OFS-mixing-nozzle type FMD

OFS-mixing-nozzles for injection moulding:

For high quality plastic parts, it is necessary to have a thermal homogeneous melt. The regular homogeneity of additives like flame retardant and UV-stabilizer are also a guarantor for high quality plastic parts as colour and thermal mixing. The high blend power of the OFS-mixing-nozzle ensures saving of colour-batches and other additives.

- **static wing-mixer:**
  The static wing-mixer consists of 4 rustproof elements with specifically arranged wings, in order to mix the cast. Each element is arranged in such a way that by combining several elements a complete mixing system develops.
  This system produces the desired homogeneity through continuous swirling of the fusion stream in layers, which are spread over the whole flow diameter.

- **features:**
  - 4 mixing elements
  - completely detachable → simple cleaning
  - high mechanical firmness through cast ring system
  - available for all machine types
  - suitable for nearly all plastic materials
  - nozzle complete with suitable heater and thermocouple

Advantages of the wing-mixer:

1. thermally homogeneous melt
2. uniform melt viscosity also with high regenerate portion
3. closer tolerances, better surface quality of the shaped parts, that means less discarded parts
4. homogeneous colour distribution → streak-free products, reduced colouring material costs
5. amortization by production advantages within a short time
6. self-cleaning, no dead corners

description	Di (mm)	Da (mm)
OFS-FM0 static wing-mixer with 3 or 4 elements adequate for screws ø up to 35 mm	8	14
OFS-FMI static wing-mixer with 4 elements adequate for screws ø 30-75 mm	12	20
OFS-FMII static wing-mixer with 4 elements adequate for screws ø 70-130 mm	16	25

flow direction

The illustrated mixing experiment demonstrates the excellent mixing characteristics

Odenwälder Filtersysteme GmbH

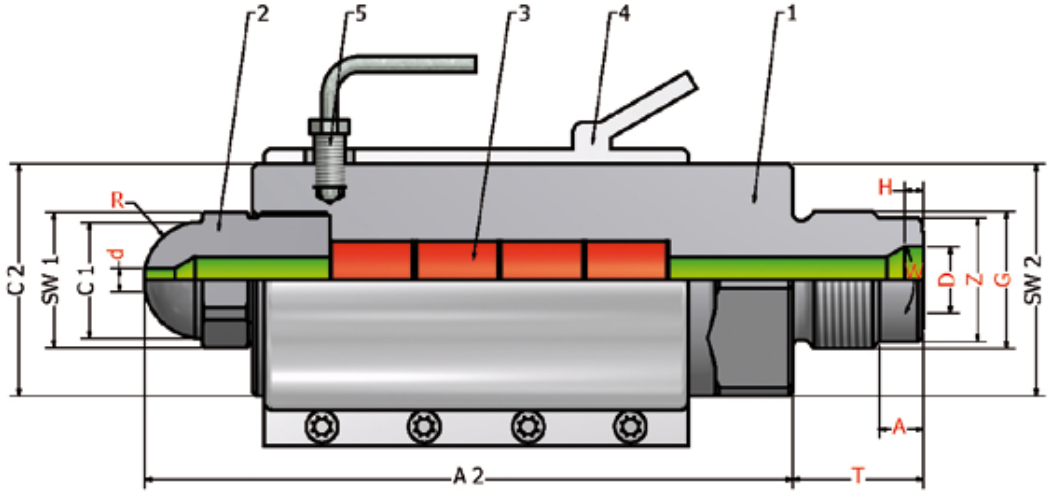
Industriegebiet III
Im Krötenteich 3a - D-74722 Buchen / Odw.
phone 06281/404-393 - fax: 06281/404-391

Dimensions

datas and standard dimensions (mm)		FMDO	FMDI	FMDII
screw diameter*	mm	bis 35	30 - 75	70 - 130
max. injection pressure	bar	2.000	2.000	2.000
length	A2	122	128 / 148	148 / 168
head diameter	C1	24	30	30
base diameter	C2	45	60	60
head hexagon	SW1	27	32	32
adapter hexagon	SW2	46	60	60

*at PS

1 nozzle base
2 nozzlehead
3 mixinginsert
4 heater
5 thermocouple



required dimensions (mm)			required informations		
machine thread	G		material (MFI)		
T/A/D/Z/W°/H		specify if required	shot weight	gr.	
drill	d		melt temperature	C°	
radius/surface	R		injection time	sec	
			injection pressure (specific)	bar	
			machine type		
			screw diameter	mm	

additional options:

- with shut-off function
- nozzle head with dip nozzle
- nozzle head with internal thread
- nozzle base with needle seat
- etc.

mixing insert