

Brass rotary vane pumps PO 70-400 series

The rotary vane pumps, manufactured by Fluid-o-Tech® and sold worldwide under the trademark Rotoflow®, are volumetric pumps designed for pumping water and moderate aggressive liquids with low flow at high pressure.

Technical features and manufacturing characteristics

The rotary vane pump is brass made with a stainless steel AISI 303 rotor, while the pumping chamber and the vanes are in carbon graphite. The inlet and outlet ports are 3/8" GAS or NPT threaded. The pumps are designed to be directly mounted to the motor with a stainless steel clamp. For different mounting arrangements see our technical info "optional mountings". Maximum operative temperature: 70 °C (158 F).

Available upon request:

- Viton®/EPDM seals
- Built-in relief valve
- Built-in 100 mesh strainer
- Flange mount
- California AB 1953 compliant brass



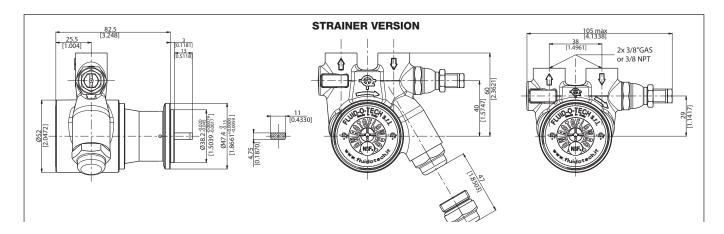




MAIN APPLICATIONS

- Beverage vending machines
- Post mix drink dispensers
- Espresso coffee machines
- Water treatment
- Water dispensers
- Cooling systems

	TECHNICAL INFORMATION									
Pump housing material	Brass	Max static pressure	20 bar/290 psi							
Pumping chamber	Carbon graphite	Pump weight	w/o strainer 1.1 kg (2.5 lb)							
Ports	3/8" GAS or NPT	(clamp mount)	w strainer 1.3 kg (2.9 lb)							
Speed limit	1725 rpm									

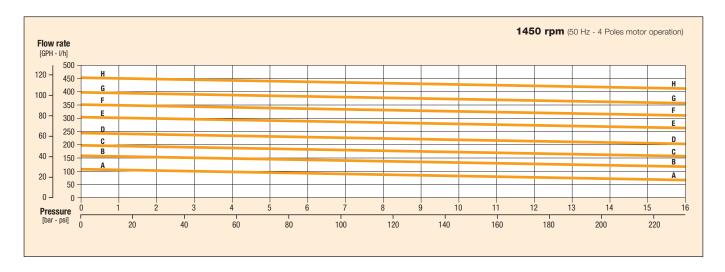






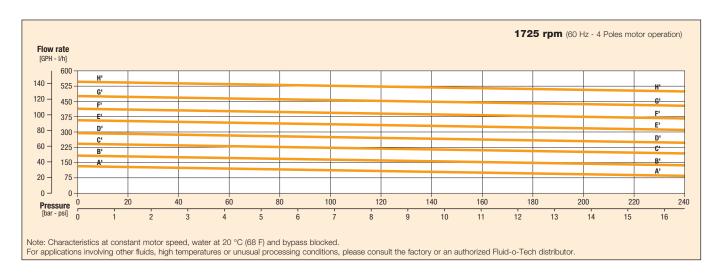
Model PO/PA/PW	/PB 070	071	074	071x	074x	100	101	104	101x	104x	1500	1501	1504	1501x	1504x	200	201	204	201x	204x
Figure Relief valve			A-A					B-B					C-C					D-D		
Relief valve	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL
Strainer	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES

Model PO/PA/PW/PB	2500	2501	2504	2501x	2504x	300	301	304	301x	304x	3500	3501	3504	3501x	3504x	400	401	404	401x	404x
Figure			E-E					F-F					G-G					Н-Н		
Figure Relief valve	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL
Strainer	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES



Model PO/PA/PW/P	В 070	071	074	071x	074x	100	101	104	101x	104x	1500	1501	1504	1501x	1504x	200	201	204	201x	204x
Figure Relief valve			A'-A'					B'-B'					C'-C'					D'-D'		
Relief valve	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL
Strainer	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES

Model PO/PA/PW	/PB 2500	2501	2504	2501x	2504x	300	301	304	301x	304x	3500	3501	3504	3501x	3504x	400	401	404	401x	404x
Figure			E'-E'					F'-F'					G'-G'					H'-H'		
Figure Relief valve	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL	NO	STD	BAL	STD	BAL
Strainer	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES

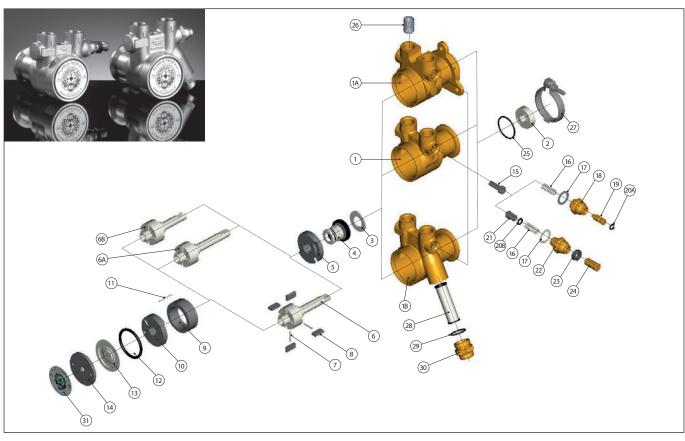








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POS	DESCRIPTION	MATERIAL	CODE	NOTES
1	HOUSING	DDACC	22-01-01	NPT PORTS
•	HOUSING	BRASS	22-01-02	GAS PORTS
1A	HOUSING WITH FLANGE	DDACC	22-01-54	NPT PORTS
IA	HOUSING WITH FLANGE	BRASS	22-01-55	GAS PORTS
45	HOUGING WITH FILTER	DDAGO	22-01-08	NPT PORTS
1B	HOUSING WITH FILTER	BRASS	22-01-09	GAS PORTS
2	BALL BEARING	STEEL	90-22-01	
3	WASHER	S.S.	22113	
	_	CERAMIC/NBR	90-40-01	NSF/WRAS
4	MECHANICAL SEAL	CERAMIC/VITON®	90-40-03	
		CERAMIC/EPDM	90-40-05	
5	REAR FLANGE	GRAPHITE	22-03-08	
6	I-SHAPED ROTOR	S.S.	22-02-01	
6A	D-SHAPED ROTOR	S.S.	22-02-02	
6B	F-SHAPED ROTOR	S.S.	22-02-11	
			22-07-02	70-100 l/h
			22-07-03	150 l/h
7	VANE PIN	S.S.	22-07-04	200 l/h
			22-07-05	250 l/h
			22-07-06	300 l/h





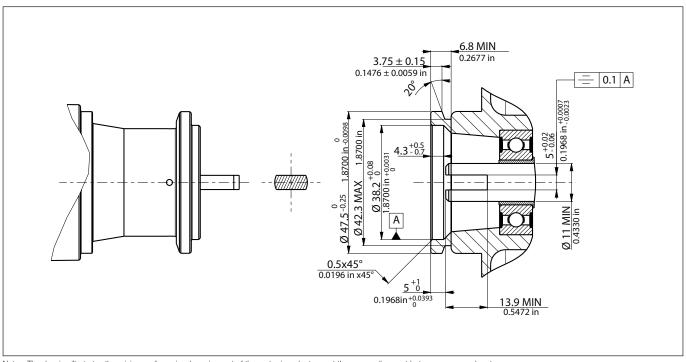
POS	DESCRIPTION	MATERIAL	CODE	NOTES
_		0.0	22-07-07	350 l/h
7	VANE PIN	S.S.	22-07-08	400 l/h
8	VANE	GRAPHITE	22-04-03	
			22-05-17	70 l/h
			22-05-18	100 l/h
			22-05-19	150 l/h
			22-05-21	200 l/h
9	LINER	GRAPHITE	22-05-23	250 l/h
			22-05-24	300 l/h
			22-05-25	350 l/h
			22-05-27	400 l/h
10	FRONT FLANGE	GRAPHITE	22-03-06	
11	ALIGNMENT PIN	S.S.	22-07-01	
		NBR	90-23-13	NSF/WRAS
12	O-RING	VITON®	90-23-21	
		EPDM	90-23-14	
13	SHAPED DISK	S.S.	22701	
14	THREADED CUP	ALUMINUM	22-08-02	
•••	TIMEADED GOT	BRASS	22307	
	OPEN BYPASS VALVE	PLASTIC	22-16-13	
15 -				
	SOLID BYPASS VALVE —	BRASS	22-16-02	
		PLASTIC	22-16-18	
16	BYPASS SPRING	S.S.	22505	
17	WASHER	NYLON®	22-12-01	NSF/WRAS
18	STANDARD BYPASS NUT	BRASS	22-20-01	
19	STANDARD BYPASS SCREW	BRASS	22-17-03	
	_	NBR	90-23-16	NSF/WRAS
20A	BYPASS SCREW O-RING	VITON®	90-23-20	
		EPDM	90-23-24	
	BALANCED BYPASS —	NBR	90-23-138	
20B	SCREW O-RING	VITON®	90-23-141	
		EPDM	90-23-140	
21	BYPASS PLUNGER —	BRASS	22-18-13	
		PLASTIC	22-18-09	
22	BALANCED BYPASS NUT	BRASS	22-20-12	
23	LOCK NUT	PLASTIC	22-20-09	
24	BALANCED BYPASS SCREW	BRASS	22-17-02	
25	BALL BEARING SEAT O-RING	NBR	90-23-26	
26	RETAINER SPRING	S.S.	22023	
27	ASSEMBLED CLAMP	S.S.	94-80-01	100 1 100
28	MAIN FILTER	S.S./PLASTIC	22-82-03	100 MESH
		NBR	90-23-03	
29	FILTER NUT O-RING	VITON®	90-23-17	
		EPDM	90-23-15	
	CIL TED WIT	DDACO	00 00 00	
30	FILTER NUT	BRASS	22-20-03 99-01-01	







Rotary vane pumps **Optional mountings**

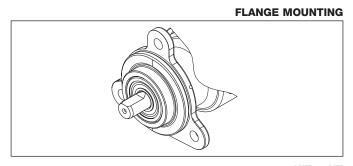


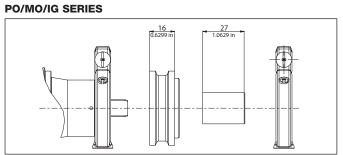
Notes: The drawing illustrates the minimum dimensional requirement of the motor in order to grant the proper alignment between pump and motor.

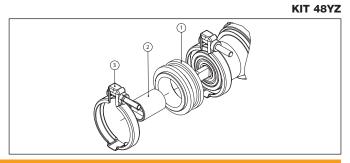
Tool AT-190_1 is available upon request to verify the compliance with the motor to the above requirements.

Misalignment between motor and pump shaft might cause excessive noise at first and damage to pump and/or motor afterwards with possible leakages of liquid and subsequent blockage of the unit.

PO SERIES



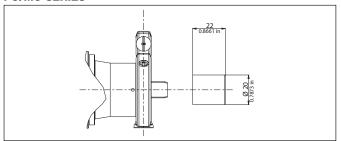




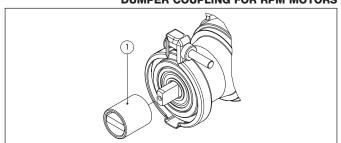
POS	DESCRIPTION	MATERIAL	CODE	QUANTITY	
_	SPACER 48 YZ	PLASTIC	92-01-04	1	
' -	HIGH TEMPERATURE SPACER 48 YZ	PLASTIC	92-01-05	1	
	CROSS COUPLING MALE/FEMALE	PLASTIC	91-03-06	1	



PO/MO SERIES

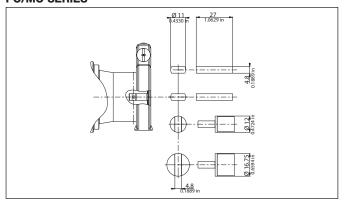


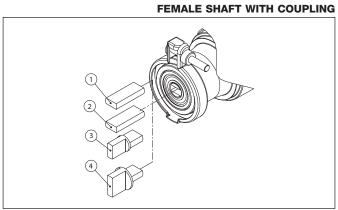
DUMPER COUPLING FOR RPM MOTORS



POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	COUPLING MALE/FEMALE	PLASTIC	91-03-05	1

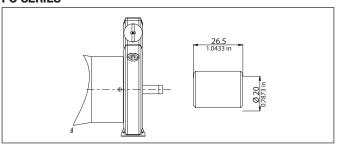
PO/MO SERIES



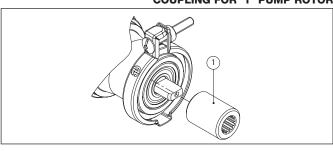


POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	FLAT COUPLING	PLASTIC	91-03-01	1
2	FLAT COUPLING	BRASS	91-03-02	1
3	CROSS COUPLING	BRASS	91-03-04	1
4	CROSS COUPLING	BRASS	91-03-03	1

PO SERIES



COUPLING FOR "I" PUMP ROTOR



POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	"I" SPLINED COUPLING	PLASTIC	91-03-11	1







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DECLARATION OF CONFORMITY

DATA: 01/06/2018

Rev.: 11

Product: ROTARY VANE PUMPS PO SERIES

Fluid-o-Tech S.r.l. declares under its own responsibility that all the rotary vane pumps manufactured comply with the safety requirements for the use they are designed for, provided that the normal operating conditions indicated in the instruction sheet attached to the product are respected.

The product complies with the following Directives:

- Directive 2014/34/EU of the European Parliament and of the Council, of 26th February 2014, related to equipments and protection devices intended to be used in potentially explosive environments - ATEX.
- D.M. 174/04 of the Health Ministry, of 6th April 2004, on materials and devices that may be used in fixed catching, treatment, adduction and distribution installations of water destined for human use.
- EC Regulation n.1935/2004 of the European Parliament and the Council of 27th October 2004 on materials and articles intended to come into contact with food products and for which migration tests are planned with simulant of type A, as required by DM n.338 of 22nd July 1998 Encl.1 Chapter 1.

Groups equipped with motors satisfy the requirements of the following Directives for the member states' legislations approaching:

- Directive 2014/30/ EU of the European Parliament and of the Council, of 26th February 2014, related to the Electromagnetic Compatibility - EMC.
- Directive 2014/35/EU of the European Parliament and of the Council, of 26th February 2014, related to the electric material intended to be used within specified voltage limits - DBT.
- Directive 2014/34/ EU of the European Parliament and of the Council, of 26th February 2014, related to equipments and protection devices intended to be used in potentially explosive environments - ATEX.
- Directive 2011/65/ EU of the European Parliament and of the Council, of 08 June 2011, and Delegated Directive 2015/863 of the Uropean Commission of 31st March 2015, on the restriction of the use of certain hazardous substances in electrical and electronic equipment - RoHS

Fluid-o-Tech S.r.l. has referred to the harmonized regulations applicable to the product which the same Directives refer to.

It is necessary to clarify that for the Directive 2014/34/EU relevant to the potentially explosive environments, the product complies with such Directive for applications in environments with characteristics EEx II 3 G2 D22, provided that the normal operating conditions indicated in the instruction sheet are respected. It is understood that the motor to which the pump is coupled needs to be complying with the same requirements.

Fluid-o-Tech S.r.l. Via Leonardo da Vinci, 40 20094 Corsico (MI), Italy Tel. +39 02 999501 Fax +39 02 99950999

THE PRESIDENT OF THE BOARD (VITTORIO ANDREIS)

> FLUID: O TECH SRL PRESIDENTE DEL CONSIGLIO D'AMMINISTRAZIONE





This certifies that

FLUID-O-TECH

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations and Scottish Water Byelaws.

20, 22, 24, 26, 28, 31, 32, 33 & 34 SERIES OF PUMPS

The certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be valid until the end of:

September 2020

1509062

Certificate No.

Secretary

Chairman, Product Assessment Group



Furna

NSF International

RECOGNIZES

FLUID O TECH S.R.L.

Facility: CORSICO, MILANO, ITALY

AS COMPLYING WITH NSF/ANSI 169. PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE AUTHORIZED TO BEAR THE NSF MARK.







Certification Program Accredited by the Standards Council

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