

# SUMMARY AUXILIARY VALVES



● **QUICK EXHAUST VALVES SERIES VSR**

PAGE 5-70



● **STOP VALVES SERIES STP**

PAGE 5-71



● **SLIDE VALVES SERIES VCS**

PAGE 5-74



● **CIRCUIT SELECTOR VALVES SERIES VOR**

PAGE 5-75



● **CHECK VALVE SERIES VNR**

PAGE 5-76



● **PNEUMATIC LOGIC**  
● **TIMER**

PAGE 5-77

PAGE 5-79

# QUICK EXHAUST VALVES SERIES VSR

New, more compact and lighter version.  
Used to evacuate air in the cylinder quickly, which increases cylinder speed.

- Temperature 0-80°C (32°-176°F)
- Max. pressure 12 bar (1200 KPa)
- Min. pressure 0.5 bar (50 KPa)

Nominal flow rate (P → A)  $\Delta P = 1$  bar [Nl/min]:

Pm [bar]	1/8	1/4	1/2
2.5	550	800	2400
4	700	1200	2800
6.3	900	1400	3600

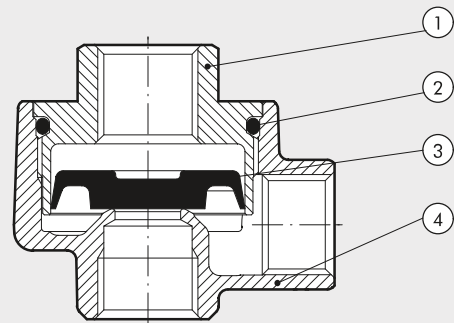
Empty flow rate (A → R) [Nl/min]:

Pm [bar]	1/8	1/4	1/2
2.5	800	1500	4400
4	1200	2450	6300
6.3	1800	3500	8000

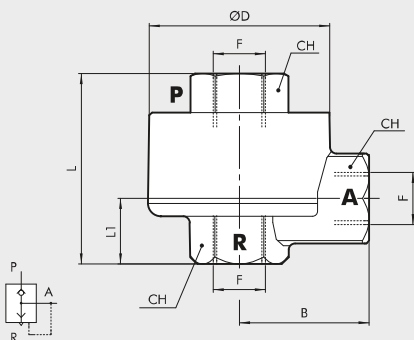


## COMPONENTS

- ① Cap: nickel-plated brass for 1/8-1/4  
anodised aluminium for 1/2
- ② O-ring: NBR
- ③ Lip-seal: Polyurethane
- ④ Body: nickel-plated brass

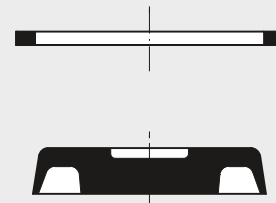


## OVERALL DIMENSIONS AND ORDERING CODES



Code	Ref.	F	B	D	CH	L	L1	Weight [g]
9101201	VSR 1/8	1/8	18.5	29.5	14	32.5	13.4	80
9201201	VSR 1/4	1/4	23.3	34	17	40.5	16.9	115
9401201	VSR 1/2	1/2	35	47	27	45.7	16.2	230

## SPARE GASKETS



Code	Ref.
9151501	Spare gaskets VSR 1/8
9251501	Spare gaskets VSR 1/4
9451501	Spare gaskets VSR 1/2

# STOP VALVES SERIES STP



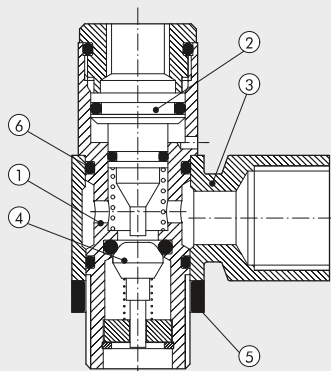
Stop valves mounted on the cylinder inlets allow a flow of air only in the presence of an pneumatic pilot. Unidirectional and bidirectional versions are available. This item is mainly used as a safety valve. When pressure drops in the pneumatic pilot, all cylinder movement is halted.



TECHNICAL DATA		UNIDIRECTIONAL				BIDIRECTIONAL			
		1/8"	1/4"	3/8"	1/2"	1/8"	1/4"	3/8"	1/2"
Operating pressure	bar					0.5 - 10			
	MPa					0.05 - 1			
Operating temperature	°C					-10 to 60			
	°F					14 to 148			
Fluid		Lubricated or unlubricated filtered air							
Flow rate (6 bar)	Nl/min	250	350	950	1450	320	700	1060	1700
Type		Female threaded ports - R automatic cartridge							
Installation		In any position							

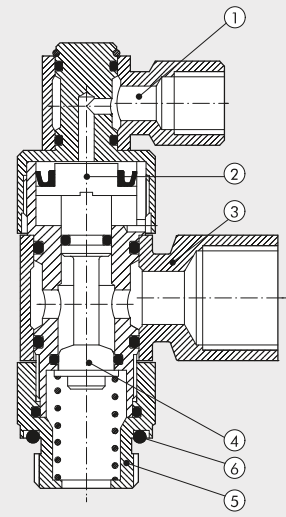
### UNIDIRECTIONAL STOP VALVE COMPONENTS

- ① Body: nickel-plated brass
- ② Piston rod: steel
- ③ Rotary ring: nickel-plated brass
- ④ Valve: steel
- ⑤ Gasket: technopolymer
- ⑥ Gasket O-Ring: NBR



### BIDIRECTIONAL STOP VALVE COMPONENTS

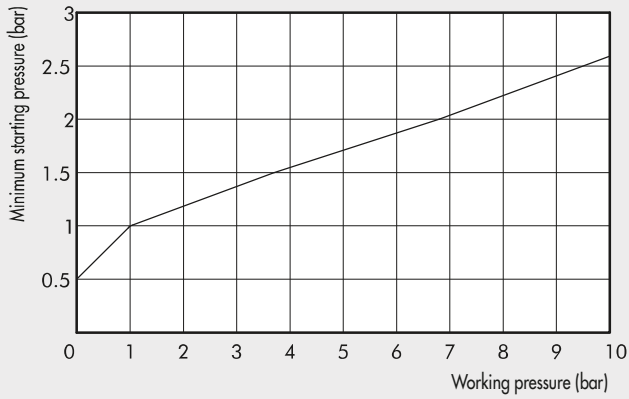
- ① Pilot ring: nickel-plated brass
- ② Piston rod: nickel-plated brass
- ③ Rotary ring: nickel-plated brass
- ④ Stem with valve: brass
- ⑤ Body: nickel-plated brass
- ⑥ Gasket O-Ring: NBR



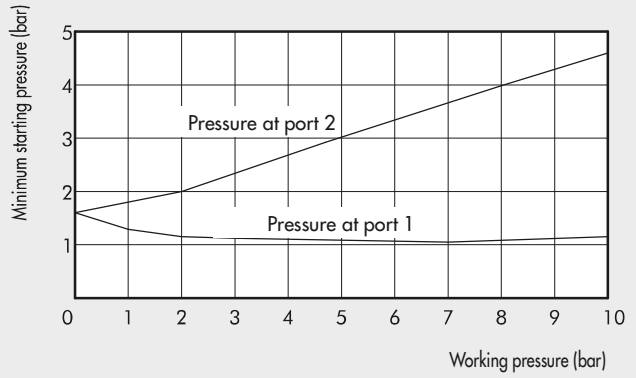
STOP VALVES SERIES STP  
ACCESSORIES

**STARTING PRESSURE**

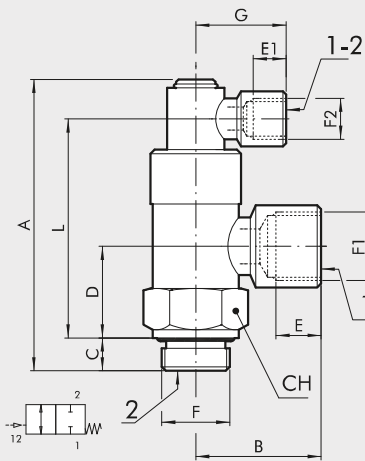
**UNIDIRECTIONAL VALVE**



**BIDIRECTIONAL VALVE**

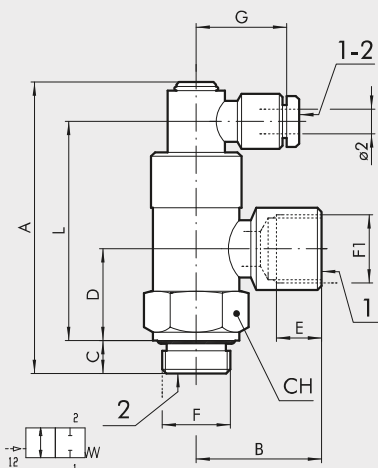


**BIDIRECTIONAL THREADED STOP VALVE**



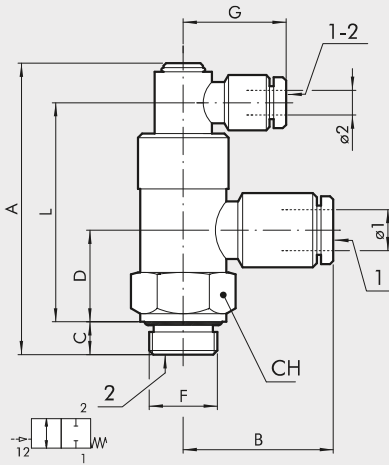
Code	Description	F	F1	F2	A	B	C	D	E	E1	G	L	CH
W6001101001	STP-B 1/8 108	G 1/8	G 1/8	G 1/8	57.5	21.5	6.9	16	7	7	21.5	41.9	14
W6001111011	STP-B 1/4 104	G 1/4	G 1/4	G 1/8	65.7	25.5	8	19.5	8	7	21.5	48.1	17
W6001121021	STP-B 3/8 138	G 3/8	G 3/8	G 1/8	70.9	31	8	22.3	10	7	21.5	53.3	22

**THREAD + PIPE BIDIRECTIONAL STOP VALVE**



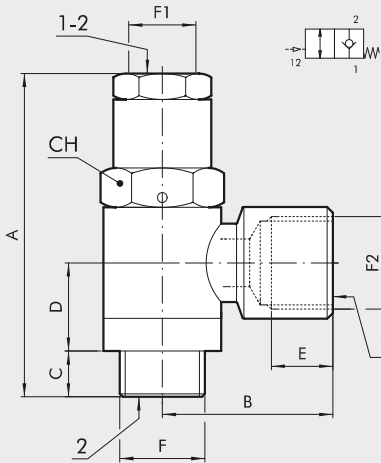
Code	Description	F	F1	Ø 2	A	B	C	D	E	G	L	CH
W6001101002	STP-BX 1/8-1/8 04	G 1/8	G 1/8	4	57.5	21.5	6.9	16	7	25	41.9	14
W6001111012	STP-BX 1/4-1/4 04	G 1/4	G 1/4	4	65.7	25.5	8	19.5	8	25	48.1	17
W6001121022	STP-BX 3/8-3/8 04	G 3/8	G 3/8	4	70.9	31	8	22.3	10	25	53.3	22

### PIPE BIDIRECTIONAL STOP VALVE



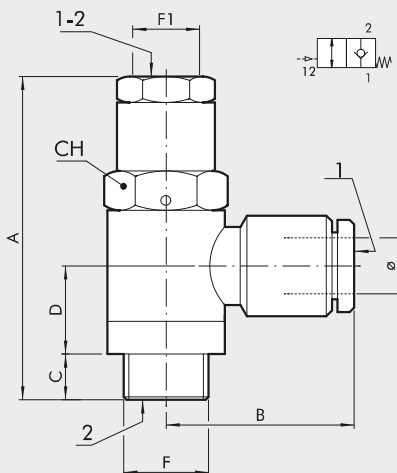
Code	Description	F	Ø 1	Ø 2	A	B	C	D	G	L	CH
W6001101106	STP-B 1/8 006	G 1/8	6	4	57.5	25	6.9	16	25	41.9	14
W6001111106	STP-B 1/4 006	G 1/4	6	4	65.7	27.5	8	19.5	25	48.1	17
W6001111108	STP-B 1/4 008	G 1/4	8	4	65.7	32	8	19.5	25	48.1	17
W6001121108	STP-B 3/8 008	G 3/8	8	4	70.9	31.5	8	22.3	25	53.3	22
W6001121110	STP-B 3/8 010	G 3/8	10	4	70.9	36.5	8	22.3	25	53.3	22
W6001131112	STP-B 1/2 012	G 1/2	12	4	83.5	41.5	12	27	25	71.5	27

### UNIDIRECTIONAL THREADED STOP VALVE



Code	Description	F	F2	A	B	C	D	E	F1	CH
W6001001001	STP-U 1/8 108	G 1/8	G 1/8	43.5	21.5	6	13	7	M5	14
W6001011011	STP-U 1/4 114	G 1/4	G 1/4	49.5	25.5	7	13.5	8	G 1/8	17
W6001021021	STP-U 3/8 138	G 3/8	G 3/8	54.9	31	9	15	10	G 1/8	19

### UNIDIRECTIONAL PIPE STOP VALVE



Code	Description	F	Ø	A	B	C	D	F1	CH
W6001001106	STP-U 1/8 006	G 1/8	6	43.5	25	6	13	M5	14
W6001011106	STP-U 1/4 006	G 1/4	6	49.5	27.5	7	13.5	G 1/8	17
W6001011108	STP-U 1/4 008	G 1/4	8	49.5	32	7	13.5	G 1/8	17
W6001021108	STP-U 3/8 008	G 3/8	8	54.9	31.5	9	15	G 1/8	19
W6001021110	STP-U 3/8 010	G 3/8	10	54.9	36.5	9	15	G 1/8	19
W6001031112	STP-U 1/2 012	G 1/2	12	61.4	41.5	10	17	G 1/8	24

# SLIDE VALVES SERIES VCS

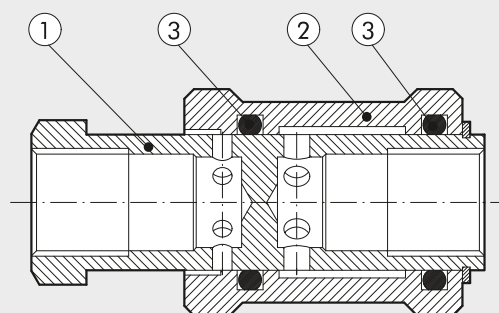
The 3/2 slide valve is normally used as a circuit on-off valve. When the ring nut is moved back, the system downstream is relieved; when the ring nut is moved forward, the system is supplied with compressed air.



TECHNICAL DATA		1/8"	1/4"	3/8"	1/2"
Operating pressure		0 - 10 bar (0 - 1 MPa)			
Operating temperature range	°C	-10 to + 80			
Fluid		Lubricated or unlubricated filtered air			
Flow rate at 6.3 bar (0.63 MPa - 91 psi) ΔP 0.5 bar	Nl/min	430	680	1400	2200
Flow rate at 6.3 bar (0.63 MPa - 91 psi) ΔP 1 bar	Nl/min	630	1040	2070	3330
Conductance C	Nl/min · bar	170	247	537	833
Critical ratio b	bar/bar	0.2	0.3	0.1	0.2

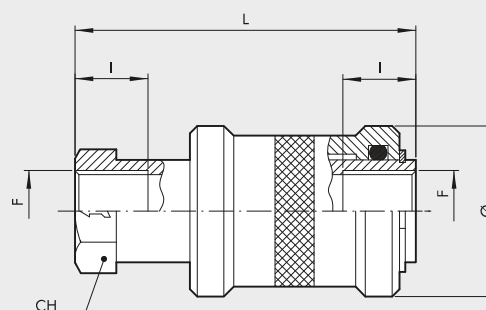
## COMPONENTS

- ① Body: chromium-plated brass
- ② Ring nut: anodized aluminium
- ③ Seals: NBR

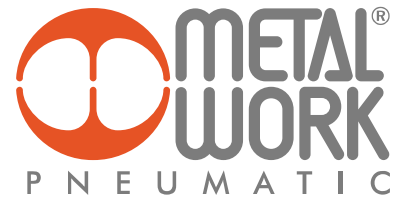


## DIMENSIONS AND ORDERING CODES

Code	Description	F	Ø	I	L	CH
W0970050001	Slide valves 3/2	1/8"	25	10	48	11
W0970050002	Slide valves 3/2	1/4"	30	12	58	19
W0970050003	Slide valves 3/2	3/8"	35	12	68	22
W0970050004	Slide valves 3/2	1/2"	40	15	80	27



# CIRCUIT SELECTOR VALVES SERIES VOR



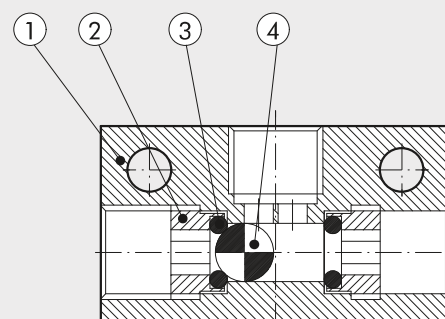
Circuit selector valves select two separate input signal without creating reciprocal interference, giving a single output signal.



TECHNICAL DATA		1/8"		1/4"	
		NI/min		1300	
Nominal flow rate at 6.3 bar ΔP 1 bar	NI/min	500		1300	
Operating temperature range	°C	-10 to + 80			
	°F	14 to 176			
Operating pressure	bar	2 - 10			
	MPa	0.2 - 1			
Fluid		Lubricated or unlubricated filtered air			

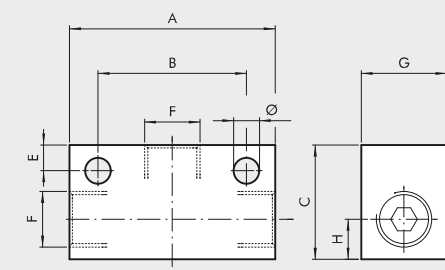
## COMPONENTS

- ① Body: passivated aluminium
- ② Insert: brass
- ③ Seal: NBR
- ④ Ball: stainless steel



## DIMENSIONS AND ORDERING CODES

Code	Description	A	C	G	H	E	B	F	Ø
W3603000001	VOR 1/8	36	20	15	7.5	4	25	G 1/8	4.5
W3603000002	VOR 1/4	43	25	20	8.5	6.5	25	G 1/4	4.5



CIRCUIT SELECTOR VALVES SERIES VOR  
**ACCESSORIES**

# CHECK VALVE SERIES VNR

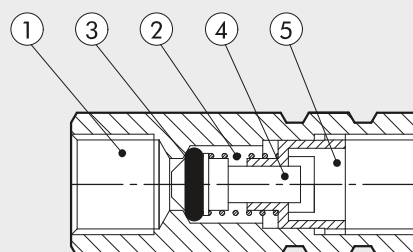
This allow air flow in only one of the two directions.



TECHNICAL DATA		1/8"	1/4"
Ports		G 1/8"	G 1/4"
Nominal diameter	mm	5.2	7
Nominal flow rate	NI/min	900	1100
Operating temperature range	°C	-10 to +70	
	°F	14 to 158	
Operating pressure	bar	2 - 10	
	MPa	0.2 - 1	
Opening pressure	bar	0.05 (5 KPa)	
Fluid		Lubricated or unlubricated filtered air	

## COMPONENTS

- ① Body: OT58 brass
- ② Valve spring: steel
- ③ Seal: NBR
- ④ Stem with OT58 brass valve
- ⑤ Stem insert: OT58 brass



## DIMENSIONS AND ORDERING CODES

Code	Description	F	L	CH
W3601000001	VNR 1/8	1/8	35	13
W3601000002	VNR 1/4	1/4	41	17

