

 Aliaxis



**DKM/CP DN 40÷65**  
PVC-U / PVC-C / PP-H / PVDF

Pneumatically actuated 2-way diaphragm valve

# DKM/CP DN 40÷65

The DKM/CP diaphragm valve is particularly suitable for shutting off and regulating abrasive or dirty fluids. The new internal geometry of the body optimises fluid dynamic efficiency by increasing the flow rate and ensuring an optimum linearity of the flow adjustment curve. The DKM/CP is extremely compact and very light.

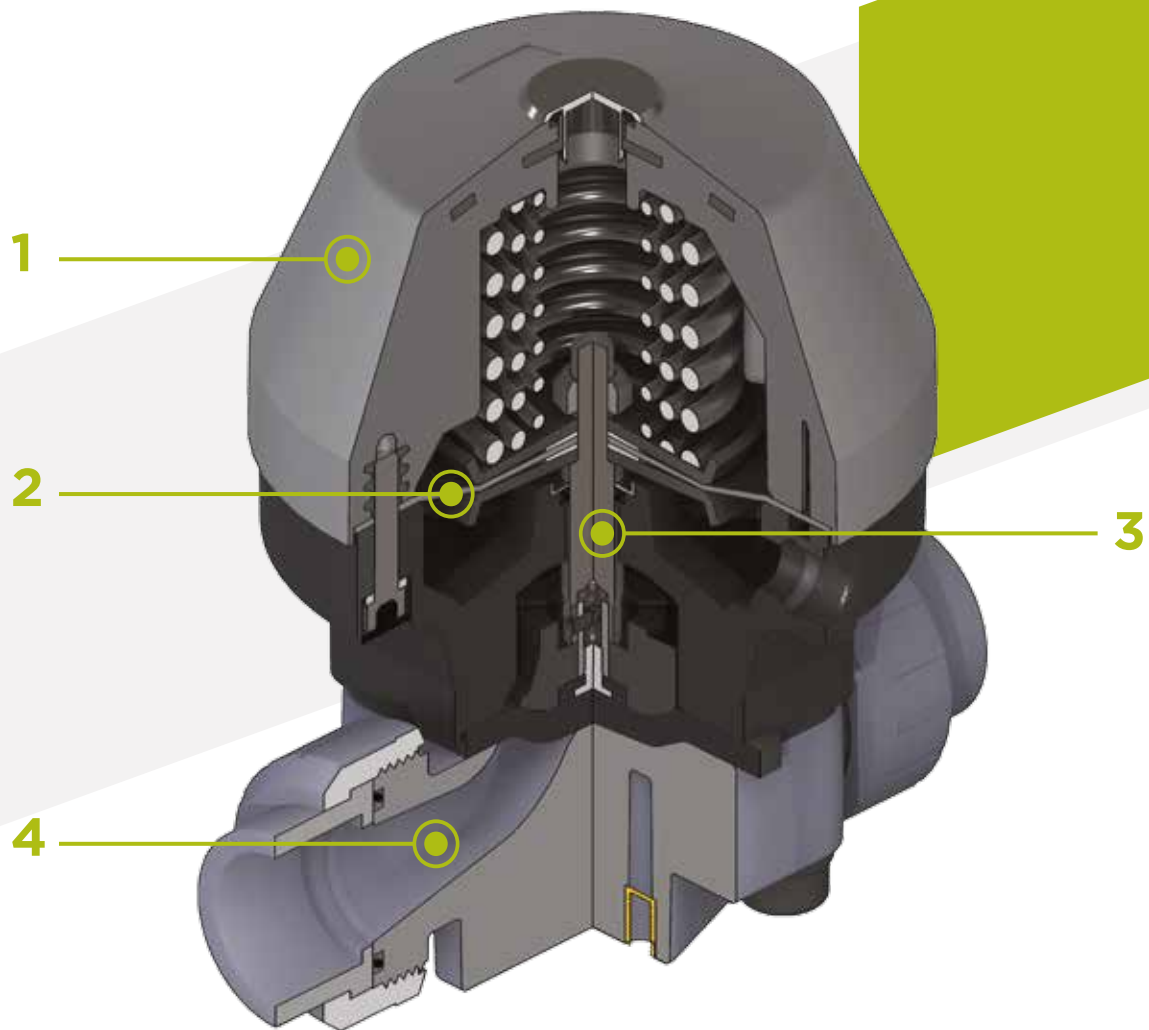
## PNEUMATICALLY ACTUATED 2-WAY DIAPHRAGM VALVE

- Connection system for solvent weld, threaded and flanged joints
- **Optimised fluid dynamic design:** maximum output flow rate thanks to the optimised efficiency of the fluid dynamics that characterise the new internal geometry of the body
- **Robust and reliable diaphragm actuator in PP-GR** ideal for heavy-duty applications in chemically aggressive environments
- **Modularity of the range:** only 3 actuators and diaphragms for 5 different valve sizes
- Bonnet fastening screws in stainless steel protected against the external environment by PE plugs.
- **CDSA** (Circular Diaphragm Sealing Angle) system that, thanks to the uniform distribution of shutter pressure on the diaphragm seal, offers the following advantages:
  - reduction in the tightening torque of the screws fixing the actuator to the valve body
  - reduced mechanical stress on all valve components (actuator, body and diaphragm)
  - easy to clean valve interior
  - low risk of the accumulation of deposits, contamination or damage to the diaphragm due to crystallisation

Technical specifications	
<b>Construction</b>	Pneumatically actuated diaphragm valve with body at maximized flow rate
<b>Size range</b>	DN 40 ÷ 65
<b>Nominal pressure</b>	PN 10 with water at 20 °C
<b>Temperature range</b>	<b>PVC-U:</b> 0 °C ÷ 60 °C - <b>PVC-C:</b> 0 °C ÷ 100 °C <b>PP-H:</b> 0 °C ÷ 100 °C - <b>PVDF:</b> -20 °C ÷ 120 °C
<b>Coupling standards</b>	<b>Solvent welding/Welding</b> EN ISO 1452, EN ISO 15493, EN ISO 15494, EN ISO 10931, BS 4346-1, DIN 8063, NF T54-028, ASTM D 2467, ASTM F 439. Can be coupled to pipes according to EN ISO 1452, EN ISO 15493, EN ISO 15494, EN ISO 10931, DIN 8062, NF T54-016, ASTM D 1785, ASTM F 441 <b>Thread:</b> ISO 228-1, DIN 2999, ASTM D 2464 <b>Flanging system:</b> ISO 7005-1, EN ISO 1452, EN ISO 15493, EN 1092-1, EN ISO 15494, EN ISO 10931, EN 558-1, DIN 2501, ANSI B16.5 Cl.150, JIS B2220
<b>Reference standards</b>	<b>Construction criteria:</b> EN ISO 16138, EN ISO 1452, EN ISO 15493, EN ISO 15494, EN ISO 10931 <b>Test methods and requirements:</b> ISO 9393 <b>Installation criteria:</b> DVS 2204, DVS 2221, DVS 2202-1, DVS 2201-1, DVS 2207-11, DVS 2207-15, DVS 2208-1, UNI 11242, UNI 11318
<b>Valve material</b>	PVC-U / PVC-C / PP-H / PVDF
<b>Diaphragm material</b>	EPDM, FPM, PTFE (on request NBR)
<b>Control options</b>	Pneumatic actuator

The diaphragm actuator in PP-GR is characterized by its robust construction, making DKM the ideal choice for demanding and chemically aggressive applications.

Technical specifications - pneumatic actuator	
<b>Construction</b>	Single-acting (NC-NO) and double-acting (DA) pneumatic piston actuator
<b>Actuator Material</b>	<b>Body and bonnet:</b> PP-GR
<b>Control air pressure</b>	<b>Minimum:</b> according to the working pressure and operation of the actuator (see detailed graphs ) <b>Maximum:</b> NC: 6 bar - NO: 5 bar - DA: 5 bar
<b>Power supply</b>	Dry or lubricated filtered compressed air. If using other fluids, contact the FIP service centre
<b>Control fluid temperature</b>	Max 40 °C
<b>Working temperature</b>	-20 °C ÷ 50 °C
<b>Accessories</b>	<ul style="list-style-type: none"> <li>• Optical position indicator</li> <li>• Stroke limiter with position indicator</li> <li>• Stroke limiter with position indicator and emergency manual override</li> <li>• Limit switch boxes</li> <li>• Electro-pneumatic positioner</li> <li>• Pilot solenoid valves 3/2 ways for direct or manifold mounting</li> <li>• Distance plate</li> </ul>



**1 Diaphragm actuator in PP-GR characterized by its robust construction.** In the configuration Normally Closed, the upper part is equipped with steel reinforcement. **Absence of metal parts exposed to the external environment** prevents any risk of corrosion

**2** The special **control diaphragm** reinforced with fibres can reach up to 10 million drives without showing signs of wear

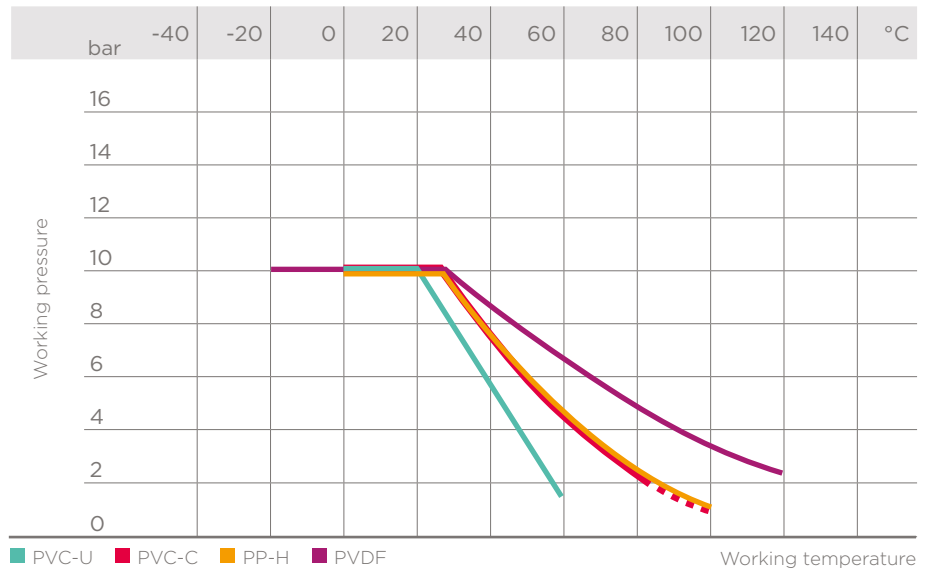
**3 High strength stainless steel stem** with floating pin connection between the actuator stem and diaphragm to prevent concentrated loads, improve the seal and extend its lifetime

**4 New design of valve body interior**  
**Substantially increased flow coefficient** and reduced pressure drop. The degree of efficiency reached has also enabled **the size and weight** of the valve to be **reduced**  
**Adjustment linearity:** the internal profiles of the valve also greatly improve its characteristic curve, resulting in **extremely sensitive and precise adjustment** along the entire stroke of the shutter

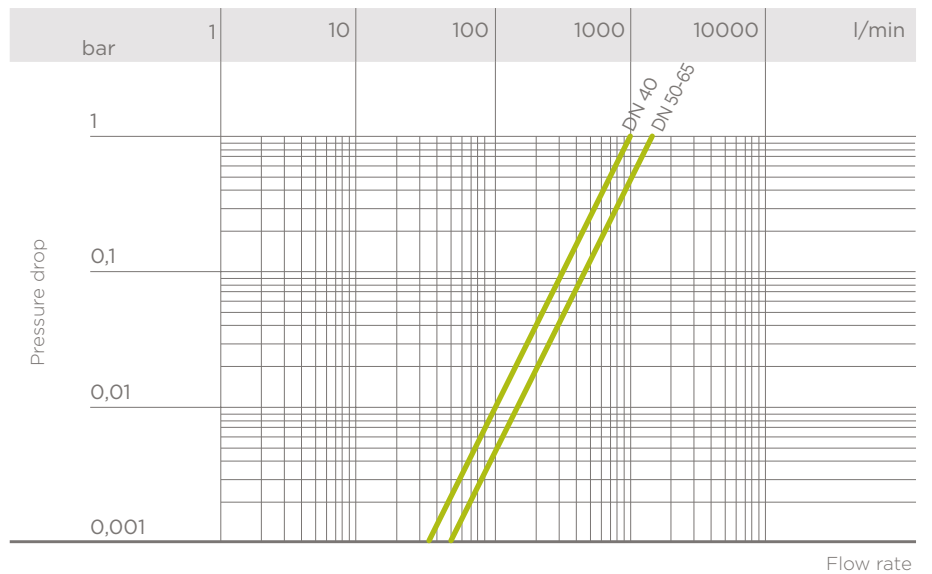
# TECHNICAL DATA

## PRESSURE VARIATION ACCORDING TO TEMPERATURE

For water and non-hazardous fluids with regard to which the material is classified as CHEMICALLY RESISTANT. In other cases, a reduction of the nominal pressure PN is required (25 years with safety factor).



## PRESSURE DROP GRAPH



## K<sub>v</sub>100 FLOW COEFFICIENT

The K<sub>v</sub>100 flow coefficient is the Q flow rate of litres per minute of water at a temperature of 20 °C that will generate Δp= 1 bar pressure drop at a certain valve position.

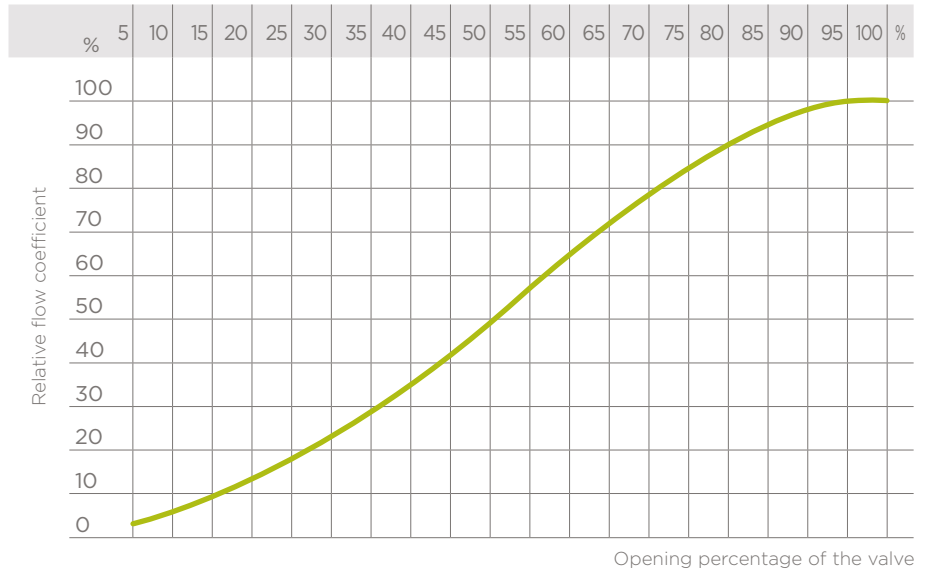
The K<sub>v</sub>100 values shown in the table are calculated with the valve completely open.

DN	40	50	65
K <sub>v</sub> 100 l/min	1087	1648	1600

# TECHNICAL DATA

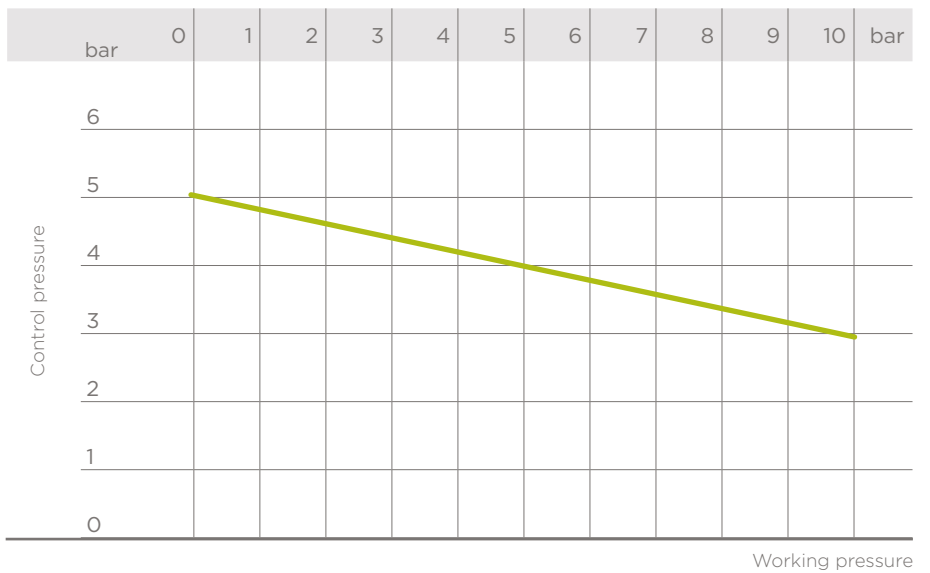
## RELATIVE FLOW COEFFICIENT GRAPH

The relative flow coefficient refers to the variation in the flow rate as a function of the valve opening stroke.



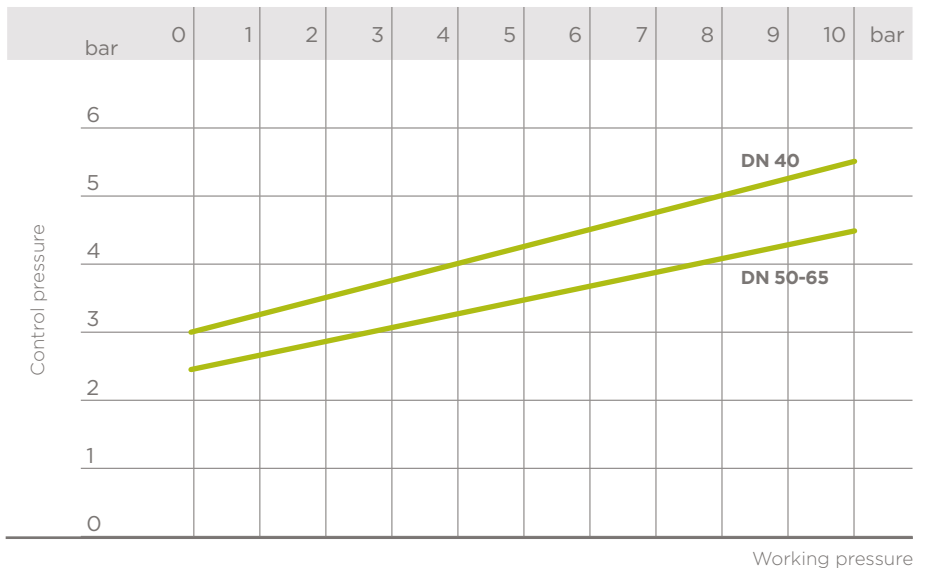
## CONTROL PRESSURE ACCORDING TO WORKING PRESSURE DKM/CP NC

Minimum control pressure according to working pressure with EPDM/FPM diaphragm



## CONTROL PRESSURE ACCORDING TO WORKING PRESSURE DKM/CP NO-DA

Minimum control pressure according to working pressure with EPDM/FPM diaphragm



## FUNCTIONAL CHARACTERISTICS

	Double-acting (DA)	normally closed (NC)	Single-acting (SA)
Function type	double-acting	normally closed (NC)	normally open (NO)
Valve opening	air	air	spring
Valve closing	air	spring	air

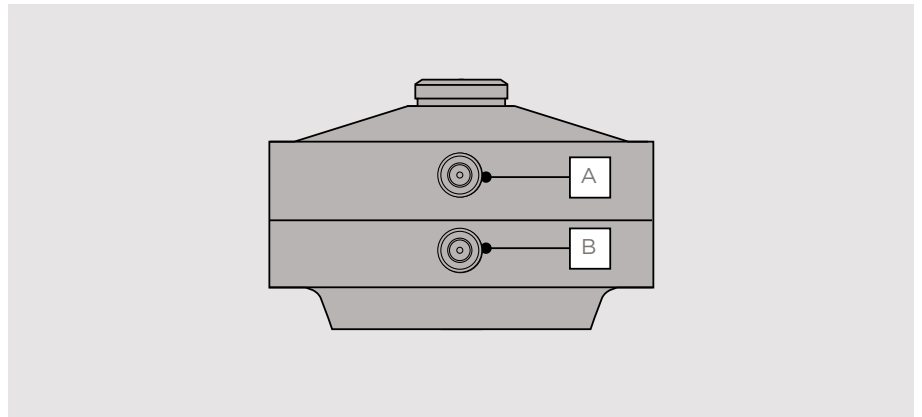
## ACTUATOR CAPACITY

NI: Normal-liter  
Volume at atmospheric pressure

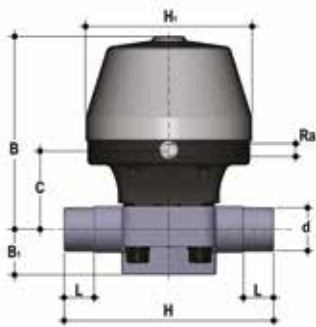
DN	40	50	65
NC	0.36 NI	1.15 NI	1.15 NI
NO	0.28 NI	0.50 NI	0.50 NI
DA	0.28 NI	0.50 NI	0.50 NI

## COMPRESSED AIR CONNECTIONS

Function type	Normally open (NO)	Double-acting (DA)
Valve opening	-	Inlet B
Valve closing	Inlet A	Inlet A



# DIMENSIONS



## DKMDV/CP DKMDC/CP DKMDM/CP DKMDF/CP

Pneumatically actuated diaphragm valve, Normally Closed, with male ends, metric series PVC-U, PVC-C, PP-H, PVDF

d	DN	PN	B	B <sub>1</sub>	C	H	H <sub>1</sub>	L	Ra	g NC
50	40	10	202	35	96	194	155	31	1/4"	3900
63	50	10	254	46	113	224	210	38	1/4"	7724
75	65	10	254	46	113	284	210	44	1/4"	7854

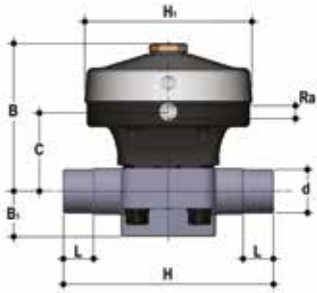
Figures for PVC-U version

## DKM/CP NC Codes

d	DN	DKMDV/CP PVC-U						DKMDC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMDVNC050E	DKMDVNC050F	DKMDVNC050P	DKMDCNC050E	DKMDCNC050F	DKMDCNC050P	DKMDCNC050E	DKMDCNC050F	DKMDCNC050P
63	50	DKMDVNC063E	DKMDVNC063F	DKMDVNC063P	DKMDCNC063E	DKMDCNC063F	DKMDCNC063P	DKMDCNC063E	DKMDCNC063F	DKMDCNC063P
75	65	DKMDVNC075E	DKMDVNC075F	DKMDVNC075P	DKMDCNC075E	DKMDCNC075F	DKMDCNC075P	DKMDCNC075E	DKMDCNC075F	DKMDCNC075P

d	DN	DKMDM/CP PP-H						DKMDF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMDMNC050E	DKMDMNC050F	DKMDMNC050P	DKMDFNC050E	DKMDFNC050F	DKMDFNC050P	DKMDFNC050E	DKMDFNC050F	DKMDFNC050P
63	50	DKMDMNC063E	DKMDMNC063F	DKMDMNC063P	DKMDFNC063E	DKMDFNC063F	DKMDFNC063P	DKMDFNC063E	DKMDFNC063F	DKMDFNC063P
75	65	DKMDMNC075E	DKMDMNC075F	DKMDMNC075P	DKMDFNC075E	DKMDFNC075F	DKMDFNC075P	DKMDFNC075E	DKMDFNC075F	DKMDFNC075P





## DKMDV/CP DKMDC/CP DKMDM/CP DKMDF/CP

Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with male ends, metric series PVC-U, PVC-C, PP-H, PVDF

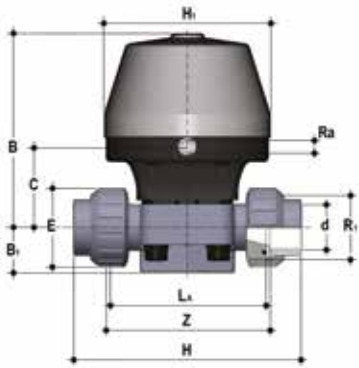
d	DN	PN	B	B <sub>1</sub>	C	H	H <sub>1</sub>	L	Ra	<sup>g</sup> NO-DA
50	40	10	160	35	94	194	155	31	1/4"	3320
63	50	10	200	46	123	224	218	38	1/4"	5624
75	65	10	200	46	123	284	218	44	1/4"	5754

Figures for PVC-U version

## DKM/CP NO-DA Codes

d	DN	DKMDV/CP PVC-U						DKMDC/CP PVC-C	
		EPDM	FPM	PTFE	EPDM	FPM	PTFE		
50	40	DKMDVNO050E	DKMDVNO050F	DKMDVNO050P	DKMDCNO050E	DKMDCNO050F	DKMDCNO050P		
63	50	DKMDVNO063E	DKMDVNO063F	DKMDVNO063P	DKMDCNO063E	DKMDCNO063F	DKMDCNO063P		
75	65	DKMDVNO075E	DKMDVNO075F	DKMDVNO075P	DKMDCNO075E	DKMDCNO075F	DKMDCNO075P		

d	DN	DKMDM/CP PP-H			DKMDF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMDMNO050E	DKMDMNO050F	DKMDMNO050P	DKMDFNO050E	DKMDFNO050F	DKMDFNO050P
63	50	DKMDMNO063E	DKMDMNO063F	DKMDMNO063P	DKMDFNO063E	DKMDFNO063F	DKMDFNO063P
75	65	DKMDMNO075E	DKMDMNO075F	DKMDMNO075P	DKMDFNO075E	DKMDFNO075F	DKMDFNO075P



## DKMUIV/CP DKMUIC/CP DKMUIM/CP DKMUIF/CP

Pneumatically actuated diaphragm valve, Normally Closed, with female union ends, metric series PVC-U, PVC-C, PP-H, PVDF

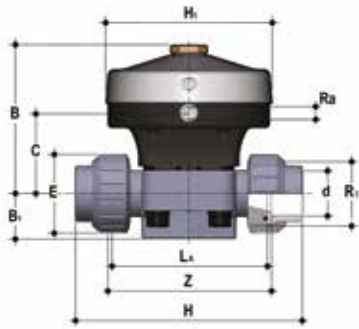
d	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	g NC
50	40	10	202	35	96	79	222	155	154	2" 1/4	1/4"	160	4112
63	50	10	254	46	113	98	266	210	184	2" 3/4	1/4"	190	8120

Figures for PVC-U version

## DKM/CP NC Codes

d	DN	DKMUIV/CP PVC-U				DKMUIC/CP PVC-C			
		EPDM	FPM	PTFE	EPDM	FPM	PTFE		
50	40	DKMUIVNC050E	DKMUIVNC050F	DKMUIVNC050P	DKMUICNC050E	DKMUICNC050F	DKMUICNC050P		
63	50	DKMUIVNC063E	DKMUIVNC063F	DKMUIVNC063P	DKMUICNC063E	DKMUICNC063F	DKMUICNC063P		

d	DN	DKMUIM/CP PP-H				DKMUIF/CP PVDF			
		EPDM	FPM	PTFE	EPDM	FPM	PTFE		
50	40	DKMUIMNC050E	DKMUIMNC050F	DKMUIMNC050P	DKMUIFNC050E	DKMUIFNC050F	DKMUIFNC050P		
63	50	DKMUIMNC063E	DKMUIMNC063F	DKMUIMNC063P	DKMUIFNC063E	DKMUIFNC063F	DKMUIFNC063P		



## DKMUIV/CP DKMUIC/CP DKMUIM/CP DKMUIF/CP

Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with female union ends, metric series PVC-U, PVC-C, PP-H, PVDF

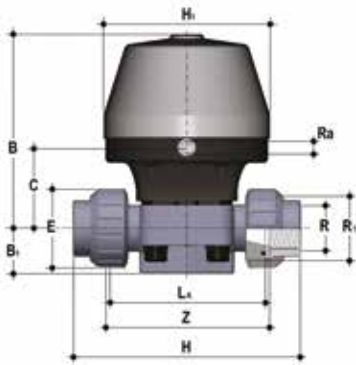
d	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	<sup>g</sup> NO-DA
50	40	10	160	35	94	79	222	155	154	2" 1/4	1/4"	160	3532
63	50	10	200	46	123	98	266	218	184	2" 3/4	1/4"	190	6020

Figures for PVC-U version

## DKM/CP NO-DA Codes

d	DN	DKMUIV/CP PVC-U				DKMUIC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE	
50	40	DKMUIVNO050E	DKMUIVNO050F	DKMUIVNO050P	DKMUICNO050E	DKMUICNO050F	DKMUICNO050P	
63	50	DKMUIVNO063E	DKMUIVNO063F	DKMUIVNO063P	DKMUICNO063E	DKMUICNO063F	DKMUICNO063P	

d	DN	DKMUIM/CP PP-H			DKMUIF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMUIMNO050E	DKMUIMNO050F	DKMUIMNO050P	DKMUIFNO050E	DKMUIFNO050F	DKMUIFNO050P
63	50	DKMUIMNO063E	DKMUIMNO063F	DKMUIMNO063P	DKMUIFNO063E	DKMUIFNO063F	DKMUIFNO063P



## DKMUFC/CP

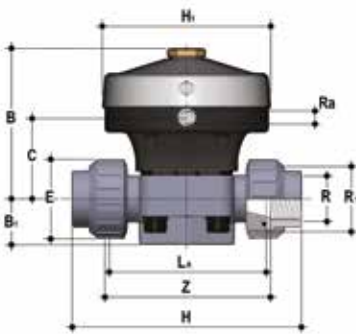
Pneumatically actuated diaphragm valve, Normally Closed, with BSP threaded female union ends, PVC-U, PVC-C series

R	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	<sup>g</sup> NC
1" 1/2	40	10	202	35	96	79	208	155	154	2" 1/4	1/4"	165	4112
2"	50	10	254	46	113	98	246	210	184	2" 3/4	1/4"	195	8120

Figures for PVC-U version

## DKM/CP NC Codes

R	DN	DKMUFC/CP PVC-U			DKMUFC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMUFCNC112E	DKMUFCNC112F	DKMUFCNC112P	DKMUFCNC112E	DKMUFCNC112F	DKMUFCNC112P
2"	50	DKMUFCNC200E	DKMUFCNC200F	DKMUFCNC200P	DKMUFCNC200E	DKMUFCNC200F	DKMUFCNC200P



## DKMUFC/CP

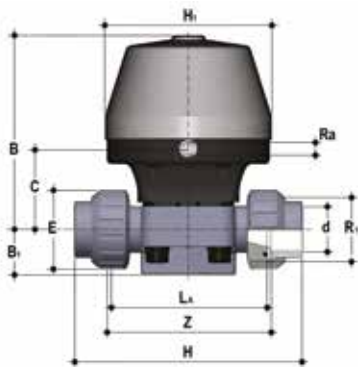
Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with BSP threaded female union ends, PVC-U, PVC-C series

R	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	<sup>g</sup> NO-DA
1" 1/2	40	10	160	35	94	79	208	155	154	2" 1/4	1/4"	165	3532
2"	50	10	200	46	123	98	246	218	184	2" 3/4	1/4"	195	6020

Figures for PVC-U version

## DKM/CP NO-DA Codes

R	DN	DKMUFC/CP PVC-U			DKMUFC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMUFCNO112E	DKMUFCNO112F	DKMUFCNO112P	DKMUFCNO112E	DKMUFCNO112F	DKMUFCNO112P
2"	50	DKMUFCNO200E	DKMUFCNO200F	DKMUFCNO200P	DKMUFCNO200E	DKMUFCNO200F	DKMUFCNO200P



## DKMUAV/CP DKMUAC/CP

Pneumatically actuated diaphragm valve, Normally Closed, with female union ends for solvent welding, ASTM PVC-U, PVC-C series

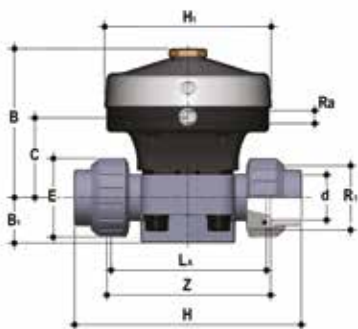
d	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	g <sub>NC</sub>
1" 1/2	40	10	202	35	96	79	234	155	154	2" 1/4	1/4"	164	4112
2"	50	10	254	46	113	98	272	210	184	2" 3/4	1/4"	195	8120

Figures for PVC-U version

For spare parts related to installation prior to october 2017 please contact FIP Technical Support

## DKM/CP NC Codes

d	DN	DKMUAV/CP PVC-U			DKMUAC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMUAVNC112E	DKMUAVNC112F	DKMUAVNC112P	DKMUACNC112E	DKMUACNC112F	DKMUACNC112P
2"	50	DKMUAVNC200E	DKMUAVNC200F	DKMUAVNC200P	DKMUACNC200E	DKMUACNC200F	DKMUACNC200P



## DKMUAV/CP DKMUAC/CP

Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with female union ends for solvent welding, ASTM PVC-U, PVC-C series

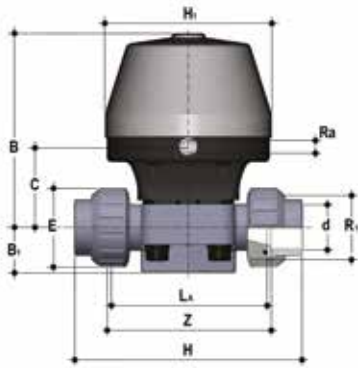
d	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	g <sub>NO-DA</sub>
1" 1/2	40	10	160	35	94	79	234	155	154	2" 1/4	1/4"	164	3532
2"	50	10	200	46	123	98	272	218	184	2" 3/4	1/4"	195	6020

Figures for PVC-U version

For spare parts related to installation prior to october 2017 please contact FIP Technical Support

## DKM/CP NO-DA Codes

d	DN	DKMUAV/CP PVC-U			DKMUAC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMUAVNO112E	DKMUAVNO112F	DKMUAVNO112P	DKMUACNO112E	DKMUACNO112F	DKMUACNO112P
2"	50	DKMUAVNO200E	DKMUAVNO200F	DKMUAVNO200P	DKMUACNO200E	DKMUACNO200F	DKMUACNO200P



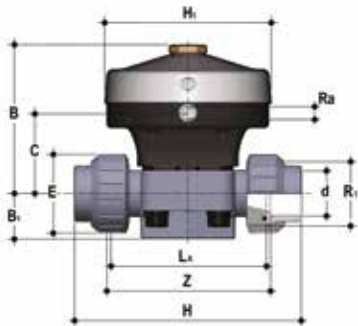
## DKMULV/CP

Pneumatically actuated diaphragm valve, Normally Closed, with female union ends for solvent welding, ASTM PVC-U series

d	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	g NC
1" 1/2	40	10	202	35	96	79	222	155	154	2" 1/4	1/4"	162	4112
2"	50	10	254	46	113	98	266	210	184	2" 3/4	1/4"	194	8120

## DKM/CP NC Codes

d	DN	EPDM	FPM	DKMULV/CP PVC-U PTFE
1" 1/2	40	DKMULVNC112E	DKMULVNC112F	DKMULVNC112P
2"	50	DKMULVNC200E	DKMULVNC200F	DKMULVNC200P



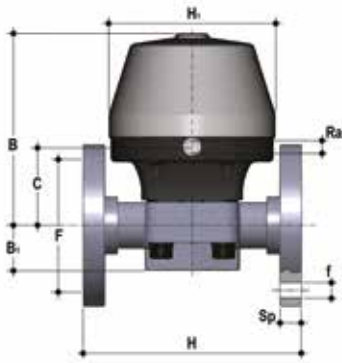
## DKMULV/CP

Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with female union ends for solvent welding, PVC-U series

d	DN	PN	B	B <sub>1</sub>	C	E	H	H <sub>1</sub>	La	R <sub>1</sub>	R <sub>a</sub>	Z	g NO-DA
1" 1/2	40	10	160	35	94	79	222	155	154	2" 1/4	1/4"	222	3532
2"	50	10	200	46	123	98	266	218	184	2" 3/4	1/4"	266	6020

## DKM/CP NO-DA Codes

d	DN	EPDM	FPM	DKMULV/CP PVC-U PTFE
1" 1/2	40	DKMULVNO112E	DKMULVNO112F	DKMULVNO112P
2"	50	DKMULVNO200E	DKMULVNO200F	DKMULVNO200P



## DKMOV/CP DKMOC/CP DKMOM/CP DKMOF/CP

Pneumatically actuated diaphragm valve, Normally Closed, with a monolithic flanged body, drilled PN10/16. Face to face according to EN 558-1 PVC-U, PVC-C, PP-H, PVDF

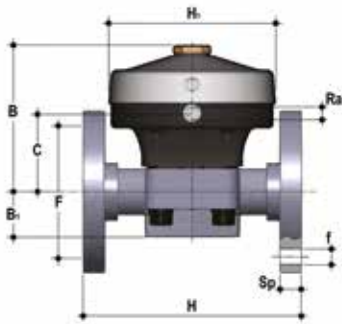
d	DN	PN	B	B <sub>1</sub>	C	F	Øf	H	H <sub>1</sub>	Ra	U	Sp	g NC
50	40	10	202	35	96	110	18	200	155	1/4"	4	16	4475
63	50	10	254	46	113	125	18	230	210	1/4"	4	16	8494
75	65	10	254	46	113	145	18	290	210	1/4"	4	21	8954

Figures for PVC-U version

## DKM/CP NC Codes

d	DN	DKMOV/CP PVC-U			DKMOC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMOVNC050E	DKMOVNC050F	DKMOVNC050P	DKMOCNC050E	DKMOCNC050F	DKMOCNC050P
63	50	DKMOVNC063E	DKMOVNC063F	DKMOVNC063P	DKMOCNC063E	DKMOCNC063F	DKMOCNC063P
75	65	DKMOVNC075E	DKMOVNC075F	DKMOVNC075P	DKMOCNC075E	DKMOCNC075F	DKMOCNC075P

d	DN	DKMOM/CP PP-H			DKMOF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMOMNC050E	DKMOMNC050F	DKMOMNC050P	DKMOFNC050E	DKMOFNC050F	DKMOFNC050P
63	50	DKMOMNC063E	DKMOMNC063F	DKMOMNC063P	DKMOFNC063E	DKMOFNC063F	DKMOFNC063P
75	65	DKMOMNC075E	DKMOMNC075F	DKMOMNC075P	DKMOFNC075E	DKMOFNC075F	DKMOFNC075P



## DKMOV/CP DKMOC/CP DKMOM/CP DKMOF/CP

Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with a monolithic flanged body, drilled PN10/16. Face to face according to EN 558-1 PVC-U, PVC-C, PP-H, PVDF

d	DN	PN	B	B <sub>1</sub>	C	F	Øf	H	H <sub>1</sub>	Ra	U	Sp	<sup>g</sup> NO-DA
50	40	10	160	35	94	110	18	200	155	1/4"	4	16	3895
63	50	10	200	46	123	125	18	230	218	1/4"	4	16	6394
75	65	10	200	46	123	145	18	290	218	1/4"	4	21	6854

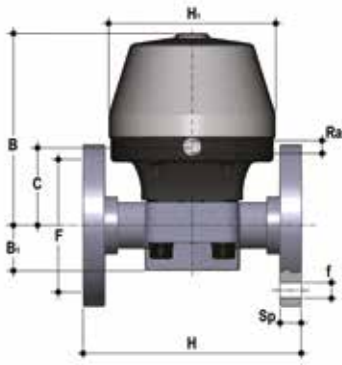
Figures for PVC-U version

## DKM/CP NO-DA Codes

d	DN	DKMOV/CP PVC-U			DKMOC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMOVNO050E	DKMOVNO050F	DKMOVNO050P	DKMOCNO050E	DKMOCNO050F	DKMOCNO050P
63	50	DKMOVNO063E	DKMOVNO063F	DKMOVNO063P	DKMOCNO063E	DKMOCNO063F	DKMOCNO063P
75	65	DKMOVNO075E	DKMOVNO075F	DKMOVNO075P	DKMOCNO075E	DKMOCNO075F	DKMOCNO075P

d	DN	DKMOM/CP PP-H			DKMOF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
50	40	DKMOMNO050E	DKMOMNO050F	DKMOMNO050P	DKMOFNO050E	DKMOFNO050F	DKMOFNO050P
63	50	DKMOMNO063E	DKMOMNO063F	DKMOMNO063P	DKMOFNO063E	DKMOFNO063F	DKMOFNO063P
75	65	DKMOMNO075E	DKMOMNO075F	DKMOMNO075P	DKMOFNO075E	DKMOFNO075F	DKMOFNO075P





## DKMOAV/CP DKMOAC/CP DKMOAM/CP DKMOAF/CP

Pneumatically actuated diaphragm valve, Normally Closed, with a monolithic flanged body, drilled ANSI B16.5 cl. 150 #FF. Face to face according to EN 558-1 PVC-U, PVC-C, PP-H, PVDF

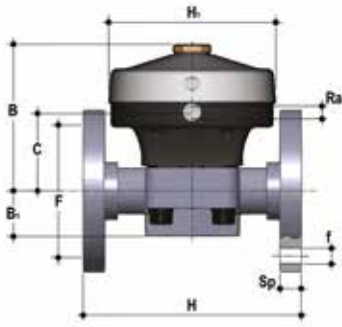
Size	DN	PN	B	B <sub>1</sub>	C	F	Øf	H	H <sub>1</sub>	Ra	U	Sp	g NC
1" 1/2	40	10	202	35	96	98.4	15.9	180	155	1/4"	4	16	4475
2"	50	10	254	46	113	120.7	19.1	210	210	1/4"	4	16	8494
2" 1/2	65	10	254	46	113	139.7	19.1	250	210	1/4"	4	21	8954

Figures for PVC-U version  
For spare parts related to installation prior to october 2017 please contact FIP Technical Support

## DKM/CP NC Codes

Size	DN	DKMOAV/CP PVC-U			DKMOAC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMOAVNC112E	DKMOAVNC112F	DKMOAVNC112P	DKMOACNC112E	DKMOACNC112F	DKMOACNC112P
2"	50	DKMOAVNC200E	DKMOAVNC200F	DKMOAVNC200P	DKMOACNC200E	DKMOACNC200F	DKMOACNC200P
2" 1/2	65	DKMOAVNC212E	DKMOAVNC212F	DKMOAVNC212P	DKMOACNC212E	DKMOACNC212F	DKMOACNC212P

Size	DN	DKMOAM/CP PP-H			DKMOAF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMOAMNC112E	DKMOAMNC112F	DKMOAMNC112P	DKMOAFNC112E	DKMOAFNC112F	DKMOAFNC112P
2"	50	DKMOAMNC200E	DKMOAMNC200F	DKMOAMNC200P	DKMOAFNC200E	DKMOAFNC200F	DKMOAFNC200P
2" 1/2	65	DKMOAMNC212E	DKMOAMNC212F	DKMOAMNC212P	DKMOAFNC212E	DKMOAFNC212F	DKMOAFNC212P



## DKMOAV/CP DKMOAC/CP DKMOAM/CP DKMOAF/CP

Pneumatically actuated diaphragm valve, Normally Open - Double-Acting, with a monolithic flanged body, drilled ANSI B16.5 cl. 150 #FF. Face to face according to EN 558-1 PVC-U, PVC-C, PP-H, PVDF

Size	DN	PN	B	B <sub>1</sub>	C	F	Øf	H	H <sub>1</sub>	Ra	U	Sp	<sup>g</sup> NO-DA
1" 1/2	40	10	160	35	94	98.4	15.9	180	155	1/4"	4	16	3895
2"	50	10	200	46	123	120.7	19.1	210	218	1/4"	4	16	6394
2" 1/2	65	10	200	46	123	139.7	19.1	250	218	1/4"	4	21	6854

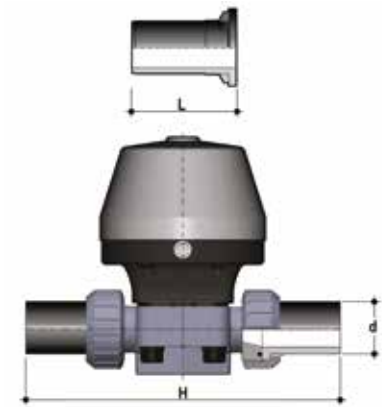
Figures for PVC-U version  
For spare parts related to installation prior to october 2017 please contact FIP Technical Support

## DKM/CP NO-DA Codes

Size	DN	DKMOAV/CP PVC-U			DKMOAC/CP PVC-C		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMOAVNO112E	DKMOAVNO112F	DKMOAVNO112P	DKMOACNO112E	DKMOACNO112F	DKMOACNO112P
2"	50	DKMOAVNO200E	DKMOAVNO200F	DKMOAVNO200P	DKMOACNO200E	DKMOACNO200F	DKMOACNO200P
2" 1/2	65	DKMOAVNO212E	DKMOAVNO212F	DKMOAVNO212P	DKMOACNO212E	DKMOACNO212F	DKMOACNO212P

Size	DN	DKMOAM/CP PP-H			DKMOAF/CP PVDF		
		EPDM	FPM	PTFE	EPDM	FPM	PTFE
1" 1/2	40	DKMOAMNO112E	DKMOAMNO112F	DKMOAMNO112P	DKMOAFNO112E	DKMOAFNO112F	DKMOAFNO112P
2"	50	DKMOAMNO200E	DKMOAMNO200F	DKMOAMNO200P	DKMOAFNO200E	DKMOAFNO200F	DKMOAFNO200P
2" 1/2	65	DKMOAMNO212E	DKMOAMNO212F	DKMOAMNO212P	DKMOAFNO212E	DKMOAFNO212F	DKMOAFNO212P

# ACCESSORIES



## Q/BBE-L

Long spigot PE100 end connectors for electrofusion or butt welding

d	DN	L	H	SDR	Code
50	40	95	344	11	QBBEL11050
63	50	95	374	11	QBBEL11063

## Q/BBM-L

Long spigot PP-H end connectors for butt welding

d	DN	L	H	SDR	Code
50	40	95	344	11	QBBML11050
63	50	95	374	11	QBBML11063

## Q/BBM-C

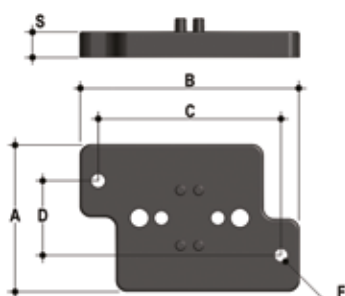
Short spigot PP-H end connectors for butt welding

d	DN	L	H	SDR	Code
50	40	55	264	11	QBBMC11050
63	50	55	294	11	QBBMC11063

## Q/BBF-L

Long spigot PVDF end connectors for butt welding

d	DN	L	H	SDR	Code
50	40	95	344	21	QBBFL21050
63	50	95	374	21	QBBFL21063



## PMDK

Wall mounting plate

d	DN	A	B	C	D	F	S	Code
50	40	65	144	130	33	6.5	11	PMDK2
63	50	65	144	130	33	6.5	11	PMDK2
75	65	65	144	130	33	6.5	11	PMDK2

# FASTENING AND SUPPORTING

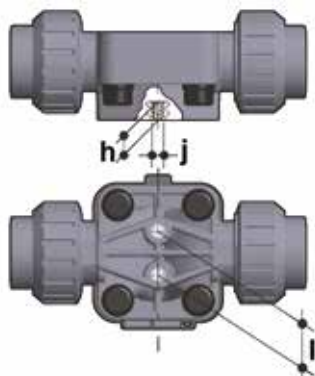


All valves, whether manual or actuated, must be adequately supported in many applications.

The DK valve series is therefore provided with an integrated bracket that permits direct anchoring of the valve body without the need of other components.

For wall installation, dedicated PMDK mounting plates which are available as accessories can be used. These plates should be fastened to the valve before wall installation.

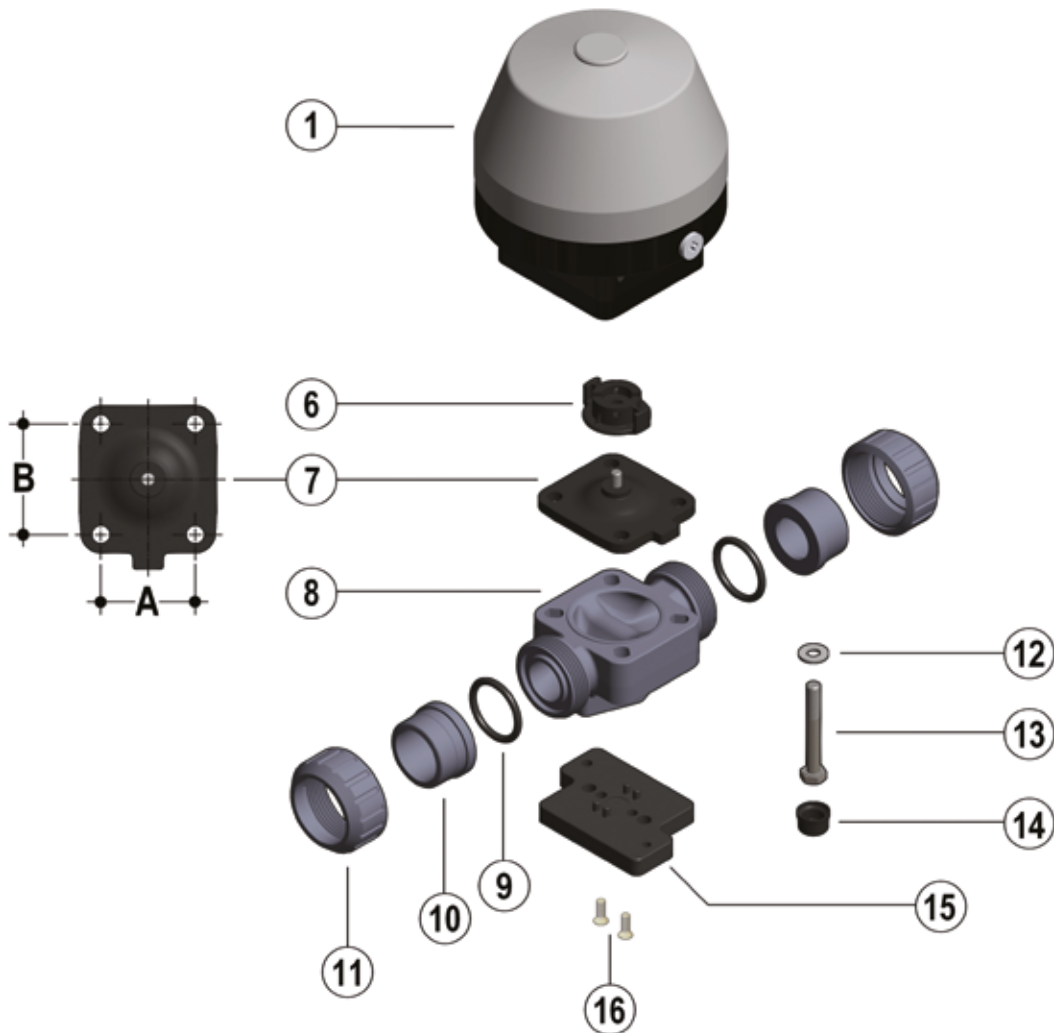
The PMDK plate also allows the DK valve to be aligned with FIP ZIKM pipe clips.



d	DN	h	l	j
50	40	13	44,5	M8
63	50	13	44,5	M8
75	65	13	44,5	M8

# COMPONENTS

## EXPLODED VIEW DKM/CP-NC DN 40÷65



DN	40	50	65
A	65	78	78
B	70	82	82

**1.** Actuator (PP-GR - 1)\*

**6.** Compressor (IXEF® - 1)

**7.** Diaphragm seal (EPDM, FPM, PTFE - 1)\*

**8.** Valve body (PVC-U, PVCC, PPH, PVDF - 1)\*

**9.** Socket seal O-ring (EPDM-FPM - 2)\*

**10.** End connector (PVC-U, PVCC, PPH, PVDF - 2)\*

**11.** Union nut (PVC-U, PVCC, PPH, PVDF - 2)\*

**12.** Washer (Stainless steel - 4)

**13.** Bolt (Stainless steel - 4)

**14.** Protection plug (PE - 4)

**15.** Distance plate (PP-GR - 1)\*\*

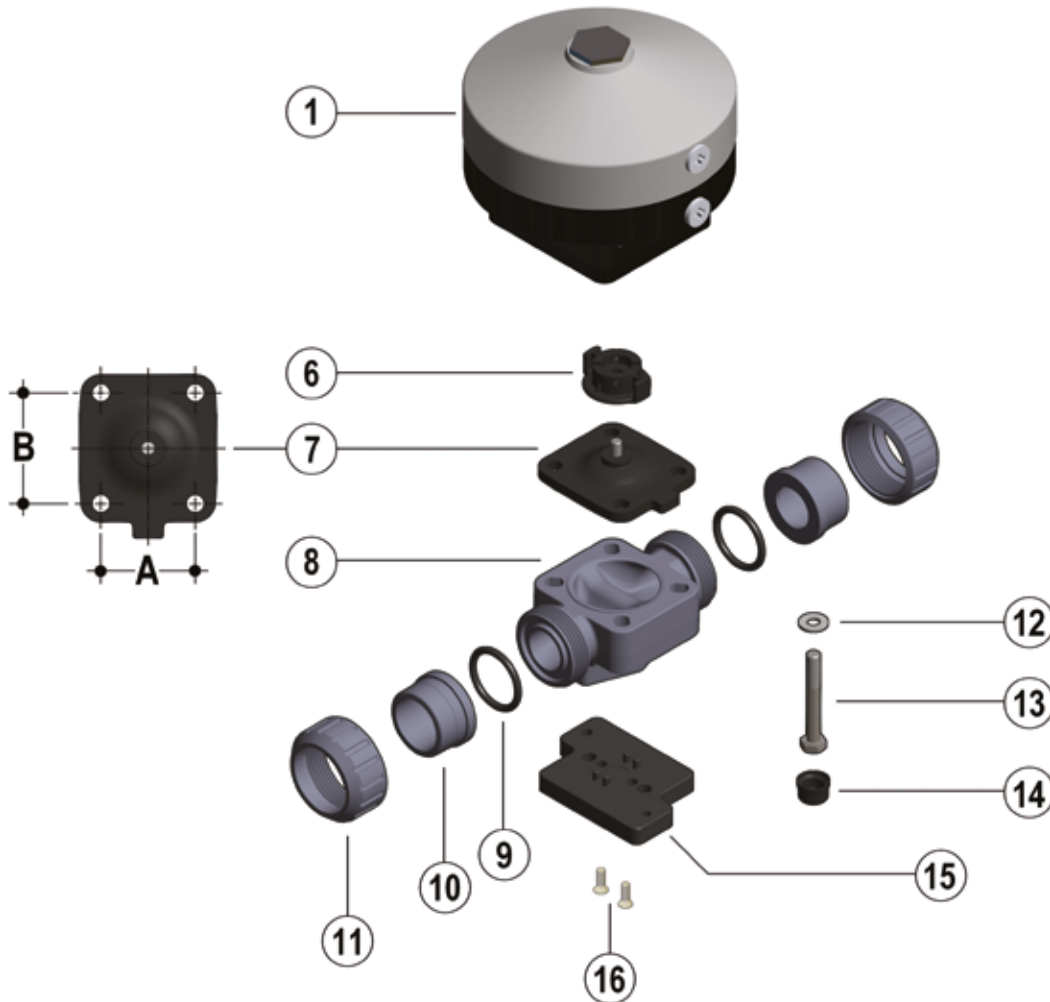
**16.** Screw (Stainless steel - 2)\*\*

\* Spare parts

\*\* Accessories

The material of the component and the quantity supplied are indicated between brackets

## EXPLODED VIEW DKM/CP-NO-DA DN 40÷65



DN	40	50	65
A	65	78	78
B	70	82	82

**1** · Actuator (PP-GR - 1)\*

**6**. Compressor (IXEF® - 1)

**7**. Diaphragm seal (EPDM, FPM, PTFE - 1)\*

**8**. Valve body (PVC-U, PVCC, PPH, PVDF - 1)\*

**9**. Socket seal O-ring (EPDM-FPM - 2)\*

**10**. End connector (PVC-U, PVCC, PPH, PVDF - 2)\*

**11**. Union nut (PVC-U, PVCC, PPH, PVDF - 2)\*

**12**. Washer (Stainless steel - 4)

**13**. Bolt (Stainless steel - 4)

**14**. Protection plug (PE - 4)

**15**. Distance plate (PP-GR - 1)\*\*

**16**. Screw (Stainless steel - 2)\*\*

\* Spare parts

\*\* Accessories

The material of the component and the quantity supplied are indicated between brackets

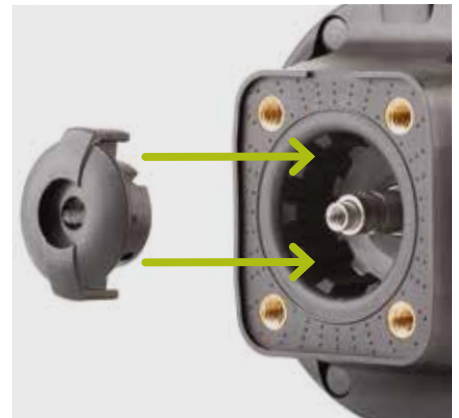
## DISASSEMBLY

- 1) Isolate the valve from the line (release the pressure and empty the pipeline).
- 2) Open the valve with compressed air (NC-DA) to drain any residual liquid from the valve.
- 3) Disconnect the valve from the pneumatic and electrical connections.
- 4) Fully unscrew the union nuts (11) and extract the valve sideways.
- 5) Remove the protection plugs (14) and bolts (13) with the relative washers (12). This operation will be made easier if the actuator is pressurised (NC).
- 6) Separate the valve body (8) from the actuator (1).
- 7) Unscrew the diaphragm (7) and remove the compressor (6). This operation will be made easier if the actuator is not pressurised (NC).

## ASSEMBLY

- 1) Insert the compressor (6) on the actuator stem (1) aligning it correctly in its housing (fig. 1).
- 2) Screw the diaphragm (7) onto the stem, aligning it correctly with its housing on the actuator.
- 3) Fit the actuator (1) on the valve body (8) and tighten the bolts (13) with the relative washers (12). This operation will be made easier if the actuator is pressurised (NC).
- 4) Tighten the bolts (13) evenly (diagonally) to the tightening torque suggested on the relative instruction sheet.
- 5) Replace the protection plugs (14)
- 6) Position the valve between the end connectors (10) and tighten the union nuts (11), making sure that the socket seal O-rings (9) do not exit their seats.
- 7) Reconnect the valve to the pneumatic and electrical connections

Fig. 1



**Note:** All operations on equipment under pressure or containing compressed springs must be carried out under safe conditions for the operator.

## INSTALLATION

Before proceeding with installation, please follow these instructions carefully: (these instructions refer to union end versions). The valve can be installed in any position and in any direction.

- 1) Check that the pipes to be connected to the valve are aligned in order to avoid mechanical stress on the threaded joints.
- 2) Unscrew the union nuts (11) and insert them on the pipe segments.
- 3) Solvent weld or screw the end connectors (10) onto the pipe ends.
- 4) Position the valve body between the end connectors, making sure that the socket seal O-rings (9) do not exit their seats.
- 5) Fully tighten the union nuts (11).
- 6) If necessary, support the pipework with FIP pipe clips or by means of the carrier built into the valve itself (see paragraph "Fastening and supporting").
- 7) Connect the compressed air as indicated in paragraph "Compressed air connections". For valves with electric accessories, refer to the specific technical manual supplied with the accessory.



**Note:** before putting the valve into service, check that the bolts on the valve body (8) are tightened correctly at the suggested torque.

*Aliaxis*

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