
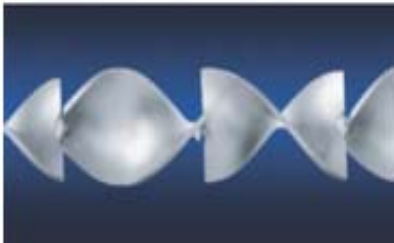




STATIC MIXERS

The static mixer is the most simple and economical device for obtaining intimate mixing of two or more components. The purpose is simply achieved by fluid patterns deviation and creation of turbulence. The main applications are in the field of water and smokes treatment and preparation of products inchemical and food industry.

Selection is based on the ratio of the flow rates, viscosities and densities of the fluids to be mixed. Function of Fluid regime and material of construction, GREC design and manufacture different types and configurations of mixing elements.

Kind of mixing elements manufacturer by GREC:

<p>VM Elements for laminar regime</p>		<p>HY Elements sanitary finish for turbulent regime</p>	
<p>BM Elements for gas-liquid mixing</p>		<p>TM Elements for turbulent regime</p>	

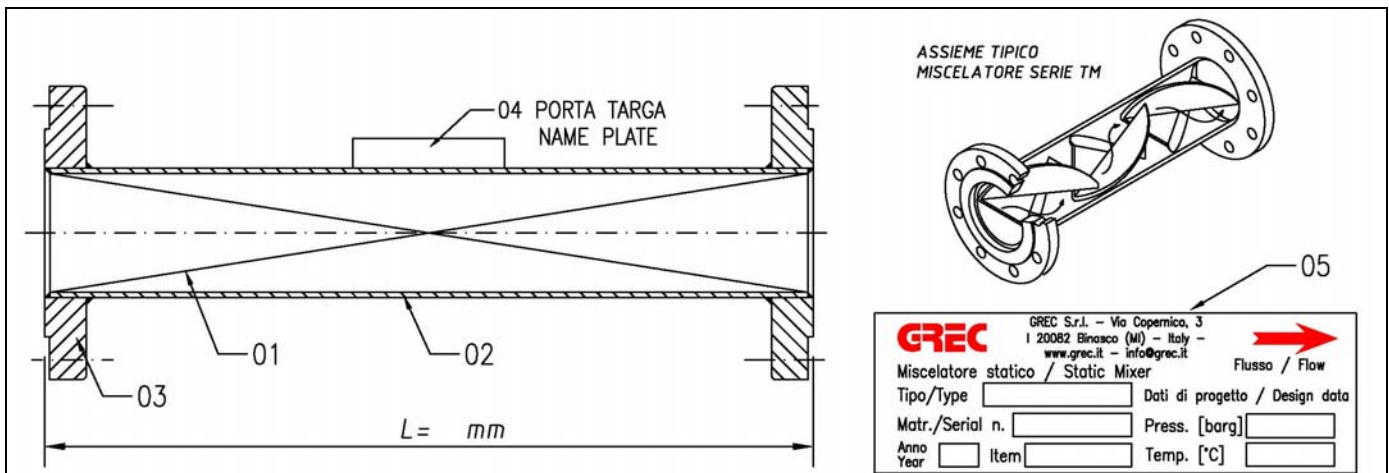
Sanitary application **HY**,
DIN connection
with additive inlet



High viscosity application **BM** flange
connection with additive inlet

STATIC MIXER SERIES TM – TURBULENT REGIME

Model: TM4/6-DN25 ÷ 80PN16	Rev	Date	BY	Verif	Appr.
	0	01/10/12	MF	MM	MM



POS	Q.ty	Description	Material
01	4 / 6	MIXING ELEMENTS TIPE TM DN	AISI 304
02	1	PIPE DN	AISI 304
03	2	FLANGE DN	AISI 304
04	1	NAME PLATE SUPPORT	AISI 304
05	1	NAME PLATE	AISI

Design code	ASME VIII Div 1	Design temperature	-20° + 150°C
Connection	EN1092-1	Design pressure	12 bar
Length (L)	See table L (mm)	Material	SS 304
Efficiency	> 95%	Pressure drop	Max 0,5 bar

Note:

PROCESS DATA

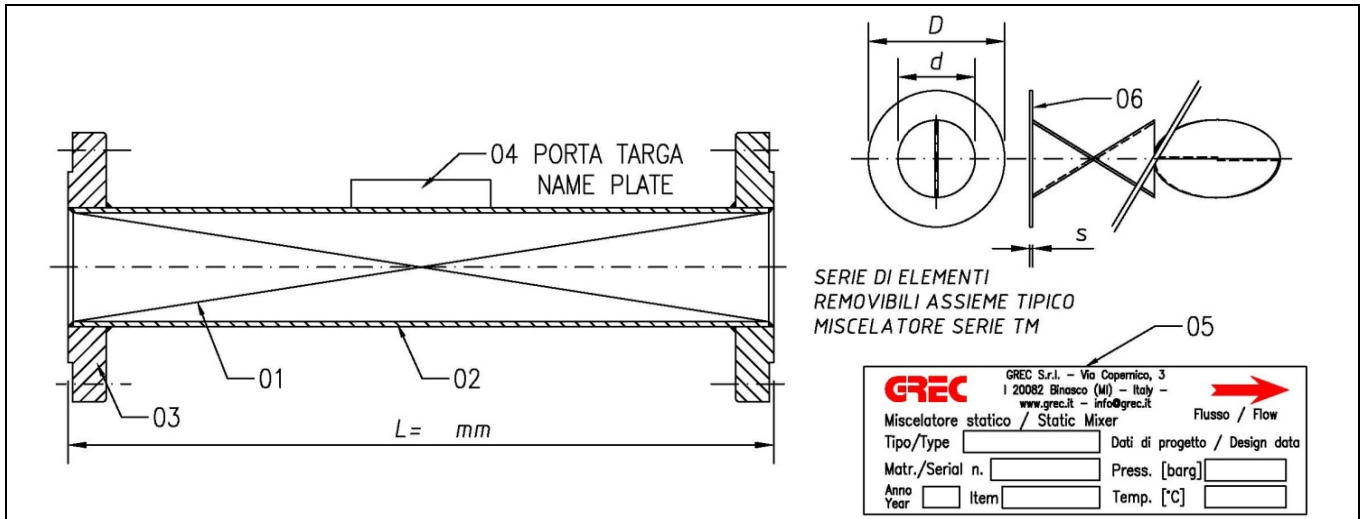
No. Mixing elements	Viscosity ratio μ_1 / μ_2	Density ratio SG1/SG2	Flow rate ratio Q1/Q2
4	< 1:2000	< 1:10	< 1:250
6			< 1:1000

PIPE DN	FLOW RATE		LENGHT L (mm)			Note
	Q min (m³/h)	Q max (m³/h)	4 EL	CODE	6 EL	
25	0,25	4	180		260	
40	0,45	9	260		390	
50	1,2	15	330		490	
65	1,5	22	420		620	
80	1,8	33	515		760	

STATIC MIXER SERIES TM-R – TURBULENT REGIME

Model: TM4/6-R-DN25 ÷ 80PN16

Rev	Data	Fatto	Verif	Appr.
0	01/10/12	MF	MM	MM



POS	Q.ty	Description	Material
01	4 / 6	REMOVABLE MIXING ELEMENTS TIPE TM DN	AISI 304
02	1	PIPE DN	AISI 304
03	2	FLANGE DN	AISI 304
04	1	NAME PLATE SUPPORT	AISI 304
05	1	NAME PLATE	AISI

Design code	ASME VIII Div 1	Design temperature	-20° + 150°C
Connection	EN1092-1	Design pressure	12 bar
Length (L)	See table L (mm)	Material	SS 304
Efficiency	➤ 95%	Pressure drop	Max 0,5 bar

Note:

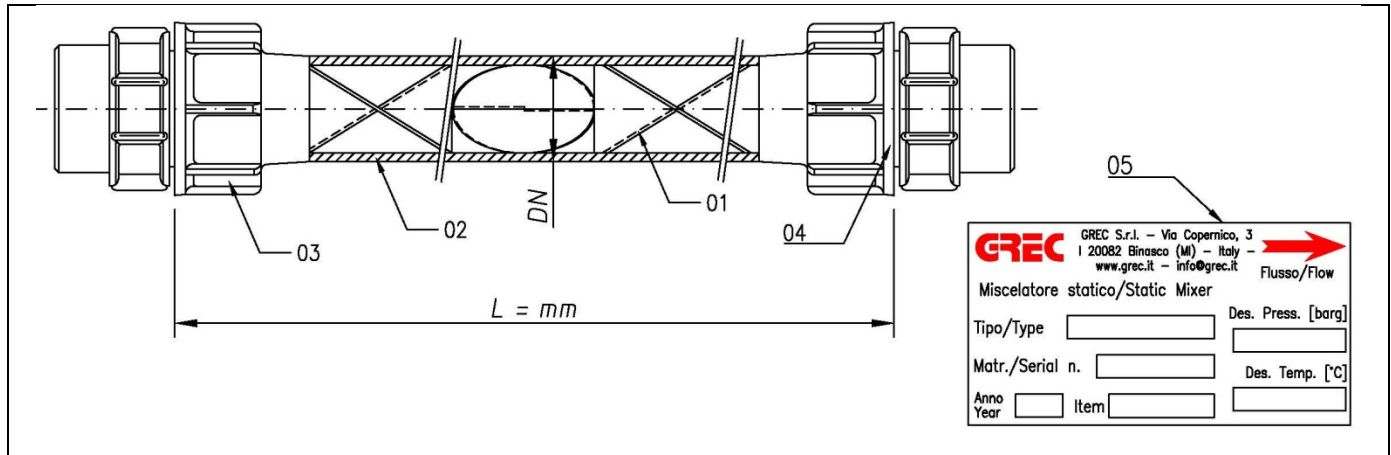
PROCESS DATA

No. Mixing elements	Viscosity ratio μ_1 / μ_2	Density ratio SG1/SG2	Flow rate ratio Q1/Q2
4	< 1:2000	< 1:10	< 1:250
6			< 1:1000

PIPE DN	FLOW RATE		LENGHT L (mm)						Note	
	Q min (m³/h)	Q max (m³/h)	4 EL	CODE	6 EL	CODE	D	d		s
25	0,25	4	180		260		68	22	3	
40	0,45	9	260		390		88	36	3	
50	1,2	15	330		490		102	48	3	
65	1,5	22	420		620		120	58	3	
80	1,8	33	515		760		130	74	3	

STATIC MIXERS TM PP – TURBULANT REGIME

Model: TM4/6-DN20÷50 PP	Rev	Data	Fatto	Verif	Appr.
	0	01/10/12	MF	MM	MM



POS	Q.ty	Description	Material
01	6	MIXING ELEMENTS TYPE TM	PP
02	1	CLEAR PIPE DN	PVC
03	2	THREATED CONNECTION	PVC
04	2	GASKET	EPDM
05	1	NAME PLATE	PVC

Design code	STD MANUFACTURER	Design temperature	45 °C
Connection	THREATED OR BONDING	Design pressure	4 Bar(g)
Length (L)	See table	Material	See table
Efficiency	> 95%	Pressure drop	Max 0,2 Bar

Note:

PROCESS DATA

No. Mixing elements	Viscosity ratio μ_1 / μ_2	Density ratio SG1/SG2	Flow rate ratio Q1/Q2
4	< 1:2000	< 1:10	< 1:250
6			< 1:1000

PIPE DN	FLOW RATE		LENGHT L (mm)				Note
	Q min (m³/h)	Q max (m³/h)	4 EL	CODE	6 EL	CODE	
20	0,15	2	210	002613	---	---	
25	0,25	4	230		---	---	
40	0,45	9	350		385		
50	1,2	15	360		405		