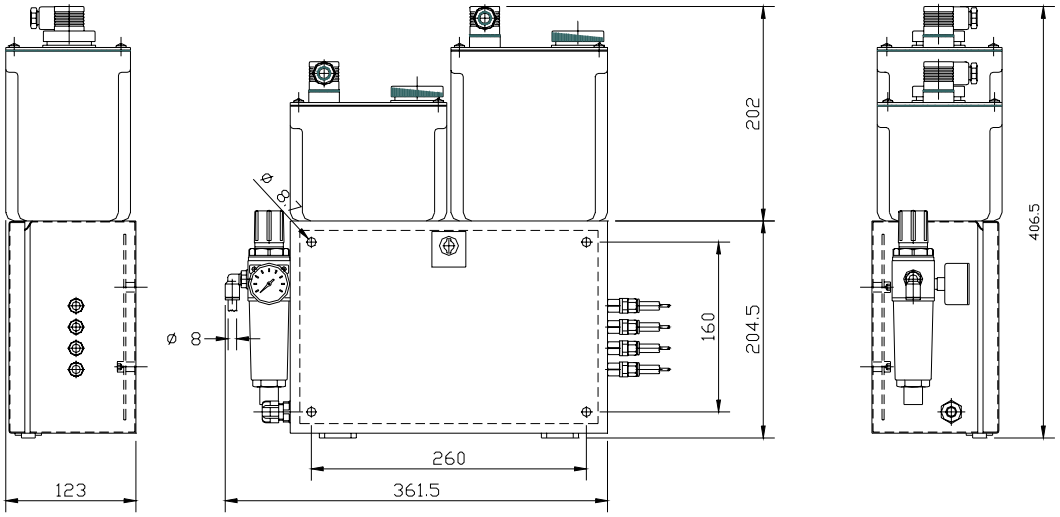
	THE UNIT IS SUPPLIED COMPLETE OF:
1-30	LOW LEVEL SWITCHES
19	FILLER CUPS + STRAINER
7	2.2 L EMULSION RESERVOIR
17	1.2 L OIL RESERVOIR
12	METALLIC BOX
9	PUMPS + BASES
29	SUCTION STRAINER
8	AIR REGULATOR
6	FREQUENCY GENERATOR
18	AIR INLET FITTINGS PUSH-IN 8 MM
10-11	PRESSURE REDUCER WITH GAUGE
20	SOLENOID VALVE 24 V DC – 24 V AC – 115 V AC OR 230 V AC THE VOLTAGE HAS TO BE ADD TO THE CODE. EXAMPLE 70.071.2.24VDC
	5 M COAXIAL HOSE FOR EACH OUTLET (6 MM – 2.5 MM)

OVERALL DIMENSION

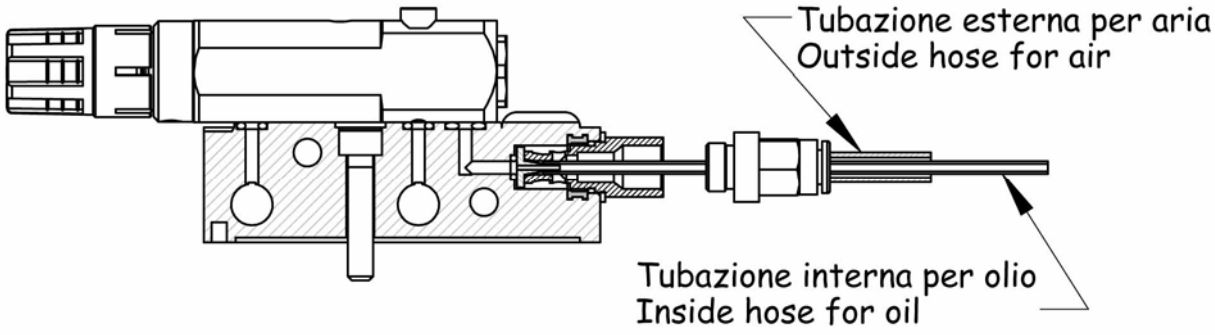


CODES TO ORDER SOLENOID VALVE COILS

14.660.1.R	14.660.2.R	14.660.3.R	14.660.4.R
24 V DC	115 V AC	230 V AC	24 V AC

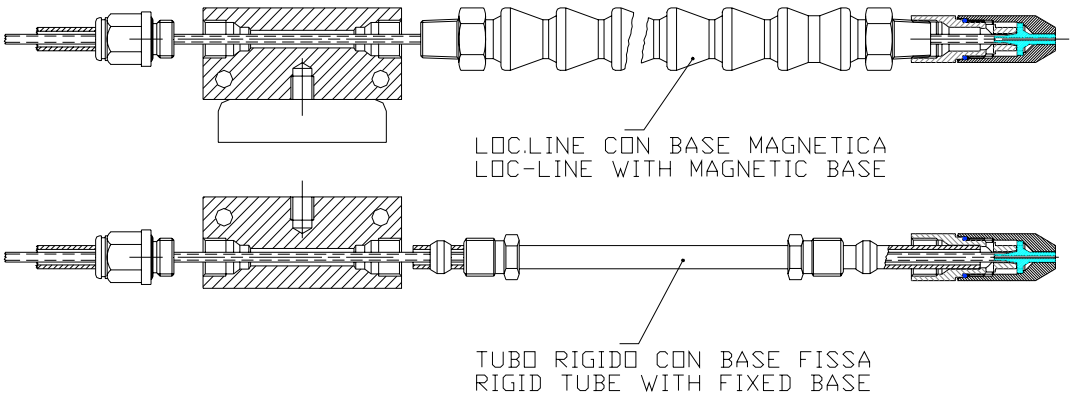
COAXIAL FEEDING LINES

ALL LUBETOOLS ARE SUPPLIED WITH 5 M OF COAXIAL HOSES ALREADY ASSEMBLED IN THE BASE OF THE PNEUMATIC PUMPS. THE OUTSIDE NYLON HOSES HAVE A DIAMETER OF 6 MM AND THE INSIDE NYLON HOSES HAVE A DIAMETER OF 2.5 MM. THE INSIDE HOSES ARE 500 MM MORE LONGER THAN THE OUTSIDE HOSES BECAUSE HAVE TO BE JOIN TO THE NOZZLE, WHILE THE OUTSIDE HOSES HAVE TO BE JOIN TO THE STRAIGHT ADAPTORS. ON REQUEST IS POSSIBLE TO SUPPLY MORE LONGER HOSES AND/OR SPECIAL COVERING.



END TUBES WITH NOZZLE

THE END TUBES WITH NOZZLE HAVE AN OVERALL LENGTH OF 300 MM THAT CAN BE REDUCED CUTTING THE STEEL TUBE OR REMOVING PARTS OF THE LOC-LINE

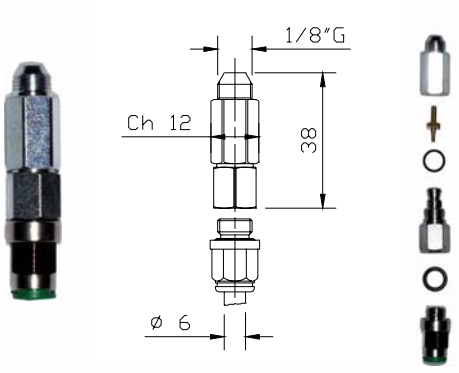


CODES FOR ORDER

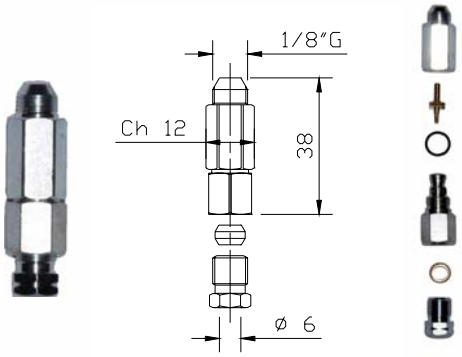
CODE	*TYPE*
70.100.0	*LOC-LINE WITH FIXED BASE (6 MM)*
70.100.2	*LOC-LINE WITH MAGNETIC BASE (6 MM)*
70.100.1	*RIGID TUBE WITH FIXED BASE (6 MM)*
70.100.3	*RIGID TUBE WITH MAGNETIC BASE (6 MM)*
70.101.0	*LOC-LINE WITH FIXED BASE (8 MM)*
70.101.2	*LOC-LINE WITH MAGNETIC BASE (8 MM)*
70.101.1	*RIGID TUBE WITH FIXED BASE (8 MM)*
70.101.3	*RIGID TUBE WITH MAGNETIC BASE (8 MM)*

THE CODE INCLUDES THE NOZZLE, THE STEEL OR THE LOC-LINE TUBE AND THE MAGNETIC OR FI XED BASE.

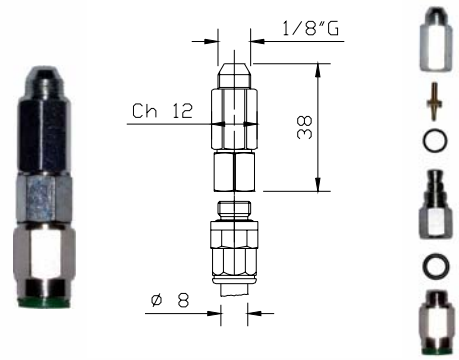
NOZZLE WITH HEAD THREAD 1/8" GAS



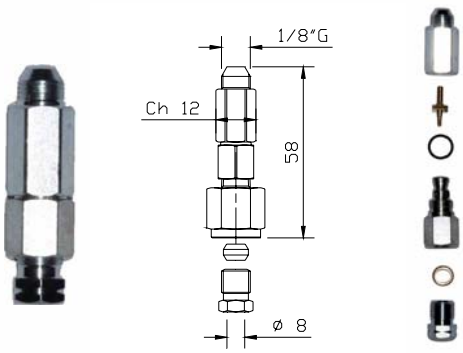
A70.093181



A70.093178

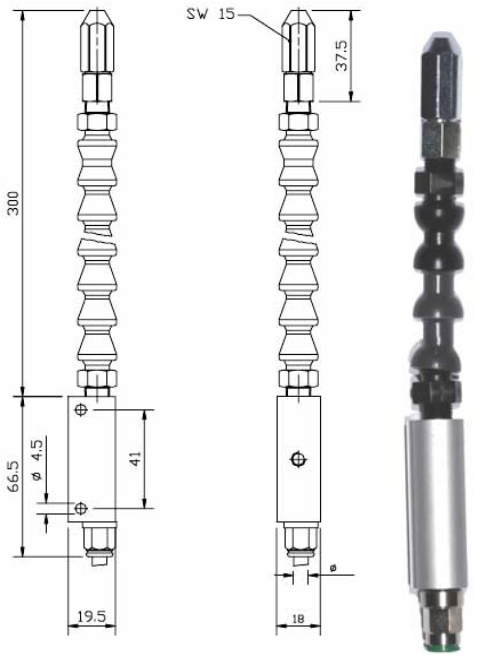


A70.093246

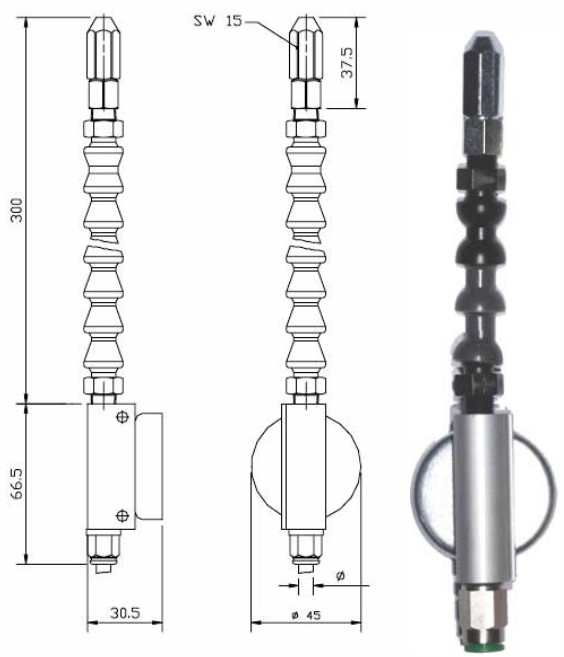


A70.093248

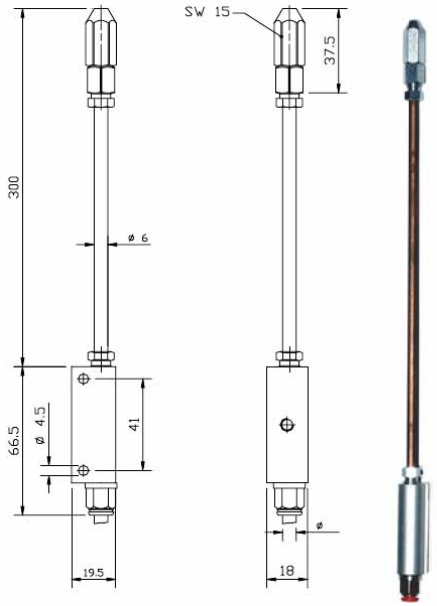
END TUBES WITH NOZZLE
OVERALL DIMENSION



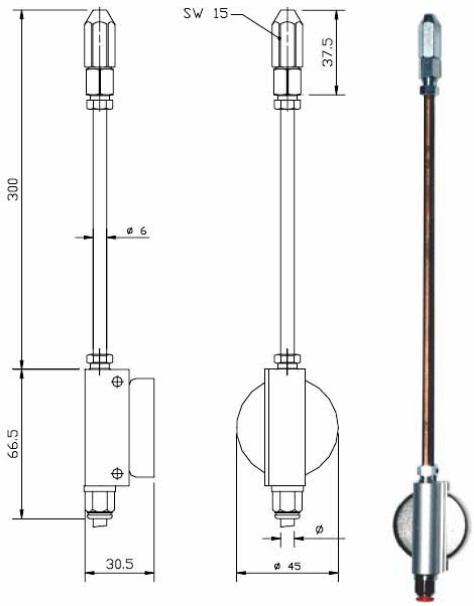
70.100.0 (Ø6)
70.101.0 (Ø8)



70.100.2 (Ø6)
70.101.2 (Ø8)

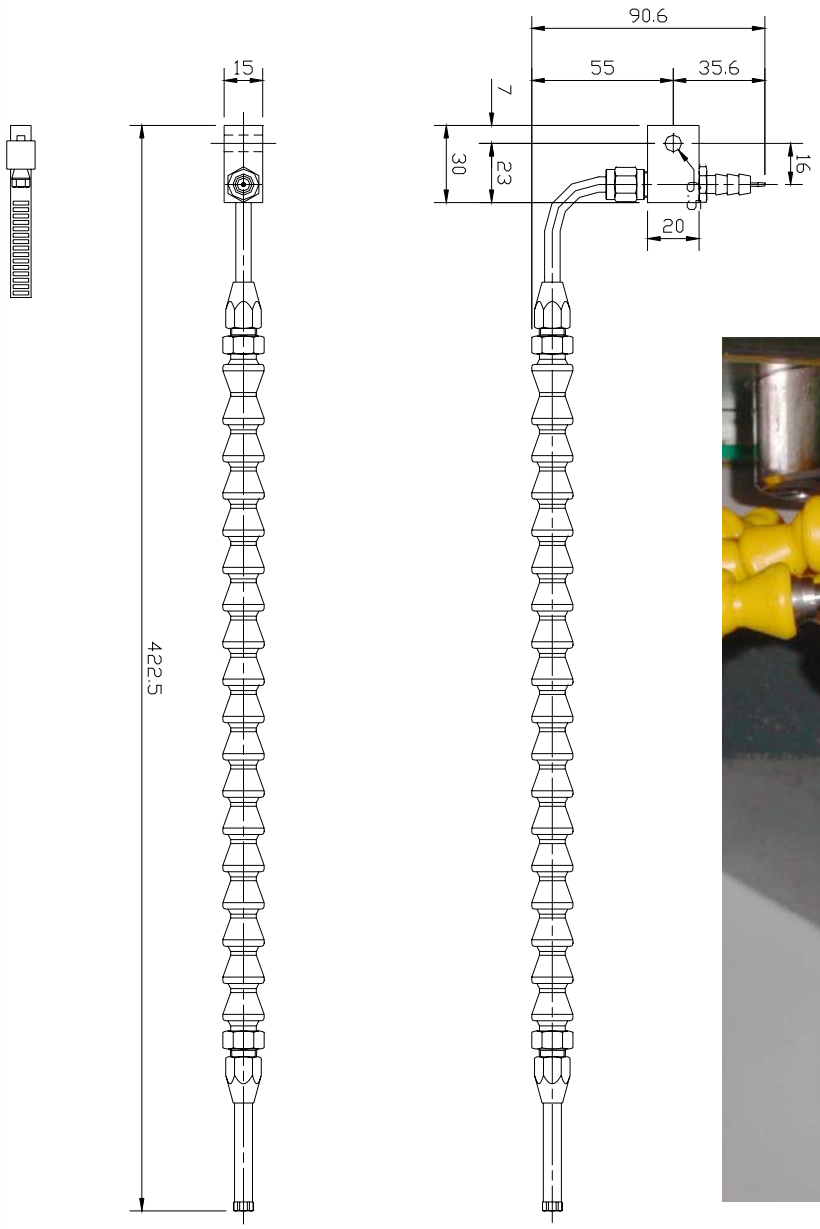


70.100.1 (Ø6)
70.101.1 (Ø8)

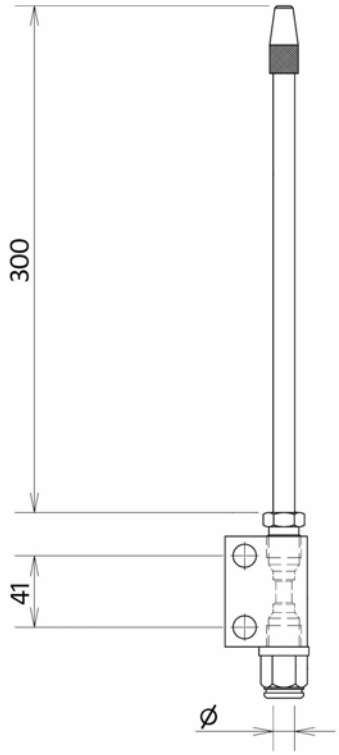


70.100.3 (Ø6)
70.101.3 (Ø8)

END TUBES WITH NOZZLE
OVERALL DIMENSION
CODE
70.103.8



END TUBES WITH DECABON NOZZLE
OVERALL DIMENSION

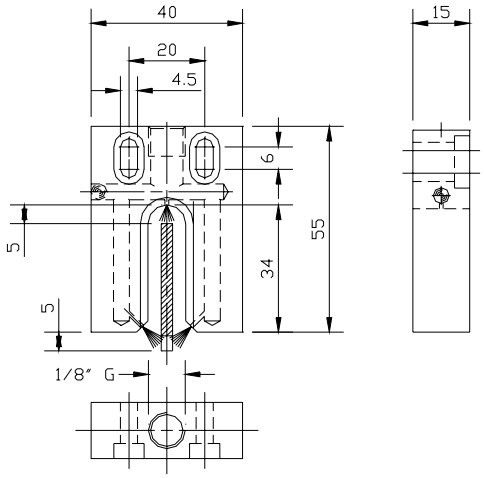


CODE	DECABON NOZZLE	Ø
70.118.2	*WITH BLOCK + PUSH-IN FITTING*	6 MM
70.118.3	*WITH MAGNETIC BLOCK + PUSH-IN FITTING*	6 MM
70.118.4	*WITH BLOCK + PUSH-IN FITTING*	8 MM
70.118.5	*WITH MAGNETIC BLOCK + PUSH-IN FITTING*	8 MM

SADDLE NOZZLE FOR HORIZONTAL BAND SAW
BLADE HEIGHT: FROM 6 MM TO 34 MM
LUBRICANT: OIL

CODE	*INLETS*	*OUTLETS*
70.111.0	1	3

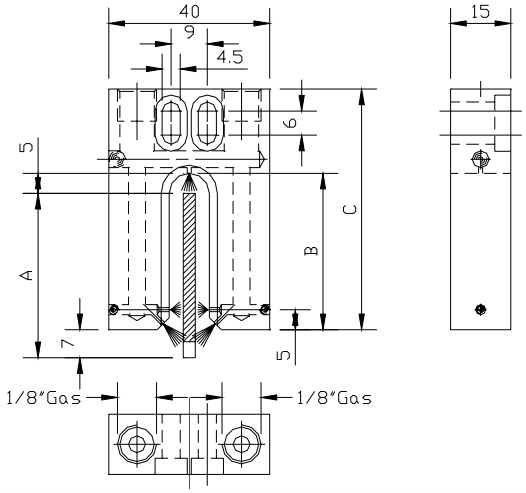
OVERALL DIMENSION



BLADE HEIGHT: FROM 41 MM TO 80 MM
LUBRICANT: OIL

CODE	*INLETS*	*OUTLETS*	BLADE	A	B	C
70.111.1	2	5	41	41	39	60
70.111.2	2	5	54	54	52	73
70.111.3	2	5	67	67	65	86
70.111.4	2	5	80	80	78	99

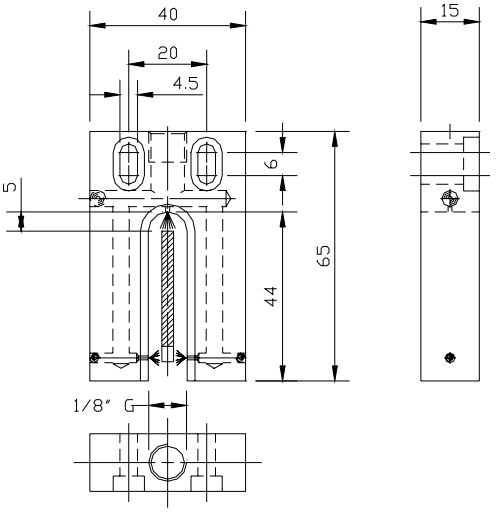
OVERALL DIMENSION



SADDLE NOZZLE FOR VERTICAL BAND SAW
BLADE HEIGHT: FROM 6 MM TO 34 MM
LUBRICANT: OIL

CODE	*INLETS*	*OUTLETS*
70.112.0	1	3

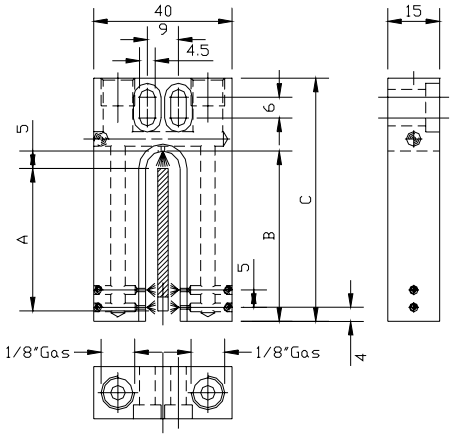
OVERALL DIMENSION



BLADE HEIGHT: FROM 41 MM TO 80 MM
LUBRICANT: OIL

CODE	*INLETS*	*OUTLETS*	BLADE	A	B	C
70.112.1	2	5	41	41	49	70
70.112.2	2	5	54	54	62	83
70.112.3	2	5	67	67	75	96
70.112.4	2	5	80	80	88	109

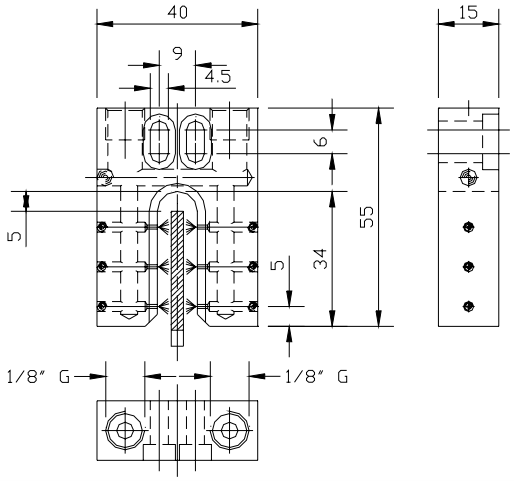
OVERALL DIMENSION



SADDLE NOZZLE FOR HORIZONTAL BAND SAW
BLADE HEIGHT: FROM 6 MM TO 34 MM
LUBRICANT: EMULSION

CODE	*INLETS*	*OUTLETS*
70.113.0	2	6

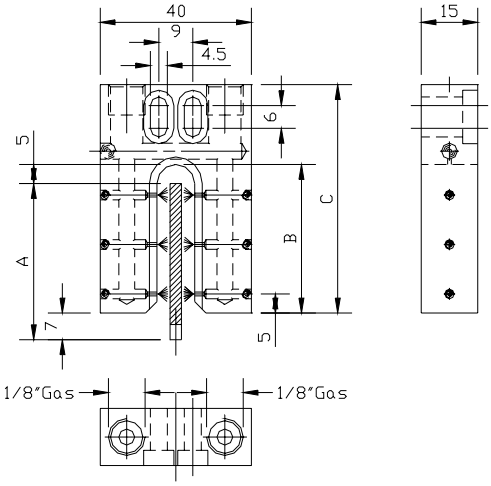
OVERALL DIMENSION



BLADE HEIGHT: FROM 41 MM TO 80 MM
LUBRICANT: EMULSION

CODE	*INLETS*	*OUTLETS*	BLADE	A	B	C
70.113.1	2	6	41	41	39	60
70.113.2	2	8	54	54	52	73
70.113.3	2	10	67	67	65	86
70.113.4	2	12	80	80	78	99

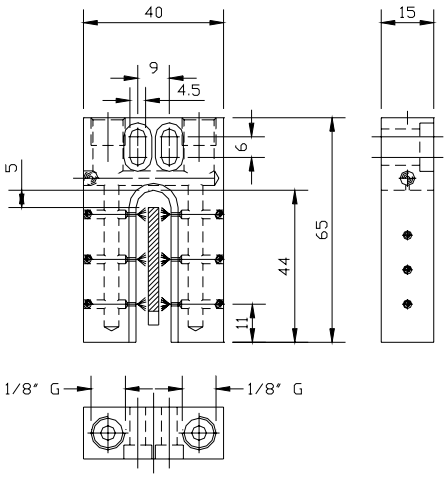
OVERALL DIMENSION



SADDLE NOZZLE FOR VERTICAL BAND SAW
BLADE HEIGHT: FROM 6 MM TO 34 MM
LUBRICANT: EMULSION

CODE	*INLETS*	*OUTLETS*
70.114.0	2	6

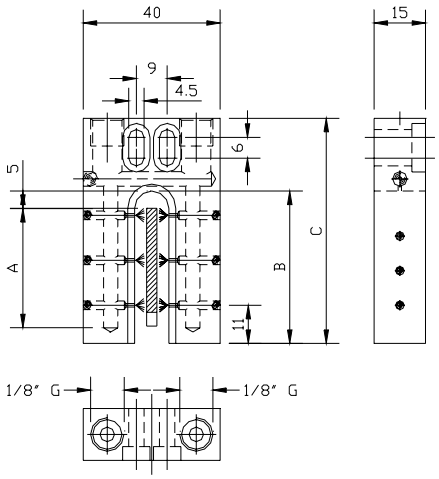
OVERALL DIMENSION



BLADE HEIGHT: FROM 41 MM TO 80 MM
LUBRICANT: EMULSION

CODE	*INLETS*	*OUTLETS*	BLADE	A	B	C
70.114.1	2	6	41	41	49	70
70.114.2	2	8	54	54	62	83
70.114.3	2	10	67	67	75	96
70.114.4	2	12	80	80	88	109

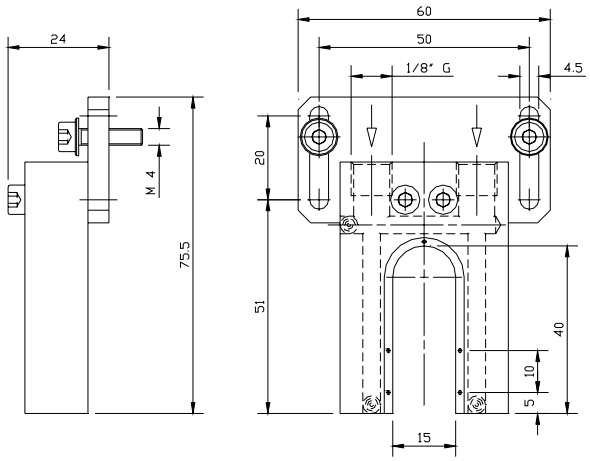
OVERALL DIMENSION



SADDLE NOZZLE FOR CIRCULAR SAW
LUBRICANT: OIL

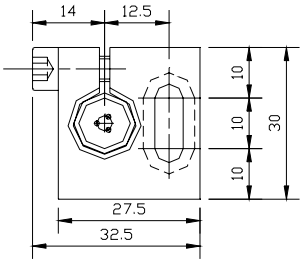
CODE	*INLETS*	*OUTLETS*
70.106.2	2	5

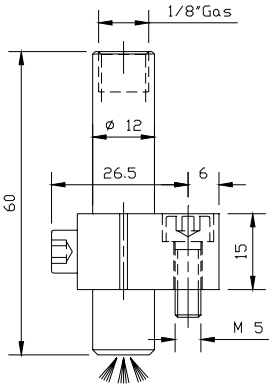
OVERALL DIMENSION



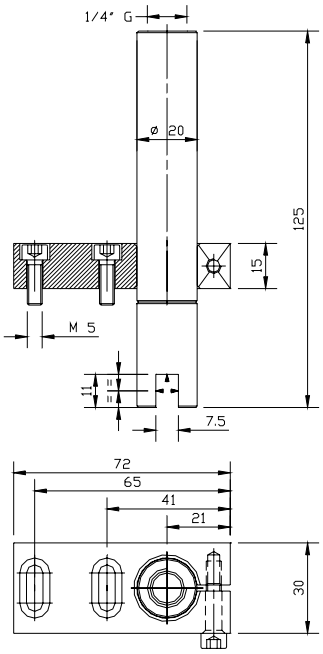
CODICE *CODE*	INGRESSI *INLETS*	USCITE *OUTLETS*	CODICE *CODE*	INGRESSI *INLETS*	USCITE *OUTLETS*
70.103.2	1	3	70.103.5	1	3

DIMENSIONI D'INGOMBRO



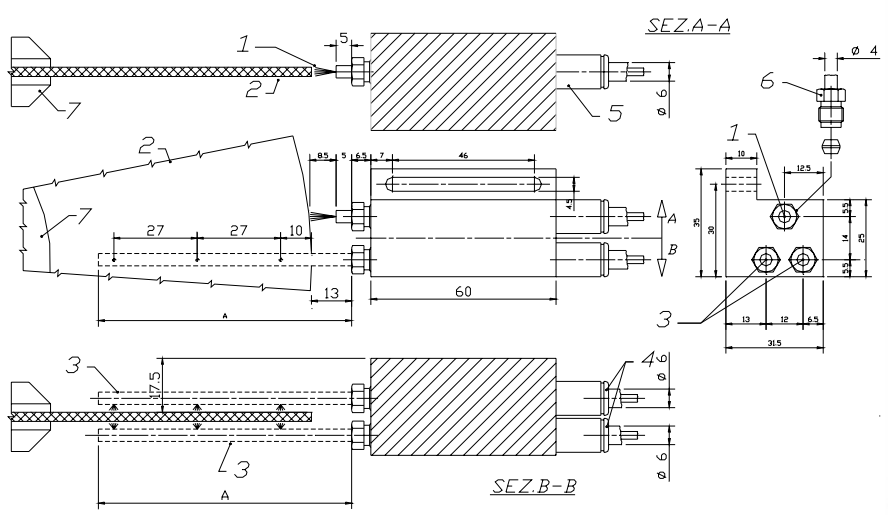


OVERALL DIMENSION



NOZZLE FOR CIRCULAR SAW

LUBRICANT: OIL + EMULSION



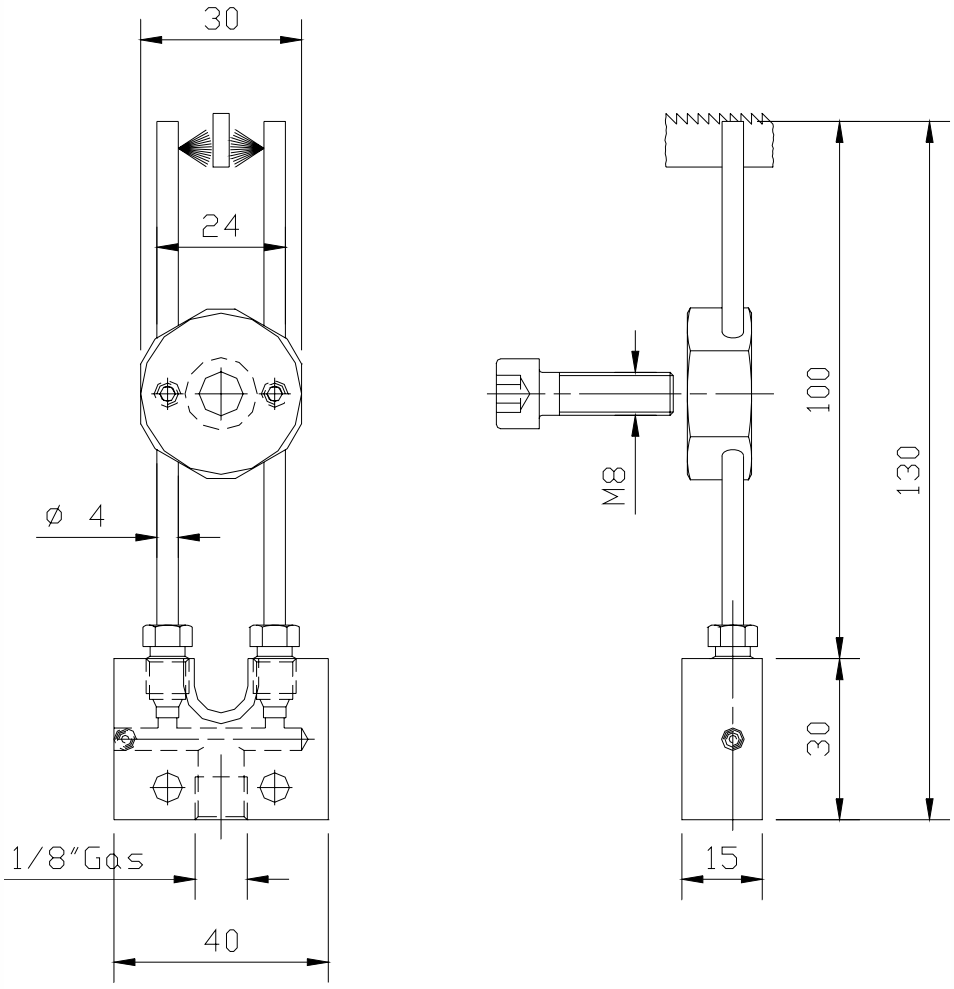
1	*TOOTH LUBRICATION WITH OIL*
2	*DISK*
3	*SIDES LUBRICATION WITH EMULSION*
4	*PUSH-IN FITTINGS TUBE 6 MM FOR EMULSION*
5	*PUSH-IN FITTING TUBE 6 MM FOR OIL*
6	*NUT AND OLIVE FOR 4 MM TUBE*
7	*METAL RING TO FIX THE DISK*

CODES FOR ORDER

CODE	*EMULSION HOLES*	*DISK DIAMETER MM*	A
70.103.4.55	2 + 2	175 – 200	55
70.103.4.82	3 + 3	225 – 250 – 275	82
70.103.4.109	4 + 4	300 – 315 – 350 – 370 - 400	109

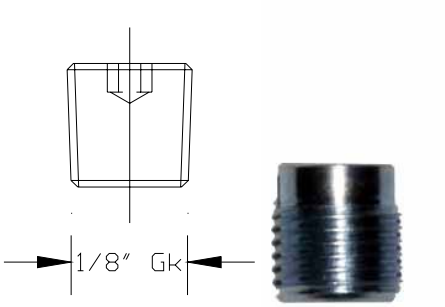
SPECIAL NOZZLE FOR VERTICAL BLADE
OVERALL DIMENSION

CODE
70.109.9

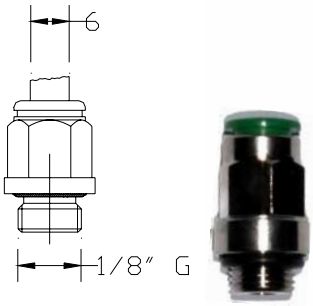


PUSH-IN FITTINGS AND PLUG FOR SADDLE NOZZLE

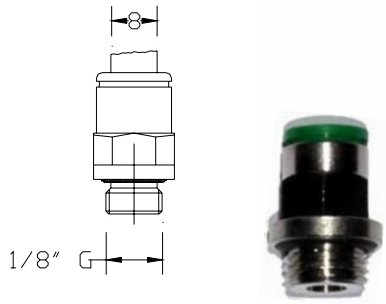
A92.087058
1/8”



A92.106113
1/8” – 6 MM

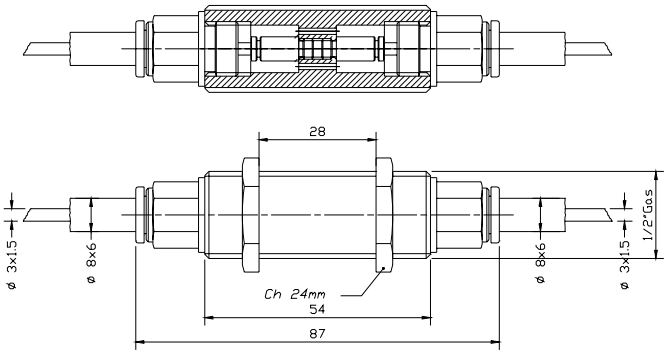


A92.106074
1/8” – 8 MM

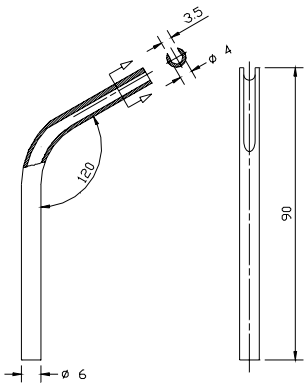


BULKHEAD CONNECTION PUSH-IN FOR COAXIAL HOSES 8x4 MM – 3x1.5 MM

A70.093230



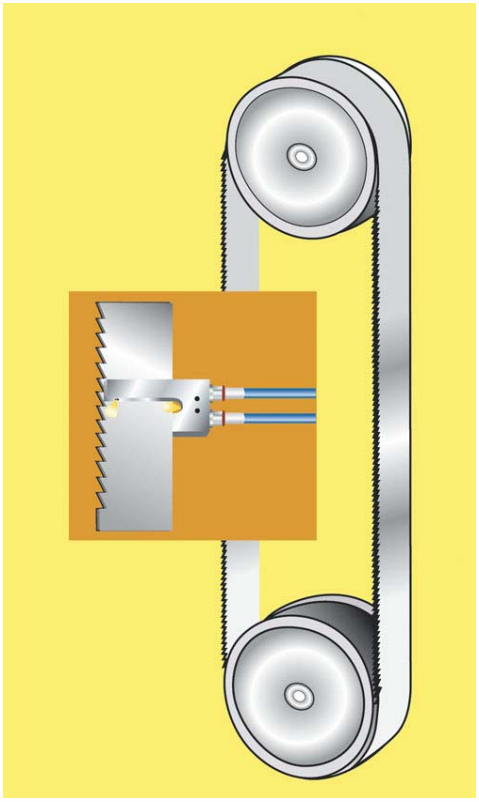
A70.093231



APPLICATIONS

REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

SEGATRICI CIRCOLARI
CIRCULAR SAW MACHINES



THE NUMBER OF NOZZLE TO USE IS DEPENDING ON THE MATERIALS AND THE ART OF PROCESSING

GUIDE TO SELECT THE NOZZLE
BAND SAW MACHINES

BLADE FROM 6 MM TO 34 MM	*1 INLET – 3 OUTLETS*
BLADE FROM 41 MM TO 80 MM	*2 INLETS – 5 OUTLETS*

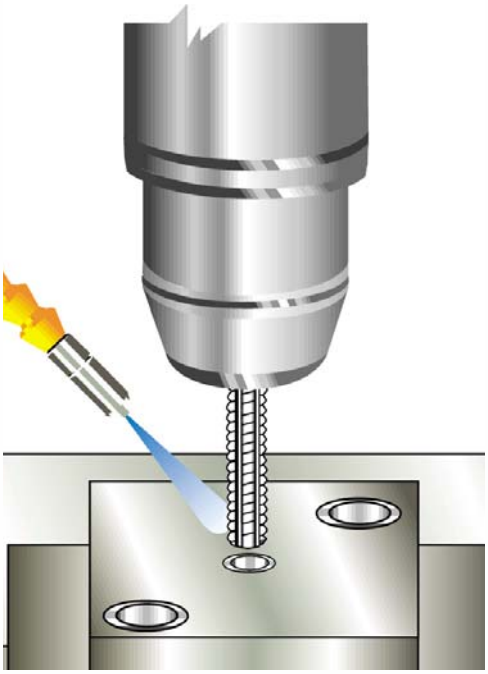
GUIDE TO SELECT THE NOZZLE
CIRCULAR SAW MACHINES

DISK FROM 175 MM TO 225 MM	*1 INLET – 3 OUTLETS*
DISK FROM 250 MM TO 400 MM	*2 INLETS – 5 OUTLETS*

APPLICATIONS

REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

FORATURA - ALESATURA
DRILLING - BORING



THE NUMBER OF NOZZLE TO USE IS DEPENDING ON THE MATERIALS AND THE ART OF PROCESSING

GUIDE TO SELECT THE NOZZLE
TAPPING

TOOL FROM 3 MM TO 10 MM	*1 NOZZLE*
TOOL FROM 11 MM TO 20 MM	*2 NOZZLE*
TOOL FROM 21 MM TO 40 MM	*3 NOZZLE*
TOOL FROM 41 MM TO 60 MM	*4 NOZZLE*

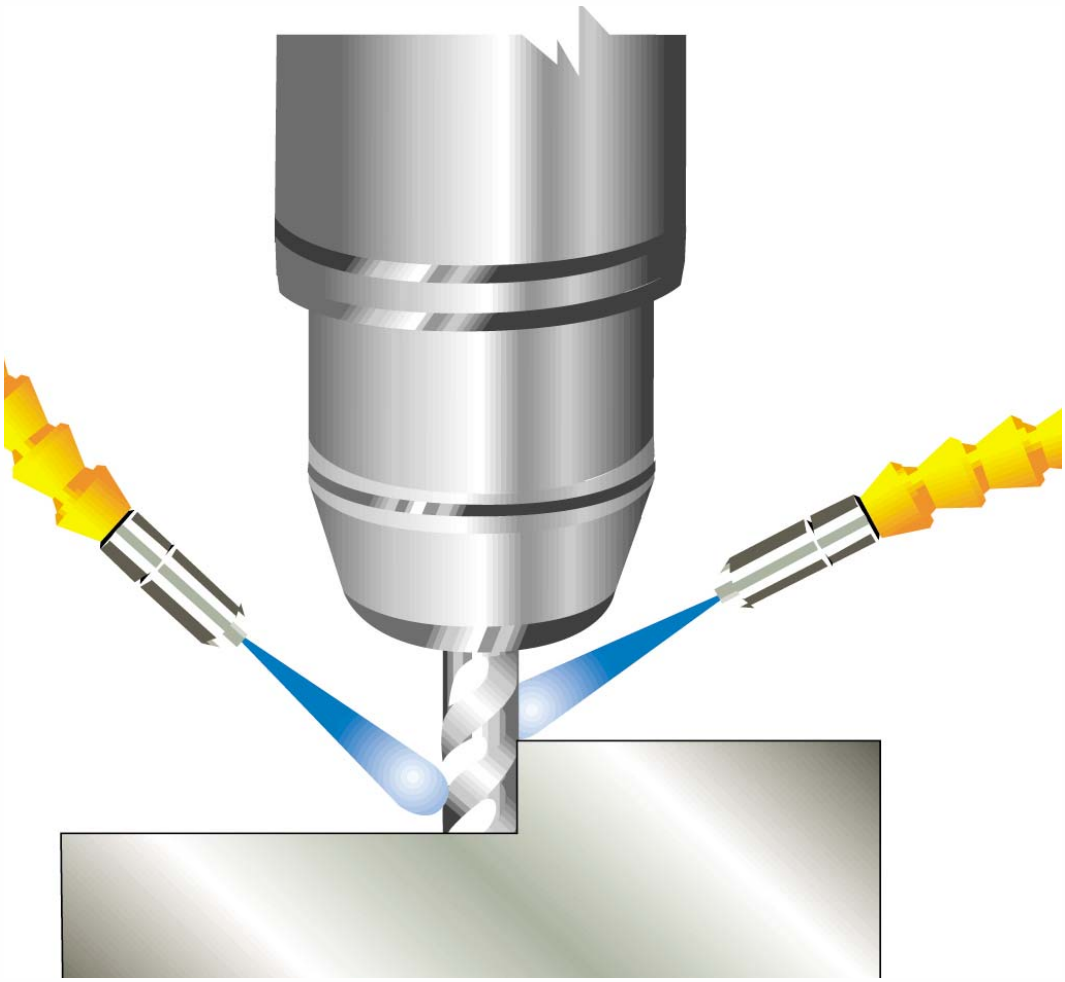
GUIDE TO SELECT THE NOZZLE
DRILLING - BORING

TOOL FROM 1 MM TO 12 MM	*1 NOZZLE*
TOOL FROM 13 MM TO 24 MM	*2 NOZZLE*
TOOL FROM 25 MM TO 48 MM	*3 NOZZLE*
TOOL FROM 49 MM TO 60 MM	*4 NOZZLE*

APPLICATIONS

REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

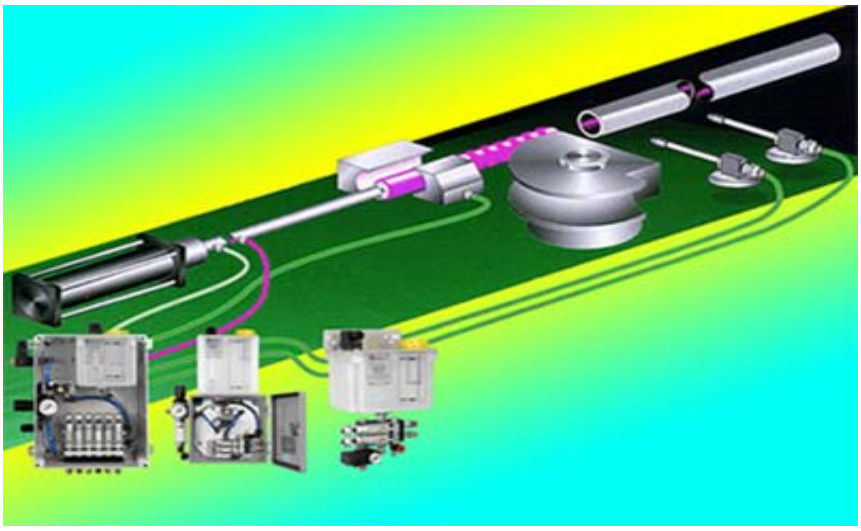
MILLING - ENGRAVING



THE NUMBER OF NOZZLE TO USE IS DEPENDING ON THE MATERIALS AND THE ART OF PROCESSING

GUIDE TO SELECT THE NOZZLE

TOOL FROM 1 MM TO 12 MM	*1 NOZZLE*
TOOL FROM 13 MM TO 40 MM	*2 NOZZLE*
TOOL FROM 41 MM TO 100 MM	*3 NOZZLE*
TOOL FROM 101 MM TO 240 MM	*4 NOZZLE*



*The **TUBE FORMING LUBRICATION SYSTEM** consists of many options, it depends on customer preferences.*

Normally the mandrel is lubricated with higher oil volume and higher air pressure than the other points. The spray dispensed to each outlet is fully adjustable. The customer can have an air-oil combination or just oil.

We can set the system following customers need.

An exact adjustable amount of lubricant is sent to all points that have to be lubricate. The whole working environment remains clean.

BENEFITS:

Positive lubricant injection

Automatic repeat cycling of lubricant metering pumps

Automatic cycling with machine

Various combination of outlets

Custom systems to meet customer's needs

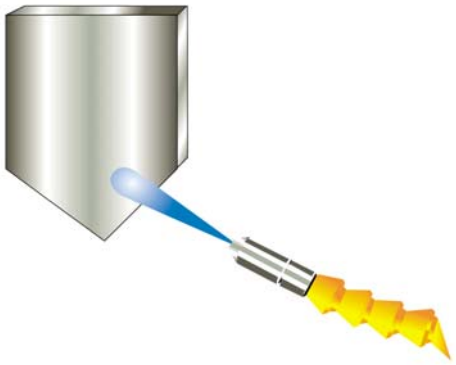
Full adjustment of air and oil output at each lubrication point

APPLICATIONS

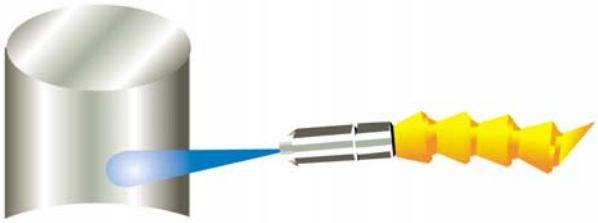
REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

TUBE FABRICATION

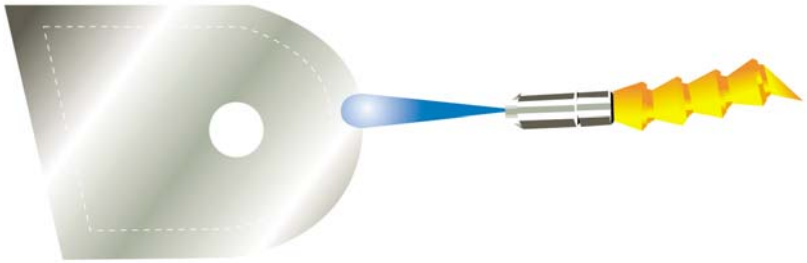
TRADITIONAL CUTTING
ORBITAL CUTTING
SHEARING
TAGGING



PUNCHING
DRILLING
FACING
FLARING



FORMING
BENDING
SHAPING



APPLICATIONS

REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

CHAINS – MONO AND BI-RAIL CONVEYORS

THE LUBRICATION ASSURES MAXIMUM CHAIN LIFE AND OPTIMUM CONVEYOR OPERATION.

THE SYSTEM DOES NOT CONTAMINATE THE TRANSPORTED MATERIALS WITH OIL DROPS.

THE SYSTEM DO NOT PRODUCE FOG OR DANGEROUS VAPOUR.

LAST GENERATION OIL CAN BE USED WITHOUT PROBLEMS.

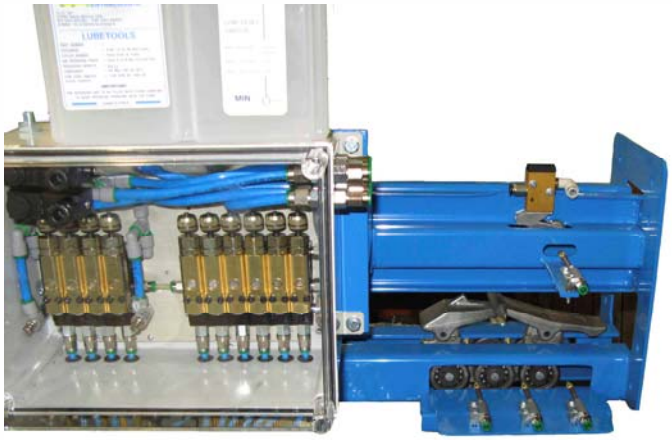
THE CORRECT UNIT DEPENDS ON THE NUMBER OF POINTS HAVE TO BE LUBRICATE.

THE UNIT WILL BEGIN TO OPERATE BY MEAN OF AN INDUCTIVE SENSOR OR A MECHANICAL FEELER PIN OPERATED FROM THE CHAIN.
A SOLENOID VALVE OR A VALVE WILL OPEN AND WILL SEND THE AIR TO THE SYSTEM.
DURING THE WORKING TIME WILL BE POSSIBLE TO HAVE ONE SHOT OR MORE SHOTS DEPENDING ON THE CHAIN HAVE TO BE LUBRICATED.
THE TIME THAT THE INDUCTIVE SENSOR OR THE MECHANICAL FEELER PIN IS ACTIVATED FROM THE CHAIN. WILL BE THE WORKING TIME.

THE MORE USED NOZZLE IS WITH STEEL UBE BECAUSE HAS THE POSSIBILITY TO BE ADJUSTED WITHOUT BRACKET.

SOME TIME ARE USED THE NOZZLE WITH A THREADED FINAL PART. IN THIS CASE HAS TO BE USED BRACKETS WITH THREAD HOLES.

CONVEYORS LUBRICATION SYSTEMS



CONVEYORS LUBRICATION
MONO AND BI RAIL SYSTEMS

THIS SYSTEM IS DESIGNED TO LUBRICATE THE ROLLERS OF CONVEYORS WHILE THEY ARE IN OPERATION AND DELIVERS A METERED AMOUNT OF LUBRICANT INTO MOVING BEARING FITTINGS. THESE CUSTOM-ENGINEERED LUBRICATION SYSTEMS ARE PERFECT FOR APPLICATIONS EVEN IN HARSH OPERATING CONDITIONS.
EACH CONVEYOR REQUIRES ONE UNIT FOR THE LEFT SIDE AND FOR THE RIGHT.
THE SEQUENCE OF THE LUBRICATION EVENTS (EACH ROLLER OR EVERY OTHER ROLLER, ETC.) DEPENDS ON THE NUMBER OF ROLLERS, THE SPEED OF THE CONVEYOR OR ON THE DISTANCE BETWEEN THE ROLLERS.

BENEFITS

METERED APPLICATION OF LUBRICANT

WORKS ON MOVING PARTS WHICH CONSUMING TIME TO LUBRICATE MANUALLY

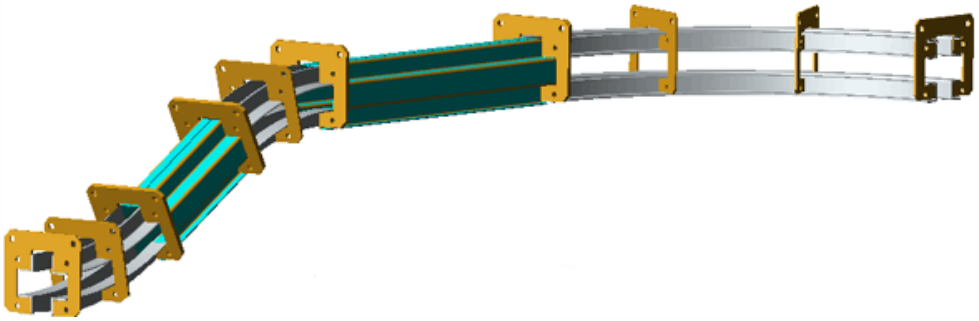
LUBRICATES WHILE THE CONVEYOR IS IN NORMAL OPERATION – NO LOST PRODUCTION TIME

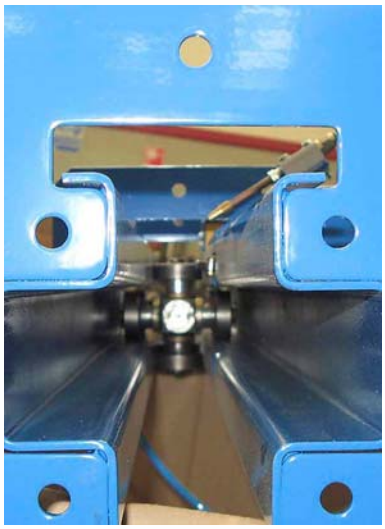
LUBRICATION EVEN UNDER HARSH OPERATION CONDITION

FUNCTIONING

SYSTEM IF FORMED BY A RESERVOIR WHICH SENDS OIL, BY GRAVITY, TO THE DISPENSING ROOMS OF THE PNEUMATIC MICROPUMPS. NECESSARY AIR FOR THE FUNCTIONING OF THE PUMPS AND THE OIL SPRAY IS SENT ON THE PASSAGE OF BEARINGS THAT POWER PNEUMATIC VALVES WITH MECHANICAL CONTROL OR INDUCTIVE SENSORS, SUITABLY POSITIONED ALONG RAILROAD.

CONVEYORS LUBRICATION
MONORAIL SYSTEMS





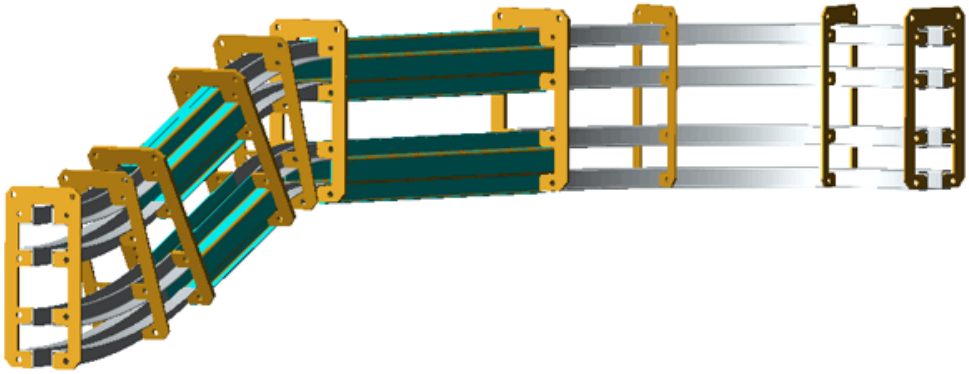
TYPICAL MONORAIL
CONVEYOR SYSTEM

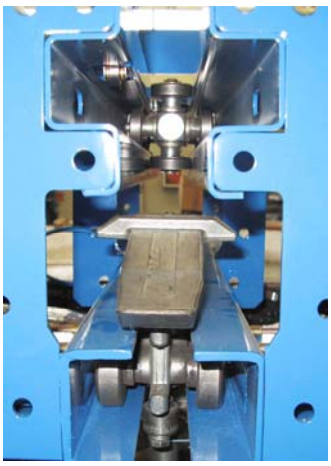
TYPICAL MONORAIL CONVEYOR SYSTEM IS COMPOSED BY:

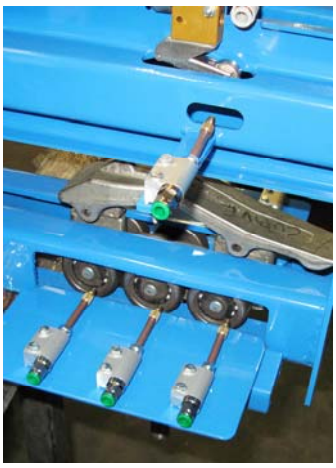
1) *2 PNEUMATIC VALVES WITH MECHANICAL CONTROL OR 2 INDUCTIVE SENSORS*
2) *4 MICROPUMPS DIVIDED IN TWO GROUPS OF 2*
3) *ONE 2.2 L RESERVOIR COMPLETE OF LUBRICANT LOW LEVEL SWITCH*
4) *2 AIR REGULATORS*
5) *4 NOZZLES*

WE ARE STILL AVAILABLE FOR DESIGNING SYSTEMS ON SPECIFIC REQUEST OF CUSTOMER.

CONVEYORS LUBRICATION
BIRAIL SYSTEMS







TYPICAL BIRAIL
CONVEYOR SYSTEM

TYPICAL BIRAIL CONVEYOR SYSTEM IS COMPOSED BY:

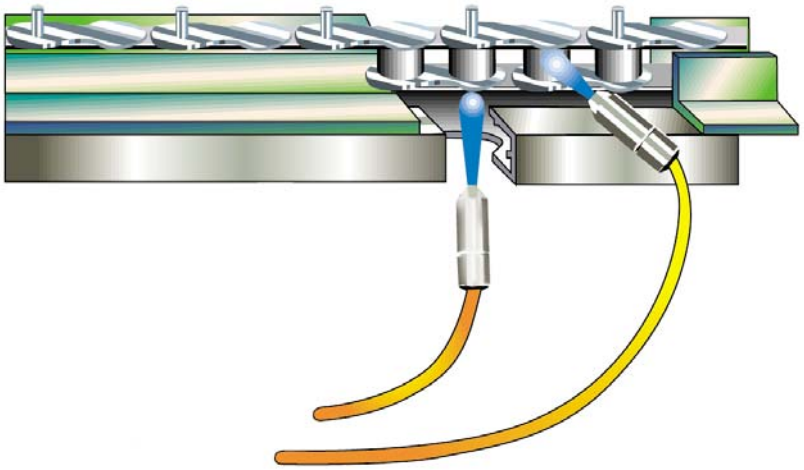
1) *3 OR 4 PNEUMATIC VALVES WITH MECHANICAL CONTROL OR INDUCTIVE SENSORS*
2) *10 OR MORE MICROPUMPS DIVIDED INTO TWO GROUPS OF 2 AND ONE OF 6*
3) *ONE 3,6L RESERVOIR COMPLETE OF LOW LEVEL SWITCH*
4) *3 OR MORE AIR REGULATOR*
5) *10 OR MORE NOZZLES*

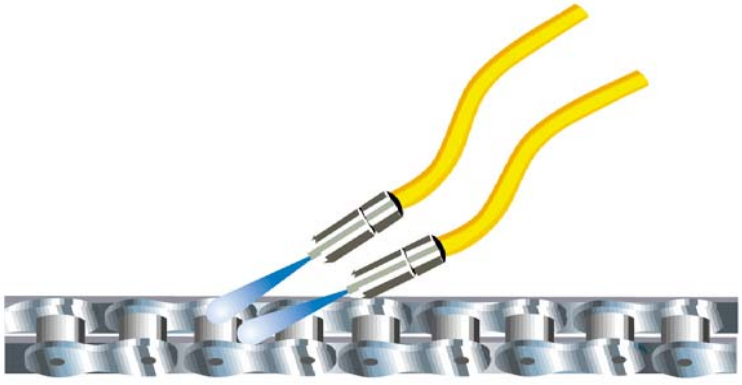
WE ARE STILL AVAILABLE FOR DESIGNING SYSTEMS ON SPECIFIC REQUEST OF CUSTOMER.

APPLICATIONS

REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

CHAINS – MONO AND BI-RAIL CONVEYORS

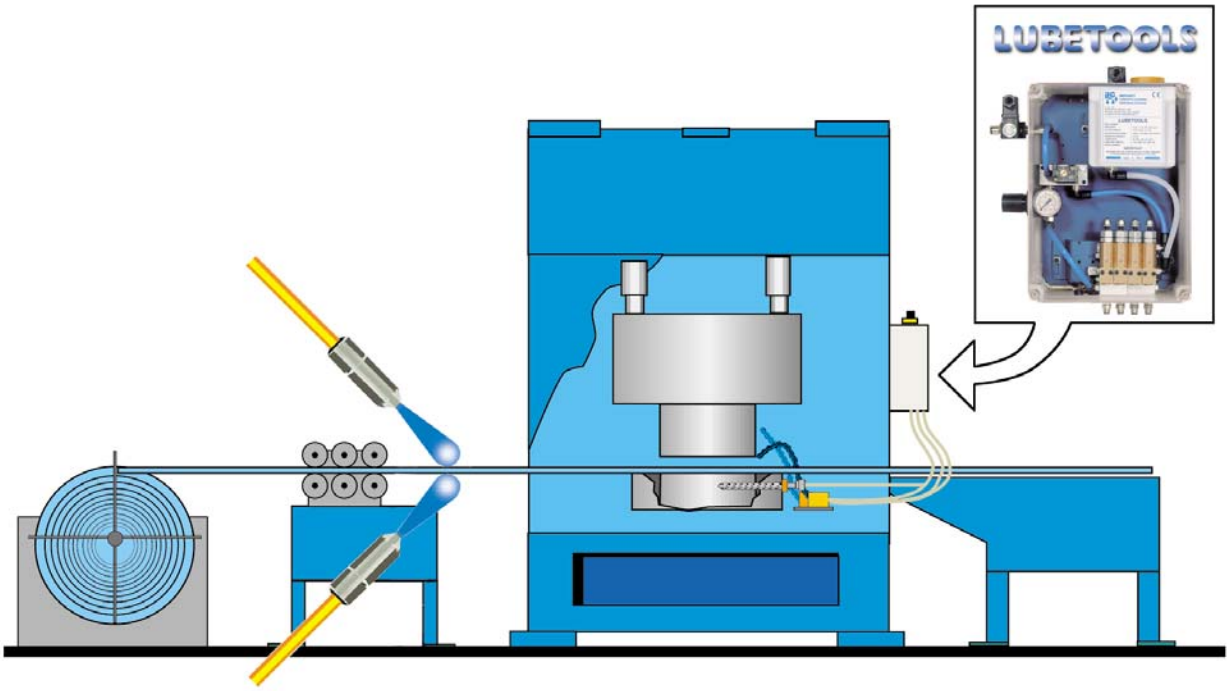




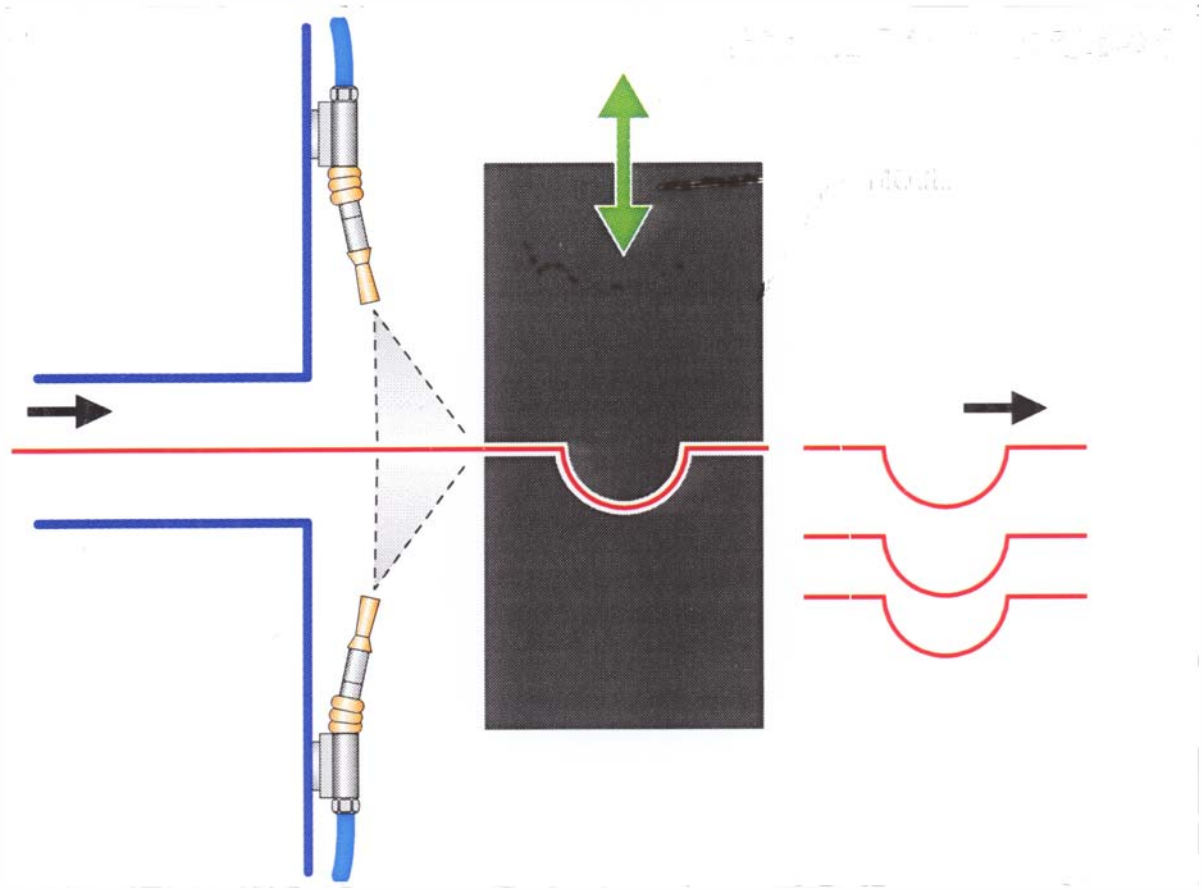
APPLICATIONS

REMEMBER MORE IS NOT BETTER AND USE DROPS NOT LITRES

METAL FORMING LUBRICATION



POSITIONING NOZZLE



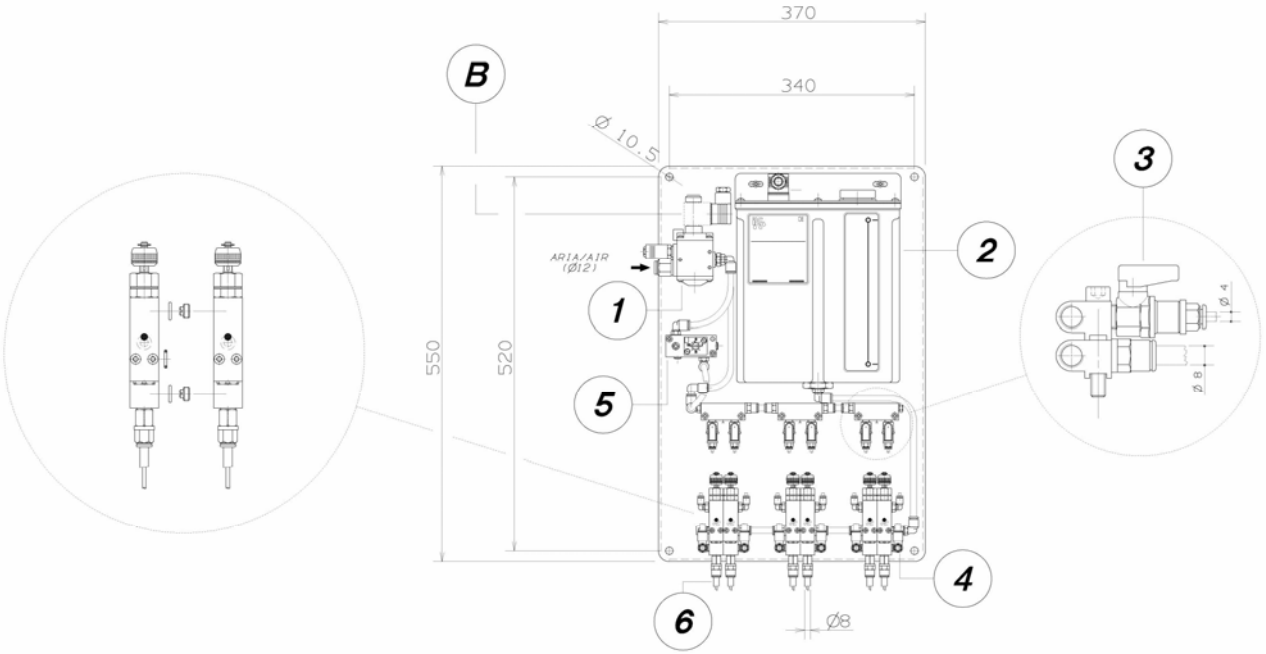
SHEET DISTANCE 100-150 MM

DISTANCE FROM ANOTHER NOZZLE 100 MM

45º ANGLE AS SHOW ON THE PICTURE

EACH NOZZLE COVER A SURFACE OF 100-120 MM

STRIP TOP AND BOTTOM LUBRICATION WITH WIDTH FROM 50 MM TO 800 MM



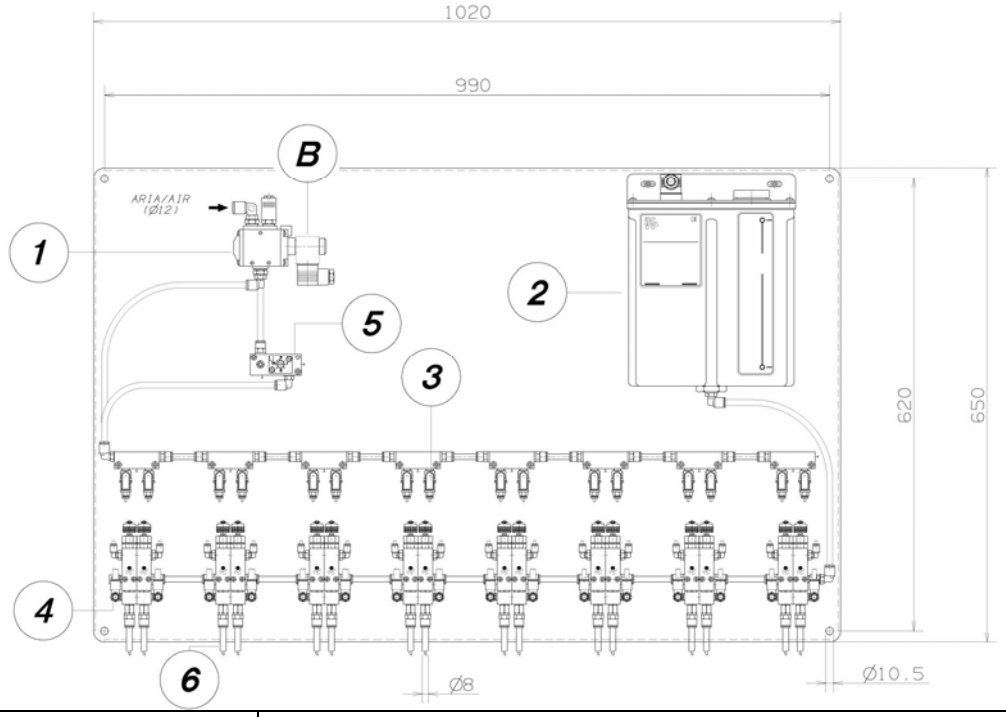
CODE	*WAYS*
70.722.4	2
70.067.9	4
70.099.5	6

B	*COIL*
1	*N. 2 SOLENOID VALVE 24 V DC – 24 V AC – 115 V AC OR 230 V AC* *FIRST TO DRIVE THE PUMPS/STROKES* *SECOND TO SEND AIR TO THE NOZZLE*
2	*6 L RESERVOIR COMPLETE OF LOW LEVEL SWITCH 1 A 250 V AC 200 V DC 50 W*
3	*AIR PUMP ON/OFF VALVE*
4	*NOZZLE AIR REGULATOR*
5	*FREQUENCY GENERATOR*
6	*5 M COAXIAL TUBE 8 MM*
THE POINTS ARE INDEPENDENT AND CAN BE EXCLUDED CLOSING THE VALVE 3 AND THE CORRESPONDENT NOZZLE AIR REGULATOR. *ON REQUEST IT IS POSSIBLE TO SUPPLY UNITS TO LUBRICATE STRIP WITH LOWER OR UPPER WIDTH.*	

CODES TO ORDER SOLENOID VALVE 14.662.5 COILS

14.662.1.R	14.662.2.R	14.662.3.R	14.662.4.R
24 V DC	115 V AC	230 V AC	24 V AC

STRIP TOP AND BOTTOM LUBRICATION WITH WIDTH FROM 50 MM TO 800 MM



CODE	*WAYS*
70.712.1	8
70.071.4	10
70.722.1	12
70.723.8	14
70.073.4	16

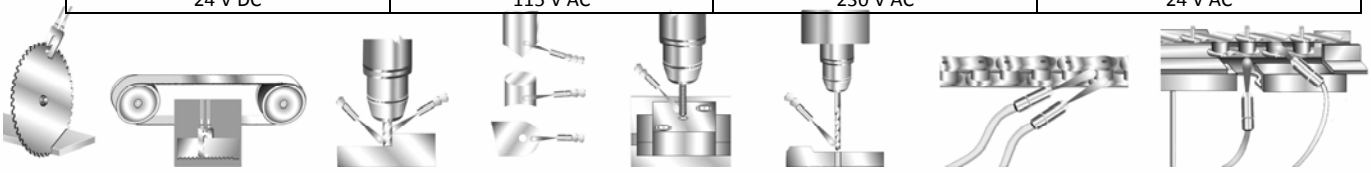
B	*COIL*
1	*N. 2 SOLENOID VALVE 24 V DC – 24 V AC – 115 V AC OR 230 V AC FIRST TO DRIVE THE PUMPS/STROKES SECOND TO SEND AIR TO THE NOZZLE*
2	*6 L RESERVOIR COMPLETE OF LOW LEVEL SWITCH 1 A 250 V AC 200 V DC 50 W*
3	*AIR PUMP ON/OFF VALVE*
4	*NOZZLE AIR REGULATOR*
5	*FREQUENCY GENERATOR*
6	*5 M COAXIAL TUBE 8 MM*

THE POINTS ARE INDEPENDENT AND CAN BE EXCLUDED CLOSING THE VALVE 3 AND THE CORRESPONDENT NOZZLE AIR REGULATOR.

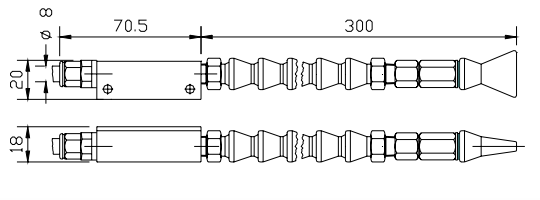
ON REQUEST IT IS POSSIBLE TO SUPPLY UNITS TO LUBRICATE STRIP WITH LOWER OR UPPER WIDTH.

CODES TO ORDER SOLENOID VALVE 14.662.5 COILS

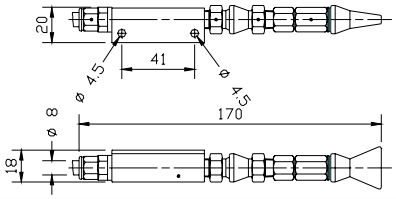
14.662.1.R	14.662.2.R	14.662.3.R	14.662.4.R
24 V DC	115 V AC	230 V AC	24 V AC



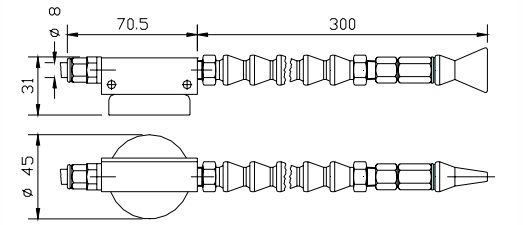
FLAT NOZZLE
FOR SLOW FEED



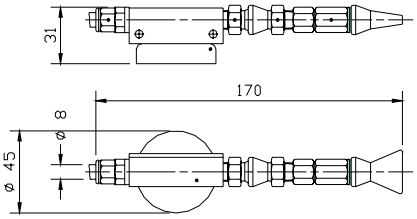
70.102.0



70.102.4



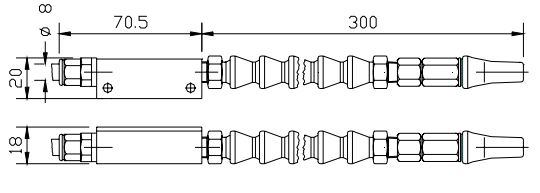
70.102.1



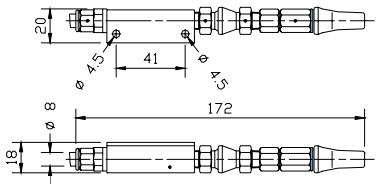
70.102.5

CODE	*DESCRIPTION*
70.102.0	*LOC-LINE WITH FIXED BASE*
70.102.1	*LOC-LINE WITH MAGNETIC BASE*
70.102.4	*FIXED BASE*
70.102.5	*MAGNETIC BASE*

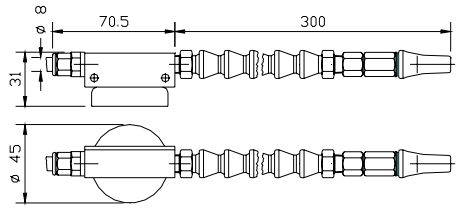
CONE NOZZLE
FOR HIGH FEED



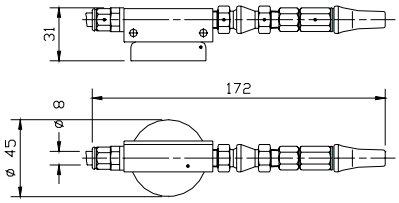
70.102.2



70.102.9



70.102.3



70.102.8

CODE	*DESCRIPTION*
70.102.2	*LOC-LINE WITH FIXED BASE*
70.102.3	*LOC-LINE WITH MAGNETIC BASE*
70.102.9	*FIXED BASE*
70.102.8	*MAGNETIC BASE*

VEGETABLE OIL NATURAL – 77

INTEGRAL LUBRICANT OF NATURAL ORIGINS

ILC TECHNICAL DEPARTMENT HAS SET A SERIES OF LUBRICANT/COOLANT OF NATURAL ORIGINS CALLED NATURAL 77 SERIES, WITH THE PRECISE AIM OF IMPROVING DRAMATICALLY THE WORKING ENVIRONMENT CONDITIONS AND IN THE MEANWHILE TO SUPPLY CUTTING TOOLS PERFORMANCES HIGHER TO THAT ACHIEVABLE WITH THE USE OF TRADITIONAL CUTTING NEAT MINERAL OILS. NATURAL 77 SERIES IS WHOLLY FREE FROM ANY LUBRICANT MINERAL OIL AND IT IS COMPOSED TOTALLY BY SYNTHETIC ESTERS DERIVED FROM RAW MATERIALS OF NATURAL ORIGINS. ODOURLESS, LIGHT-COLOURED, THESE PRODUCTS ARE WHOLLY BIODEGRADABLE AND ABSOLUTELY NON-TOXIC, THE USE OF NATURAL 77 SERIES AVOIDS TOTALLY THE RISK DUE TO THE USE OF MINERAL OILS AND CONSEQUENTLY THE PERIODICAL MEDICAL VISIT.

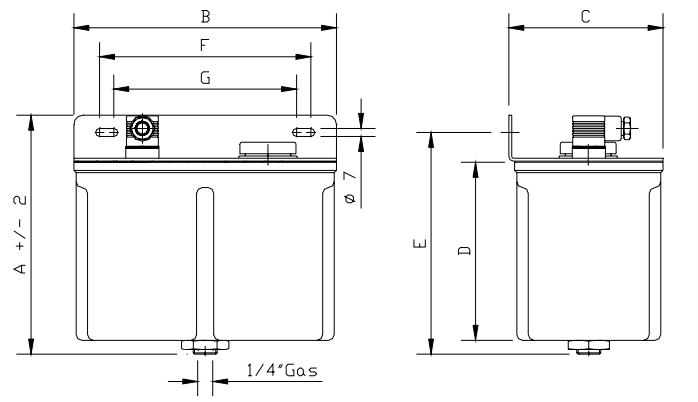
IN ADDITION, NATURAL 77 SERIES HAS AN EXCEPTIONAL LUBRICANT POWER COMBINED WITH EXTREME PRESSURE PREROGATIVES AND A GOOD COOLING ACTION WHICH KEEPS IT SUITABLE TO OBTAIN MAXIMAL RESULTS WITH STRONG FEEDS AND WITH THE TYPE OF WORKING TOOL, AVOIDING GASSINGS AND SEIZING-UP.
NATURAL 77 SERIES HAS EVEN THE PREROGATIVE TO REDUCE SMOKES, HAS LOW VOLATILITY WHICH REDUCES NOTEWORTHY STEAM REDUCTION, SUCH AN EXCELLENT CHEMICAL STABILITY TO AVOID POLYMERISATION OR DEGRADATION OF THE USING PRODUCT; LAST, BUT NOT THE LEAST, NATURAL 77 HAS THE CHARACTERISTIC OF AUTO EXTINGUISHING IMMEDIATELY AT THE ARISING OF A FIRE TRIGGER.

NATURAL 77 IS A NEAT FLUID WITH COMPLEX ADDITIVATION, WITH VERY HIGH ANTI-WELDING POWER AND CONSPICUOUS EXTREME PRESSURE RESISTANCE, AND, USED WITH TOOLS OR CERAMIC METAL INSERTS, IT ALLOWS TO DOUBLE THE FEED SPEED IN COMPARISON WITH THE USUAL PARAMETERS OF USAGE. THE USE OF NATURAL 77 AVOIDS SMOKES THAT WOULD DEVELOP WITH TRADITIONAL OILS DURING THE INCREASING FEED SPEEDS MENTIONED ABOVE. FURTHERMORE, NATURAL 77 IS SUITABLE TO BE USED ON GEAR-CUTTING MACHINES USING BOTH CUTTING SYSTEMS SUCH AS "GLEASON" AND SLOTTING MACHINE SUCH AS "FELLOWS". NATURAL 77 IS ALSO WHOLLY FREE OF CHLORINE AND ITS DERIVATIVES.

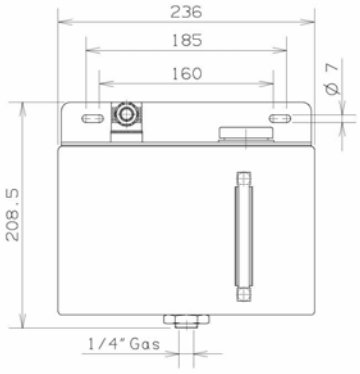
PRODUCT	*SPECIFIC GRAVITY AT 15 ºC KG/L*	*VISCOSITY cSt A 40 ºC*	*FLASH POINT ºC*
NATURAL 77	0.928	68	290

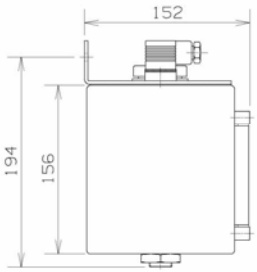
CODE	*DESCRIPTION*	*Q.TY*
30.600.6	*5 L VEGETABLE OIL NATURAL 77*	1

COMPONENTS
RESERVOIRS

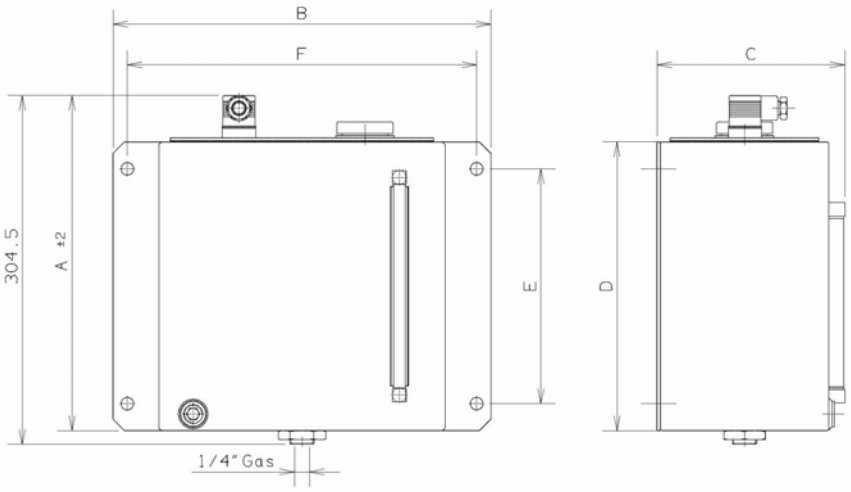


CODE	*CAPACITY - L*	*LOW LEVEL SWITCH*	A MM	B MM	C MM	D MM	E MM	F MM	G MM
A72.079263	1.2 *Polyester*		161	148	123	108	146	132	125
A72.079264	2.2 *Polyester*		213	148	123	160	198	132	125
A72.079265	3.6 *Polyester*		208	230	135	155	193	185	160
A72.079269	6.0 Nylon		303	230	135	250	288	185	160
A72.079260	1.2 *Polyester*	***	161	148	123	108	146	132	125
A72.079261	2.2 *Polyester*	***	213	148	123	160	198	132	125
A72.079262	3.6 *Polyester*	***	208	230	135	155	193	185	160
A72.079268	6.0 Nylon	***	303	230	135	250	288	185	160





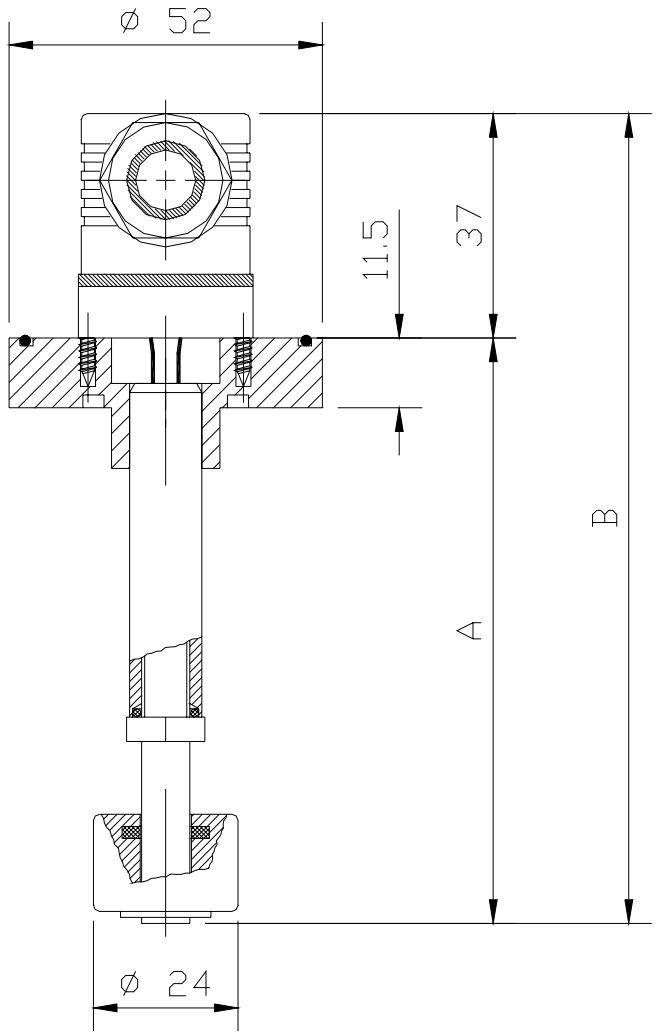
CODE	*CAPACITY - L*	*LOW LEVEL SWITCH*
A72.079399	3.6 *Metallic*	***
A72.079399.SL	3.6 *Metallic*	



CODE	*CAPACITY - L*	*LOW LEVEL SWITCH*	A MM	B MM	C MM	D MM	E MM	F MM
A72.079415	8.0 *Metallic*	***	305	330	163	252	205	305
A72.079324	12.0 *Metallic*	***	305	355	196	252	205	330
A72.079420	50.0 *Metallic*	***	452	560	266	400	300	530
A72.079415.SL	8.0 *Metallic*		282	330	163	252	205	305
A72.079324.SL	12.0 *Metallic*		282	355	196	252	205	330
A72.079420.SL	50.0 *Metallic*		429	560	266	400	300	530

COMPONENTS

LOW LEVEL SWITCHES



CODE	*RESERVOIR L*	A MM	B MM
A70.094040	1.20	97	133.5
A70.094029	2.20	144	181
A70.094029	3.60	144	181
A70.094037	6.00	240	277

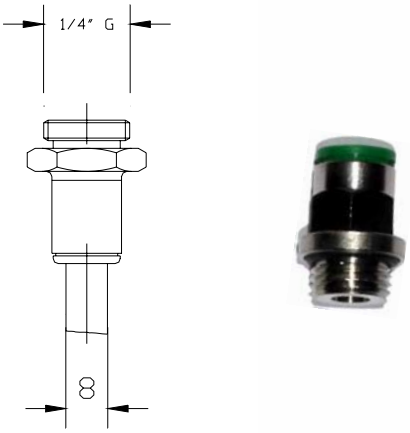
COMPONENTS

PUSH-IN FITTINGS TO CONNECT RESERVOIR OUTLET TO AN 8 MM TUBE

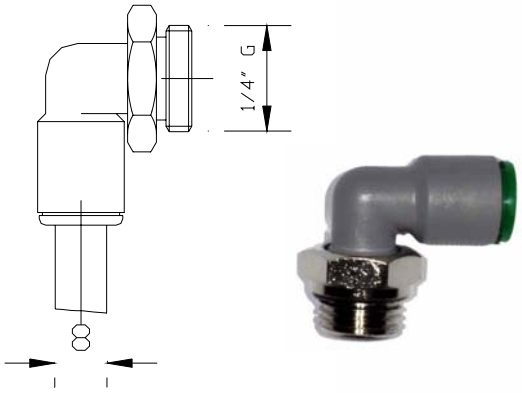
RACCORDO A 90 GRADI

ELBOW FITTING

A92.106123

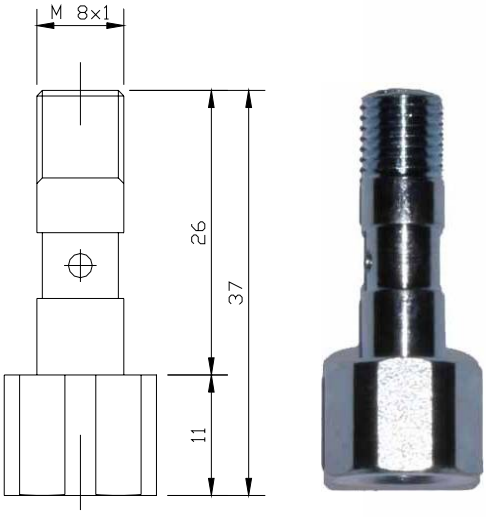


A92.106248



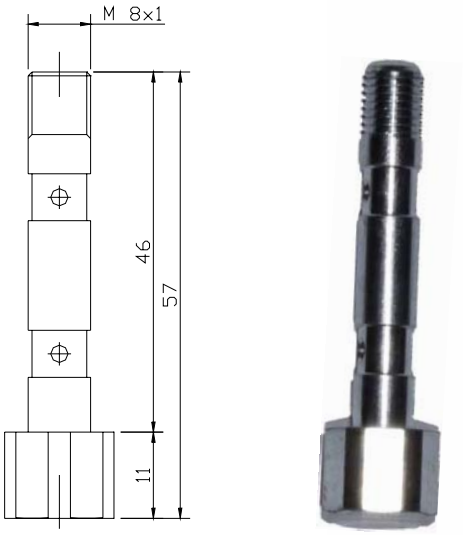
ADAPTORS FOR MINI LUBETOOLS WITH ONE PUMP

A51.106208



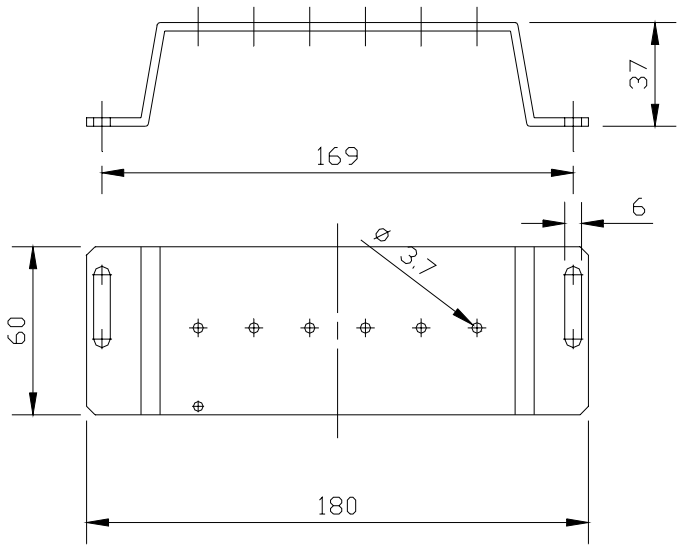
ADAPTORS FOR MINI LUBETOOLS WITH TWO PUMPS

A51.106215

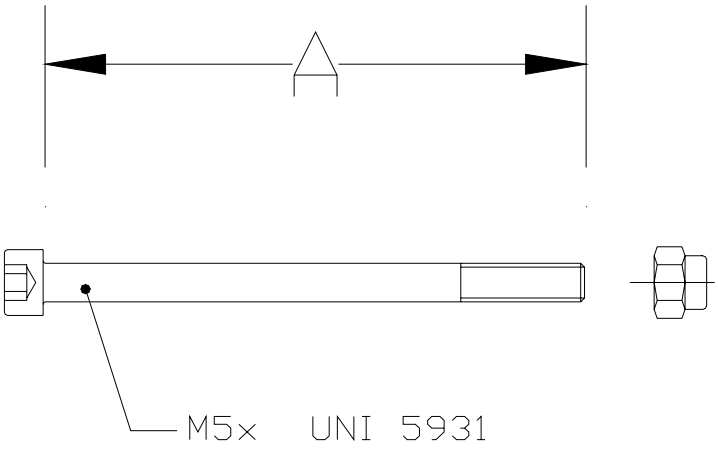


BRACKET TO INSTALL THE BASE PUMPS (FROM 1 TO 6 PUMPS)

A85.120401



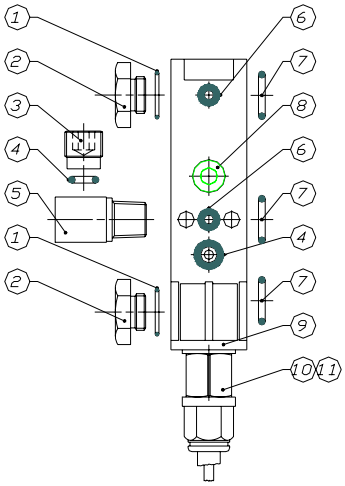
TIE-RODS TO JOIN THE PUMP BASES



CODE	*OUTLETS*	A
A70.093167 (x2)	2	35
A70.093168 (x2)	3	55
A70.093169 (x2)	4	75
A70.093170 (x2)	5	95
A70.093171 (x2)	6	115

PUMP BASE
THE CODE A70.093165 IS COMPLETE OF ALL THE ITEMS
SHOWED IN THE BELOW DRAWING

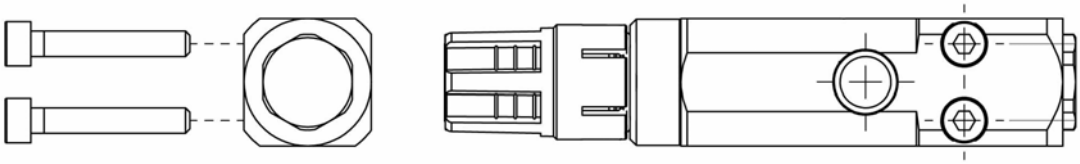
A70.093165



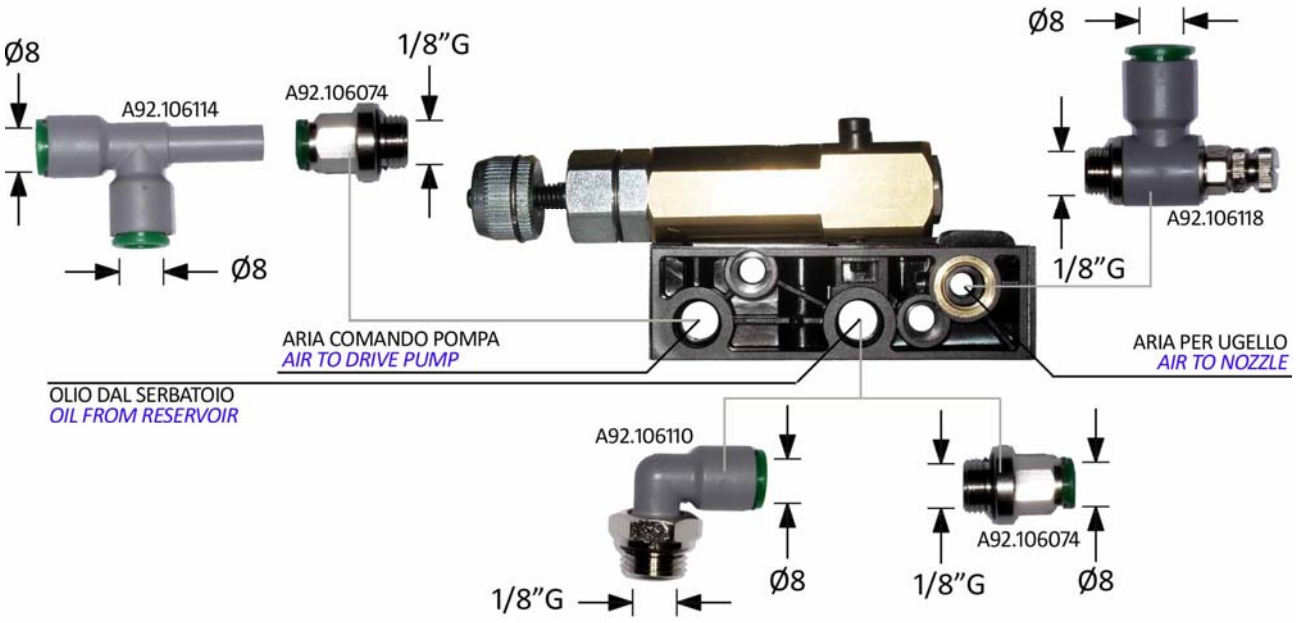
POS.	*CODE*	*DESCRIPTION*
1	A92.127109	*"O"-RING 11x1*
2	A51.096055	*PLUG*
3	A73.087010	*PLUG*
4	A92.127108	*"O"-RING 2018*
5	03.231.0	*ELBOW ADAPTOR*
6	A92.127106	*"O"-RING 2010*
7	A92.127109	*"O"-RING 2037*
8	UNI5931-M5X25	*SCREW M5x25 UNI 5931*
9	A83.082081	*SINGLE BASE*
10	A70.093219	*DELIVERY FITTING + 5 M COAXIAL TUBE – 6 MM*
11	A70.093228	*DELIVERY FITTING + 5 M COAXIAL TUBE – 8 MM*

MICRO PNEUMATIC PUMP TO BE INSTALLED ON THE BASE

A70.093463



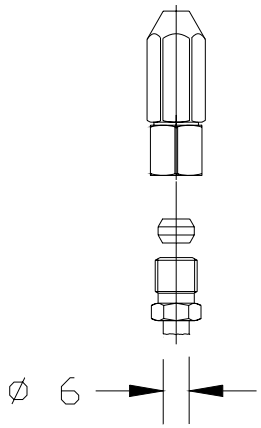
FITTINGS FOR PUMP BASE



NOZZLE COMPLETE OF FITTING FOR TUBE 6 MM

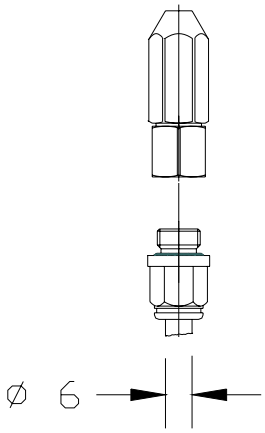
NUT AND OLIVE FITTING

A70.093172



PUSH-IN FITTING

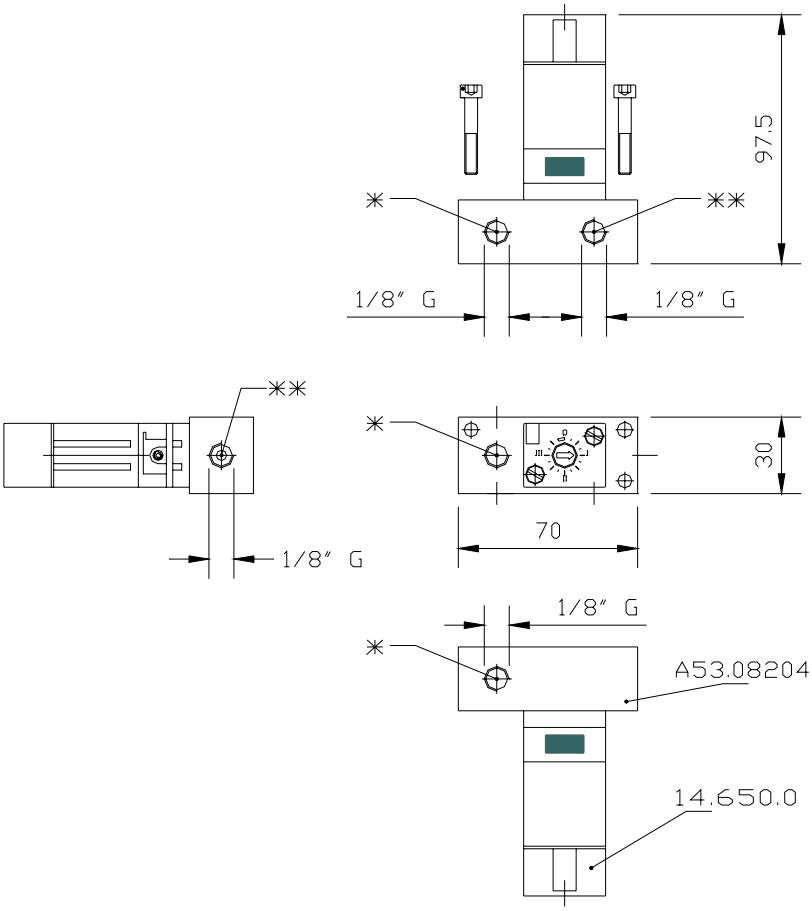
A70.093180



FREQUENCY GENERATOR COMPLETE OF BASE

A72.079243

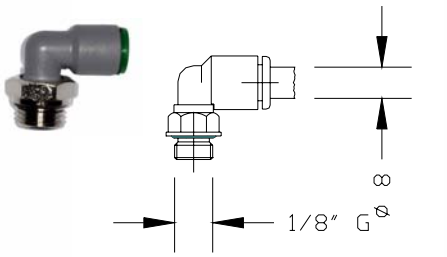
**	AIR FOR PNEUMATIC PUMPS
*	AIR FOR NOZZLE



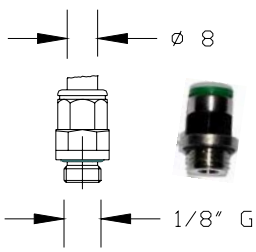
base **A70.093491**

RACCORDI BASE E TAPPO | *BASE FITTINGS AND PLUG*

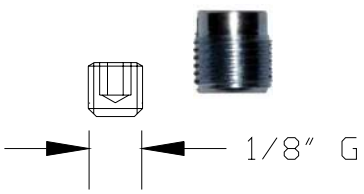
A92.106110



A92.106074



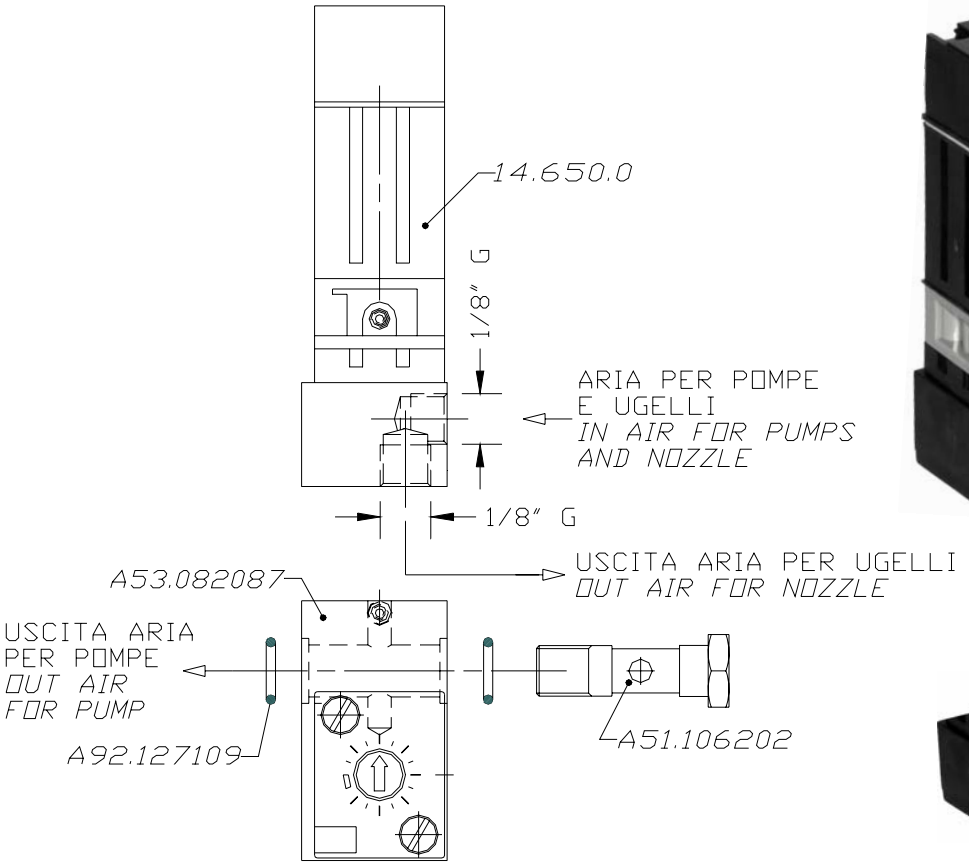
A92.087058



FREQUENCY GENERATOR COMPLETE OF BASE

THIS IS USED FOR THE MINI VERSION WITH ONE OR TWO PUMPS

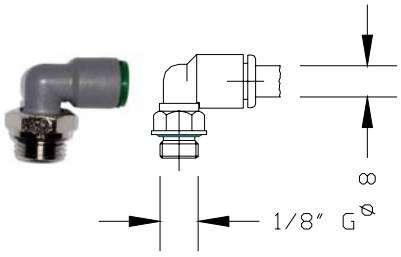
A72.079321

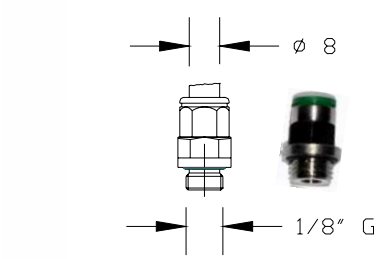


base **A70.093504**

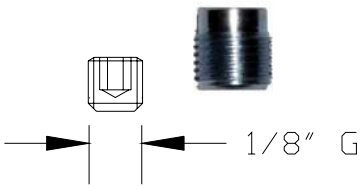
BASE FITTINGS AND PLUG

A92.106074

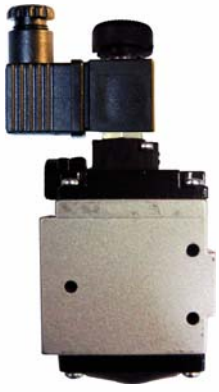




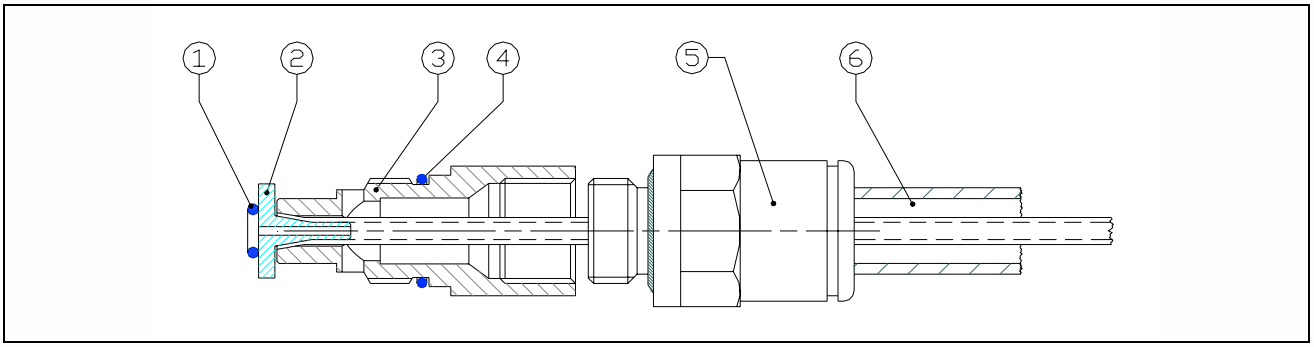
A92.087058



SOLENOID VALVES

Code	*Description*	*Image*
14.660.0 14.660.1 14.660.2 14.660.3 14.660.4	***Solenoid valve*** *Connection: 1/4" G* *Orifice size (mm): 6* *Discharge (Nl/min): 620* *Max Pressure (BAR): 10* *Coil 24 V DC* *Coil 115 V AC* *Coil 230 V AC* *Coil 24 V AC*	
14.663.5 14.660.1 14.660.2 14.660.3 14.660.4	***Solenoid valve*** *Connection: 1/8" G* *Orifice size (mm): 1,5* *Discharge (Nl/min): 60* *Max Pressure (BAR): 10* *Coil 24 V DC* *Coil 115 V AC* *Coil 230 V AC* *Coil 24 V AC*	
14.662.5 14.662.1 14.662.2 14.662.3 14.662.4	***Solenoid valve*** *Connection: 3/8" G* *Orifice size (mm): 10* *Discharge (Nl/min): 1500* *Max Pressure (BAR): 10* *Coil 24 V DC* *Coil 115 V AC* *Coil 230 V AC* *Coil 24 V AC*	

COAXIAL HOSES COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE



CODES TO ORDER

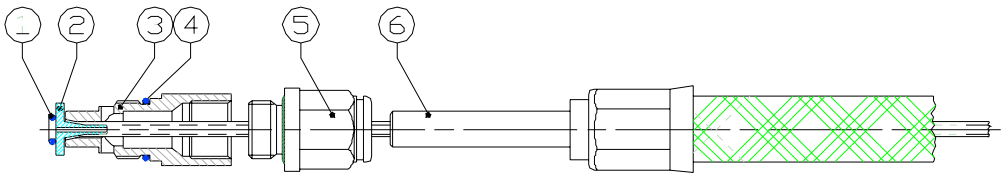
Mt	Ø6	Ø8	Ø10
1,5	A70.093458	---	---
3	A70.093453	---	---
4	A70.093438	---	---
5	A70.093219	A70.093228	A70.093475
6	A70.093253	A70.093257	---
7	A70.093254	A70.093258	---
8	A70.093255	A70.093259	---
9	A70.093256	A70.093260	---
10	A70.093250	A70.093249	A70.093476
15	A70.093412	A70.093418	A70.093477
20	---	A70.093469	A70.093478
25	---	---	A70.093479
30	---	A70.093470	A70.093471

POS	*DESCRIPTION*	CODICE - *CODE*
1	*O"-RING 3x1*	A92.127034
2	*NOZZE FOR PUMP BASE*	A52.090051
3	*ADAPTOR*	A51.106104
4	*"O"-RING 8x1*	A73.127065
5	*PUSH-IN FITTING*	*
6	*COAXIAL HOSE*	**

	DESCRIPTION	*CODE*
*	*PUSH-IN FITTING 1/8" HOSE 6 MM*	A92.106113
*	*PUSH-IN FITTING 1/8" HOSE 8 MM*	A92.106074
*	*PUSH-IN FITTING 1/4" HOSE 10 MM*	03.214.0 + A92.106191

**			
Mt	Ø6	Ø8	Ø10
1	70.150.1	70.160.1	70.170.1
2	70.150.2	70.160.2	70.170.2
3	70.150.3	70.160.3	70.170.3
4	70.150.4	70.160.4	70.170.4
5	70.150.5	70.160.5	70.170.5
6	70.150.6	70.160.6	70.170.6
7	70.150.7	70.160.7	70.170.7
8	70.150.8	70.160.8	70.170.8
9	70.150.9	70.160.9	70.170.9
10	70.151.0	70.161.0	70.171.0
11	70.151.1	70.161.1	70.171.1
12	70.151.2	70.161.2	70.171.2
13	70.151.3	70.161.3	70.171.3
14	70.151.4	70.161.4	70.171.4
15	70.151.5	70.161.5	70.171.5
16	70.151.6	70.161.6	70.171.6
17	70.151.7	70.161.7	70.171.7
18	70.151.8	70.161.8	70.171.8
19	70.151.9	70.161.9	70.171.9
20	70.152.0	70.162.0	70.172.0
21	70.152.1	70.162.1	70.172.1
22	70.152.2	70.162.2	70.172.2
23	70.152.3	70.162.3	70.172.3
24	70.152.4	70.162.4	70.172.4
25	70.152.5	70.162.5	70.172.5
30	70.153.0	70.163.0	70.173.0

METALLIC COAXIAL HOSES COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE



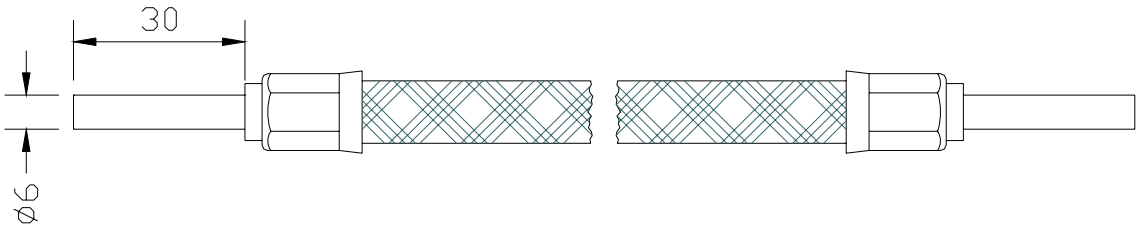
CODES TO ORDER	*DESCRIPTION*
A70.093351	*1 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093352	*2 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093353	*3 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093354	*4 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093355	*5 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093356	*6 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093357	*7 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093358	*8 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093359	*9 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093360	*10 M COAXIAL HOSE TERMINAL 8 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*

A70.093341	*1 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093342	*2 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093343	*3 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093344	*4 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093345	*5 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093346	*6 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093347	*7 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093348	*8 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093349	*9 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*
A70.093350	*10 M COAXIAL HOSE TERMINAL 6 MM COMPLETE OF FITTING, ADAPTOR AND NOZZLE FOR THE PUMP BASE*

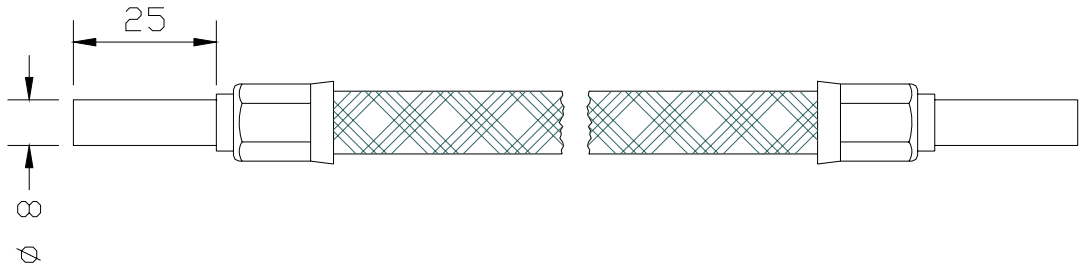
POS	*DESCRIPTION*	CODICE - *CODE*
1	O"-RING 3x1	A92.127034
2	*NOZZE FOR PUMP BASE*	A52.090051
3	*ADAPTOR*	A51.106104
4	*"O"-RING 8x1*	A73.127065
5	*PUSH-IN FITTING*	*
6	*COAXIAL HOSE*	*

	DESCRIPTION	CODICE - *CODE*
*	*PUSH-IN FITTING 1/8" HOSE 8 MM*	A92.106074
*	*PUSH-IN FITTING 1/8" HOSE 6 MM*	A92.106113

METALLIC FLEXIBLE HOSES

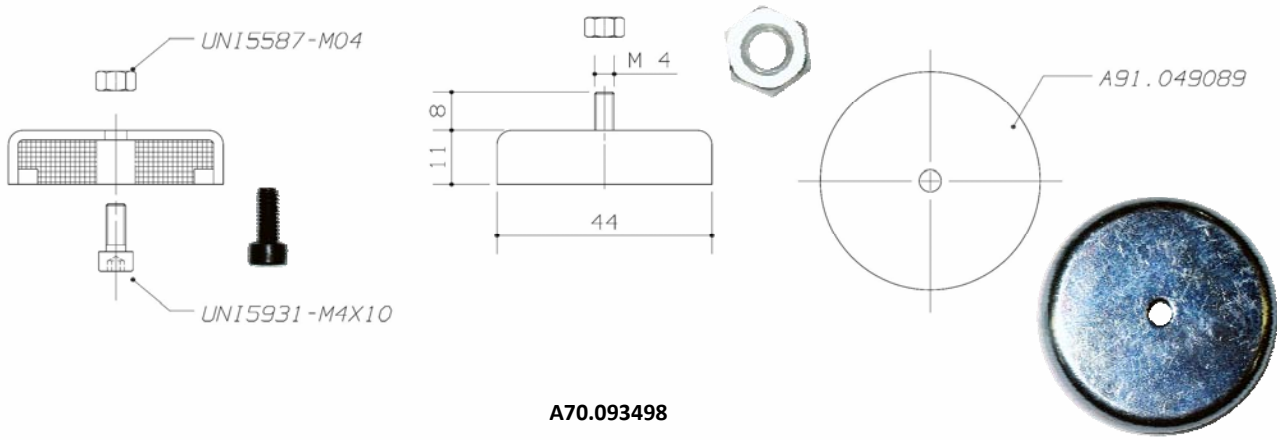


**	*CODES TO ORDER METALLIC FLEXIBLE HOSES*
30.616.0.01000	*1 M METALLIC HOSE 6 MM*
30.616.0.02000	*2 M METALLIC HOSE 6 MM*
30.616.0.03000	*3 M METALLIC HOSE 6 MM*
30.616.0.04000	*4 M METALLIC HOSE 6 MM*
30.616.0.05000	*5 M METALLIC HOSE 6 MM*
30.616.0.06000	*6 M METALLIC HOSE 6 MM*
30.616.0.07000	*7 M METALLIC HOSE 6 MM*
30.616.0.08000	*8 M METALLIC HOSE 6 MM*
30.616.0.09000	*9 M METALLIC HOSE 6 MM*
30.616.0.10000	*10 M METALLIC HOSE6 MM*

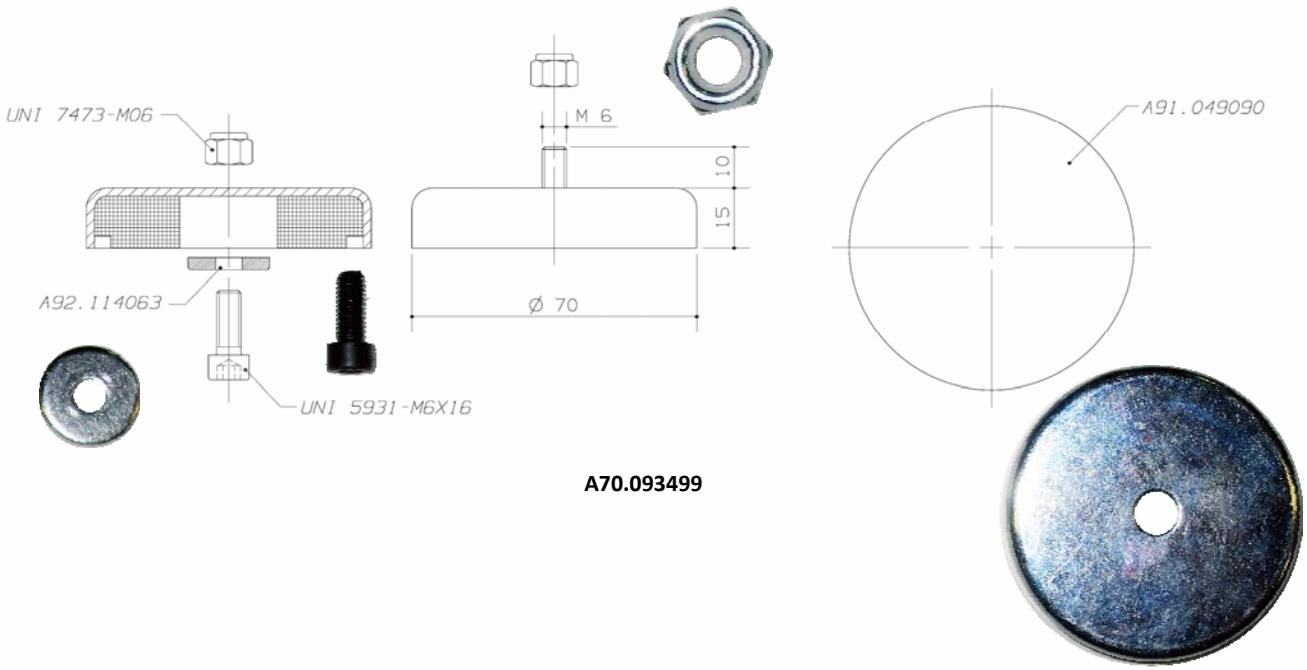


**	*CODES TO ORDER METALLIC FLEXIBLE HOSES*
30.618.0.01000	*1 M METALLIC HOSE 8 MM*
30.618.0.02000	*2 M METALLIC HOSE 8 MM*
30.618.0.03000	*3 M METALLIC HOSE 8 MM*
30.618.0.04000	*4 M METALLIC HOSE 8 MM*
30.618.0.05000	*5 M METALLIC HOSE 8 MM*
30.618.0.06000	*6 M METALLIC HOSE 8 MM*
30.618.0.07000	*7 M METALLIC HOSE 8 MM*
30.618.0.08000	*8 M METALLIC HOSE 8 MM*
30.618.0.09000	*9 M METALLIC HOSE 8 MM*
30.618.0.10000	*10 M METALLIC HOSE 8 MM*

MAGNETS



A70.093498



A70.093499

FITTINGS

		HOSE 4 MM	*HOSE* 6 MM	*HOSE* 8 MM	*HOSE* 10 MM
	1/8" G	A92.106165	A92.106113	A92.106074	
	1/8" G	A92.106218	A92.106195	A92.106110	
	1 / 4" G		A92.106133	A92.106123	A92.106191
	1 /4" G		A92.106224	A92.106248	A92.106199

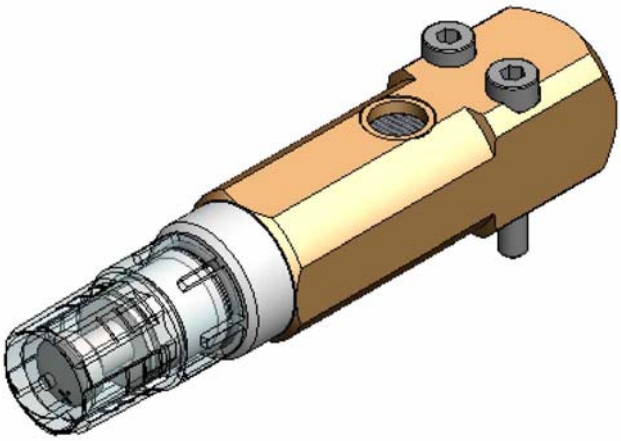
A70.093463

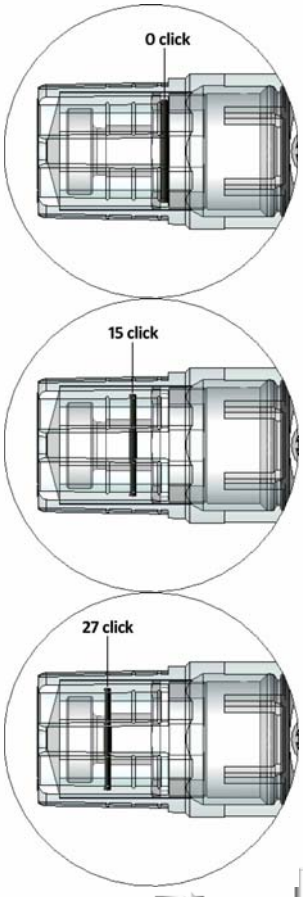
REGOLAZIONE DELLA PORTATA DEL CICLO

RUOTARE IL POMOLO IN SENSO ORARIO PER RIDURRE LA QUANTITA' DI OLIO ED IN SENSO ANTIORARIO PER INCREMENTARLA.

HOW TO AD JUST THE DISCHARGE PER STROKE

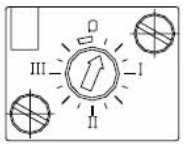
TURNING THE ADJUSTER CLOCKWISE WILL DECREASE THE PUMP DISCHARGE AND TURNING THE ADJUSTER ANTI-CLOCKWISE WILL INCREASE THE PUMP DISCHARGE.



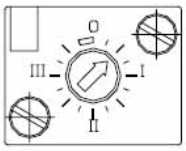


SCATTI *INCREMENTS*	PORTATA / CICLO *DISCHARGE / CYCLE*
CLICK 0	39,00 mm³
CLICK 1	37,23 mm³
CLICK 2	35,47 mm³
CLICK 3	33,70 mm³
CLICK 4	31,93 mm³
CLICK 5	30,16 mm³
CLICK 6	28,40 mm³
CLICK 7	26,63 mm³
CLICK 8	24,86 mm³
CLICK 9	23,10 mm³
CLICK 10	21,33 mm³
CLICK 11	19,56 mm³
CLICK 12	17,79 mm³
CLICK 13	16,03 mm³
CLICK 14	14,26 mm³
CLICK 15	12,49 mm³
CLICK 16	10,73 mm³
CLICK 17	8,96 mm³
CLICK 18	7,19 mm³
CLICK 19	5,42 mm³
CLICK 20	3,66 mm³
CLICK 21	1,89 mm³
CLICK 22	0,12 mm³
CLICK 23	0,00 mm³
CLICK 24	0,00 mm³
CLICK 25	0,00 mm³
CLICK 26	0,00 mm³
CLICK 27	0,00 mm³

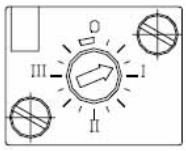
IMPOSTAZIONE DEI CICLI DEL GENERATORE DI FREQUENZA CON ARIA A 6 BAR (90 PSI)



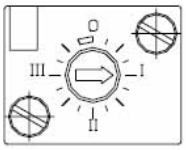
66 CICLI / MINUTO
66 STROKES / MINUTE



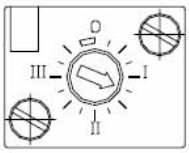
37 CICLI / MINUTO
37 STROKES / MINUTE



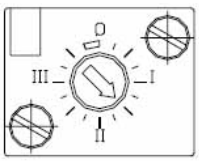
21 CICLI / MINUTO
21 STROKES / MINUTE



13 CICLI / MINUTO
13 STROKES / MINUTE

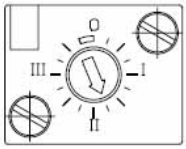


10 CICLI / MINUTO
10 STROKES / MINUTE

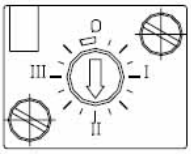


6 CICLI / MINUTO
6 STROKES / MINUTE

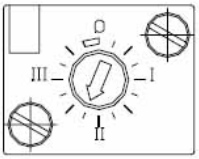
HOW TO ADJUST THE FREQUENCY GENERATOR WITH AIR AT 6 BAR (90 PSI)



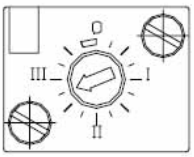
5 CICLI / MINUTO
5 STROKES / MINUTE



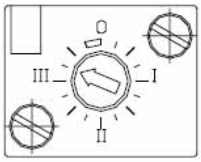
4 CICLI / MINUTO
4 STROKES / MINUTE



3 CILCI / MINUTO
3 STROKES / MINUTE



2 CILCI / MINUTO
2 STROKES / MINUTE



1 CICLO / MINUTO
1 STROKE / MINUTE

CON UNA PRESSIONE A 5 BAR (75 PSI) I VALORI DEVONO ESSERE INCREMENTATI DEL 7%

CON UNA PRESSIONE A 7 BAR (105 PSI) I VALORI DEVONO ESSERE RIDOTTI DEL 4%

CON UNA PRESSIONE A 8 BAR (120 PSI) I VALORI DEVONO ESSERE RIDOTTI DELL' 8%

WITH THE AIR PRESSURE 5 BAR (75 PSI) THE VALUES HAVE TO BE INCREASED OF ABOUT 7%

WITH THE AIR PRESSURE 7 BAR (105 PSI) THE VALUES HAVE TO BE DECREASED OF ABOUT 4%

WITH THE AIR PRESSURE 8 BAR (120 PSI) THE VALUES HAVE TO BE DECREASED OF ABOUT 8%