

NIKKISO

M150 PULSELESS SERIES



NIKKISO METERING PUMP



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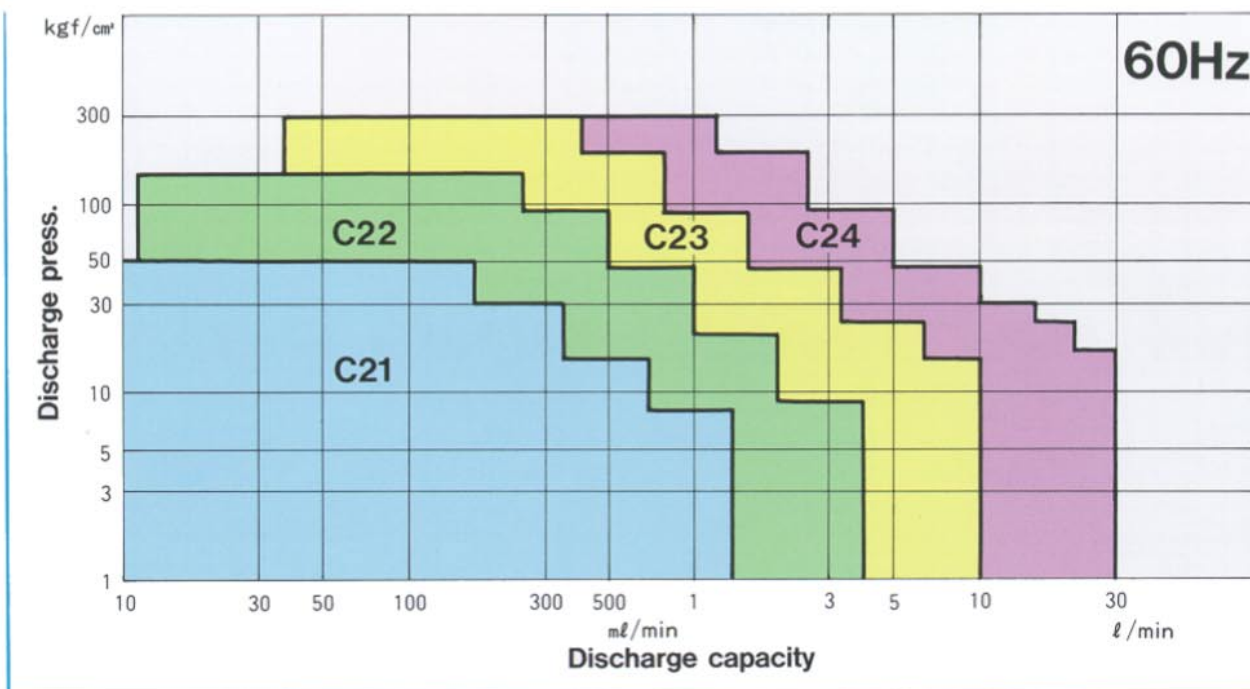
M150 PULSELESS SERIES

Incorporating newly designed cam and check valves, the new Model M150 Pulseless Series have less pulsation and are more accurate and compact.

- Compact. One cylindrical cam drives two plungers.
- Pulsation reduced to one fifth of previous models.
- Compact design with motor mounted on top.
- Newly designed check valves increase discharge accuracy ($\pm 0.5\%$).

● Press-Capacity Envelope

Packed plunger Discharge press. max. 300kgf/cm²G
 Low press. diaphragm type Discharge press. max. 15kgf/cm²G
 High press. diaphragm type Discharge press. max. 175kgf/cm²G



NEW SERIES

M150 PULSELESS SERIES

● Structure and Features

● **Capacity adjusting mechanism.**
Wide capacity adjusting due to low noise NIKKISO inverter (SPEFREQ E860).

SPEFREQ E860
Incorporates a PID controller function and scaling meter.

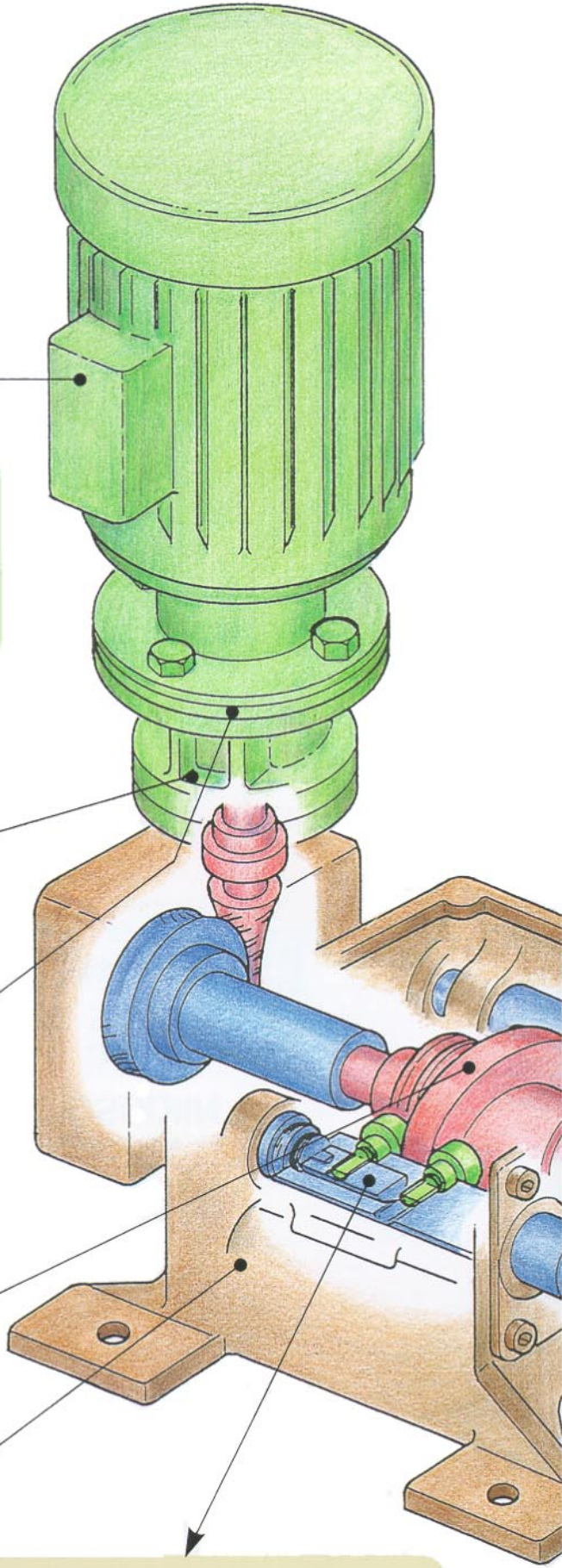
● **Compact design (I)**
Compact design achieved by mounting the motor on top.

● **Easy to assemble**
No alignment required due to the flanged motor.

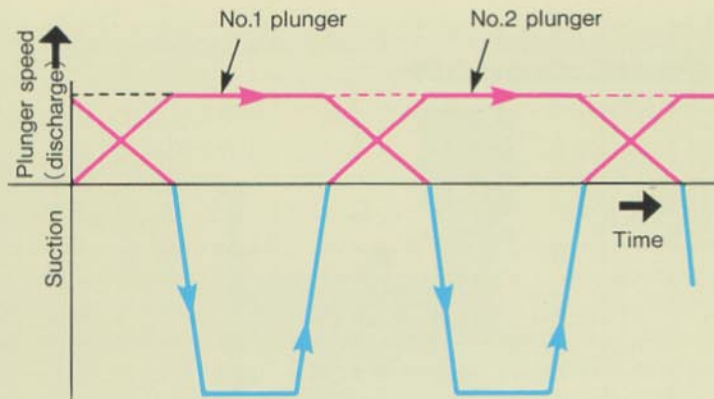
● **Compact design (II)**
Compact design achieved by the cylindrical cam which drives two plungers (patent pending).

● **Long life power end**
Maintenance-free due to oil bath system, greatly extending the life of the power end.

● **Low pulsation**
(one fifth of previous models)
Precise plunger movement achieved by reduced play with a specially designed cam and Belleville springs.



● Plunger speed curve



Pulsation eliminated; Specially designed cam control the plunger speed at discharge stroke so that combined plunger speed curve shape (=discharge capacity) at discharge side is always maintained constant.

● Widely interchangeable parts

Stable supply of proven M150 parts with high compatibility. Easy to modify to diaphragm or packed plunger type.

● Highly discharge accuracy

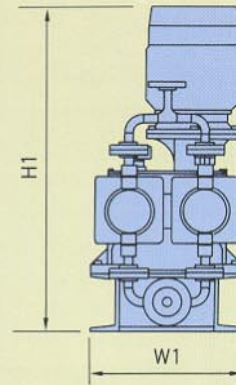
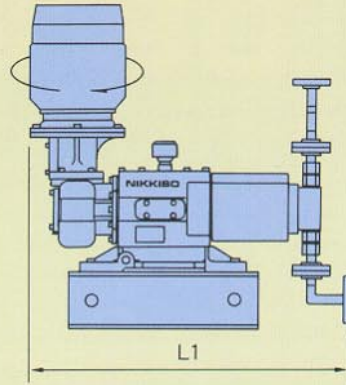
Specially designed check valves ensure a secure checking action.
Steady state flow accuracy: $\pm 0.5\%$
Highly discharge accuracy can be maintained even if after disassembly and re-assembly.

NIKKISO
Inverter
SPEFREQ
E860

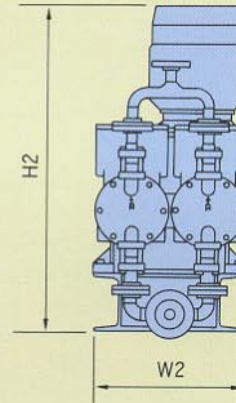
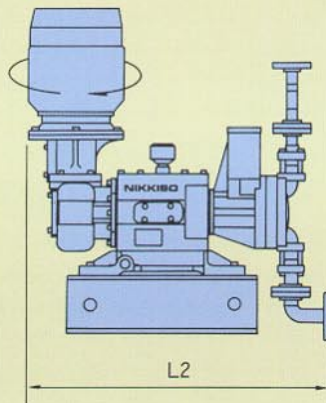


● Dimensions

<Packed plunger type>



<Low press diaphragm type>



Typical dimension

(Unit in mm)

MODEL	L1	W1	H1	L2	W2	H2
C21	650	300	770	630	300	770
C22	760	360	850	750	360	850
C23	890	400	990	820	400	990
C24	1150	500	1140	1010	500	1140

Note: Dimensions may change due to plunger diameter and types of motor.
Dimensions are subject to change.

● Material

■ Packed plunger type

Component	Material
Liquid-ends	SUS316
Plunger	SUS316
Gland packing	PTFE-CARBON
Ball valve	SUS316, SUS440C or HC
Valve seat	SUS316

■ Diaphragm type

Component	Material
Diaphragm head	SCS14 or SUS316
Plunger	SS400(PISTON) or SUS420J2-HT
Gland packing	U packing or BUNA N DUCK
Ball valve	SUS316, SUS440C or HC
Valve seat	SUS316
Diaphragm	PTFE

Note: These are typical examples of standard materials; materials may change between pump models.
For another materials, please contact us.



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Representative

● Subject to change without prior notice.