

INDAG

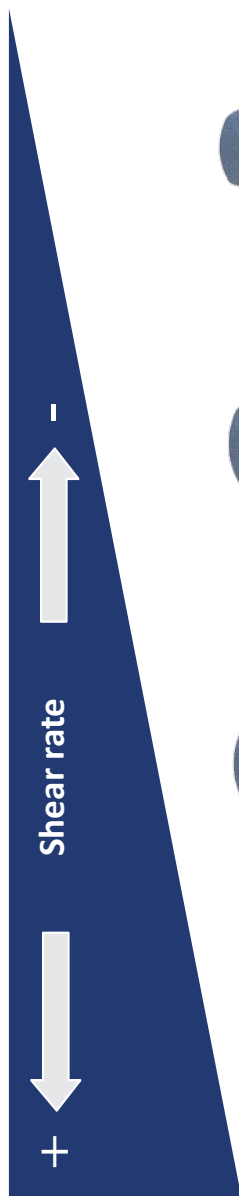
Maschinenbau GmbH

The FlowMix[®]-Company

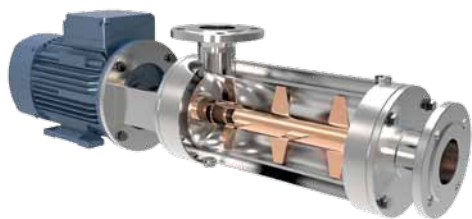


**Dynamic inline mixer
Type DLM/M**

For gentle mixing



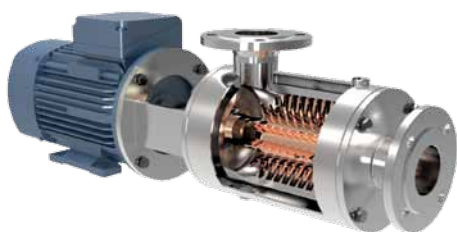
Mixer type DLM/M



Mixer type DLM/P



Mixer type DLM/S



Mixer type DLM/H



■ Function and applications of DLM/M

INDAG dynamic inline mixer type DLM/M is used to mix homogeneously a diversity of liquids. Even shear sensitive liquids or liquids with high solid content can be mixed. Only DLM/M rotor is equipped with mixing elements. Stator is without mixing elements. Therefore even fibrous particles will not lead to blockage of mixer.

A small selection of examples for applications are: Mixing of sewage sludge / polymer solution; mixing of paper sludge / polymer solution; mixing of sewage sludge / high pressure steam; mixing of caustic lye / water; mixing of lubricant / additive; mixing wax / additive; mixing of aerated foams / additive without reducing quality of foam.

■ Technology of DLM/M

INDAG inline mixer type DLM/M has only mixing elements on rotor and no mixing elements in stator (mixer casing). Rotor can be equipped with mixing elements of different geometry. Geometry depends on product to be mixed. INDAG mixer DLM/M is designed in a modular way. A single acting mechanical seal can be changed to double acting mechanical seal without change of mixer. INDAG mixers are designed likewise for explosive range and products (ATEX).

Positioning

Horizontal or vertical position of mixer is possible

Pressure levels

6 bar, 10 bar, 16 bar, 25 bar, 40 bar, 100 bar

Materials

1.4301 (AISI 304), 1.4404 (AISI 316L), 1.439 (AISI 904L), 1.4462 (AISI 318), PVDF, PTFE, Teflon coated, Tantal coated

Seals

Single acting mechanical seal; double acting mechanical seal; stuffing box seal, magnetic coupling

Connections

EN, DIN, ANSI flange

Rotational speed

100rpm to 1,800rpm

Capacities

50l/h to 120,000l/h

Temperatures

0°C to 300°C

Viscosities

1 mPas to 1,000,000 mPas

■ Advantages of DLM/M

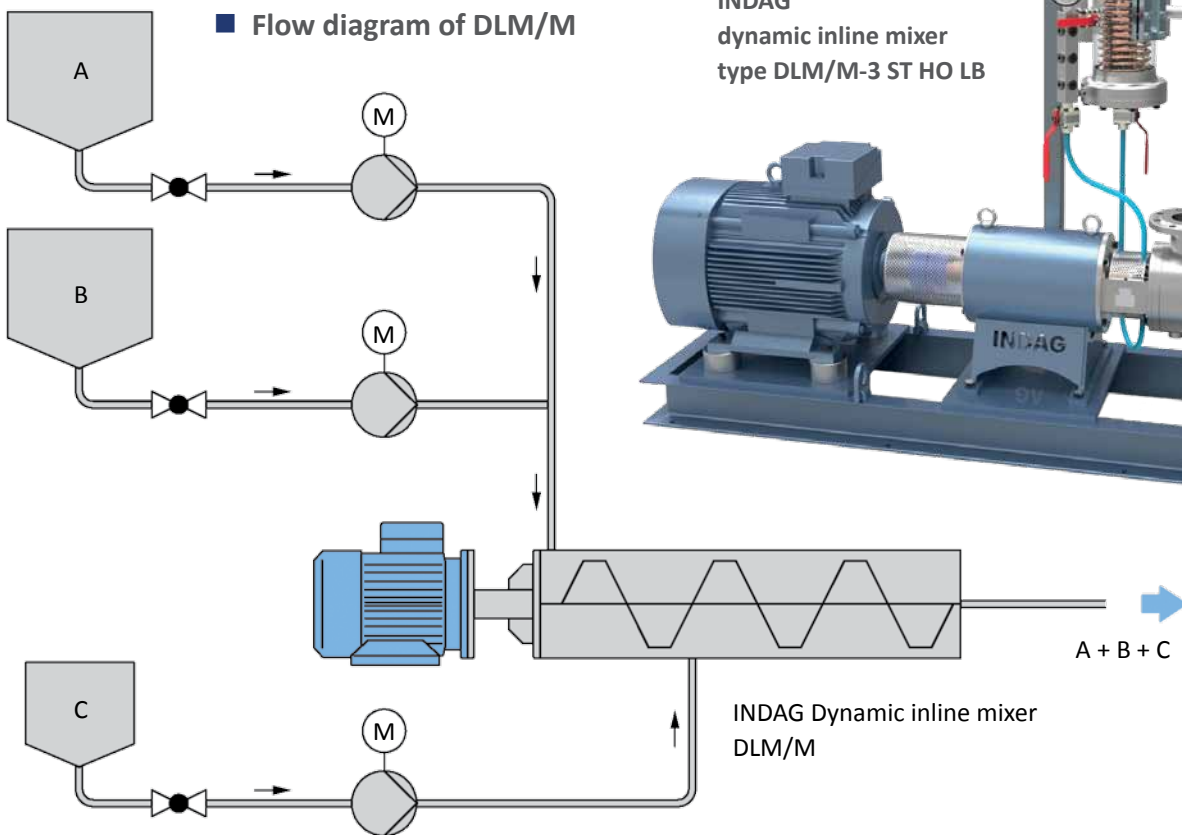
- Very good self-cleaning during CIP-cleaning
- No pressure loss
- No blockage entwining (clog) free
- Very homogenous mixing result
- Mixing energy can be changed variable and adapted to product or capacity changes

■ Mixer sizes and capacities of DLM/M

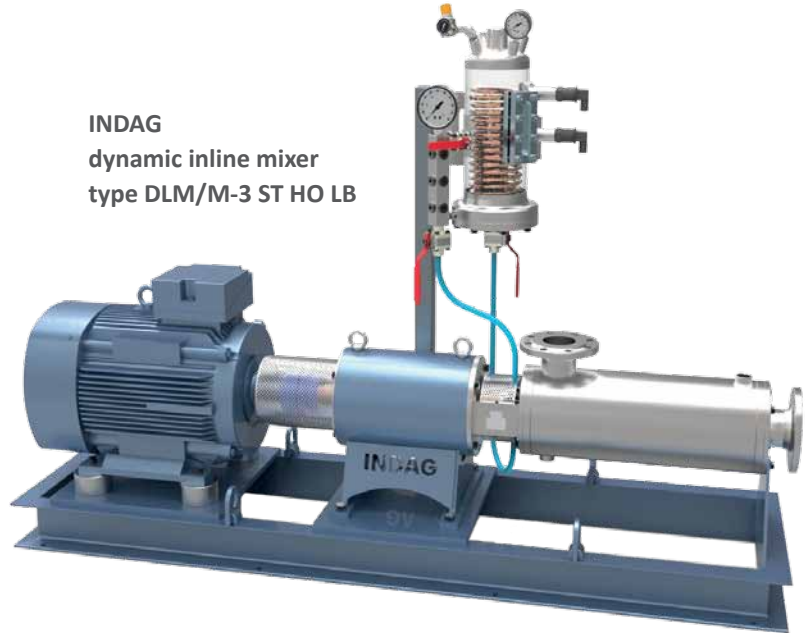
Type DLM/M ... ST**	unit	1	2	3	4	5	6
capacity*	l/h	100-2,000	200-5,000	500-10,000	1,000-20,000	3,000-6,000	6,000-120,000
connection	DN	40-80	50-100	65-150	80-200	100-250	125-300
optional	ASME	1.5" -3"	2"-4"	2.5"-6"	3"-8"	4"-10"	5"-12"
power	kW	0.75-2.2	1.1-3	1.5-4	2.2-7.5	3-11	4-15
rotational speed	1/min	100-1,800	100-1,800	100-1,800	100-1,800	100-1,000	100-1,000

*Capacity depends on product. ** ST = standard execution

■ Flow diagram of DLM/M



INDAG
dynamic inline mixer
type DLM/M-3 ST HO LB

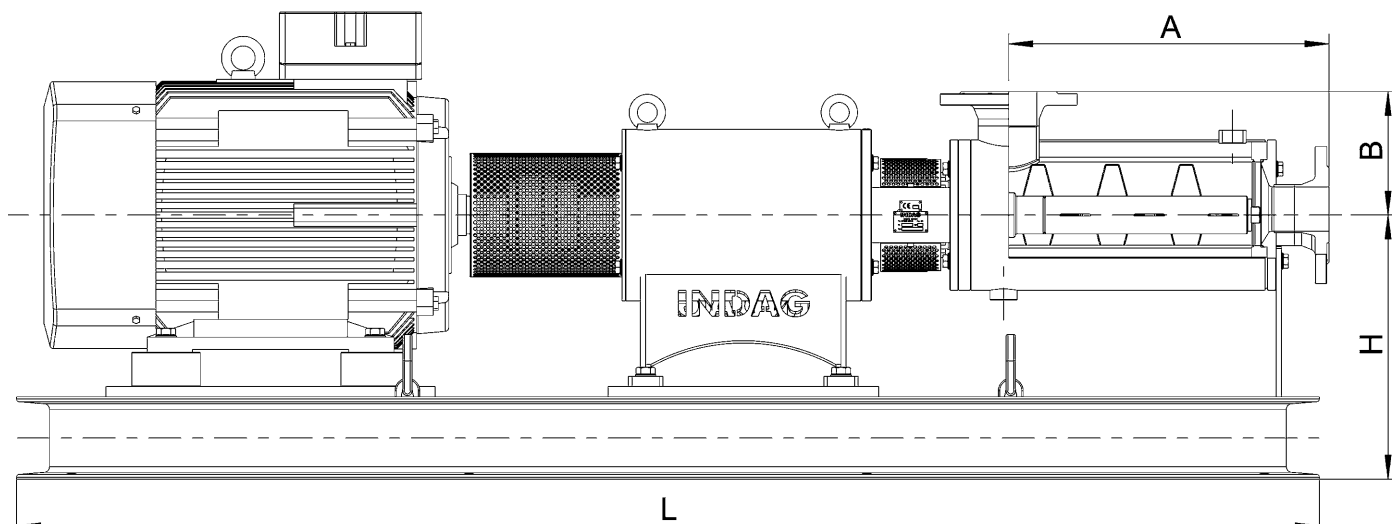


INDAG DLM/M-4 ST HO

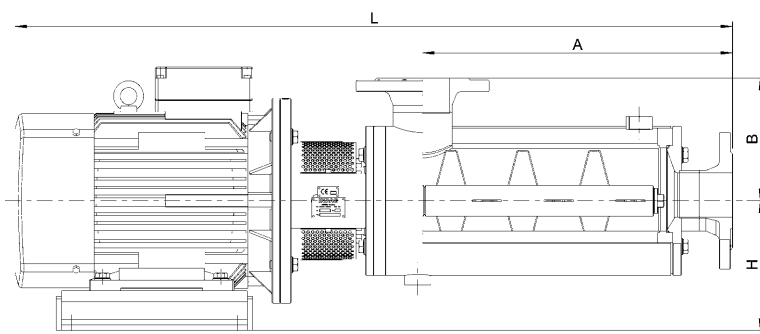


INDAG dynamic inline mixer type DLM/M-4 ST HO LB

■ Dimension drawing of DLM/M (LB)



■ Dimension drawing of DLM/M (KB)



■ Dimension table of DLM/M

Type	unit	A	B	H*	L*
DLM/M-1 KB	mm	340	138	158	892
DLM/M-2 KB	mm	376	165	170	998
DLM/M-3 KB	mm	467	180	190	1081
DLM/M-4 KB	mm	569	210	190	1230
DLM/M-5 KB	mm	652	242	218	1390
DLM/M-1 LB	mm	340	138	250	1500
DLM/M-2 LB	mm	376	165	312	1700
DLM/M-3 LB	mm	467	180	385	1900
DLM/M-4 LB	mm	569	210	460	2200
DLM/M-5 LB	mm	652	242	460	2500

* depends on the drive

Company profile

For over 60 years INDAG develops, designs and produces dynamical inline mixers and complete metering and mixing systems in Borsfleth, Germany.

INDAG products claim to meet highest requirements in quality and efficiency.

INDAG

Maschinenbau GmbH

Ivenfleth 13

D-25376 Borsfleth / GERMANY

phone +49 4124 9876-0

fax: +49 4124 9876-54

e-mail: info@indag.de

www.indag.com

Product and service spectrum

Product spectrum includes: dynamic inline mixer type DLM/M, intensive inline mixer type DLM/P, intensive inline mixer type DLM/S, homogenizer type DLM/H, solid-liquid mixer type DLM/FS, complete systems type FlowMix for metering, mixing, emulsifying, dispersing and aerating.

Complete systems are equipped with PLC control and sensors for automatic and monitored production. Service spectrum includes commissioning and maintenance of mixers and complete systems.

