

RE 50 131/08.02

Replaces: 10.00

**Accumulator safety block
Type ABZSS**

Nominal sizes DN 10; 20; 30

Series 3X

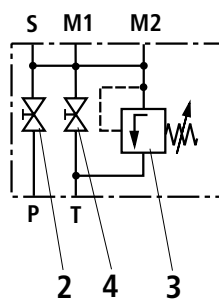
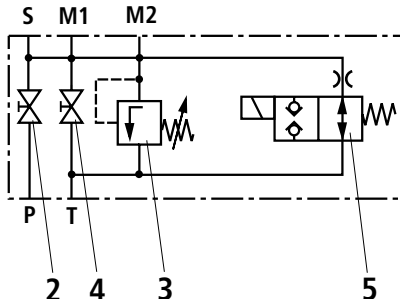
Maximum operating pressure 350 bar

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Symbols**Version "M"**

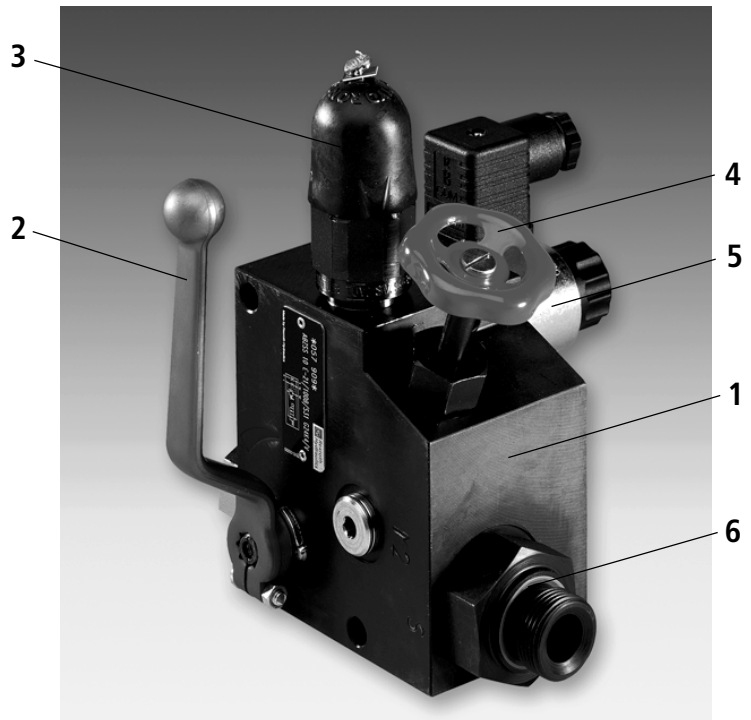
(manual unloading)

**Version "E"**(manual and
electro-magnetic unloading)

- 1 Block
- 2 System isolator valve
- 3 Pressure relief valve
- 4 Manual unloading
- 5 Electro-magnetic unloading, optional
- 6 Accumulator adaptor, see accessories on pages 8 to 10

Connection designations:

- M1; M2** – Test points
P – Pump connection
S – Accumulator connection
T – Tank connection



Accumulator safety block type ABZSS.E.3X... with plug-in connector



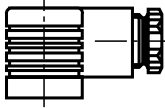
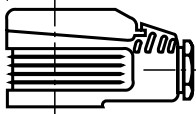
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Plug-in connector ordering details (individual connections)

		Plug-in connector DIN EN 175 301-803-A ISO 4400  Without circuitry	Large plug-in connector  With indicator light 12 ... 240 V With rectifier 12 ... 240 V With indicator light and Z-diode protective circuitry 24 V		
Colour black	Material No.	00074684	00057292	00313933	00310995

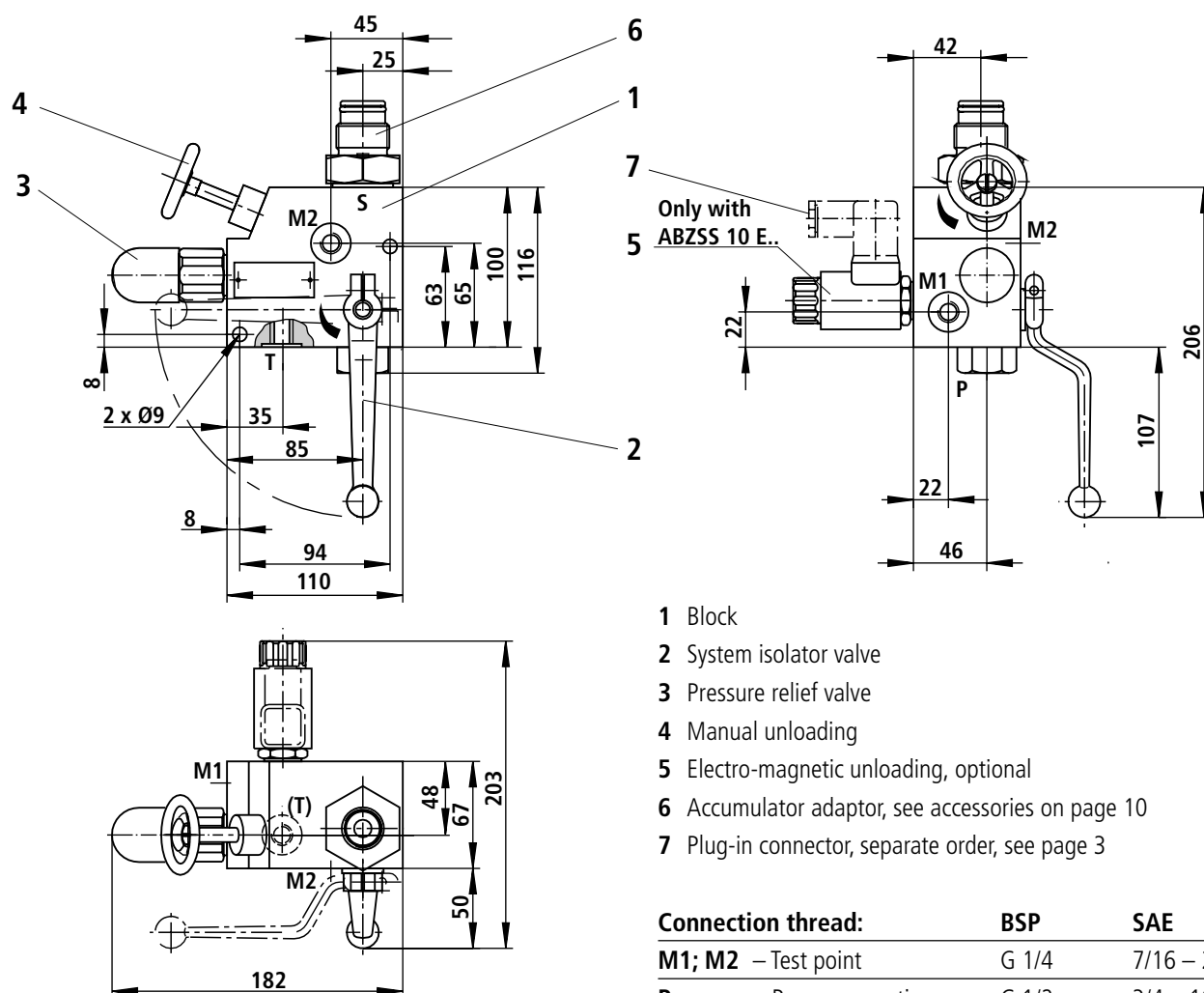
Technical data (for applications outside these parameters, please consult us!)

Seal material		FKM seals or NBR seals ¹⁾
Operating temperature range	°C	– 15 to + 80
Max. operating pressure	bar	350
Pressure fluid		Mineral oil (HL, HLP) to DIN 51 524 ³⁾ Triglyzeride (rape seed oil) HETG to VDMA 24 568 ³⁾ Synthetic ester HEES to VDMA 24 568 ²⁾ Polyglycole HEPG to VDMA 24 568 ²⁾
Block material		Steel
Direct acutated pressure relief valve	Type	DBDS...K1X/...VB or DBDS...K1X/...E ¹⁾ to catalogue sheet RE 25 402
Cartridge poppet valve	Type	KSE1PA/CG24N9K4V to catalogue sheet RE 18 136-02
Nominal size	DN	10 20 30 30...S030
Weight	Version "M"	kg 5.2 8.5 20.5 26.5
	Version "E"	kg 5.5 8.8 20.8 26.8

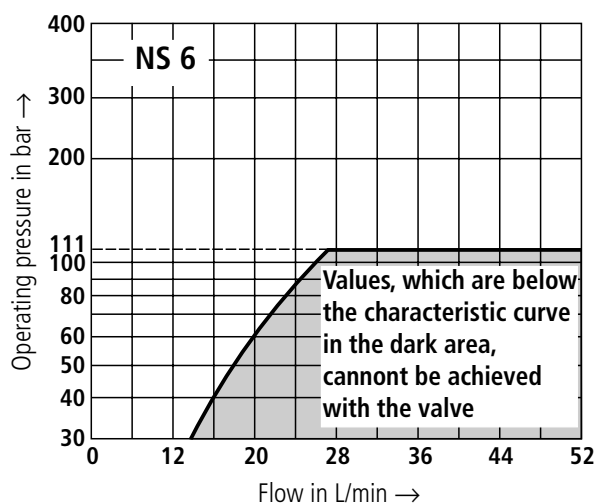
¹⁾ Special version

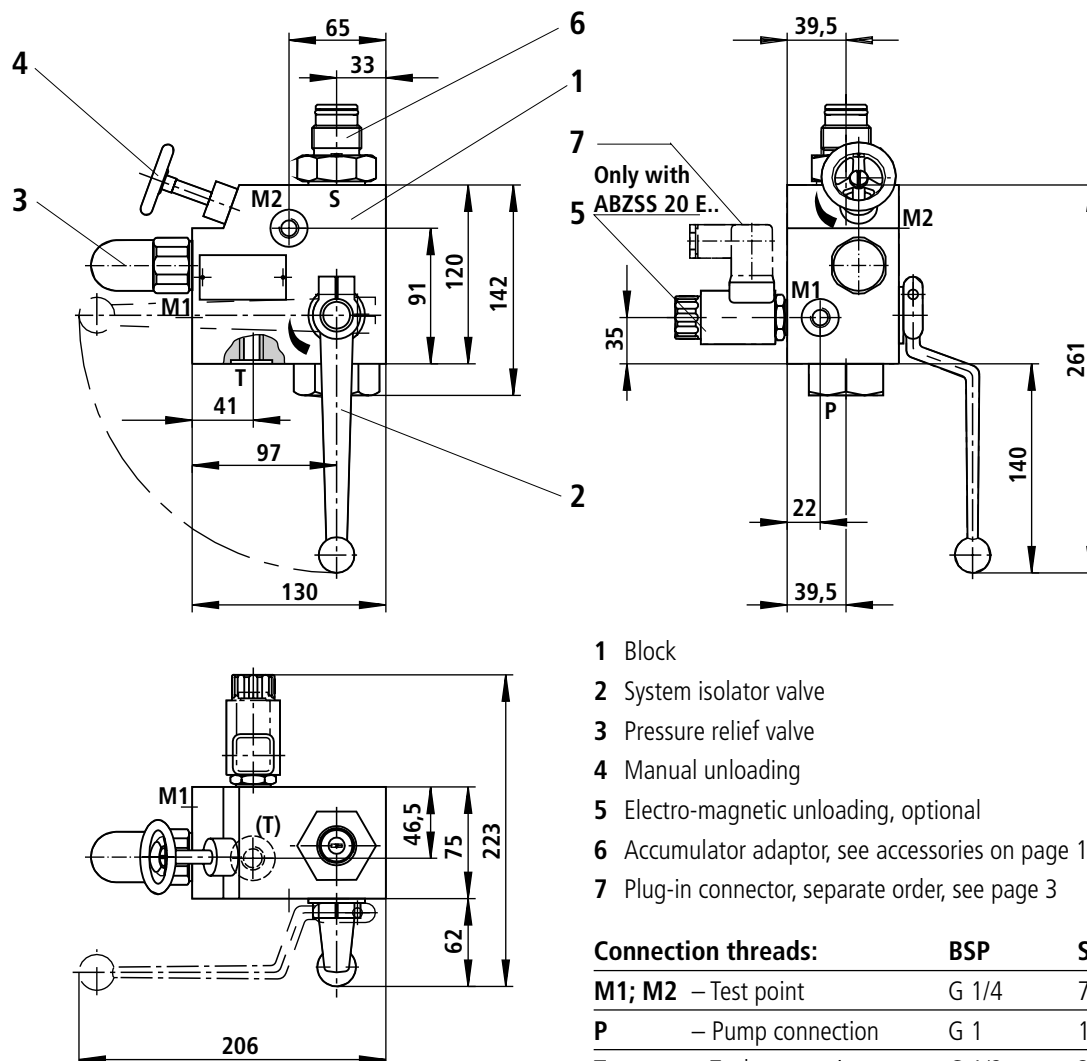
²⁾ Suitable for FKM seals

³⁾ Suitable for FKM and NBR seals



Design tested pressure relief valve type DBD ../..E, NS 6 – Directive 97/23/EG (pressure component directive)

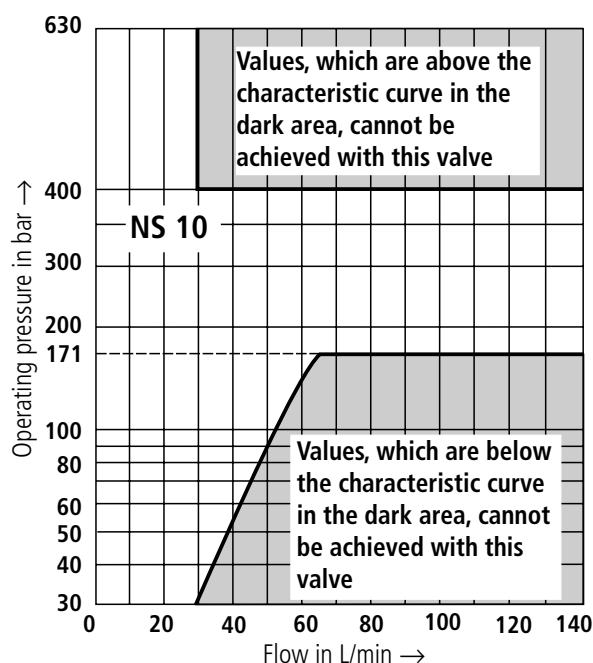


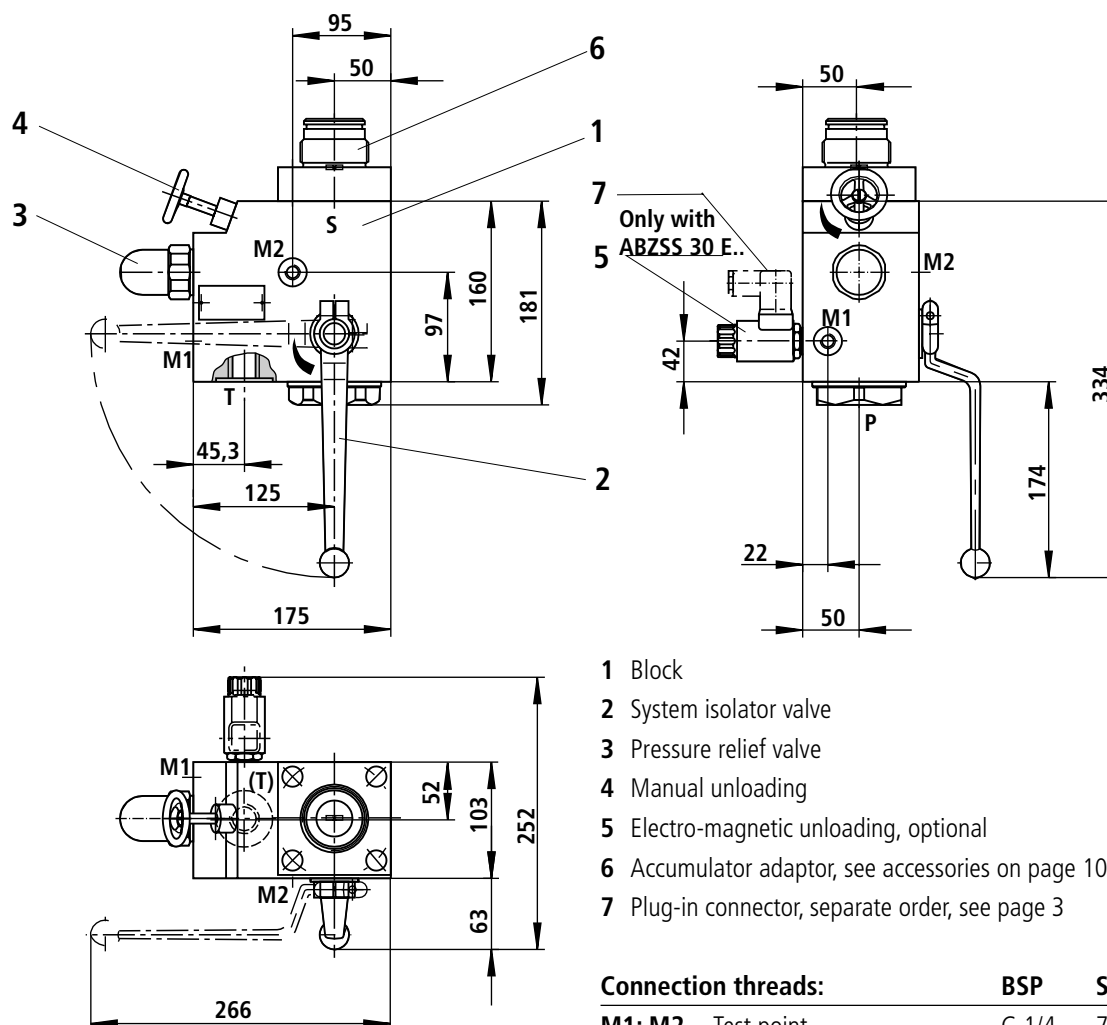


- 1 Block
- 2 System isolator valve
- 3 Pressure relief valve
- 4 Manual unloading
- 5 Electro-magnetic unloading, optional
- 6 Accumulator adaptor, see accessories on page 10
- 7 Plug-in connector, separate order, see page 3

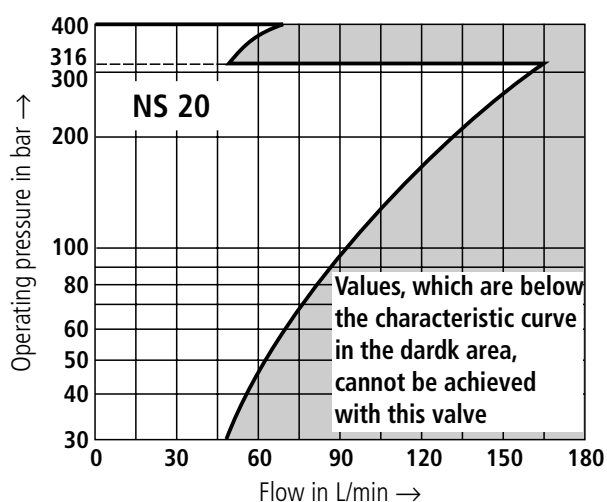
Connection threads:	BSP	SAE
M1; M2 – Test point	G 1/4	7/16 – 20 UNF
P – Pump connection	G 1	1 5/16 – 12 UN
T – Tank connection	G 1/2	3/4 – 16 UNF
S – Accumulator connection	M33 x 2	M33 x 2

Design test pressure relief valve type DBD ../..E, NS 10 – Directive 97/23/EG (pressure component directive)

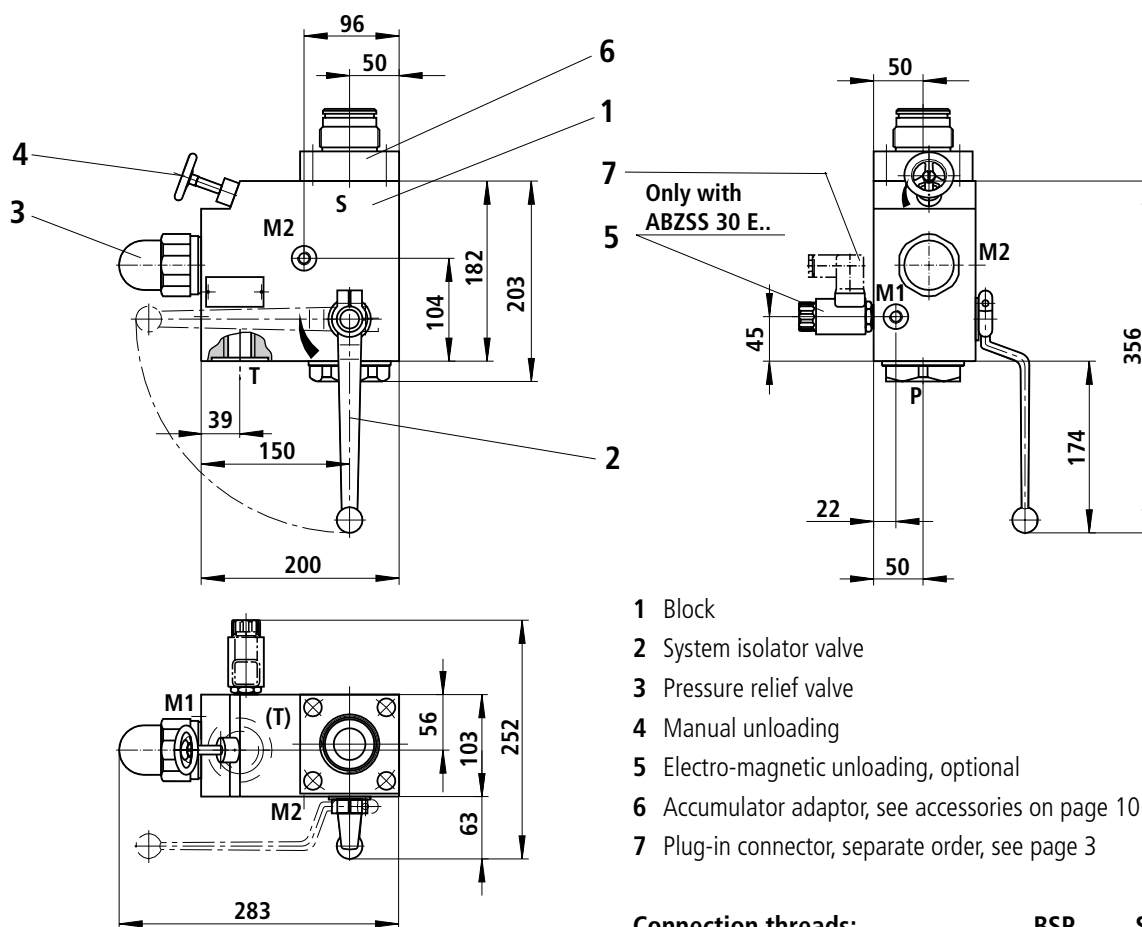


**Connection threads:****BSP SAE**

M1; M2	– Test point	G 1/4	7/16 – 20 UNF
P	– Pump connection	G 1 1/2	1 7/8 – 12 UN
T	– Tank connection	G 1	1 5/16 – 12 UN
S	– Accumulator adaptor (flange)	Page 8	Page 10

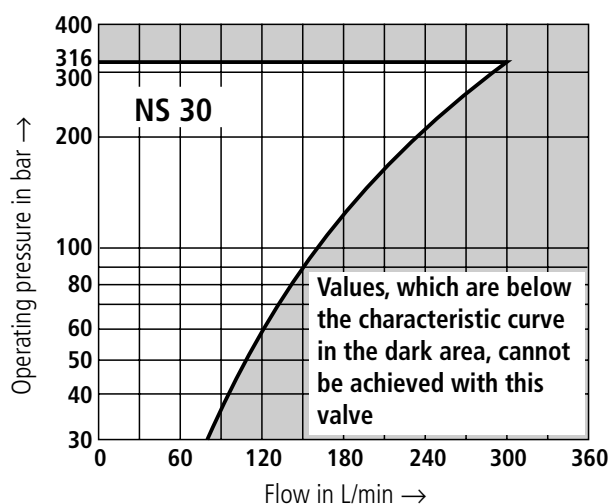
Design tested pressure relief valve type DBD../..E, NS 20 – Directive 97/23/EG (pressure component directive)

The accumulator safety block type ABZSS 30...S030 is, when compared to the standard accumulator safety block ABZSS 30..., fitted with a NS 30 direct actuated pressure relief valve.

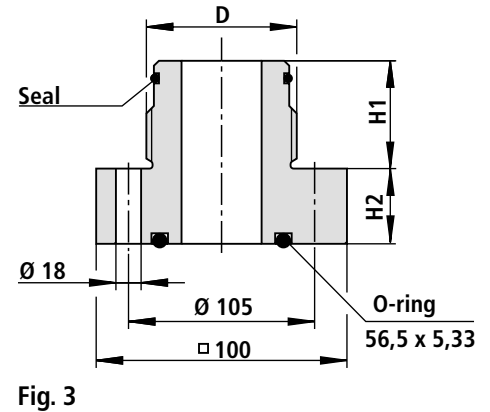
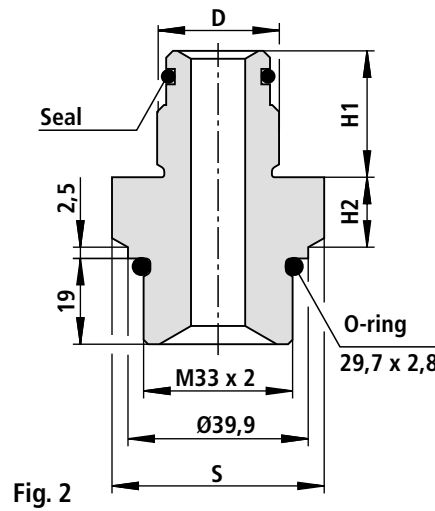
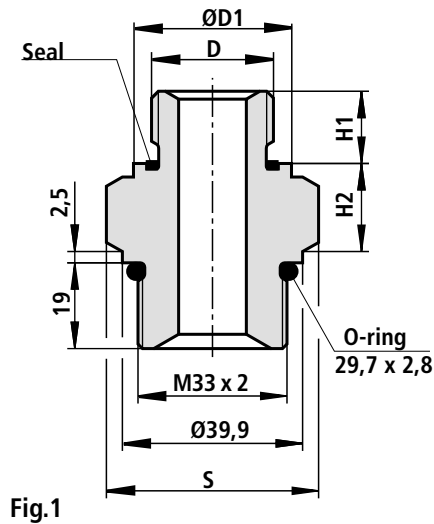


Connection threads:	BSP	SAE
M1; M2 – Test point	G 1/4	7/16 – 20 UNF
P – Pump connection	G 1 1/2	1 7/8 – 12 UN
T – Tank connection	G 1 1/2	1 7/8 – 12 UN
S – Accumulator connection (flange)	Page 8	Page 10

Design tested pressure relief valve type DBD ../..E, NS 30 – Directive 97/23/EG (pressure component directive)



Accessories: accumulator adaptor, max. operating pressure 350 bar, BSP thread (Dimensions in mm)



Accumulator safety block	Accumulator type	Accumulator DN	Accumulator adaptor	Abb.	S	H1	H2	D	ØD1	Seal
ABZSS 10 ABZSS 20	Membrane accumulator	0.075	S30	1	41A/F	14	13.5	G 1/2 A	26.9	Profile seal ring G 1/2 A to DIN 3869
		0.16								
		0.32								
		0.5								
		0.6								
		0.7								
		0.75								
		1.0								
		1.4								
		2.0	S31	2	46A/F	37	16.5	G 1 1/4 A	—	30 x 3
	Bladder accumulator	2.8								
		3.5								
		10.0								
		12.0								
ABZSS 30	Membrane accumulator	13.0	S13	3	65A/F	43	20.5	G 2 A	—	48 x 3
		20.0								
		24.0								
		32.0								
		50.0								
	Bladder accumulator	2.5	S307	3	—	37	30	G 2 A	—	48 x 3
		4.0								
		5.0								
		6.0								
		10.0								

Ordering details

Short code	Accumulator adaptor	Material No. FKM	Accumulator adaptor	Material No. NBR ²⁾
S30	S30V/G 1/2-M33 x 2.0	00545252	S30 M/G 1/2-M33 x 2.0	00862695
S31	S31V/G 3/4-M33 x 2.0	00545253	S31 M/G 3/4-M33 x 2.0	00862697
S10	S10V/G 3/4-M33 x 2.0	00545254	S10 M/G 3/4-M33 x 2.0	00862699
S12	S12V/G 1 1/4-M33 x 2.0	00545255	S12 M/G 1 1/4-M33 x 2.0	00862700
S13	S13V/G 2-M33 x 2.0	00545256	S13 M/G 2-M33 x 2.0	00862701
S307	S307G 1 1/4-DN32 ¹⁾	00085303	S307M/G 1 1/4-DN32 ¹⁾	00067050
S309	S309V/G 2-DN32 ¹⁾	00545858	S309 M/G 2-DN32 ¹⁾	00862702

¹⁾ The M16 x 45 S.H.C.S. are included within the scope of supply

²⁾ Special version

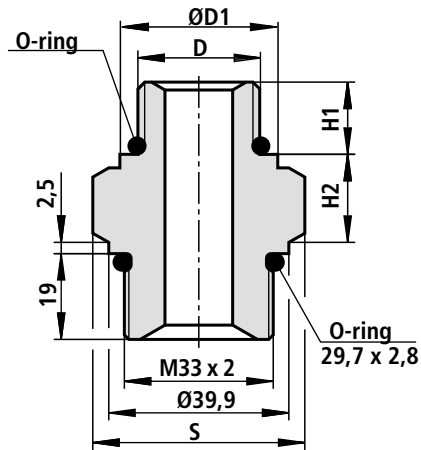


Fig. 1

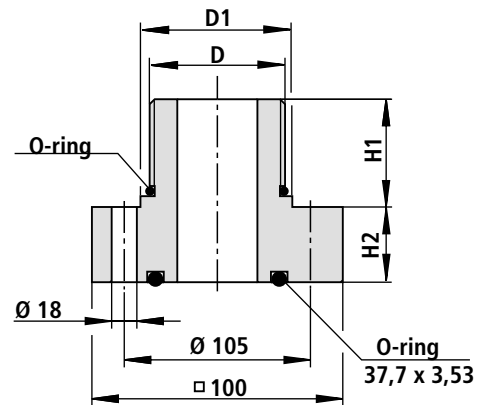


Fig. 2

Accumulator safety block	Accumulator Type	Accumulator DN	Accumulator adaptor	Fig.	S	H1	H2	D	ØD1	O-ring
ABZSS 10 ABZSS 20	Membrane accumulator	0.32	S64	1	41A/F	11.4	18.1	3/4-16UNF-2A	23.0	16.36 x 2.21
		0.5								
		0.6								
		0.7								
	Bladder accumulator	0.75	S60	1	41A/F	15.2	18.3	1 1/16-12UN-2A	32.0	23.0 x 3.0
		1.0								
		1.4								
		2.0								
ABZSS 30	Bladder accumulator	2.8	S620	2	—	15.2	33.8	1 5/8-12UN-2A	48.0	38.0 x 3.0
		3.5								
		1.0								
		4.0								
	Bladder accumulator	6.0	S630	2	—	15.2	33.8	1 7/8-12UN-2A	54.0	44.0 x 3.0
		10.0								
		20.0								
		32.0								

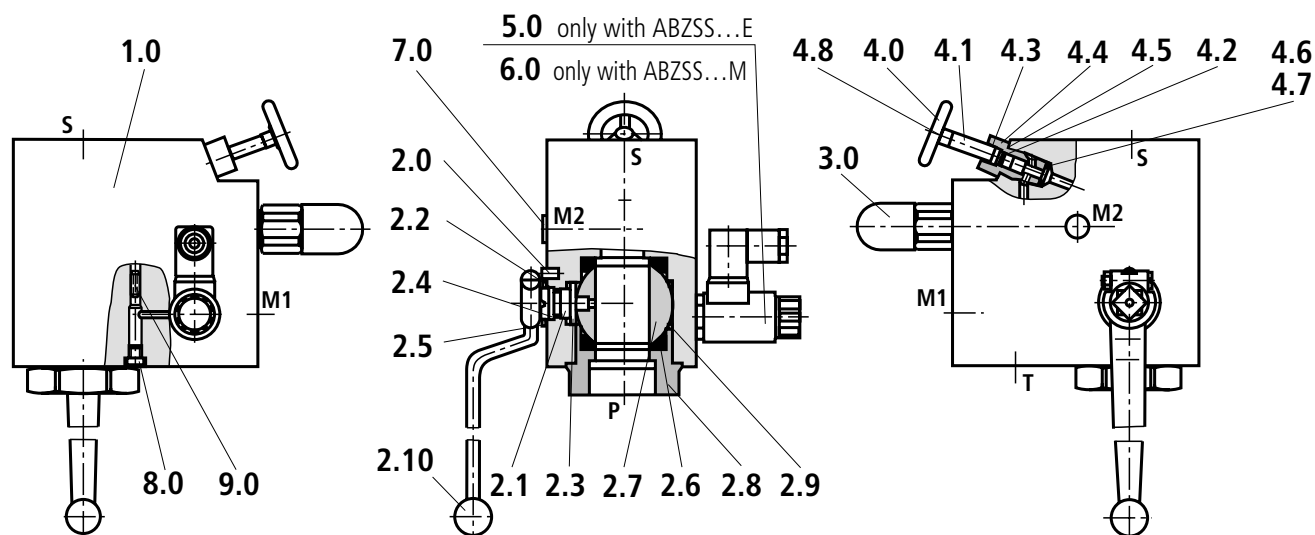
Ordering details

Short code	Accumulator adaptor	Material No. FKM	Accumulator adaptor	Material No. NBR ²⁾
S64	S64V/ 3/4-16UNF-M33x2	00618805	S64M/ 3/4-16UNF-M33x2	00618806
S60	S60V/ 1 1/16-12UN-M33x2	00618788	S60M/ 1 1/16-12UN-M33x2	00618799
S62	S62V/ 1 5/8-12UN-M33x2	00618800	S62M/ 1 5/8-12UN-M33x2	00618801
S63	S63V/ 1 7/8-12UN-M33x2	00618803	S63M/ 1 7/8-12UN-M33x2	00618804
S620	S620V/ 1 5/8-12UN-DN32 ¹⁾	00618813	S620M/ 1 5/8-12UN-DN32 ¹⁾	00618814
S630	S630V/ 1 7/8-12UN-DN32 ¹⁾	00618817	S630M/ 1 7/8-12UN-DN32 ¹⁾	00618815

¹⁾ The M16 x 45 S.H.C.S. are included within the scope of supply

²⁾ Special version

Spare parts



Accumulator safety block		ABZSS...10M	ABZSS...10E	ABZSS...20M	ABZSS...20E	ABZSS...30M	ABZSS...30E
Description	Pos.-Nr.	Material No.					
Block	1.0						
Spare parts kit		BSP:		BSP:		BSP:	
System isolator valve		00089456 (FKM)		00089458 (FKM)		00089459 (FKM)	
Cylindrical pin	2.0	00210290 (NBR) ¹⁾		00210291 (NBR) ¹⁾		00210292 (NBR) ¹⁾	
Spindle	2.1	SAE:		SAE:		SAE:	
O-ring	2.2	00618000 (FKM)		00618002 (FKM)		00618005 (FKM)	
Washer	2.3	00618001 (NBR) ¹⁾		00618003 (NBR) ¹⁾		00618006 (NBR) ¹⁾	
Circlip	2.4						
Limiting washer	2.5						
Seal	2.6						
Ball	2.7						
Connection piece	2.8						
O-ring	2.9						
Lever	2.10	00089461		00089462		00089463	
Direct operated	3.0	DBDS...K1X/...VE to RE 25 402					
Pressure relief valve		DBDS...K1X/...E to RE 25 402 ¹⁾					
Spare parts kit		00089468					
Manual unloading		(FKM)					
Hand wheel	4.0	00210324					
Spindle	4.1	(NBR) ¹⁾					
O-ring	4.2						
Circlip	4.3						
Bush	4.4						
O-ring	4.5						
O-ring	4.6						
Support ring	4.7						
Flat head screw	4.8						
Cartridge poppet valve	5.0	00993076 (FKM)					
Plug	6.0	00617084 (FKM) 00617085 (NBR) ¹⁾					
Plug	7.0	BSP: G 1/4	00012297 (FKM)	00210325 (NBR) ¹⁾			
		SAE: 7/16-20UNF	00014410 (FKM)	00014411 (NBR) ¹⁾			
Plug	8.0	BSP: G 1/8	00012977 (FKM)	00012419 (NBR) ¹⁾			
		SAE: 7/16-20UNF	00014410 (FKM)	00014411 (NBR) ¹⁾			
Orifice	9.0	00897329					

¹⁾ Special version

Commissioning guidelines

Notes with regard to the EC machinery directive 89/392 EWG, annex II, section B:

The sub-assemblies are manufactured to conform with the harmonised standards prEN 982, prEN 983, DIN EN 292 and DIN EN 60 204-1. The commissioning cannot be carried out until it has been confirmed that the machine, to which the sub-assemblies are to be fitted, conforms with EC guidelines.

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