

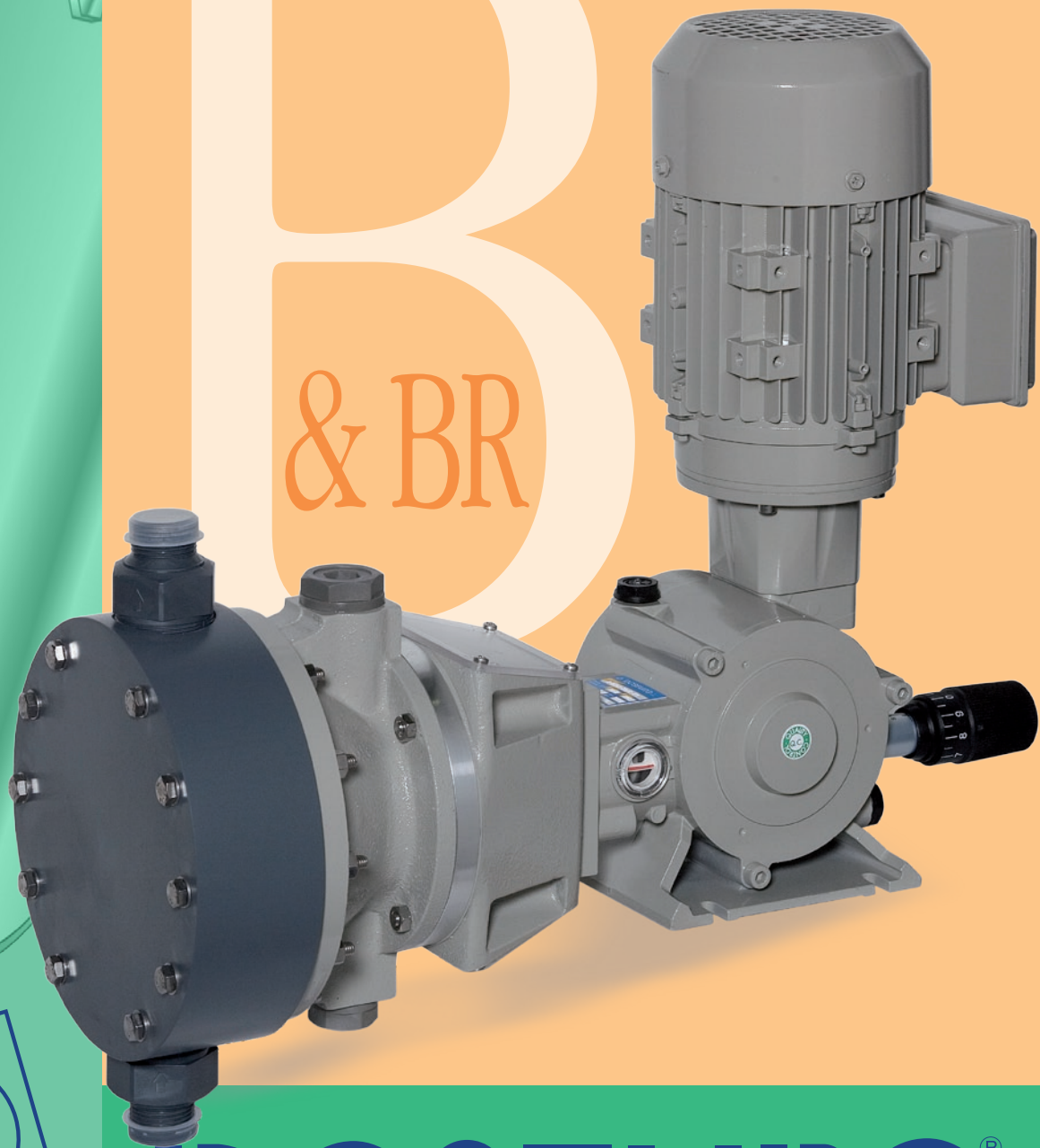
SR series

Spring Return dosing pumps

B - hydraulic diaphragm type

BR - hydraulic diaphragm type with an internal relief - refilling valve

B
& BR



DOSEURO®

The right dosing choice



SR series

MAIN ELEMENTS TO SUPPORT OUR PRODUCTS

Versatility

Different diaphragm sizes are available to suit different applications, starting from 1,5 up to 1068 l/h.

Reliability

The high degree of accuracy and reproducibility with high quality materials selected make the diaphragm pump SR series to assure the maximum reliability.

Quality

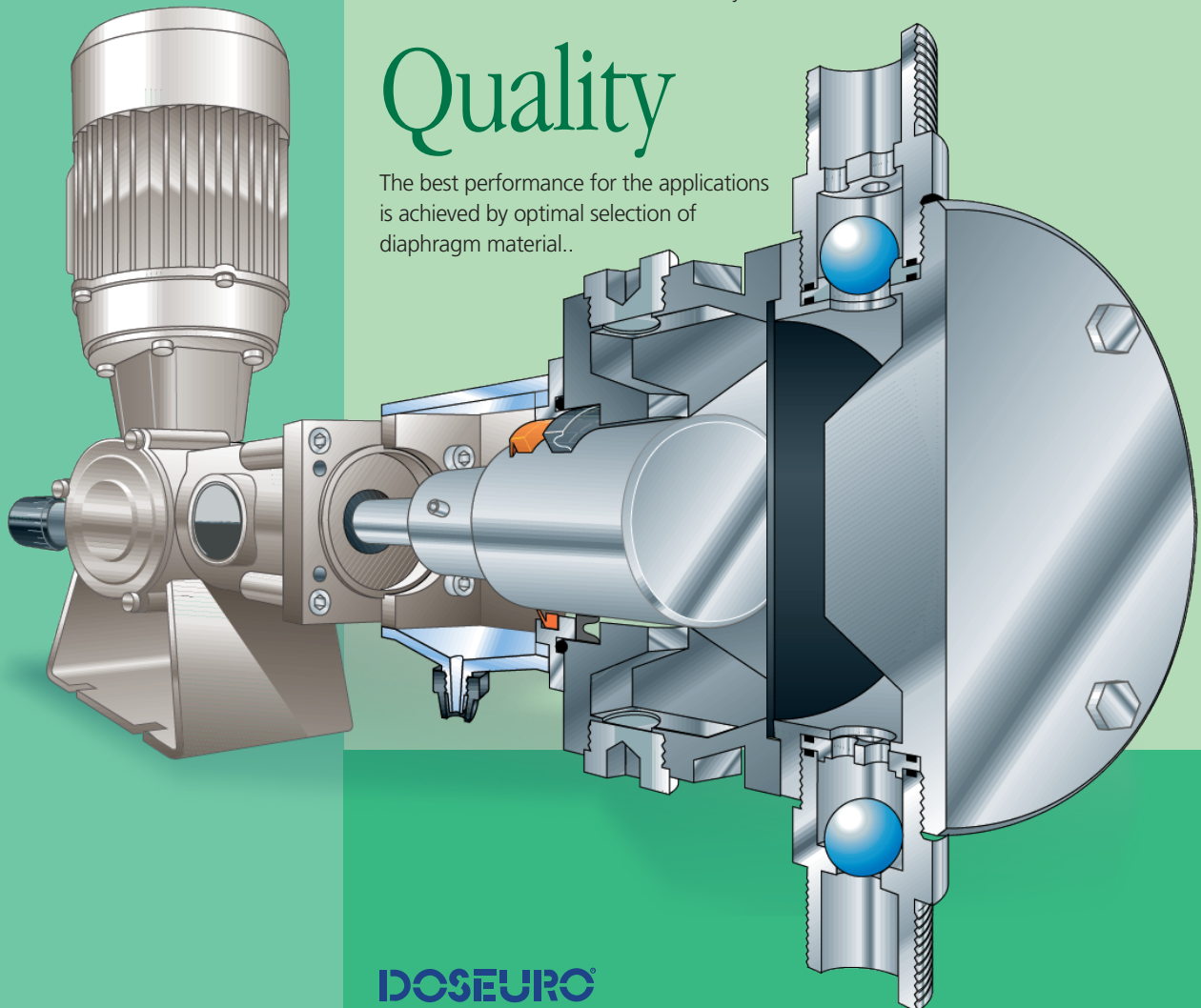
The best performance for the applications is achieved by optimal selection of diaphragm material..

FEATURES

Hydraulic Diaphragm metering pumps are suitable for use when the dosed liquid is of abrasive type with small amounts of solids in suspension or is a toxic solution.

Every pump is fitted a standard gearbox reduction system and with vertical mounted B14 shaped electric motor in accordance with the UNEL-MEC specifications.

The motor power range is from 0.18 Kw up to 0.75 Kw at the at European standard: 3 phase voltages of 230/400V @ 50/60Hz, 4 poles and 1 phase voltages of 230/50-60Hz or 110/60Hz.



Hydraulic Diaphragm Dosing Pump



B and BR Type

As motors conform to UNEL-MEC specifications, there are many alternative options available, including different voltages, insulation class and special explosion proof versions.

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

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

PUMPING HEADS

Pumping heads are made in standard executions: S.S.316 or PVC.

A wide range of other materials like HASTELLOY, ALLOY, PTFE, PVDF, PP are according to the liquid to be dosed.

Standard liquid handled maximum temperature :

- 60 ° C with S.S. 316 pump head
- 40 ° C with PVC pump head

Jacketed pump head for either cooling and heating are available to suit requirements.

DIAPHRAGM

There are made in PTFE/NBR.

SUCTION AND DISCHARGE CONNECTIONS

Normally are threaded, but they can be supplied also UNI or ANSI flanged. All the pumps have a ball valve standard: single and double balls by the function

of the piston diameter or the material execution.

STROKE ADJUSTMENT

Stroke adjustment can be carried out:

- Manual: by a linear micrometer screw.
- Electrical: via servo motor with 4-20 mA signal upon request interface PROFIBUS or other BUS.
- Pneumatic: by a pneumatic servo control with signal from 3 to 15 PSI.

Flow rate adjustment is possible while running or standstill.

MULTIPLE HEADED PUMPS

Different multiple heads units are available on request.

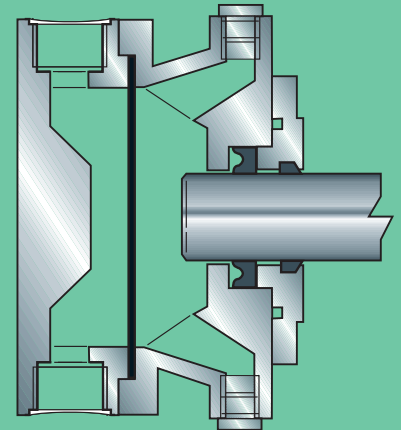
Each pumping element has independent adjustment while running or at standstill.

"B" AND "BR" SERIES HYDRAULIC DIAPHRAGM PUMPS ARE AVAILABLE IN DIFFERENT SIZES:

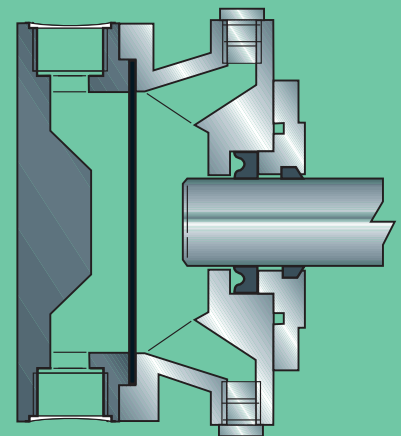
- B 125N / BR 125N
Stroke length 12.5 mm
- B 175N / BR 175N
Stroke length 17.5 mm
- B 250N / BR 250N
Stroke length 25 mm

For these three types, different diaphragm sizes are available to suit different applications for capacity and pressure.

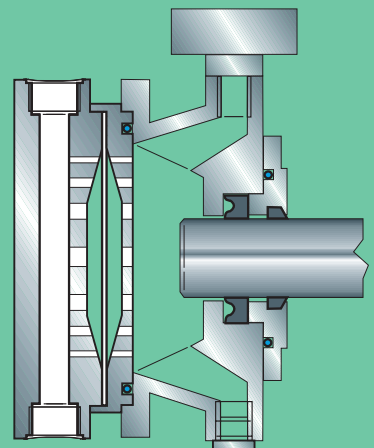
Execution 41



Execution 43



Execution 41 for BR pump





SR series

SOME STANDARD EXECUTIONS FOR HYDRAULIC DIAPHRAGM PUMPS

| EXECUT. | PUMPHEAD | PISTON | VALVE (ball) | VALVE SEAT | DIAPHRAGM | VALVE GASKETS |
|-----------|----------|----------------|--------------|------------|-----------|---------------|
| 29 | PP | S.S. 420 TEMP. | PYREX | PP | PTFE/NBR | T20 |
| 41 | S.S. 316 | S.S. 420 TEMP. | S.S. 316 | S.S. 316 | PTFE/NBR | T20 |
| 43 | PVC | S.S. 420 TEMP. | PYREX | PVC | PTFE/NBR | T20 |

PP = Polypropylene
 S.S. 316 = Stainless steel 316
 S.S. 420 TEMP. = Tempered stainless steel 420
 T20 = Polyurethane rubber

Different executions on request

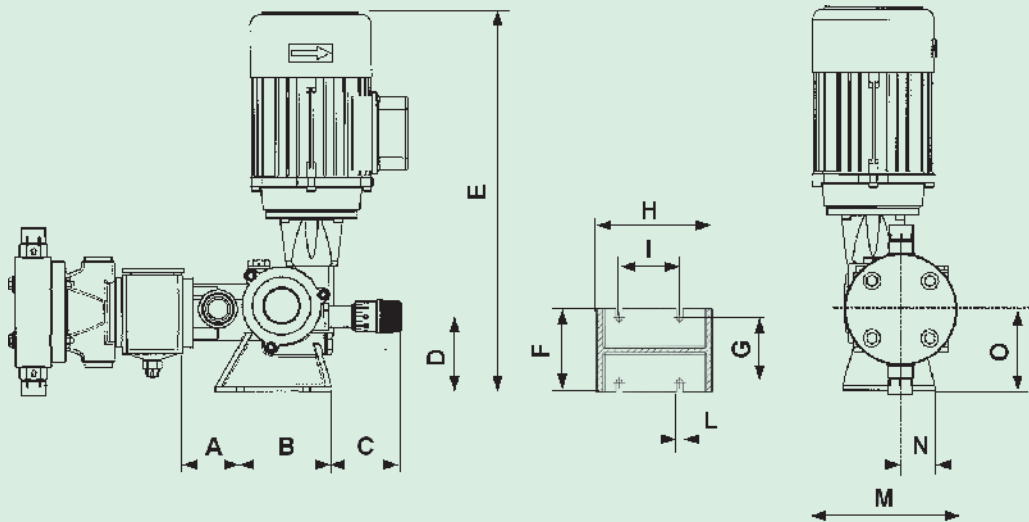
Glossary and numbering system to identify pumps type

| B | 125N | 30 | B | 41 | DV |
|--|---------------|--------------------------|---|-----------------------------------|---------------------------|
| 1st group | 2nd group | 3rd group | 1th group | 1th group | 1th group |
| "B" series Hydraulic diaphragm dosing pump | Stroke length | Diaphragm 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

Spring Return Hydraulic Diaphragm Dosing Pumps

Type B 125N



TECHNICAL FEATURES

| Pump type | Reducer ratio | | Capacity (*2) | | | | Max Press. Kg/cm ² (*3) | | | | Connect. (*4) SS 316 or PVC | Motor features | ø mm | | Stroke lenght | Net weights Kg (*5) | | | |
|------------------|---------------|----------|---------------|-------|-------|-------|------------------------------------|---------|---------|---------|--------------------------------|----------------|---------------------------|-----------|---------------|---------------------|-----|-----|-----|
| | (*1) | SPM (*1) | | L/l' | | L/h | | SS 316 | | PVC | | | Real piston | Diaphrag. | | Kg (*5) | | | |
| | | 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 | | | | |
| B-125N-8 | F | 58 | 70 | 0,025 | 0,030 | 1,5 | 1,8 | 20 * | - | 10 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 8 | 50 | 12,5 mm | 9,5 | 8 | |
| | C | 96 | 116 | 0,040 | 0,050 | 2,4 | 3 | | | | | | | | | | 10 | 9,5 | 8 |
| | B | 116 | | 0,050 | | 3 | | | | | | | | | | | 10 | 10 | 9,5 |
| B-125N-12 | I | 35 | 42 | 0,045 | 0,054 | 2,7 | 3,2 | 20 * | - | 10 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 12 | 50 | 12,5 mm | 9,5 | 8 | |
| | F | 58 | 70 | 0,075 | 0,090 | 4,5 | 5,4 | | | | | | | | | | 10 | 9,5 | 8 |
| | C | 96 | 116 | 0,123 | 0,150 | 7,4 | 9 | | | | | | | | | | 10 | 10 | 9,5 |
| B-125N-18 | I | 35 | 42 | 0,110 | 0,132 | 6,6 | 7,9 | 20 * | - | 10 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 18 | 50 | 12,5 mm | 10 | 9,5 | |
| | F | 58 | 70 | 0,183 | 0,220 | 11 | 13,2 | | | | | | | | | | 10 | 10 | 9,5 |
| | C | 96 | 116 | 0,300 | 0,366 | 18 | 22 | | | | | | | | | | 10 | 10 | 9,5 |
| B-125N-25 | I | 35 | 42 | 0,211 | 0,252 | 12,6 | 15,1 | 20 * | - | 10 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 25 | 70 | 12,5 mm | 10 | 9,5 | |
| | F | 58 | 70 | 0,350 | 0,420 | 21 | 25,2 | | | | | | | | | | 10 | 10 | 9,5 |
| | C | 96 | 116 | 0,566 | 0,700 | 34 | 42 | | | | | | | | | | 10 | 10 | 9,5 |
| B-125N-30 | I | 35 | 42 | 0,301 | 0,360 | 18 | 21,6 | 14 | 20 * | 10 | - | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 30 | 70 | 12,5 mm | 10 | 9,5 | |
| | F | 58 | 70 | 0,500 | 0,600 | 30 | 36 | | | | | | | | | | 10 | 10 | 9,5 |
| | C | 96 | 116 | 0,816 | 1,000 | 49 | 60 | | | | | | | | | | 10 | 10 | 9,5 |
| B-125N-40 | I | 35 | 42 | 0,543 | 0,650 | 32,5 | 39 | 8 | 13,2 | 8 | 10 | 1/2" G.m. | 3 Ph or 1 Ph ~1400 rpm | 40 | 90 | 12,5 mm | 11 | 11 | |
| | F | 58 | 70 | 0,900 | 1,080 | 54 | 65 | | | | | | | | | | 10 | 11 | 11 |
| | C | 96 | 116 | 1,483 | 1,800 | 89 | 108 | | | | | | | | | | 10 | 11 | 11 |
| | B | 116 | | 1,800 | | 108 | | 10 | 11 | 11 | | | | | | | | | |

(*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) For higher pressure please contact our sales department.

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

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

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

(*7) The pumps are epoxy painted RAL 7030



SR series

Type B 175N

TECHNICAL FEATURES

| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² (*3) | | | | Connect. (*4) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*5) | |
|------------------|---------------|----------|-------|---------------|-------|-------|-------|------------------------------------|---------|---------|-----------|--------------------|----------------|---------------------|-------------------|---------------|---------------------|--------|
| | (*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 | | | | | | | |
| B-175N-8 | F | 70 | 84 | 0,043 | 0,052 | 2,6 | 3,12 | 20 * | - | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 8 | 50 | 17.5 mm | 11,5 | 11 | |
| | C | 96 | 116 | 0,058 | 0,070 | 3,5 | 4,2 | | | | | | | | | | | |
| | B | 120 | | 0,073 | | 4,4 | | | | | | | | | | | | |
| B-175N-12 | F | 70 | 84 | 0,126 | 0,152 | 7,6 | 9,12 | 20 * | - | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 12 | 50 | 17.5 mm | 12 | 11,5 | |
| | C | 96 | 116 | 0,173 | 0,206 | 10,4 | 12,4 | | | | | | | | | | | |
| | B | 120 | | 0,216 | | 13 | | | | | | | | | | | | |
| B-175N-18 | F | 70 | 84 | 0,300 | 0,360 | 18 | 21,6 | 20 * | - | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 18 | 50 | 17.5 mm | 12 | 11,5 | |
| | C | 96 | 116 | 0,400 | 0,480 | 24 | 28,8 | | | | | | | | | | | |
| | B | 120 | | 0,533 | | 32 | | | | | | | | | | | | |
| B-175N-25 | F | 70 | 84 | 0,600 | 0,720 | 36 | 43,2 | 20 * | - | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 25 | 70 | 17.5 mm | 12,5 | 12 | |
| | C | 96 | 116 | 0,816 | 0,980 | 49 | 58,8 | | | | | | | | | | | |
| | B | 120 | | 1,016 | | 61 | | | | | | | | | | | | |
| B-175N-30 | F | 70 | 84 | 0,850 | 1,020 | 51 | 61,2 | 20 * | - | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 30 | 70 | 17.5 mm | 12,5 | 12 | |
| | C | 96 | 116 | 1,150 | 1,380 | 69 | 82,8 | | | | | | | | | | | |
| | B | 120 | | 1,466 | | 88 | | | | | | | | | | | | |
| B-175N-40 | F | 70 | 84 | 1,533 | 1,840 | 92 | 110,4 | 12 | 20 | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 40 | 90 | 17.5 mm | 13,5 | 12 | |
| | C | 96 | 116 | 2,100 | 2,52 | 126 | 151,2 | | | | | | | | | | | |
| | B | 120 | | 2,630 | | 158 | | | | | | | | | | | | |
| B-175N-50 | F | 70 | 84 | 2,400 | 2,880 | 144 | 172,8 | 7,5 | 11 | 10 | 1/2" G.m. | 0.25 kW or 0.37 kW | 50 | 120 | 17.5 mm | 16 | 15 | |
| | C | 96 | 116 | 3,283 | 3,940 | 197 | 236,4 | | | | | | | | | | | |
| | B | 120 | | 4,116 | | 247 | | | | | | | | | | | | |
| B-175N-55 | F | 70 | 84 | 2,900 | 3,480 | 174 | 208,8 | 6,3 | 11 | 10 | 3/4" G.m. | 0.25 kW or 0.37 kW | 55 | 120 | 17.5 mm | 16 | 15 | |
| | C | 96 | 116 | 3,966 | 4,760 | 238 | 285,6 | | | | | | | | | | | |
| | B | 120 | | 4,983 | | 299 | | | | | | | | | | | | |
| B-175N-65 | F | 70 | 84 | 4,050 | 4,860 | 243 | 291,6 | 4,5 | 7,8 | 7,8 | 3/4" G.m. | 0.25 kW or 0.37 kW | 65 | 120 | 17.5 mm | 16 | 15 | |
| | C | 96 | 116 | 5,550 | 6,660 | 333 | 399,6 | | | | | | | | | | | |
| | 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) For higher pressure please contact our sales department

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

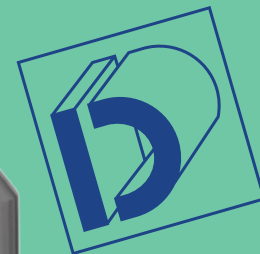
(*5) The weight is approximate and is the value of the pump fitted with a totally enclosed fan-cooled outdoor motor.

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

(*7) The pumps are epoxy painted RAL 7030

DOSEURO

Spring Return Hydraulic Diaphragm Dosing Pumps



Type B 250N



TECHNICAL FEATURES

| Pump type | Reducer ratio | | Capacity (*2) | | | | Max Press. Kg/cm ² (*3) | | | | Connect. (*4) | Motor features | ø mm Real piston | ø mm Diaphrag. | Stroke length | Net weights Kg (*5) | | |
|------------------|---------------|----------|---------------|-------|-------|-------|------------------------------------|---------|---------|---------|---------------|----------------|---------------------------|-------------------|---------------|---------------------|--------|-----|
| | (*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 | | | | | | | |
| B-250N-40 | F | 56 | 67 | 1,75 | 2,10 | 105 | 126 | 11 * | - | 10 | - | 3/4" G.m. | 0,55 kW or 0,75 kW | 40 | 120 | 25 mm | 26 | 23 |
| | C | 96 | 116 | 3,00 | 3,60 | 180 | 216 | | | | | | | | | | 26 | 23 |
| | B | 112 | | 3,50 | | 210 | | | | | | | | | | | 26 | 23 |
| B-250N-50 | F | 56 | 67 | 2,75 | 3,30 | 165 | 198 | 11 * | - | 10 | - | 3/4" G.m. | 0,55 kW or 0,75 kW | 50 | 120 | 25 mm | 26 | 23 |
| | C | 96 | 116 | 4,70 | 5,63 | 282 | 338 | | | | | | | | | | 26 | 23 |
| | B | 112 | | 5,50 | | 330 | | | | | | | | | | | 26 | 23 |
| B-250N-55 | F | 56 | 67 | 3,33 | 4,00 | 200 | 240 | 11 * | - | 10 | - | 3/4" G.m. | 0,55 kW or 0,75 kW | 55 | 120 | 25 mm | 26 | 23 |
| | C | 96 | 116 | 5,70 | 6,83 | 342 | 410 | | | | | | | | | | 26 | 23 |
| | B | 112 | | 6,66 | | 400 | | | | | | | | | | | 26 | 23 |
| B-250N-65 | F | 56 | 67 | 4,63 | 5,56 | 278 | 333,6 | 9 * | - | 9 | - | 1" G.m. | 3 Ph or 1 Ph ~1400 rpm | 65 | 160 | 25 mm | 37 | 26 |
| | C | 96 | 116 | 7,93 | 9,52 | 476 | 571,2 | | | | | | | | | | 37 | 26 |
| | B | 112 | | 9,26 | | 556 | | | | | | | | | | | 37 | 26 |
| B-250N-75 | F | 56 | 67 | 6,18 | 7,42 | 371 | 445,2 | 6,6 | 8,7 | 6,6 | 8,7 | 1" G.m. | 3 Ph or 1 Ph ~1400 rpm | 75 | 160 | 25 mm | 37 | 26 |
| | C | 96 | 116 | 10,60 | 12,72 | 636 | 763,2 | | | | | | | | | | 37 | 26 |
| | B | 112 | | 12,36 | | 742 | | | | | | | | | | | 37 | 26 |
| B-250N-90 | F | 56 | 67 | 8,90 | 10,68 | 534 | 640,8 | 4,7 | 6,2 | 4,7 | 6,2 | 1" G.m. | 3 Ph or 1 Ph ~1400 rpm | 90 | 160 | 25 mm | 37 | 26 |
| | C | 96 | 116 | 15,25 | 18,30 | 915 | 1098 | | | | | | | | | | 37 | 26 |
| | B | 112 | | 17,80 | | 1068 | | | | | | | | | | | 37 | 26 |

(*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) For higher pressure please contact our sales department.

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

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

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

(*7) The pumps are epoxy painted RAL 7030



SR series

Type BR 125N

| Pump type | Reducer ratio | | Capacity (*2) | | | | Max Press. Kg/cm ² (*3) | | | | Connect. (*4) | Motor features | ø mm | ø mm | Stroke lenght | Net weights Kg (*5) | | |
|------------|---------------|----------|---------------|-------|-------|-------|------------------------------------|---------|---------|---------|---------------|--------------------|------|------|---------------|---------------------|-------------|-----------|
| | (*1) | SPM (*1) | | L/1' | | L/h | | SS 316 | | PVC | | | | | | SS 316 or PVC | Real piston | Diaphrag. |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 0,18 kW | 0,25 kW | 0,18 kW | 0,25 kW | | | | | | | |
| BR-125N-8 | F | 58 | 70 | 0,025 | 0,030 | 1,5 | 1,8 | 13,5 * | - | 7 | - | 0.18 kW or 0.25 kW | 8 | 50 | 12.5 mm | 10,5 | 9 | |
| | C | 96 | 116 | 0,040 | 0,050 | 2,4 | 3 | | | | | | | | | | | |
| | B | 116 | | 0,050 | | 3 | | | | | | | | | | | | |
| BR-125N-12 | I | 35 | 42 | 0,045 | 0,054 | 2,7 | 3,2 | 13,5 * | - | 7 | - | 0.18 kW or 0.25 kW | 12 | 50 | 12.5 mm | 10,5 | 9 | |
| | F | 58 | 70 | 0,075 | 0,090 | 4,5 | 5,4 | | | | | | | | | | | |
| | C | 96 | 116 | 0,123 | 0,150 | 7,4 | 9 | | | | | | | | | | | |
| BR-125N-18 | I | 35 | 42 | 0,110 | 0,132 | 6,6 | 7,9 | 13,5 * | - | 7 | - | 0.18 kW or 0.25 kW | 18 | 70 | 12.5 mm | 11 | 10,5 | |
| | F | 58 | 70 | 0,183 | 0,220 | 11 | 13,2 | | | | | | | | | | | |
| | C | 96 | 116 | 0,300 | 0,366 | 18 | 22 | | | | | | | | | | | |
| BR-125N-25 | I | 35 | 42 | 0,211 | 0,252 | 12,6 | 15,1 | 13,5 * | - | 7 | - | 0.18 kW or 0.25 kW | 25 | 70 | 12.5 mm | 11 | 10,5 | |
| | F | 58 | 70 | 0,350 | 0,420 | 21 | 25,2 | | | | | | | | | | | |
| | C | 96 | 116 | 0,566 | 0,700 | 34 | 42 | | | | | | | | | | | |
| BR-125N-30 | I | 35 | 42 | 0,301 | 0,360 | 18 | 21,6 | 9 | 13,5 * | 7 | - | 0.18 kW or 0.25 kW | 30 | 90 | 12.5 mm | 11 | 10,5 | |
| | F | 58 | 70 | 0,500 | 0,600 | 30 | 36 | | | | | | | | | | | |
| | C | 96 | 116 | 0,816 | 1,000 | 49 | 60 | | | | | | | | | | | |
| BR-125N-40 | I | 35 | 42 | 0,543 | 0,650 | 32,5 | 39 | 5 | 8,5 | 5 | 7 | 0.18 kW or 0.25 kW | 40 | 90 | 12.5 mm | 12 | 12 | |
| | F | 58 | 70 | 0,900 | 1,080 | 54 | 65 | | | | | | | | | | | |
| | C | 96 | 116 | 1,483 | 1,800 | 89 | 108 | | | | | | | | | | | |
| | B | 116 | | 1,800 | | 108 | | | | | | | | | | | | |



(*1) Numero di colpi effettuati al minuto dal pistone - motore a 4 poli. (~1400 giri 1')

BR 125N 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

BR 175N 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

BR 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) For higher pressure please contact our sales department.

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

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

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

(*7) The pumps are epoxy painted RAL 7030

DOSEURO

Spring Return Hydraulic Diaphragm Dosing Pumps



Type BR 175N

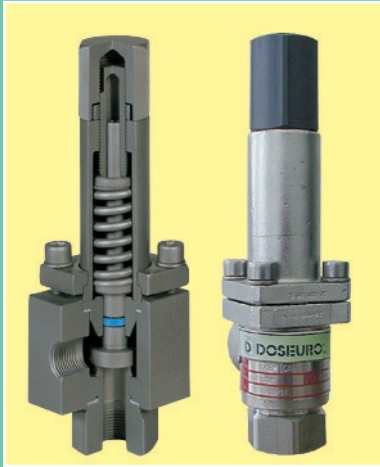
| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² (*3) | | | | Connect. (*4) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*5) | | | | |
|------------|---------------|----------|-------|---------------|-------|-------|-------|------------------------------------|---------|---------|---------|--------------------|--------------------|---------------------|-------------------|---------------|---------------------|---------|---------|------|------|
| | (*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 | 0,25 kW | 0,37 kW | 0,25 kW | 0,37 kW | | | | | | | | | | |
| BR-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 | | | | | | | | | | | | | | |
| | B | 120 | | 0,073 | | 4,4 | | | | | | | | | | | | | | | |
| BR-175N-12 | F | 70 | 84 | 0,126 | 0,152 | 7,6 | 9,12 | 14 | * | 7 | - | | | 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 | | | | | | | | | | | | | | |
| | B | 120 | | 0,216 | | 13 | | | | | | | | | | | | | | | |
| BR-175N-18 | F | 70 | 84 | 0,300 | 0,360 | 18 | 21,6 | 14 | * | 7 | - | | 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 | | | | | | | | | | | | | | |
| | B | 120 | | 0,533 | | 32 | | | | | | | | | | | | | | | |
| BR-175N-25 | F | 70 | 84 | 0,600 | 0,720 | 36 | 43,2 | 14 | * | 7 | - | | | 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 | | | | | | | | | | | | | | |
| | B | 120 | | 1,016 | | 61 | | | | | | | | | | | | | | | |
| BR-175N-30 | F | 70 | 84 | 0,850 | 1,020 | 51 | 61,2 | 14 | * | 7 | - | 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 | | | | | | | | | | | | | | |
| | B | 120 | | 1,466 | | 88 | | | | | | | | | | | | | | | |
| BR-175N-40 | F | 70 | 84 | 1,533 | 1,840 | 92 | 110,4 | 9 | 13 | 7 | - | | ~1400 rpm | 40 | | | 90 | 17,5 mm | 14,5 | 13 | |
| | C | 96 | 116 | 2,100 | 2,52 | 126 | 151,2 | | | | | | | | | | | | | | |
| | B | 120 | | 2,630 | | 158 | | | | | | | | | | | | | | | |
| BR-175N-50 | F | 70 | 84 | 2,400 | 2,880 | 144 | 172,8 | 5 | 7 | 5 | 7 | 3/4" G.m. | | 50 | 120 | 17,5 mm | | | 17 | 16 | |
| | C | 96 | 116 | 3,283 | 3,940 | 197 | 236,4 | | | | | | | | | | | | | | |
| | B | 120 | | 4,116 | | 247 | | | | | | | | | | | | | | | |
| BR-175N-55 | F | 70 | 84 | 2,900 | 3,480 | 174 | 208,8 | 4 | 7 | 4 | 7 | | 3/4" G.m. | 55 | | | 120 | 17,5 mm | 17 | 16 | |
| | C | 96 | 116 | 3,966 | 4,760 | 238 | 285,6 | | | | | | | | | | | | | | |
| | B | 120 | | 4,983 | | 299 | | | | | | | | | | | | | | | |
| BR-175N-65 | F | 70 | 84 | 4,050 | 4,860 | 243 | 291,6 | 3 | 5 | 3 | 5 | 3/4" G.m. | | 65 | 120 | 17,5 mm | | | 17 | 16 | |
| | C | 96 | 116 | 5,550 | 6,660 | 333 | 399,6 | | | | | | | | | | | | | | |
| | B | 120 | | 6,960 | | 418 | | | | | | | | | | | | | | | |

Type BR 250N

| Pump type | Reducer ratio | | | Capacity (*2) | | | | Max Press. Kg/cm ² (*3) | | | | Connect. (*4) | Motor features | ø mm Real piston | ø mm Diaphragm | Stroke length | Net weights Kg (*5) | | | | |
|------------|---------------|----------|-------|---------------|-------|-------|-------|------------------------------------|---------|---------|---------|---------------|--------------------|---------------------|-------------------|---------------|---------------------|--------|-------|----|----|
| | (*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 | | | | | | | | | | |
| BR-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 | | | | | | | | | | | | | | |
| | B | 112 | | 3,50 | | 210 | | | | | | | | | | | | | | | |
| BR-250N-50 | F | 56 | 67 | 2,75 | 3,30 | 165 | 198 | 7,2 * | - | 7 | - | | | 0,55 kW or 0,75 kW | | | 50 | 120 | 25 mm | 27 | 24 |
| | C | 96 | 116 | 4,70 | 5,63 | 282 | 338 | | | | | | | | | | | | | | |
| | B | 112 | | 5,50 | | 330 | | | | | | | | | | | | | | | |
| BR-250N-55 | F | 56 | 67 | 3,33 | 4,00 | 200 | 240 | 7,2 * | - | 7 | - | | 0,55 kW or 0,75 kW | | 55 | 120 | 25 mm | | | 27 | 24 |
| | C | 96 | 116 | 5,70 | 6,83 | 342 | 410 | | | | | | | | | | | | | | |
| | B | 112 | | 6,66 | | 400 | | | | | | | | | | | | | | | |
| BR-250N-65 | F | 56 | 67 | 4,63 | 5,56 | 278 | 333,6 | 5,9 * | - | 5,9 | - | | | ~1400 rpm | 65 | | | 160 | 25 mm | 38 | 27 |
| | C | 96 | 116 | 7,93 | 9,52 | 476 | 571,2 | | | | | | | | | | | | | | |
| | B | 112 | | 9,26 | | 556 | | | | | | | | | | | | | | | |
| BR-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 | | | | | | | | | | | | | | |
| | B | 112 | | 12,36 | | 742 | | | | | | | | | | | | | | | |
| BR-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 | | | | | | | | | | | | | | |
| | B | 112 | | 17,80 | | 1068 | | | | | | | | | | | | | | | |



Accessories



Safety relief valves

| Type | Pump capacity | Connections |
|-------------|-----------------|--------------|
| TS-10 | 200 l/h | 3/8" or 1/2" |
| 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.

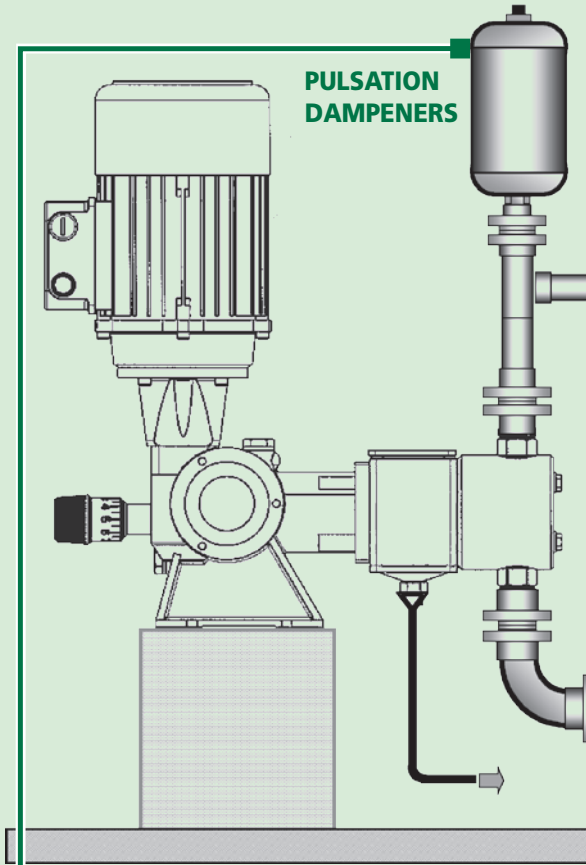


Pulsation dampeners

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.

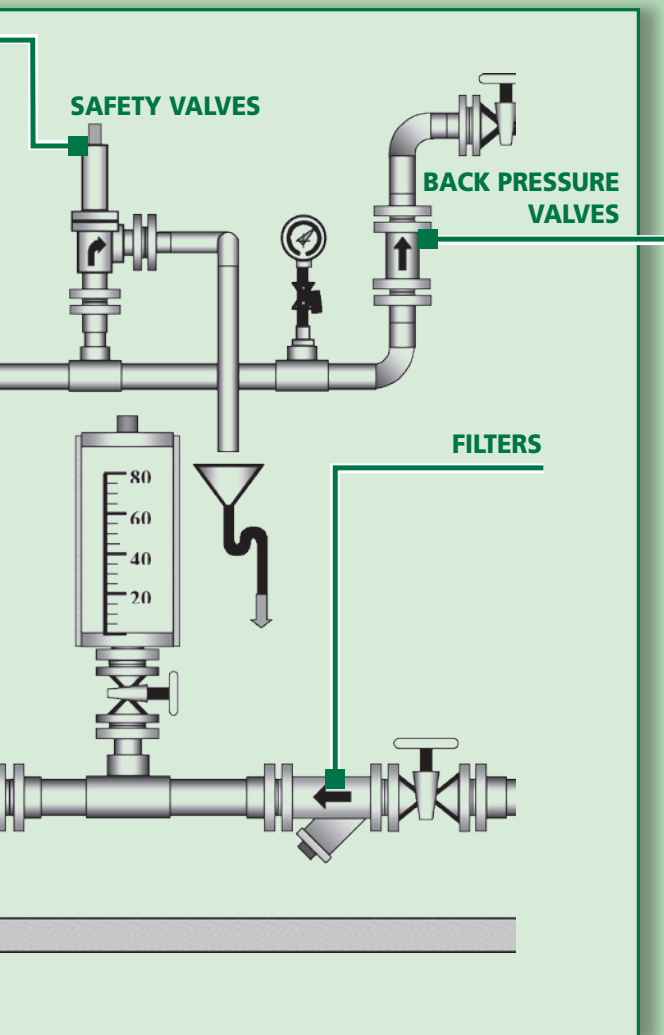
1.- FILTERS

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.



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"

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"

Authorized Distributor:

www.trimcorph.com

TRIMCOR TRIUMPH MACHINERY CORPORATION
THE PUMP, MOTOR & DRIVES SPECIALIST

