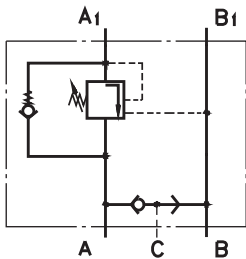


VALVES FOR HYDRAULIC MOTORS

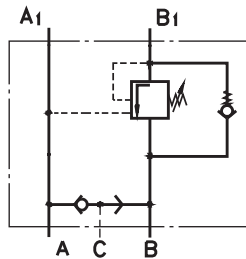
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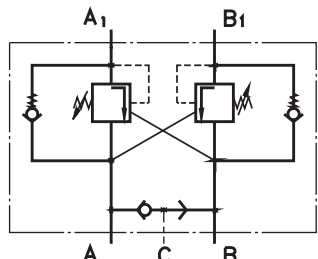
OVERCENTER VALVES WITH BRAKE CONTROL



Single Overcenter Valves
with Brake Control
type KPBR ... AE



Single Overcenter Valves
with Brake Control
type KPBR ... BE



Dual Overcenter Valves
with Brake Control
type KPBR ... D

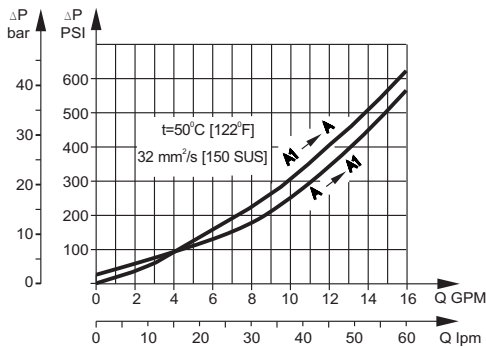
SPECIFICATION DATA

Parameters	Type											
	KPBR...E	KPBS...E	KPBR...D	KPBS...D	KPBW...E	KPBW...D	KPBHR...E	KPBHR...D	KPBT...E	KPBT...D	KPBV...E	KPBV...D
Flow Rate, lpm [GPM]	60 [15.85]								100 [26.4]		200 [52.8]	
Rated bar Pressure*, [PSI]	60÷280 [870÷4060]						70÷250 [1015÷3625]					
Pilot Ratio	4,25:1											
Weight, kg [lb]	3,020 [6.658]	2,900 [6.39]	3,060 [6.746]	2,920 [6.437]	3,050 [7.724]	3,140 [6.923]	2,300 [5.071]	2,400 [5.291]	5,400 [11.905]	5,800 [12.787]	9,200 [20.283]	9,750 [21.495]

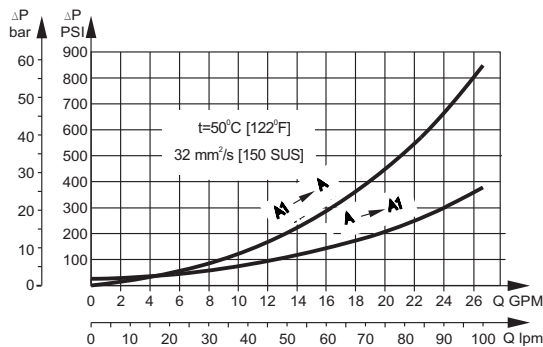
*Pressure Settings are at flow rate of 5 lpm [1.3 GPM] and viscosity 32 mm²/s [150 SUS] at 50 °C [122° F].

PRESSURE LOSSES

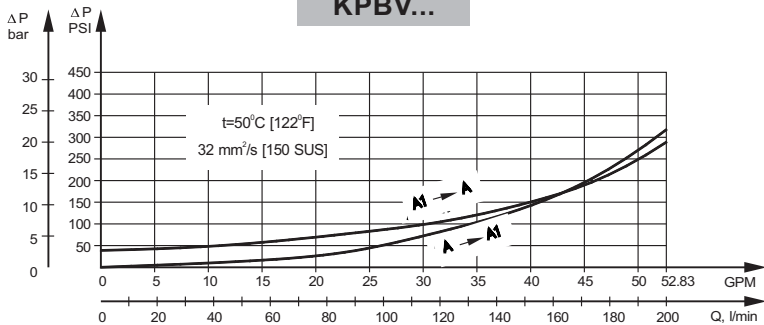
KPBR..., KPBS..., KPBW..., KPBHR...



KPBT...

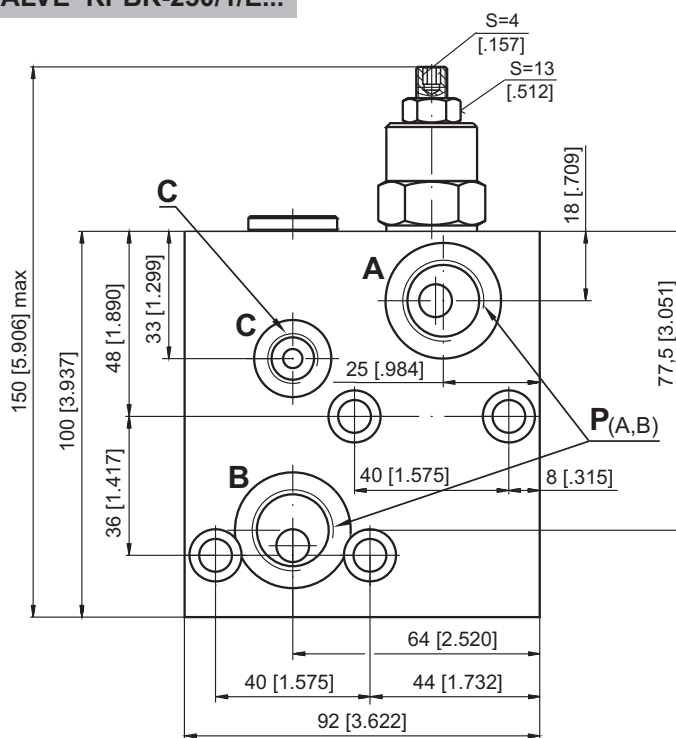
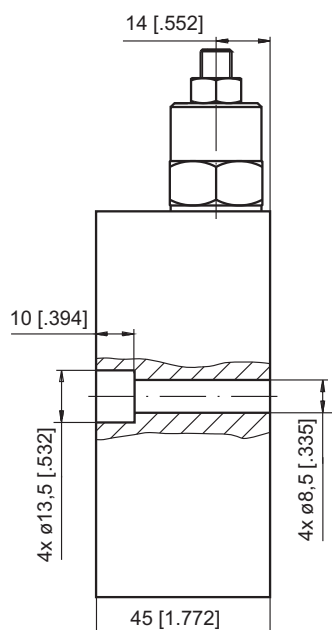


KPBV...

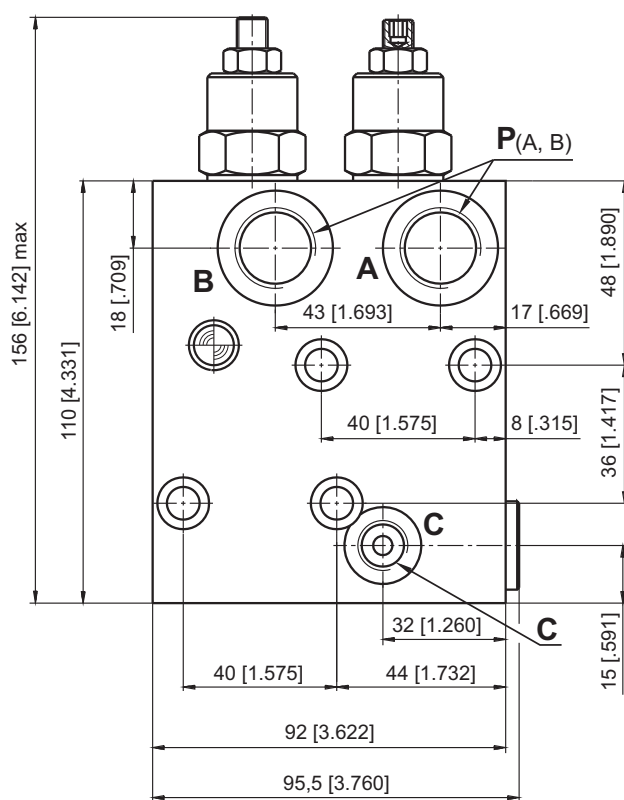
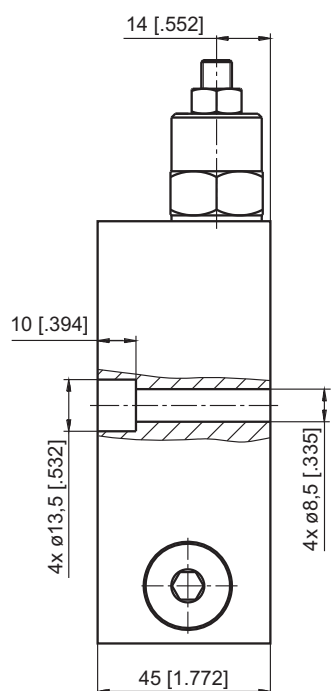


VALVES FOR MP, MR, MH HYDRAULIC MOTORS

SINGLE VALVE KPBR-250/1/E...



DUAL VALVE KPBR-250/1/D...



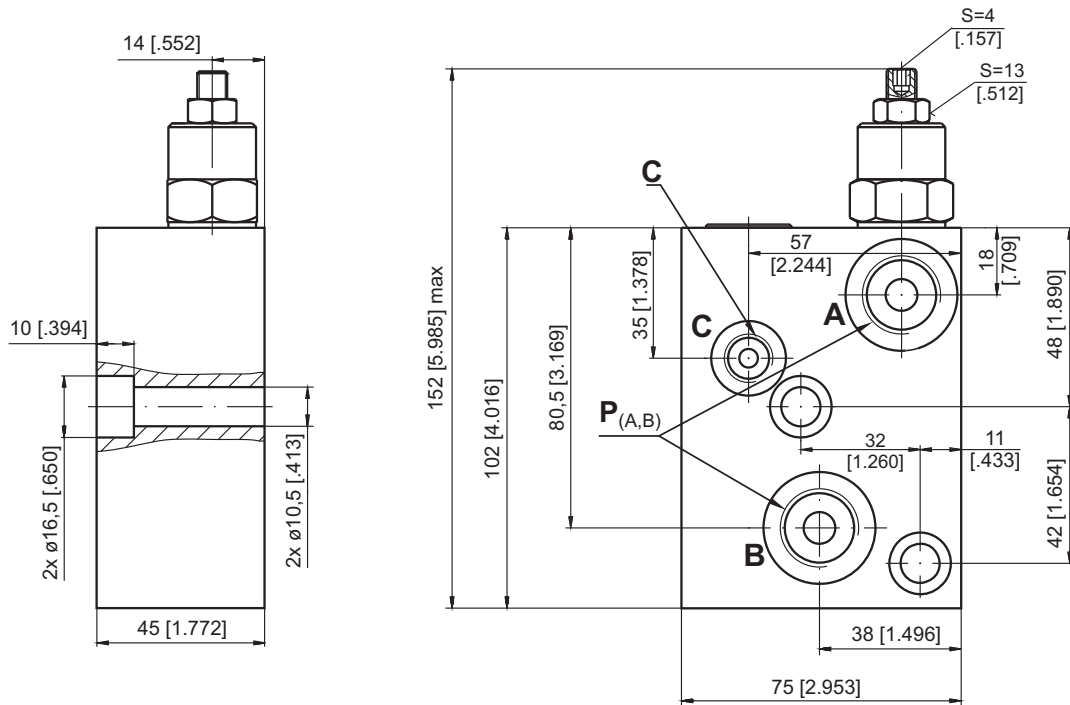
	Thread Ports - P _(A,B)	Thread Port - C
-	G1/2 16 [.63] depth	G1/4 12 [.47] depth
M	M22x1,5 16 [.63] depth	M14x1,5 12 [.47] depth
A	7/8 - 14 UNF O-ring 16 [.63] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth



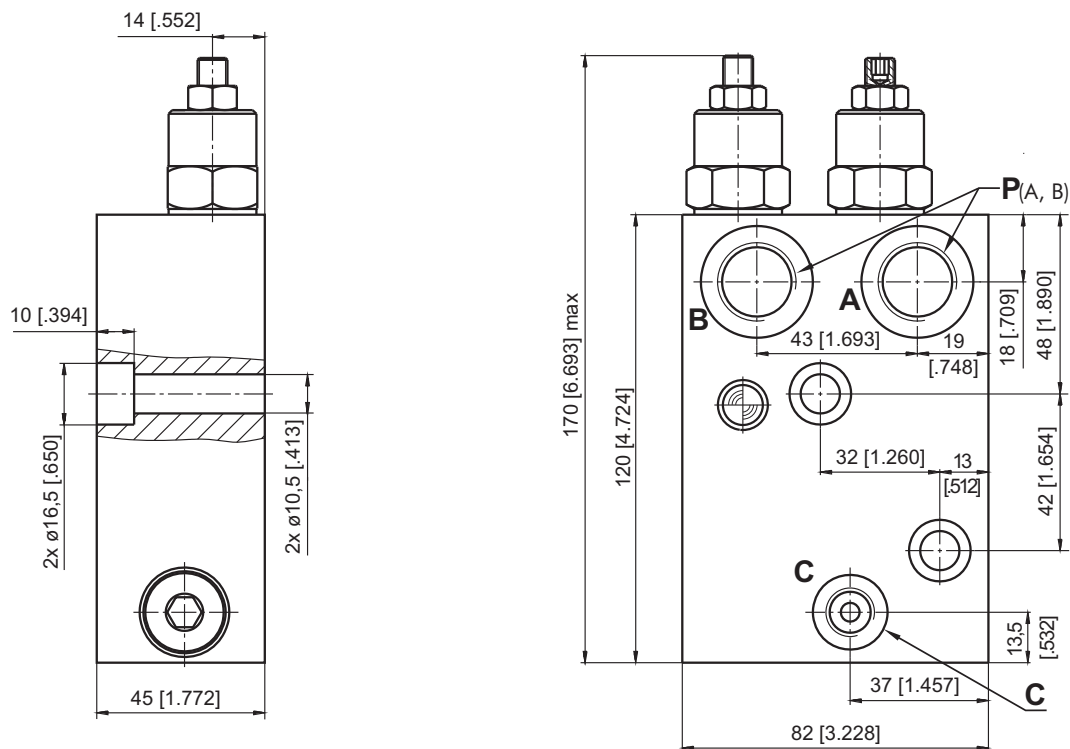
Note : KPBR Blocks are installed directly on MP, MR and MH Motors with four screws M8x45 - 8.8 DIN 912 or 5/16-18 UNC, 1.75 long ANSI B 18.3 . Tightening torque $2,0^{+0.5}$ daNm [177^{+44} lb-in].

VALVES FOR MS HYDRAULIC MOTORS

SINGLE VALVE KPBS-250/1/E...



DUAL VALVE KPBS-250/1/D...



	Thread Ports - P _(A,B)	Thread Port - C
-	G1/2 16 [.63] depth	G1/4 12 [.47] depth
M	M22x1,5 16 [.63] depth	M14x1,5 12 [.47] depth
A	7/8 - 14 UNF O-ring 16 [.63] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth



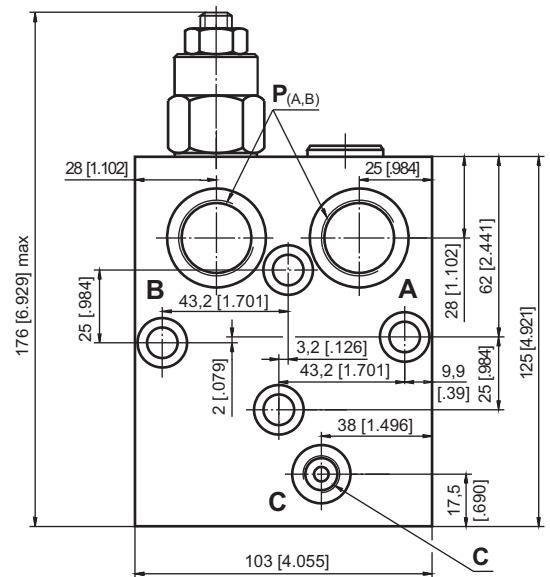
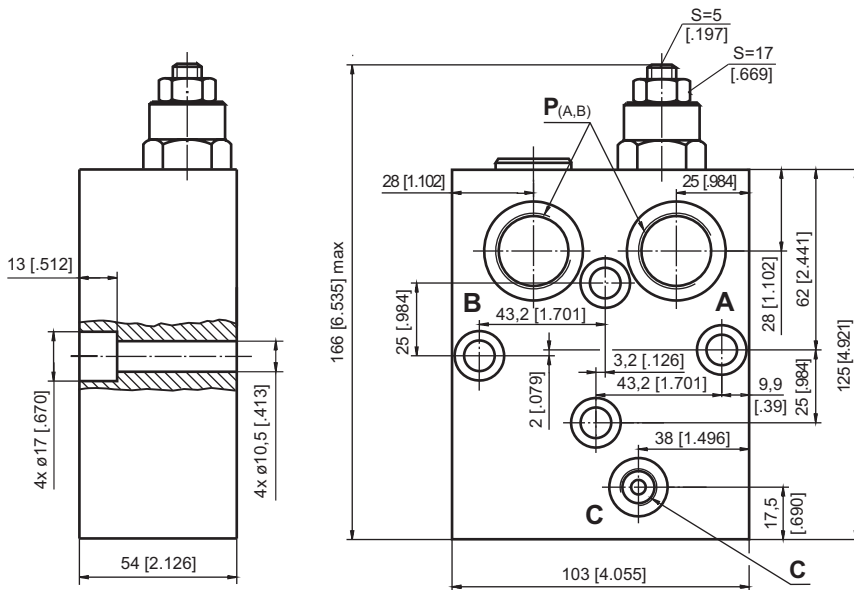
mm [in]

Note : KPBS Blocks are installed directly on MS Motors with two screws M10x45 - 8.8 DIN 912 or 3/8-16UNC, 1.75 long ANSI B 18.3 . Tightening torque 3,5 daNm [310 lb-in].

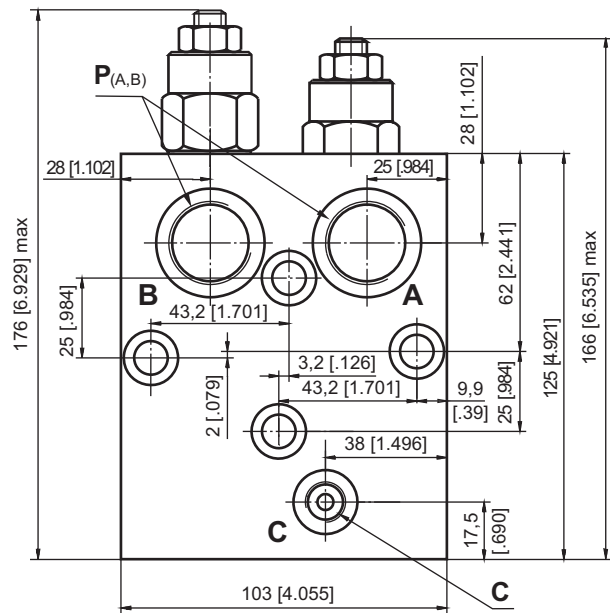
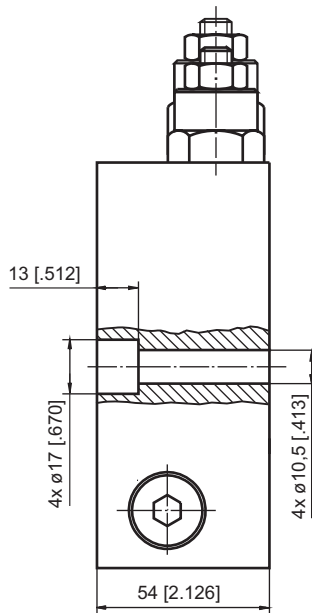
VALVES FOR MT HYDRAULIC MOTORS

SINGLE VALVE KPBT-250/1/AE...

SINGLE VALVE KPBT-250/1/BE...



DUAL VALVE KPBT-250/1/D...



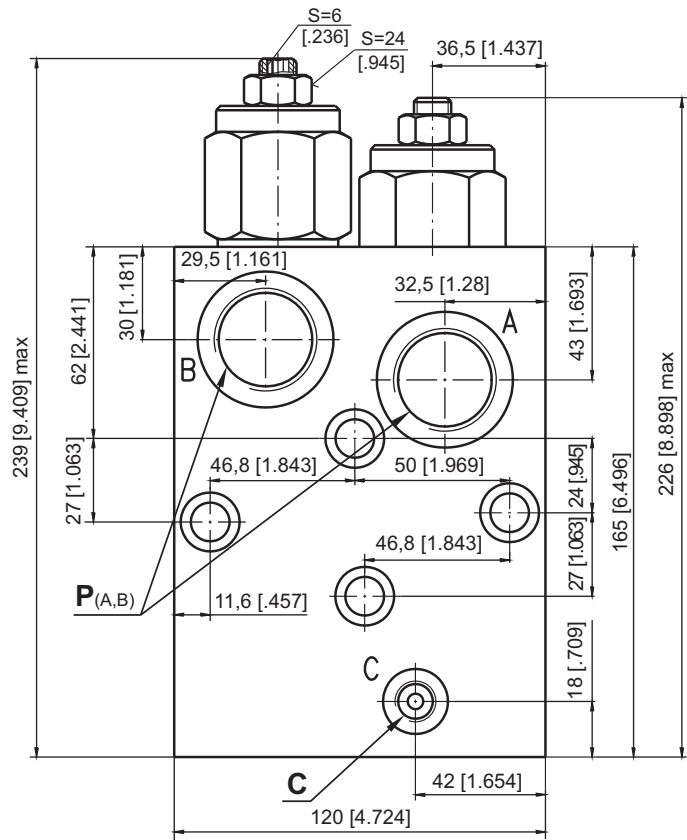
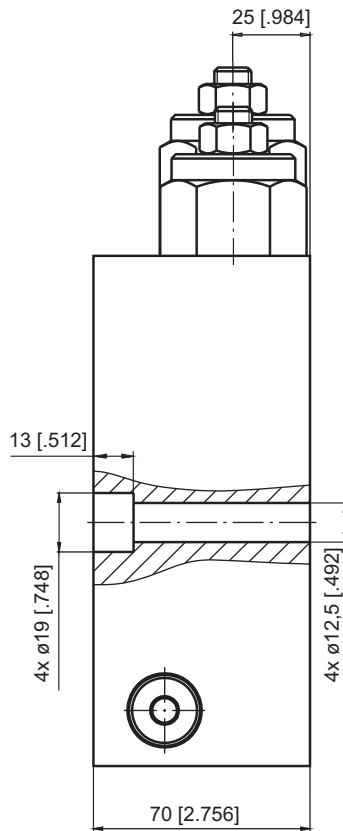
	Thread Ports - P _(A,B)	Thread Port - C
-	G3/4 17 [.67] depth	G1/4 14 [.55] depth
M	M27x2 17 [.67] depth	M14x1,5 14 [.55] depth
A	1 1/16-12 UN O-ring 17 [.67] depth	7/16 - 20 UNF O-ring 12,7 [.50] depth



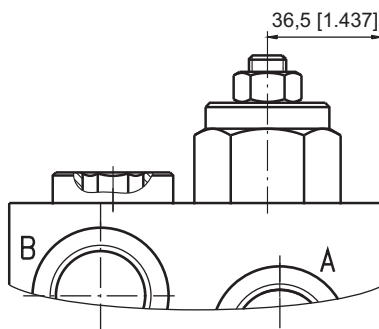
Note : KPBT Blocks are installed directly on MT Motors with four screws M10x50 - 8.8 DIN 912. Tightening torque 3,5 daNm [310 lb-in].

VALVES FOR MV HYDRAULIC MOTORS

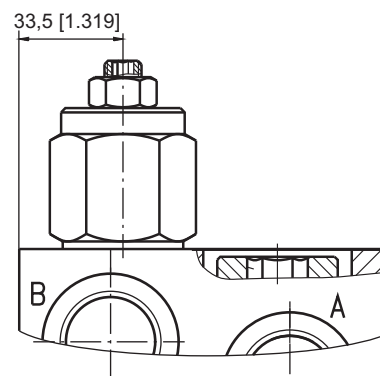
DUAL VALVE KPBV-250/1/D...



SINGLE VALVE KPBV-250/1/AE...



SINGLE VALVE KPBV-250/1/BE...



	Thread Ports - P _(A,B)	Thread Port - C
-	G 1 20 [0.79] depth	G1/4 14 [0.55] depth
M	M33x2 20 [0.79] depth	M14x1,5 14 [0.55] depth
A	1 5/16 - 12 UN O-ring 20 [0.79] depth	7/16 - 20 UNF O-ring 12,7 [0.50] depth

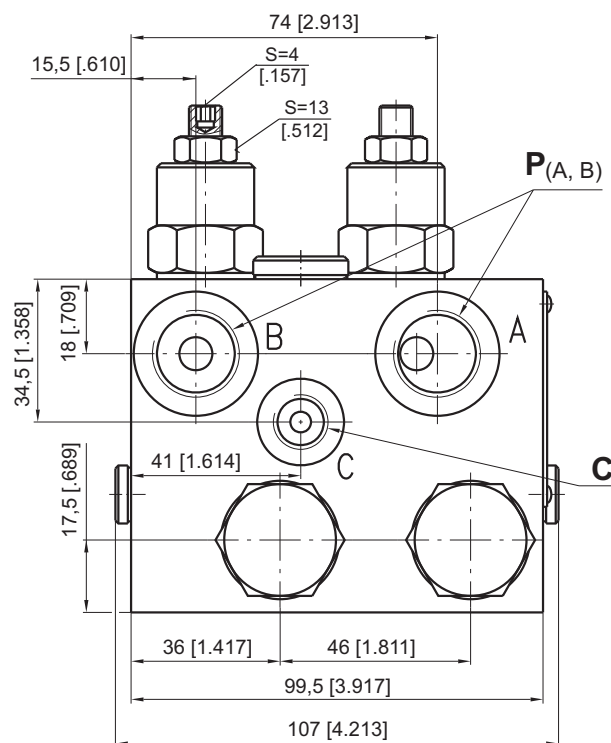
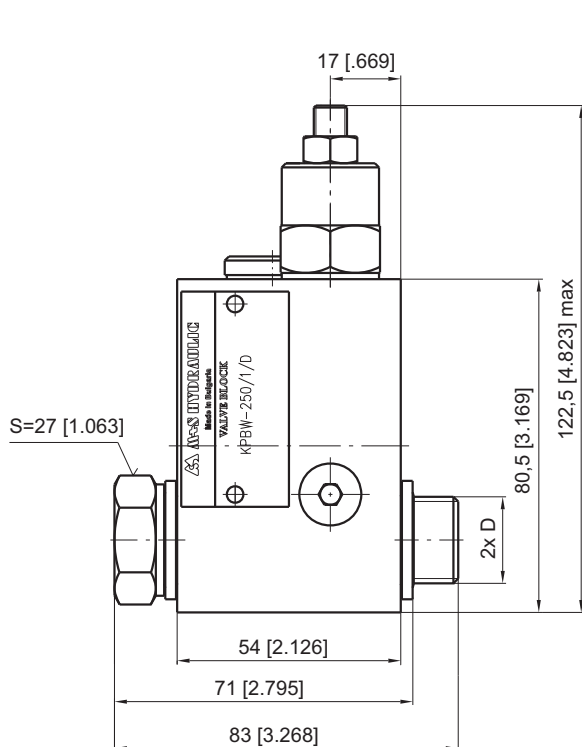


mm [in]

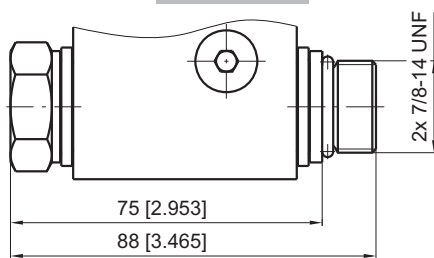
Note : KPBV Blocks are installed directly on MV Motors with four screws M12x70 - 8.8 DIN 912. Tightening torque 6,5 daNm [575 lb-in].

VALVES FOR RW and HW HYDRAULIC MOTORS

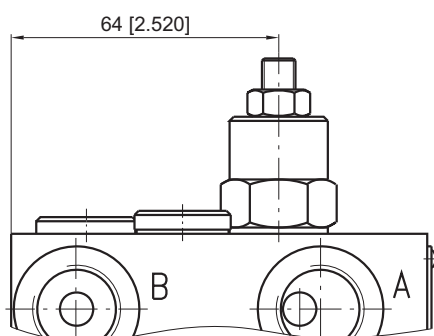
DUAL VALVE KPBW-250/1/D...



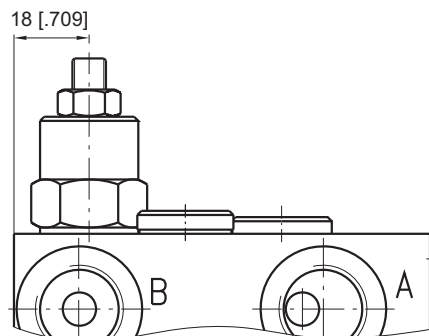
KPBW-...A



SINGLE VALVE KPBW-250/1/AE...



SINGLE VALVE KPBW-250/1/BE...



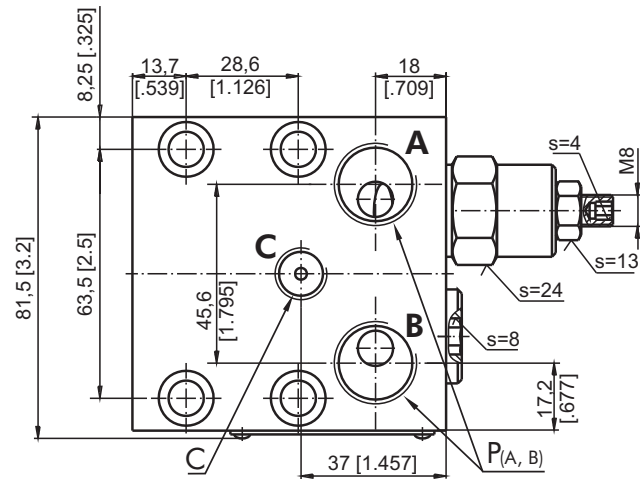
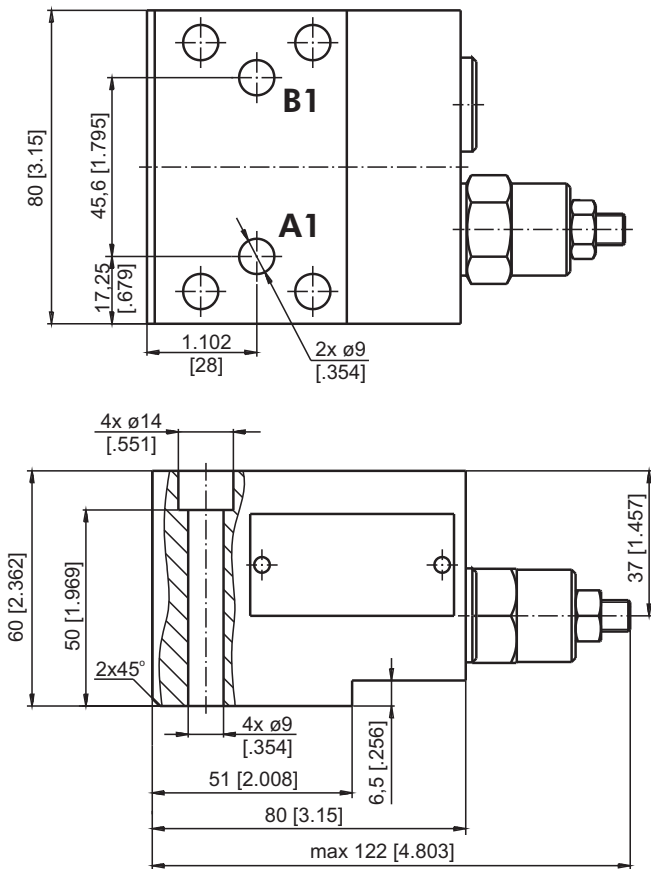
	Thread Ports - P _(A,B)	Thread Port - C	Thread Ports - D
-	G1/2 16 [0.63] depth	G1/4 12 [0.47] depth	G1/2 12 [0.47] length
M	M22x1,5 16 [0.63] depth	M14x1,5 12 [0.47] depth	M22x1,5 12 [0.47] length
A	7/8 - 14 UNF O-ring 16 [0.63] depth	7/16 - 20 UNF O-ring 12,7 [0.50] depth	7/8 - 14 UNF O-ring 13 [0.51] length



Note : KPBW Blocks assembly to RW or HW motors is done with two screws (thread D) included in the valve set. Tightening torque 8 daNm [710 lb-in].

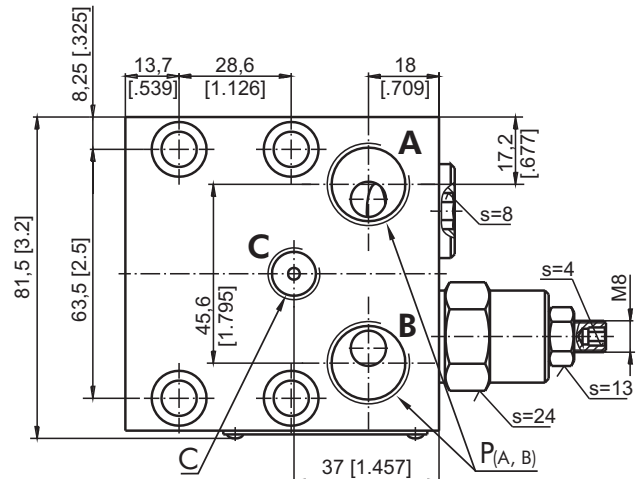
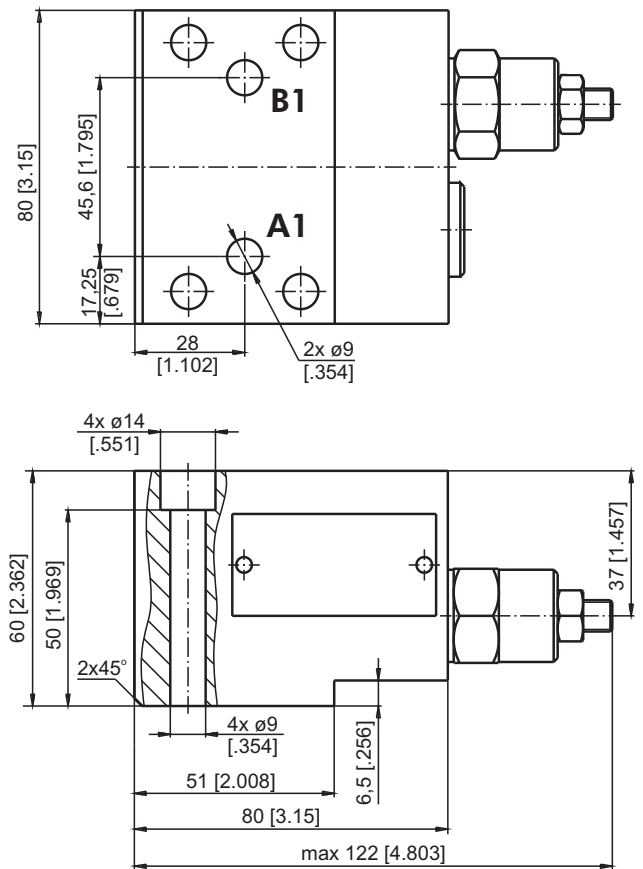
VALVES FOR HP, HR HYDRAULIC MOTORS

SINGLE VALVE KPBHR-250/1/AE...



	Thread Ports - P _(A,B)	Thread Ports - C
A	7/8 - 14 UNF O-ring 17 [.67] deep	7/16 - 20 UNF O-ring 12,7 [.50] deep
-	G1/2 17 [.67] deep	G1/4 14 [.55] deep
M	M22x1,5 17 [.67] deep	M14x1,5 14 [.55] deep

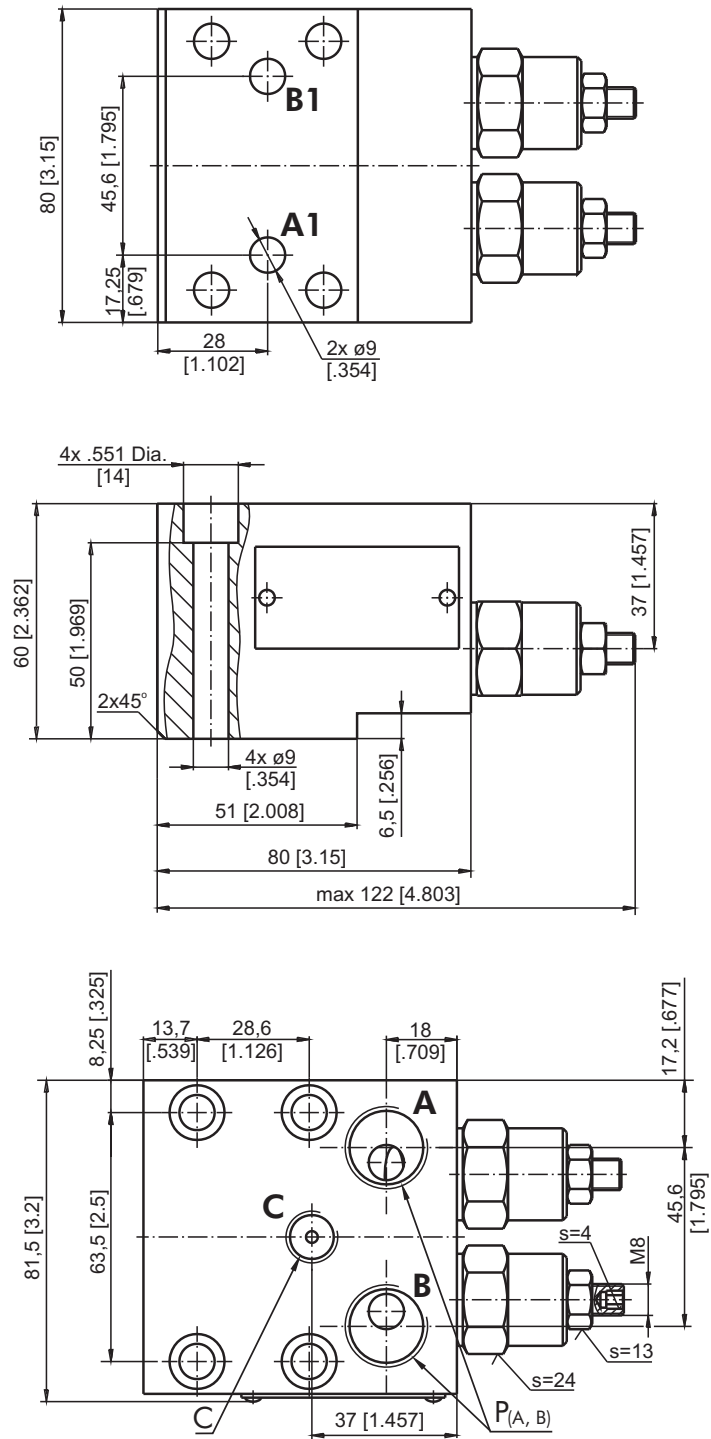
SINGLE VALVE KPBHR-250/1/BE...



Note : KPBHR Blocks are installed directly on HP and HR Motors with four bolts 5/16-18UNC, 2.5 long or M8x60 - 8.8 DIN 912. Tightening torque 2,0^{+0,5} daNm [177⁺⁴⁴ lb-in].

VALVES FOR HP, HR HYDRAULIC MOTORS

DUAL VALVE KPBHR-250/1/D...



	Thread Ports - P _(A,B)	Thread Ports - C
A	7/8 - 14 UNF O-ring 17 [.67] deep	7/16 - 20 UNF O-ring 12,7 [.50] deep
-	G1/2 17 [.67] deep	G1/4 14 [.55] deep
M	M22x1,5 17 [.67] deep	M14x1,5 14 [.55] deep



Note : KPBHR Blocks are installed directly on HP and HR Motors with four bolts 5/16-18UNC, 2.5 long or M8x60 - 8.8 DIN 912. Tightening torque 2,0^{+0,5} daNm [177⁺⁴⁴ lb-in].