

Coolant Mixers

CMX

The Groz Coolant Mixer ensures accurate and uniform blending of metal cutting fluids, coolants, antifreeze etc with water for supply to machines.

Widely used in industrial applications these are also useful in garages, motor workshops for mixing of detergents, antifreeze etc

Compact Construction with Aluminium body and a Stainless Steel Rotary Disc Valve precision CNC machined for accurate performance over time

Mixer works on a venturi mechanism driven by pressure from water supply

Supplied with brass ball valve and 2

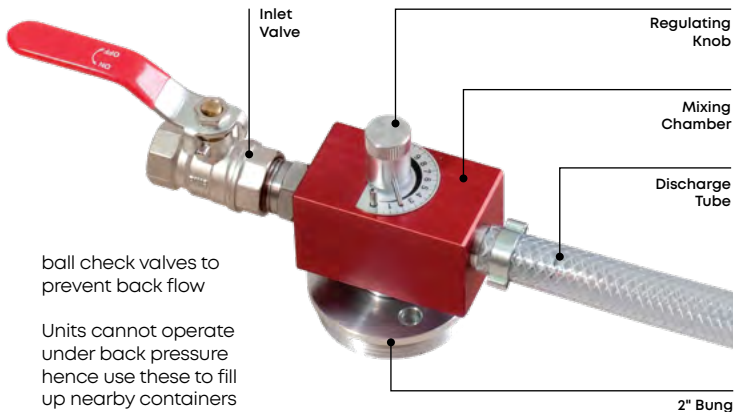
ball check valves to prevent back flow

Units cannot operate under back pressure hence use these to fill up nearby containers

Mixing ratio can be adjusted as required through a simple turn of the knob

Virtually maintenance free these are easy to install and operate.

A time and cost saving alternative to manual blending these are built durable for reliable performance over time



Available in two versions :

a. CMX

Coolant/ liquid mixers with one piece polypropylene suction tube, 2" bung adaptor & delivery hose. Press fit plastic suction tube can be cut to fit drum height

b. CMX-SS

Coolant/liquid mixers with stainless steel 2pc threaded suction tube & 2" bung adaptor & delivery hose. The Bung adaptor can be tightened anywhere along the suction tube depending upon available drum height

SPECIFICATION

CAT NR.	ORD NR.	SUCTION TUBE O.D.	
		(INCH)	(MM)
CMX/1	61100	0.47	12
CMX/2	61101	0.62	16
CMX/3	61102	0.47	12
CMX/SS/1	61105	0.86	22
CMX/SS/2	61106	0.86	22
CMX/SS/3	61107	0.86	22

MODEL	RED	BLUE	YELLOW
Mechanism	Venturi Type	Venturi Type	Venturi Type
Flow Rate	1100 Litre per Hour (290 Gallons per hour)	1250 Litre per hour (330 Gallons per hour)	1100 Litre per Hour (290 Gallons per hour)
For Use With	55 Gal (205 Litre) Drums	55 Gal (205 Litre) Drums	55 Gal (205 Litre) Drums
Water Inlet	1/2"	1/2"	1/2"
Bung Size	2"	2"	2"
Hose Length	39.37" (1 m)	39.37" (1 m)	39.37" (1 m)
Application	Metal Working Fluids	Soap Solutions	Metal Working Fluids
Mixing Ratio	0 to 11 %	0 to 57 %	0 to 9 %

SAFETY INFORMATION

- The Mixer must be mounted horizontally within $\pm 10^\circ$ (because of the ball check valve)
- The outlet is supplied with a PVC Hose which must always be open
- Hose must not be connected to any device that can restrict liquid flow
- Always wear protection gear like safety goggles, gloves while operating the coolant mixers.
- Maintain the Coolant mixer in good condition and replace any damaged or worn parts.
- Use genuine parts only. Unauthorized parts may be dangerous and will void the warranty

PACKAGE CONTENT

DESCRIPTION	QUANTITY
Mixer Assembly (with Shut Off Valve, Bung Nut & Hose Assembly)	1
Suction Tube	1
O.I.P.M.	1

WORKING OF COOLANT MIXER

This is a Venturi type proportional mixer that is driven by water pressure supplied via a full flow Brass Ball Valve.

It uses water passing over an orifice to create suction that draws the concentrate from the drum into a Mixing Chamber where it is mixed with water.

The unit has two Non Return Valves :-

1. at the Water Side (to prevent the back flow of coolant into the water pipe)
2. at the Coolant side (to prevent the back flow of water into the drum)

Concentration is controlled by turning a metering device (i.e a Rotary Disc Valve) with the help of a Regulator Knob.

A Regulator Plate divides the whole range of possible concentrations into 10 equal settings. On trial & error basis, desired percentage of the coolant mixture is obtained by testing with a **refractometer**.

Note

Though the Regulating Scale effectively gives a value based on trial & error, It should not be

taken as an absolute Percentage Ratio. For desired mix, actual mix has to be checked by testing with a Refractometer

WARNING!

- Read carefully all the safety guidelines and the instructions.
- Non-compliance with the safety rules and regulations can lead to serious injury

INSTALLATION & OPERATION

(Refer "EXPLODED VIEW")

- The mixer is already assembled with a hose & Shut Off Valve. Push the Suction Tube into Bung Nut.
- Insert the Suction Tube into the drum & tighten Bung Nut to secure the Coolant Mixer onto the drum.
- Connect the 1/2" female threads of Shut Off Valve with the water supply.
- Turn the Regulator Knob to the desired setting.
- Open Shut Off Valve fully to start the water supply. The Mixer will continuously dispense the desired mixture until the water supply is ON.
- Take a sample of the dispensed mixture & check its concentration with a Refractometer. Use Regulator Knob to increase or decrease the concentration until you get the precise Mix.

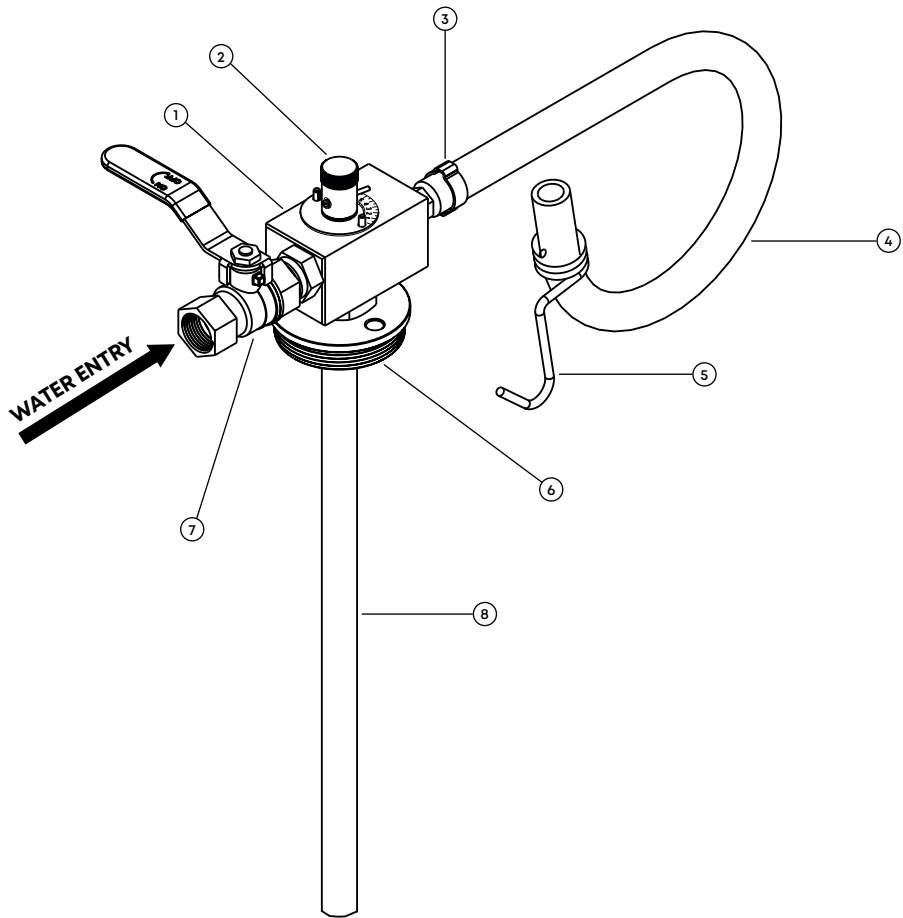
Note

- The Mixture Ratios have been specified after testing at a water pressure of 4 kg / cm² (57 PSI)
- Actual Mixture Ratios may vary as per the water pressure
- Higher water pressure leads to higher concentration & vice versa
- The Regulating Scale effectively gives a value based on trial & error. It should not be taken as an absolute Percentage Ratio

CAUTION!

- The Mixer must be mounted horizontally within $\pm 10^\circ$ (because of the ball check valve)
- The outlet is supplied with a PVC Hose which must always be open
- Hose must not be connected to any device that can restrict liquid flow

EXPLODED VIEW



PARTS LIST

REF NO.	PARTS DESCRIPTION	QUANTITY
1	Mixing Chamber	1
2	Regulator Knob	1
3	Hose Clamp	1
4	Braided PVC Hose	1

REF NO.	PARTS DESCRIPTION	QUANTITY
5	Hose Hanger	1
6	2" Bung Nut	1
7	Shut Off Valve Assembly	1
8	Suction Tube	1



GROZ WARRANTY POLICY

Groz makes all efforts to ensure that its products meet the highest standards of quality and durability and warrants to the original purchaser its range of products for a period of 12 months from Groz Invoice date, against defects in materials and workmanship. If the Groz product is part of a set, only the portion that is defective is subject to this warranty.

This warranty does not apply to damage due directly or indirectly, to misuse, abuse, wear and tear, negligence or accident, repairs or alterations outside Groz plants, or to lack of maintenance. Groz shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of its products. It is upto the user to determine suitability and safety of the product for their intended use, and the user assumes all risks and liability herewith.

In no event, shall Groz's liability exceed the invoiced cost of the product. In case of identification of defect covered under this warranty, the same must be notified in writing to Groz /Groz designated authorized service location. Proof of purchase date must accompany the complaint. Groz reserves the right to call back the faulty unit, all charges including transportation prepaid. On verification of the defect, the unit will be repaired or replaced with a new or reconditioned product or part of equal utility or a full refund given at Groz's discretion. The repaired /replaced units will be returned to the user freight prepaid, using most economical freight carrier. However if determined that the defect resulted from causes not within the scope of the warranty, then the cost of returning the product would be to buyer's account.

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