

Working conditions

This catalogue shows technical specifications and diagrams measured with mineral oil of 46mm²/s (46 cSt) viscosity at 40°C (104°F) temperature.

Nominal flow rating		160 l/min	42 US gpm
	for series circuit	140 l/min	37 US gpm
Max pressure ⁽¹⁾		315 bar	4600 psi
	for series circuit	250 bar	3600 psi
Back pressure (max.)	T outlet port	25 bar	360 psi
Internal leakage (standard) A(B)⇒T	Δp = 100 bar (1450 psi)	5 cm ³ /min	0.30 in ³ /min
Fluid		Mineral based oil	
Fluid temperature	with NBR (BUNA-N) 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
Max. contamination level		-/19/16 - ISO 4406	NAS 1638 - class 10
Ambient temperature for working conditions	with mechanical devices	from -40°C to 60°C	from -40°F to 140°F
	with pneumatic and hydraulic devices	from -30°C to 80°C	from -22°F to 140°F
	with electric devices	from -20°C to 50°C	from -4°F to 122°F

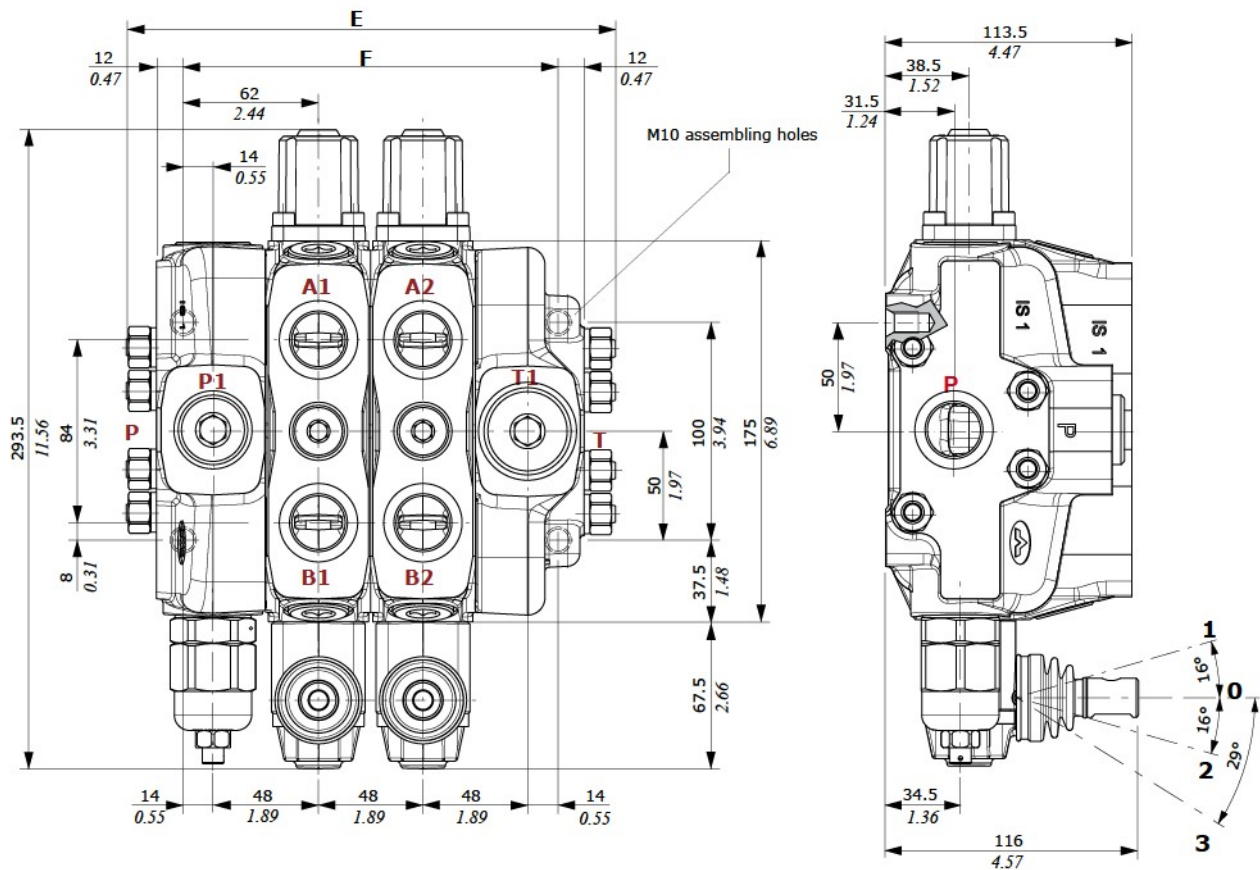
NOTE - ⁽¹⁾ Intermittent pressure at max. 250,000 cycles with specific internal testing.

Standard threads

REFERENCE STANDARD				
		BSP	UN-UNF	NPTF
THREAD ACCORDING TO		ISO 228/1	ISO 263	ANSI B1.20.3
		BS 2779	ANSI B1.1 unified	
CAVITY DIMENSION ACCORDING TO	ISO	1179-1	11926-1	
	SAE		J1926-1	J476a
	DIN	3852-2 shape X or Y		

PORTS THREADING		
MAIN PORTS	BSP	UN-UNF
P inlet	G 3/4	1 5/16-12 (SAE 16)
A and B ports	G 3/4	1 1/16-12 (SAE 12)
T outlet and C carry-over	G 1	1 5/16-12 (SAE 16)
PILOT PORTS		
Hydraulic	G 1/4	9/16-18 (SAE 6)
Pneumatic	NPTF 1/8-27	NPTF 1/8-27

Dimensional data



NOTE - Drawings and dimensions are referred to BSP thread configuration.

TYPE	E		F		Weight	
	mm	in	mm	in	Kg	lb
SDS180/1	176	6.93	124	4.88	13.8	30.42
SDS180/2	224	8.82	172	6.77	19.2	42.33
SDS180/3	272	10.71	220	8.66	24.6	54.23
SDS180/4	320	12.60	268	10.55	30	66.14
SDS180/5	368	14.49	316	12.44	35.4	78.04
SDS180/6	416	16.38	364	14.33	40.8	89.95

TYPE	E		F		Weight	
	mm	in	mm	in	Kg	lb
SDS180/7	464	18.27	412	16.22	46.2	101.85
SDS180/8	512	20.16	460	18.11	51.6	113.76
SDS180/9	560	22.05	508	20.00	57	125.66
SDS180/10	608	23.94	556	21.89	62.4	137.57
SDS180/11	656	25.83	604	23.78	67.8	149.47
SDS180/12	704	27.72	652	25.67	73.2	161.38

Performance data

