



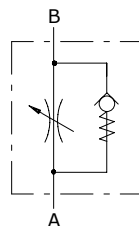
Type VSRU needle valves

- Ball type or poppet type
- With check valve

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

	VSRU..14	VSRU..38	VSRU..12	VSRU..34	VSRU..100	VSRU..114	VSRU..112	
Nominal flow from A to B	30 l/min (7.9 US gpm)	40 l/min (10.6 US gpm)	50 l/min (13.2 US gpm)	80 l/min (21.1 US gpm)	110 l/min (29 US gpm)	150 l/min (39.6 US gpm)	210 l/min (55.5 US gpm)	
Nominal flow C from B to A	30 l/min (7.9 US gpm)	50 l/min (13.2 US gpm)	80 l/min (21.1 US gpm)	110 l/min (29 US gpm)	160 l/min (42.27 US gpm)	210 l/min (55.5 US gpm)	280 l/min (74 US gpm)	
Nominal flow S from B to A	12 l/min (3.17 US gpm)	25 l/min (6.6 US gpm)	35 l/min (9.25 US gpm)	50 l/min (13.2 US gpm)	-	-	-	
Max. pressure	350 bar (5100 psi)	350 bar (5100 psi)	350 bar (5100 psi)	300 bar (4350 psi)	250 bar (3600 psi)	230 bar (3300 psi)	230 bar (3300 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 -20°C (-4°F) to 80°C (176°F)							
Environmental temp. for working conditions	from -40°C (-40°F) to 100°C (212°F)							
Weight	<i>steel</i>	0.30 kg (0.66 lb)	0.48 kg (1.06 lb)	0.59 kg (1.3 lb)	1.34 kg (2.95 lb)	2.15 kg (4.74 lb)	3.31 kg (7.3 lb)	4.76 kg (10.49 lb)

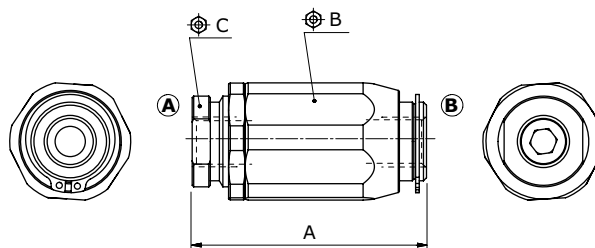
NOTE - For different conditions, please contact Walvoil Sales Dpt.



Dimensions

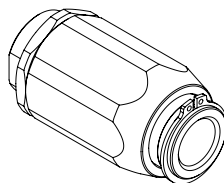
Dimensions are in mm-*in*

Valve type	All ports	A	⌀B	⌀c
VSRU..14	G 1/4	66-2.6	32	22
VSRU..38	G 3/8	77.5-3.05	38	26
VSRU..12	G 1/2	83-3.27	41	30
VSRU..34	G 3/4	104-4.09	55	38
VSRU..100	G 1"	118.5-4.66	65	46
VSRU..114	G 1" 1/4	135-5.31	80	55
VSRU..112	G 1" 1/2	149.5-5.88	90	62



Ordering codes and description composition

Port size — Opening pressure
VSRU / C 14 Pa0,5
 — C poppet type
 — S ball type



VSRU/C Complete valves

TYPE	CODE	DESCRIPTION
Poppet type, opening pressure 0.5 bar (7.25 psi)		
VSRU/C 14/Pa0,5	1603110100	Steel body, G1/4 ports
VSRU/C 38/Pa0,5	1603120100	Steel body, G3/8 ports
VSRU/C 12/Pa0,5	1603130100	Steel body, G1/2 ports
VSRU/C 34/Pa0,5	1603140100	Steel body, G3/4 ports
VSRU/C 100/Pa0,5	1603150100	Steel body, G1 ports
VSRU/C 114/Pa0,5	1603160100	Steel body, G 1" 1/4 ports
VSRU/C 112/Pa0,5	1603170100	Steel body, G 1" 1/2 ports

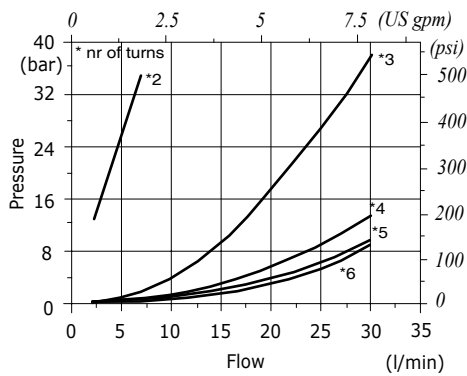
For different configurations or SAE thread please contact our Sales Dpt.

VSRU/S Complete valves

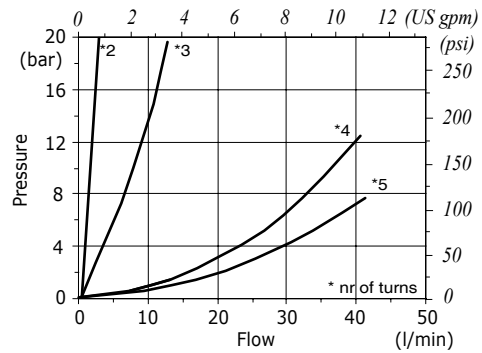
TYPE	CODE	DESCRIPTION
Ball type, opening pressure 4 bar (58 psi)		
VSRU/S 14/Pa4	1603010100	Steel body, G1/4 ports
VSRU/S 38/Pa4	1603020100	Steel body, G3/8 ports
VSRU/S 12/Pa4	1603030100	Steel body, G1/2 ports
VSRU/S 34/Pa4	1603040100	Steel body, G3/4 ports

Rating diagrams

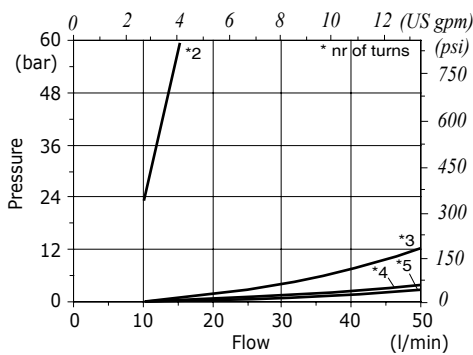
**VSRU/C 14 - VSRU/S 14
pressure drop vs. flow (A→B)**



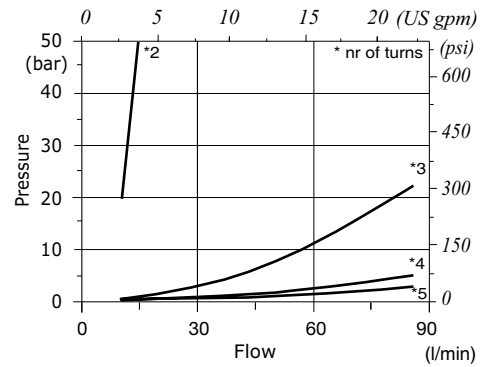
**VSRU/C 38 - VSRU/S 38
pressure drop vs. flow (A→B)**



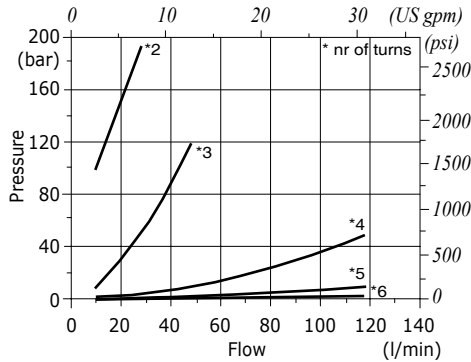
**VSRU/C 12 - VSRU/S 12
pressure drop vs. flow (A→B)**



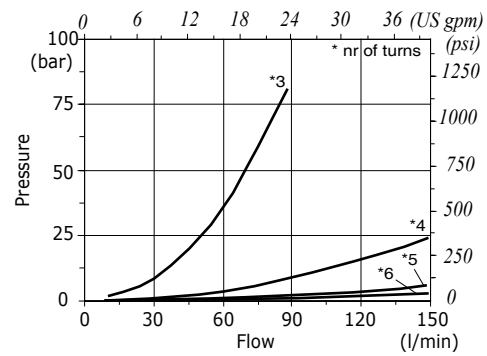
**VSRU/C 34 - VSRU/S 34
pressure drop vs. flow (A→B)**



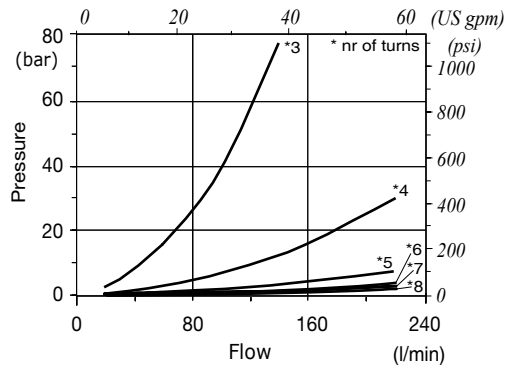
**VSRU/C 100 pressure drop vs. flow
(A→B)**



**VSRU/C 114 pressure drop vs. flow
(A→B)**

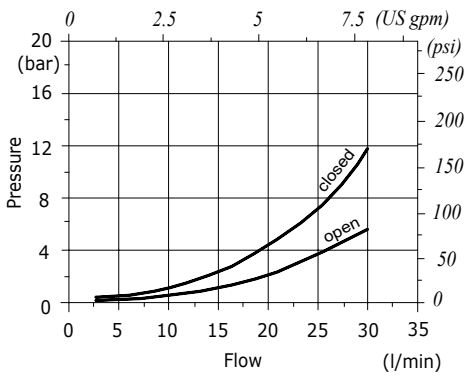


**VSRU/C 112 pressure drop vs. flow
(A→B)**

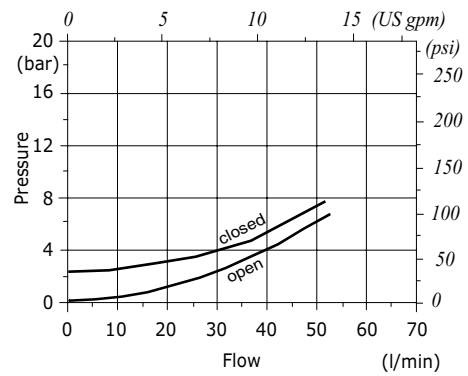


Rating diagrams

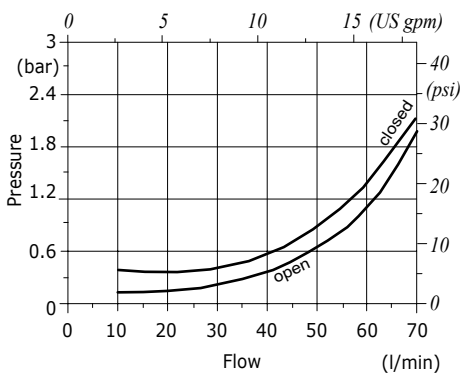
VSRU/C 14 pressure drop vs. flow (B→A)



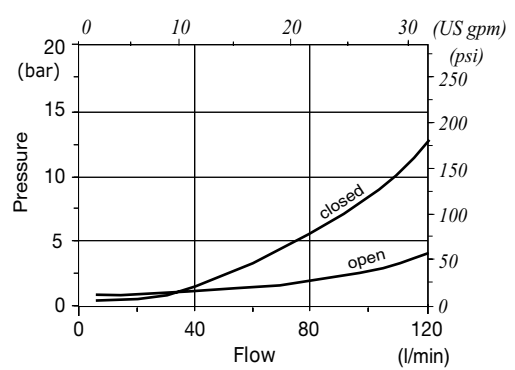
VSRU/C 38 pressure drop vs. flow (B→A)



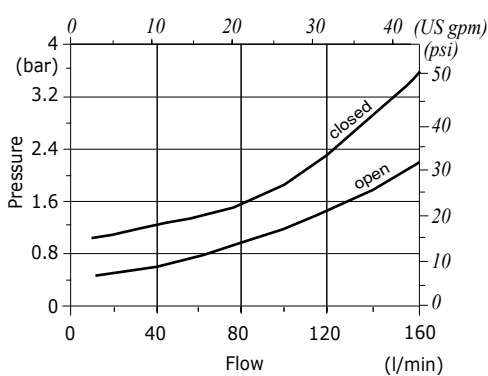
VSRU/C 12 pressure drop vs. flow (B→A)



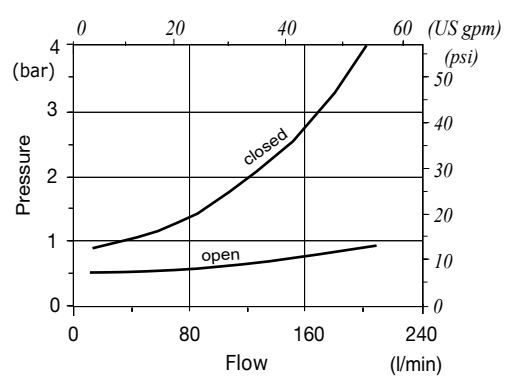
VSRU/C 34 pressure drop vs. flow (B→A)



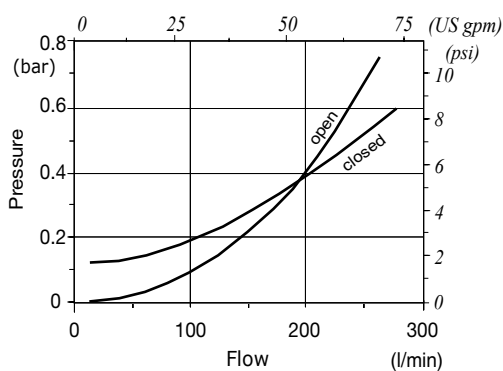
VSRU/C 100 pressure drop vs. flow (B→A)



VSRU/C 114 pressure drop vs. flow (B→A)

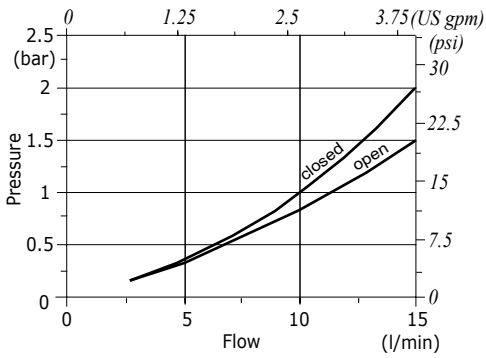


VSRU/C 112 pressure drop vs. flow (B→A)

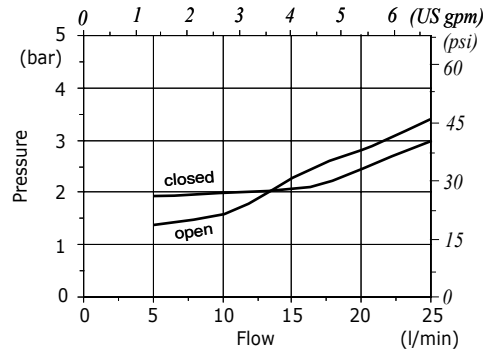


Rating diagrams

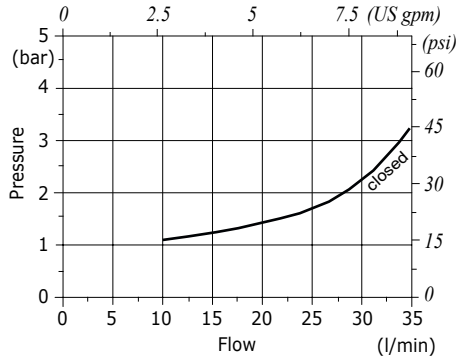
VSRU/S 14 pressure drop vs. flow (B→A)



VSRU/S 38 pressure drop vs. flow (B→A)



VSRU/S 12 pressure drop vs. flow (B→A)



VSRU/S 34 pressure drop vs. flow (B→A)

