Working conditions

Nominal flow rating		80 l/min	*21.1 US gpm*
Operating pressure (max.)	*parallel and tandem*	315 bar	*46000 psi*
Back pressure (max.)	*outlet port T, static*	35 bar	*508 psi*
Internal leakage (min.) A(B) to T	*Δp = 100 bar (1450 psi) fluid and valve at 40 °C (104 °F)*	8 cm^3/min	*0.48 in^3/min*
Hydraulic fluid		Mineral based oil	
Fluid temperature	*with NBR seals*	from -20 °C to 80 °C	*from -4 °F to 176 °F*
	with FPM (Viton) seals	from -20 °C to 100 °C	*from -4 °F to 212 °F*
Viscosity	*operating range*	from 15 to 75 mm^2/s	*from 15 to 75 cSt*
	min.	12 mm^2/s	*12 cSt*
	max.	400 mm^2/s	*400 cSt*
Permisable degree of fluid contamination		-/19/16 - ISO 4406	*NAS 1683 - class 10*
Ambient temperature	with mechanical devices	from -40 °C to 60 °C	*from -40 °F to 140 °F*
	with pneumatic and hydraulic devices devices	from -30 °C to 60 °C	*from -22 °F to 140 °F*
	with electric devices	from -20 °C to 50 °C	*from -4 °F to 140 °F*

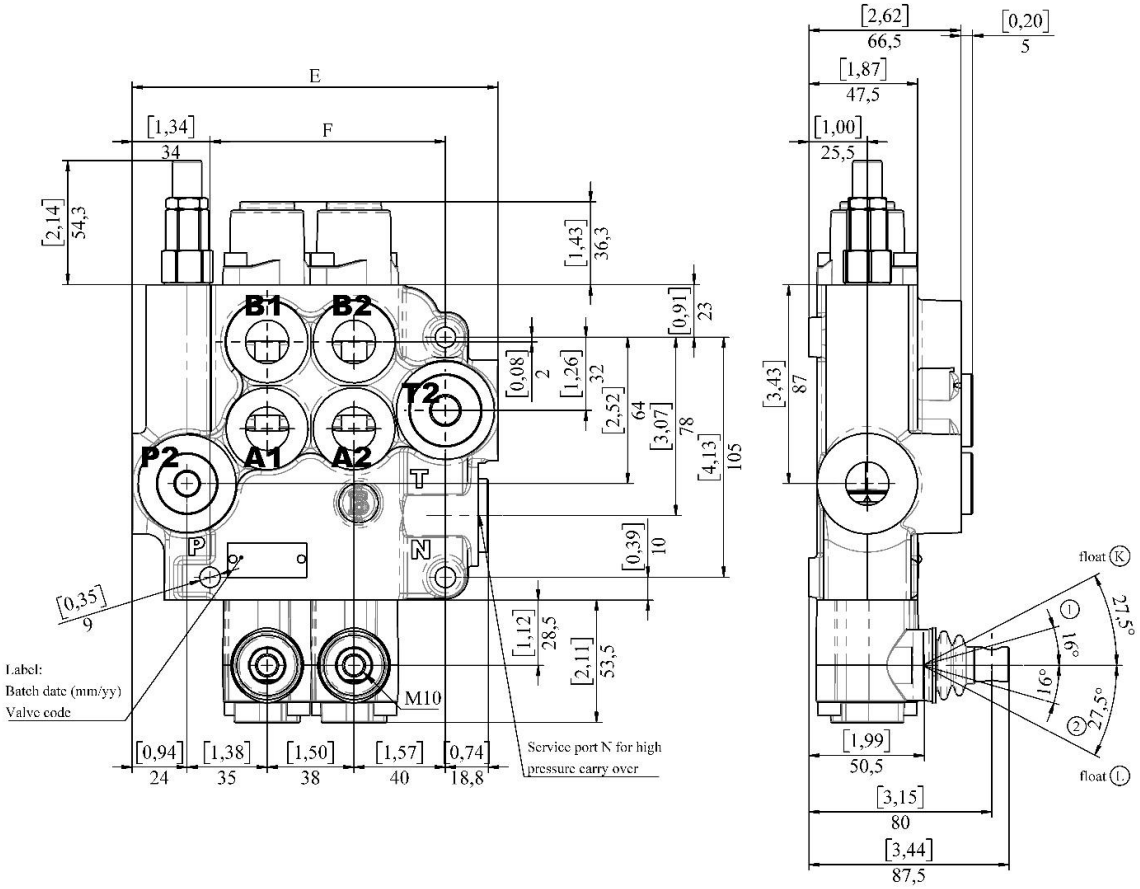
Standard threads

Refernce standard					
		BSP	UN-UNF	Metric	NPTF
Thread according to		ISO 228/1	ISO 263	ISO 262	Ansi B1.20.3
		BS 2779	ANSI B1.1 unified		
Cavity dimension according to	ISO	1179	11926	9974-1	
	SAE		J1926	J2244	J476a
	DIN 3852-2 (Shape X or Y)			3852-1 (Shape X or Y)	

Port threadings and codes				
Codes:	**G**	**S**	**NPTF**	**M**
Main ports	BSP	UN-UNF	NPTF	Metric
Inlet P	G1/2	7/8-14 (SAE10)	1/2NPTF	M22x1.5
Outlet port T	G3/4	1 1/16-12 (SAE12)	3/4NPTF	M26x1.5
Working ports A and B	G1/2	7/8-14 (SAE10)	1/2NPTF	M22x1.5
Control pilot ports				
Pneuamtic	1/8-27 NPTF	1/8-27 NPTF	1/8-27 NPTF	1/8-27 NPTF
Hydraulic	G1/4	9/16-18 (SAE6)	9/16-18 (SAE6)	G1/4

Dimensions

This drawing refers to a directional control valve with 2 working sections with common check valve



Note:Float K is presented on the drawing above just to show the convention for direction, Z80 can have float K (spool out) only in right hand version of the valve. For example code will be (Z80R/K16KZ1-G)

TYPE	E		F		Weight	
	mm	*in*	mm	*in*	kg	*lb*
Z80	111	*4.37*	65	*2.56*	3.90	*8.6*
Z80PT	122	4.80	65.00	2.56	4.55	10.03
02Z80	160	*6.30*	103	*4.06*	6.75	*14.9*
03Z80	198	*7.80*	141	*5.55*	9.05	*19.9*
04Z80	236	*9.29*	179	*7.0*	11.15	*24.6*
05Z80	274	*10.8*	217	*8.5*	13.45	*29.6*
06Z80	312	*12.3*	255	*10.0*	15.55	*34.3*