

## Check & Quick Exhaust Valves Series VNR, VSC and VSO - NPTF/INCH

Check valves VNR  
Quick exhaust valves VSC, VSO  
Ports M5 [10-32 UNF], 1/8", 1/4",  
3/8", 1/2", NPTF  
cartridge  $\varnothing$  4 mm [5/32" O.D.]



Construction	Poppet type
Mounting	In-line
Materials	Nickel-plated brass body, Brass body, Buna-N seals, Polyurethane seals, Stainless steel spring
Port sizes	M5 [10-32 UNF], 1/8", 1/4", 3/8", 1/2" NPTF; 5/32" O.D. cartridge
Installation	In-line
Operating temperature	32°F - 175°F, [dry air necessary down to -4° F]
Fluid	Filtered air
Lubricant	Oil compatible with Buna-N, [3° - 10° E]

### PNEUMATIC DATA

Operating pressure	0.3 - 10 bar, [5 - 145 psi]
Nominal pressure	6 bar [87 psi]
Nominal flow	*Qn Series VNR: 1/8" = 600 NL/min. [21.18 SCFM] 1/4" = 1400 NL/min. [49.44 SCFM] Series VSC: P → A, 1/8" = 600 NL/min. [21.19 SCFM] 1/4" = 1100 NL/min. [38.84 SCFM] 3/8" = 3300 NL/min. [116.53 SCFM] 1/2" = 3300 NL/min. [116.53 SCFM] A → R, 1/8" = 950 NL/min. [33.55 SCFM] 1/4" = 1900 NL/min. [67.09 SCFM] 3/8" = 5100 NL/min. [180.08 SCFM] 1/2" = 5100 NL/min. [180.08 SCFM] Series VSO: P → A, 5/32" O.D. = 30 NL/min. [1.06 SCFM] A → R, 5/32" O.D. = 80 NL/min. [2.82 SCFM]
Lubricant	

\*Qn flowrate [SCFM] determined with a supply pressure of 6 bar, [87 psi], and with a pressure drop of 1 bar, [14.5 psi].

\*\* Soft-seal repair kits are available for Series VSC Quick-exhaust valves.

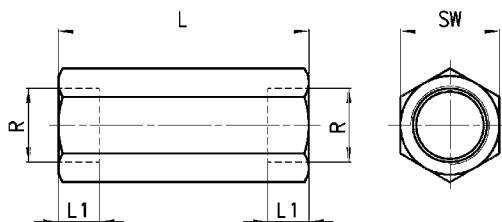
\*\*\*Dimensions are in millimeters.

Check Valves

The check valves in the VNR Series are available with M5 (10-32 UNF), 1/8" and 1/4" ports. They must be used when it is required to intercept a flow in one direction only. The design of these valves is of the poppet type and this feature allows operation at low pressures both when there is a free flow and during retention.

Materials used:

- OT58 (brass) body, Nickel Plated (1/4")
- Buna-N seals
- stainless steel spring



**VNR-205-M5**

Qn\*\* = 150 NL/min Minimum operating pressure = 1 bar (14.5 psi)

**VNR-210-02**

Qn\* = 600 NL/min Minimum operating pressure = 0.3 bar (4.3 psi)

**VNR-843-07TF**

Qn\* = 1400 NL/min Minimum operating pressure = 0.2 bar (2.9 psi)

\* Qn = determined with 6 bar and Dp = 1 bar

\*\* Qn = determined with 6 bar and Dp = 2 bar

DIMENSIONS

Mod.	R	L	L1	SW
<b>VNR-205-M5</b>	10-32 UNF	25	6	8
<b>VNR-210-02</b>	1/8"	34	7	13
<b>VNR-843-07TF</b>	1/4"	48	9	17

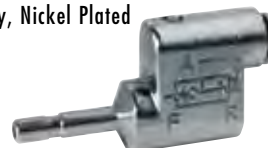


Quick exhaust valves Series VSO

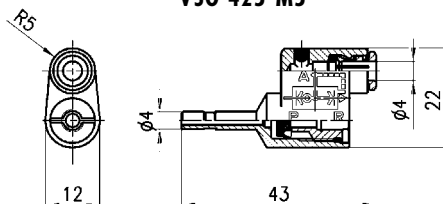
Quick exhaust valves are commonly used to increase the speed of cylinders or for rapid depressurisation of tanks containing compressed air. The models **VSO 425-M5** and **VSO 426-04** are specially designed for mounting on solenoid valves and valves incorporating a 5/32" O.D. port. We recommend that a silencer be mounted on the outlet (2931-M5).

Materials used:

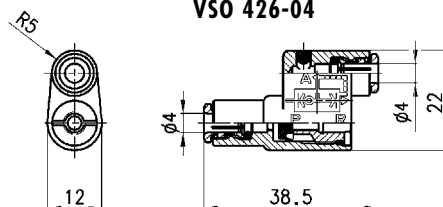
- OT58 (brass) body, Nickel Plated
- Buna-N seals



**VSO 425-M5**



**VSO 426-04**



Nominal flowrate

from P → A Qn\* 50 NL/min. [1.76 SCFM]

from A → R Qn\* 100 NL/min. [3.53 SCFM]

Qn\* = determined with 6 bar [87 psi] and DP = 1 bar (14.5 psi)

Minimum operating pressure = 1 bar (14.5 psi)

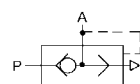
Cv Rating

from P → A: Cv = 0.04

from A → R: Cv = 0.09

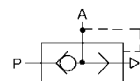
Mod.

**VSO 425-M5**



Mod.

**VSO 426-04**



## Quick exhaust valves Series VSC

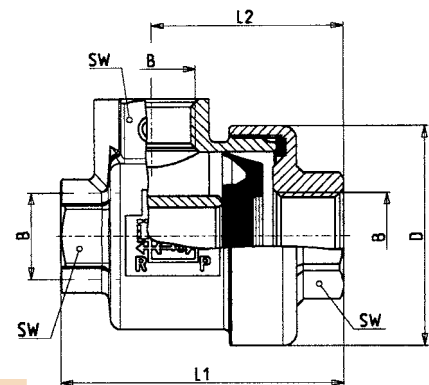
Quick exhaust valves are commonly used to increase the speed of cylinders or for rapid depressurisation of tanks containing compressed air. We recommend that a silencer be mounted on the outlet.

Materials used:

- OT58 (brass) body, Nickel Plated
- Desmopan seal (polyurethane)

<b>VSC 588-02</b>	Qn = P → A 650 NL/min Minimum operating pressure = 0,5 bar	Qn = A → R 1000 NL/min
<b>VSC 544-04</b>	Qn = P → A 1100 NL/min Minimum operating pressure = 0,3 bar	Qn = A → R 1900 NL/min
<b>VSC 538-06</b>	Qn = P → A 4500 NL/min Minimum operating pressure = 0,2 bar	Qn = A → R 6300 NL/min
<b>VSC 522-08</b>	Qn = P → A 4500 NL/min Minimum operating pressure = 0,2 bar	Qn = A → R 6300 NL/min

\* Qn = determined with 6 bar and Dp = 1 bar



DIMENSIONS (in inches)						Flow (Qn)			
Mod.	B NPTF	D	L1	L2	SW	P→A		A→R	
						SCFM	Cv	SCFM	Cv
<b>VSC 588-02</b>	1/8"	1.102	1.437	.984	.551	22.9	0.68	35.3	1.05
<b>VSC 544-04</b>	1/4"	1.299	1.653	1.122	.669	38.8	1.16	67.1	2.00
<b>VSC 538-06</b>	3/8"	1.692	2.263	1.555	.944	158.9	4.73	222.5	6.62
<b>VSC 522-08</b>	1/2"	1.692	2.302	1.555	.944	158.9	4.73	222.5	6.62