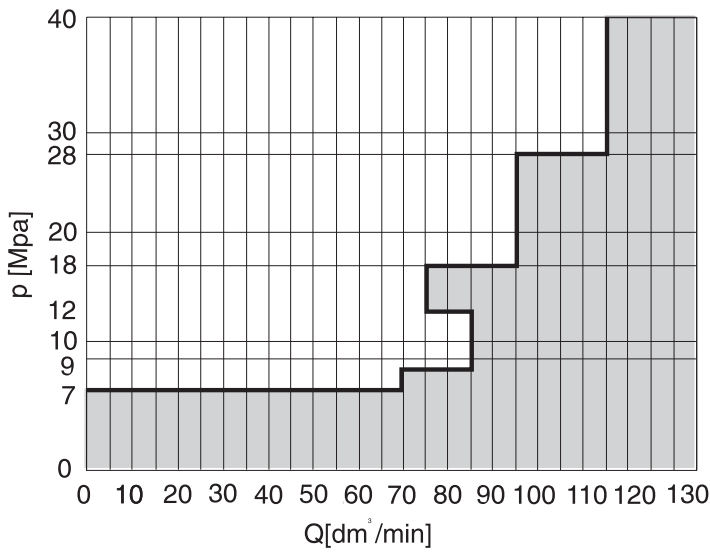
| | |
|-----------------------------------|--|
| Rated dimensions | 25 ; 32 |
| Rated flow (at v=6 m/s) | BS25=180 dm ³ /min; BS32=290 dm ³ /min |
| Working fluid | Mineral oil |
| Optimum working temperature range | 258 up to 343 K |
| Max working pressure | 33 MPa |
| Housing construction material | steel |
| Overflow valve type | DBDS10K... wg WK 450 610 |
| Required oil filtration | up to 16 μm |
| Solenoid directional valve type | 2U ED6C1-01/2M1... NZ4 wg WK 494 920 |
| Directional control valve voltage | 12VDC; 24V DC or 220V 50 Hz |
| Solenoid power rating | 26W |
| Weight | 12,3 up to 14,6 kg |



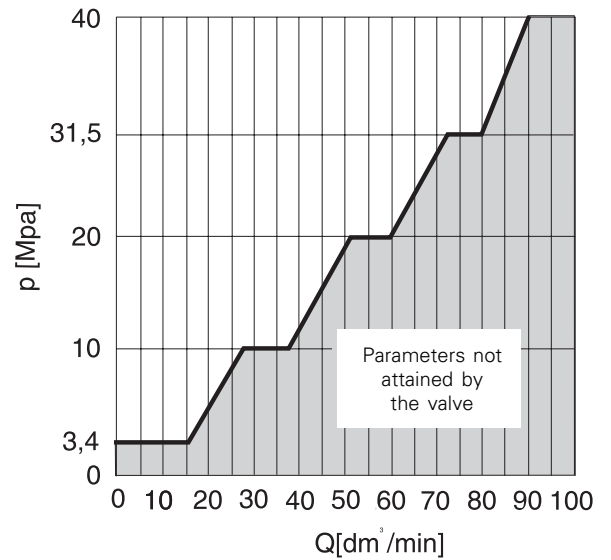
| | ϕD | For flange connection SAE | | | | | For flange connection CE OP | | | |
|-------|----------|---------------------------|------|------|-----|--------------|-----------------------------|------|-----|--------------|
| | | Size | A | B | d1 | Thread depth | Size | C | d2 | Thread depth |
| BS 25 | 1" | 1 1/4" SAE6000 | 31,6 | 66,7 | M14 | 24 | CETOP 38-400 | 51,6 | M12 | 20 |
| BS 32 | 1 1/2" | 1 1/4" SAE6000 | 31,6 | 66,7 | M14 | 24 | CETOP 38-400 | 51,6 | M12 | 20 |
| | | 1 1/2" SAE6000 | 36,7 | 79,4 | M16 | 24 | | | | |
| | | 2" SAE3000 | 42,9 | 77,8 | M12 | 20 | CETOP 50-400 | 60,1 | M14 | 24 |

PERFORMANCE CURVES

DBDS10K... safety valve flow lines



DBDS 10 version as a safety valve with CE approval



| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| BS | | | | | | | | | |
| Unit size: 25 = 25 32 = 32 | | | | | | | | | |
| Relief manner: anual = M anual and electric = R | | | | | | | | | |
| Electric directional valve control voltage (version R only) 12 VDC = G12 24 VDC = G24 220V 50Hz = W220R | | | | | | | | | |
| Overflow valve type: No valve = A With preset valve (no approval) = B With sealed valve (with CE approval) = C With sealed valve (UDT - approved) = E | | | | | | | | | |
| Safety valve setting up to 2,5 MPa = 25 up to 5 MPa = 50 up to 10 MPa = 100 up to 20 MPa = 200 up to 31,5 MPa = 315 up to 33 MPa = 330 For CE approval and UDT approved units, specify pressure setting (factory setting and sealing) | | | | | | | | | |
| Accumulator connections G2 connection = G M 50x1,5 connection = M | | | | | | | | | |
| Hydraulic system side connection dimensions port with inch screw thread (G1 for BS 25; G1 1 for BS 32) = R with SAE flange connection = S with CETOP flange connection = C | | | | | | | | | |
| SAE or CETOP connection: SAE 1 1/4 = A SAE 1 1/2 = B SAE 2 = C CETOP 38-400 = A CETOP 50-400 = B | | | | | | | | | |
| Sealing oilproof = P viton = V | | | | | | | | | |
| Housing construction material: phosphate steel = no designation stainless steel = X nickel steel = N | | | | | | | | | |
| Further requirements in clear text (to be agreed upon with the manufacturer) | | | | | | | | | |



BLOQUE DE SEGURIDAD Safety Block

Tipo SB 16
350 bar

TIPO / TYPE

Los bloques SB 16 están concebidos para reagrupar en un solo componente compacto todos los órganos necesarios para un buen funcionamiento de una instalación hidráulica con acumulador hidroneumático.

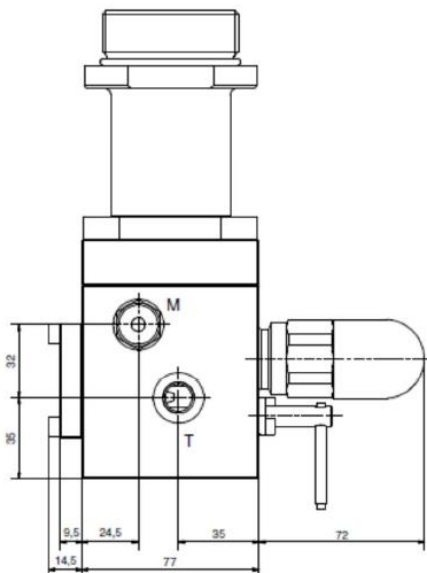
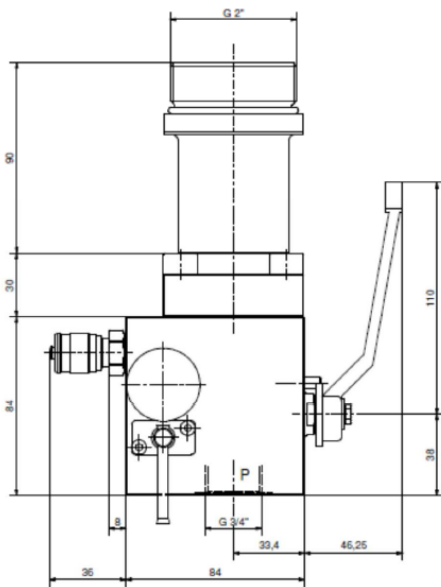
Los bloques de Base SB 16 se componen de:

- 1 Válvula manual de bola con cierre por giro de palanca 90°, para aislar el acumulador del circuito general.
- 1 Válvula limitadora de presión, a émbolo, regulada a la presión máxima del acumulador (en ningún caso esta válvula servirá para la protección de la bomba hidráulica)

The blocks SB 16 are designed to regroup in a single compact component all the necessary organs for a good operation of a Hydraulic installation with hydroneumatic accumulator.

The components of the blocks SB 16 basically are:

- 1 ball valve with closing by handle turn of 90° in order to isolate the accumulator of the general circuit.
- 1 pressure relief valve regulated at maximum pressure of the accumulator (never this valve must be used as a protection of the hydraulic pump)



DIÁMETRO NOMINAL / NOMINAL DIAMETER

16 mm 16 mm

CAUDAL NOMINAL / NOMINAL FLOW

75 l /min @ 6 m/s

PRESIÓN MÁXIMA DE SERVICIO / MAXIMUM WORKING PRESSURE

Versión manual/ Manual version: 350 bar

TEMPERATURA DE SERVICIO / WORKING TEMPERATURE

Versión manual/ Manual version: de -20° a 80° C from -20° to 80° C.

NORMATIVA / APPROVALS

Todos los bloques están contruidos conforme a la Directiva Europea 97/23 sobre equipos a presión. All the blocks full fill the European Directive 97/23 on the equipment under pressure.

FLUIDO / FLUID

Aceite mineral y éster fosfatado
(otros fluidos bajo demanda)

Mineral oil and phosphated ester
(other fluids under request)

CONEXION CIRCUITO / PROCESS PORT

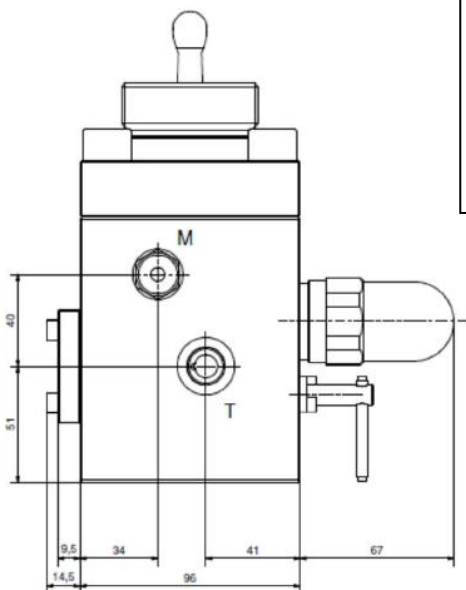
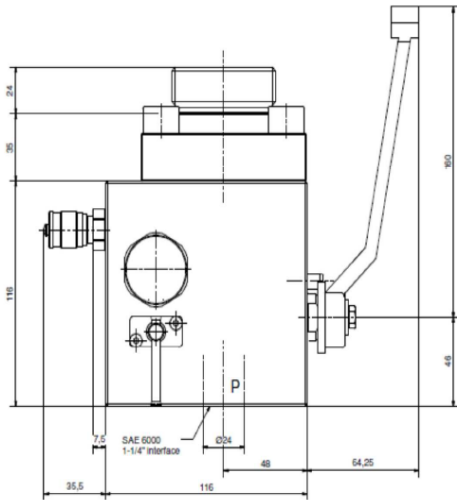
G1/2"

| FUNCIÓN FUNCTION | MS |
|---------------------|--------|
| ESQUEMA DIAGRAM | |
| MASA MASS | 5,2 Kg |



BLOQUE DE SEGURIDAD Safety Block

Tipo SB 24
350 bar



TIPO / TYPE

Los bloques SB 24 están concebidos para reagrupar en un solo componente compacto todos los órganos necesarios para un buen funcionamiento de una instalación hidráulica con acumulador hidroneumático.

Los bloques de Base SB 24 se componen de:

- 1 Válvula manual de bola con cierre por giro de palanca 90°, para aislar el acumulador del circuito general.
- 1 Válvula limitadora de presión, a émbolo, regulada a la presión máxima del acumulador (en ningún caso esta válvula servirá para la protección de la bomba hidráulica)

The blocks SB 24 are designed to regroup in a single compact component all the necessary organs for a good operation of a Hydraulic installation with hydroneumatic accumulator.

The components of the blocks DI 16 basically are:

- 1 ball valve with closing by handle turn of 90° in order to isolate the accumulator of the general circuit.
- 1 pressure relief valve regulated at maximum pressure of the accumulator (never this valve must be used as a protection of the hydraulic pump)

DIÁMETRO NOMINAL / NOMINAL DIAMETER

16 mm 16 mm

CAUDAL NOMINAL / NOMINAL FLOW

160 l /min @ 6 m/s

PRESIÓN MÁXIMA DE SERVICIO / MAXIMUM WORKING PRESSURE

Versión manual/ *Manual version:* 350 bar

TEMPERATURA DE SERVICIO / WORKING TEMPERATURE

Versión manual/ *Manual version:* de -20° a 80° C *from -20° to 80° C.*

NORMATIVA / APPROVALS

Todos los bloques están contruidos conforme a la Directiva Europea 97/23 sobre equipos a presión. *All the blocks full fill the European Directive 97/23 on the equipment under pressure.*

FLUIDO / FLUID

Aceite mineral y éster fosfatado *Mineral oil and phosphated ester*
(otros fluidos bajo demanda) *(other fluids under request)*

CONEXION CIRCUITO/ PROCESS PORT

G1/2"

| FUNCIÓN FUNCTION | MS |
|---------------------|----------------|
| ESQUEMA DIAGRAM | |
| MASA MASS | 11,8 Kg |