

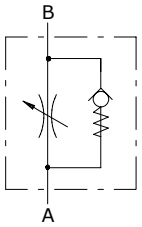
Type VRFU90
needle valves

- With check valve

Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C *(104°F)* temperature.

	VRFU9001	VRFU9002	VRFU9003	VRFU9004	VRFU9005
Nominal flow from A to B	30 l/min *(7.9 US gpm)*	40 l/min *(10.6 US gpm)*	50 l/min *(23.8 US gpm)*	80 l/min *(21.1 US gpm)*	110 l/min *(29.1 US gpm)*
Nominal flow from B to A	35 l/min *(9.2 US gpm)*	50 l/min *(23.8 US gpm)*	90 l/min *(23.8 US gpm)*	140 l/min *(37 US gpm)*	180 l/min *(47.6 US gpm)*
Max. pressure	350 bar *(5100 psi)*	350 bar *(5100 psi)*	350 bar *(5100 psi)*	320 bar *(4600 psi)*	300 bar *(4350 psi)*
Fluid	mineral based oil				
Viscosity	from 10 to 200 cSt				
Max. level of contamination	18/16/13 ISO4406				
Fluid temperature	*with NBR seals* from -30°C *(-22°F)* to 80°C *(176°F)*				
Environmental temperature for working conditions	from -40°C *(-40°F)* to 100°C *(212°F)*				
Weight *steel*	0.40 kg *(0.88 lb)*	0.41 kg *(0.9 lb)*	0.58 kg *(1.28 lb)*	1.39 kg *(3.06 lb)*	1.36 kg *(3 lb)*

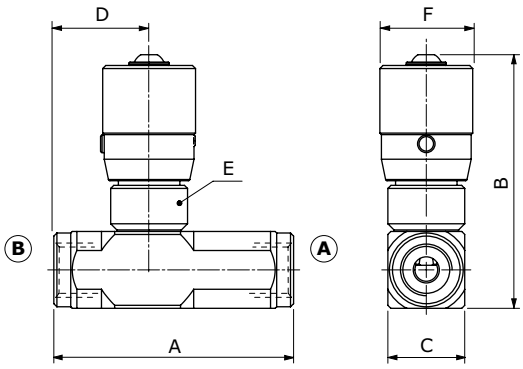
NOTE - For different conditions, please contact Walvoil Sales Dpt.



Dimensions

Dimensions are in mm-*in*

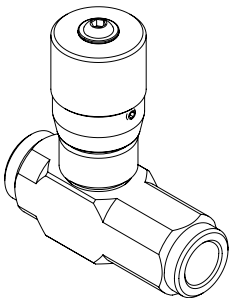
Valve type	All ports	A	B	C	D	E	F
VRFU9001	G1/4	75 - *2.95*	82 - *3.23*	25 - *0.98*	29 - *1.14*	M25X1.5	30 - *1.18*
VRFU9002	G3/8	78 - *3.07*	82 - *3.23*	25 - *0.98*	31 - *1.22*	M25X1.5	30 - *1.18*
VRFU9003	G1/2	93 - *3.66*	88 - *3.46*	30 - *1.18*	33.5 - *1.32*	M25X1.5	30 - *1.18*
VRFU9004	G3/4	110 - *4.33*	116 - *4.57*	40 - *1.57*	41.5 - *1.63*	M35X1.5	42 - *1.65*
VRFU9005	G1	135 - 5.31	116 - *4.57*	40 - *1.57*	44.5 - *1.75*	M35X1.5	42 - *1.65*



Ordering codes and description composition

Port size

VRFU90 01



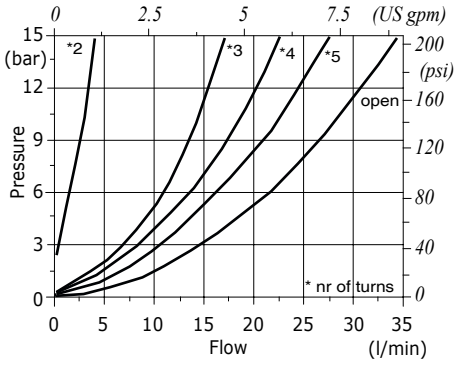
VRFU90 complete valves

TYPE	CODE	DESCRIPTION
VRFU9001	1605110100	Steel body, G1/4 ports, opening pressure 0.5 bar *(7.25 psi)*
VRFU9002	1605120100	Steel body, G3/8 ports, opening pressure 0.5 bar *(7.25 psi)*
VRFU9003	1605130100	Steel body, G1/2 ports, opening pressure 0.5 bar *(7.25 psi)*
VRFU9004	1605140100	Steel body, G3/4 ports, opening pressure 0.5 bar *(7.25 psi)*
VRFU9005	1605150100	Steel body, G1 ports, opening pressure 0.5 bar *(7.25 psi)*

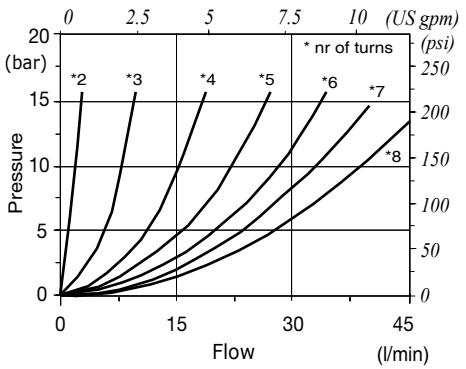
For different configurations or SAE thread please contact our Sales Dpt.

Rating diagram

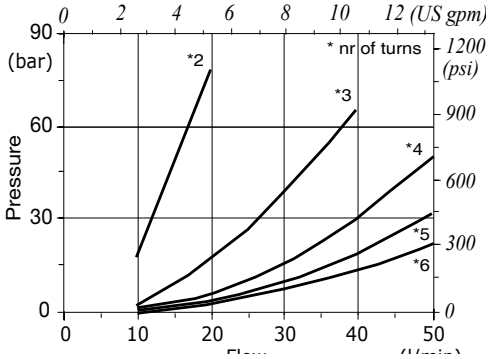
VRFU9001
pressure drop vs. flow (A→B)



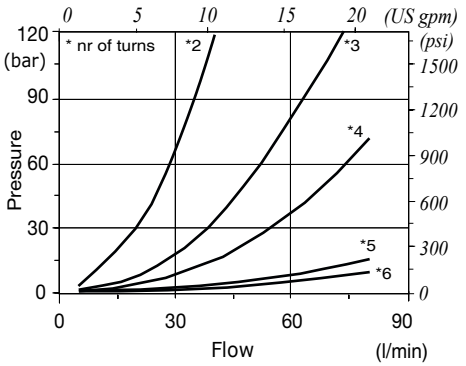
VRFU9002
pressure drop vs. flow (A→B)



VRFU9003
pressure drop vs. flow (A→B)

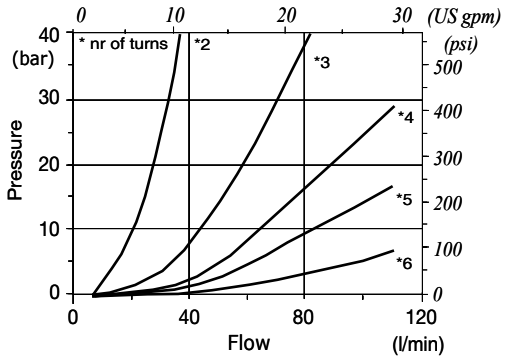


VRFU9004
pressure drop vs. flow (A→B)

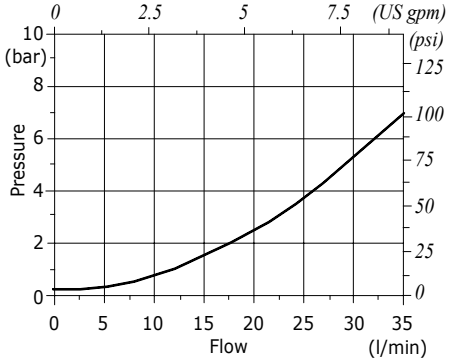


Rating diagram

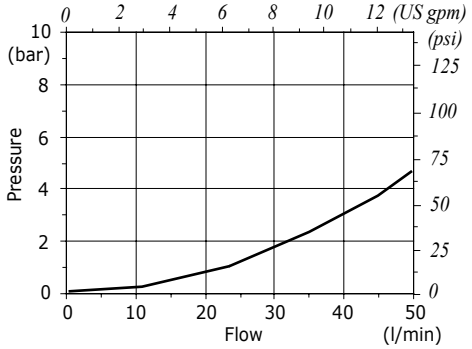
VRFU9005
pressure drop vs. flow (A→B)



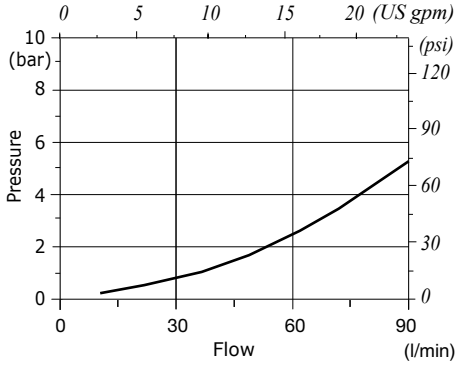
VRFU9001
pressure drop vs. flow (B→A)



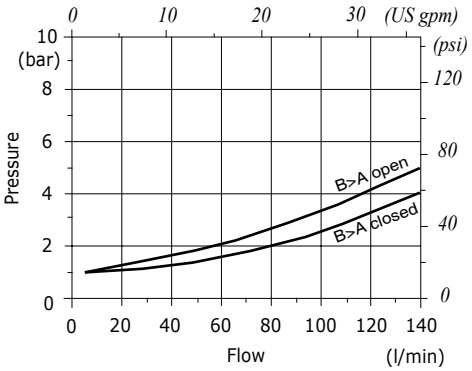
VRFU9002
pressure drop vs. flow (B→A)



VRFU9003
pressure drop vs. flow (B→A)



VRFU9004
pressure drop vs. flow (B→A)



VRFU9005
pressure drop vs. flow (B→A)

