Flow divider, combiner

DRF

0M.51.03.90.04 - Z

RE 18309-57
Edition: 03.2016
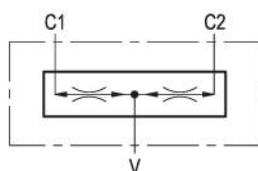Replaces: 07.2012

Description

This valve gives division of input flow from V to C1-C2, and re-combines flows in reverse direction from C1-C2 to V. The ratio between the flows through C1 and through C2 is maintained constant (typically 50% / 50%) over a wide range of pressure variations and of pressure imbalance in order to synchronize the motion of 2 actuators in both forward and reverse directions. In flow division mode, should either C1 or C2 be blocked, approximately 1÷2% of the available flow can be forced through the port still open.
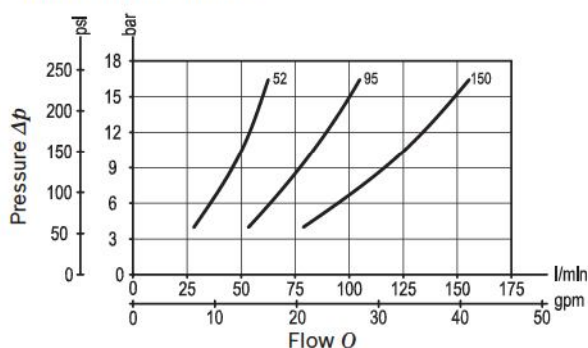
Technical data

Operating pressure	up to 210 bar (3000 psi)
Flow division ratio: 50% - 50%	
For any chosen inlet flow capacity (refer to table Z), the slippage, or the difference from theoretical value between the divided flows, depends from the inlet flow, and is lowest in the top portion of the selected range: generally it never exceeds ± 3%.	
Weight	2.2 kg (4.9 lbs)
Manifold material	Aluminium
Note: aluminium bodies are often strong enough for operating pressures exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. If in doubt, consult our Service Network.	
Fluid	Mineral oil (HL, HLP) according DIN 51524
Fluid temperature range	-30 °C to 100 (-22 to 212 °F)
Viscosity range	5 to 800 mm²/s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
Other technical data	see data sheet 18350-50

Note: for applications outside these parameters, please consult us.

Characteristic curve

Ordering code

0M.51.03.90	**04**	**Z**	

Flow divider, combiner

Port sizes	V	C1 - C2
	G 3/4	G 1/2

	INLET CAPACITY
52	28 to 55 l/min (7.4 to 14.53 gpm)
95	56 to 95 l/min (14.8 to 25.1 gpm)
150	90 to 150 l/min (27.78 to 39.63 gpm)

Preferred types

Type	Material number	Type	Material number
0M510390045200A	R930001930		
0M510390049500A	R930001889		
0M510390041500A	R930005816		

Dimensions