

# Vacuum and Pressure Switches VS-V/P-W-D-K(-2C)

Measuring range from -1 bar to 10 bar



## Suitability for Industry Specific Applications

### Applications

- Vacuum and pressure switch for use in vacuum and pressure systems for process monitoring and optimizing cycle times
- Creating control circuits to improve the efficiency of systems
- The switch can be mounted in panels due to its cubic construction; optional mounting frame with a transparent protective cap
- Can be installed in handling systems directly thanks to its small design and low weight



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### Design

- Electronic switch in a stable plastic housing made from polycarbonate
- Switch with either a one or two color display
- Connection for measuring with G1/8" female thread (switch with one color display) or G1/8" male thread (switch with two color display)
- Hysteresis and comparator mode
- 2 m connection cable
- Mounting bracket and mounting frame for mounting into switch panel available as accessories

### Our Highlights...

- All functions are set using an intelligent menu structure
- Integrated automatic setting of switching point
- Anti-chattering function with adjustable response times

### Your Benefits...

- Fast and easy installation or adjusting of any settings
- Optimal switching points are determined automatically using the process parameters
- Stable switching output even in the event of sudden, brief fluctuations in the main vacuum

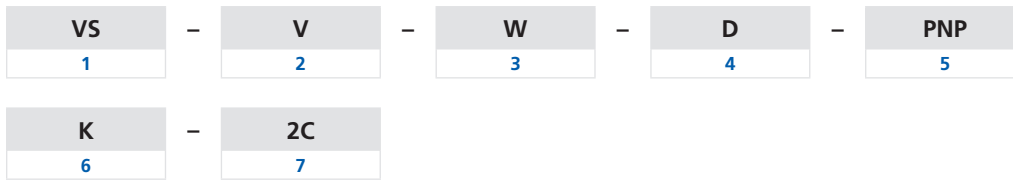
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## Designation Code Vacuum and Pressure Switches VS-V/P-W-D-K(-2C)



### 1 – Abbreviated designation

Code	Version
VS	VS

### 2 – Measuring range

Code	Measuring range in bar
V	-1 to 0
P10	0 to 10

### 3 – Design

Code	Type
W	Cube shape

### 4 – Display

Code	Type
D	Digital display

### 5 – Switching function

Code	Type
NPN	Switches to minus
PNP	Switches to plus

### 6 – Cable

Code	Cable
K	Cable

### 7 – Display

Code	Type
2C	Two-colored display

Vacuum and pressure switch VS-V/P-W-D-K(-2C) is delivered as a ready-to-connect product.

Available accessories: mounting bracket, mounting frame

## Ordering Data Vacuum and Pressure Switches VS-V/P-W-D-K(-2C)

Type	Part no.
VS-V-W-D-NPN-K	10.06.02.00417
VS-V-W-D-PNP-K	10.06.02.00418
VS-V-W-D-NPN-K-2C	10.06.02.00421
VS-V-W-D-PNP-K-2C	10.06.02.00422
VS-P10-W-D-NPN-K	10.06.02.00419
VS-P10-W-D-PNP-K	10.06.02.00420
VS-P10-W-D-NPN-K-2C	10.06.02.00423
VS-P10-W-D-PNP-K-2C	10.06.02.00424

## Ordering Data Accessories Vacuum and Pressure Switches VS-V/P-W-D-K(-2C)

Type	Mounting bracket	Mounting frame
VS-V-W-D-NPN-K	10.06.02.00425	10.06.02.00426
VS-V-W-D-PNP-K	10.06.02.00425	10.06.02.00426
VS-V-W-D-NPN-K-2C	10.06.02.00425	10.06.02.00427
VS-V-W-D-PNP-K-2C	10.06.02.00425	10.06.02.00427
VS-P10-W-D-NPN-K	10.06.02.00425	10.06.02.00426
VS-P10-W-D-PNP-K	10.06.02.00425	10.06.02.00426
VS-P10-W-D-NPN-K-2C	10.06.02.00425	10.06.02.00427
VS-P10-W-D-PNP-K-2C	10.06.02.00425	10.06.02.00427



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## Technical Data Vacuum and Pressure Switches VS-V/P-W-D-K(-2C)

Type	Measured medium	Measuring range [bar]	Max. overpressure safety [bar]	Repeatability	Hysteresis	Inputs/ outputs	Switching capacity max. [mA]
VS-V-W-D-NPN-K	Non-aggressive gases; dry, oil-free air	-1.0...0.0	3	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	2 digital	80
VS-V-W-D-PNP-K	Non-aggressive gases; dry, oil-free air	-1.0...0.0	3	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	2 digital	80
VS-V-W-D-NPN-K-2C	Non-aggressive gases; dry, oil-free air	-1.0...0.0	3	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	1 digital	125
VS-V-W-D-PNP-K-2C	Non-aggressive gases; dry, oil-free air	-1.0...0.0	3	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	1 digital	125
VS-P10-W-D-NPN-K	Non-aggressive gases; dry, oil-free air	0.0...10.0	15	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	2 digital	80
VS-P10-W-D-PNP-K	Non-aggressive gases; dry, oil-free air	0.0...10.0	15	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	2 digital	80
VS-P10-W-D-NPN-K-2C	Non-aggressive gases; dry, oil-free air	0.0...10.0	15	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	1 digital	125
VS-P10-W-D-PNP-K-2C	Non-aggressive gases; dry, oil-free air	0.0...10.0	15	± 0.2% of max. set value	Adjustable: 0 to 100% of set value or comparator mode	1 digital	125

Type	Indication	Electrical connection	Connection	Measured-value display	Voltage	Current consumption [mA]	Protection type IP	Operating temperature [°C]	Weight [g]
VS-V-W-D-NPN-K	2xLED	Cable	G1/8"-F	3-digit 7-segment LED	12-24V DC	55	40	0 ... 50	105
VS-V-W-D-PNP-K	2xLED	Cable	G1/8"-F	3-digit 7-segment LED	12-24V DC	55	40	0 ... 50	105
VS-V-W-D-NPN-K-2C	-	Cable	G1/8"-M	3-digit 7-segment LED	12-24V DC	45	40	0 ... 50	75
VS-V-W-D-PNP-K-2C	-	Cable	G1/8"-M	3-digit 7-segment LED	12-24V DC	45	40	0 ... 50	75
VS-P10-W-D-NPN-K	2xLED	Cable	G1/8"-F	3-digit 7-segment LED	12-24V DC	55	40	0 ... 50	105
VS-P10-W-D-PNP-K	2xLED	Cable	G1/8"-F	3-digit 7-segment LED	12-24V DC	55	40	0 ... 50	105
VS-P10-W-D-NPN-K-2C	-	Cable	G1/8"-M	3-digit 7-segment LED	12-24V DC	45	40	0 ... 50	75
VS-P10-W-D-PNP-K-2C	-	Cable	G1/8"-M	3-digit 7-segment LED	12-24V DC	45	40	0 ... 50	75

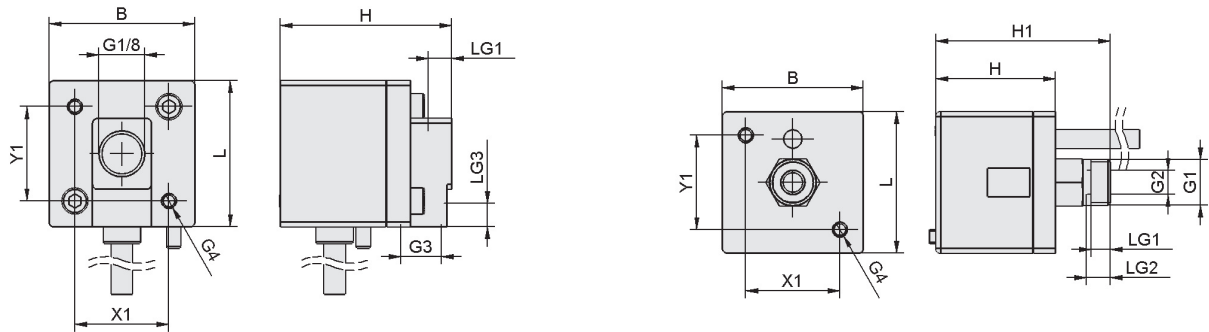
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## Design Data Vacuum and Pressure Switches VS-V/P-W-D-K(-2C)



VS-V-W-D-K, VS-P10-W-D-K

VS-V-W-D-K-2C, VS-P10-W-D-K-2C

Type	B [mm]	G1	G2	G3	G4	H [mm]	H1 [mm]
VS-V-W-D-NPN-K	31	G1/8"-F	-	G1/8"-F	M3-F	36.5	-
VS-V-W-D-PNP-K	31	G1/8"-F	-	G1/8"-F	M3-F	36.5	-
VS-V-W-D-NPN-K-2C	30	G1/8"-M	M5-F	-	M3-F	25.4	37.1
VS-V-W-D-PNP-K-2C	30	G1/8"-M	M5-F	-	M3-F	25.4	37.1
VS-P10-W-D-NPN-K	31	G1/8"-F	-	G1/8"-F	M3-F	36.5	-
VS-P10-W-D-PNP-K	31	G1/8"-F	-	G1/8"-F	M3-F	36.5	-
VS-P10-W-D-NPN-K-2C	30	G1/8"-M	M5-F	-	M3-F	25.4	37.1
VS-P10-W-D-PNP-K-2C	30	G1/8"-M	M5-F	-	M3-F	25.4	37.1

Type	L [mm]	LG1 [mm]	LG2 [mm]	LG3 [mm]	X1 [mm]	Y1 [mm]
VS-V-W-D-NPN-K	31	5	-	5	20	20
VS-V-W-D-PNP-K	31	5	-	5	20	20
VS-V-W-D-NPN-K-2C	30	4	5	-	20	20
VS-V-W-D-PNP-K-2C	30	4	5	-	20	20
VS-P10-W-D-NPN-K	31	5	-	5	20	20
VS-P10-W-D-PNP-K	31	5	-	5	20	20
VS-P10-W-D-NPN-K-2C	30	4	5	-	20	20
VS-P10-W-D-PNP-K-2C	30	4	5	-	20	20