

Working conditions

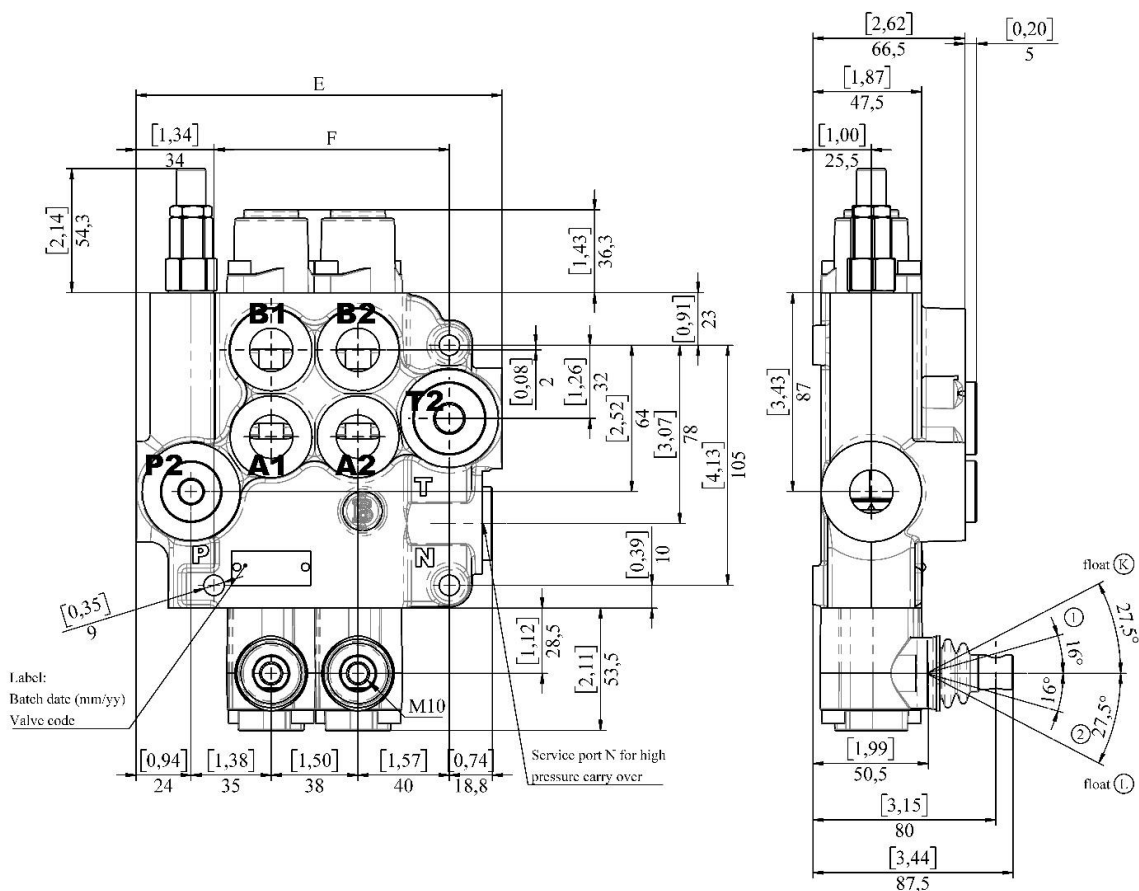
Nominal flow rating		80 l/min	21.1 US gpm
Operating pressure (max.)	<i>parallel and tandem</i>	315 bar	46000 psi
Back pressure (max.)	<i>outlet port T, static</i>	35 bar	508 psi
Internal leakage (min.) A(B) to T	$\Delta p = 100 \text{ bar (1450 psi) fluid and valve at } 40^\circ\text{C (104}^\circ\text{F)}$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

Standard threads

Reference standard				
	BSP	UN-UNF	Metric	NPTF
Thread	ISO 228/1	ISO 263	ISO 262	Ansi B1.20.3
according to	BS 2779	ANSI B1.1 unified		
Cavity	ISO 1179	11926	9974-1	
dimension	SAE	J1926	J2244	J476a
according to	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				
Pneumatic	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