

OIL-Less Diaphragm Vacuum Pumps for better Environment

We try to serve you with high quality & performance.



OIL-Less Diaphragm Vacuum Pumps Series

AC & BLDC version



G&M Tech Inc.
(주) 지엔엠텍

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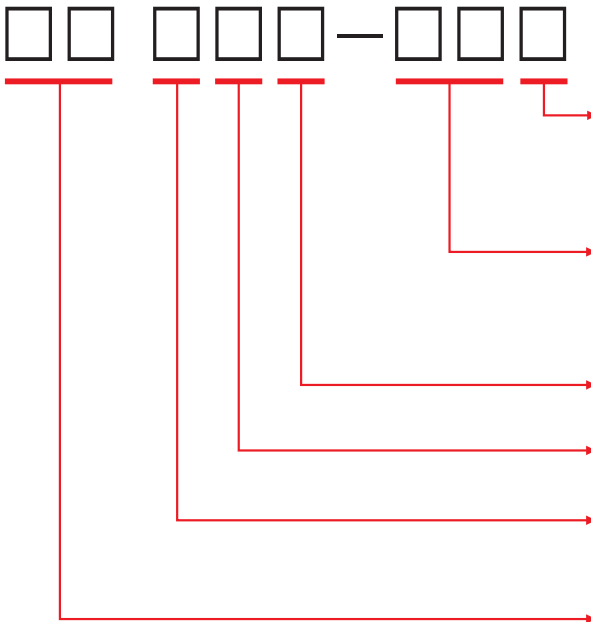
Features ;

- OIL-Less operation
- Permanently lubricated bearing
- Simple Structure and Maintenance free
- Low noise and less vibration
- Light Weight & Compact design
- Both AC & BLDC version available
- Allowable in any installation positions
- Teflon sheeted diaphragm applied

Application ;

- Designed for Autoclave (Class B)
- Medical Suctions & Aspirators
- Plasma & EtO Gas Sterilizers
- Aesthetic & Skin care machines
- Vacuum massager & Fat care machines
- Analyzing machines
- Packing machines
- Food processing machines
- Environmental Equipments

Selection Guide of Model



Head connection for Dual Head
P : Parallel connection, S : Serial connection
None : Single Head

Motor type
21 : 2 pole-110V, 22 : 2 pole-220V, 41 : 4 pole-110V
42 : 4 pole-220V, BL1 : 12V BLDC, BL2 : 24V BLDC

S : Single Head, D : Dual Head

N : Normal type, V : Startable under vacuum load

Pump type
D : Diaphragm pumps, R : Rocking Piston pumps

Free Flow Rate : Lpm (Liters/minute)
Actual flow rate shall be different with Dual Head type

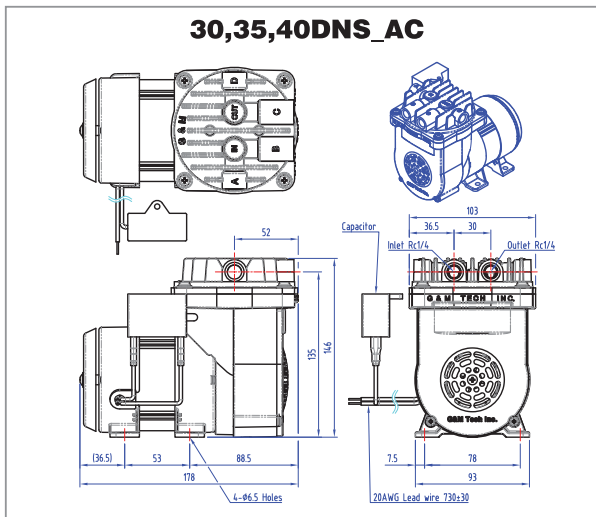
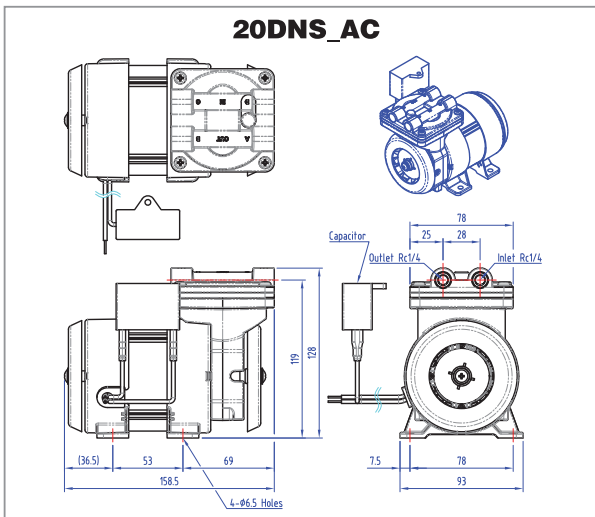
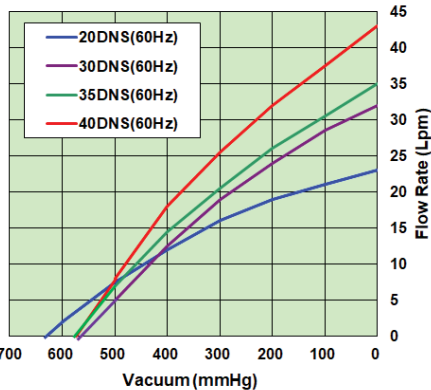
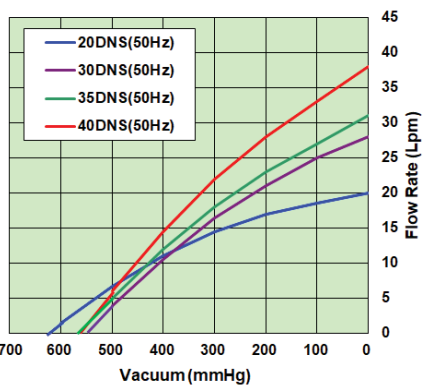
for example ;

- 35DND-BL2-S**
→ 35 Lpm, Diaphragm type Dual Head pumps, 24V BLDC Version, Heads in Serial connection.
- 40DND-22-S**
→ 40 Lpm, Diaphragm type Dual Head pumps, 2 pole, 220VAC Version, Heads in Serial connection.



Single Head (AC version)

Head Type	Single Head Type (AC version)								
	Model	20DNS-41	20DNS-42	30DNS-41	30DNS-42	35DNS-41	35DNS-42	40DNS-21	40DNS-22
Voltage		110VAC	220VAC	110VAC	220VAC	110VAC	220VAC	110VAC	220VAC
Frequency		50/60Hz		50/60Hz		50/60Hz		50/60Hz	
Free Flow Rate		20 Lpm(50Hz)		28 Lpm(50Hz)		31 Lpm(50Hz)		38 Lpm(50Hz)	
		23 Lpm(60Hz)		32 Lpm(60Hz)		35 Lpm(60Hz)		43 Lpm(60Hz)	
Max. Vacuum		630 mmHg		560 mmHg		580 mmHg		570 mmHg	
		173 mbar abs		266 mbar abs		240 mbar abs		253 mbar abs	
Max. Pressure		N.A.		N.A.		N.A.		N.A.	
Power Consumption		60W(50Hz)		60W(50Hz)		60W(50Hz)		85W(50Hz)	
		65W(60Hz)		65W(60Hz)		65W(60Hz)		98W(60Hz)	
Dimensions (mm)		93(W) x 128(H) x 158(L)		103(W) x 146(H) x 178(L)					
Weight (Kg)		2,2 Kg		2,6 Kg					
Connecting type		Rc1/4" Tap (PT1/4" Tap) Thread							
Diaphragm		Teflon Sheeted EPDM							
Motor type		4 pole motor						2 pole motor	
		TP (Thermal Protector) applied, Capacitor start							
Ambient temperature		5 ~ 40 °C							
Media temperature		5 ~ 60 °C							

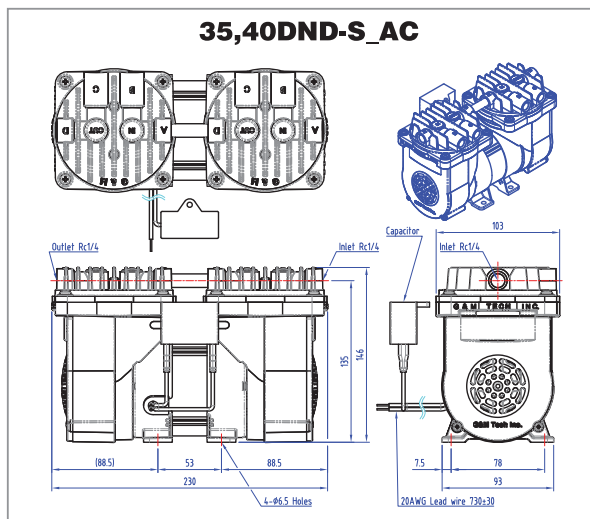
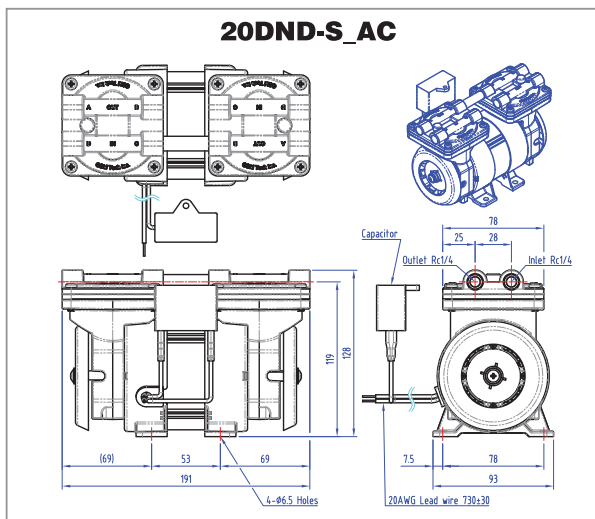
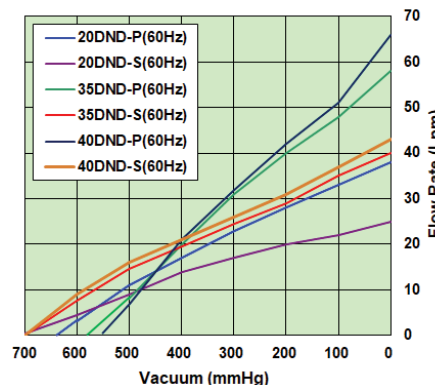
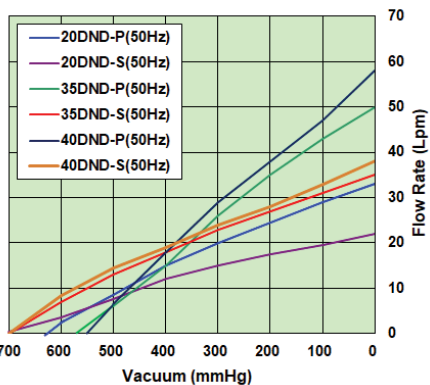


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Dual Head (AC version)

Head Type	Dual Head Type (AC version)																							
	20DND-41P		20DND-42P		20DND-41S		20DND-42S		35DND-41P		35DND-42P		35DND-41S		35DND-42S		40DND-21P		40DND-22P		40DND-21S		40DND-22S	
Head configuration	Parallel connection				Series connection				Parallel connection				Series connection				Parallel connection				Series connection			
Voltage	110VAC		220VAC		110VAC		220VAC		110VAC		220VAC		110VAC		220VAC		110VAC		220VAC		110VAC		220VAC	
Frequency	50/60Hz				50/60Hz				50/60Hz				50/60Hz				50/60Hz				50/60Hz			
Free Flow Rate	33 Lpm(50Hz)				22 Lpm(50Hz)				50 Lpm(50Hz)				35 Lpm(50Hz)				58 Lpm(50Hz)				38 Lpm(50Hz)			
	38 Lpm(60Hz)				25 Lpm(60Hz)				58 Lpm(60Hz)				40 Lpm(60Hz)				66 Lpm(60Hz)				43 Lpm(60Hz)			
Max. Vacuum	640 mmHg				720 mmHg				580 mmHg				700 mmHg				570 mmHg				690 mmHg			
	160 mbar abs				53 mbar abs				240 mbar abs				80 mbar abs				253 mbar abs				93 mbar abs			
Max. Pressure	N.A.				N.A.				N.A.				N.A.				N.A.				N.A.			
Power Consumption	80W(50Hz)				80W(50Hz)				90W(50Hz)				80W(50Hz)				126W(50Hz)				115W(50Hz)			
	88W(60Hz)				88W(60Hz)				98W(60Hz)				88W(60Hz)				153W(60Hz)				138W(60Hz)			
Dimensions (mm)	93(W) x 128(H) x 191(L)						103(W) x 146(H) x 230(L)																	
Weight (Kg)	2,6 Kg						3,7 Kg																	
Connecting type	Rc1/4" Tap (PT1/4" Tap) Thread																							
Diaphragm	Teflon Sheeted EPDM																							
Motor type	4 pole motor												2 pole motor											
	TP (Thermal Protector) applied, Capacitor start																							
Ambient temperature	5 ~ 40 °C																							
Media temperature	5 ~ 60 °C																							



Single Head (BLDC version)

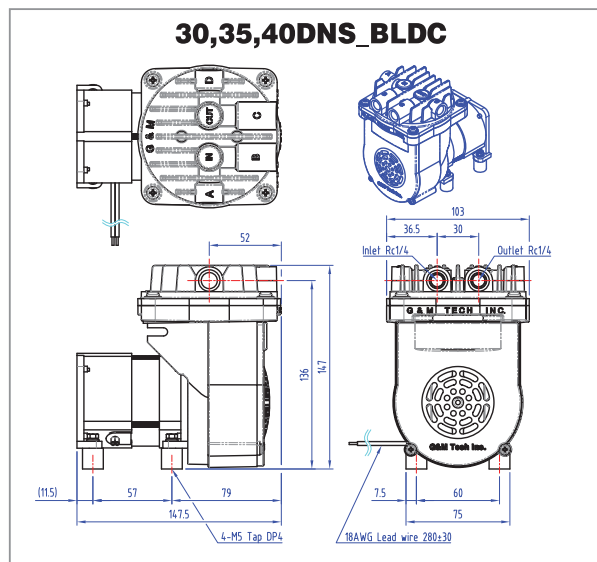
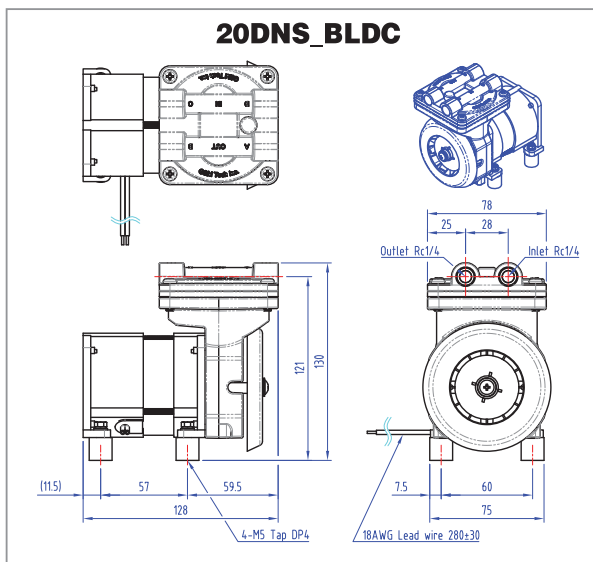
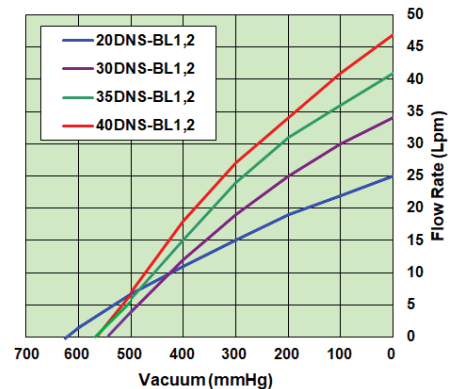
Head Type	Single Head Type (BLDC version)							
Model	20DNS-BL1	20DNS-BL2	30DNS-BL1	30DNS-BL2	35DNS-BL1	35DNS-BL2	40DNS-BL1-ED	40DNS-BL2-ED
Voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC
Driver type	Internal		Internal		Internal		External (GED-2405D)	
Free Flow Rate	25 Lpm		34 Lpm		41 Lpm		47 Lpm	
	630 mmHg		560 mmHg		580 mmHg		570 mmHg	
Max. Vacuum	173 mbar abs		266 mbar abs		240 mbar abs		253 mbar abs	
Max. Pressure	N.A.		N.A.		N.A.		N.A.	
Power Consumption	27W	24W	35W	35W	40W	40W	52W	52W
Rated current	2.2A	1.0A	2.9A	1.4A	3.3A	1.7A	4.3A	2.2A
Dimensions (mm)	84(W) x 130(H) x 128(L)			103(W) x 147(H) x 148(L)				
Weight (Kg)	1.2 Kg			1.8 Kg				
Connecting type	Rc1/4" Tap (PT1/4" Tap) Thread							
Diaphragm	Teflon Sheeted EPDM							
Motor type	BLDC (Burrless DC) motor, Insulation class E							
Ambient temperature	5 ~ 40 °C							
Media temperature	5 ~ 60 °C							



20DNS



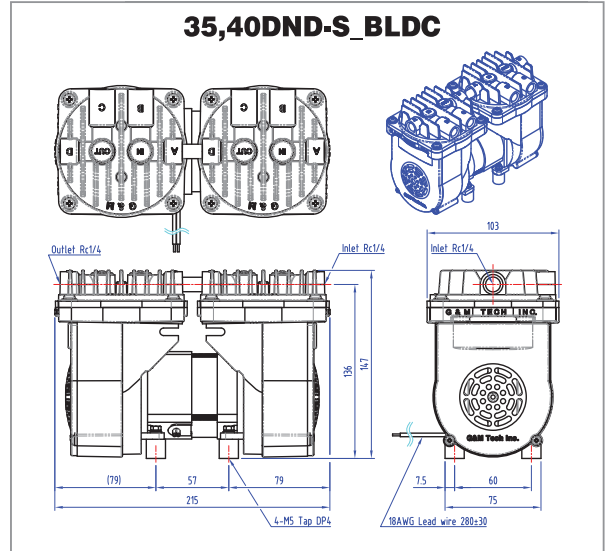
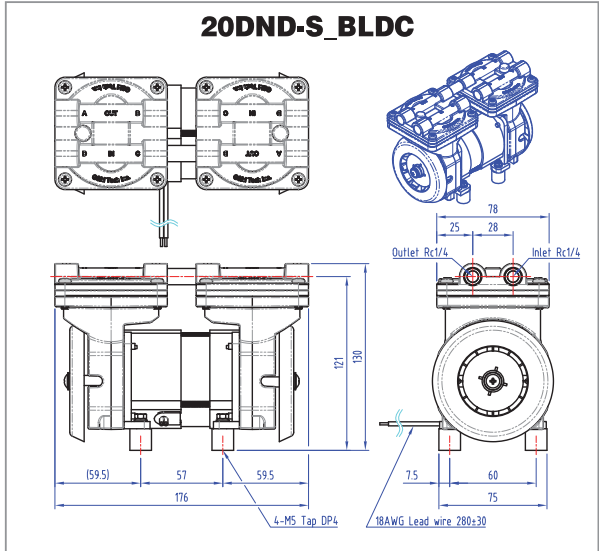
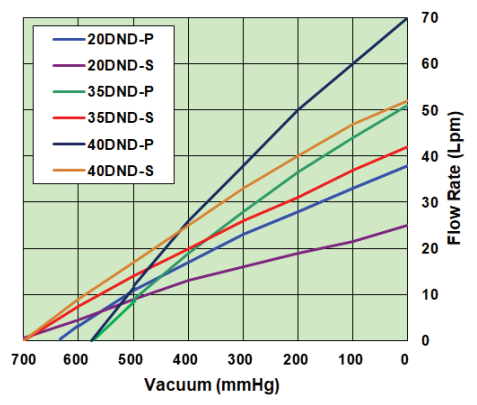
30DNS
35DNS
40DNS



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Dual Heads (BLDC version)

Head Type	Dual Head Type (BLDC version)							
	20DND-BL2P	20DND-BL2S	35DND-BL2P	35DND-BL2S	40DND-BL1P-ED	40DND-BL1S-ED	40DND-BL2P-ED	40DND-BL2S-ED
Model								
Head configuration	Parallel connection	Series connection	Parallel connection	Series connection	Parallel connection	Series connection	Parallel connection	Series connection
Voltage	24VDC		24VDC		12VDC		24VDC	
Driver type	Internal		Internal		External (GED-2405D)			
Free Flow Rate	38 Lpm	25 Lpm	51 Lpm	42 Lpm	70 Lpm	52 Lpm	70 Lpm	52 Lpm
Max. Vacuum	640 mmHg	720 mmHg	580 mmHg	690 mmHg	580 mmHg	700 mmHg	580 mmHg	700 mmHg
	160 mbar abs	53 mbar abs	240 mbar abs	93 mbar abs	240 mbar abs	80 mbar abs	240 mbar abs	80 mbar abs
Max. Pressure	N.A.		N.A.		N.A.		N.A.	
Power Consumption	39W	34W	68W	63W	102W	91W	97W	88W
Rated current	1,6A	1,4A	2,8A	2,6A	8,5A	7,6A	4,1A	3,7A
Dimensions (mm)	84(W) x 130(H) x 176(L)				103(W) x 147(H) x 215(L)			
Weight (Kg)	1,5 Kg			2,6 Kg				
Connecting type	Rc1/4" Tap (PT1/4" Tap) Thread							
Diaphragm	Teflon Sheeted EPDM							
Motor type	4 pole motor							
	BLDC (Bursh-less DC) motor, Insulation class E							
Ambient temperature	5 ~ 40 °C							
Media temperature	5 ~ 60 °C							



Assembly Drawing

Applied Models: 20DNS

18	Fan Screw	-	2	-	-	-
17	Washer	-	2	-	-	-
16	O-Ring	Silicone	3	-	-	-
15	Fan	P.P	2	-	-	BLACK
14	Head Screw	-	4	-	-	M5
13	Head	PPS	1	-	-	BLACK
12	Valve	Silicone	2	-	-	-
11	O-Ring	Silicone	2	-	-	-
10	Valve Plate	PPS	1	-	-	BLACK
9	Set Screw	-	2	-	-	M5
8	Eccentric	-	1	-	-	-
7	Bearing	-	1	-	-	6003ZZ
6	Diaphragm	EPDM+T/S	1	-	-	-
5	Rod	ADC12	1	-	-	-
4	Body Screw	-	4	-	-	M4
3	Body	PPS	1	-	-	BLACK
2	Gap Jig	-	2	-	-	-
1	Motor (AC Version)	-	1	-	-	With Capacitor
No.	Description	Material	Q'ty	Weight	Finish	Remarks
G&M Tech Inc.			Ass'y Name	20DNS_AC(E.View)		
Drawn By	Chkd. By	Appr. By	Title of Project	Diaphragm Pump		
yklee	SON		Drawing No.			

Applied Models: 30,35,40DNS

22	Fan Screw	-	2	-	-	-
21	Washer	-	2	-	-	-
20	O-Ring	Silicone	2	-	-	-
19	Fan Cover	P.C	1	-	-	BLACK
18	Fan	P.P	2	-	-	BLACK
17	Head Screw	-	4	-	-	M5
16	Head	ADC12	1	-	-	BLACK
15	O-Ring	Silicone	2	-	-	Combined
14	Valve	NBR	2	-	-	Combined
13	Valve Plate	-	1	-	-	Teflon coating
12	Valve Screw	-	2	-	-	M4
11	Set Screw	-	2	-	-	M5
10	Eccentric	-	1	-	-	-
9	Bearing	-	1	-	-	6003ZZ
8	Rod Screw	-	2	-	-	M5
7	Rod Cap	ADC12	1	-	-	-
6	Diaphragm	EPDM+T/S	1	-	-	-
5	Rod	ADC12	1	-	-	-
4	Body & F/C Screw	-	6	-	-	M4
3	Body	ADC12	1	-	-	-
2	Gap Jig	-	1	-	-	-
1	Motor (AC Version)	-	1	-	-	With Capacitor
No.	Description	Material	Q'ty	Weight	Finish	Remarks
G&M Tech Inc.			Ass'y Name	30,35,40DNS_AC(E.View)		
Drawn By	Chkd. By	Appr. By	Title of Project	Diaphragm Pump		
yklee	SON		Drawing No.			

Available Accessories

Mufflers and accessories

Rubber Mount

➤ R-SL1 (Solid type)



➤ R-ST1 (Both Stud)



➤ R-ST2 (Both Stud)



➤ R-SN (Stud & Tap)



➤ R-RM1 (Stud & Flat)

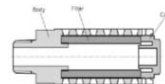


Air Filter / Silencer

➤ F-DC01
(AL Die Casting)



➤ F-PF01
(Pneumatic Filter)



➤ F-PC01
(Poly Carbonate)



➤ F-CC01
(Comp Air Filter)



Core parts



⬆ Diaphragm(Intergrated) for 20DNS(DND)



⬆ Diaphragm(Intergrated) for 20DNS(DND)



⬆ Permanently lubricated bearings



⬆ Diaphragm(Separated) for 30,35,40DNS(DND)
Valves for 30,35,40DNS(DND)



G&M Tech Inc.
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Distributor

To improve, the specifications & design on catalog can be changed without notice.
For OEM specifications, please come in contact with factory.

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