

Noga Cooling Systems



NNOGA
simply sophisticated

Innovation is the beneficial utilization of knowledge and creativity,
in order to discover and realize what does not yet exist.

Erik Keldmann

Noga is innovation



Noga Head Office



NOGA ENGINEERING & TECHNOLOGY (2008) LTD

Noga Engineering and Technology was established in 1980. Over the years the company has grown to become the world leader in the manufacturing of three main lines:

Deburring Systems ■ **Holding Systems** ■ **Cutting Fluid Applicators** ■

Noga's strongest points are product design and development, quality and service. Our products are sold in more than 60 countries either through our own companies or a network of exclusive agents.

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All NOGA products meet the strict requirements of ISO 9001 and ISO 14001.

We invite you to visit our web site: www.noga.com for further information.

NOGA reserves the right to make changes in any of its products without prior notice.

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WARNINGS



- Blades are sharp and can cut.
- Blades can break causing flying shards.
- Sharp edges and flying shards can cause injury.
- Wear safety goggles (both user and bystanders).
- Do not pry or bend blades.
- Keep away from children.
- Do not regrind blades.

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Cooling Systems

CUTTING FLUID APPLICATORS

MINICOOL 3-4

FIXED & VARI HP
(HIGH PRESSURE) COOL 5-6

NOGACOOOL 7-8

COBRA 9-12

Cooling Systems CUTTING FLUID APPLICATORS



Contents

NOGA Cutting Fluid Applicators were designed to answer various needs for cooling during machining, turning, drilling tapping etc. They are made in four different designs:

MINICOOL

MINICOOL have air and liquid mixture forms a fine spray that cools all metal cutting operations.

3 - 4

FIXED & VARI HP (HIGH PRESSURE) COOL

The Fixed HP Cool Arm and Vari HP Cool arms deliver fluids or cooling liquids at high pressure, up to 1000 PSI, allowing a higher level of machining. Easy and fast to set in position. Can be fitted with different sizes of nozzles.

5 - 6

NOGACOOOL

The NOGACOOOL consists of a manifold and flexible Loc-Line® hose held by a magnet. It is used to easily direct cutting fluid from the coolant pump of machine tools towards the cutting area.

7 - 8

COBRA

The COBRA drop-ejector shoots small quantities of liquid towards a distinct target. Various options enable the user to apply either single drops, or spray burst, or an air stream with small amounts of liquid.

9 - 12

MiniCool

NOGA MINICOOL uses the VENTURI principle to spray an air and liquid mixture. It consists of the following basic parts:

A control valve, spray unit, air line, syphon line and a powerful on/off Popeye magnet, which has a "V" form base, making it possible to mount on non-flat surfaces.

The MINICOOL enables the user to easily control both the air flow rate and liquid rate.

Stainless steel armoured syphon hose and air hose are made in a standard one meter length (special lengths available upon request).

The spray unit comes in three standard lengths: 264, 334, 479 mm (special lengths available upon request).

MiniCool

MiniCool MC1700

For Maximum heat dissipation and extended tool life

- Strong magnetic base
- Separate on/off air and fluid controls
- Stainless steel armoured syphon hose and air hose
- Nozzle connected via Loc-Line® flexible hose
- Simple, inexpensive, rugged
- Single spray unit



MiniCool MC3000

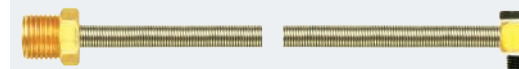
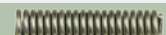
- Same as MC1700 but with 2 spray units

order no.

One spray unit of length (mm)			Two spray units of length (mm)			Air hose	Syphon hose
264	334	479	264	334	479		
MC1700	MC1800	MC2000	MC3000	MC3100	MC3200	1 M	1 M
MC1730	MC1830	MC2030	MC3030	MC3130	MC3230	2 M	2 M

SPARE PARTS

order no.

MC0130		control valve with popeye magnet
MC0101 MC0102 MC0103		spray unit 270 mm spray unit 340 mm spray unit 485 mm
MC0380 MC0302		air line 1 m air line 2 m
MC0360 MC0311		suction line 1 m suction line 2 m
MC0204		valve stem
MC3637		filter
MC0001		nuzzle nut
MC0232		banjo screw & washer
MC0031		banjo fitting

Fixed & Vari HP Cool Arms

**HP-HIGH
PRESSURE**

NOGA is introducing its patent pending newest product to the Cooling Systems line.

The Fixed HP Cool Arm and Vari HP Cool arms deliver fluids or cooling liquids at high pressure, up to 1000 PSI, allowing a higher level of machining.
Easy and fast to set in position.
Can be fitted with different sizes of nozzles.

**PATENT
PENDING**

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Fixed & Vari HP Cool Arms

SPARE PARTS for CA2000 and CA3000

HEX KEY CA1010 Hex. 5 mm



NOZZLE CA1002 Dia. 2 mm



NOZZLE CA1004 Dia. 4 mm - Standard



NOZZLE CA1006 Dia. 6 mm



ADAPTOR AD1001 Ext. NPT 1/4" - Ext. NPT 1/4"



more adaptors are available upon request.

FIXED HP COOL ARM CA2000

Single arm with 2 end ball joints so the nozzles can move on wide curve for positioning.



Dimensions:
Length: 164 mm
Thread: Int. NPT 1/4"

VARI HP COOL ARM CA3000

Long articulated arms provide full axis rotation. Sturdy tightening fixtures for total stability.



Dimensions:
Length: 206 mm
Thread: Int. NPT 1/4"

Both CA2000 and CA3000 are provided with:
CA1010 Hex Key
CA1004 Nozzle
AD1001 Adaptor

MINI VARI HP COOL ARM CA3500

Same as CA3000 but with shortened articulated arms.



Dimensions:
Length: 84 mm
Thread: Int. M 6

The CA3500 is provided with:
CA1010 Hex Key
CA1007 Nozzle
CA1008 Adaptor

SPARE PARTS for CA3500

HEX KEY CA1010 Hex. 5 mm



NOZZLE CA1007 Dia. 3 mm



ADAPTOR CA1008 Ext. M6 - Ext. NPT 1/4"



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NogaCool



NOGACOOL consists of a manifold & Loc-Line® flexible hose with a nozzle on top and a valve at the bottom, assembled on the powerful on/off Popeye magnet.

The plug attached can be replaced by a second Loc-Line® flexible hose.

NOGACOOL is supplied with a set of three nozzles: 1/16", 1/8" and 1/4".

Working conditions are as follows:

- Pressure: 2-3.4 Bar (30-50 Psi)
- Flow rate: 940 l/hour (250 gal/hour)
- Max. working temp. 170°C

Also available with magnet and manifold only (order no. MC0161).

NogaCool

NOGACOOL MC1601

SPARE PARTS

order no.

NF0037



320N popeye magnet
top thread M5

MC0156



manifold

MC0320



324 mm flexible
Loc-Line® hose
Other dimensions
available upon request.

MC0066



Ø1.6 mm plastic nozzle
(1/16")

MC0063



Ø3.2 mm plastic nozzle
(1/8")

MC0067



Ø6.3 mm plastic nozzle
(1/4")

MC0072



Wide plastic nozzle
16 holes Ø1 mm

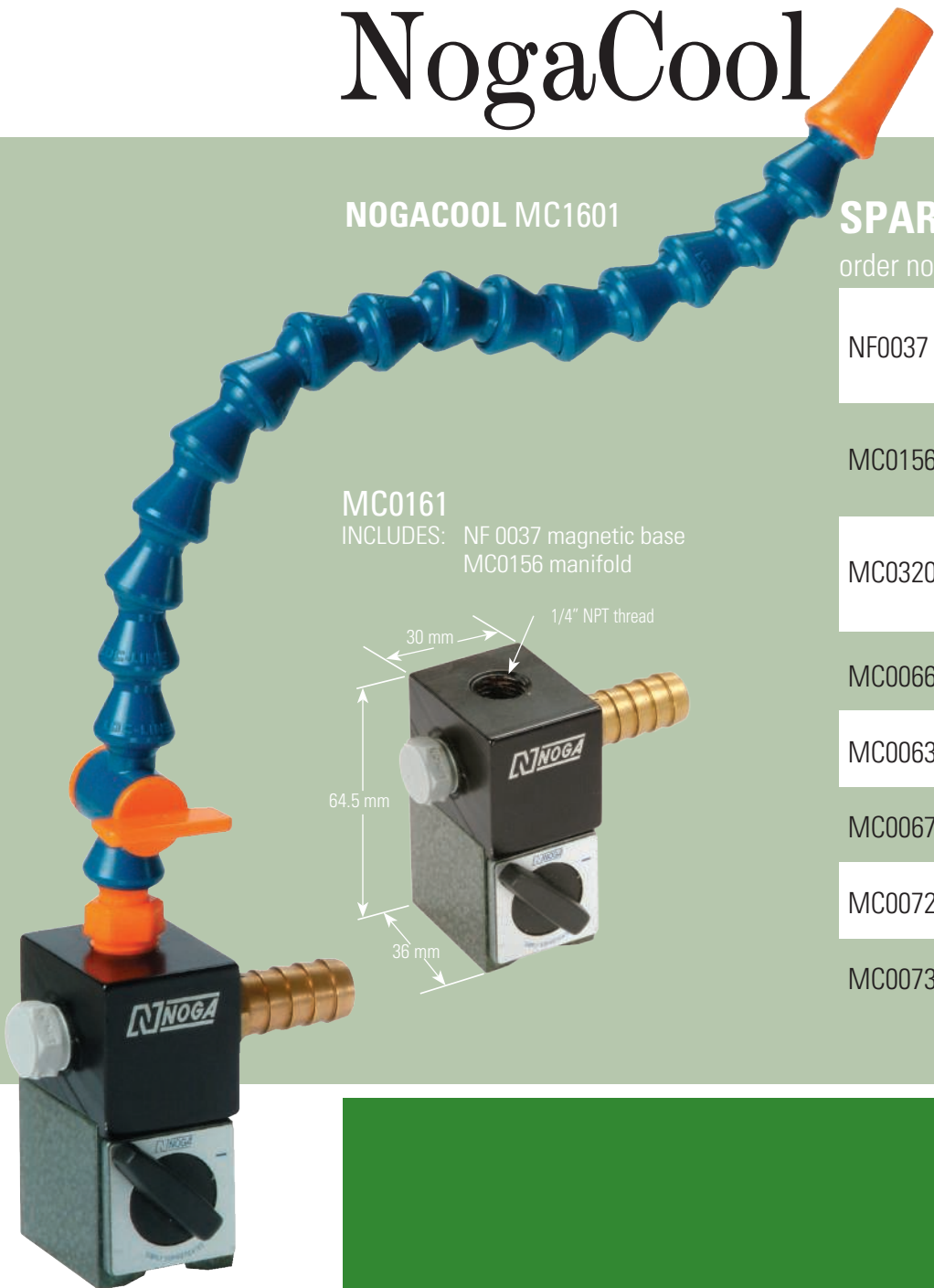
MC0073



Wide plastic nozzle
16 holes Ø1.5 mm

MC0161

INCLUDES: NF 0037 magnetic base
MC0156 manifold



Cobra



COBRA 's drop ejector is designed to accurately shoot small quantities of liquid to distinct targets. An air actuated piston shoots the drops through a flexible hose onto the target.

The drop shots can be automatically timed or manually determined by the user, the amount of liquid in each shot can also be adjusted by a tuning screw at the back of the COBRA all according to the user's needs.

The COBRA is operated by clean air, pressure 3-9 bar. Most liquids and solvents up to 250 cst viscosity can be applied.

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Cobra



COBRA CB2000

INCLUDES:
Basic Cobra only



COBRA SET CB2100

INCLUDES:
Basic Cobra CB2000
Small container CB0146
Mechanical valve SH1000
Magnet DG0036
Arm DG60013
Adaptor DG0129
Nylon tube RM8050

See drawing on page 123

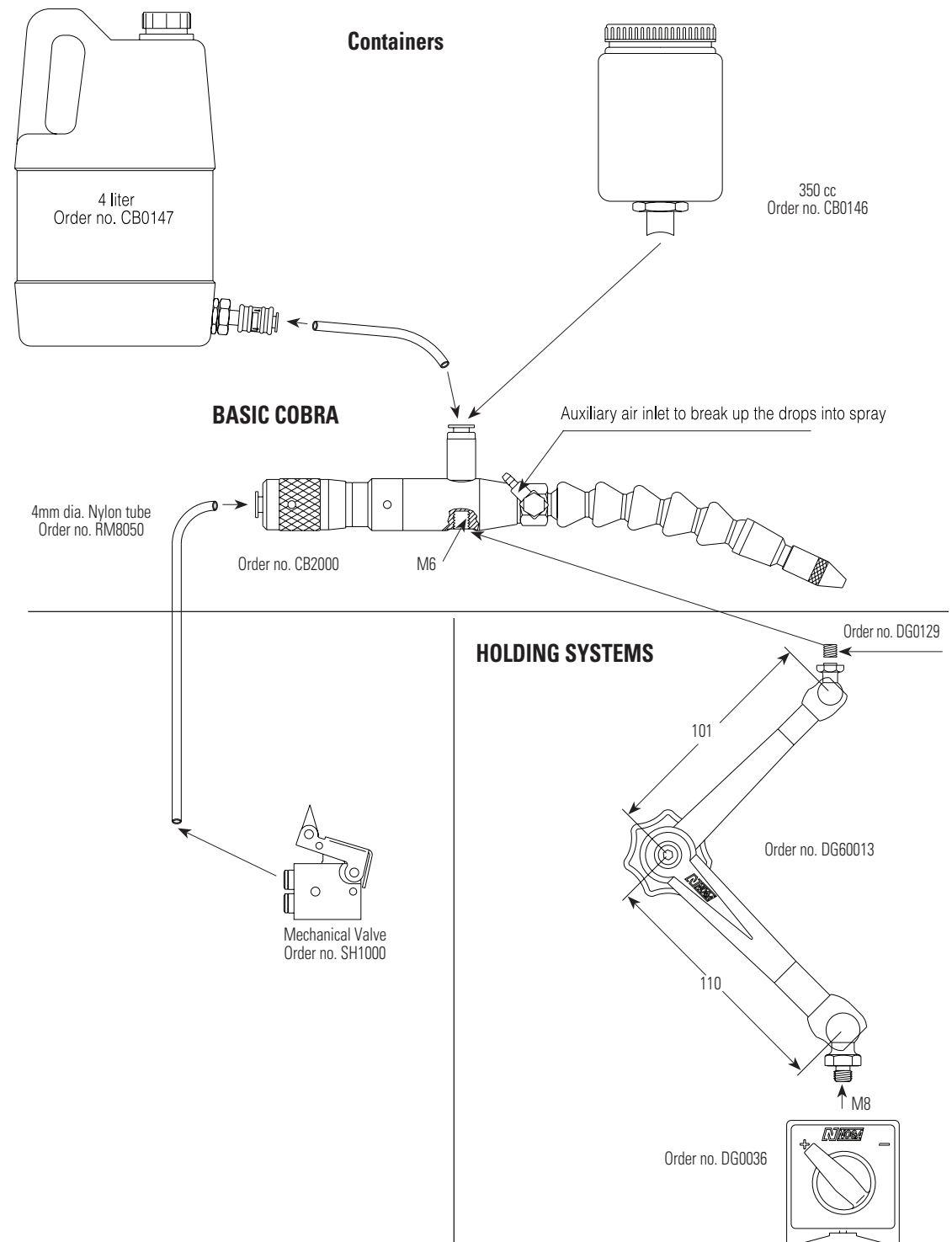
SPARE PARTS

order no.

MC0001		nuzzle nut
MC0232		banjo screw & washer
MC0031		banjo fitting
MC0030		washer

Cobra

Set-up and Accessories



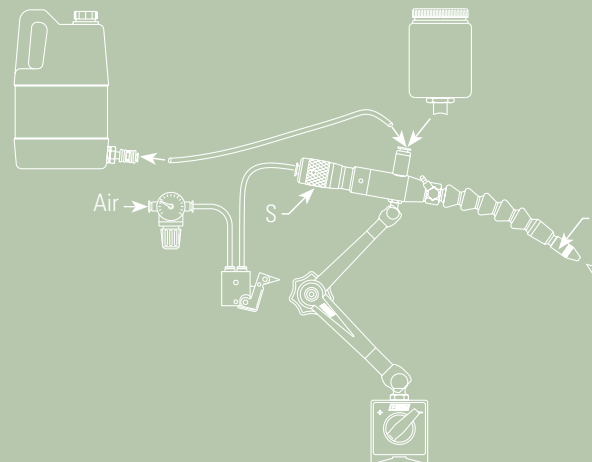
Operating Instructions

The fluid can be supplied either by fitting the bowl (CB0146) directly onto the unit or by using the large container (CB0147) and connecting it to the unit by 4 mm hose. Set up the pneumatic circuit as shown in one of the drawings (a) or (b) or (c). All connections are to be made with 4 mm hose.

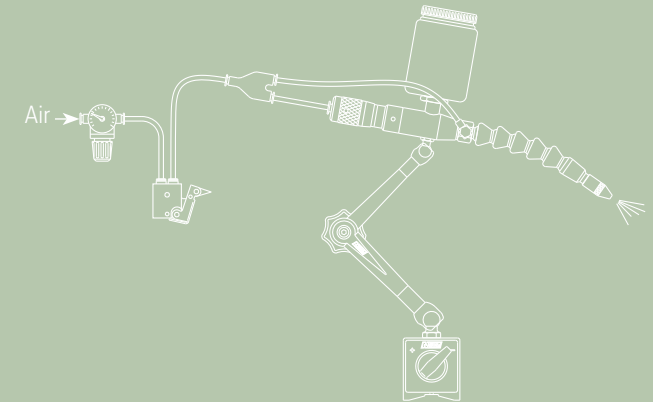
Open drop size control nut "S" to maximum drop size. Start pulsing the unit by pressing the actuating valve many times until drops emerge.

Adjust the drop size to your needs. If you have set up the circuit according to drawing (b), or (c), adjust the air flow with the nozzle nut "T".

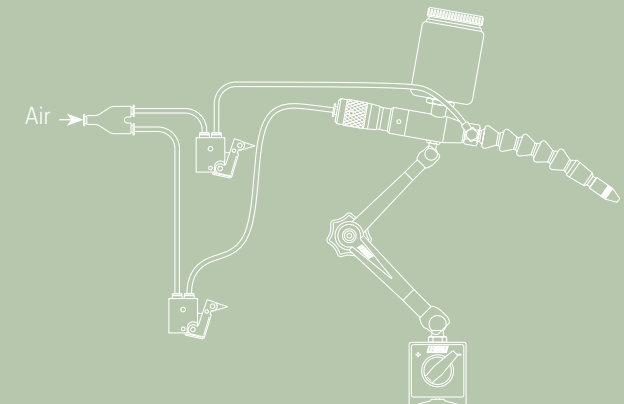
- a.** Setup for single drops using mechanical valve.



- b.** Setup for finely dispersed droplets.



- c.** Setup to supply drops and air jet independently.



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