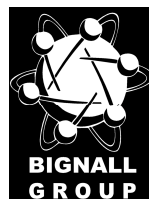
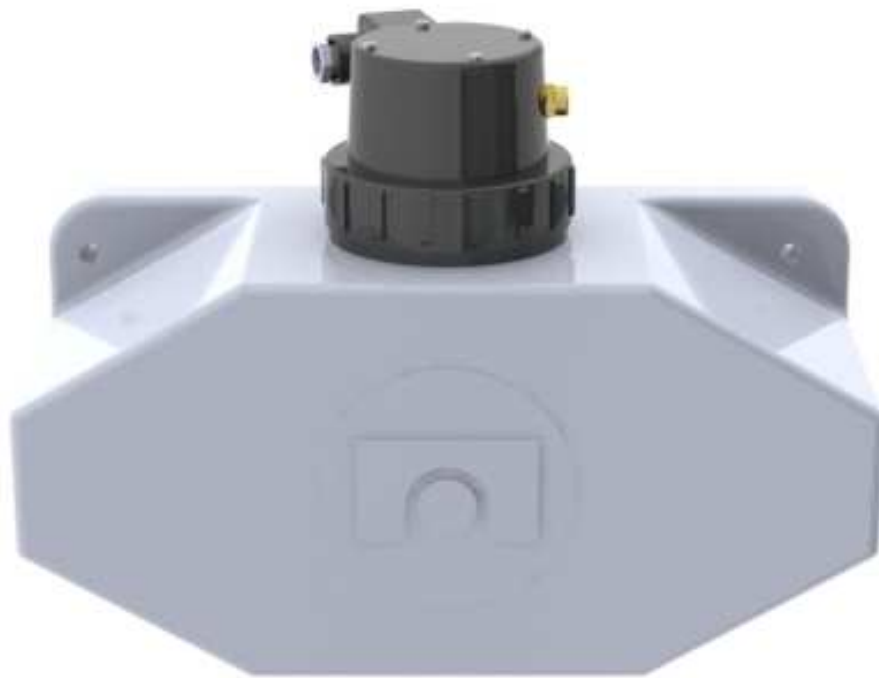




Chainmaster

NCM12/NCM12T

Operations Manual



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SPECIFICATION FOR 12v

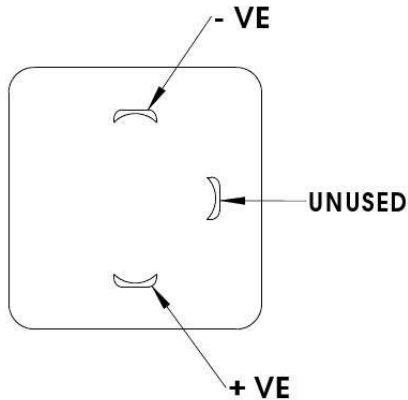
Weight (Empty)	Up to 2.4 kg
Capacity	3 Ltr or 7 Ltr Reservoir
Oil Specification	No special oils are required, use general basic engine oils(SAE 30) to API/CC or API/CD specifications. (Do not use oils with EP additives)
Voltage	12v dc (24v available on request)
Current Max	1.5 Amp
Output	4Mls/Min (Ambient temp, free flow, 12v)
Filtering	50 Micron paper filter
Temperature range	+40°C/-10°C

MOUNTING THE PUMP

The reservoir has integral mounting holes and depending on the size(3 or 7 Ltr) can be mounted using either 2 or 4 5/16" UNF or M8 bolts.

OPERATING THE PUMP

Once mounted and connected to a suitable power supply, observing the following wiring diagram.



The pump will self bleed once connected to the power supply this may take several minutes depending on conditions.

The NCM12 needs to be linked to an external timing unit set to a 0.5 second on / 1.5 second off pulse

The NCM12T comes with an internal timer which operates the pump on a 0.5 second on / 1.5 second off pulse.

Both pumps can feed a number of points through restrictor valves (meter units) These valves are available in a choice of 8 flow rates.

The top of this unit can become hot to the touch if operated for prolonged periods of time and/or in certain conditions.

MAINTENANCE

The chainmaster is very easy to maintain but it is very important to fill regularly and avoid long periods of running the pump if empty, CARE MUST BE TAKEN NOT TO OVERFILL.

The filter can be changed by removing the pump from the reservoir, (it is good practice to do this in a clean environment so as not to allow dirt to enter the reservoir.) The filter can then be removed by unscrewing the plastic PG21 nut remove the filter and replace with a new on , (stock item fp3320)



SERVICABLE PARTS

STOCK ITEM No	DESCRIPTION
STS	3LTR RESERVOIR
MTS	7 LTR RESERVOIR
FP3320	50 MICRON FILTER
88980	PG21 NUT
SH2011 CASE	HIRSCHMAN PLUG COVER

HEALTH AND SAFETY

The pump and system can deliver an output pressure of 200 Bar (2 900 PSIG).

FIRST AID MEASURES : SAE ENGINE OILS

TYPES OF EXPOSURE	FIRST AID MEASURES
Ingestion Harmless if swallowed in small amounts – larger quantities may cause nausea and diarrhoea.	Wash mouth out with water. Do not induce vomiting because of the danger of choking. If choking occurs or is expected get immediate medical advice.
Skin May cause irritation, but prolonged or frequent contact could result in dermatitis.	Wash skin as soon as possible with soap and water. Change contaminated clothing and launder before reuse.
Eyes Likely to cause irritation with short-term redness and stinging.	Wash out thoroughly with water. If redness and/or irritation continues, get medical advice.
Inhalation Unlikely to be an irritant.	If inhalation of fumes irritates the nose or throat or causes coughing remove to fresh air. Get medical advice if irritation continues.

FIRE-FIGHTING MEASURES

Extinguish with dry powder, foam, sand or earth. For small fires use CO₂.

Do not tackle fires with water. Water may be used to cool the area surrounding fires.

Fires in closed or confined spaces should be tackled by trained personnel who should wear breathing apparatus.

ACCIDENTAL RELEASE MEASURES

May cause slippery surfaces.

Contain spillage – do not wash spillage down drain. Absorb using absorbent clay, sand or other suitable absorbent material. Report any escape to public drainage or watercourses to the Local Authority and Fire Brigade.

TOXICOLOGICAL INFORMATION

The mineral oils and other components of these oils may be considered not to be essentially toxic in normal handling.

ECOLOGICAL INFORMATION

In this environment these greases are likely to biodegrade slowly.

OTHER INFORMATION

Further information can be found in Health and Safety Executive Publications, a list of which may be made available on request.

Liability

The information contained in this data is accurate to the best of MASTERLUBE SYSTEMS Limited or its subsidiaries. The customer is strongly advised to observe and ensure that its employees and customers observe all directions contained herein. However, neither MASTERLUBE SYSTEMS Limited nor its subsidiary companies accepts any liability whatsoever arising out of the use of the information or the use adaptation or processing of the products designated herein.

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Some states do not permit the limitations of warranties.

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The Company shall not be bound by or be liable for any affirmation of fact, promise, representation or inducement made by any agent, distributor, or reseller which is not embodied in this agreement.

In no event shall the company be liable for damages, regardless of the form of action, or nature of the claim, exceeding the costs of the products. In no event shall the company be liable for loss of profit, indirect, incidental, special, consequential or other similar damages arising out of the use of the products, even if the company has been advised of special circumstances of the customer or the possibility of such damages.

In any event the customer's sole and exclusive remedy shall be the repair or replacement of the product.

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