

# Industrial Automation

**IMI Norgren** 

## V60 ... V63, 3/2, 2 x 3/2, 5/2 or 5/3 Solenoid and pilot actuated spool valves

- Port size: 1/8" ... 1/2" (ISO G/NPT)
- High flow rate at small size
- Proven sealing system, maintenance-free
- Different manual override options available
- Low power consumption
- Manifold system for easy assembly
- Different pressure ranges possible



## **Technical features**

#### Medium:

Compressed air, filtered lubricated or non lubricated

#### Operation:

Electromagnetically or pneumatically controlled

#### Operating pressure:

-0,9 ... 10 bar (-13 .... 145 psi) Details see following pages

#### Flow:

500 ... 4500 l/min

#### Flow direction:

Internal pilot supply: fixed External pilot supply: optional

#### Port size:

G1/8, G1/4, G3/8 or G1/2 For valves with NPT ports see option selector

#### Mounting position:

Optional, spring return valves, preferably horizontal

#### Ambient/Media temperature:

-10 ... +50°C (+14 ... +122°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

#### Materials:

Housing:
Aluminium bar stock.
Base plate: Aluminium
Static and dynamic seals:

NBR and FPM

Plastic parts: PA, PBT with GF

#### Electrical details for solenoid operators

	•	
Voltage tolerance	± 10%	
Rating	100% continuous duty	
Inlet orifice	0,8 mm	
Electrical connection	EN 175301-803 - Form B, 22 mm	
(corresponding to choosen coil)	Industrial Standard, 22 mm	
Solenoid	4 x 90° rotable	
Manual override	Without	# = 1
	Push and turn to lock	# = 2
	Push only (not lockable)	# = 3
Protection class	IP 65 (with sealed plug)	



#### 3/2 directional control valves, solenoid actuated

Symbol	Port size	Function	Actuation	Pilot supply	Flow	Operating pressure	Pilot pressure	Weight	Drawing	Model *1)
	3120			Supply	(l/min)	(bar)	(bar)	(kg)	No.	
	G1/8	NC	Solenoid/spring	Internal	750	2 10	_	0,22	1	V60A417A-A#*
12  2 10	G1/4	NC	Solenoid/spring	Internal	1300	2 10	-	0,29	1	V61B417A-A#*
	G3/8	NC	Solenoid/spring	Internal	2600	2 10	-	0,52	1	V62C417A-A#*
1 3	G1/2	NC	Solenoid/spring	Internal	4500	2 10	-	0,78	2	V63D417A-A#*
	G1/8	NC	Solenoid/air spring	Internal	750	2 10	-	0,22	3	V60A413A-A#*
12   2 10	G1/4	NC	Solenoid/air spring	Internal	1300	2 10	-	0,29	3	V61B413A-A#*
	G3/8	NC	Solenoid/air spring	Internal	2600	2 10	-	0,52	3	V62C413A-A#*
	G1/2	NC	Solenoid/air spring	Internal	4500	3 10	-	0,78	4	V63D413A-A#*
0	G1/8	NC	Solenoid/air spring	External	750	-0,9 10	3 10	0,22	3	V60A423A-A#*
12 2 10	G1/4	NC	Solenoid/air spring	External	1300	-0,9 10	3 10	0,29	3	V61B423A-A#*
V D IT \ I T T T T T T T T T T T T T T T T	G3/8	NC	Solenoid/air spring	External	2600	-0,9 10	3 10	0,52	3	V62C423A-A#*
3 112/10	G1/2	NC	Solenoid/air spring	External	4500	-0,9 10	3 10	0,78	4	V63D423A-A#*
	G1/8	NO	Solenoid/air spring	Internal	750	2 10	-	0,22	5	V60A313A-A#*
10 2 12	G1/4	NO	Solenoid/air spring	Internal	1300	2 10	-	0,29	5	V61B313A-A#*
	G3/8	NO	Solenoid/air spring	Internal	2600	2 10	-	0,52	5	V62C313A-A#*
. •	G1/2	NO	Solenoid/air spring	Internal	4500	3 10	-	0,78	6	V63D313A-A#*
	G1/8	-	Solenoid/Solenoid	Internal	750	1,5 10	-	0,30	7	V60A411A-A#*
□ <sup>12</sup> □ □□□	G1/4	-	Solenoid/Solenoid	Internal	1300	1,5 10	-	0,38	7	V61B411A-A#*
	G3/8	-	Solenoid/Solenoid	Internal	2600	1,5 10	-	0,61	7	V62C411A-A#*
3 1	G1/2	-	Solenoid/Solenoid	Internal	4500	2 10	-	0,87	8	V63D411A-A#*

## 2 x 3/2 directional control valves, solenoid actuated

Symbol	Port size	Function	Actuation	Pilot supply	Flow	Operating pressure	Weight	Drawing	Model *1)
	3120			заррту	(l/min)	(bar)	(kg)	No.	
	G1/8	NC/NC	Solenoid/Solenoid	Internal	500	2 10	0,34	13	V60AA11A-A#*
14 4 10 10 2 12	G1/4	NC/NC	Solenoid/Solenoid	Internal	950	2 10	0,43	13	V61BA11A-A#*
	G3/8	NC/NC	Solenoid/Solenoid	Internal	1900	2 10	0,73	13	V62CA11A-A#*
- 11									
4	G1/8	NO/NO	Solenoid/Solenoid	Internal	500	2 10	0,34	13	V60AB11A-A#*
10 4 14 12 2 10	G1/4	NO/NO	Solenoid/Solenoid	Internal	950	2 10	0,43	13	V61BB11A-A#*
7 D 1/ - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	G3/8	NO/NO	Solenoid/Solenoid	Internal	1900	2 10	0,73	13	V62CB11A-A#*
'1									
4 2	G1/8	NO/NC	Solenoid/Solenoid	Internal	500	2 10	0,34	13	V60AC11A-A#*
10 4 14 10 2 12	G1/4	NO/NC	Solenoid/Solenoid	Internal	950	2 10	0,43	13	V61BC11A-A#*
	G3/8	NO/NC	Solenoid/Solenoid	Internal	1900	2 10	0,73	13	V62CC11A-A#*
'1									

# Insert code for manual override: 1 = without; 2 = push and turn, 3 = push only \*1) Insert voltage code from table below or 000 for version without solenoid

NC = Normally closed

NO = Normally open

NC/NC = Both valves normally closed (port P)
NO/NO = Both valves normally open (port P)
NO/NC = Valve normally open, 1 valve normally closed (port P)

## Voltage codes and spare coils

22 mm coil for connector interface acc. to industrial standard										
	Voltage	Power Inrush/Hold	Model	Code						
	12 V d.c.	2 W	QM/48/12J/21	12J						
-	24 V d.c	2 W	QM/48/13J/21	13J						
	24 V 50/60 Hz	4/2,5 VA	QM/48/14J/21	14J						
	110/120 V 50/60 Hz	4/2,5 VA	QM/48/18J/21	18J						
	220/240 V 50/60 Hz	6/5,0 VA	QM/48/19J/21	19J						

22 mm coil for connector interface acc. EN 175 301-803, form B										
	Voltage	Power Inrush/Hold	Model	Code						
	12 V d.c.	2 W	V10626-A12L	12L						
	24 V d.c	2 W	V10626-A13L	13L						
	24 V 50/60 Hz	4/2,5 VA	V10626-A14L	14L						
	110/120 V 50/60 Hz	4/2,5 VA	V10626-A18L	18L						
	220/240 V 50/60 Hz	6/5,0 VA	V10626-A19L	19L						

Other voltage on request.

## Connector plugs - ordered separately



Note: Light emitting gaskets cannot be used



## 5/2 directional control valves, solenoid actuated

Symbol	Port size	Actuation	Pilot supply	Flow	Operating pressure	Pilot pressure	Weight	Drawing	Model *1)
				(l/min)	(bar)	(bar)	(kg)	No.	
	G1/8	Solenoid/spring	Internal	750	3 10	_	0,22	9	V60A517A-A#*
14 4 2 12	G1/4	Solenoid/spring	Internal	1300	3 10	-	0,29	9	V61B517A-A#*
<del>[/ □ ]                                  </del>	G3/8	Solenoid/spring	Internal	2600	3 10	_	0,52	9	V62C517A-A#*
513	G1/2	Solenoid/spring	Internal	4500	3 10	-	0,96	10	V63D517A-A#*
	G1/8	Solenoid/air spring	Internal	750	2 10	-	0,24	11	V60A513A-A#*
14 4 2 12	G1/4	Solenoid/air spring	Internal	1300	2 10	-	0,33	11	V61B513A-A#*
<u> </u>	G3/8	Solenoid/air spring	Internal	2600	2 10	_	0,62	11	V62C513A-A#*
513	G1/2	Solenoid/air spring	Internal	4500	3 10	-	0,96	12	V63D513A-A#*
4.0.40	G1/8	Solenoid/air spring	External	750	-0,9 10	3 10	0,24	11	V60A523A-A#*
14 4 2 12	G1/4	Solenoid/air spring	External	1300	-0,9 10	3 10	0,33	11	V61B523A-A#*
<u> </u>	G3/8	Solenoid/air spring	External	2600	-0,9 10	3 10	0,62	11	V62C523A-A#*
513 12/14	G1/2	Solenoid/air spring	External	4500	-0,9 10	3 10	0,96	12	V63D523A-A#*
	G1/8	Solenoid/Solenoid	Internal	750	1,5 10	_	0,33	13	V60A511A-A#*
14 4 2, 12	G1/4	Solenoid/Solenoid	Internal	1300	1,5 10	-	0,42	13	V61B511A-A#*
<u> </u>	G3/8	Solenoid/Solenoid	Internal	2600	1,5 10	_	0,72	13	V62C511A-A#*
513	G1/2	Solenoid/Solenoid	Internal	4500	2 10	-	0,98	14	V63D511A-A#*

#### 5/3 directional control valves, solenoid actuated

Symbol	Port size	Function	Actuation	Pilot supply	Flow	Operating pressure	Pilot pressure	Weight	Drawing	Model *1)
	3126			зирріу	(l/min)	(bar)	(bar)	(kg)	No.	
14 4 2 40	G1/8	APB	Solenoid/Solenoid	Internal	500	3 10	-	0,35	15	V60A611A-A#*
14 4 2 12 	G1/4	APB	Solenoid/Solenoid	Internal	950	3 10	-	0,47	15	V61B611A-A#*
<u> </u>	G3/8	APB	Solenoid/Solenoid	Internal	1900	3 10	-	0,81	15	V62C611A-A#*
513										
14 4 2 12	G1/8	APB	Solenoid/Solenoid	External	500	-0,9 10	3 10	0,35	15	V60A622A-A#*
	G1/4	APB	Solenoid/Solenoid	External	950	-0,9 10	3 10	0,47	15	V61B622A-A#*
513 12/14	G3/8	APB	Solenoid/Solenoid	External	1900	-0,9 10	3 10	0,81	15	V62C622A-A#*
513 12/14										
	G1/8	COE	Solenoid/Solenoid	Internal	500	3 10	-	0,35	15	V60A711A-A#*
14 4 2 12	G1/4	COE	Solenoid/Solenoid	Internal	950	3 10	-	0,47	15	V61B711A-A#*
	G3/8	COE	Solenoid/Solenoid	Internal	1900	3 10	-	0,81	15	V62C711A-A#*
513										
	G1/8	COE	Solenoid/Solenoid	External	500	-0,9 10	3 10	0,35	15	V60A722A-A#*
14 4 2 12 W \	G1/4	COE	Solenoid/Solenoid	External	950	-0,9 10	3 10	0,47	15	V61B722A-A#*
[/ [> [+ \ +] + +   + /+   < \]	G3/8	COE	Solenoid/Solenoid	External	1900	-0,9 10	3 10	0,81	15	V62C722A-A#*
513 12/14										
	G1/8	COP	Solenoid/Solenoid	Internal	500	3 10	-	0,35	15	V60A811A-A#*
14 4 2 12 HW	G1/4	COP	Solenoid/Solenoid	Internal	950	3 10	-	0,47	15	V61B811A-A#*
	G3/8	COP	Solenoid/Solenoid	Internal	1900	3 10	-	0,81	15	V62C811A-A#*
513										
4 4 2	G1/8	COP	Solenoid/Solenoid	External	500	-0,9 10	3 10	0,35	15	V60A822A-A#*
14 4 2 12 12 12 14 14 14 14 14 14 14 14 14 14 14 14 14	G1/4	COP	Solenoid/Solenoid	External	950	-0,9 10	3 10	0,47	15	V61B822A-A#*
	G3/8	COP	Solenoid/Solenoid	External	1900	-0,9 10	3 10	0,81	15	V62C822A-A#*
513 12/14										

<sup>#</sup> Insert code for manual override: 1 = without; 2 = push and turn, 3 = push only
\*1) Insert voltage code from table on page before or 000 for version without solenoid
APB = All ports blocked
COE = Centre open exhaust
COP = Centre open pressure



## 3/2 directional control valves, pilot actuated

Symbol	Port size	Function	Actuation	Flow (l/min)	Operating pressure (bar)	Pilot pressure external (bar)	Weight (kg)	Drawing No.	Model
	G1/8	NC	Air/Spring	750	-0,9 10	2,5 10	0,13	31	V60A4D7A-XA090
12 2 10	G1/4	NC	Air/Spring	1300	-0,9 10	2,5 10	0,21	31	V61B4D7A-XA090
-D-[+]  +   W	G3/8	NC	Air/Spring	2600	-0,9 10	2,5 10	0,43	33	V62C4D7A-XA090
3 1	G1/2	NC	Air/Spring	4500	-0,9 16	3 16	0,75	35	V63D4D7A-XA090
40 0 40	G1/8	NO	Air/Spring	750	-0,9 10	2,5 10	0,13	32	V60A3D7A-XA090
10 2 12	G1/4	NO	Air/Spring	1300	-0,9 10	2,5 10	0,21	32	V61B3D7A-XA090
-D-(+\) +\	G3/8	NO	Air/Spring	2600	-0,9 10	2,5 10	0,43	34	V62C3D7A-XA090
	G1/2	NO	Air/Spring	4500	-0,9 16	3 16	0,75	36	V63D3D7A-XA090
	G1/8	-	Air/Air	750	-0,9 10	1,5 10	0,13	37	V60A4DDA-XA020
12 2 10	G1/4	-	Air/Air	1300	-0,9 10	1,5 10	0,21	37	V61B4DDA-XA020
-D-1 <u>-\ \</u> - <u>T</u>  -\ -	G3/8	_	Air/Air	2600	-0,9 10	1,5 10	0,43	38	V62C4DDA-XA020
3 1	G1/2	-	Air/Air	4500	-0,9 16	1,5 16	0,68	39	V63D4DDA-XA020

## 2 x 3/2 directional control valves, pilot actuated

Symbol	Port size	Function	Actuation	Flow (l/min)	Operating pressure (bar)	Pilot pressure external (bar)	Weight (kg)	Drawing No.	Model
44 4 40 40 3 40	G1/8	NC/NC	Air/Air	500	2 10	2 10	0,18	43	V60AADDA-XA020
14 4 10 10 2 12	G1/4	NC/NC	Air/Air	950	2 10	2 10	0,28	43	V61BADDA-XA020
- D-L <del>+ \  \ + F</del> \  \D-L+ \  \/ + I-\  - \  - \  - \  - \  - \  - \  - \	G3/8	NC/NC	Air/Air	1900	2 10	2 10	0,60	44	V62CADDA-XA020
1 1									
10 1 11 10 2 10	G1/8	NO/NO	Air/Air	500	2 10	2 10	0,18	43	V60ABDDA-XA020
10 4 14 12 2 10	G1/4	NO/NO	Air/Air	950	2 10	2 10	0,28	43	V61BBDDA-XA020
- D- 1/- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-	G3/8	NO/NO	Air/Air	1900	2 10	2 10	0,60	44	V62CBDDA-XA020
1									
40 44440 2 40	G1/8	NO/NC	Air/Air	500	2 10	2 10	0,18	43	V60ACDDA-XA020
10 414 10 2 12 	G1/4	NO/NC	Air/Air	950	2 10	2 10	0,28	43	V61BCDDA-XA020
	G3/8	NO/NC	Air/Air	1900	2 10	2 10	0,60	44	V62CCDDA-XA020
1									

## 5/2 directional control valves, pilot actuated

Symbol	Port size	Actuation	Flow (l/min)	Operating pressure (bar)	Pilot pressure external (bar)	Weight (kg)	Drawing No.	Model
4.0	G1/8	Air/Spring	750	-0,9 10	2,5 10	0,16	40	V60A5D7A-XA090
14 4 2 12	G1/4	Air/Spring	1300	-0,9 10	2,5 10	0,26	40	V61B5D7A-XA090
- D- <u>L-\                                     </u>	G3/8	Air/Spring	2600	-0,9 10	2,5 10	0,56	41	V62C5D7A-XA090
5 13	G1/2	Air/Spring	4500	-0,9 16	3 16	0,92	42	V63D5D7A-XA090
	G1/8	Air/Air	750	-0,9 10	1,5 10	0,17	43	V60A5DDA-XA020
14 4 2 12	G1/4	Air/Air	1300	-0,9 10	1,5 10	0,27	43	V61B5DDA-XA020
- D-[ <u>+\      /</u> - -<  -	G3/8	Air/Air	2600	-0,9 10	1,5 10	0,58	44	V62C5DDA-XA020
5 13	G1/2	Air/Air	4500	-0,9 16	1,5 16	0,87	45	V63D5DDA-XA020

## 5/3 directional control valves, pilot actuated

Symbol	Port size	Function	Actuation	Flow (l/min)	Operating pressure (bar)	Pilot pressure external (bar)	Weight (kg)	Drawing No.	Model
	G1/8	APB	Air/Air	500	-0,9 10	3 10	0,20	46	V60A6DDA-XA020
14   4   2   12   14   1   1   1   1   1   1   1   1   1	G1/4	APB	Air/Air	950	-0,9 10	3 10	0,32	46	V61B6DDA-XA020
- Ď- <u>l-\                                   </u>	G3/8	APB	Air/Air	1900	-0,9 10	3 10	0,67	47	V62C6DDA-XA020
5. 11.3	G1/2	APB	Air/Air	2300	-0,9 10	3 10	1,10	48	V63D6DDA-XA020
	G1/8	COE	Air/Air	500	-0,9 10	3 10	0,20	46	V60A7DDA-XA020
14   4   2   12   12   12   12   12   14   14	G1/4	COE	Air/Air	950	-0,9 10	3 10	0,32	46	V61B7DDA-XA020
- N T T T T T T T T T T T T T T T T T T	G3/8	COE	Air/Air	1900	-0,9 10	3 10	0,67	47	V62C7DDA-XA020
5. 1.3	G1/2	COE	Air/Air	2300	-0,9 10	3 10	1,10	48	V63D7DDA-XA020
	G1/8	COP	Air/Air	500	-0,9 10	3 10	0,20	46	V60A8DDA-XA020
14   4   2   12	G1/4	COP	Air/Air	950	-0,9 10	3 10	0,32	46	V61B8DDA-XA020
- D'-\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\	G3/8	COP	Air/Air	1900	-0,9 10	3 10	0,67	47	V62C8DDA-XA020
5' '1'3									

NC = Normally closed NO = Normally open NC/NC = Both valves normally closed (port P) NO/NO = Both valves normally open (port P)

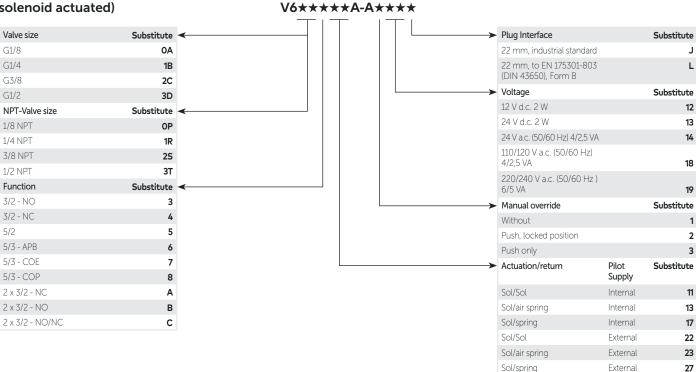
NO/NC = Valve normally open, 1 valve normally closed (port P)

APB = All ports blocked

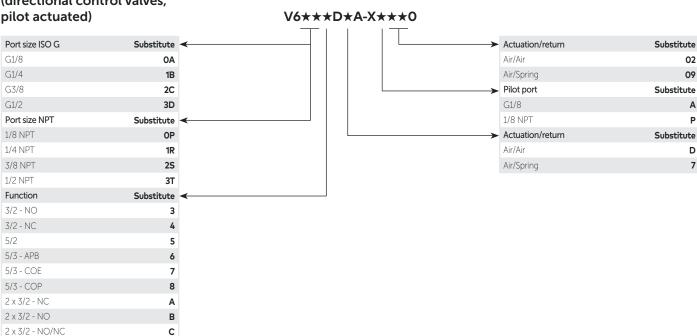
COE = Centre open exhaust COP = Centre open pressure



#### **Option selector** (directional control valves, solenoid actuated)



## **Option selector** (directional control valves, pilot actuated)





#### Manifold system for common pressure supply (V60 and V61) – preferred solution for 3/2 valves

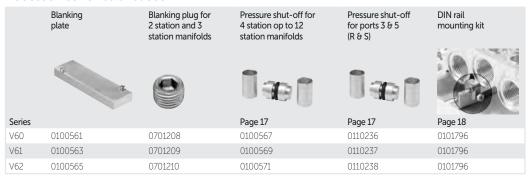
	Manifold* 2 to 9 stations	10 and 12 stations	Bracket for manifold	Blanking plug for unused valve station
	18			
Series	Page 19	Page 19	Page 19	
V60	263962 *1)	263963 *2)	0555485	0491586
V61	263942 *1)	263943 *2)	0555484	0491587

<sup>\*</sup> Supplied with bolt and sealing washers

#### Sub-base - available for 2 x 3/2, 5/2, 5/3 valves

	Valve stations 2	3	4	6	12
	3030				
Series	Page 17	Page 17	Page 17	Page 17	Page 17
V60	2221002	2221003	2221004	2221006	2221012
V61	2221102	2221103	2221104	2221106	2221112
V62	2221202	2221203	2221204	2221206	2221212

#### **Accessories for sub-bases**



#### Coil accessories



## Silencers



For further details see related datasheets

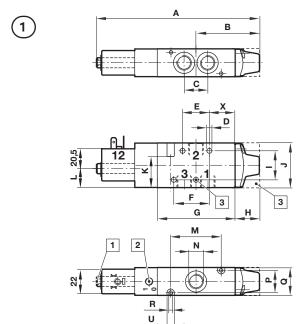
Example only, any standard Norgren silencer can be used

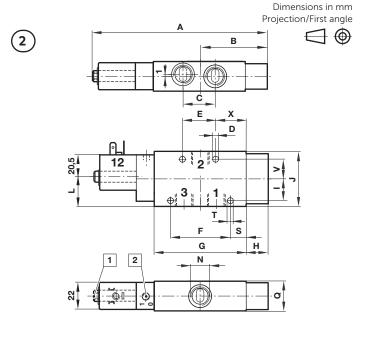
<sup>\*1)</sup> Insert station code after model numbers: 2, 3, 4, 5, 6, 7 and 8

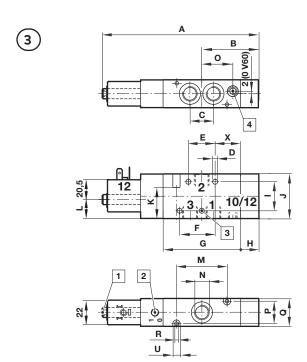
<sup>\*2)</sup> Insert station code after model numbers: 9 (for V61 only), 0 for 10 and 2 for 12

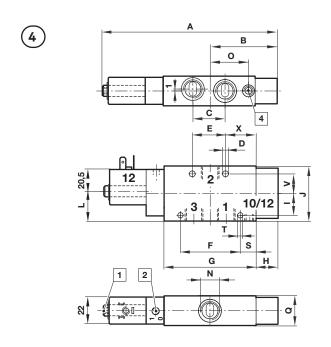


#### **Dimensions**







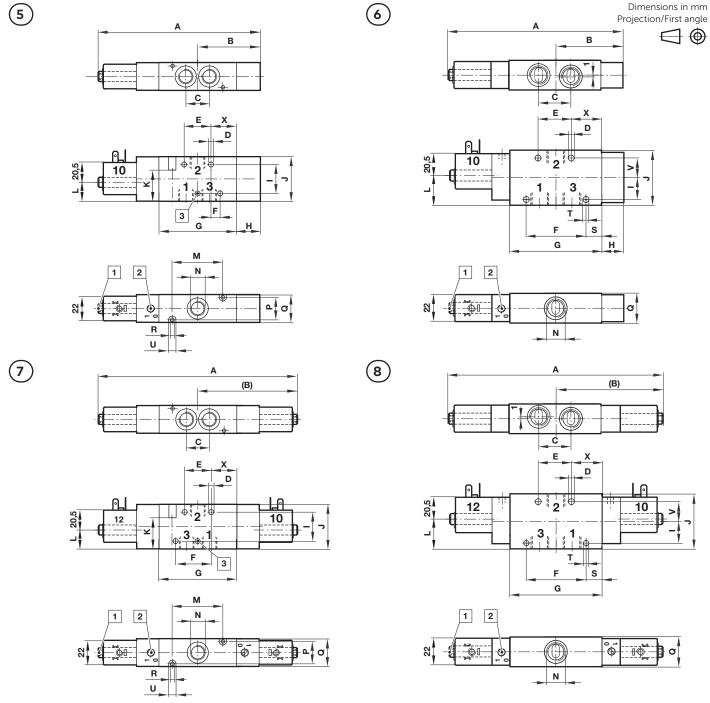


Collected pilot exhaust (M5)
Manual Override

3 V62: Central mounting hole (left hole is not applicable) and square end cover External pilot port, M5 or 10-32 UNF (V60, V61 & V62), G1/8 or 1/8-27 NPT (V63)

No.	Α	В	С	ØD	Ε	F	G	Н	1	J	К	L	М	N	0	Р	Q	ØR	S	ØΤ	ØU	٧	Χ	Model
1	125	45	16	4,5	18	25	56	17	26	35	28	12	35	G1/8	_	17	22	3,2	_	_	6,5	_	19	V60A417A
1	147	57,5	21	4,5	24	32	70	22,5	26	40	28	17	46	G1/4	_	20	25	3,2	_	-	6,5	_	23	V61B417A
1	166,5	70	24,5	4,5	26	_	83,5	28	36	55	44	32	54	G3/8	_	28	34	4,5	_	_	8,0	23	30	V62C417A
2	197	87,5	38	7	46	75	108	33,5	26	65	_	38	_	G1/2	_	_	35	_	18,5	5,5	_	_	36	V63D417A
3	116,5	37	16	4,5	18	25	56	9	26	35	28	12	35	G1/8	_	17	22	3,2	_	_	6,5	_	19	V60A413A
3	132,5	43	21	4,5	24	32	70	8	26	40	28	17	46	G1/4	_	20	25	3,2	_	-	6,5	_	23	V61B413A
3	147	50,5	24,5	4,5	26	_	83,5	9	36	55	44	32	54	G3/8	_	28	34	4,5	_	_	8,0	_	30	V62C413A
3	116,5	37	16	4,5	18	25	56	9	26	35	28	12	35	G1/8	22	17	22	3,2	_	_	6,5	_	19	V60A423A
3	132,5	43	21	4,5	24	32	70	8	26	40	28	17	46	G1/4	29	20	25	3,2	_	_	6,5	_	23	V61B423A
3	147	50,5	24,5	4,5	26	_	83,5	9	36	55	44	32	54	G3/8	_	28	34	4,5	_	_	8,0	_	30	V62C423A
4	190	80	38	7,0	46	75	108	26	26	65	_	38	_	G1/2	_	_	35	_	18,5	5,5	_	23	36	V63D413A
4	190	80	38	7,0	46	75	108	26	26	65	_	38	_	G1/2	45	_	35	_	18,5	5,5	_	23	36	V63D423A



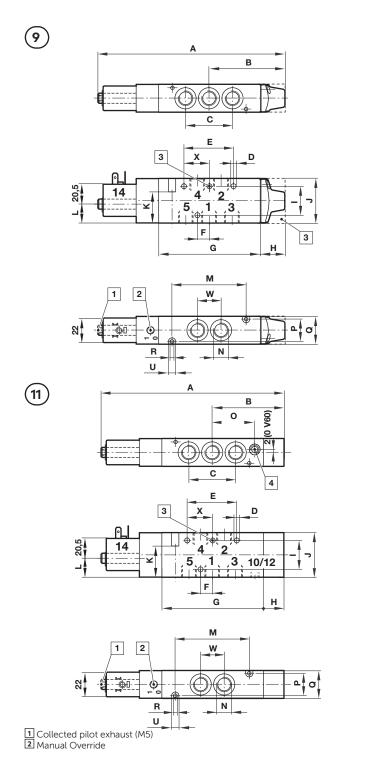


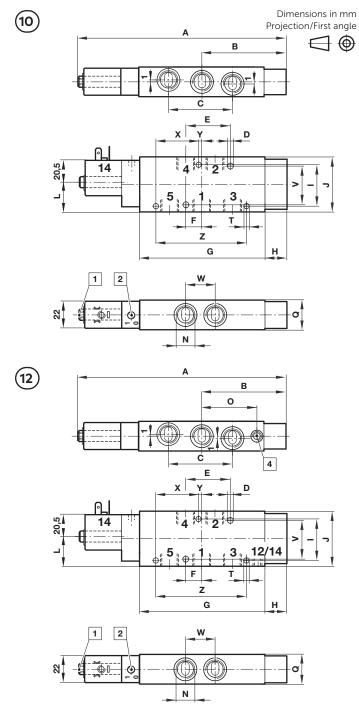
1 Collected pilot exhaust (M5)
2 Manual Override

3 V62: Central mounting hole (left hole is not applicable) and square end cover

No.	Α	В	С	ØD	E	F	G	Н	1	J	К	L	М	N	Р	Q	ØR	S	ØΤ	ØU	V	Χ	Model
5	116,5	37	16	4,5	18	7	56	9	26	35	28	12	35	G1/8	17	22	3,2	_	-	6,5	_	19	V60A313A
5	132,5	43	21	4,5	24	8	70	8	26	40	28	17	46	G1/4	20	25	3,2	_	_	6,5	_	23	V61B313A
5	147	50,5	24,5	4,5	26	_	83,5	9	36	55	44	32	54	G3/8	28	34	4,5	_	_	8,0	_	28	V62C313A
6	190	80	38	7,0	46	75	108	26	26	65	_	38	_	G1/2	-	35	_	14,5	5,5	-	23	26	V63D313A
7	159,5	79,5	16	4,5	18	25	56	_	26	35	28	12	35	G1/8	17	22	3,2	_	_	6,5	_	19	V60A411A
7	179	89,5	21	4,5	24	32	70	_	26	40	28	17	46	G1/4	20	25	3,2	_	_	6,5	_	23	V61B411A
7	193,5	97	24,5	4,5	26	_	83,5	_	36	55	44	32	54	G3/8	28	34	4,5	_	_	8,0	_	30	V62C411A
8	219	109,5	38	7,0	46	75	108	_	26	65	_	38	_	G1/2	-	35	_	18,5	5,5	_	23	36	V63D411A



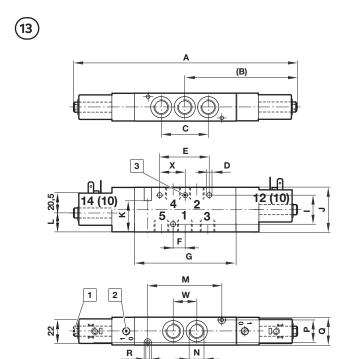




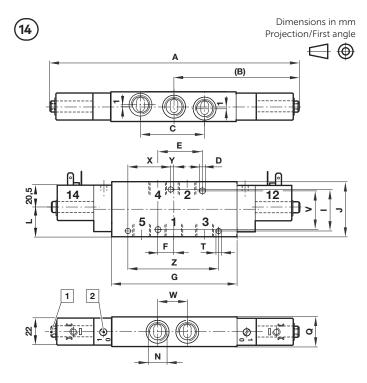
3 V62: Central mounting hole (left hole is not applicable) and square end cover 4 External pilot port, M5 or 10-32 UNF (V60, V61 & V62), G1/8 or 1/8-27 NPT (V63)

No.	Α	В	С	ØD	Е	F	G	Н	1	J	К	L	М	N	0	Р	Q	ØR	ØΤ	ØU	V	W	Χ	Υ	Z	Model
9	140	52,5	32,5	4,5	33,5	8	71	17	26	35	28	12	50	G1/8	_	17	22	3,2	_	6,5	_	16	17	_	_	V60A517A
9	167	67,5	42	4,5	44	10	90	22,5	26	40	28	17	66	G1/4	_	20	25	3,2	_	6,5	_	21	22	_	_	V61B517A
9	191	82	49	4,5	_	12	108	28	36	55	44	32	78	G3/8	_	28	34	4,5	_	8,0	_	24,5	26	_	_	V62C517A
10	235	106,5	76	7,0	60	19	146	33,5	52	65	_	38	_	G1/2	_	_	35	_	5,5	_	46	38	57,5	3	115	V63D517A
11	132	44,5	32,5	4,5	33,5	8	71	9	26	35	28	12	50	G1/8	_	17	22	3,2	_	6,5	_	16	17	_	_	V60A513A
11	153	53	42	4,5	44	10	90	8	26	40	28	17	66	G1/4	_	20	25	3,2	_	6,5	_	21	22	_	_	V61B513A
11	171,5	62,5	49	4,5	_	12	108	8,5	36	55	44	32	78	G3/8	_	28	34	4,5	_	8,0	_	24,5	26	_	_	V62C513A
12	228	99	76	7,0	60	19	146	26	52	65	_	38	_	G1/2	-	_	35		5,5	_	46	38	57,5	3	115	V63D513A
11	132	44,5	32,5	4,5	33,5	8	71	9	26	35	28	12	50	G1/8	29,5	17	22	3,2	_	6,5	_	16	17	-	_	V60A523A
11	153	53	42	4,5	44	10	90	8	26	40	28	17	66	G1/4	39	20	25	3,2	_	6,5	_	21	22	_	_	V61B523A
11	171,5	62,5	49	4,5	_	12	108	8,5	36	55	44	32	78	G3/8	48	28	34	4,5	_	8,0	_	24,5	26	_	_	V62C523A
12	228	99	76	7,0	60	19	146	26	52	65	_	38	_	G1/2	64	-	35		5,5	_	46	38	57,5	3	115	V63D523A





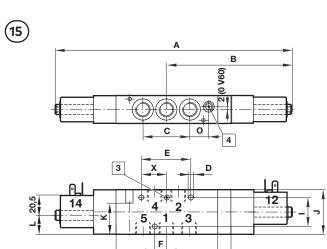
U



- 1 Collected pilot exhaust (M5)
  2 Manual Override
  3 V62: Central mounting hole (left hole is not applicable)

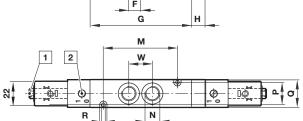
No.	Α	В	С	ØD	Ε	F	G	1	J	К	L	М	N	Р	Q	ØR	ØT	ØU	V	W	Χ	Υ	Z	Model
13	174,5	87,5	32,5	4,5	33,5	8	71	26	35	28	12	50	G1/8	17	22	3,2	_	6,5	_	16	17	_	_	V60A511A
13	174,5	87,5	32,5	4,5	33,5	8	71	26	35	28	12	50	G1/8	17	22	3,2	-	6,5	_	16	17	_	_	V60AA11A
13	174,5	87,5	32,5	4,5	33,5	8	71	26	35	28	12	50	G1/8	17	22	3,2	_	6,5	_	16	17	_	_	V60AB11A
13	174,5	87,5	32,5	4,5	33,5	8	71	26	35	28	12	50	G1/8	17	22	3,2	_	6,5	_	16	17	_	_	V60AC11A
13	199	99,5	42	4,5	44	10	90	26	40	28	17	66	G1/4	20	25	3,2	_	6,5	_	21	22	_	_	V61B511A
13	199	99,5	42	4,5	44	10	90	26	40	28	17	66	G1/4	20	25	3,2	_	6,5	_	21	22	_	_	V61BA11A
13	199	99,5	42	4,5	44	10	90	26	40	28	17	66	G1/4	20	25	3,2	_	6,5	_	21	22	_	_	V61BB11A
13	199	99,5	42	4,5	44	10	90	26	40	28	17	66	G1/4	20	25	3,2	_	6,5	_	21	22	_	_	V61BC11A
13	218	109	49	4,5	_	12	108	36	55	44	32	78	G3/8	28	34	4,5	_	8,0	_	24,5	26	_	_	V62C511A
13	218	109	49	4,5	_	12	108	36	55	44	32	78	G3/8	28	34	4,5	_	8,0	_	24,5	26	_	_	V62CA11A
13	218	109	49	4,5	_	12	108	36	55	44	32	78	G3/8	28	34	4,5	_	8,0	_	24,5	26	_	_	V62CB11A
13	218	109	49	4,5	_	12	108	36	55	44	32	78	G3/8	28	34	4,5	_	8,0	_	24,5	26	_	_	V62CC11A
14	257	128,5	76	7,0	60	19	146	52	65	-	38	-	G1/2	-	35	-	5,5	-	46	38	57,5	3	115	V63D511A





Dimensions in mm Projection/First angle



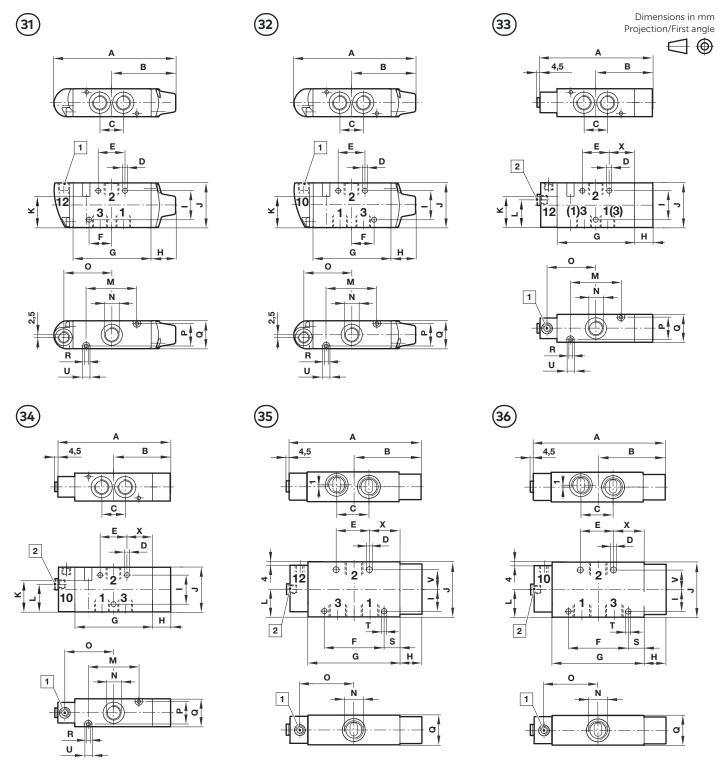


U

1 Collected pilot exhaust (M5)
2 Manual Override
3 V62: Central mounting hole (left hole is not applicable) and square end cover
4 External pilot port, M5 or 10-32 UNF (V60, V61 & V62)

No.	Α	В	С	ØD	Е	F	G	Н	1	J	К	L	М	N	0	Р	Q	ØR	ØU	W	Χ	Model
15	188,5	101,5	32,5	4,5	33,5	8	71	14	26	35	28	12	50	G1/8	13	17	22	3,2	6,5	16	17	V60A611A
15	188,5	101,5	32,5	4,5	33,5	8	71	14	26	35	28	12	50	G1/8	13	17	22	3,2	6,5	16	17	V60A622A
15	188,5	101,5	32,5	4,5	33,5	8	71	14	26	35	28	12	50	G1/8	13	17	22	3,2	6,5	16	17	V60A711A
15	188,5	101,5	32,5	4,5	33,5	8	71	14	26	35	28	12	50	G1/8	13	17	22	3,2	6,5	16	17	V60A722A
15	188,5	101,5	32,5	4,5	33,5	8	71	14	26	35	28	12	50	G1/8	13	17	22	3,2	6,5	16	17	V60A811A
15	188,5	101,5	32,5	4,5	33,5	8	71	14	26	35	28	12	50	G1/8	13	17	22	3,2	6,5	16	17	V60A822A
15	217	117,5	42	4,5	44	10	90	18	26	40	28	17	66	G1/4	18	20	25	3,2	6,5	21	22	V61B611A
15	217	117,5	42	4,5	44	10	90	18	26	40	28	17	66	G1/4	18	20	25	3,2	6,5	21	22	V61B622A
15	217	117,5	42	4,5	44	10	90	18	26	40	28	17	66	G1/4	18	20	25	3,2	6,5	21	22	V61B711A
15	217	117,5	42	4,5	44	10	90	18	26	40	28	17	66	G1/4	18	20	25	3,2	6,5	21	22	V61B722A
15	217	117,5	42	4,5	44	10	90	18	26	40	28	17	66	G1/4	18	20	25	3,2	6,5	21	22	V61B811A
15	217	117,5	42	4,5	44	10	90	18	26	40	28	17	66	G1/4	18	20	25	3,2	6,5	21	22	V61B822A
15	240,5	131,5	49	4,5	_	12	108	22,5	36	55	44	32	78	G3/8	23,5	28	34	4,5	8	24,5	26	V62C611A
15	240,5	131,5	49	4,5	_	12	108	22,5	36	55	44	32	78	G3/8	23,5	28	34	4,5	8	24,5	26	V62C622A
15	240,5	131,5	49	4,5	_	12	108	22,5	36	55	44	32	78	G3/8	23,5	28	34	4,5	8	24,5	26	V62C711A
15	240,5	131,5	49	4,5	-	12	108	22,5	36	55	44	32	78	G3/8	23,5	28	34	4,5	8	24,5	26	V62C722A
15	240,5	131,5	49	4,5	_	12	108	22,5	36	55	44	32	78	G3/8	23,5	28	34	4,5	8	24,5	26	V62C811A
15	240,5	131,5	49	4,5	_	12	108	22,5	36	55	44	32	78	G3/8	23,5	28	34	4,5	8	24,5	26	V62C811A

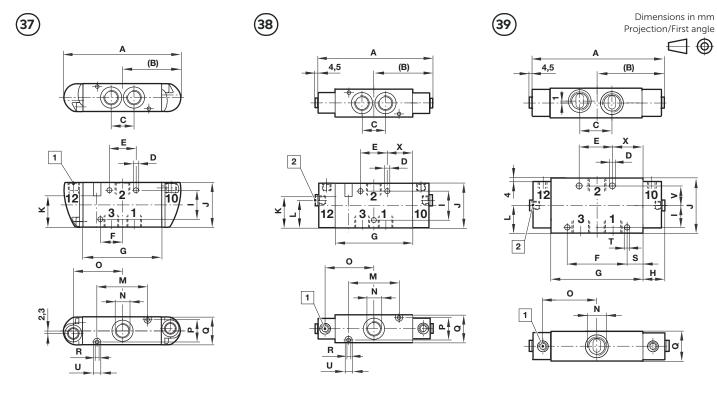




1 Pilot ports G1/8 or 1/8-27 NPT 2 Alternative pilot ports G1/8 or 1/8-27 NPT

No.	Α	В	С	ØD	Ε	F	G	Н	1	J	К	L	М	N	0	Р	Q	ØR	S	ØΤ	ØU	V	Χ	Model
31	89,5	45	16	4,5	18	16	56	17	26	35	28	_	35	G1/8	36	17	22	3,2	_	_	6,5	_	_	V60A4D7A
31	110	57,5	21	4,5	24	20	70	22,5	26	40	28	_	46	G1/4	43	20	25	3,2	_	_	6,5	_	_	V61B4D7A
32	89,5	45	16	4,5	18	16	56	17	26	35	28	_	35	G1/8	36	17	22	3,2	_	_	6,5	_	_	V60A3D7A
32	110	57,5	21	4,5	24	20	70	22,5	26	40	28	_	46	G1/4	43	20	25	3,2	_	_	6,5	_	-	V61B3D7A
33	132	70	24,5	4,5	26	_	83,5	28	36	55	_	33,5	54	G3/8	52	28	34	4,5	_	_	8,0	_	30	V62C4D7A
34	132	70	24,5	4,5	26	_	83,5	28	36	55	_	33,5	54	G3/8	52	28	34	4,5	_	_	8,0	_	28	V62C3D7A
35	162	87,5	38	7,0	46	75	108	33,5	26	65	_	39,5	_	G1/2	64	_	35	_	18,5	5,5	_	23	36	V63D4D7A
36	162	87,5	38	7,0	46	75	108	33,5	26	65	_	39,5	_	G1/2	64	_	35	_	14,5	5,5	_	23	26	V63D3D7A

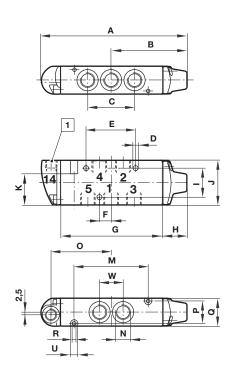




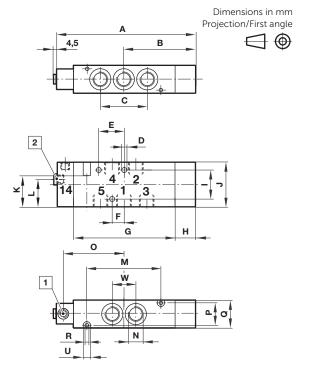
- 1 Pilot ports G1/8 or 1/8-27 NPT 2 Alternative pilot ports G1/8 or 1/8-27 NPT
- U No. В С G Μ Ν Q Model Α D J 0 R Χ 37 G1/8 V60A4DDA-89 56 35 17 22 3,2 6,5 44,5 16 4,5 18 16 26 35 28 36 37 104 52 21 4,5 70 40 G1/4 43 25 24 20 26 28 46 20 3,2 6,5 V61B4DDA-38 83,5 55 33,5 30 124 62 24,5 4,5 26 36 44 54 G3/8 52 28 34 4,5 8,0 V62C4DDA-39 148 38 108 39,5 G1/2 23 36 V63D4DDA-74 7,0 46 75 26 65 64 35 18,5 5,5



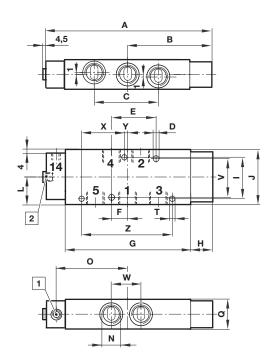












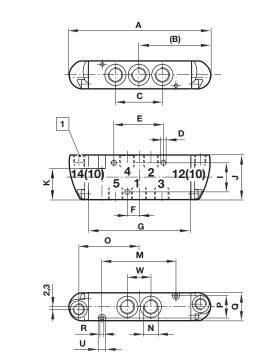
1 Pilot ports G1/8 or 1/8-27 NPT 2 Alternative pilot ports G1/8 or 1/8-27 NPT

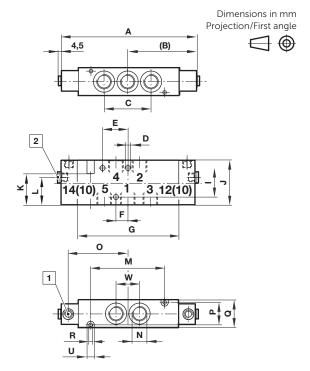
No.	Α	В	С	D	Е	F	G	Н	1	J	К	L	М	N	0	Р	Q	R	Т	U	٧	W	Χ	Υ	Z	Model
40	105	52,5	32,5	4,5	33,5	8	71	17	26	35	28	_	50	G1/8	43,5	17	22	3,2	_	6,5	_	16	_	_	_	V60A5D7A
40	130	67,5	42	4,5	44	10	90	22,5	26	40	28	_	66	G1/4	53	20	25	3,2	_	6,5	_	21	_	_	_	V61B5D7A
41	156	82	49	4,5	26	12	108	28	36	55	44	33,5	78	G3/8	64	28	34	4,5	_	8,0	_	24,5	_	_	_	V62C5D7A
42	200	106,5	76	7,0	60	19	146	33,5	52	65	-	39,5	-	G1/2	83	_	35	_	5,5	_	46	38	57,5	3	115	V63D5D7A

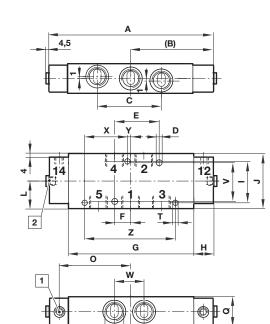




**45**)







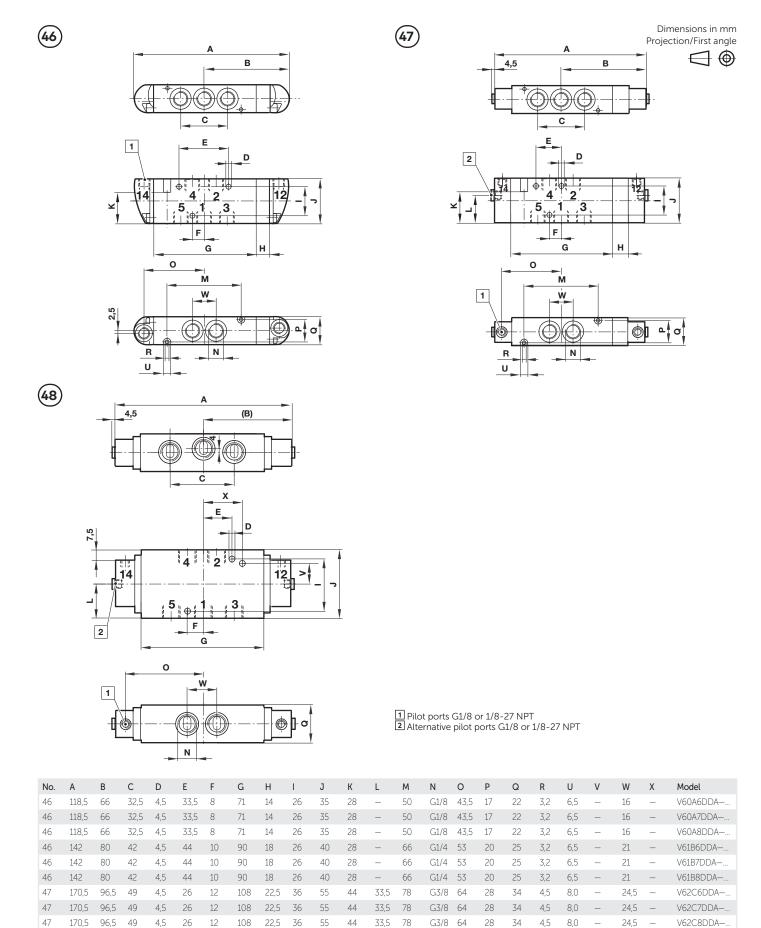
N

1 Pilot ports G1/8 or 1/8-27 NPT 2 Alternative pilot ports G1/8 or 1/8-27 NPT

No.	Α	В	С	D	Е	F	G	Н	1	J	К	L	М	N	0	Р	Q	R	Т	U	٧	W	Χ	Z	Model
43	104,5	52,5	32,5	4,5	33,5	8	71	_	26	35	28	_	50	G1/8	44	17	22	3,2	_	6,5	_	16	_	_	V60A5DDA
43	104,5	52,5	32,5	4,5	33,5	8	71	-	26	35	28	_	50	G1/8	44	17	22	3,2	_	6,5	-	16	_	_	V60AADDA
43	104,5	52,5	32,5	4,5	33,5	8	71	_	26	35	28	_	50	G1/8	44	17	22	3,2	_	6,5	_	16	_	_	V60ABDDA
43	104,5	52,5	32,5	4,5	33,5	8	71	_	26	35	28	_	50	G1/8	44	17	22	3,2	_	6,5	_	16	_	_	V60ACDDA
43	124	62	42	4,5	44	10	90	_	26	40	28	_	66	G1/4	53	20	25	3,2	_	6,5	_	21	_	_	V61B5DDA
43	124	62	42	4,5	44	10	90	_	26	40	28	_	66	G1/4	53	20	25	3,2	-	6,5	_	21	_	_	V61BADDA
43	124	62	42	4,5	44	10	90	_	26	40	28	_	66	G1/4	53	20	25	3,2	_	6,5	_	21	_	_	V61BBDDA
43	124	62	42	4,5	44	10	90	_	26	40	28	-	66	G1/4	53	20	25	3,2	-	6,5	_	21	_	-	V61BCDDA
44	148	74	49	4,5	26	12	108	_	36	55	44	33,5	78	G3/8	64	28	34	4,5	_	8,0	_	24,5	_	_	V62C5DDA
44	148	74	49	4,5	26	12	108	_	36	55	44	33,5	78	G3/8	64	28	34	4,5	-	8,0	_	24,5	_	_	V62CADDA
44	148	74	49	4,5	26	12	108	_	36	55	44	33,5	78	G3/8	64	28	34	4,5	_	8,0	_	24,5	_	_	V62CBDDA
44	148	74	49	4,5	26	12	108	_	36	55	44	33,5	78	G3/8	64	28	34	4,5	_	8,0	_	24,5	_	_	V62CCDDA
45	186	93	76	7,0	60	19	146	-	52	65	-	39,5	-	G1/2	83	-	35	_	5,5	-	46	38	57,5	115	V63D5DDA

44





G1/2 98

G1/2 98

108 66

7,0

7,0

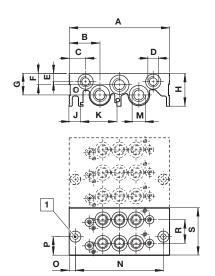
34 16

V63D6DDA-

V63D7DDA-



#### Sub bases 2 and 3 stations

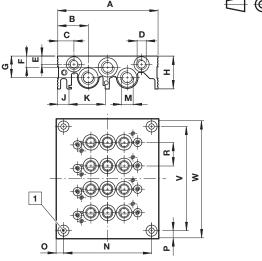


#### Sub bases 4 to 12 stations

Dimensions in mm Projection/First angle





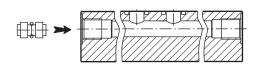


1 For M5 bolts only

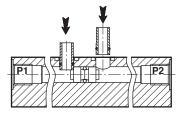
Series	Valve— stations	Α	В	С	D	Ε	F	G	Н	J	К	М	N	0	Р	R	S	V *2)	W *2)	Weight (kg) *2)	Model
V60	2	98	30	16	G1/8	8	11	21	32	11	35,5	G1/4	86	6	28	23	46	_	46	0,23	2221002
V60	3	98	30	16	G1/8	8	11	21	32	11	35,5	G1/4	86	6	28	23	69	-	69	0,28	2221003
V60	4 » 12	98	30	16	G1/8	8	11	21	32	11	35,5	G1/4	86	6	6,5	23	_	(N x 23) +10	(N x 23) +23	4 stations = 0,61 *2)	22210*1)
V61	2	104	26	9	G1/8	8	13	20	33	10	35,5	G3/8	24	40	26	26	52	-	52	0,28	2221102
V61	3	104	26	9	G1/8	8	13	20	33	10	35,5	G3/8	24	40	52	26	78	_	78	0,45	2221103
V61	4 » 12	104	26	9	G1/8	8	13	20	33	10	35,5	G3/8	24	40	6,5	26	_	(N x 26) +10	(N x 26) +23	4 stations = 0,72 *2)	22211*1)
V62	2	120	29	9	G1/8	8	15	22	38	12	35,5	G1/2	32	44	35	35	70	_	70	0,50	2221202
V62	3	120	29	9	G1/8	8	15	22	38	12	35,5	G1/2	32	44	70	35	105	-	105	0,85	2221203
V62	4 » 12	120	29	9	G1/8	8	15	22	38	12	35,5	G1/2	32	44	7	35	_	(N x 35) +12	(N x 35) +26	4 stations = 1,25 *2)	22212*1)

<sup>\*1)</sup> Insert sub—base code after model numbers: 04, 06, 08, 10 and 12 corresponding the stations

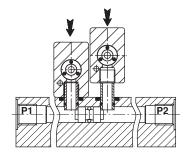
## **Mounting instructions** Pressure shut-off part



1. Set stopper at required position (in main pressure line).



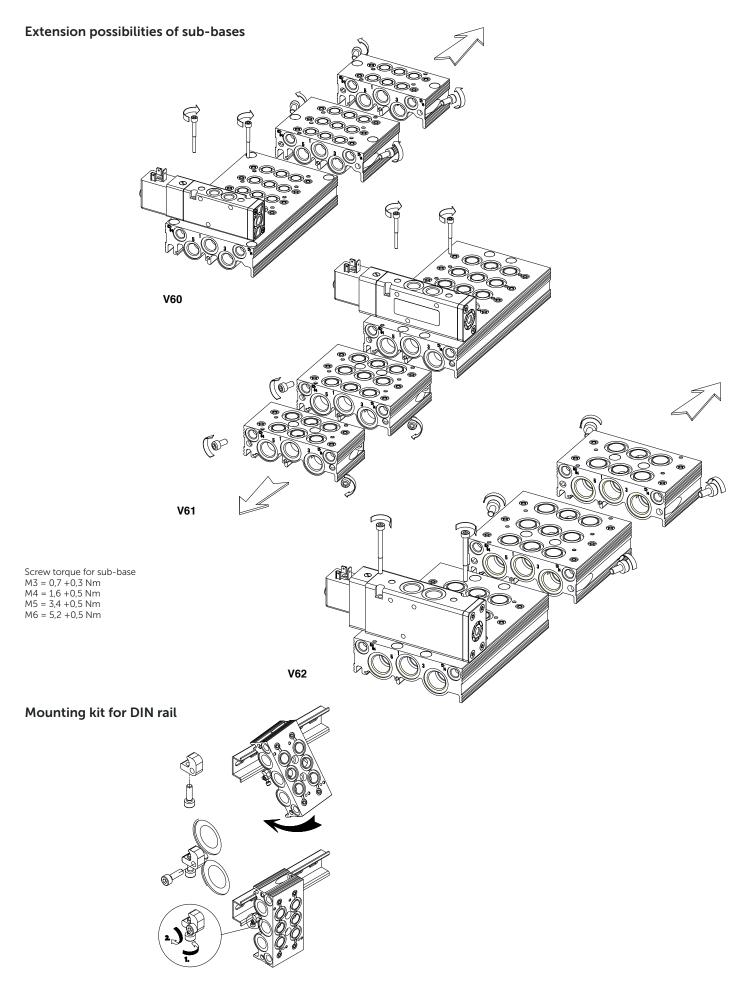
2. Insert two bushes to lock stopper in position.



3. Mount valves on sub-base (bushes rise into P port of valves).

<sup>\*2)</sup> Add +0,25 for two further stations V60 series, +0,30 for V61 and +0,54 for V62 series





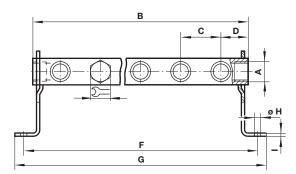


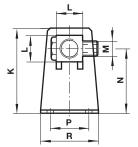
## Manifold for common pressure supply

Dimensions in mm Projection/First angle









Series	Valve stations	А	В	С	D	Е	F	G	ØН	I	К	L	М	N	Р	R	Weight (kg)	Model
V60	2	G1/4	76	32	22	14	90	106	6,5	2,5	60	16	G1/8	48	28	42	0,053	2639622
V60	3	G1/4	108	32	22	14	122	138	6,5	2,5	60	16	G1/8	48	28	42	0,075	2639623
V60	4	G1/4	140	32	22	14	154	170	6,5	2,5	60	16	G1/8	48	28	42	0,099	2639624
V60	5	G1/4	172	32	22	14	186	202	6,5	2,5	60	16	G1/8	48	28	42	0,123	2639625
V60	6	G1/4	204	32	22	14	218	234	6,5	2,5	60	16	G1/8	48	28	42	0,147	2639626
V60	7	G1/4	236	32	22	14	250	266	6,5	2,5	60	16	G1/8	48	28	42	0,174	2639627
V60	8	G1/4	268	32	22	14	282	298	6,5	2,5	60	16	G1/8	48	28	42	0,194	2639628
V60	9	G1/4	300	32	22	14	314	330	6,5	2,5	60	16	G1/8	48	28	42	0,209	2639629
V60	10	G1/4	332	32	22	14	346	362	6,5	2,5	60	16	G1/8	48	28	42	0,230	2639630
V60	12	G1/4	396	32	22	14	410	426	6,5	2,5	60	16	G1/8	48	28	42	0,280	2639632
V61	2	G3/8	85	35	25	19	100	116	6,5	3	75	23	G1/4	57	35	50	0,130	2639422
V61	3	G3/8	120	35	25	19	135	151	6,5	3	75	23	G1/4	57	35	50	0,192	2639423
V61	4	G3/8	155	35	25	19	170	186	6,5	3	75	23	G1/4	57	35	50	0,250	2639424
V61	5	G3/8	190	35	25	19	205	221	6,5	3	75	23	G1/4	57	35	50	0,309	2639425
V61	6	G3/8	225	35	25	19	240	256	6,5	3	75	23	G1/4	57	35	50	0,367	2639426
V61	7	G3/8	260	35	25	19	275	291	6,5	3	75	23	G1/4	57	35	50	0,421	2639427
V61	8	G3/8	295	35	25	19	310	326	6,5	3	75	23	G1/4	57	35	50	0,482	2639428
V61	9	G3/8	330	35	25	19	345	361	6,5	3	75	23	G1/4	57	35	50	0,537	2639429
V61	10	G3/8	365	35	25	19	380	396	6,5	3	75	23	G1/4	57	35	50	0,595	2639430
V61	12	G3/8	435	35	25	19	450	466	6,5	3	75	23	G1/4	57	35	50	0,642	2639432

#### Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »Technical features/

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.