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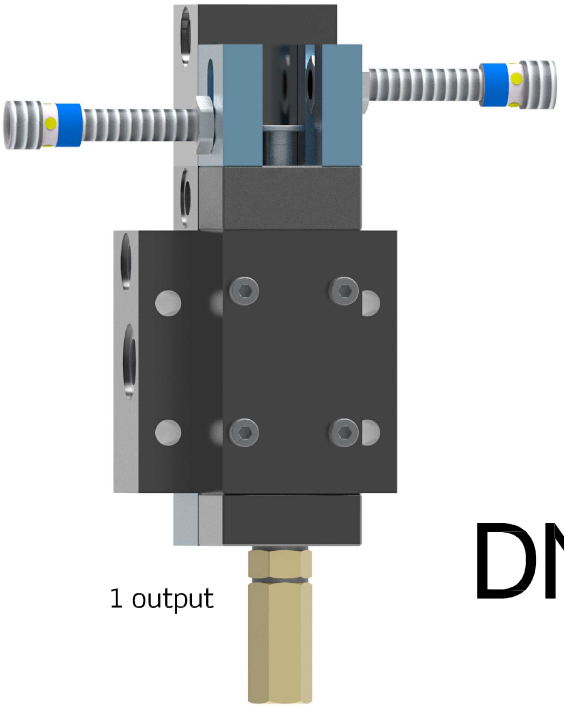
INTZA
LUBRICATION SYSTEMS

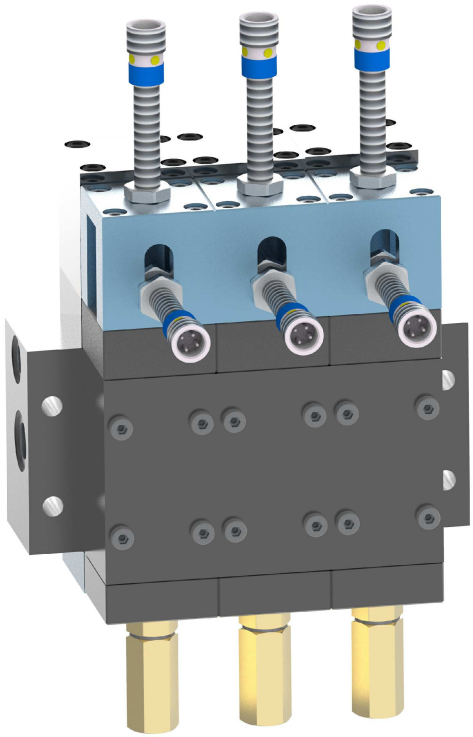


1 output

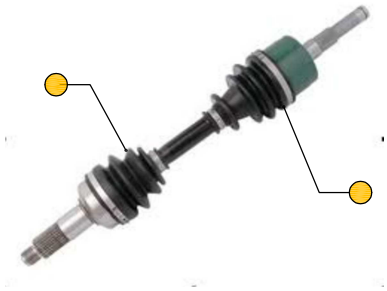
DN12

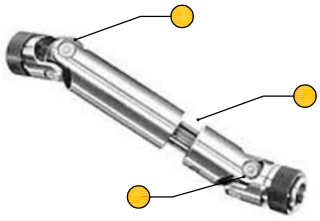
290.000.000

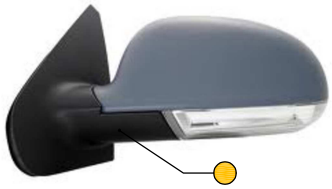
Grease and oil dosing systems for assembly lines and workstations

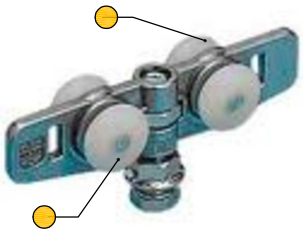


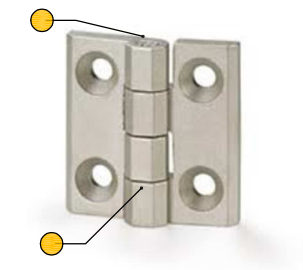
2...6 outputs

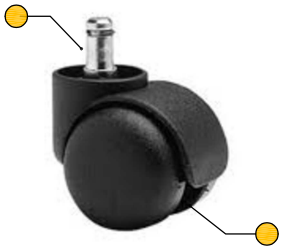












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INTZA LUBRICATION SYSTEMS

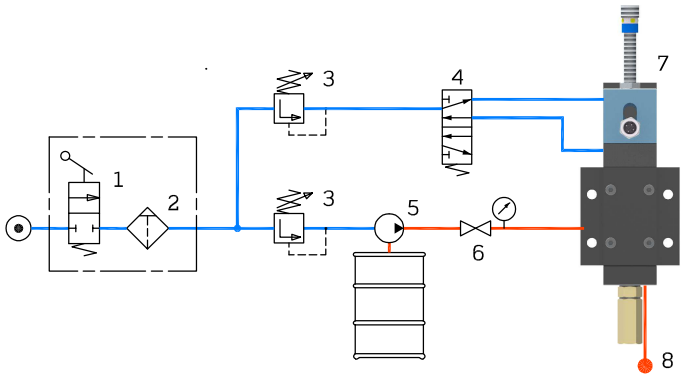
Grease dosing system

The task of a dosing system is to take a lubricant dose to a certain point at a certain timing and rate within a mechanism.
Size the diameters correctly taking into consideration its complexity and length.
Particular attention will be always paid to keep load losses down to minimum taking into account the lubricants to be carried.
Preferably Ø8x6 or Ø6x4 rigid pipe with a maximum length of 3 metres should be used.

Application examples

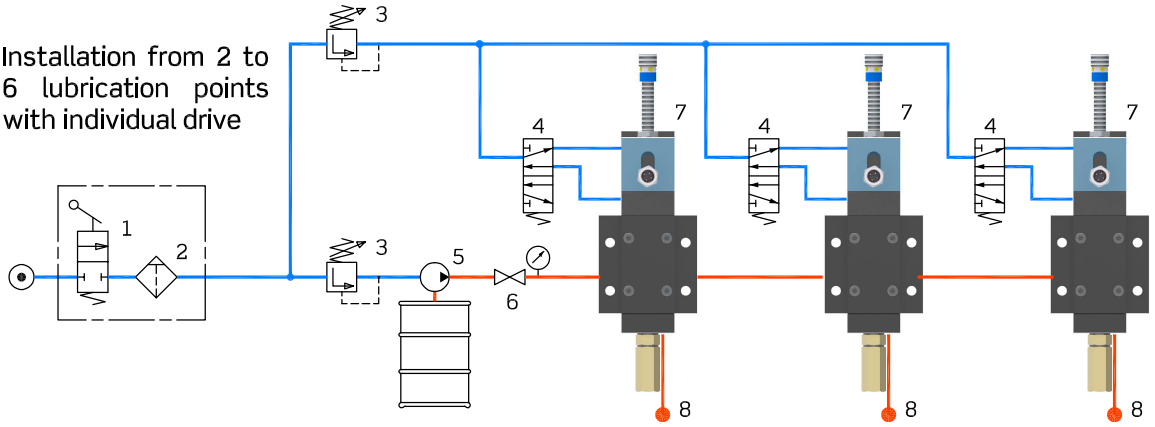
1 dosing point installation

The pumping station maintains a constant pressure in the circuit, and through the pneumatic drive of the doser, the dosing of lubricant to the lubrication point is provided.

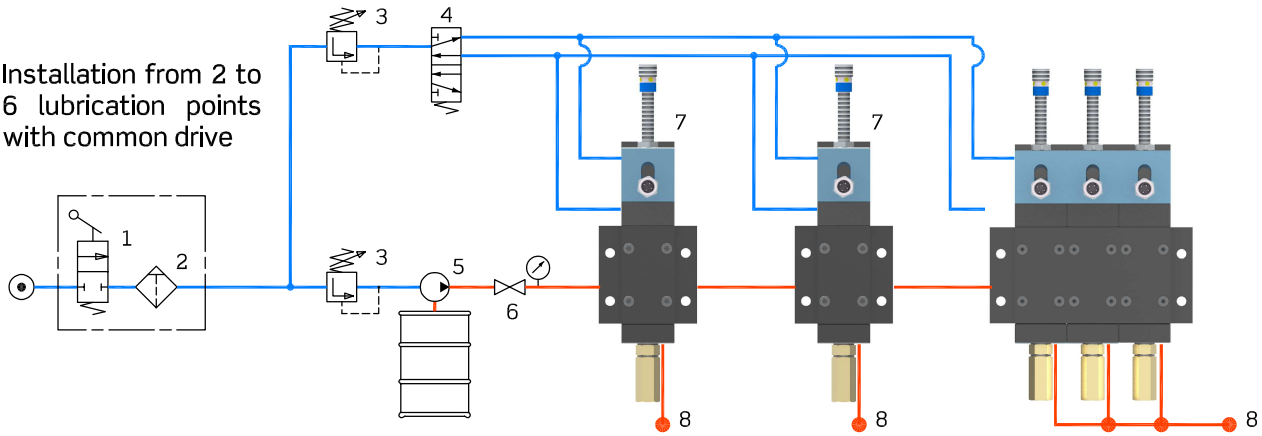


1-Air inlet valve
2-Air filter
3-Air press. regul. valve
4-Drive valve
5-Lubricant feed pump
6-Lubricant shut-off valve
7-Dosing element
8-Lubrication point

Installation from 2 to 6 lubrication points with individual drive



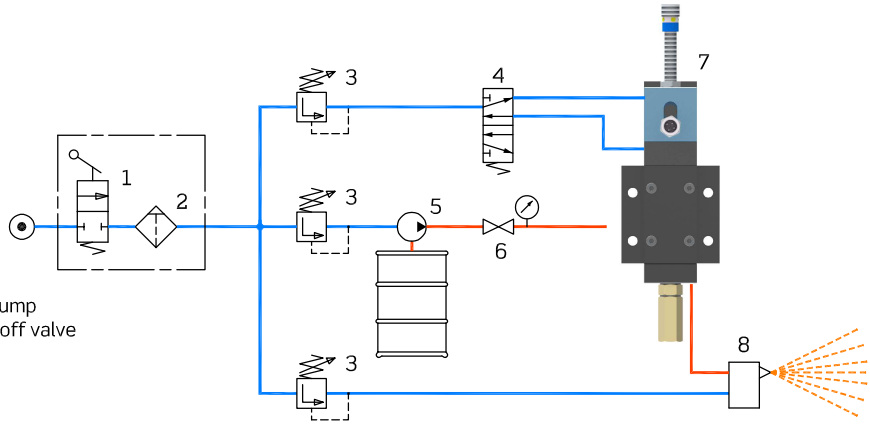
Installation from 2 to 6 lubrication points with common drive



Grease spraying installation

As the dosing installations shown above but adding an additional air pressure regulation valve for the spraying nozzle.

Spraying is done by pulses, depending on the working cadence of the doser.



1-Air inlet valve
2-Air filter
3-Air pressur. regul.
4-Drive valve
5-Lubricant feed pump
6-Lubricante shut-off valve
7-Dosing element
8-Spraying nozzle

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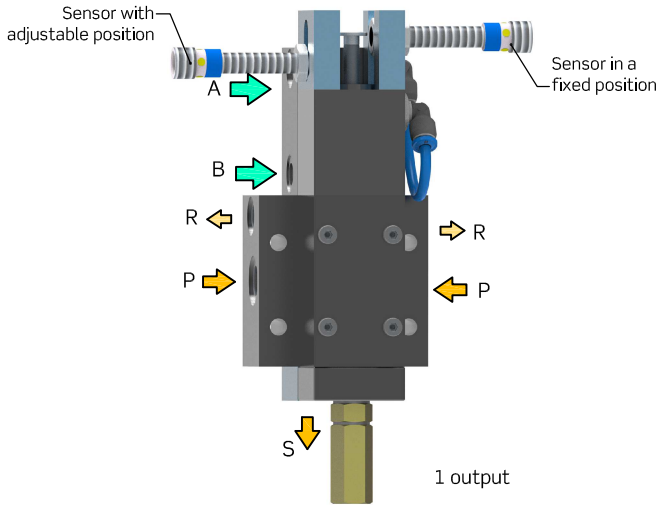
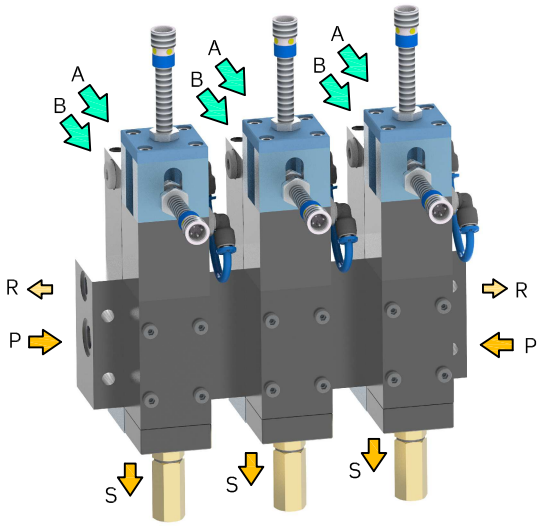
INTZA LUBRICATION SYSTEMS



1 output

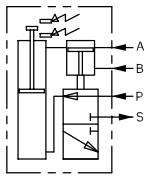


2...4 outputs

Volumetric doser for grease

DN12/A

290.010.000



-Up to NLGI 3
-Double effect pneumatic control
-Flow 0,02 ÷ 0,3 cm3/stroke
-Visual monitoring
-Optional electric monitoring

Technical data

Outlet flow..... 0,02 ÷ 0,3 cm3/stroke
Lubricant..... grease up to NLGI 3
Aire inlet pressure..... 3 ÷ 8 bar
Grease inlet pressure..... 20 ÷ 80 bar
Output backpressure..... max. 40 bar
Maximum number or cycles..... 60/minute
Working temperature..... +5°C÷ + 40°C
Body material..... aluminium
Seals material..... FPM (viton)

Operation

Fig.1 - The air flow comes into (B) and moves the reversing piston (1) connecting the lubricant feed inlet (P) with the dosing chamber (5), and filling that dosing chamber with lubricant up to the volume corresponding to the stroke limited by the regulating nut (4).

Fig.2 - When the air comes into (A) moves the reversing piston (1) connecting the dosing chamber (5) with the outlet [S] and moving the dosing piston (2) which then discharges the lubricant previously stored.

Fig.1

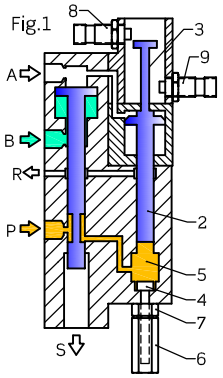
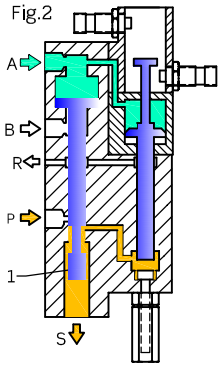


Fig.2

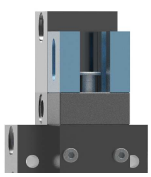


1. Reversing piston
2. Dosing piston
3. Control rod
4. Flow adjustment nut
5. Dosing chamber
6. Protective nut
7. Locknut
8. Upper sensor (fixed)
9. Lower sensor (adjustable)

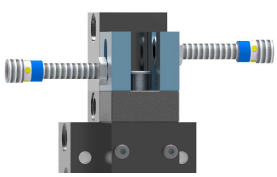
A Dosing air inlet
B Recovery air inlet
P Lubricant feed
R Drain (collection can be needed)
S Dosing outlet

DN12 / A-1 / X - X X - 1

Flow	N°of out.	Monitoring	X	Inductive sensor	X
0,02 ÷ 0,3 cm3/str.	1	Visual	1	Without	0
		Visual + electric with sensors at the sides	5	Without	0
		Visual + electric with sensors at top and at front	6	With	5
	2	Visual	1	Without	0
	3 4	Visual + electric with sensors at top and at front	6	Without / With	0 / 5



Monitoring "1"
Visual monitoring at front.



Monitoring "5"
Visual monitoring at front.
Sensors at the sides.
Not available for dosers with more than 1 output

Monitoring "6"
Visual monitoring at the side.
1 sensor at top.
1 sensor at front.

Flow adjustment

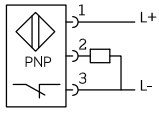
By the regulating nut (4) we can adjust the stroke of the dosing piston. For that is needed to loose the protective nut (6) and its nut (7).

Visual and electrical (2 sensors) monitoring

The control rod (3) is connected to the dosing piston (2) so the move jointly at each lubricant delivery allowing a visual control of the operation.
The displacement of the dosing piston is detected as well by a inductive sensor. From the top stop (8) until its final position (9) depending in the lenght of the stroke adjusted by the nut (4).

Characteristics of the inductive sensor

Connector.....M12x1
Function.....NC
Voltage.....10 ÷30 V
Maximum load admited.... 200 MA
Power consumption..... 20 MA



(R) Collection of the lubricant drain

At high operation rates and at high piston speeds, some small leaks may occur which do no affect dosing accuracy, and wich can be collected through the "R" holes to be returned to the tank.

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INTZA LUBRICATION SYSTEMS

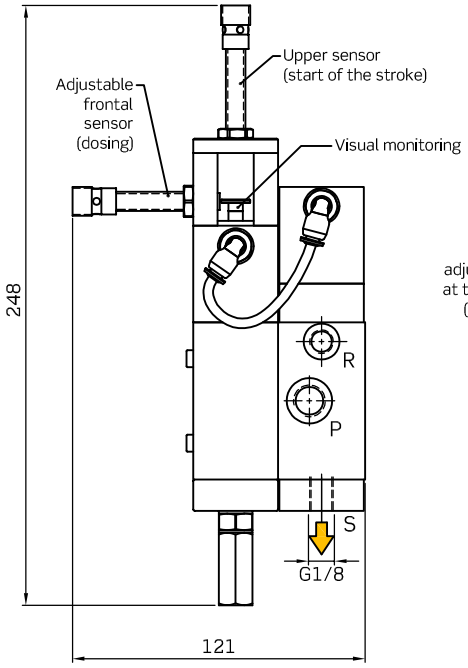
Dimensions

DN12/A

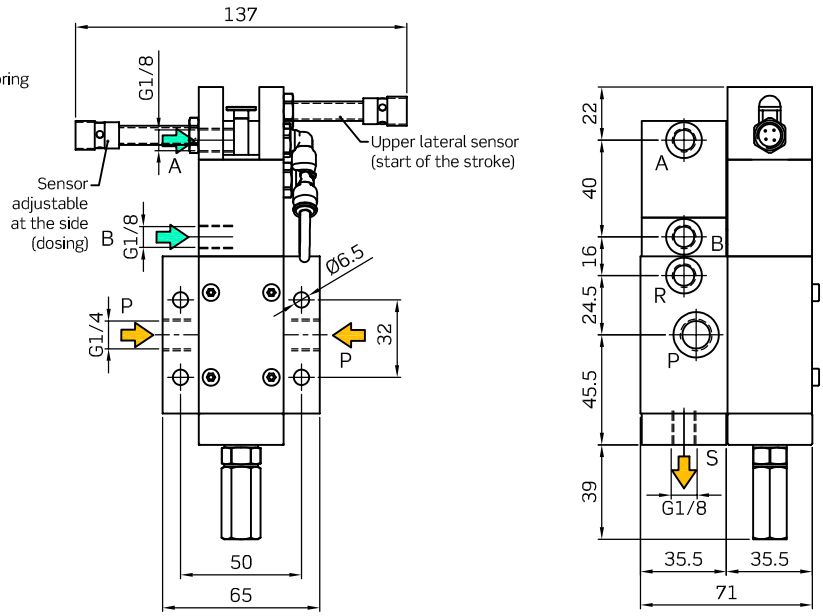
290.010.000

Individual mounting

Doser with visual monitoring at the side, sensors at top and at front

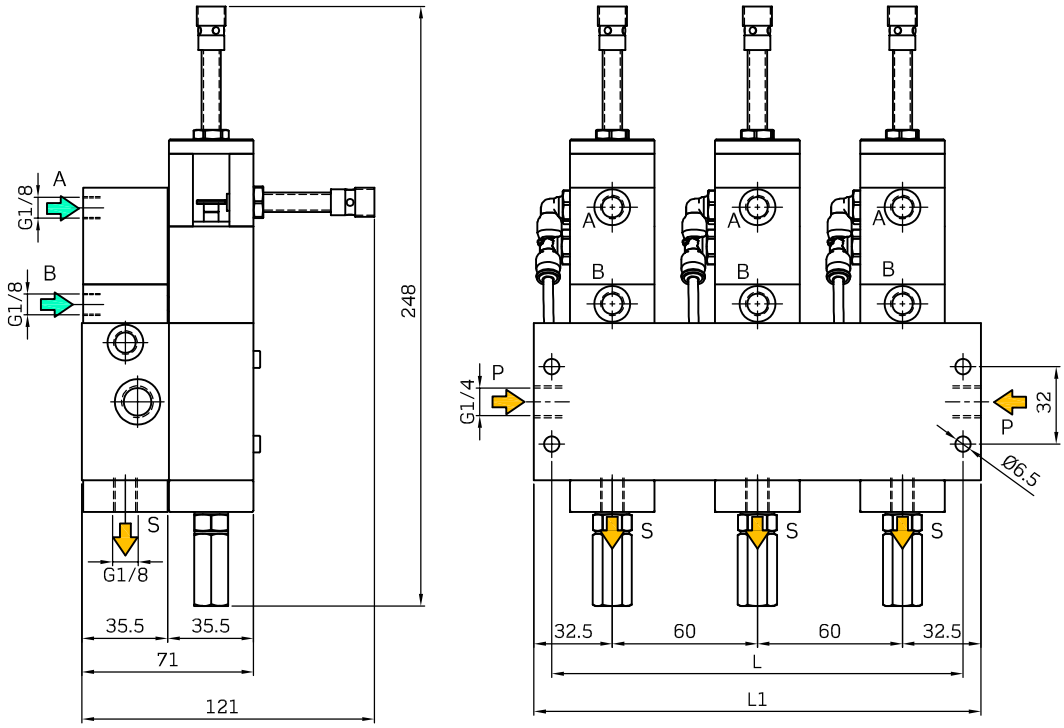


Doser with frontal visual monitoring and sensors at the sides



A Dosing air inlet
B Recovery air inlet
P Lubricant feed
R Drain (collection can be needed)
S Dosing outlet

Block mounting (2 ... 4 outlets)



	2 out.	3 out.	4 out.
L	110	170	230
L1	125	185	245

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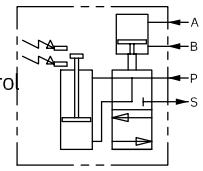
INTZA LUBRICATION SYSTEMS

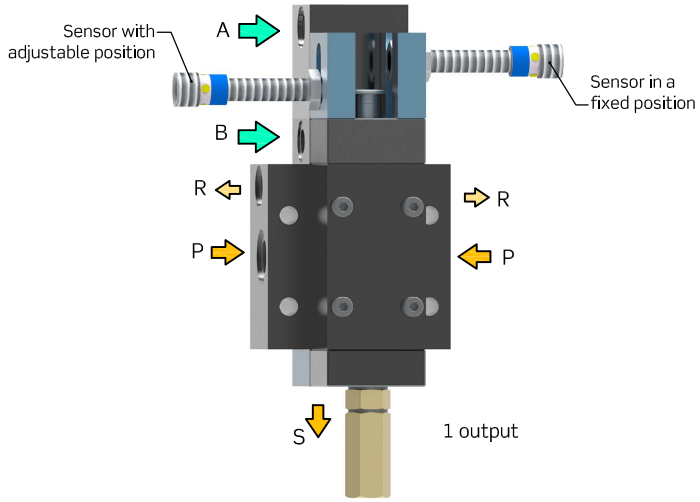
Volumetric doser for grease

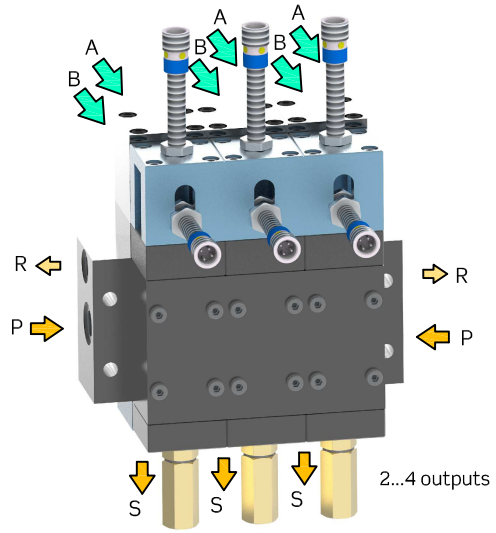
DN12/D

290.050.000



-Up to NLGI 3
-Double effect pneumatic contro
-Flow 0,02 ÷ 1 cm3/stroke
-Visual monitoring
-Optional electric monitoring





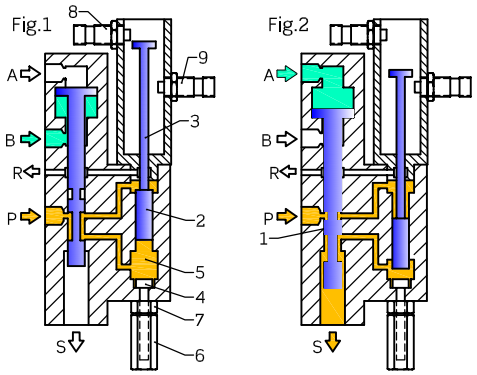
Technical data

Outlet flow.....0,02 ÷ 1 cm3/stroke
Lubricant..... grease up to NLGI 3
Aire inlet pressure..... 3 ÷ 8 bar
Grease inlet pressure..... 60 ÷ 150 bar
Output backpressure..... max. 10 bar
Maximum number or cycles..... 60/minute
Working temperature..... +5°C÷ + 40°C
Body material..... aluminium
Seals material..... FPM (viton)

Operation

Fig.1 - The air flow comes into (B) and moves the reversing piston (1) connecting the lubricant feed inlet (P) with the dosing chamber (5), and filling that dosing chamber with lubricant up to the volume corresponding to the stroke limited by the regulating nut (4).

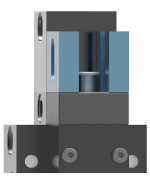
Fig.2 - When the air comes into (A) moves the reversing piston (1) connecting the dosing chamber (5) with the outlet [S]. The pressure created by the pump moves the dosing piston (2) which then discharges the lubricant previously stored.



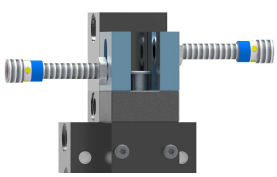
1. Reversing piston
2. Dosing piston
3. Control rod
4. Flow adjustment nut
5. Dosing chamber
6. Protective nut
7. Locknut
8. Upper sensor (fixed)
9. Lower sensor (adjustable)
A Dosing air inlet
B Recovery air inlet
P Lubricant feed
R Drain (collection can be needed)
S Dosing outlet

DN12 / D-1 / X - X X - 1

Flow	N°of out.	Monitoring	X	Inductive sensor	X
0,02 ÷ 1 cm3/str.	1	Visual	1	Without	0
		Visual + electric with sensors at the sides	5	Without	0
		Visual + electric with sensors at top and at front	6	With	5
	2 3	Visual	1	Without	0
	4 5 6	Visual + electric with sensors at top and at front	6	Without With	0 5



Monitoring "1"
Visual monitoring at front.



Monitoring "5"
Visual monitoring at front.
Sensors at the sides.
Not available for dosers with more than 1 output

Monitoring "6"
Visual monitoring at the side.
1 sensor at top.
1 sensor at front.

Flow adjustment

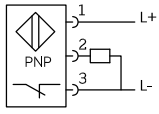
By the regulating nut (4) we can adjust the stroke of the dosing piston. For that is needed to loose the protective nut (6) and its nut (7).

Visual and electrical (2 sensors) monitoring

The control rod (3) is connected to the dosing piston (2) so the move jointly at each lubricant delivery allowing a visual control of the operation.
The displacement of the dosing piston is detected as well by a inductive sensor. From the top stop (8) until its final position (9) depending in the lenght of the stroke adjusted by the nut (4).

Characteristics of the inductive sensor

Connector.....M12x1
Function.....NC
Voltage.....10 ÷30 V
Maximum load admited.... 200 MA
Power consumption..... 20 MA



(R) Collection of the lubricant drain

At high operation rates and at high piston speeds, some small leaks may occur which do no affect dosing accuracy, and wich can be collected through the "R" holes to be returned to the tank.

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INTZA LUBRICATION SYSTEMS

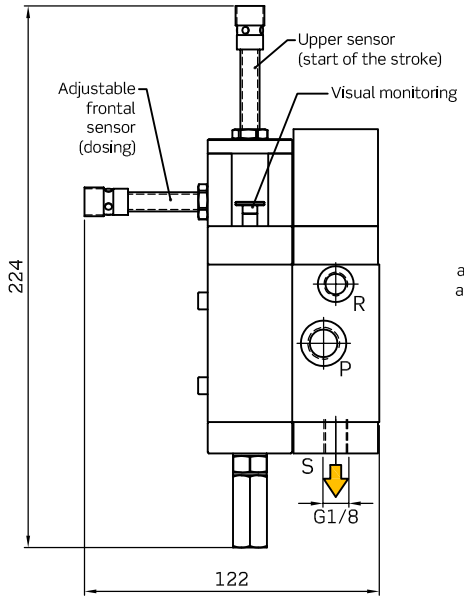
Dimensions

DN12/D

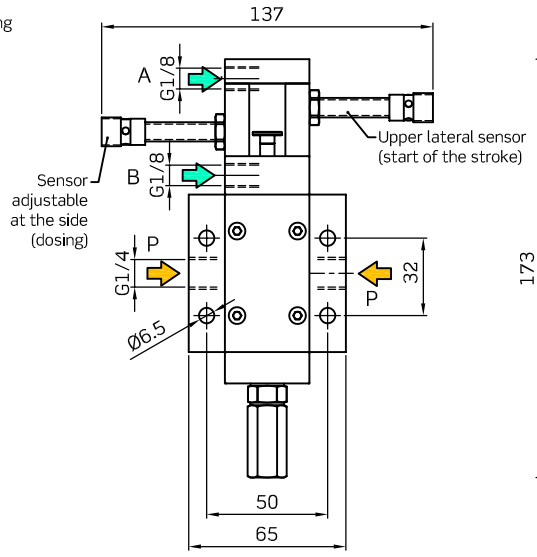
290.050.000

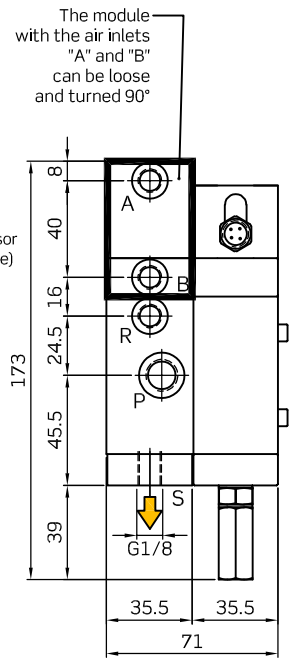
Individual mounting

Doser with visual monitoring at the side, sensors at top and at front



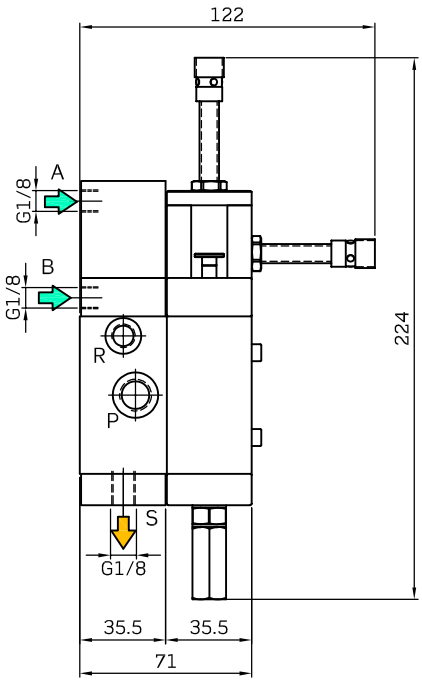
Doser with frontal visual monitoring and sensors at the sides

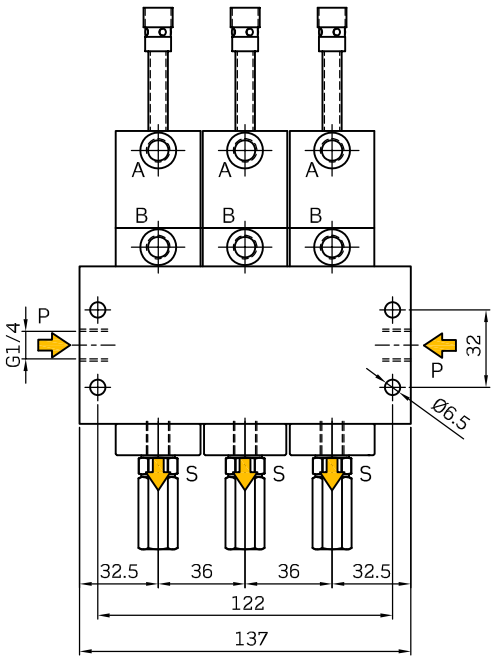




A Dosing air inlet
B Recovery air inlet
P Lubricant feed
R Drain (collection can be needed)
S Dosing outlet

Block mounting (2 ... 6 outlets)





	2 out.	3 out.	4 out.	5 out.	6 out.
L	86	122	158	194	230
L1	101	137	173	209	245

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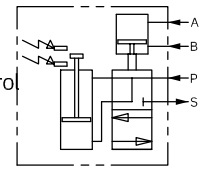
INTZA LUBRICATION SYSTEMS

Volumetric doser for grease

DN12/E

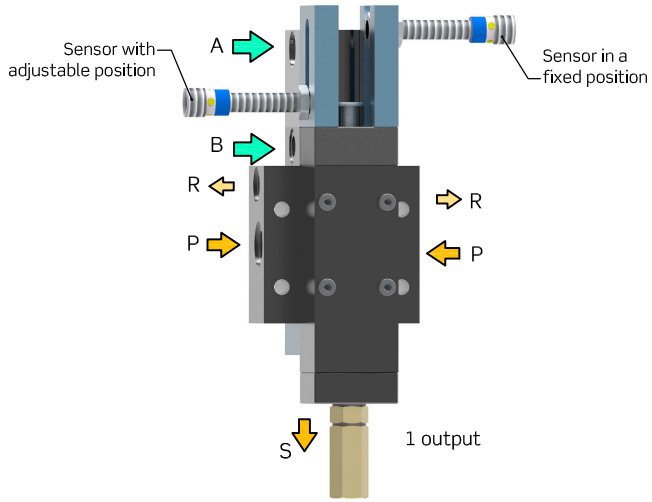
290.100.000

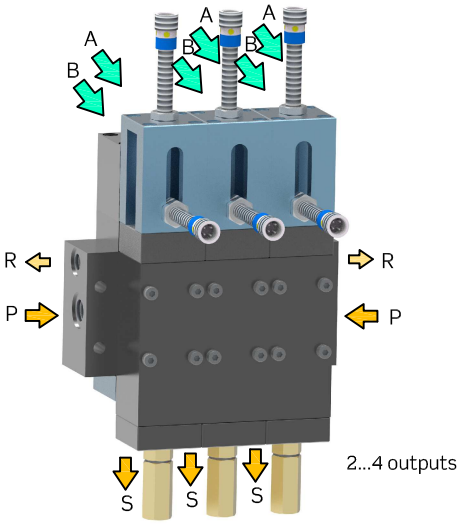


-Up to NLGI 3
-Double effect pneumatic contro
-Flow 0,05 ÷ 3 cm3/stroke
-Visual monitoring
-Optional electric monitoring

Technical data

Outlet flow.....0,02 ÷ 3 cm3/stroke
Lubricant..... grease up to NLGI 3
Aire inlet pressure..... 3 ÷ 8 bar
Grease inlet pressure..... 60 ÷ 150 bar
Output backpressure..... max. 10 bar
Maximum number or cycles..... 60/minute
Working temperature..... +5°C÷ + 40°C
Body material..... aluminium
Seals material..... FPM (viton)

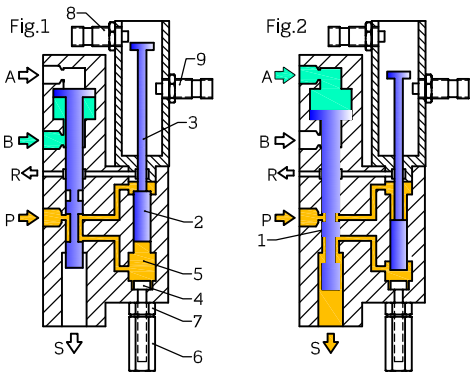




Operation

Fig.1 - The air flow comes into (B) and moves the reversing piston (1) connecting the lubricant feed inlet (P) with the dosing chamber (5), and filling that dosing chamber with lubricant up to the volume corresponding to the stroke limited by the regulating nut (4).

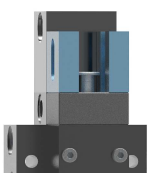
Fig.2 - When the air comes into (A) moves the reversing piston (1) connecting the dosing chamber (5) with the outlet [S]. The pressure created by the pump moves the dosing piston (2) which then discharges the lubricant previously stored.



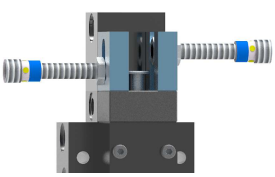
1. Reversing piston
2. Dosing piston
3. Control rod
4. Flow adjustment nut
5. Dosing chamber
6. Protective nut
7. Locknut
8. Upper sensor (fixed)
9. Lower sensor (adjustable)
A Dosing air inlet
B Recovery air inlet
P Lubricant feed
R Drain (collection can be needed)
S Dosing outlet

DN12 / E-1 / X - X X - 1

Flow	N°of out.	Monitoring	X	Inductive sensor	X
0,05 ÷ 3 cm3/str.	1	Visual	1	Without	0
		Visual + electric with sensors at the sides	5	Without	0
		Visual + electric with sensors at top and at front	6	With	5
	2	Visual	1	Without	0
	3				
	4	Visual + electric with sensors at top and at front	6	Without	0
	5				
	6			With	5



Monitoring "1"
Visual monitoring at front.



Monitoring "5"
Visual monitoring at front.
Sensors at the sides.
Not available for dosers with more than 1 output

Monitoring "6"
Visual monitoring at the side.
1 sensor at top.
1 sensor at front.

Flow adjustment

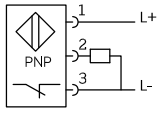
By the regulating nut (4) we can adjust the stroke of the dosing piston. For that is needed to loose the protective nut (6) and its nut (7).

Visual and electrical (2 sensors) monitoring

The control rod (3) is connected to the dosing piston (2) so the move jointly at each lubricant delivery allowing a visual control of the operation.
The displacement of the dosing piston is detected as well by a inductive sensor. From the top stop (8) until its final position (9) depending in the lenght of the stroke adjusted by the nut (4).

Characteristics of the inductive sensor

Connector.....M12x1
Function.....NC
Voltage.....10 ÷30 V
Maximum load admited.... 200 MA
Power consumption..... 20 MA



(R) Collection of the lubricant drain

At high operation rates and at high piston speeds, some small leaks may occur which do no affect dosing accuracy, and wich can be collected through the "R" holes to be returned to the tank.

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INTZA LUBRICATION SYSTEMS

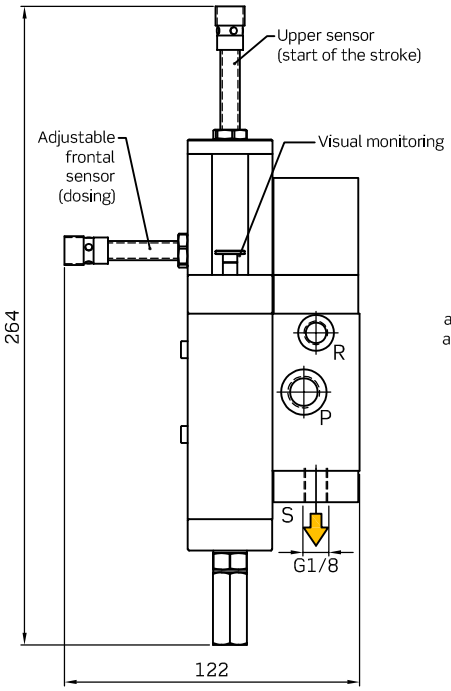
Dimensions

DN12/E

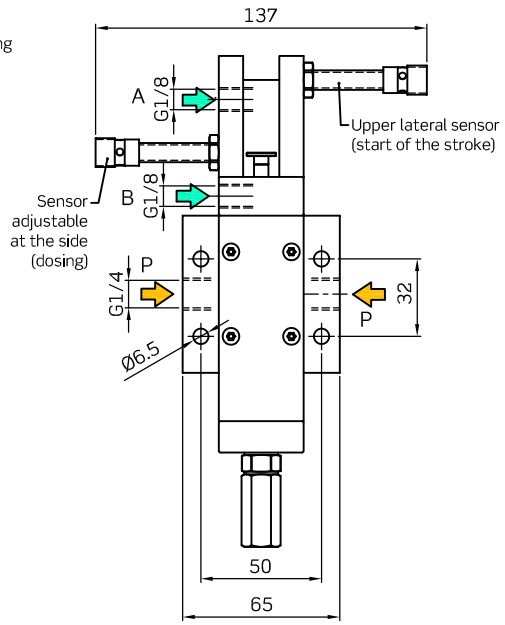
290.100.000

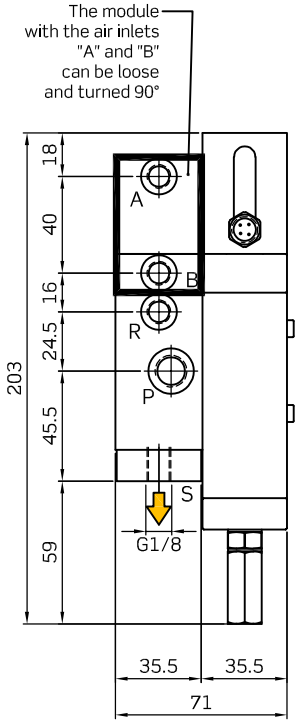
Individual mounting

Doser with visual monitoring at the side, sensors at top and at front



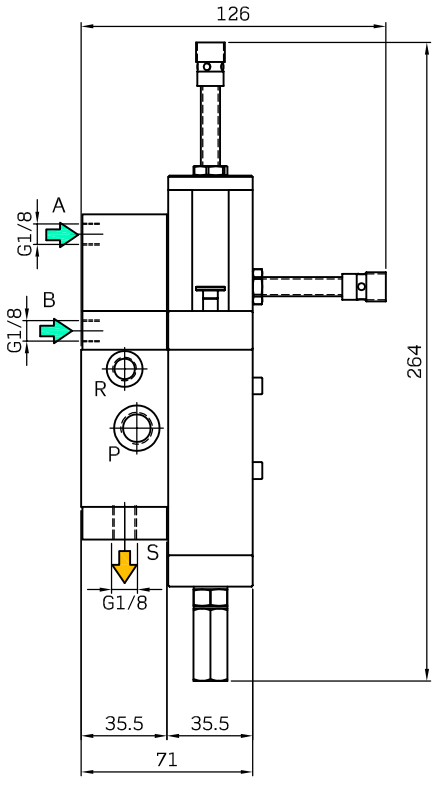
Doser with frontal visual monitoring and sensors at the sides

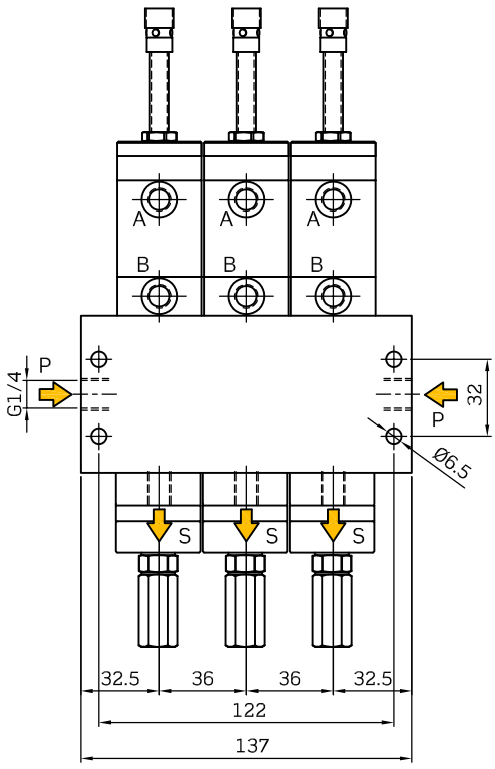




A Dosing air inlet
B Recovery air inlet
P Lubricant feed
R Drain (collection can be needed)
S Dosing outlet

Block mounting (2 ... 6 outlets)





	2 out.	3 out.	4 out.	5 out.	6 out.
L	86	122	158	194	230
L1	101	137	173	209	245