

# B.P. PILOT BURNER

株式会社加藤鉄五バーナー製作所  
KATO

# Pilot BURNER

**PILOT BURNER is Gun-type Oil Burner enables excellent performance of combustion.**

- Wide range of the capacity from 4 liters/hr. upto 400liters/hr.
- Suitable models for Kerosene, Light and Heavy oil.
- On-Off and High-Low controls are available.
- Power source of AC100V - 200V, 220V, 230V, 380V, etc. are available.

## FUEL AND BURNER MODELS

|                              | Kerosene    | Light Oil   | Heavy oil A (Bunker A) | Heavy oil B (Bunker B) | Heavy oil C (Bunker C) |
|------------------------------|-------------|-------------|------------------------|------------------------|------------------------|
| Standard kinematic viscosity | 1.4CST/30°C | 3.0CST/30°C | 3.0CST/50°C            | 25CST/50°C             | 120CST/50°C            |
| Notation                     | -           | -           | -                      | C                      | C                      |
| Example                      | GPN-50      | GPN-50      | GPN-50                 | GPN-50C                | GPN-50C                |

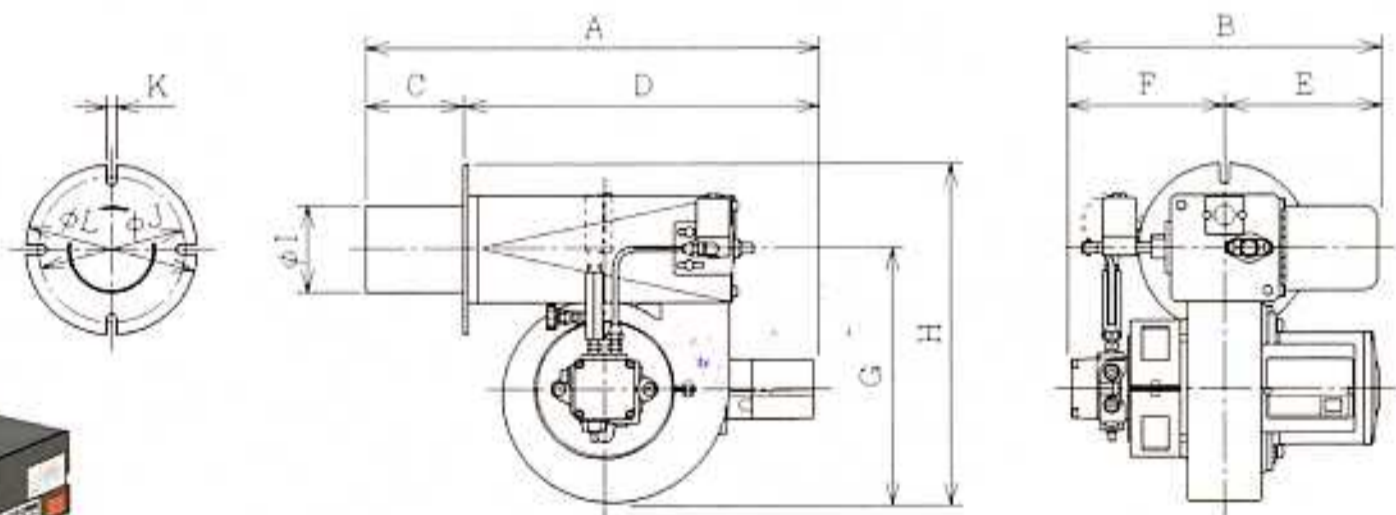
## CONTROLS OF COMBUSTION

|                      | ON-OFF                    | Hi-Lo           |                    | Hi-Mi-Lo |
|----------------------|---------------------------|-----------------|--------------------|----------|
| Q'ty of Nozzle       | 1                         | 2               |                    | 3        |
| Air adjustment       | Fixed (Manual adjustment) | Open/Close      | 2 steps adjustment |          |
| Air adjusting device | Regulation Plate, Shutter | Solenoid Damper | Control Motor      |          |
| Notation             | -                         | W E             | W E M              |          |
| Example              | GPN-50                    | GPN-50WE        | GPN-50WEM          |          |
|                      |                           |                 | GPN-402TEM         |          |

**FB**  
[ON-OFF control]  
(for Kerosene, Light oil and BunkerA)



FB-10



FB-10 ~30

Fixed flange type

| MODEL | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|
| FB-10 | 465 | 320 | 100 | 365 | 160 | 160 | 265 | 325 | 90  | 150 | 10 | 175 |
| FB-14 | 490 | 395 | 105 | 385 | 245 | 150 | 300 | 370 | 116 | 190 | 12 | 230 |
| FB-20 | 555 | 420 | 100 | 455 | 240 | 180 | 255 | 360 | 116 | 170 | 11 | 210 |
| FB-30 | 600 | 490 | 130 | 470 | 260 | 230 | 345 | 480 | 140 | 220 | 12 | 270 |

※ Reverse location of burner housing models are available.

Model number is FB-...R. Please state "R" next to the last letter of the burner model.



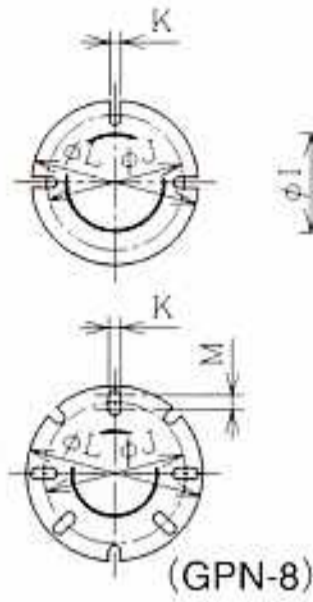
# GPN series

[ON-OFF control]

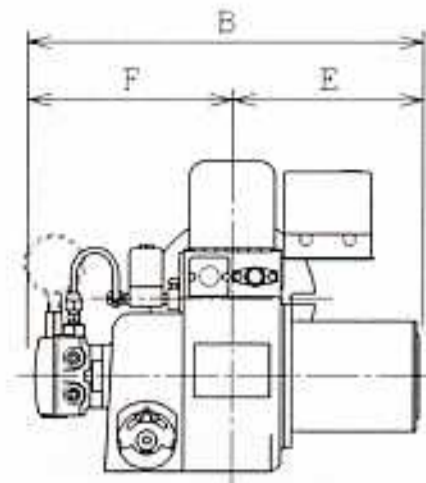
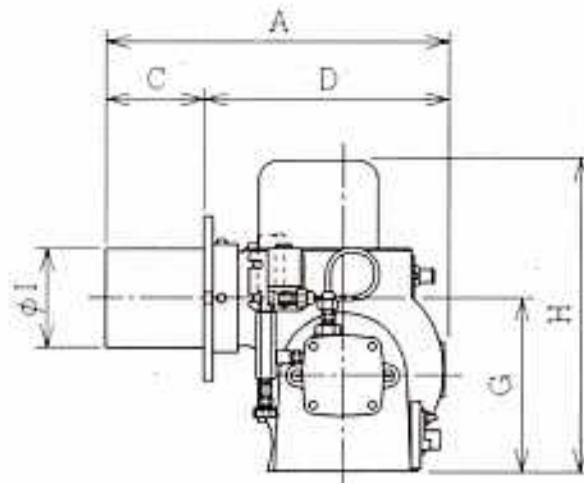
(for Kerosene, Light oil and Bunker A)



**GPN-10**



(GPN-8)



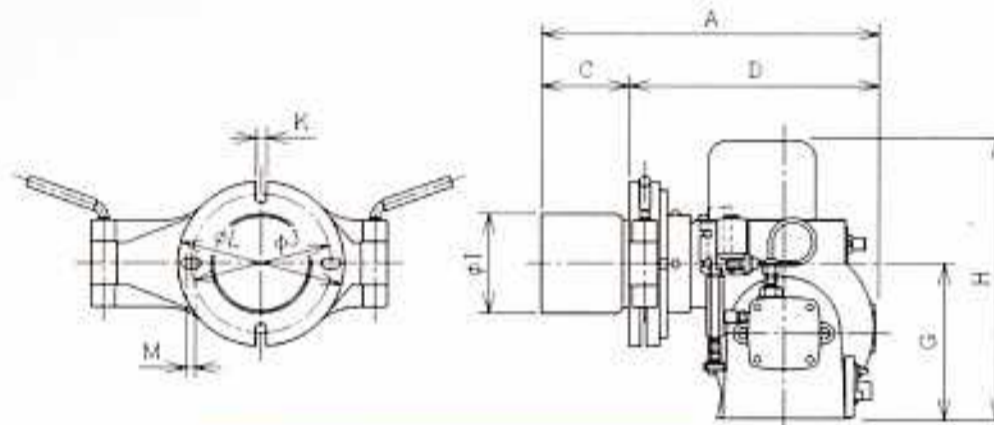
**GPN-8~20**

Fixed flange type

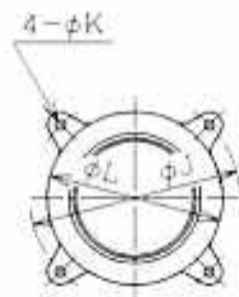
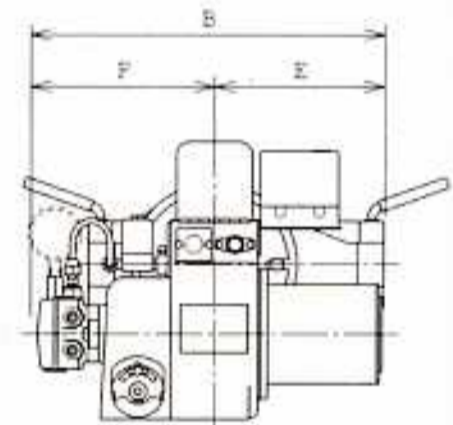
| MODEL  | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   | M  |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|
| GPN-8  | 326 | 355 | 79  | 247 | 175 | 180 | 185 | 330 | 90  | 145 | 12 | 180 | 15 |
| GPN-9  | 350 | 390 | 130 | 220 | 181 | 209 | 185 | 330 | 90  | 140 | 11 | 180 |    |
| GPN-10 | 350 | 400 | 100 | 250 | 195 | 205 | 180 | 325 | 102 | 140 | 11 | 170 |    |
| GPN-15 | 385 | 450 | 115 | 270 | 245 | 205 | 206 | 356 | 102 | 150 | 11 | 190 |    |
| GPN-20 | 370 | 450 | 100 | 270 | 245 | 205 | 206 | 356 | 115 | 150 | 11 | 190 |    |



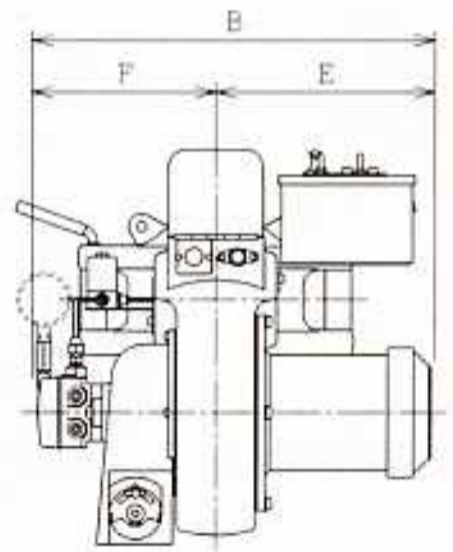
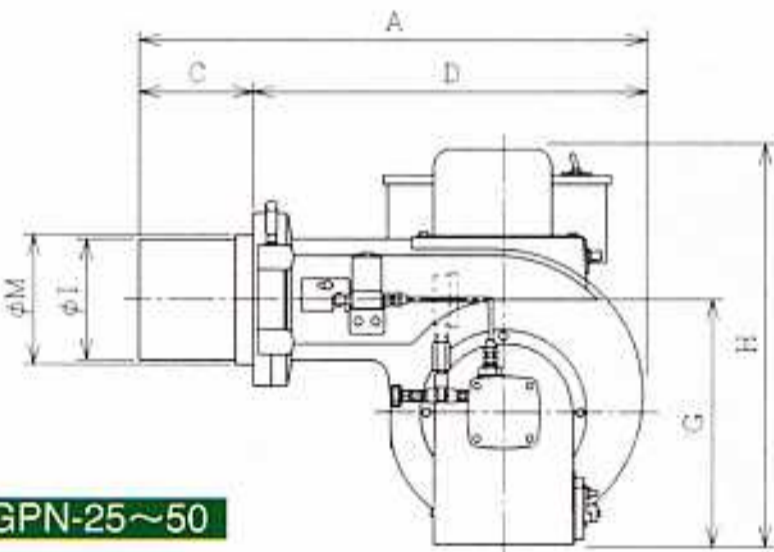
**GPN-35**



**GPN-10~20 Hinged Type**



**GPN-25~50**



Hinged flange type

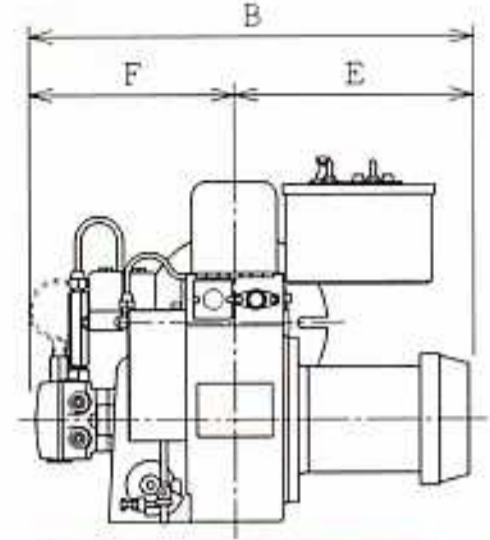
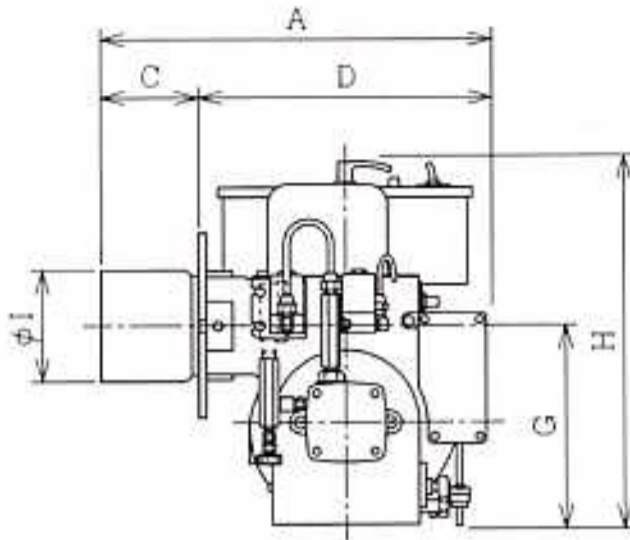
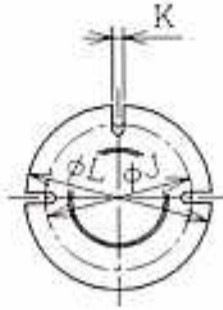
| MODEL  | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   | M   |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
| GPN-10 | 385 | 402 | 100 | 285 | 197 | 205 | 180 | 325 | 115 | 160 | 12 | 190 | 10  |
| GPN-15 | 405 | 450 | 100 | 305 | 245 | 205 | 206 | 356 | 115 | 160 | 12 | 190 | 10  |
| GPN-20 | 405 | 450 | 100 | 305 | 245 | 205 | 206 | 356 | 115 | 160 | 12 | 190 | 10  |
| GPN-25 | 440 | 450 | 110 | 330 | 245 | 205 | 235 | 405 | 115 | 230 | 11 | 190 | 125 |
| GPN-30 | 513 | 460 | 118 | 395 | 245 | 215 | 275 | 460 | 127 | 240 | 11 | 200 |     |
| GPN-35 | 490 | 455 | 118 | 372 | 245 | 210 | 287 | 460 | 127 | 240 | 11 | 200 |     |
| GPN-40 | 525 | 460 | 130 | 395 | 245 | 215 | 275 | 460 | 140 | 240 | 11 | 200 | 150 |
| GPN-50 | 580 | 460 | 130 | 450 | 250 | 210 | 285 | 465 | 140 | 240 | 11 | 200 | 150 |

# GPN-WE series

(for Kerosene, Light oil and Bunker A)



GPN-20WE

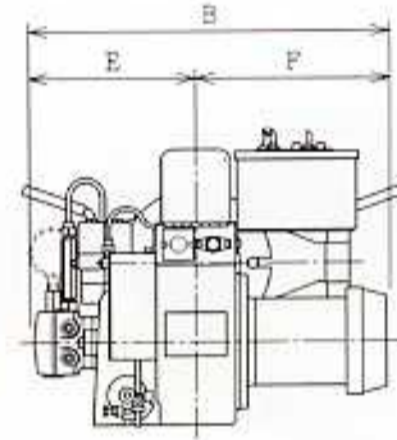
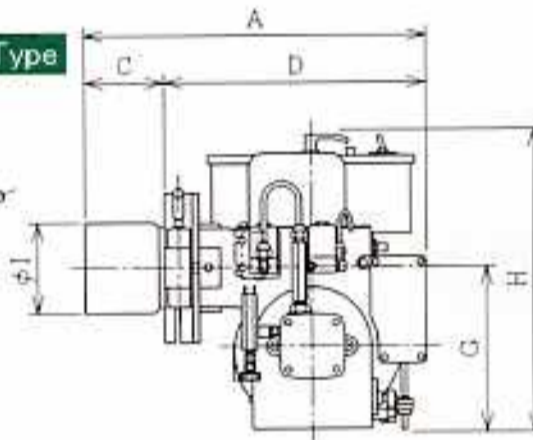
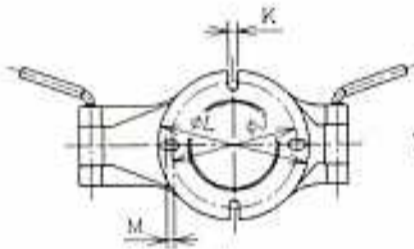


GPN-10WE~20WE

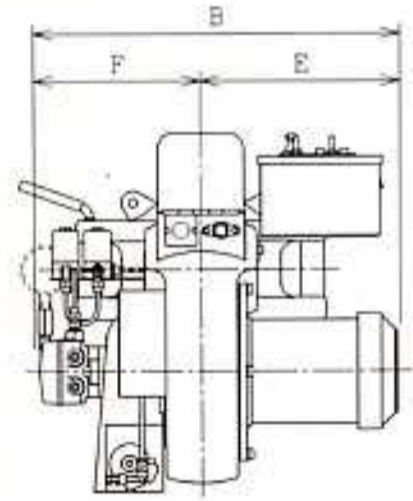
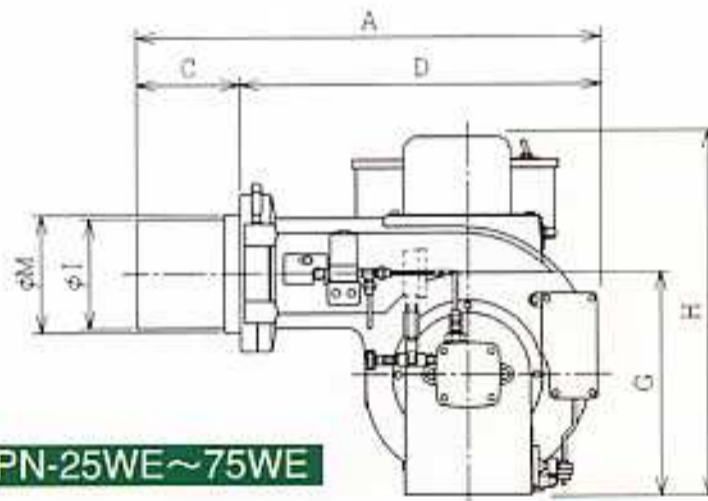
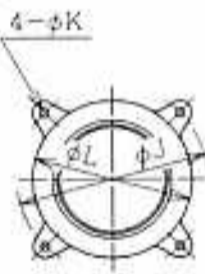
Fixed flange type

| MODEL    | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|
| GPN-10WE | 380 | 423 | 100 | 280 | 208 | 215 | 195 | 363 | 115 | 140 | 11 | 170 |
| GPN-15WE | 400 | 460 | 100 | 300 | 245 | 215 | 215 | 390 | 115 | 150 | 11 | 190 |
| GPN-20WE | 400 | 460 | 100 | 300 | 245 | 215 | 215 | 390 | 115 | 150 | 11 | 190 |

GPN-10WE~20WE Hinged Type



GPN-50WE



GPN-25WE~75WE

Hinged flange type

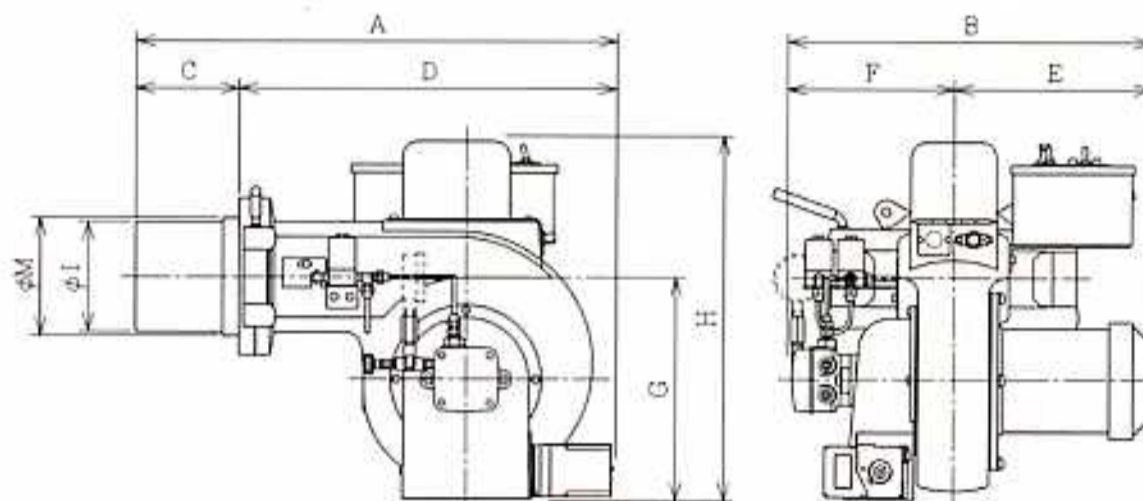
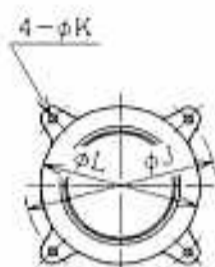
| MODEL    | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   | M   |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
| GPN-10WE | 415 | 423 | 100 | 315 | 208 | 215 | 195 | 363 | 115 | 160 | 12 | 190 | 10  |
| GPN-15WE | 435 | 460 | 100 | 335 | 245 | 215 | 215 | 390 | 115 | 160 | 12 | 190 | 10  |
| GPN-20WE | 435 | 460 | 100 | 335 | 245 | 215 | 215 | 390 | 115 | 160 | 12 | 190 | 10  |
| GPN-25WE | 455 | 460 | 110 | 345 | 245 | 215 | 240 | 405 | 115 | 230 | 11 | 190 | 125 |
| GPN-30WE | 538 | 460 | 118 | 420 | 245 | 215 | 275 | 460 | 127 | 240 | 11 | 200 |     |
| GPN-35WE | 503 | 455 | 118 | 385 | 245 | 210 | 287 | 460 | 127 | 240 | 11 | 200 |     |
| GPN-40WE | 555 | 460 | 130 | 425 | 245 | 215 | 275 | 460 | 140 | 240 | 11 | 200 | 150 |
| GPN-50WE | 585 | 460 | 130 | 455 | 250 | 210 | 290 | 470 | 140 | 240 | 11 | 200 | 150 |
| GPN-75WE | 610 | 525 | 130 | 480 | 275 | 250 | 315 | 500 | 153 | 240 | 11 | 200 |     |

# GPN-WEM series

(for Kerosene, Light oil and Bunker A)



**GPN-75WEM**



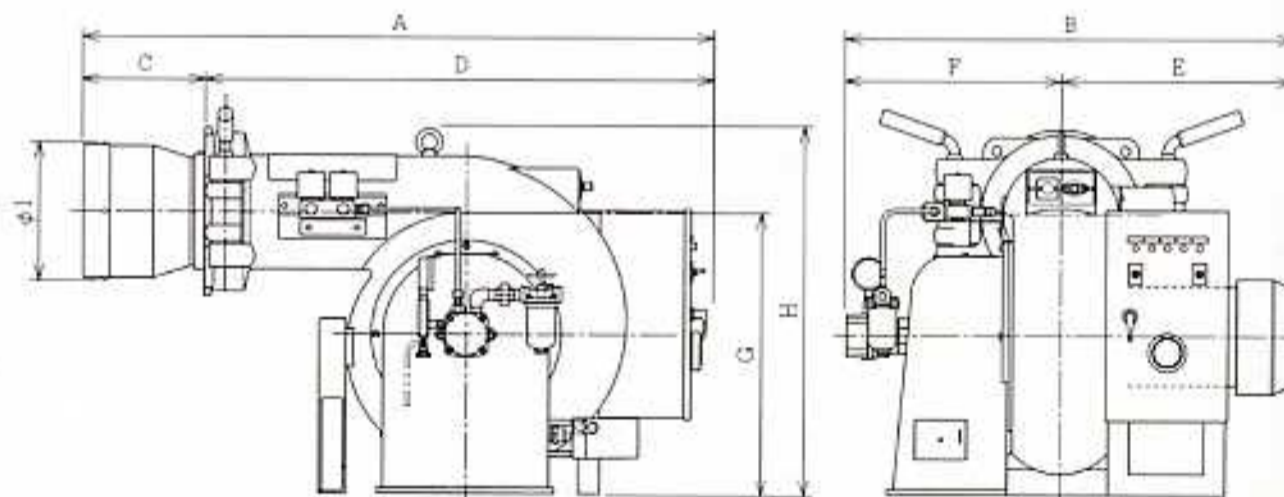
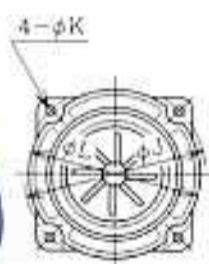
**GPN-25WEM~81WEM**

Hinged flange type

| MODEL     | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   | M   |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
| GPN-25WEM | 480 | 460 | 110 | 370 | 245 | 215 | 235 | 400 | 115 | 230 | 11 | 190 | 125 |
| GPN-30WEM | 555 | 460 | 118 | 437 | 245 | 215 | 275 | 460 | 127 | 240 | 11 | 200 |     |
| GPN-35WEM | 515 | 460 | 118 | 397 | 245 | 210 | 287 | 460 | 127 | 240 | 11 | 200 |     |
| GPN-40WEM | 565 | 460 | 130 | 435 | 245 | 215 | 275 | 460 | 140 | 240 | 11 | 200 | 150 |
| GPN-50WEM | 600 | 460 | 130 | 470 | 250 | 210 | 285 | 465 | 140 | 240 | 11 | 200 | 150 |
| GPN-75WEM | 620 | 525 | 130 | 490 | 275 | 250 | 315 | 500 | 153 | 240 | 11 | 200 |     |
| GPN-81WEM | 645 | 600 | 130 | 515 | 350 | 250 | 355 | 600 | 153 | 240 | 11 | 200 |     |



**GPN-402TEM**



**GPN-122WEM~402TEM**

Hinged flange type

| MODEL      | A    | B    | C   | D    | E   | F   | G   | H   | I   | J   | K  | L   |
|------------|------|------|-----|------|-----|-----|-----|-----|-----|-----|----|-----|
| GPN-122WEM | 995  | 720  | 170 | 825  | 385 | 335 | 360 | 490 | 181 | 280 | 15 | 255 |
| GPN-152WEM | 990  | 720  | 170 | 820  | 385 | 335 | 360 | 490 | 181 | 280 | 15 | 255 |
| GPN-202WEM | 1180 | 840  | 230 | 950  | 435 | 405 | 535 | 700 | 262 | 340 | 18 | 320 |
| GPN-300TEM | 1300 | 950  | 230 | 1070 | 510 | 440 | 640 | 820 | 262 | 340 | 18 | 320 |
| GPN-402TEM | 1297 | 1110 | 227 | 1070 | 630 | 480 | 615 | 805 | 269 | 380 | 18 | 350 |

# SPECIFICATIONS

## FB · GPN seires

for Kerosene, Light oil and Bunker A [ON-OFF control]

| MODEL  | SPECIFICATION | STANDARD NOZZLE<br>(SPRAY ANGLE : 60° ) |      |   | POWER SOURCE |     | MOTOR<br>KW | CALIBER OF<br>CONNECTION | FLOW CHART |
|--------|---------------|---|------|---|--------------|-----|-------------|--------------------------|------------|
|        |               |   |      |   | V            | Φ   |             |                          |            |
| FB-10  |               | 2.75                                    | -    | - | 100/200      | 1/3 | 0.15        | 8A                       | Fig. 1     |
| FB-14  |               | 3.50                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| FB-20  |               | 4.50                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| FB-30  |               | 5.50                                    | -    | - | 200          | 3   | 0.4         | 8A                       |            |
| GPN-8  |               | 1.50                                    | -    | - | 100/200      | 1   | 0.125       | 8A                       |            |
| GPN-9  |               | 2.00                                    | -    | - | 100/200      | 1   | 0.125       | 8A                       |            |
| GPN-10 |               | 2.50                                    | -    | - | 100/200      | 1/3 | 0.2         | 8A                       |            |
| GPN-15 |               | 3.00                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-20 |               | 4.00                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-25 |               | 4.50                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-30 |               | 5.50                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-35 |               | 6.00                                    | -    | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-40 |               | 3.50                                    | 3.50 | - | 200          | 3   | 0.4         | 8A                       |            |
| GPN-50 |               | 4.00                                    | 4.00 | - | 200          | 3   | 0.4         | 8A                       |            |

※ GPN-40 and 50 : Individual nozzle spray fuel at the same time.

## GPN-WE series

for Kerosene, Light oil and Bunker A [Hi-Lo control]

| MODEL    | SPECIFICATION | STANDARD NOZZLE<br>(SPRAY ANGLE : 60° ) |      |   | POWER SOURCE |     | MOTOR<br>KW | CALIBER OF<br>CONNECTION | FLOW CHART |
|----------|---------------|---|------|---|--------------|-----|-------------|--------------------------|------------|
|          |               |   |      |   | V            | Φ   |             |                          |            |
| GPN-10WE |               | 1.25                                    | 1.25 | - | 100/200      | 1/3 | 0.2         | 8A                       | Fig. 2     |
| GPN-15WE |               | 1.50                                    | 1.50 | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-20WE |               | 2.00                                    | 2.00 | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-25WE |               | 2.25                                    | 2.25 | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-30WE |               | 2.75                                    | 2.75 | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-35WE |               | 3.00                                    | 3.00 | - | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-40WE |               | 3.25                                    | 3.25 | - | 200          | 3   | 0.4         | 8A                       |            |
| GPN-50WE |               | 4.00                                    | 4.00 | - | 200          | 3   | 0.4         | 8A                       |            |
| GPN-75WE |               | 6.00                                    | 6.00 | - | 200          | 3   | 0.75        | 8A                       |            |

## GPN-WEM series

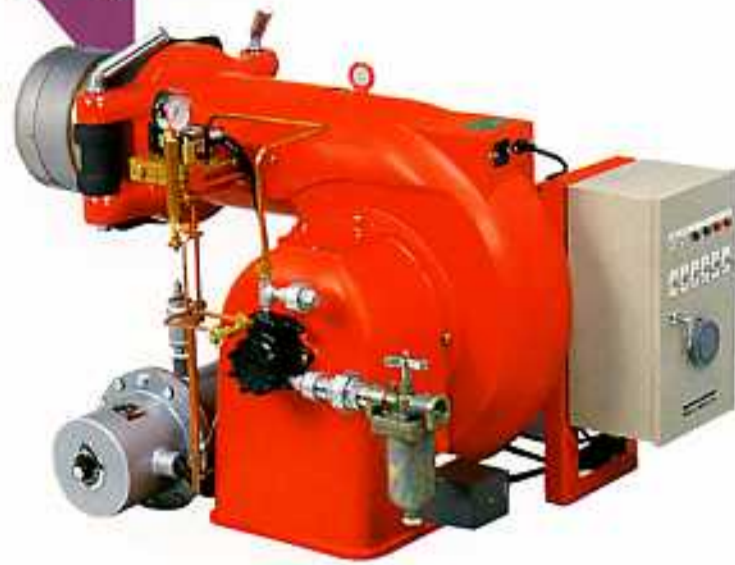
for Kerosene, Light oil and Bunker A [Hi-Lo control]

| MODEL      | SPECIFICATION | STANDARD NOZZLE<br>(SPRAY ANGLE : 60° ) |      |      | POWER SOURCE |     | MOTOR<br>KW | CALIBER OF<br>CONNECTION | FLOW CHART |
|------------|---------------|---|------|------|--------------|-----|-------------|--------------------------|------------|
|            |               |   |      |      | V            | Φ   |             |                          |            |
| GPN-10WEM  |               | 1.25                                    | 1.25 | -    | 100/200      | 1/3 | 0.2         | 8A                       | Fig. 3     |
| GPN-15WEM  |               | 1.50                                    | 1.50 | -    | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-20WEM  |               | 2.00                                    | 2.00 | -    | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-25WEM  |               | 2.25                                    | 2.25 | -    | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-30WEM  |               | 2.75                                    | 2.75 | -    | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-35WEM  |               | 3.00                                    | 3.00 | -    | 100/200      | 1/3 | 0.25        | 8A                       |            |
| GPN-40WEM  |               | 3.50                                    | 3.50 | -    | 200          | 3   | 0.4         | 8A                       |            |
| GPN-50WEM  |               | 4.00                                    | 4.00 | -    | 200          | 3   | 0.4         | 8A                       |            |
| GPN-75WEM  |               | 6.00                                    | 6.00 | -    | 200          | 3   | 0.75        | 8A                       |            |
| GPN-81WEM  |               | 8.00                                    | 8.00 | -    | 200          | 3   | 1.1         | 8A                       |            |
| GPN-122WEM |               | 11.0                                    | 11.0 | -    | 200          | 3   | 1.5         | 10A                      |            |
| GPN-152WEM |               | 13.0                                    | 13.0 | -    | 200          | 3   | 2.2         | 10A                      |            |
| GPN-202WEM |               | 18.0                                    | 18.0 | -    | 200          | 3   | 3.7         | 10A                      |            |
| GPN-300TEM |               | 22.0                                    | 22.0 | 22.0 | 200          | 3   | 7.5         | 15A                      |            |
| GPN-402TEM |               | 30.0                                    | 28.0 | 28.0 | 200          | 3   | 11.0        | 15A                      |            |

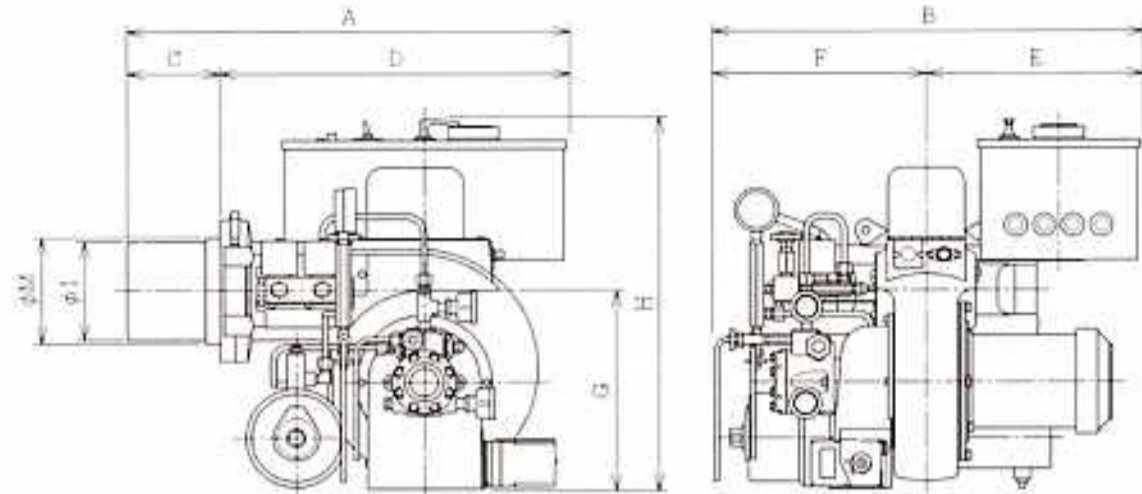
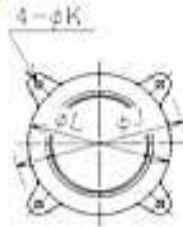
※ OPTION : Oil Heater for cold district

# GPN-B · C series

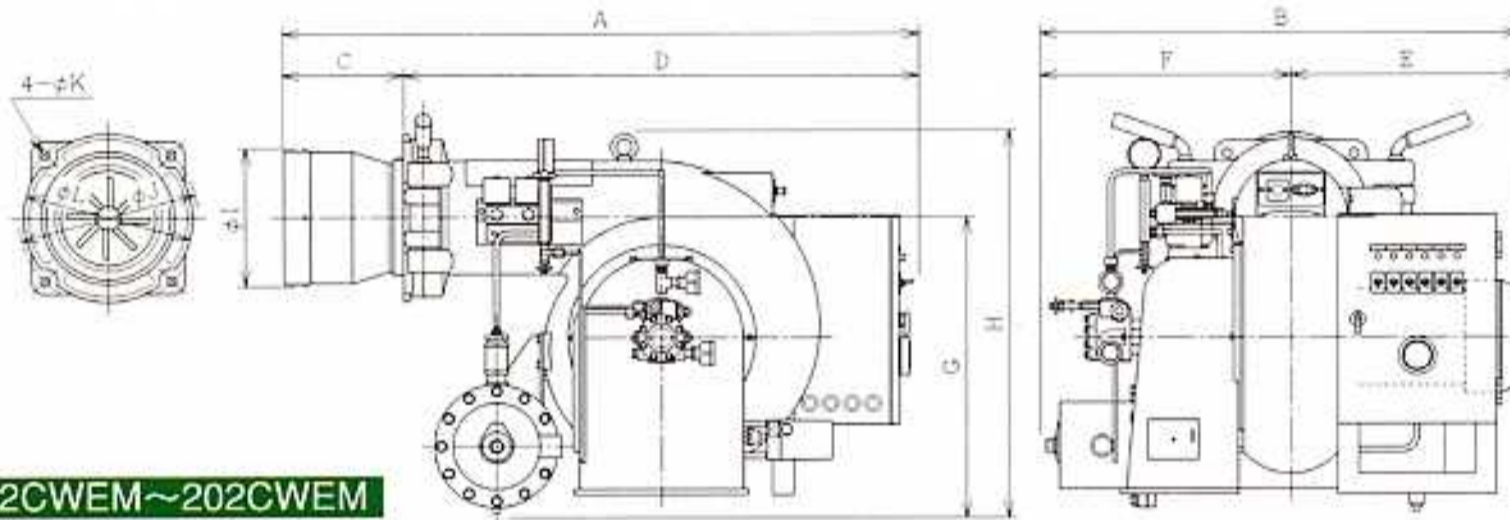
(for Banker B, C)



GPN-202CWEM



GPN-40C~81CWEM



GPN-122CWEM~202CWEM

Hinged flange type

| MODEL       | A    | B   | C   | D   | E   | F   | G   | H   | I   | J   | K  | L   | M   |
|-------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
| GPN-40C     | 590  | 560 | 130 | 460 | 265 | 295 | 275 | 460 | 140 | 240 | 11 | 200 | 150 |
| GPN-50C     | 630  | 555 | 130 | 500 | 265 | 290 | 285 | 465 | 140 | 240 | 11 | 200 | 150 |
| GPN-40CWEM  | 585  | 610 | 130 | 455 | 305 | 305 | 275 | 510 | 140 | 240 | 11 | 200 | 150 |
| GPN-50CWEM  | 620  | 610 | 130 | 490 | 305 | 305 | 285 | 530 | 140 | 240 | 11 | 200 | 150 |
| GPN-75CWEM  | 620  | 640 | 130 | 490 | 310 | 330 | 315 | 565 | 153 | 240 | 11 | 200 |     |
| GPN-81CWEM  | 645  | 685 | 130 | 515 | 355 | 330 | 355 | 605 | 153 | 240 | 11 | 200 |     |
| GPN-122CWEM | 995  | 775 | 170 | 825 | 385 | 390 | 360 | 515 | 181 | 280 | 15 | 255 |     |
| GPN-152CWEM | 995  | 795 | 170 | 825 | 385 | 410 | 470 | 625 | 181 | 280 | 15 | 255 |     |
| GPN-202CWEM | 1205 | 910 | 230 | 975 | 435 | 475 | 575 | 740 | 262 | 340 | 18 | 320 |     |

## Specification

(for Banker B and C) [ON-OFF control]

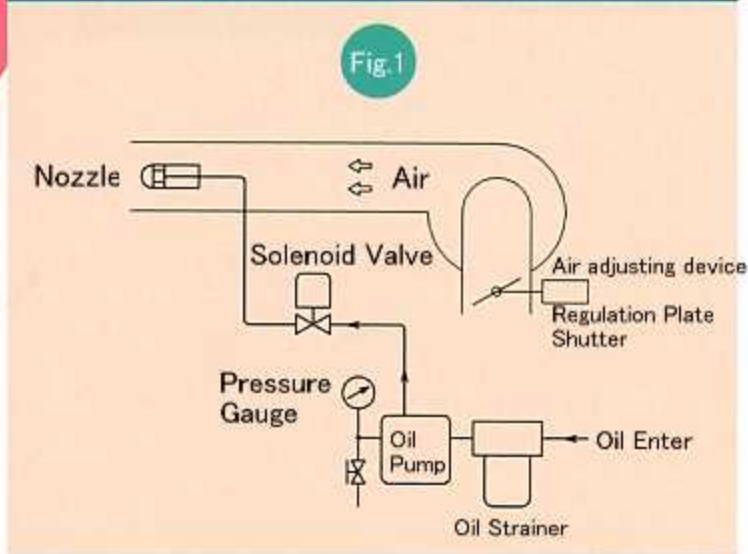
| MODEL   | SPECIFICATION | STANDARD NOZZLE (SPRAY ANGLE : 60°) |   |   | POWER SOURCE |   | MOTOR KW | HEATER KW | CALIBER OF CONNECTION | FLOW CHART |
|---------|---------------|-------------------------------------|---|---|--------------|---|----------|-----------|-----------------------|------------|
|         |               |                                     |   |   | V            | φ |          |           |                       |            |
| GPN-40C |               | 3.50                                | - | - | 200          | 3 | 0.4      | 2.0       | 20A                   | Fig. 3     |
| GPN-50C |               | 5.00                                | - | - | 200          | 3 | 0.4      | 2.0       | 20A                   |            |

(for Banker B and C) [Hi-Lo control]

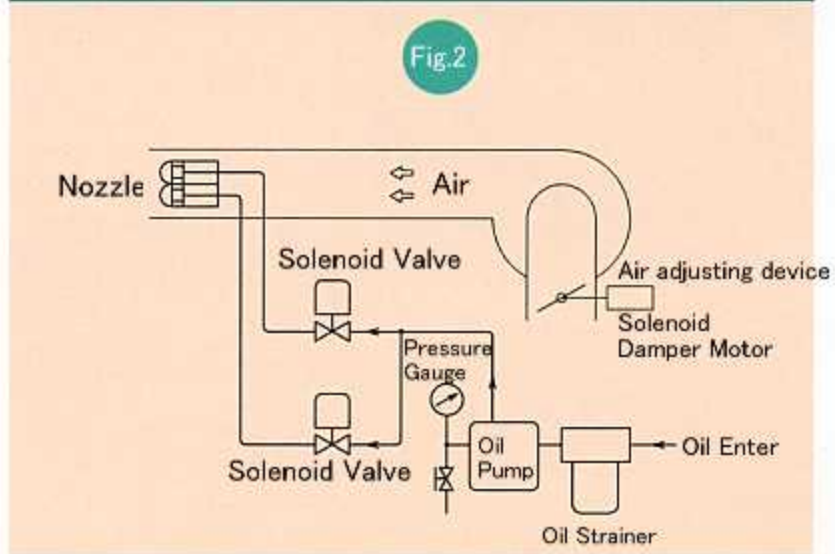
| MODEL       | SPECIFICATION | STANDARD NOZZLE (SPRAY ANGLE : 60°) |      |   | POWER SOURCE |   | MOTOR KW | HEATER KW | CALIBER OF CONNECTION | FLOW CHART |
|-------------|---------------|-------------------------------------|------|---|--------------|---|----------|-----------|-----------------------|------------|
|             |               |                                     |      |   | V            | φ |          |           |                       |            |
| GPN-40CWEM  |               | 2.00                                | 1.50 | - | 200          | 3 | 0.4      | 2.0       | 20A                   | Fig. 4     |
| GPN-50CWEM  |               | 2.50                                | 2.50 | - | 200          | 3 | 0.4      | 2.0       | 20A                   |            |
| GPN-75CWEM  |               | 3.50                                | 3.50 | - | 200          | 3 | 0.75     | 3.0       | 20A                   |            |
| GPN-81CWEM  |               | 4.00                                | 4.00 | - | 200          | 3 | 1.1      | 5.0       | 20A                   |            |
| GPN-122CWEM |               | 5.50                                | 5.50 | - | 200          | 3 | 1.5      | 6.0       | 25A                   |            |
| GPN-152CWEM |               | 6.50                                | 6.50 | - | 200          | 3 | 2.2      | 7.0       | 25A                   |            |
| GPN-202CWEM |               | 7.00                                | 7.00 | - | 200          | 3 | 3.7      | 8.0       | 25A                   |            |

## Piping Flow Chart

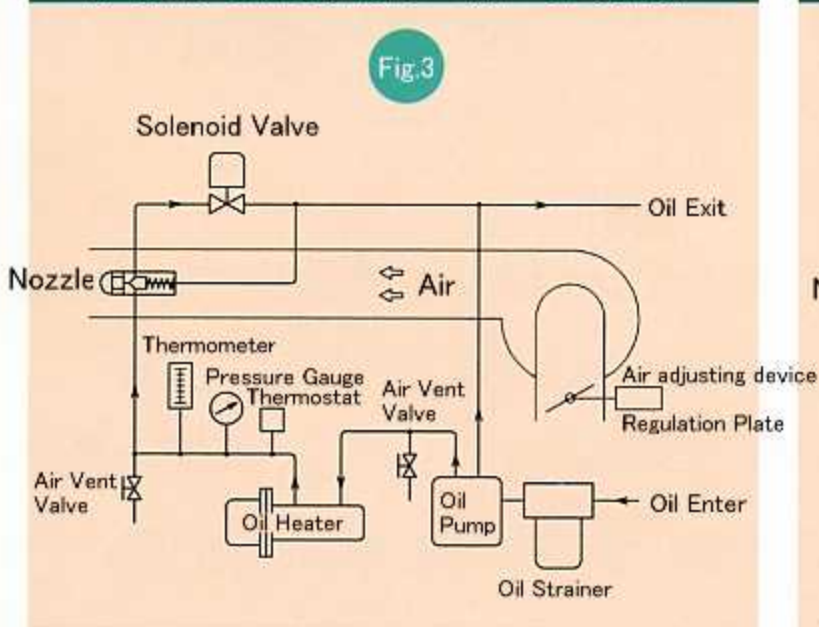
for Kerosene, Light oil and Bunker A (On-Off control)



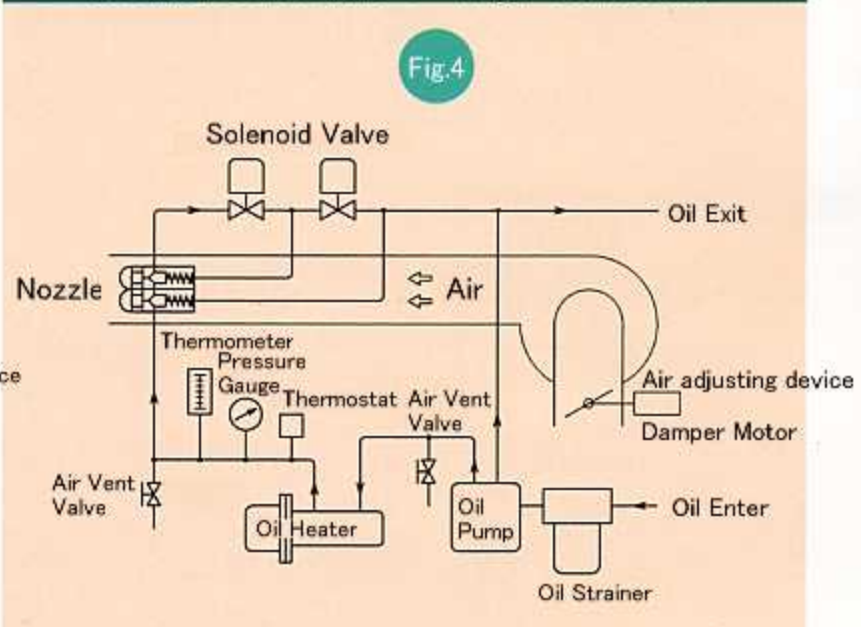
for Kerosene, Light oil and Bunker A (High - Low control)



for Bunker B and Bunker C (On - Off control)



for Bunker B and Bunker C (High - Low control)



● The modifications will be done without any notice.

Exclusive Export Agent

## LECIP CORPORATION

1260-2 KAMINOHO, ITONUKI-CHO, MOTOSU-GUN  
GIFU 501-0401, JAPAN

PHONE : 81-58-3200300, 3200301  
FAX : 81-58-3200302



株式会社

# 加藤鉄工バーナー製作所

〒501-61 岐阜県羽島郡岐南町みやまち1丁目177番地  
TEL 058-271-1011(代) FAX 058-271-1632