



**New VXD series  
Pilot operated 2 port solenoid valve**

# Improved features and related benefits

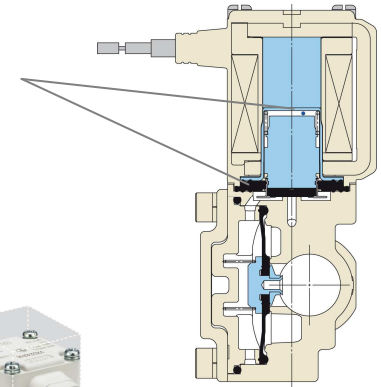
**FEATURE:** New body materials for optimising applications with air: resin body with one-touch fittings and aluminium body.

**CUSTOMER BENEFIT:** Cost savings due to weight reduction. Additionally, reduced labour costs for piping when resin body with one-touch fittings is used.



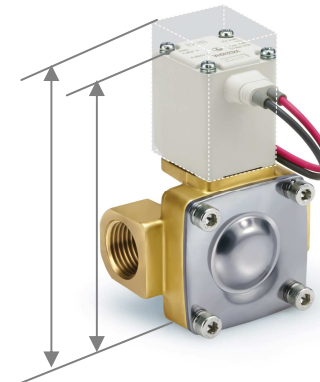
**FEATURE:** The addition of bumper and clearance reduces the noise level when ON and prevents the armature from getting stuck when using viscous fluids, improving the response time when OFF.

**CUSTOMER BENEFIT:** Contribution to a shorter cycle time and a reduced noise level environment.



**FEATURE:** More compact dimensions of the coil

**CUSTOMER BENEFIT:** Space saving for the required flow rate.



**FEATURE:** Normally open 1/4" port size and orifice size 10 are now added

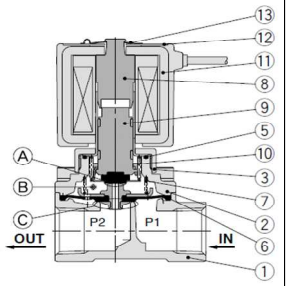
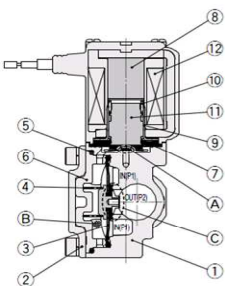
**CUSTOMER BENEFIT:** Additional models provide more design flexibility.

# Technical details

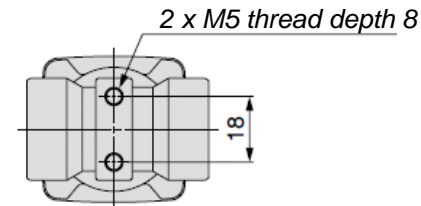
## ▪Equivalent product variations: VXD to new VXD

VXD		New VXD		
Option symbol	Description	Fluid option	Material options	Additional option
-	Brass / NBR / B coil	2 (Water)	A,B,C,G,H,L,N	
G	Stainless steel / NBR / B coil	2 (Water)	D,E,F,J,K,M,P	
E	Brass / EPDM / H coil	5 (Heated water)	A,B,C,G,H,L,N	
P	Stainless steel / EPDM / H coil	5 (Heated water)	D,E,F,J,K,M,P	
A	Brass / FKM / B coil	3 (Oil)	A,B,C,G,H,L,N	
H	Stainless steel / FKM / B coil	3 (Oil)	D,E,F,J,K,M,P	
D	Brass / FKM / H coil	6 (High temp. Oil)	A,B,C,G,H,L,N	
N	Stainless steel / FKM / H coil	6 (High temp. Oil)	D,E,F,J,K,M,P	
L	Stainless steel / FKM / B coil (High corrosive spec/Oil-free)	3 (Oil)	D,E,F,J,K,M,P	D
J	Stainless steel / EPDM / B coil (High corrosive spec/Copper-free)			
B	Brass / EPDM / B coil			

## ▪Other options & features

	Old VXD Rotatable	New VXD Non-rotatable
<b>Coil orientation</b>		
<b>Coil position</b> <b>Orifice size 10mm</b>		
<b>Ambient temperature</b>	-10 to 60 °C	-20 to 60 °C
<b>Withstand pressure</b>	5,0 MPa	2,0 MPa (1,5 MPa)

\* The old VXD2130#-04# (1/2" port size) includes two bottom mounting holes



New VXD does not include any bottom mounting hole

( ) resin body

# Technical details

## ■ General specifications

Different specifications



**Air**

### Normally closed

Port size	Orifice [mm]	Min. operating pressure differential [Mpa]		Max. operating pressure differential [Mpa]				Cv (effective area)		Weight [g]	
				AC		DC		Old VXD	New VXD	Old VXD	New VXD
		Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD				
1/4"(Ø10)	10	0,02	0,02	0,9	0,9	0,7	0,7	2,0	2,0 (1,3)	420	370* (330)
3/8"	10			2,4	2,4						
	15			1,0	1,0	1,0	1,0	5,0	5,0	670	720
1/2"(Ø12)	10			0,9	0,9	0,7	0,7	2,4	2,4 (1,5)	500	370* (330)
	15			5,5	5,5	670	720				
3/4"	20			1,0	1,0	1,0	1,0	9,5	9,5	1150	840
1"	25	(225)	(225)	1650	1360						

\* Body material is aluminium

( ): for resin body

### Normally open

Port size	Orifice [mm]	Min. operating pressure differential [Mpa]		Max. operating pressure differential [Mpa]				Cv (effective area)		Weight [g]	
				AC		DC		Old VXD	New VXD	Old VXD	New VXD
		Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD				
1/4"(Ø10)	10	-	-	-	0,6	-	0,4	-	2,0 (1,3)	-	390* (350)
3/8"	10			2,4							
		15	0,02	0,7	0,7	0,7	0,7	5,0	5,0	690	740
1/2"(Ø12)	10	-	0,02	-	0,6	-	0,4	-	2,4 (1,5)	-	390* (350)
	15	5,5		5,5	690	740					
3/4"	20	0,02	0,7	0,7	0,7	0,7	9,5	9,5	1170	860	
1"	25	(225)	(225)	1690	1390						

\* Body material is aluminium

( ): for resin body

### Internal leakage

Seal material	Leakage rate (cm <sup>3</sup> /min)	
	Old VXD	New VXD
NBR / FKM	2 or less	15 or less (aluminium/resin body)
		2 or less (metal body)

### External leakage

Seal material	Leakage rate (cm <sup>3</sup> /min)	
	Old VXD	New VXD
NBR / FKM	1 or less	15 or less (aluminium/resin body)
		1 or less (metal body)

# Technical details

## ■ General specifications

Different specifications



Water

### Normally closed

Port size	Orifice [mm]	Min. operating pressure differential [Mpa]		Max. operating pressure differential [Mpa]				Cv converted		Weight [g]	
				AC		DC		Old VXD	New VXD	Old VXD	New VXD
		Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD				
1/4"	10	0,02	0,02	0,7	0,7	0,5	0,5	1,9	1,9	420	480
3/8"	10							2,4	2,4		
	15			4,5	4,5	670	720				
1/2"	10			0,7	0,7	0,5	0,5	2,4	2,4	500	480
	15			5,5	5,5	670	720				
3/4"	20			1,0	1,0	1,0	1,0	9,5	9,5	1150	840
1"	25	13	13	1650	1360						

### Normally open

Port size	Orifice [mm]	Min. operating pressure differential [Mpa]		Max. operating pressure differential [Mpa]				Cv converted		Weight [g]		
				AC		DC		Old VXD	New VXD	Old VXD	New VXD	
		Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD					
1/4"	10	-	0,02	-	0,4	-	0,3	-	1,9	-	500	
3/8"	10								2,4			
	15			0,02	0,7	0,7	0,7	0,7	4,5	4,5	690	740
1/2"	10			-	-	0,4	-	0,3	-	2,4	-	500
	15			5,5	5,5	690	740					
3/4"	20			0,02	0,7	0,7	0,7	0,7	9,5	9,5	1170	860
1"	25	13	13	1690	1390							

### Internal leakage

Seal material	Leakage rate (cm <sup>3</sup> /min)	
	Old VXD	New VXD
NBR / FKM /EPDM	0,2 or less	0,2 or less

### External leakage

Seal material	Leakage rate (cm <sup>3</sup> /min)	
	Old VXD	New VXD
NBR / FKM /EPDM	0,1 or less	0,1 or less

# Technical details

## ■ General specifications

*Different specifications*



Oil

### Normally closed

Port size	Orifice [mm]	Min. operating pressure differential [Mpa]		Max. operating pressure differential [Mpa]				Cv converted		Weight [g]	
				AC		DC		Old VXD	New VXD	Old VXD	New VXD
		Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD				
1/4"	10	0,02	0,02	0,5	0,5	0,5	0,4	1,9	1,9	420	480
3/8"	10			2,4	2,4						
	15			4,5	4,5	670	720				
1/2"	10			0,5	0,5	0,4	0,4	2,4	2,4	500	480
	15			5,5	5,5	670	720				
3/4"	20			0,7	0,7	0,7	0,7	9,5	9,5	1150	840
1"	25	13	13	1650	1360						

### Normally open

Port size	Orifice [mm]	Min. operating pressure differential [Mpa]		Max. operating pressure differential [Mpa]				Cv converted		Weight [g]	
				AC		DC		Old VXD	New VXD	Old VXD	New VXD
		Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD				
1/4"	10	-	0,02	-	0,4	-	0,3	-	1,9	-	500
3/8"	10	0,02		0,6	0,6	0,6	0,6	4,5	4,5		
	15	-		-	0,4	-	0,3	-	2,4	-	500
1/2"	10	0,02		0,6	0,6	0,6	0,6	5,5	5,5	690	740
	15	9,5		9,5	1170	860					
3/4"	20	13		13	1690	1390					
1"	25										

### Internal leakage

Seal material	Leakage rate (cm <sup>3</sup> /min)	
	Old VXD	New VXD
FKM	0,2 or less	0,2 or less

### External leakage

Seal material	Leakage rate (cm <sup>3</sup> /min)	
	Old VXD	New VXD
FKM	0,1 or less	0,1 or less

# Technical details

## ▪ Solenoid coil specifications

*Normally closed*

*DC specification*

Orifice [mm]	Power consumption [W]		Temperature rise [°C]	
	Old VXD	New VXD	Old VXD	New VXD
10	5,5	4,5	50	50
15	4,5	4,5	45	50
20	4,5	4,5	45	50
25	7	7	45	55

*Normally closed*

*AC specification*

Orifice [mm]	Power consumption [W]		Temperature rise [°C]	
	Old VXD	New VXD	Old VXD	New VXD
10	7	7	55	60
15	7	7	55	60
20	7	7	55	60
25	9,5	9,5	60	70

*Normally open*

*DC specification*

Orifice [mm]	Power consumption [W]		Temperature rise [°C]	
	Old VXD	New VXD	Old VXD	New VXD
10	-	7,5	-	60
15	4,5	7,5	45	60
20	4,5	7,5	45	60
25	7	8,5	45	70

*Normally open*

*AC specification*

Orifice [mm]	Power consumption [W]		Temperature rise [°C]	
	Old VXD	New VXD	Old VXD	New VXD
10	-	9	-	60
15	7	9	55	60
20	7	9	55	60
25	9,5	10	60	70

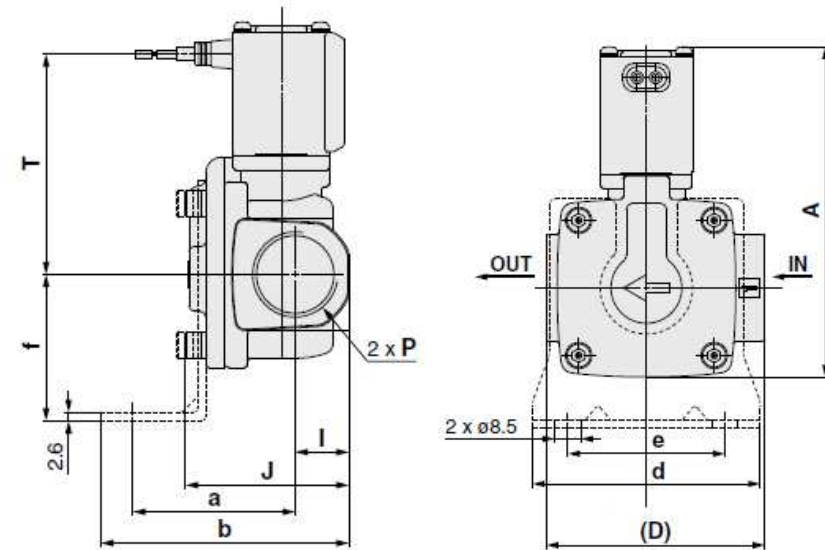
*Different specifications*

# Technical details

## ▪Face to face dimensions

Orifice size [mm]	D [mm]	
	Old VXD	New VXD
10	50	50
15	63	70
20	80	71
25	90	95

Different dimensions



## ▪Bracket mounting and other dimensions

Orifice size [mm]	A [mm]		a [mm]		b [mm]		f [mm]	
	Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD
10*	80,5 / 86	88(93,5)		48,5/47		55/53,5		28/27
15	103,5(110,5)	96,5(102,5)	42	47,5	66	71,5	39	39
20	115(122)	107,5(113,5)	51	50,5	78	77,5	45,5	45,5
25	133(140.,5)	126,5(134,5)	56	55,5	86	85,5	49,5	49,5

( ) Refers to Normally Open

\* Old VXD orifice size 10mm has a different overall shape

Orifice size [mm]	d [mm]		e [mm]		I [mm]		J [mm]	
	Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD	Old VXD	New VXD
10		67		52		11/13		37,5/42,5
15	57	57	34	34	14	14	44,5	50
20	74	74	51	51	17	17	51,5	51
25	81	81	58	58	20	20	60	59,5