

Diagram No. 12.1

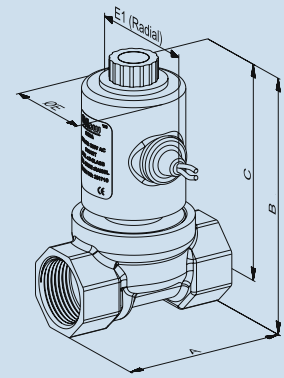
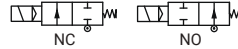


Diagram No. 12.2



SPECIFICATIONS

Port :	Refer below technical data sheet (Available BSP / NPT)				
End Connection :	Screwed / Flange				
Body Material :	SS ASTM A351 Grade CF8 / CF8M, Forged Brass				
Diaphragm :	Nitrile (NBR)	EPDM	Viton (FKM)	PTFE	
Media Temp :	-30° C to 90° C	-10° C to 140° C	-10° C to 180° C	-10° C to 180° C	
Circumstance Temp :	-10° C to 70° C				
Media :	Air, Water, Chemical, Gas, Oil, Steam, LPG.				
Main Features :	Internal Parts are in superior corrosion resistance steel, (Equivalent to SS316L) Suitable for Food Industries, Pharmaceuticals, Chemical application & Highly corrosive environment.				
Operating Voltage :	24AC	110AC	230AC	12DC	24DC
Power Consumption :	7W	8W	8W / 17W	10W	11W
Coil Features :	High Reliability Unaffected by Voltage Surges. Easy coil changes coil lockable in 4X90 position or freely movable in between as require.				
Coil Housing :	Epoxy square coil, Metallic round enclosure, IP-67 Flameproof enclosure, IP-68 Weatherproof enclosure.				
Optional Feature :	90% Power saver series also available, Water hammering reducer also available to avoid water hammer forces. <input checked="" type="checkbox"/> Special high flow rate series available on request at low pressure or gravity pressure application.				
Other Specification Data :	Available on Request.				

NOTE: Use of filter in the inlet port is recommended.
Preferably Over Horizontal Pipeline with the coil upright.

CAUTION: AC coil should not be used on a DC coil valve and vice versa.
For DC coil max operating pressure may reduce by 1 Kg/cm²

TECHNICAL DATA

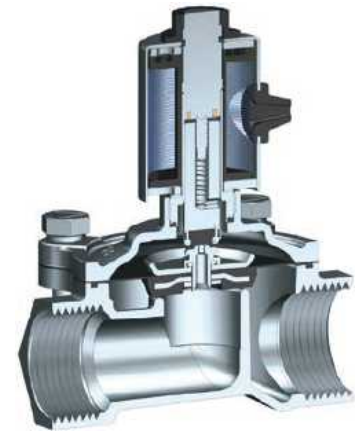
Model No.	Body Material	Pipe (Inch)	Orifice (mm)	Min. Operating Pressure Kg/cm ²	Max. Operating Pressure Kg/cm ²		Seal & Diaphragm Material	Flow Factor Kv m ³ / hr
					AC	DC		
MBN73	Brass	¾"	15.50	0	7	7	NBR / EPDM / VITON	2.50
MBN23	Brass	½"	15.50	0	7	7	NBR / EPDM / VITON	3.10
MBN24	Brass	½"	12	0	10	10	NBR / EPDM / VITON	2.10
MCN24	CF8 / CF8M	½"	17	0	10	8	NBR / EPDM / VITON / PTFE	3.20
MCN34	CF8 / CF8M	¾"	20	0	10	8	NBR / EPDM / VITON	5
MCN44	CF8 / CF8M	1"	25.50	0	10	8	NBR / EPDM / VITON / PTFE	8.20
MCN6D3	CF8 / CF8M	1½"	35	0	4	4	NBR / EPDM / VITON	18.20
MCN8D3	CF8 / CF8M	2"	46.50	0	4	4	NBR / EPDM / VITON	31.40

DIMENSION (NC)

All dimensions are in mm

Model No.	Port Size	Diagram No.	A	B	C	D	E	E1
MBN73	¾"	12.1	57	106	93	46	38	48.50
MBN23	½"	12.1	57	106	93	46	38	48.50
MBN24	½"	12.2	54	91	78	-	38	48.50
MCN23	½"	12.1	69	108	93	56	38	48.50
MCN33	¾"	12.1	76	114	98	62	38	48.50
MCN34	¾"	12.2	65	101	85.3	-	38	48.50
MCN43	1"	12.1	100	121	106	76	38	48.50
MCN6D3	1½"	12.1	108	154	124	89	50	62
MCN8D3	2"	12.1	137	171	137	120	50	62

In normally open valve dimension B&C will increase up to 8mm.



SECTION VIEW

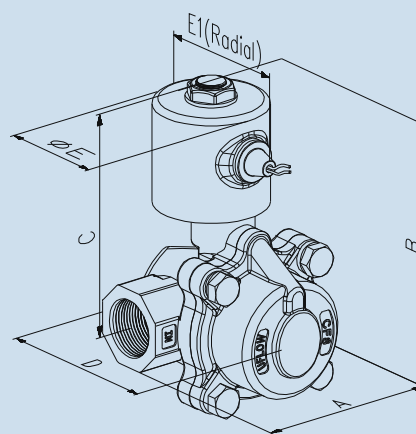
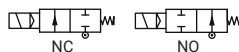


Diagram No. 13.1



SPECIFICATIONS

Port :	Refer below technical data sheet (Available BSP / NPT)					
End Connection :	Screwed / Flange					
Body Material :	SS ASTM A351 Grade CF8 / CF8M					
Seal & 'O' Ring :	PTFE + Silicon / Viton					
Media Temp :	-10° C to 180° C					
Circumstance Temp :	-10° C to 70° C					
Media :	Steam, Hot Water, Hot Fluid, Water Oil					
Main Features :	Internal Parts are in superior corrosion resistance steel, (Equivalent to SS316L) Suitable for Food Industries, Pharmaceuticals, Chemical application & Highly corrosive environment.					
Operating Voltage :	<table border="1"> <tr> <td>24AC</td> <td>110AC</td> <td>230AC</td> <td>12DC</td> <td>24DC</td> </tr> </table>	24AC	110AC	230AC	12DC	24DC
24AC	110AC	230AC	12DC	24DC		
Power Consumption :	<table border="1"> <tr> <td>7W</td> <td>8W</td> <td>8W</td> <td>10W</td> <td>11W</td> </tr> </table>	7W	8W	8W	10W	11W
7W	8W	8W	10W	11W		
Coil Features :	High Reliability Unaffected by Voltage Surges. Easy coil changes coil lockable in 4X90 position or freely movable in between as require.					
Coil Housing :	Epoxy square coil, Metallic round enclosure, IP-67 Flame proof enclosure, IP-68 Weather proof enclosure.					
Optional Feature :	90% Power saver series also available, Manual Override, Water hammering reducer also available to avoid water hammer forces.					
Other Specification Data :	Available on Request					

NOTE: Use of filter in the inlet port is recommended.

DIMENSION (NC)

All dimensions are in mm

Model No.	Port Size	Diagram No.	A	B	C	D	E	E1
HCP29	½"	13.1	67	122	94	60	44	57
HCP39	¾"	13.1	81	129.50	97	70	44	57
HCP49	1"	13.1	96	146	104	75	44	57
HCP69	1½"	13.1	108	172	117	96	44	57
HCP89	2"	13.1	132	191	125	114	44	57

In normally open valve dimension B&C will increase up to 8mm.



SECTION VIEW

TECHNICAL DATA

Model No.	Body Material	Pipe (Inch)	Orifice (mm)	Min. Operating Pressure Kg/cm ²	Max. Operating Pressure Kg/cm ²	Seal & Diaphragm Material	Flow Factor Kv m ³ / hr
HCP29	CF8 / CF8M	½"	17	1.5	12	PTFE	4
HCP39	CF8 / CF8M	¾"	20	1.5	12	PTFE	7
HCP49	CF8 / CF8M	1"	25	1.5	12	PTFE	12
HCP59 / HCP69	CF8 / CF8M	1¼" / 1½"	36	1.5	12	PTFE	23
HCP89	CF8 / CF8M	2"	48	1.5	12	PTFE	38
HCP2A	CF8 / CF8M	½"	17	1.5	40	PTFE	3.50
HCP3A	CF8 / CF8M	¾"	20	1.5	40	PTFE	3.30
HCP4A	CF8 / CF8M	1"	25	1.5	40	PTFE	8.30
HCP5A / HCP6A	CF8 / CF8M	1¼" / 1½"	36	1.5	40	PTFE	17
HCP8A	CF8 / CF8M	2"	48	1.5	40	PTFE	31

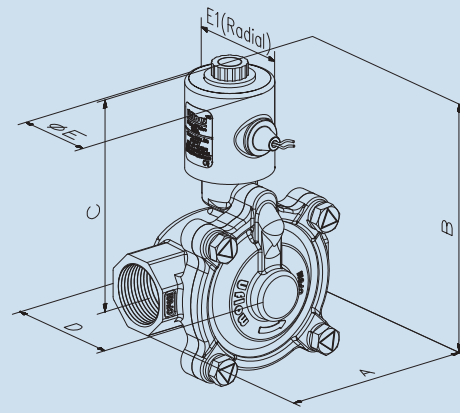
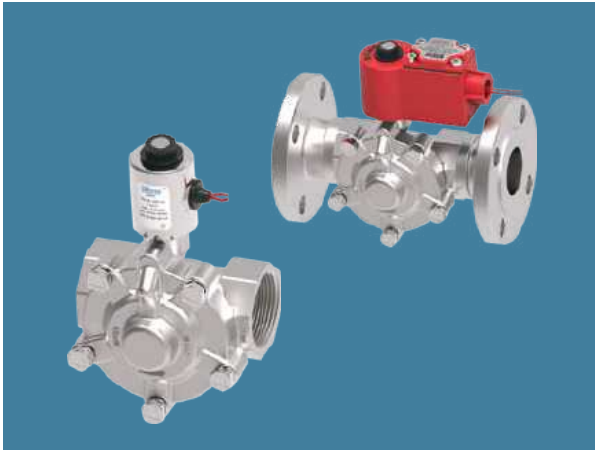
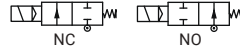


Diagram No. 14.1



SPECIFICATIONS

Port :	Refer below technical data sheet (Available BSP / NPT)				
End Connection :	Screwed / Flange				
Body Material :	SS ASTM A351 Grade CF8 / CF8M				
Diaphragm :	Nitrile (NBR)	EPDM	Viton (FKM)		
Media Temp :	-30° C to 90° C	-10° C to 140° C	-10° C to 180° C		
Circumstance Temp :	-10° C to 70° C				
Media :	Air, Water, Chemical, Gas				
Main Features :	Internal Parts are in superior corrosion resistance steel, (Equivalent to SS316L) Suitable for Food Industries, Pharmaceuticals, Chemical application & Highly corrosive environment.				
Operating Voltage :	24AC	110AC	230AC	12DC	24DC
Power Consumption :	7W	8W	8W	10W	11W
Coil Features :	High Reliability Unaffected by Voltage Surges. Easy coil changes coil lockable in 4X90 position, or freely movable in between as require.				
Optional Feature :	90% Power saver series also available, Manual Override, Water hammering reducer also available to avoid water hammer forces.				
Other Specification Data :	Available on Request - High Pressure 20Kg Series.				

NOTE: Use of filter in the inlet port is recommended.

DIMENSION (NC)

All dimensions are in mm

Model No.	Port Size	Diagram No.	A	B	C	D	E	E1
PCN28	½"	14.1	67	122.50	95	45	48	57
PCN38	¾"	14.1	81	130	97.50	55	48	57
PCN48	1"	14.1	96	145.50	104	64	48	57
PCN58	1¼"	14.1	108	172	116	88	48	57
PCN68	1½"	14.1	108	172	116	88	48	57
PCN88	2"	14.1	132	191	125	98	48	57
PCN98	2½"	14.1	166	212	140	126.50	48	57
PCNA8	3"	14.1	192	236.50	151	138	48	57



SECTION VIEW

TECHNICAL DATA

Model No.	Body Material	Pipe (Inch)	Orifice (mm)	Min. Operating Pressure Kg/cm ²	Max. Operating Pressure Kg/cm ²	Seal & Diaphragm Material	Flow Factor Kv m ³ / hr
PCN28	CF8 / CF8M	½"	17	0.5	12	NBR / EPDM / VITON	03.20
PCN38	CF8 / CF8M	¾"	20	0.5	12	NBR / EPDM / VITON	5
PCN48	CF8 / CF8M	1"	25	0.5	12	NBR / EPDM / VITON	8.20
PCN58	CF8 / CF8M	1¼"	36	0.5	12	NBR / EPDM / VITON	12.20
PCN68	CF8 / CF8M	1½"	36	0.5	12	NBR / EPDM / VITON	17.10
PCN88	CF8 / CF8M	2"	48	0.5	12	NBR / EPDM / VITON	29.90
PCN98	CF8 / CF8M	2½"	60	0.5	12	NBR / EPDM / VITON	43.50
PCNA8	CF8 / CF8M	3"	72	0.5	12	NBR / EPDM / VITON	64.50

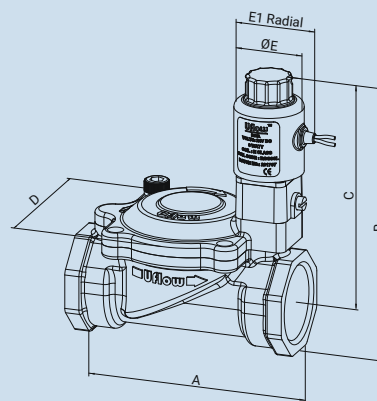
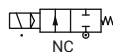


Diagram No. 15.1



SPECIFICATIONS

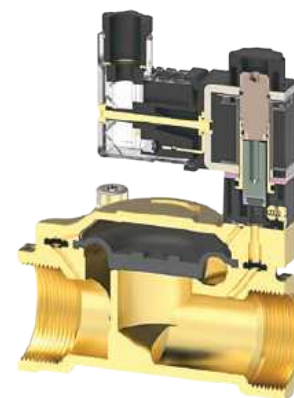
Port :	Refer below technical data sheet (Available BSP / NPT)				
End Connection :	Screwed / Flange				
Body Material :	SS ASTM A351 Grade CF8 / CF8M, Forged Brass				
Diaphragm :	Nitrile (NBR)	EPDM	Viton (FKM)		
Media Temp :	-30° C to 90° C	-10° C to 140° C	-10° C to 180° C		
Circumstance Temp :	-10° C to 70° C				
Media :	Air, Water, Chemical, Gas, Oil, Diesel, Kerosene, LPG.				
Main Features :	Internal Parts are in superior corrosion resistance steel, (Equivalent to SS316L) Suitable for Food Industries, Pharmaceuticals, Chemical application & Highly corrosive environment.				
Operating Voltage :	24AC	110AC	230AC	12DC	24DC
Power Consumption :	7W	8W	8W	10W	11W
Coil Features :	High Reliability Unaffected by Voltage Surges. Easy coil changes coil lockable in 4X90 position or freely movable in between as require.				
Coil Housing :	Epoxy square coil, Metallic round enclosure, IP-67 Flameproof enclosure, IP-68 Weatherproof enclosure.				
Optional Feature :	90% Power saver series also available, Manual Override, Water hammering reducer also available to avoid water hammer forces.				
Other Specification Data :	Available on Request.				

NOTE: Use of filter in the inlet port is recommended.

DIMENSION (NC)

All dimensions are in mm

Model No.	Port Size	Diagram No.	A	B	C	D	E	E1
PBN260	½"	15.1	60.50	82	69	38	28	33
PBN360	¾"	15.1	87	90	74	56	28	33
PBN460	1"	15.1	92	107	87	63	28	33
PBN660	1½"	15.1	120	123	96	83	28	33
PCNB8	4"	15.1	262	241	177	186.50	44	57



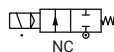
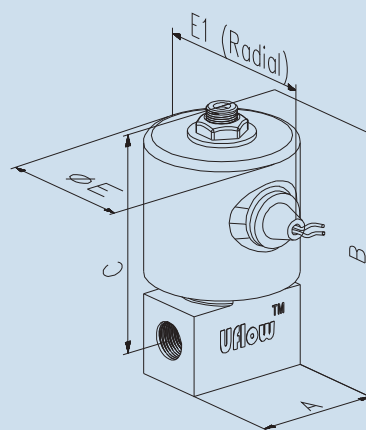
SECTION VIEW

TECHNICAL DATA

Model No.	Body Material	Pipe (Inch)	Orifice (mm)	Min. Operating Pressure Kg/cm ²	Max. Operating Pressure Kg/cm ²	Seal & Diaphragm Material	Flow Factor Kv m ³ / hr
PBN260	Brass	½"	12	0.30	10	NBR / EPDM / VITON	2.10
PBN360	Brass	¾"	20	0.30	10	NBR / EPDM / VITON	5.50
PBN460	Brass	1"	25	0.30	10	NBR / EPDM / VITON	9
PBN660	Brass	1½"	36	0.30	10	NBR / EPDM / VITON	17.10
PCNB8	CF8 / CF8M	4"	98	0.50	12	NBR / EPDM / VITON	115



Diagram No. 18.1



SPECIFICATIONS

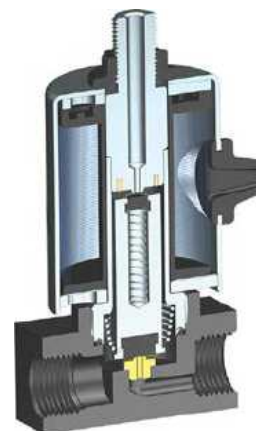
Port :	Refer below technical data sheet (Available BSP / NPT)				
End Connection :	Screwed				
Body Material :	SS ASTM A351 Grade CF8 / CF8M, Forged Brass, Aluminium				
Seal & 'O' Ring	Nitrile (NBR)	EPDM	Viton (FKM)	PTFE	
Media Temp :	-30° C to 90° C	-10° C to 140° C	-10° C to 180° C	-10° C to 180° C	
Circumstance Temp :	-10° C to 70° C				
Media :	Air, Water, Chemical, Gas, Oil, Diesel, Kerosene, LPG.				
Main Features :	Internal Parts are in superior corrosion resistance steel, (Equivalent to SS316L) Suitable for Food Industries, Pharmaceuticals, Chemical application & Highly corrosive environment.				
Operating Voltage :	24AC	110AC	230AC	12DC	24DC
Power Consumption :	7W	8W	8W	10W	11W
Coil Features :	High Reliability Unaffected by Voltage Surges. Easy coil changes coil lockable in 4X90 position or freely movable in between as require.				
Coil Housing :	Epoxy square coil, Metallic round enclosure, IP-67 Flameproof enclosure, IP-68 Weatherproof enclosure.				
Optional Feature :	90% Power saver series also available.				
Other Specification Data :	Available on Request.				

NOTE: Use of filter in the inlet port is recommended.

DIMENSION

All dimensions are in mm

Model No.	Port Size	Diagram No.	A	B	C	E	E1
TAN14	¼"	18.1	44.50	87	77	44	57
TBN14	¼"	18.1	43	89	80	44	57
TCN14	¼"	18.1	43	88	79	44	57
TBN74	⅜"	18.1	48	93	80	44	57
TBN24	½"	18.1	48	93	80	44	57
TCN24	½"	18.1	48	93	80	44	57
TBN040	⅜"	18.1	38	60	51	28	33
TBN140	¼"	18.1	38	60	51	28	33
TBN034	⅜"	18.1	16	50	43	21	51



SECTION VIEW

TECHNICAL DATA

Model No.	Body Material	Pipe (Inch)	Orifice (mm)	Min. Operating Pressure Kg/cm ²	Max. Operating Pressure Kg/cm ²	Seal & 'O' Ring Material	Flow Factor Kv m ³ / hr
TAN14	ALUMINIUM	¼"	1.50	0	10	NBR / SI / FKM / EPDM	0.07
TBN14	BRASS	¼"	1.50	0	10	NBR / SI / FKM / EPDM	0.07
TCN14	CF8 / CF8M	¼"	1.50	0	10	NBR / SI / FKM / EPDM	0.07
TBN74	BRASS	⅜"	1.50	0	10	NBR / SI / FKM / EPDM	0.07
TBN24	BRASS	½"	1.50	0	10	NBR / SI / FKM / EPDM	0.07
TCN24	CF8 / CF8M	½"	1.50	0	10	NBR / SI / FKM / EPDM	0.07
TBN040	BRASS	⅜"	1.20	0	10	NBR / SI / FKM / EPDM	0.042
TBN140	BRASS	¼"	1.20	0	10	NBR / SI / FKM / EPDM	0.042
TBN043	BRASS	⅜"	1.20	0	7	NBR / SI / FKM / EPDM	0.042

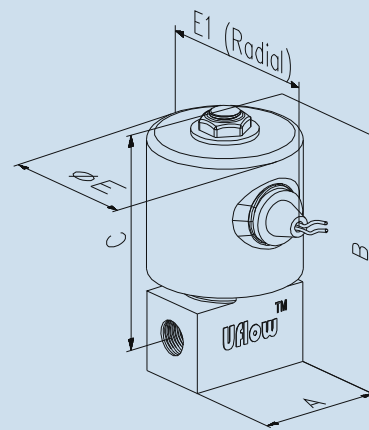
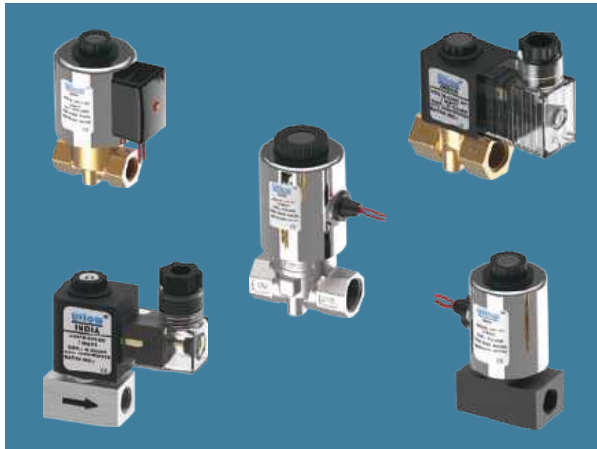
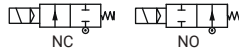


Diagram No. 16.1



SPECIFICATIONS

Port :	Refer below technical data sheet (Available BSP / NPT)				
End Connection :	Screwed				
Body Material :	SS ASTM A351 Grade CF8 / CF8M, Forged Brass, Aluminium				
Seal & 'O' Ring	Nitrile (NBR)	EPDM	Viton (FKM)	PTFE	
Media Temp :	-30° C to 90° C	-10° C to 140° C	-10° C to 180° C	-10° C to 180° C	
Circumstance Temp :	-10° C to 70° C				
Media :	Air, Chemical, Gas, Oil, Steam, Hot Water, Oil				
Main Features :	Internal Parts are in superior corrosion resistance steel, (Equivalent to SS316L) Suitable for Food Industries, Pharmaceuticals, Chemical application & Highly corrosive environment.				
Operating Voltage :	24AC	110AC	230AC	12DC	24DC
Power Consumption :	7W	8W	8W / 17W	10W	11W
Coil Features :	High Reliability Unaffected by Voltage Surges. Easy coil changes coil lockable in 4X90 position or freely movable in between as require.				
Coil Housing :	Epoxy square coil, Metallic round enclosure, IP-67 Flameproof enclosure, IP-68 Weatherproof enclosure.				
Optional Feature :	90% Power saver series also available.				
Other Specification Data :	Available on Request.				

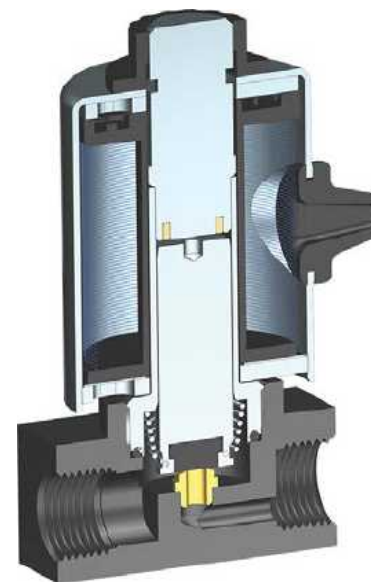
NOTE: Use of filter in the inlet port is recommended.

DIMENSION (NC)

All dimensions are in mm

Model No.	Port Size	Diagram No.	A	B	C	E	E1
DAN14	¼"	16.1	44.50	81	71	44	57
DBN14	¼"	16.1	43	83	74	44	57
DCN14	¼"	16.1	43	83	74	44	57
DBN74	¾"	16.1	48	88	75	44	57
DBN24	½"	16.1	48	88	75	44	57
DCN223	½"	16.1	61.50	109	96	44	57
DAN243	½"	16.1	65	102	88	44	57
DBN040	⅝"	16.1	38	56	47	28	33
DBN130M	¼"	16.1	34	69	46	28	33
DCN24	½"	16.1	48	91	79	44	57
DCN034	⅜"	16.1	27	50	43	21	51

**In Normally open valve Dimension B&C will increase up to 8mm.*



SECTION VIEW

TECHNICAL DATA

Model No.	Body Material	Pipe (Inch)	Orifice (mm)		Min. Operating Pressure Kg/cm ²	Max. Operating Pressure Kg/cm ²	Seal & 'O' Ring Material	Flow Factor Kv m ³ / hr	
			NC	NO				NC	NO
DCN1D	CF8 / CF8M / BRASS / ALUMINUM	¼"	5	-	0	4	NBR / SI / FKM / EPDM	0.73	-
DCN2D	CF8 / CF8M / BRASS	½"	5	-	0	4	NBR / SI / FKM / EPDM	0.73	-
DBN7D	BRASS	¾"	5	-	0	4	NBR / SI / FKM / EPDM	0.73	-
DCN034	SS 304 / SS 316 / BRASS	⅛"	1.6	-	0	7	NBR / SI / FKM / EPDM	0.09	-
DBN040	BRASS	⅛"	2	-	0	10	NBR / SI / FKM / EPDM	0.11	-
DBN140	BRASS	¼"	2	-	0	10	NBR / SI / FKM / EPDM	0.11	-
DBN1D0M	BRASS	¼"	2.8	-	0	4	NBR / SI / FKM / EPDM	0.18	-
DCN14	CF8 / CF8M / BRASS	¼"	4	2.5	0	10	NBR / SI / FKM / EPDM	0.54	0.16
DCN24	CF8 / CF8M / BRASS	½"	4	2.5	0	10	NBR / SI / FKM / EPDM	0.54	0.16
DBN74	BRASS	¾"	4	2.5	0	10	NBR / SI / FKM / EPDM	0.54	0.16
DAN14	ALUMINUM	¼"	3	2.5	0	10	NBR / SI / FKM / EPDM	0.20	0.16
DAN243	ALUMINUM	½"	5	-	0	10	NBR / SI / FKM / EPDM	0.73	-
DCN223	CF8 / CF8M	½"	12	-	0	2	NBR / SI / FKM / EPDM	1.80	-
DCN15	CF8 / CF8M / BRASS	¼"	3	2.5	0	16	NBR / FKM / EPDM	0.20	0.16
DCN25	CF8 / CF8M / BRASS	½"	3	2.5	0	16	NBR / FKM / EPDM	0.20	0.16
DBN75	BRASS	¾"	3	2.5	0	16	NBR / FKM / EPDM	0.20	0.16
DAN15	ALUMINUM	¼"	2.5	1.8	0	16	NBR / FKM / EPDM	0.16	0.10
DCN1B	CF8 / CF8M / BRASS	¼"	2.5	1.8	0	25	NBR / FKM / EPDM	0.16	0.10
DCN2B	CF8 / CF8M / BRASS	½"	2.5	1.8	0	25	NBR / FKM / EPDM	0.16	0.10
DBN7B	BRASS	¾"	2.5	1.8	0	25	NBR / FKM / EPDM	0.16	0.10
DAN1B	ALUMINUM	¼"	2.2	1.8	0	25	NBR / FKM / EPDM	0.16	0.10
DCN1J	CF8 / CF8M / BRASS	¼"	2	1.3	0	40	NBR / FKM / EPDM	0.11	0.05
DCN2J	CF8 / CF8M / BRASS	½"	2	1.3	0	40	NBR / FKM / EPDM	0.11	0.05
DBN7J	BRASS	¾"	2	1.3	0	40	NBR / FKM / EPDM	0.11	0.05
DAN1J	ALUMINUM	¼"	1.8	1.3	0	40	NBR / FKM / EPDM	0.10	0.05
DCN1H	CF8 / CF8M / BRASS	¼"	1.8	1.3	0	60	NBR / FKM / EPDM	0.10	0.05
DCN2H	CF8 / CF8M / BRASS	½"	1.8	1.3	0	60	NBR / FKM / EPDM	0.10	0.05
DBN7H	BRASS	¾"	1.8	1.3	0	60	NBR / FKM / EPDM	0.10	0.05
DAN1H	ALUMINUM	¼"	1.5	1.3	0	60	NBR / FKM / EPDM	0.10	0.05
DCN1L	CF8 / CF8M / BRASS	¼"	1.8	1.3	0	100	NBR / FKM / EPDM	0.10	0.05
DCN2L	CF8 / CF8M / BRASS	½"	1.8	1.3	0	100	NBR / FKM / EPDM	0.10	0.05
DBN7L	BRASS	¾"	1.8	1.3	0	100	NBR / FKM / EPDM	0.10	0.05
DCN1C	CF8 / CF8M / BRASS	¼"	1.3	-	0	150	NBR / FKM / EPDM	0.05	-
DCN2C	CF8 / CF8M / BRASS	½"	1.3	-	0	150	NBR / FKM / EPDM	0.05	-
DBN7C	BRASS	¾"	1.3	-	0	150	NBR / FKM / EPDM	0.05	-

NOTE: Model number will change in case of normally open valve.