

MOTOR OPERATED VALVES / Type VKV



Type VKV
(Drip-proof model)



Type VKV
(Hot gas compatible model)

Scan here
for the capacity table. ⇒



URL : https://saginomiya.co.jp/en/auto/pdf/vkv_capacity.pdf

FEATURES

- Suitable for a wide range of air conditioning and refrigeration systems.
- Hot gas compatible models are also available (Excluding VKV-40D).
- Standards : UL, cUL (Please contact us for details.)

APPLICATIONS

- Room air conditioners
- Packaged air conditioners
- VRF
- Chillers etc.

COMMON SPECIFICATIONS

- Max. working pressure : 4.3 MPa (R32)
4.2 MPa (Except R32)
- Fluid temperature : -50 to 60°C
(It should be 50% or less on energizing ratio.)
-50 to 120°C
(Hot gas compatible model. It should be 50% or less on energizing ratio.)
- Ambient temperature : -50 to 60°C
(It should be 50% or less on energizing ratio.)
- Flow direction : Bi-flow
- Excitation method : 1-2 phase, Uni-polar

DESCRIPTION OF CATALOG NO.

VKV - 18 D S □ □
I II III IV V

I	Type
II	Port size
III	Connection type
IV	Coil style
V	Serial number

TYPE NUMBER SELECTION

Catalog No.	* 1 Refrigerant	Port size φ (mm)	Cv value	Connection (Solder) (mm)		Operation range pulse	B → A M.O.P.D. (MPa)	A → B Valve closing pressure (MPa)	* 2 Wt. (kg)
				Side B	Side A				
VKV-14DS	R32	1.4	0.05	φ 7.94 ODM	φ 7.94 ODM	0 to 480	3.5	2.8 or less	0.27
VKV-18DS	R134a	1.8	0.10						
VKV-25DS	R404A	2.5	0.18						
VKV-30DS	R407C	3.0	0.24						
VKV-32DS	R410A	3.0	0.24	φ 9.52 ODM	φ 12.7 ODM	0 to 480	2.5	1.5 or less	0.29
VKV-32DS	R448A	3.2	0.28						
VKV-32DS	R449A	3.2	0.28						
VKV-40DS	R407H	4.0	0.45	φ 12.7 ODM	φ 12.7 ODM	0 to 480	2.5	0.3 or less	0.33

* 1 For other refrigerants, please contact us.

* 2 Includes a drip-proof type coil. (Lead wire length 500mm)

TYPE NUMBER SELECTION

< Hot gas compatible model >

Catalog No.	* 1 Refrigerant	Port size φ (mm)	Cv value	Connection (Solder) (mm)		Operation range pulse	B → A M.O.P.D. (MPa)	A → B Valve closing pressure (MPa)	* 2 Wt. (kg)
				Side B	Side A				
VKV-14DS167	R32	1.4	0.05	φ 7.94 ODM	φ 7.94 ODM	0 to 480	3.5	2.8 or less	0.27
VKV-18DS168	R134a	1.8	0.10						
VKV-25DS169	R404A	2.5	0.18						
VKV-30DS170	R407C	3.0	0.24						
VKV-32DS171	R410A	3.0	0.24	φ 9.52 ODM	φ 12.7 ODM	0 to 480	2.5	1.5 or less	0.29
VKV-32DS171	R448A	3.2	0.28						
VKV-32DS171	R449A	3.2	0.28						

* 1 For other refrigerants, please contact us.

* 2 Includes a coil. (Lead wire length 500mm)

Catalog No.	Capacity (U.S.R.T.) (kW)							
	CT 38°C / ET 5°C / SC 0K / SH 0K							
	R32	R134a	R404A	R407C	R410A	R448A	R449A	R407H
VKV-14DS VKV-14DS167	2.5 {8.9}	1.1 {4.0}	1.0 {3.6}	1.5 {5.3}	1.7 {6.1}	1.5 {5.3}	1.4 {5.1}	1.7 {6.1}
VKV-18DS VKV-18DS168	5.1 {17.8}	2.3 {8.1}	2.1 {7.3}	3.0 {10.6}	3.4 {12.1}	3.0 {10.6}	2.9 {10.2}	3.5 {12.2}
VKV-25DS VKV-25DS169	9.1 {32.1}	4.1 {14.5}	3.7 {13.1}	5.4 {19.0}	6.2 {21.8}	5.4 {19.0}	5.2 {18.3}	6.2 {21.9}
VKV-30DS VKV-30DS170	12.2 {42.8}	5.5 {19.3}	5.0 {17.4}	7.2 {25.4}	8.3 {29.1}	7.2 {25.3}	6.9 {24.4}	8.3 {29.2}
VKV-32DS VKV-32DS171	14.2 {49.9}	6.4 {22.5}	5.8 {20.3}	8.4 {29.6}	9.6 {33.9}	8.4 {29.6}	8.1 {28.5}	9.7 {34.1}
VKV-40DS	22.8 {80.2}	10.3 {36.2}	9.3 {32.7}	13.5 {47.6}	15.5 {54.5}	13.5 {47.5}	13.0 {45.8}	15.6 {54.8}

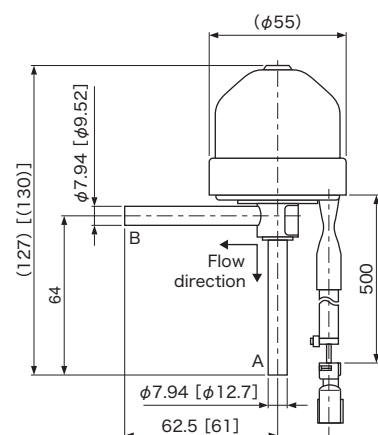
COIL SPECIFICATIONS

Catalog No. (Valve body)	* 1 Rated voltage	Current	Power consumption	* 2 Insulation class
VKV-14DS to 32DS VKV-14DS167 to 32DS171	12V.DC ± 10%	0.26A / Phase (20°C)	Approx. 3.1W	Class E molded
VKV-40DS		0.38A / Phase (20°C)		

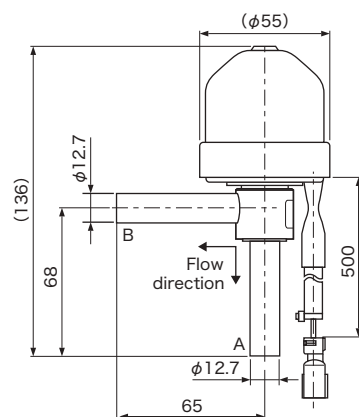
* 1 24V.DC coil is also available. Please contact us for details.

* 2 Compliant with IEC60085, 60335-2-40.

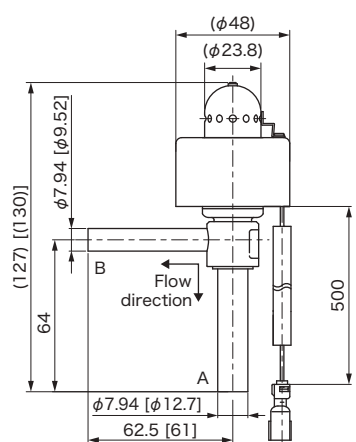
DIMENSIONS



Type VKV-14DS to 30DS [32DS]



Type VKV-40DS

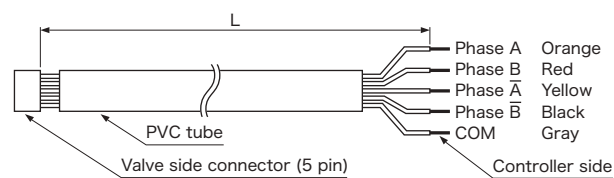


Type VKV-14DS167 to 30DS170 [32DS171]
(Hot gas compatible model)

Unit : mm

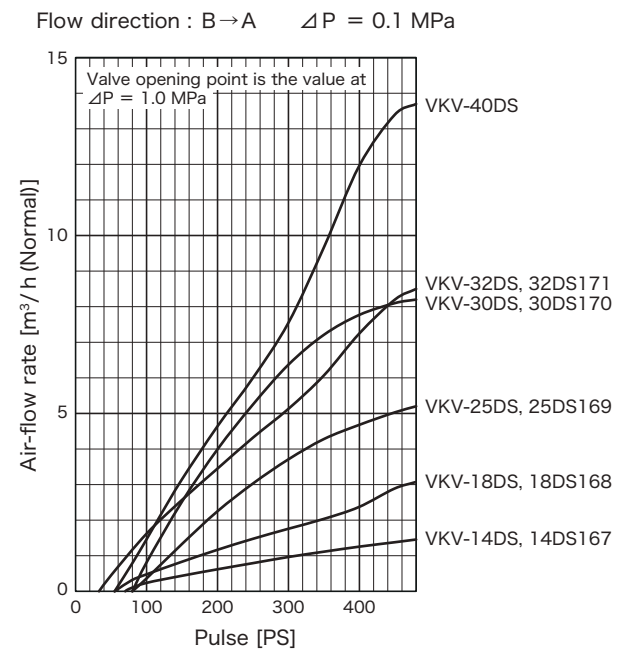
OPTIONAL PARTS

- Relay cable



Catalog No.	L (m)
PKV-LK02N	2
PKV-LK05N	5
PKV-LK10N	10

FLOW CHARACTERISTICS



RELATED PRODUCT

- Pulse converters Type LNE (Pages 39 to 40)