#### FLUID-O-TECH

### **TMFR 50-200 24V Series**

Electro-magnetic drive rotary vane pump with motor

#### **DESCRIPTION**

The TMFR series and its innovative concept of a completely integrated brushless motor and positive displacement sealless rotary vane pump, is designed for those applications where a very long service life is needed.

The electro-magnetic drive, where the motor has no moving parts and is completely potted in resin for best protection against condensation, grants absence of friction, very low noise and high efficiency in a truly small footprint. The versatility of this product opens new horizons to high tech systems.

The pump housing is in brass or AISI 303 stainless steel, the rotor is in AISI 303 stainless steel, while the pumping chamber is in carbon graphite.

#### **FEATURES**

- Long Life no moving parts
- Brushless 24V motor with inverter
- Carbon Graphite pump chamber
- Pressures to 20 bar
- Low Noise
- Port & amp; Speed options

#### MAIN APPLICATIONS

- Cooling
- Solar heating systems
- Refrigerating gas transfer
- Reverse osmosis
- Fuel burner
- Water repressurization
- Espresso coffee machines



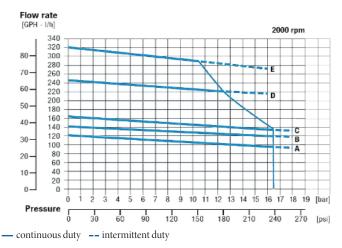
### **SPECIFICATIONS**

#### **GENERAL**

Pump housing material	Brass or stainless steel					
Pumping chamber	Carbon graphite 3/8" GAS or NPT					
Ports						
Max static pressure	20 bar					
Noise	46dB (A) at 1100 rpm					
Unit weight (w/o controller)*	2.7 kg BLDC 24 V (w / inverter) 1000 to 2000 pm 2000 rpm					
Motor type						
Speed range						
Nominal motor speed						
Actual power	480 W (max) 320 W (max)					
Motor IP protection	IP 55					
Controller IP protection	IP 20					

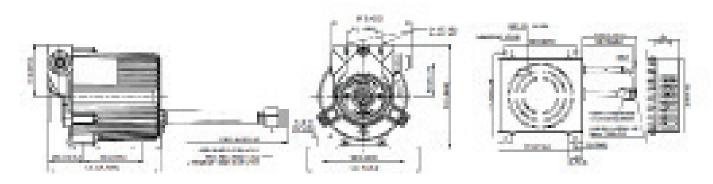
<sup>\*</sup> Controller weight: 640 g (1,5 Lb).

#### **FLOW RATE**



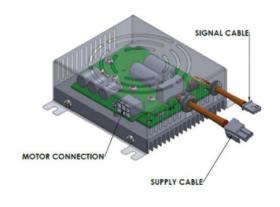
Note: Hydraulic performances measured with 20 °C (68 F) water and without bypass. Curves are averages.

# **DIMENSIONS (MM)**

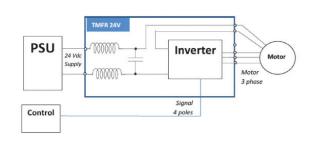


\* Dimensions in mm [inches]

### TECHNICAL NOTE TMFR/TSFR 24 V



### **BLOCK DIAGRAM**



## **MODEL LINEUP**

	TMFROT (BRASS)	050 051 054	070 071 074	100 101 104	150 151 154	200 201 204	
	Figure A-A Relief valve NO STD BAL		В-В	C-C	D-D	E-E	
			NO STD BAL	NO STD BAL	NO STD BAL	NO STD BAL	

TMFRSS (STAINLESS	STEEL)	050	051	070	071	100	101	150	151	200	201
Figure	A-A		В-В		C-C			D-D		E-E	
Relief valve	NO	STD	NO	STD	NO	STD	N	IO S	TD	NO	STD