

SR Series

Spring Return dosing pump

SD - sandwich hydraulic diaphragm type
with an internal relief – refilling valve

SD



DosingPump.ir
DOSEURO®

The right dosing choice



SR series

SUPPORTING ELEMENTS OF OUR PRODUCTS

Versatility

Different diaphragm sizes are available to suit different applications. Starting from 1.5 l/h to 1068 l/h.

Reliability

The use of quality materials along with a high degree of accuracy and repeatability assures maximum reliability for the sandwich diaphragm SR series.

Quality

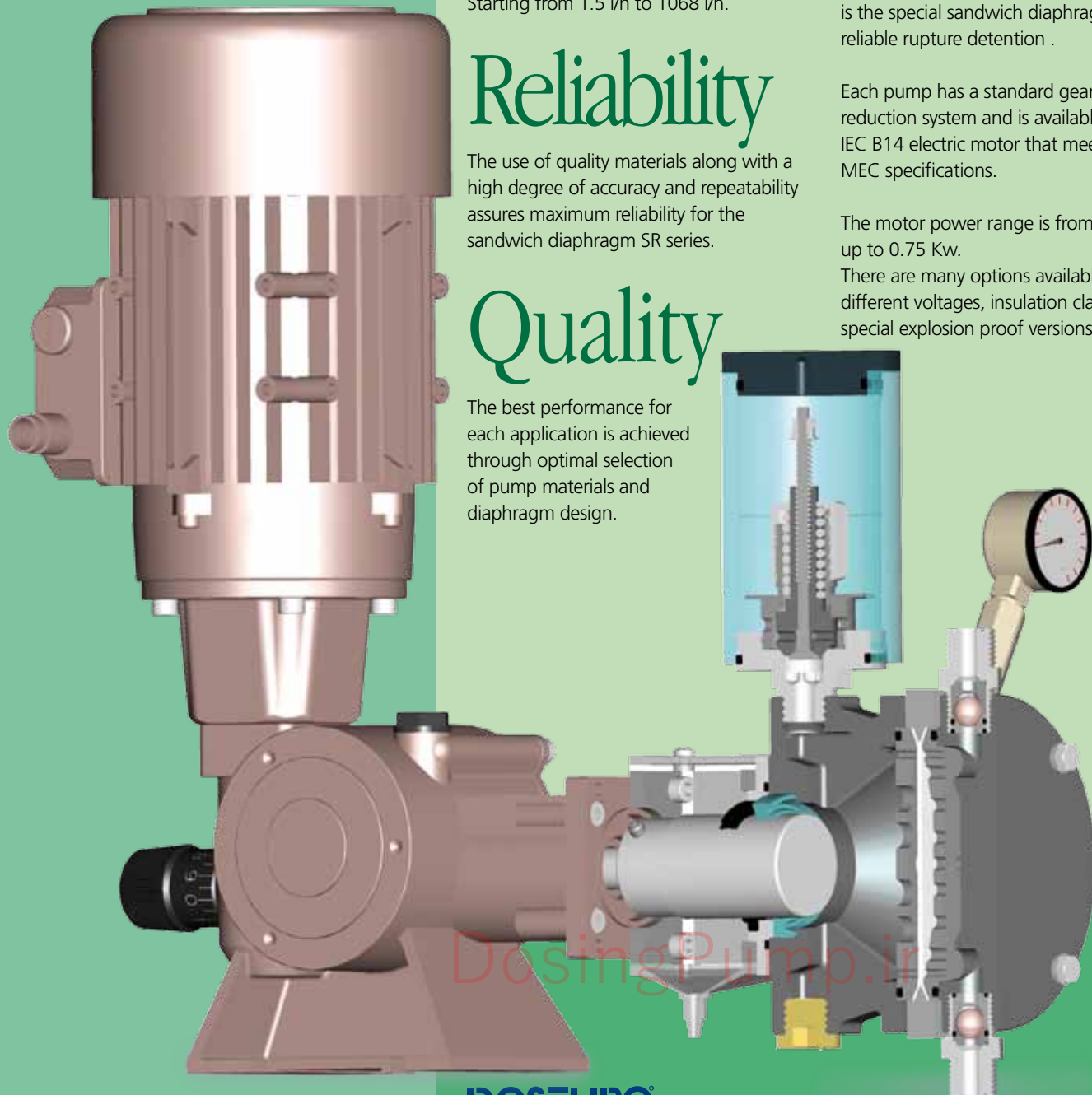
The best performance for each application is achieved through optimal selection of pump materials and diaphragm design.

FEATURES

Sandwich Hydraulic Diaphragm pumps are suitable for use when: the dosed liquid contains small amounts of suspended solids, abrasive or toxic solution and when piston leakage is not accepted. Is included on the pump a safety valve for guarantee the diaphragm security against over pressure. The characteristics of this pump is the special sandwich diaphragm and the reliable rupture detention .

Each pump has a standard gearbox reduction system and is available with an IEC B14 electric motor that meets UNEL – MEC specifications.

The motor power range is from 0.18 Kw up to 0.75 Kw. There are many options available including different voltages, insulation classes and special explosion proof versions.



DosingPump.ir



Sandwich Hydraulic Diaphragm Dosing Pump SD Type

The gearbox is a standard wormwheel reduction system with all bearings supported within a fully lubricated gearbox.

The mechanism for adjusting the stroke length is a positive stroke spring return that is operated by an eccentric.

PUMP HEADS

Pump heads are manufactured in standard materials: S.S.316 and PVC. A wide range of other materials such as HASTELLOY, ALLOY, PTFE, PVDF and PP are also available.

Maximum temperature of fluids pumped:
60 °C with S.S. 316 pump head
40 °C with PVC pump head
Jacketed pump heads for either cooling and heating are available.

DIAPHRAGM

PTFE.

DIAPHRAGM RUPTURE DETECTOR

Pressure gauge
Pressure switches
Ex-proof Pressure switches

SUCTION AND DISCHARGE CONNECTIONS

Standard : threaded,
Upon request: Flanged, UNI , ANSI or NPT.
All pumps use ball check valves as standard: single or double balls in each valve ,determined by the piston diameter or the materials of construction.

STROKE ADJUSTMENT

Flow rate adjustment is possible while the pump is running or stopped. The movement of the diaphragm is based on a precise reciprocating gearbox which provides an exact volumetric displacement. Stroke adjustment can be carried out by the following:

- Manual: by a linear micrometer stroke knob.
- Electrical: via servo motor with 4-20 mA input signal or interfaced with PROFIBUS or other BUS.
- Pneumatic: by a pneumatic servo controller with signal from 3 to 15 PSI air input.

MULTIPLE HEADED PUMPS

Pumps with multiple heads are available upon request.
Flow rates of each pump head can be adjusted independently while running or stopped.

"SD" SERIES SANDWICH HYDRAULIC DIAPHRAGM PUMPS ARE AVAILABLE IN DIFFERENT MODEL:

- SD 125N: Stroke length 12.5 mm
- SD 175N: Stroke length 17.5 mm
- SD 250N: Stroke length 25 mm

The above models have different diaphragm sizes for varied capacities and pressures.



DosingPump.ir



SR series

SOME STANDARD EXECUTIONS FOR HYDRAULIC DIAPHRAGM PUMPS

| EXECUT. | PUMPHEAD | PISTON | VALVE (ball) | VALVE SEAT | DIAPHRAGM | PISTON GASKETS | OIL CHAMBER |
|-----------|----------|----------------|--------------|------------|---------------|----------------|-------------|
| 03 | PVC | S.S. 420 TEMP. | PYREX | PVC | PTFE SANDWICH | AU / NBR | ALLUMINIUM |
| 05 | S.S. 316 | S.S. 420 TEMP. | S.S. 316 | S.S. 316 | PTFE SANDWICH | AU / NBR | ALLUMINIUM |
| 06 | S.S.316 | S.S. 420 TEMP. | S.S. 316 | S.S. 316 | PTFE SANDWICH | AU / NBR | Fe.00 |
| 07 | PP | S.S. 420 TEMP. | PYREX | PP | PTFE SANDWICH | AU / NBR | ALLUMINIUM |

PP = Polypropylene
 S.S. 316 = Stainless steel 316
 S.S. 420 TEMP. = Tempered stainless steel 420

Different executions on request

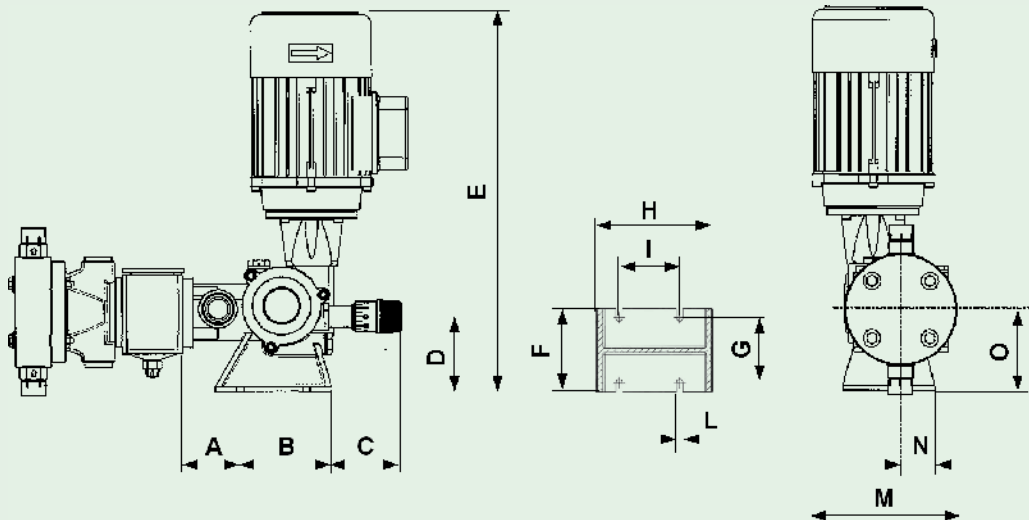
Glossary and numbering system to identify pumps type

| SD | 125N | 30 | B | 03 | DV |
|---|---------------|--------------------------|---|--------------------------------------|-------------------------------|
| 1st group | 2nd group | 3rd group | 4th group | 5th group | 6th group |
| "SD" series Sandwich Hydraulic diaphragm dosing pump | Stroke length | Piston diameter in mm | Reduction ratio group (n° of strokes/min) 58=F (1/24) 116=B (1/12) | Materials in touch with the fluid | Not standard- special code |

In case of pumps supplied without motor add: W/M

OVERALL DIMENSIONS

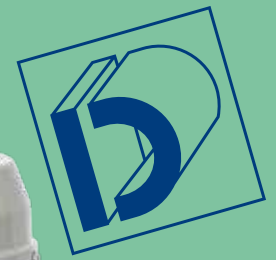
| | 125 | 175 | 250 |
|----------|-----|-----|-----|
| A | 57 | 68 | 75 |
| B | 90 | 100 | 127 |
| C | 70 | 70 | 120 |
| D | 75 | 73 | 70 |
| E | 375 | 410 | 450 |
| F | 90 | 90 | 154 |
| G | 75 | 75 | 130 |
| H | 115 | 125 | 157 |
| I | 65 | 65 | 102 |
| L | 7 | 7 | 9 |
| M | 130 | 170 | 194 |
| N | 33 | 33 | 60 |
| O | 80 | 78 | 78 |



General dimensional quote are indicative and adverted to the maximum acceptable pump dimension

DosingPump.ir

Sandwich Hydraulic Diaphragm Dosing Pump



Type SD 125N



TECHNICAL FEATURES

| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² | | | | Connect. (*3) SS 316 or PVC | Motor features | ø mm | | Stroke length | Net weights Kg (*4) | |
|------------|---------------|----------|-------|---------------|-------|-------|-------|-------------------------------|---------|---------|---------|--------------------------------|---------------------------|-------------|------------|---------------|---------------------|------|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | PVC | | | | Real piston | Diaphragm. | | Kg (*4) | |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,18 kW | 0,25 kW | 0,18 kW | 0,25 kW | | | | | | SS 316 | PVC |
| SD-125N-8 | F | 58 | 70 | 0,025 | 0,030 | 1,5 | 1,8 | 13.5 | - | 7 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 8 | 50 | 12.5 mm | 10.5 | 9 |
| | C | 96 | 116 | 0,040 | 0,050 | 2,4 | 3 | | | | | | | | | | 10.5 | 9 |
| | B | 116 | | 0,050 | | 3 | | | | | | | | | | | | |
| SD-125N-12 | I | 35 | 42 | 0,045 | 0,054 | 2,7 | 3,2 | 13.5 | - | 7 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 12 | 50 | 12.5 mm | 10.5 | 9 |
| | F | 58 | 70 | 0,075 | 0,090 | 4,5 | 5,4 | | | | | | | | | | 10.5 | 9 |
| | C | 96 | 116 | 0,123 | 0,150 | 7,4 | 9 | | | | | | | | | | | |
| SD-125N-18 | B | 116 | | 0,150 | | 9 | | 13.5 | - | 7 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 18 | 70 | 12.5 mm | 11 | 10.5 |
| | I | 35 | 42 | 0,110 | 0,132 | 6,6 | 7,9 | | | | | | | | | | 11 | 10.5 |
| | F | 58 | 70 | 0,183 | 0,220 | 11 | 13,2 | | | | | | | | | | | |
| SD-125N-25 | C | 96 | 116 | 0,300 | 0,366 | 18 | 22 | 13.5 | - | 7 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 25 | 70 | 12.5 mm | 11 | 10.5 |
| | B | 116 | | 0,366 | | 22 | | | | | | | | | | | | |
| | I | 35 | 42 | 0,211 | 0,252 | 12,6 | 15,1 | | | | | | | | | | | |
| SD-125N-30 | F | 58 | 70 | 0,350 | 0,420 | 21 | 25,2 | 13.5 | - | 7 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 30 | 70 | 12.5 mm | 11 | 10.5 |
| | C | 96 | 116 | 0,566 | 0,700 | 34 | 42 | | | | | | | | | | 11 | 10.5 |
| | B | 116 | | 0,700 | | 42 | | | | | | | | | | | | |
| SD-125N-40 | I | 35 | 42 | 0,301 | 0,360 | 18 | 21,6 | 9 | 13.5 | 7 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 30 | 70 | 12.5 mm | 11 | 10.5 |
| | F | 58 | 70 | 0,500 | 0,600 | 30 | 36 | | | | | | | | | | 11 | 10.5 |
| | C | 96 | 116 | 0,816 | 1,000 | 49 | 60 | | | | | | | | | | | |
| SD-125N-40 | B | 116 | | 1,000 | | 60 | | 5 | 8.5 | 5 | 7 | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 40 | 90 | 12.5 mm | 12 | 12 |
| | I | 35 | 42 | 0,543 | 0,650 | 32,5 | 39 | | | | | | | | | | 12 | 12 |
| | F | 58 | 70 | 0,900 | 1,080 | 54 | 65 | | | | | | | | | | | |
| SD-125N-40 | C | 96 | 116 | 1,483 | 1,800 | 89 | 108 | 5 | 8.5 | 5 | 7 | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 40 | 90 | 12.5 mm | 12 | 12 |
| | B | 116 | | 1,800 | | 108 | | | | | | | | | | | | |

(*1) Piston's strokes number during 1 minute with 4 poles installed motor (~1400 rpm)

I = Reducer ratio 1 : 40 = 35 strokes at 60 Hz / 42 strokes at 60 Hz

F = Reducer ratio 1 : 24 = 58 strokes at 50 Hz / 70 strokes at 60 Hz

C = Reducer ratio 1 : 14,5 = 96 strokes at 50 Hz / 116 strokes at 60 Hz

B = Reducer ratio 1 : 12 = 116 strokes at 50 Hz / not suitable

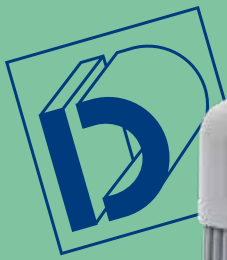
(*2) The indicated capacity value is subject to changes due to the working pressure, the dosed liquid, the viscosity and the installation asset

(*3) Different ranges of connections are available on request

(*4) The weight is approximate and is the value of the pump fitted with a totally enclosed fan-cooled outdoor motor

(*5) The pumps can be supplied with accessories if requested

(*6) The pumps are epoxy painted RAL 7030



SR series

Type SD 175 N

TECHNICAL FEATURES

| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² | | | | Connect. (*3) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*4) | |
|------------|---------------|----------|-------|---------------|-------|-------|-------|-------------------------------|---------|---------|---------|---------------|--------------------|---------------------|-------------------|---------------|---------------------|--------|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | PVC | | | | | | | SS 316 or PVC | SS 316 |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,25 kW | 0,37 kW | 0,25 kW | 0,37 kW | | | | | | | |
| SD-175N-8 | F | 70 | 84 | 0,043 | 0,052 | 2,6 | 3,12 | 14 | - | 7 | - | 1/2" G.m. | 0,25 kW or 0,37 kW | 8 | 50 | 17,5 mm | 12,5 | 12 |
| | C | 96 | 116 | 0,058 | 0,070 | 3,5 | 4,2 | | | | | | | | | | 13 | 12,5 |
| | B | 120 | | 0,073 | | 4,4 | | | | | | | | | | | | |
| SD-175N-12 | F | 70 | 84 | 0,126 | 0,152 | 7,6 | 9,12 | 14 | - | 7 | - | 1/2" G.m. | 0,25 kW or 0,37 kW | 12 | 50 | 17,5 mm | 13 | 12,5 |
| | C | 96 | 116 | 0,173 | 0,206 | 10,4 | 12,4 | | | | | | | | | | 13 | 12,5 |
| | B | 120 | | 0,216 | | 13 | | | | | | | | | | | | |
| SD-175N-18 | F | 70 | 84 | 0,300 | 0,360 | 18 | 21,6 | 14 | - | 7 | - | 1/2" G.m. | 0,25 kW or 0,37 kW | 18 | 50 | 17,5 mm | 13 | 12,5 |
| | C | 96 | 116 | 0,400 | 0,480 | 24 | 28,8 | | | | | | | | | | 13 | 12,5 |
| | B | 120 | | 0,533 | | 32 | | | | | | | | | | | | |
| SD-175N-25 | F | 70 | 84 | 0,600 | 0,720 | 36 | 43,2 | 14 | - | 7 | - | 1/2" G.m. | 0,25 kW or 0,37 kW | 25 | 70 | 17,5 mm | 13,5 | 13 |
| | C | 96 | 116 | 0,816 | 0,980 | 49 | 58,8 | | | | | | | | | | 13,5 | 13 |
| | B | 120 | | 1,016 | | 61 | | | | | | | | | | | | |
| SD-175N-30 | F | 70 | 84 | 0,850 | 1,020 | 51 | 61,2 | 14 | - | 7 | - | 1/2" G.m. | 0,25 kW or 0,37 kW | 30 | 70 | 17,5 mm | 13,5 | 13 |
| | C | 96 | 116 | 1,150 | 1,380 | 69 | 82,8 | | | | | | | | | | 13,5 | 13 |
| | B | 120 | | 1,466 | | 88 | | | | | | | | | | | | |
| SD-175N-40 | F | 70 | 84 | 1,533 | 1,840 | 92 | 110,4 | 9 | 13 | 7 | - | 1/2" G.m. | 0,25 kW or 0,37 kW | 40 | 90 | 17,5 mm | 14,5 | 13 |
| | C | 96 | 116 | 2,100 | 2,52 | 126 | 151,2 | | | | | | | | | | 14,5 | 13 |
| | B | 120 | | 2,630 | | 158 | | | | | | | | | | | | |
| SD-175N-50 | F | 70 | 84 | 2,400 | 2,880 | 144 | 172,8 | 5 | 7 | 5 | 7 | 1/2" G.m. | 0,25 kW or 0,37 kW | 50 | 120 | 17,5 mm | 17 | 16 |
| | C | 96 | 116 | 3,283 | 3,940 | 197 | 236,4 | | | | | | | | | | 17 | 16 |
| | B | 120 | | 4,116 | | 247 | | | | | | | | | | | | |
| SD-175N-55 | F | 70 | 84 | 2,900 | 3,480 | 174 | 208,8 | 4 | 7 | 4 | 7 | 3/4" G.m. | 0,25 kW or 0,37 kW | 55 | 120 | 17,5 mm | 17 | 16 |
| | C | 96 | 116 | 3,966 | 4,760 | 238 | 285,6 | | | | | | | | | | 17 | 16 |
| | B | 120 | | 4,983 | | 299 | | | | | | | | | | | | |
| SD-175N-65 | F | 70 | 84 | 4,050 | 4,860 | 243 | 291,6 | 3 | 5 | 3 | 5 | 3/4" G.m. | 0,25 kW or 0,37 kW | 65 | 120 | 17,5 mm | 17 | 16 |
| | C | 96 | 116 | 5,550 | 6,660 | 333 | 399,6 | | | | | | | | | | 17 | 16 |
| | B | 120 | | 6,960 | | 418 | | | | | | | | | | | | |

(*1) Piston's strokes number during 1 minute with 4 poles installed motor (~1400 rpm 1')

F = Reducer ratio 1 : 20 = 70 strokes at 50 Hz / 84 strokes at 60 Hz
 C = Reducer ratio 1 : 14,5 = 96 strokes at 50 Hz / 116 strokes at 60 Hz
 B = Reducer ratio 1 : 11,5 = 120 strokes at 50 Hz / not suitable

(*2) The indicated capacity value is subject to changes due to the working pressure, the dosed liquid, the viscosity and the installation asset

(*3) Different ranges of connections are available on request

(*4) The weight is approximate and is the value of the pump fitted with a totally enclosed fan-cooled outdoor motor

(*5) The pumps can be supplied with accessories if requested

(*6) The pumps are epoxy painted RAL 7030

Sandwich Hydraulic Diaphragm Dosing Pump

Type SD 250 N



TECHNICAL FEATURES

| Pump type | Reducer ratio | | Capacity (*2) | | | | Max Press. Kg/cm ² | | | | Connect. (*3) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*4) | | |
|------------|---------------|----------|---------------|-------|-------|-------|-------------------------------|---------|---------|---------|---------------|----------------|---------------------------|-------------------|---------------|---------------------|--------|-----|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | PVC | | | | | | SS 316 or PVC | SS 316 | PVC |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,55 kW | 0,75 kW | 0,55 kW | 0,75 kW | | | | | | | |
| SD-250N-40 | F | 56 | 67 | 1,75 | 2,10 | 105 | 126 | 7.2 | - | 7 | - | 3/4" G.m. | 0.55 kW or 0.75 kW | 40 | 120 | 25 mm | 27 | 24 |
| | C | 96 | 116 | 3,00 | 3,60 | 180 | 216 | | | | | | | | | | 27 | 24 |
| | B | 112 | | 3,50 | | 210 | | | | | | | | | | | | |
| SD-250N-50 | F | 56 | 67 | 2,75 | 3,30 | 165 | 198 | 7.2 | - | 7 | - | 3/4" G.m. | 0.55 kW or 0.75 kW | 50 | 120 | 25 mm | 27 | 24 |
| | C | 96 | 116 | 4,70 | 5,63 | 282 | 338 | | | | | | | | | | 27 | 24 |
| | B | 112 | | 5,50 | | 330 | | | | | | | | | | | | |
| SD-250N-55 | F | 56 | 67 | 3,33 | 4,00 | 200 | 240 | 7.2 | - | 7 | - | 3/4" G.m. | 0.55 kW or 0.75 kW | 55 | 120 | 25 mm | 27 | 24 |
| | C | 96 | 116 | 5,70 | 6,83 | 342 | 410 | | | | | | | | | | 27 | 24 |
| | B | 112 | | 6,66 | | 400 | | | | | | | | | | | | |
| SD-250N-65 | F | 56 | 67 | 4,63 | 5,56 | 278 | 333,6 | 5.9 | - | 5.9 | - | 1" G.m. | 3 Ph or 1 Ph ~1400 rpm | 65 | 160 | 25 mm | 38 | 27 |
| | C | 96 | 116 | 7,93 | 9,52 | 476 | 571,2 | | | | | | | | | | 38 | 27 |
| | B | 112 | | 9,26 | | 556 | | | | | | | | | | | | |
| SD-250N-75 | F | 56 | 67 | 6,18 | 7,42 | 371 | 445,2 | 4.3 | 5.7 | 4.3 | 5.7 | 1" G.m. | 75 | 160 | 25 mm | 38 | 27 | |
| | C | 96 | 116 | 10,60 | 12,72 | 636 | 763,2 | | | | | | | | | 38 | 27 | |
| | B | 112 | | 12,36 | | 742 | | | | | | | | | | | | |
| SD-250N-90 | F | 56 | 67 | 8,90 | 10,68 | 534 | 640,8 | 3.1 | 4 | 3.1 | 4 | 1" G.m. | 90 | 160 | 25 mm | 38 | 27 | |
| | C | 96 | 116 | 15,25 | 18,30 | 915 | 1098 | | | | | | | | | 38 | 27 | |
| | B | 112 | | 17,80 | | 1068 | | | | | | | | | | | | |

(*1) Piston's strokes number during 1 minute with 4 poles installed motor (~1400 rpm 1')

F = Reducer ratio 1 : 25 = 56 strokes at 50 Hz / 67 strokes at 60 Hz

C = Reducer ratio 1 : 14,5 = 96 strokes at 50 Hz / 116 strokes at 60 Hz

B = Reducer ratio 1 : 12,5 = 112 strokes at 50 Hz / not suitable

(*2) The indicated capacity value is subject to changes due to the working pressure, the dosed liquid, the viscosity and the installation asset

(*3) Different ranges of connections are available on request

(*4) The weight is approximate and is the value of the pump fitted with a totally enclosed fan-cooled outdoor motor

(*5) The pumps can be supplied with accessories if requested

(*6) The pumps are epoxy painted RAL 7030

SR series

For high pressure

Type SD 125 N

| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² | | Connect. (*3) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*4) |
|------------|---------------|----------|-------|---------------|-------|-------|-------|-------------------------------|---------|---------------|--------------------|---------------------|-------------------|---------------|---------------------|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | | | | | | |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,18 kW | 0,25 kW | | | | | | |
| SD-125N-8 | F | 58 | 70 | 0,025 | 0,030 | 1,5 | 1,8 | 40 | - | 1/2" G.m. | 0.18 kW or 0.25 kW | 8 | 50 | 12.5 mm | 12,5 |
| | C | 96 | 116 | 0,040 | 0,050 | 2,4 | 3 | | | | | | | | |
| | B | 116 | | 0,050 | | 3 | | | | | | | | | |
| SD-125N-12 | I | 35 | 42 | 0,045 | 0,054 | 2,7 | 3,2 | 40 | - | 1/2" G.m. | 0.18 kW or 0.25 kW | 12 | 50 | 12.5 mm | 12,5 |
| | F | 58 | 70 | 0,075 | 0,090 | 4,5 | 5,4 | | | | | | | | |
| | C | 96 | 116 | 0,123 | 0,150 | 7,4 | 9 | | | | | | | | |
| SD-125N-18 | B | 116 | | 0,150 | | 9 | | 21 | 40 | 1/2" G.m. | 0.18 kW or 0.25 kW | 18 | 70 | 12.5 mm | 13 |
| | I | 35 | 42 | 0,110 | 0,132 | 6,6 | 7,9 | | | | | | | | |
| | F | 58 | 70 | 0,183 | 0,220 | 11 | 13,2 | | | | | | | | |
| SD-125N-25 | C | 96 | 116 | 0,300 | 0,366 | 18 | 22 | - | 22 | 1/2" G.m. | 0.18 kW or 0.25 kW | 25 | 70 | 12.5 mm | 13 |
| | B | 116 | | 0,366 | | 22 | | | | | | | | | |
| | I | 35 | 42 | 0,211 | 0,252 | 12,6 | 15,1 | | | | | | | | |
| SD-125N-30 | F | 58 | 70 | 0,350 | 0,420 | 21 | 25,2 | - | 22 | 1/2" G.m. | 0.18 kW or 0.25 kW | 30 | 70 | 12.5 mm | 13 |
| | C | 96 | 116 | 0,566 | 0,700 | 34 | 42 | | | | | | | | |
| | B | 116 | | 0,700 | | 42 | | | | | | | | | |
| SD-125N-30 | I | 35 | 42 | 0,301 | 0,360 | 18 | 21,6 | - | 15 | 1/2" G.m. | 0.18 kW or 0.25 kW | 30 | 70 | 12.5 mm | 13 |
| | F | 58 | 70 | 0,500 | 0,600 | 30 | 36 | | | | | | | | |
| | C | 96 | 116 | 0,816 | 1,000 | 49 | 60 | | | | | | | | |
| | B | 116 | | 1,000 | | 60 | | | | | | | | | |

Type SD 175 N

| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² | | Connect. (*3) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*4) |
|------------|---------------|----------|-------|---------------|-------|-------|-------|-------------------------------|---------|---------------|--------------------|---------------------|-------------------|---------------|---------------------|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | | | | | | |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,25 kW | 0,37 kW | | | | | | |
| SD-175N-8 | F | 70 | 84 | 0,043 | 0,052 | 2,6 | 3,12 | 40 | - | 1/2" G.m. | 0.25 kW or 0.37 kW | 8 | 50 | 17.5 mm | 14,5 |
| | C | 96 | 116 | 0,058 | 0,070 | 3,5 | 4,2 | | | | | | | | |
| | B | 120 | | 0,073 | | 4,4 | | | | | | | | | |
| SD-175N-12 | F | 70 | 84 | 0,126 | 0,152 | 7,6 | 9,12 | 40 | - | 1/2" G.m. | 0.25 kW or 0.37 kW | 12 | 50 | 17.5 mm | 15 |
| | C | 96 | 116 | 0,173 | 0,206 | 10,4 | 12,4 | | | | | | | | |
| | B | 120 | | 0,216 | | 13 | | | | | | | | | |
| SD-175N-18 | F | 70 | 84 | 0,300 | 0,360 | 18 | 21,6 | 40 | - | 1/2" G.m. | 0.25 kW or 0.37 kW | 18 | 70 | 17.5 mm | 15 |
| | C | 96 | 116 | 0,400 | 0,480 | 24 | 28,8 | | | | | | | | |
| | B | 120 | | 0,533 | | 32 | | | | | | | | | |
| SD-175N-25 | F | 70 | 84 | 0,600 | 0,720 | 36 | 43,2 | 25 | 35 | 1/2" G.m. | 0.25 kW or 0.37 kW | 25 | 70 | 17.5 mm | 15,5 |
| | C | 96 | 116 | 0,816 | 0,980 | 49 | 58,8 | | | | | | | | |
| | B | 120 | | 1,016 | | 61 | | | | | | | | | |
| SD-175N-30 | F | 70 | 84 | 0,850 | 1,020 | 51 | 61,2 | 17 | 24 | 1/2" G.m. | 0.25 kW or 0.37 kW | 30 | 90 | 17.5 mm | 15,5 |
| | C | 96 | 116 | 1,150 | 1,380 | 69 | 82,8 | | | | | | | | |
| | B | 120 | | 1,466 | | 88 | | | | | | | | | |
| SD-175N-40 | F | 70 | 84 | 1,533 | 1,840 | 92 | 110,4 | - | 13 | 1/2" G.m. | 0.25 kW or 0.37 kW | 40 | 90 | 17.5 mm | 15,5 |
| | C | 96 | 116 | 2,100 | 2,52 | 126 | 151,2 | | | | | | | | |
| | B | 120 | | 2,630 | | 158 | | | | | | | | | |
| SD-175N-50 | F | 70 | 84 | 2,400 | 2,880 | 144 | 172,8 | - | 8.5 | 3/4" G.m. | 0.25 kW or 0.37 kW | 50 | 120 | 17.5 mm | 19 |
| | C | 96 | 116 | 3,283 | 3,940 | 197 | 236,4 | | | | | | | | |
| | B | 120 | | 4,116 | | 247 | | | | | | | | | |

Sandwich Hydraulic Diaphragm Dosing Pump



Type SD 250 N

| Pump type | Reducer ratio | | Capacity (*2) | | | | Max Press. Kg/cm ² | | Connect. (*3) | Motor features | ø mm Real piston | ø mm Diaphrag. | Stroke length | Net weights Kg (*4) |
|------------|---------------|----------|---------------|-------|-------|-------|-------------------------------|---------|---------------|----------------|---------------------|-------------------|---------------|---------------------|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | | | | | |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,55 kW | 0,75 kW | SS 316 | | | | |
| SD-250N-40 | F | 56 | 67 | 1,75 | 2,10 | 105 | 126 | 15.7 | 20.7 | 3/4" G.m. | 40 | 120 | 25 mm | 29 |
| | C | 96 | 116 | 3,00 | 3,60 | 180 | 216 | | | | | | | |
| | B | 112 | | 3,50 | | 210 | | | | | | | | |
| SD-250N-50 | F | 56 | 67 | 2,75 | 3,30 | 165 | 198 | 9.9 | 13,2 | 3/4" G.m. | 50 | 120 | 25 mm | 29 |
| | C | 96 | 116 | 4,70 | 5,63 | 282 | 338 | | | | | | | |
| | B | 112 | | 5,50 | | 330 | | | | | | | | |
| SD-250N-55 | F | 56 | 67 | 3,33 | 4,00 | 200 | 240 | 9 | 10,8 | 3/4" G.m. | 55 | 120 | 25 mm | 29 |
| | C | 96 | 116 | 5,70 | 6,83 | 342 | 410 | | | | | | | |
| | B | 112 | | 6,66 | | 400 | | | | | | | | |
| SD-250N-65 | F | 56 | 67 | 4,63 | 5,56 | 278 | 333,6 | - | 7,9 | 1" G.m. | 65 | 160 | 25 mm | 41 |
| | C | 96 | 116 | 7,93 | 9,52 | 476 | 571,2 | | | | | | | |
| | B | 112 | | 9,26 | | 556 | | | | | | | | |

(*1) Piston's strokes number during 1 minute with 4 poles installed motor (~1400 rpm 1')

SD 125N

I = Reducer ratio 1 : 40 = 35 strokes at 50 Hz / 42 strokes at 60 Hz
 F = Reducer ratio 1 : 24 = 58 strokes at 50 Hz / 70 strokes at 60 Hz
 C = Reducer ratio 1 : 14,5 = 96 strokes at 50 Hz / 116 strokes at 60 Hz
 B = Reducer ratio 1 : 12 = 116 strokes at 50 Hz / not suitable

SD 175N

F = Reducer ratio 1 : 20 = 70 strokes at 50 Hz / 84 strokes at 60 Hz
 C = Reducer ratio 1 : 14,5 = 96 strokes at 50 Hz / 116 strokes at 60 Hz
 B = Reducer ratio 1 : 11,5 = 120 strokes at 50 Hz / not suitable

SD 250N

F = Reducer ratio 1 : 25 = 56 strokes at 50 Hz / 67 strokes at 60 Hz
 C = Reducer ratio 1 : 14,5 = 96 strokes at 50 Hz / 116 strokes at 60 Hz
 B = Reducer ratio 1 : 12,5 = 112 strokes at 50 Hz / not suitable

(*2) The indicated capacity value is subject to changes due to the working pressure, the dosed liquid, the viscosity and the installation asset.

(*3) Different ranges of connections are available on request

(*4) The weight is approximate and is the value of the pump fitted with a totally enclosed fan-cooled outdoor motor.

(*5) The pumps can be supplied with accessories if requested

(*6) The pumps are epoxy painted RAL 7030



Accessories



Safety relief valves

| Type | Pump capacity | Connections |
|-------------|-----------------|------------------|
| TS-10 | 200 l/h | 3/8" or 1/2" G.F |
| TS-13 | 400 l/h | 1/2" G.F |
| TS-21 | 1000 l/h | 1" G.F |
| Body | PVC or S.S. 316 | |

* S.S. 316 Relief - Safety valve setting pressure: max 40 kg/cm² (588 Psi) higher pressures are available on request.
 PVC Relief safety valve setting pressure: max 10 kg/cm² (145 Psi).
 For higher setting pressures consult our technical dept.

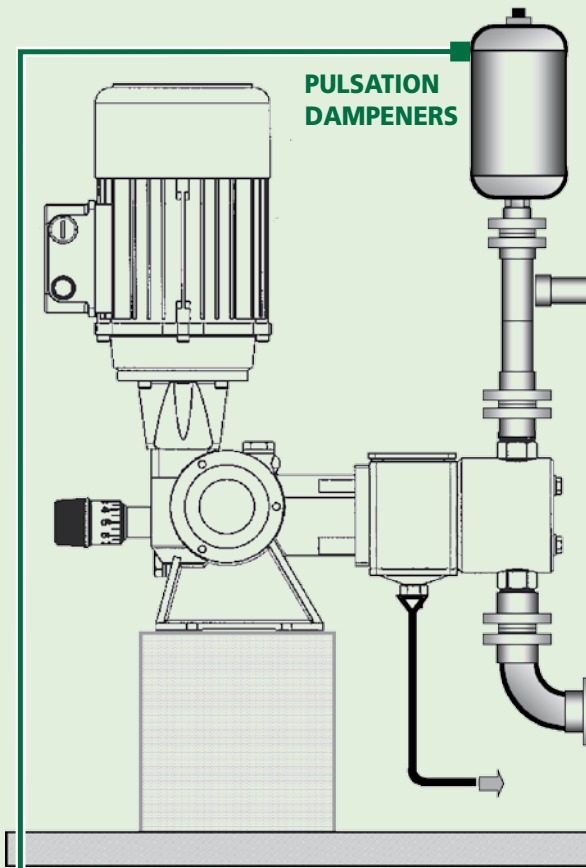


Pulsation dampeners

Type: HSTX
 Body in S.S.316, composed of two parts assembled by a special hosing that under dynamic pressures tends to close itself. Diaphragms are compatible to the liquid used. Built in accordance with ASME VIII° Div. 1 rules.



Type: HSTPVC
 Body in PVC, composed of two parts assembled by a special hosing that under dynamic pressures tends to close itself. Maximum temperature: + 50 °C. Diaphragms are compatible with the process liquid.



Each metering pump can be supplied with accessories in order to improve the operation and accuracy of the units.

The benefits of fluid control assure

- Increase efficiency and pump life
- Decrease maintenance and operation costs

The control of fluid dynamics is essential to ensure efficient and safe use of process systems. Uncontrolled fluid in motion can physically destroy. A pumping system including the pumping, valves, meters, back pressure valves, inline instrumentation and equipment.

1.- FILTERS

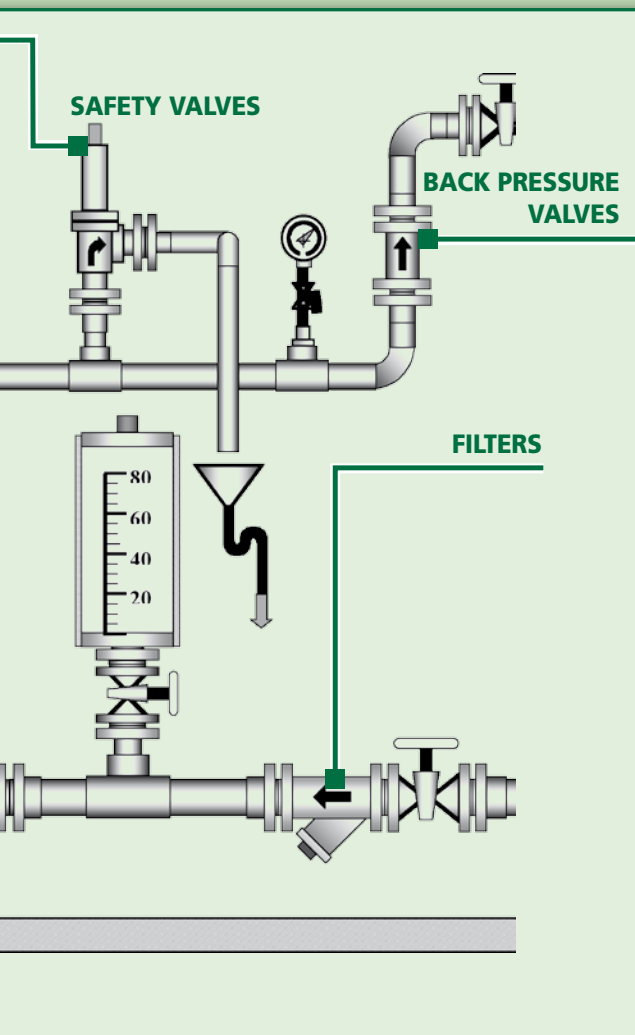
We suggest to install filters (on the suction pipe) to keep back impurities that can be presented on liquid to be dosed or coming from pipeline system.

The use of filters assures a trouble-free dosing.

2.- SAFETY VALVES

Safety valves are designed to protect the pump and chemical feed system from over pressure damage caused by defective equipment or a blockage in the chemical feed line.

DosingPump.ir



Relief valves

| Type | Pump Capacity | Connections |
|---------|---------------|-------------|
| VSCS-6 | 90 l/h | 1/2" G.F |
| VSCS-10 | 230 l/h | 1/2" G.F |
| VSCS-14 | 420 l/h | 3/4" G.F |
| VSCS-22 | 1050 l/h | 1" G.F |

Body PVC, PP or S.S. 316

Diaphragm PTFE/NBR

* Relief valve setting pressure:
3/10 kg/cm² (44/145 Psi)
G.F.= Cylindrical, Female



Back pressure valves

| Type | Pump Capacity | Connections |
|---------|---------------|-------------|
| VSCC-6 | 90 l/h | 1/2" G.F |
| VSCC-10 | 230 l/h | 1/2" G.F |
| VSCC-14 | 420 l/h | 3/4" G.F |
| VSCC-22 | 1050 l/h | 1" G.F |

Body PVC, PP or S.S. 316

Diaphragm PTFE/NBR

* Back pressure valve setting pressure:
1/3 kg/cm² (15/44Psi)
G.F.= Cylindrical, Female



3.- BACK PRESSURE VALVES

Back pressure valves apply positive discharge pressure to a metering pump system to prevent siphoning and eliminate varying downstream pressure.

4.- PULSATION DAMPENER

Metering pumps have a pulsating flow. Both spring return plunger dosing pumps and quick closing valves start and stop fluids that are in motion. Spring return plunger dosing pumps derive their pumping action by capturing a given amount of fluid in a chamber and pushing it out the pump's discharge.

Each pump cycle includes a suction stroke during the fluid flow is stopped.

This pumping action produces an acceleration/deceleration of the fluid, creating units of uncontrolled energy, resulting in PULSATION, observed as pressure spikes.

Pulsation dampener is required for two reasons:

- To reduce high, non-permissible pressure fluctuations.
- To create a nearly continuous flow.

Polyethylene tanks

suitable to be fitted with metering pump on its top





Our range of production also includes:

SR Series Spring Return:

Piston dosing pumps: type "A" and "AP-A"
Mechanical diaphragm dosing pumps: type "D" and "FM"
Hydraulic diaphragm dosing pumps: type "B" and "BR"

PDP Series:

Positive displacement dosing pumps: type "AI" and "AP-AI"
Positive displacement dosing pumps: type "BI" and "SDI"

SDP Series:

Solenoid dosing pumps: type "S"
Solenoid dosing pumps: type "GA"

H Series:

Automatic plants for dissolution and preparation of powder polyelectrolytes:
type "HA" - "HB" - "HE" and "HA-P"

EM Series:

Electric Mixers for chemical mixing:
type "DAM", "DMT", "DEM", "DRV", "DRC" and "DVL"



Cert. n° 5942

HEAD OFFICE

Via G. Carducci 141
20093 Cologno Monzese (MI) Italy
Tel.: +39 02 27301324
Fax: +39 02 26700883
e-mail: info@doseuro.com
www.doseuro.com

DOSEURO (UK) LTD.

Unit 8, East Road Industrial Estate
Sleaford, Lincolnshire NG34 7EH
Tel.: +44 1529 300045
Fax: +44 1529 410967
e-mail: enquiries@doseuro.co.uk
www.doseuro.co.uk



DOSEURO[®]
The right dosing choice