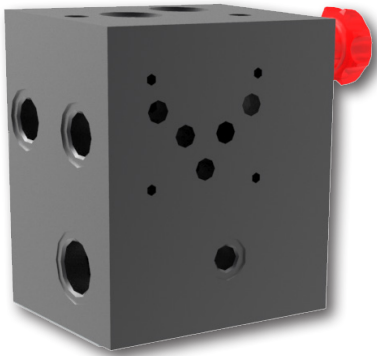


ZB10

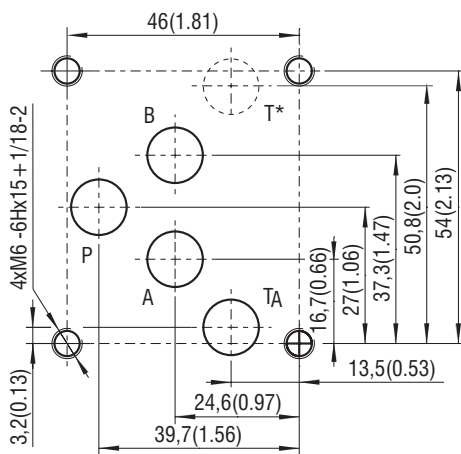
Size 10 (D05) • p_{max} 320 bar (4600 PSI)



Technical Features

- › Tank cover mounted base manifold for hydraulic power packs which require one directional valve, optionally stackable with PD10-Z10 (Cat. 0008) serial plates
- › Designed for flange mounted valves with pattern acc. to ISO 4401-05 (CETOP 05)
- › Simplified models ZB10L* for cost effective circuit design and assembly with stackable serial PD10-Z10 plates
- › Integrated functions for circuit unloading drain, main circuit check and pressure relief valves
- › Suitable for mounting the pump drive unit horizontally on the tank cover, or for vertical arrangement with the pump situated in the tank under the oil level
- › Variety of models support the build-up of systems with constant or regulated pumps
- › In the standard version, the ZB10A(B) manifold housing is zinc-coated for 520 h and the steel parts are uinc-coated for 240 h protection acc. to ISO 9227. Aluminium ZB10L manifold housing is without any surface protection

ISO 4401-05 (CETOP 05)



Ports P, A, B, T - max Ø11,2 mm (0.44 in)

Port T only with model ZB10A(B)-QT2

Technical Data

Modular valves mounting surface		10 (D05)	
Cartridge cavity		M28x1,5 / QP2, M35x1,5 / QT2	
Max. operating pressure	bar (PSI)	aluminium 250 (3626)	
	bar (PSI)	steel 320 (4640)	
Max. flow	l/min (GPM)	50 (13.2) for QP2	120 (31.7) for QT2
		ZB10A(B)-QP2(QT2)*ST*	ZB10L-QT2*AL*
Port dimensions		Base plate	Simplified base plate
		P1 ... G3/4	T1 ... G3/4
		A, B, P, T, PP2, D2, T1, T2, T3... G1/2	P, T, P1, D2, T2 ... G1/2
		M1, M2, M3 ... G1/4	M ... G1/4
		L2 ... G1/8	-
Weight	ZB10A(B)	kg (lbs)	steel 6,3 (13.9)
	ZB10L		aluminium 2,5 (5.5)

	Data sheet	Type
General information	GI_0060	Products and operating conditions
Cavity details / Mounting interface	SMT_0019	SMT-QP2*, SMT-QT2*
		Size 10 / CETOP 05

Studs and nuts for vertical stacking assemblies - Dn04, 06, 10_0020

Ordering Code

ZB10 [] - [] - [] - [] **K** - []

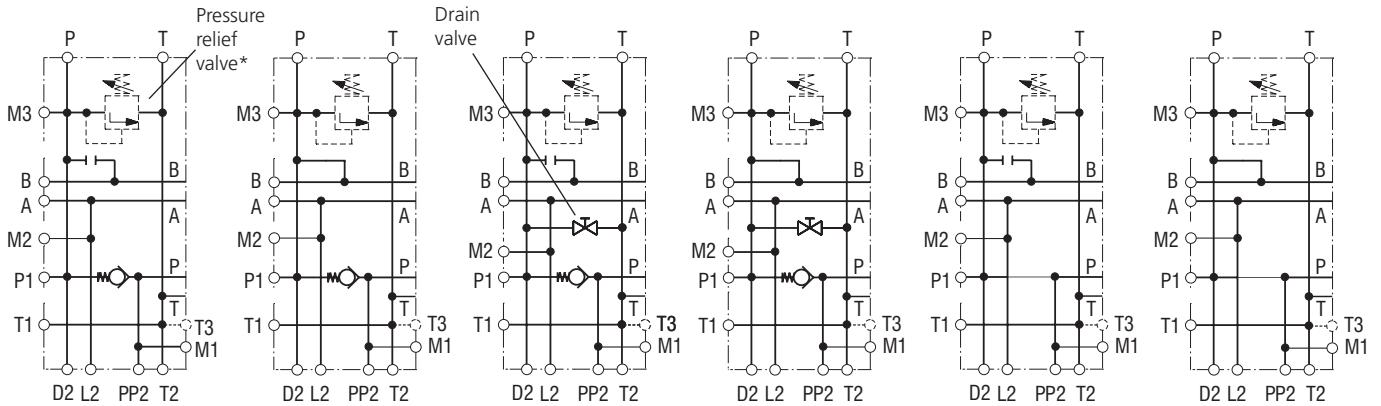
<p>Base manifold with pressure relief valve for PD serial plates assembly</p> <p>Size, mounting interface of serial plates base plate for PD10-Z10 serial plates</p> <p>Models with one mounting interface acc. to ISO 4401, DIN 24340 (CETOP 05) with check valve without check valve</p> <p>Models without mounting interface acc. to ISO 4401, DIN 24340 (CETOP 05) without check valve</p> <p>Pressure relief valve cavity M28x1,5 / QP2 (VPP1-06, VPP2-06)* M35x1,5 / QT2 (VPP1-10)*</p> <p>*Pressure relief valve is not supplied with the ZB block see catalogue: HA_5061 (VPP1-06, VPP1-10), HA_5062(VPP2-06)</p>	<p>A B</p> <p>L</p> <p>QP2 QT2</p>	<p>No designation</p> <p>B</p> <p>K</p> <p>AL ST</p> <p>1 3</p> <p>11 12 21 22</p>	<p>Surface treatment aluminium manifold without treatment zinc-coated (ZnNi), ISO 9227 (520 h)</p> <p>Seals seal plate for oil tank cover assembly</p> <p>Material of base manifold aluminium, EN AW-7075 T6* steel** *only for „ZB10L“ models **only for „ZB10A(B)“ models</p> <p>Design models for ZB10L types T return line from bottom side two T return lines from plate and bottom side</p> <p>Design models for ZB10A(B) + Connection P-B without P-B ports connection with P-B ports connection without P-B ports connection with P-B ports connection</p>
--	---	---	---

Functional Symbols

Models for flange mounted valves with pattern acc. to ISO 4401-05 (CETOP 05)

with check valve				without check valve	
ZB10A*-11	ZB10A*-12	ZB10A*-21	ZB10A*-22	ZB10B*-11	ZB10B*-12

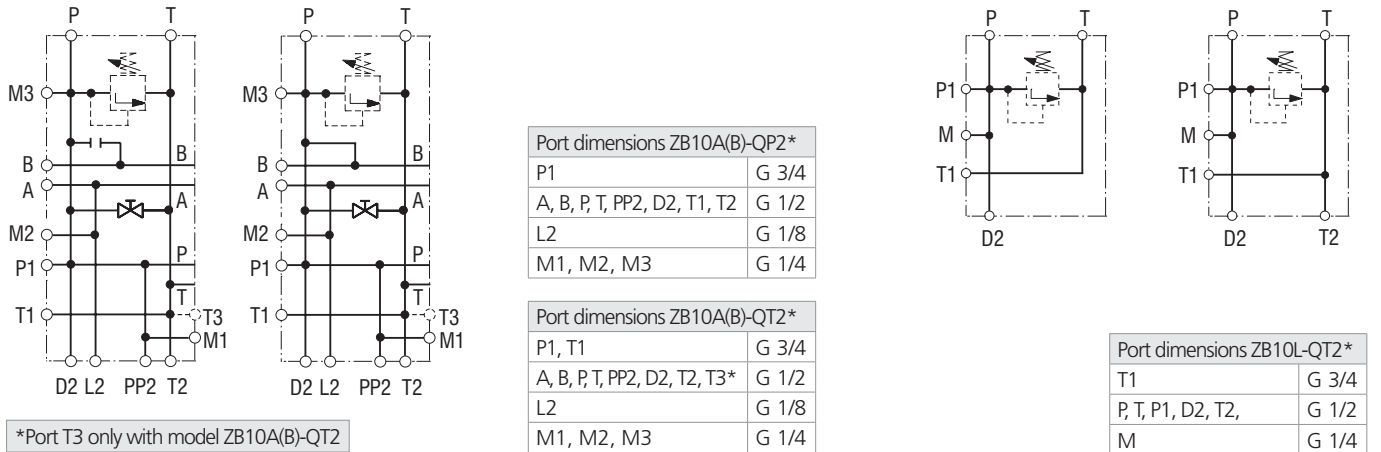
mounting interface of PD10-Z10 (cat. 0008) serial plates



Models for flange mounted valves with pattern acc. to ISO 4401-05 (CETOP 05)

without check valve		Simplified models ZB10L* without mounting pattern for modular valve	
ZB10B*-21	ZB10B*-22	ZB10L*-1	ZB10L*-3

mounting interface of PD10-Z10 (cat. 0008) serial plates



Pressure relief valve is not supplied with the ZB block

Application

Ordering number	Type	Pressure [bar]	Weight [kg]
23442001	ZB10A-QP2-11-STK-B	320	cca 6,3
23440601	ZB10A-QP2-21-STK-B	320	
30843100	ZB10A-QP2-12-STK-B	320	
30843200	ZB10A-QP2-22-STK-B	320	
23440501	ZB10B-QP2-11-STK-B	320	
23441801	ZB10B-QP2-21-STK-B	320	
30843300	ZB10B-QP2-12-STK-B	320	
30843400	ZB10B-QP2-22-STK-B	320	

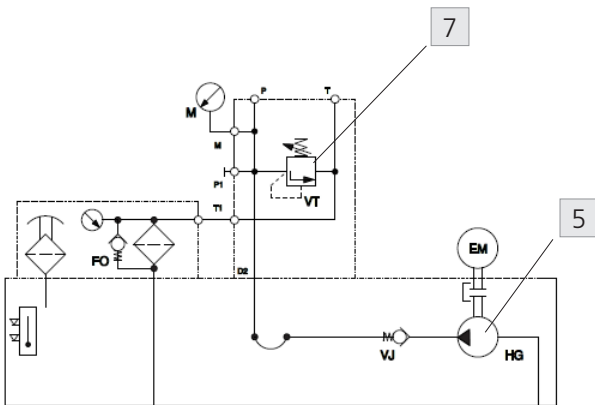
Ordering number	Type	Pressure [bar]	Weight [kg]
32861900	ZB10A-QT2-11-STK-B	320	cca 9,3
34046400	ZB10A-QT2-21-STK-B	320	
34046600	ZB10A-QT2-12-STK-B	320	
34046900	ZB10A-QT2-22-STK-B	320	
34047400	ZB10B-QT2-11-STK-B	320	
34047700	ZB10B-QT2-21-STK-B	320	
34047800	ZB10B-QT2-12-STK-B	320	
34047900	ZB10B-QT2-22-STK-B	320	

Ordering number	Type	Pressure [bar]	Weight [kg]
34048000	ZB10L-QT2-1-AL	250	cca 2,3
31785300	ZB10L-QT2-3-AL	250	

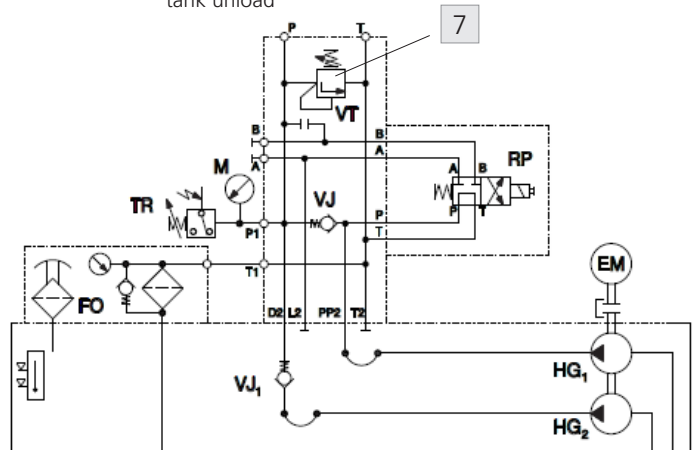
Available types

Typical circuit This block enables a great number of circuit arrangements. The shown example represents only one of many possible variants.

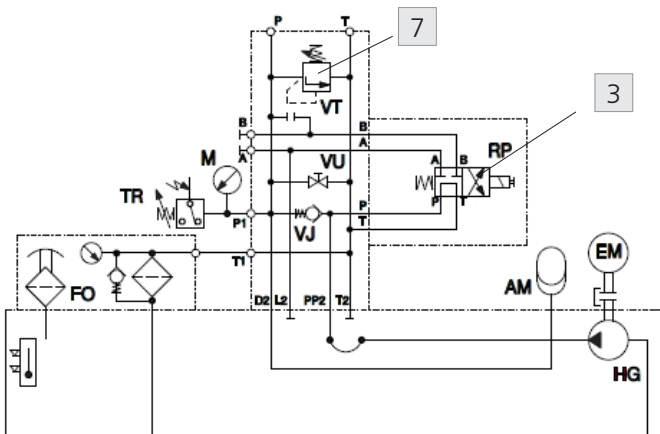
ZB10L*-1 Basic pressure circuit protection and connection with gear pump and return filter



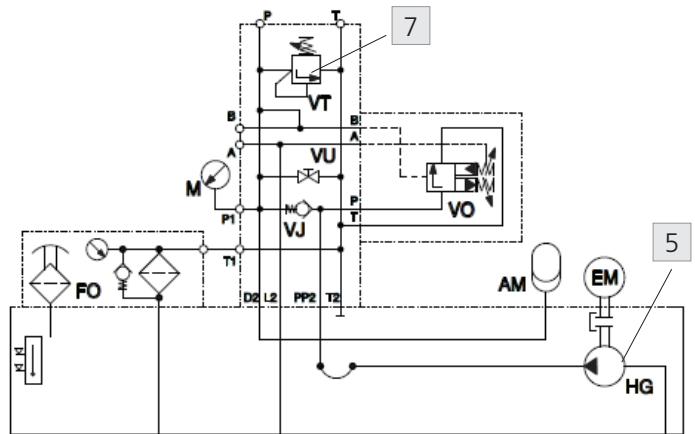
ZB10A*-11 Basic pressure circuit protection and connection with tandem gear pump and return filter with one pump tank unload



ZB10A*-21 System with accumulator

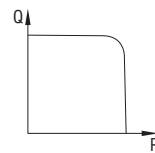
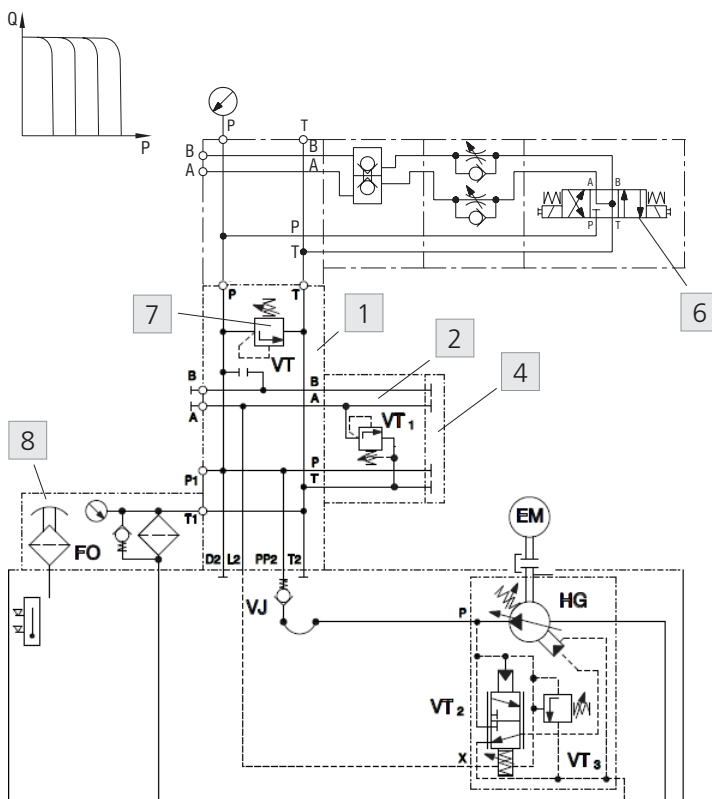


ZB10A*-22 System with accumulator and accumulator charging valve

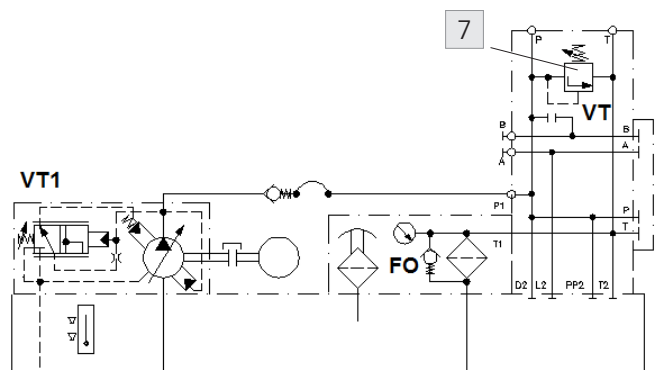


ZB10B* Constant pressure regulation with relief valve (remote control)

ZB10B* Constant pressure regulation (setting on the pump)

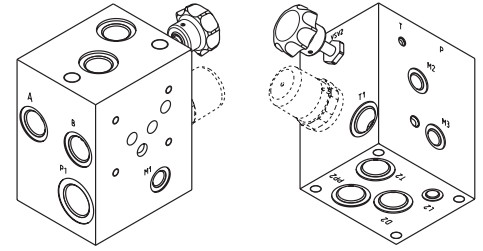
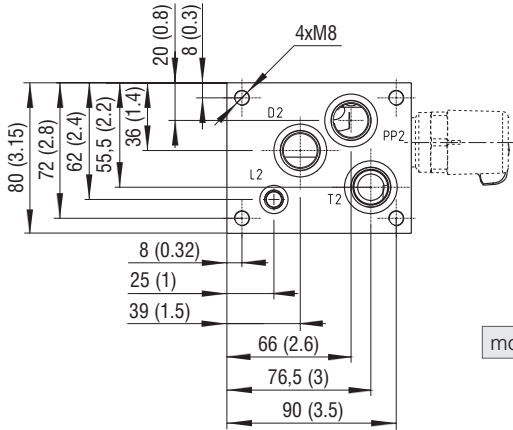


1	Serial plate PD10-Z10
2	Pressure relief valve VPN2-10/M
3	Directional valve RPE4-102R11
4	Blanking plate for ISO 4401 Modular Valve
5	Gear pumps GP*
6	Directional valve RPE4-10
7	Pressure relief valve VPP1-10, VPP1-06, VPP2-06
8	Return line filter

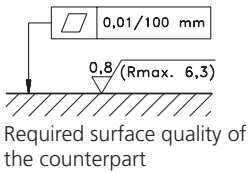
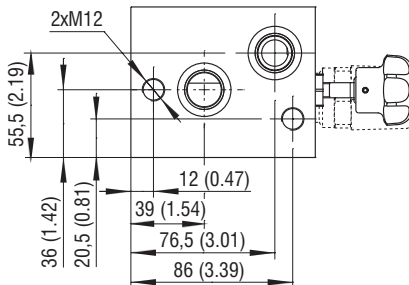
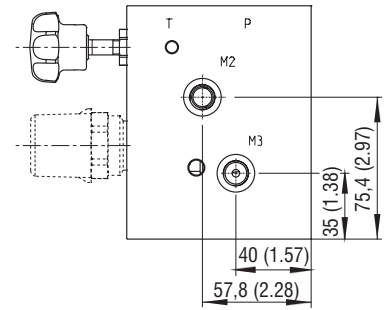
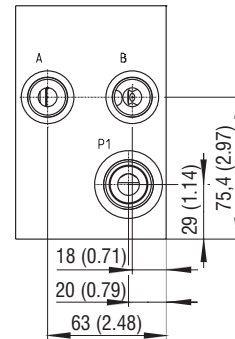
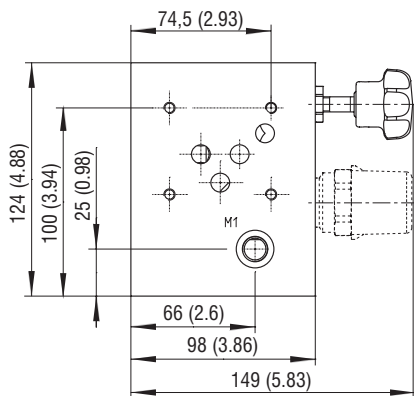
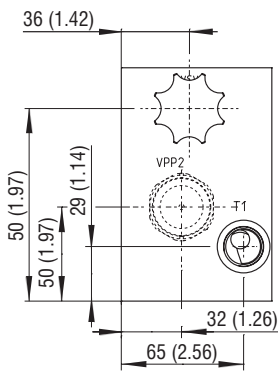


Dimensions in millimeters (inches)

Model ZB10A-QP2*



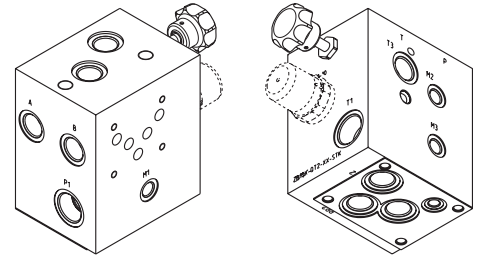
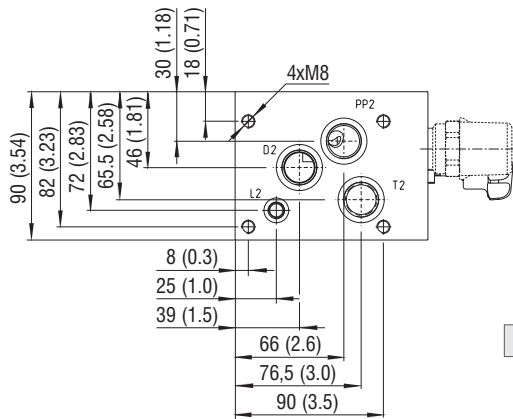
mounting interface of PD10-Z10 (cat. 0008) serial plates



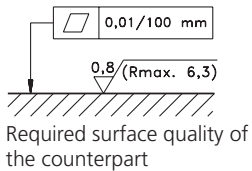
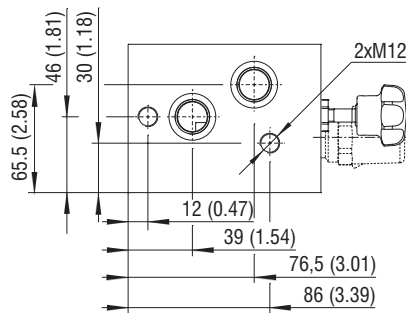
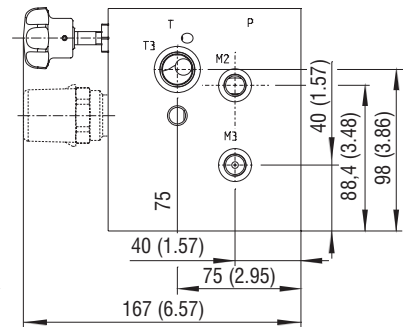
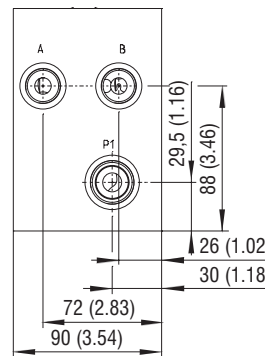
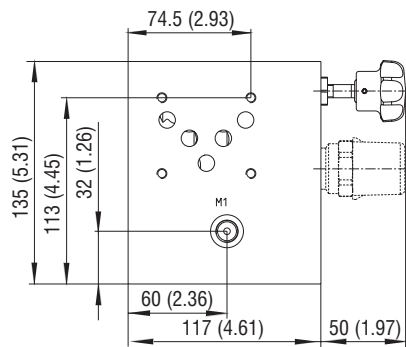
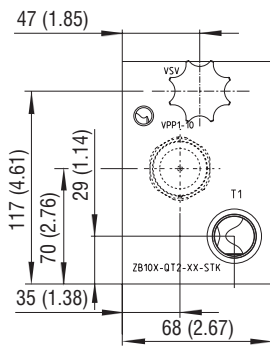
ZB10A(B)*	Size of ports Dimensions in millimeters (inches)					
Port	P1	P, T,	L2	M1, M2, M3	A, B, PP2, D2, T2, T3	T1
Thread	G 3/4	G 1/2	G 1/8	G 1/4	G 1/2	G 1/2
Depth of thread	16 (0.63)	14 (0.55)	8 (0.31)	12 (0.47)	14 (0.55)	14 (0.55)
Counterbore	∅33 (1.30)	∅28 (1.10)	∅15 (0.59)	∅20 (0.79)	∅28 (1.10)	∅28 (1.10)
Depth of counterbore	1 (0.03)	1 (0.03)	0,5 (0.02)	1 (0.03)	1 (0.03)	1 (0.03)
O-Ring [mm]		23,81x2,62				

Dimensions in millimeters (inches)

Model ZB10A-QT2*



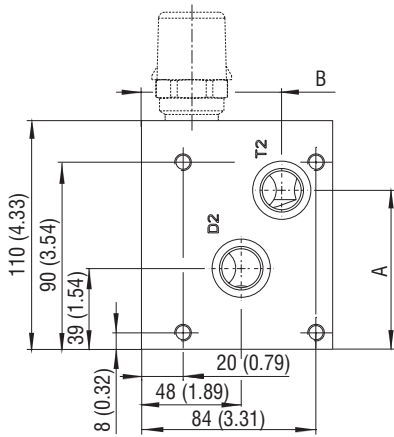
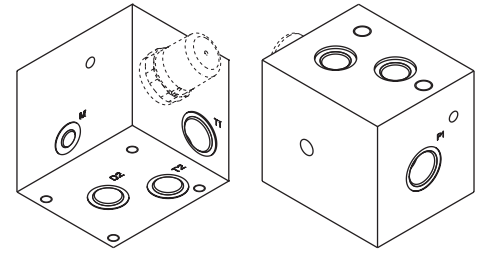
mounting interface of PD10-Z10 (cat. 0008) serial plates



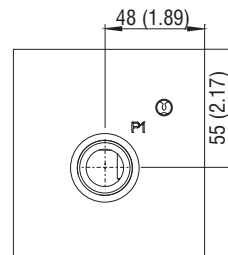
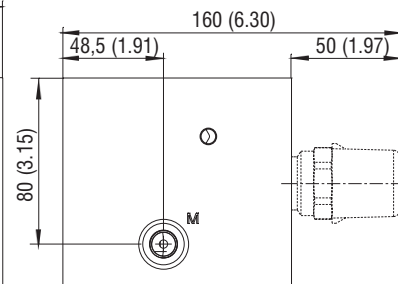
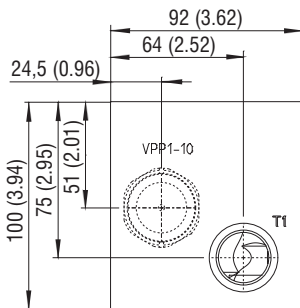
ZB10A(B)*	Size of ports Dimensions in millimeters (inches)					
	P1	P, T,	L2	M1, M2, M3	A, B, PP2, D2, T2, T3	T1
Thread	G 3/4	G 1/2	G 1/8	G 1/4	G 1/2	G 3/4
Depth of thread	16 (0.63)	14 (0.55)	8 (0.31)	12 (0.47)	14 (0.55)	16 (0.63)
Counterbore	∅33 (1.30)	∅28 (1.10)	∅15 (0.59)	∅20 (0.79)	∅28 (1.10)	∅33 (1.30)
Depth of counterbore	1 (0.03)	1 (0.03)	0,5 (0.02)	1 (0.03)	1 (0.03)	1 (0.03)
O-Ring [mm]		23,81x2,62				

Dimensions in millimeters (inches)

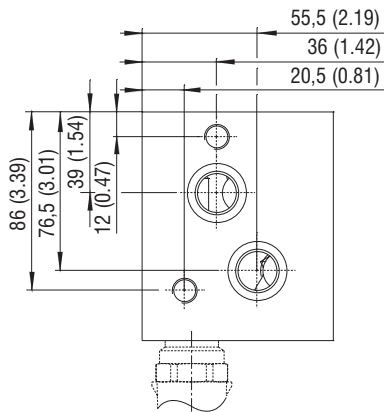
Model ZB10L*



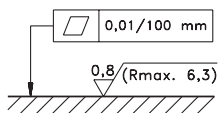
mounting interface of PD10-Z10 (cat. 0008) serial plates



	Dimension [mm (in)]	
	Model	
	L*1	L*3
A	-	76,5 (3.01)
B	-	60 (2.36)
Port	-	T2



ZB10L*	Size of ports			
	Dimensions in millimeters (inches)			
Port	T1	P, T,	P1, D2, T2	M
Thread	G 3/4	G 1/2	G 1/2	G 1/4
Depth of thread	16 (0.63)	14 (0.55)	14 (0.55)	12 (0.47)
Counterbore	∅33 (1.30)	∅28 (1.10)	∅28 (1.10)	∅20 (0.79)
Depth of counterbore	1 (0.03)	1 (0.03)	1 (0.03)	1 (0.03)
O-Ring [mm]		23,81x2,62		



Required surface quality of the counterpart