

Brass and stainless steel rotary vane pumps CO/MO 50-200 series

The Compact and Compact Plus series rotary vane pumps are the smallest series of the Rotoflow® line of positive displacement pumps. Capable of high performances despite the small size, the Compact and Compact Plus series is the choice when space is an issue.

Technical features and manufacturing characteristics

The Compact series housing is brass made only, while the Compact Plus series, equipped with ball bearings supporting the rotor, is available in brass or stainless steel AISI 303.

Both are assembled with a stainless steel AISI 303 rotor, carbon graphite pumping chamber and NBR seals. The inlet and outlet ports are 3/8" GAS or NPT threaded. The pumps can be connected to direct coupling motors with a stainless steel clamp. Maximum operative temperature: 70 °C (158 F).

Available upon request:

- Viton®/EPDM seals
- Built-in relief valve
- California AB 1953 compliant brass





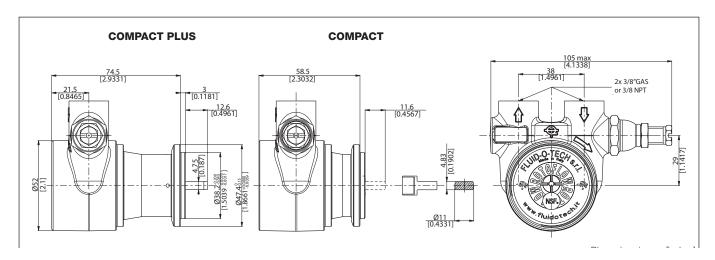


MAIN APPLICATIONS

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

Water treatment

TECHNICAL INFORMATION				
Pump housing material	Brass or stainless steel	Max static pressure	20 bar/290 psi	
Pumping chamber	Carbon graphite	Dump weight	CO 850 g (1.9 lb)	
Ports	3/8" GAS or NPT	Pump weight	MO 1 Kg (2.2 lb)	
Speed limit	1725 rpm			

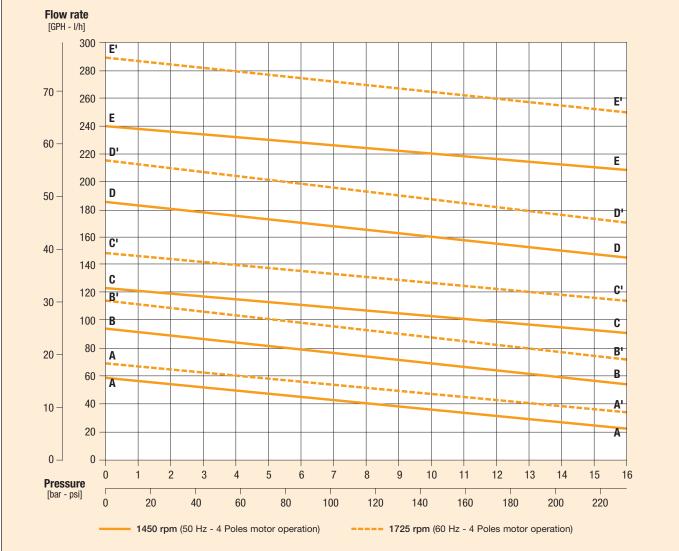






Model CO/CA/CW/CB (Compact)	050 051 054	070 071 074	100 101 104	150 151 154	200 201 204
Figure	A-A (50 Hz); A'-A' (60 Hz)	B-B (50 Hz); B'-B' (60 Hz)	C-C (50 Hz); C'-C' (60 Hz)	D-D (50 Hz); D'-D' (60 Hz)	E-E (50 Hz); E'-E' (60 Hz)
Relief valve	NO STD BAL				

Model MO/MA/MW/MB (Compact Plus)	050 051 054	070 071 074	100 101 104	150 151 154	200 201 204
Figure	A-A (50 Hz); A'-A' (60 Hz)	B-B (50 Hz); B'-B' (60 Hz)	C-C (50 Hz); C'-C' (60 Hz)	D-D (50 Hz); D'-D' (60 Hz)	E-E (50 Hz); E'-E' (60 Hz)
Relief valve	NO STD BAL				



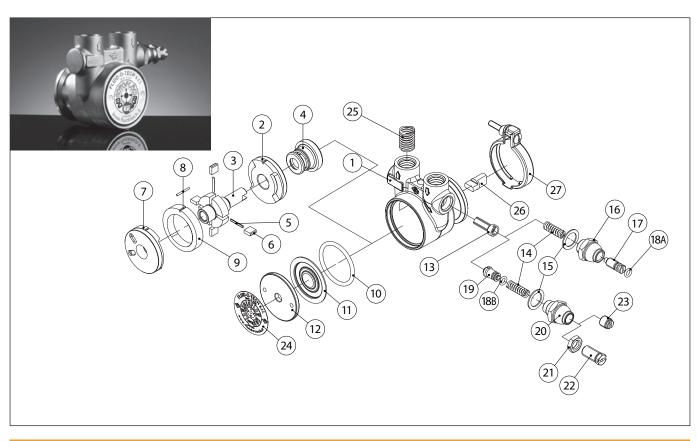
Note: Characteristics at constant motor speed, water at 20 °C (68 F) and relief valve closed. When coupling the pump to the motor the min. starting torque should be no less than 0.5 Nm. For applications involving other fluids, high temperatures or unusual processing conditions, please consult the factory or an authorized Fluid-o-Tech distributor.







Brass rotary vane pumps CO 50-200 series



POS	DESCRIPTION	MATERIAL	CODE	NOTES	
1	HOUSING	BRASS	24-01-01 24-01-09		
2	ROTOR	S.S.	24-02-02		
3	REAR FLANGE	GRAPHITE	22-03-08		
	4 MECHANICAL SEAL	CERAMIC/NBR	90-40-02	NSF/WRAS	
4		CERAMIC/VITON®	90-40-04		
		CERAMIC/EPDM	90-40-06		
				22-07-02	50 l/h
			22-07-03	70 l/h	
5	VANE PIN	S.S.	22-07-04	100 l/h	
			22-07-06	150 l/h	
			22-07-08	200 l/h	
6	VANE	GRAPHITE	24-04-03		
7	FRONT FLANGE	GRAPHITE	22-03-06		
8	ALIGNMENT PIN	S.S.	24-07-01		
			24-05-17	50 l/h	
9			24-05-18	70 l/h	
	LINED		24-05-11	100 l/h	
	LINER	GRAPHITE	24-05-12	150 l/h	
		-	24-05-13	200 l/h	



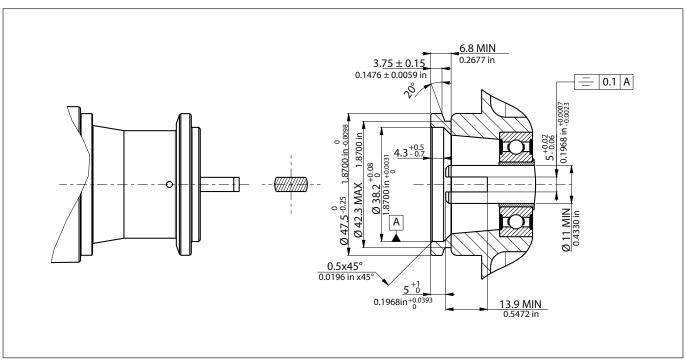


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POS	DESCRIPTION	MATERIAL	CODE	NOTES
		NBR	90-23-13	NSF/WRAS
10	O-RING	VITON®	90-23-21	
	_	EPDM	90-23-14	
11	SHAPED DISK	S.S.	22701	
12	THREADED CAP	ALUMINUM	22-08-02	
	OPEN VALVE	BRASS	22307	
13	OI EN VALVE	PLASTIC	22-16-13	
13	SOLID VALVE	BRASS	22-16-02	
	GOLID VALVE	PLASTIC	22-16-01	
14	SPRING	S.S.	22505	
15	WASHER	NYLON	22-12-01	
16	BYPASS NUT	BRASS	22-20-01	
17	BYPASS SCREW	BRASS	22-17-03	
	BYPASS SCREW O-RING	NBR	90-23-16	NSF/WRAS
18A		VITON®	90-23-20	
		EPDM	90-23-24	
		NBR	90-23-138	
18B	BALANCED BYPASS SCREW O-RING	VITON®	90-23-141	
	JONEW O-MING	EPDM	90-23-140	
		BRASS	22-18-03	
19	BYPASS PLUNGER -	PLASTIC	22-18-09	
20	BALANCED BYPASS NUT	BRASS	22-20-12	
21	LOCK NUT	PLASTIC	22-20-09	
22	BALANCED BYPASS SCREW	BRASS	22-17-02	
23	BALANCED BYPASS SCREW	BRASS	22-17-04	C2 SERIES
04	LADEL		99-01-01	
24	LABEL		99-01-02	NSF
25	SPRING	S.S.	22023	
26	COUPLING	BRASS	91-03-07	
27	ASSEMBLED CLAMP	S.S.	94-80-01	





Rotary vane pumps **Optional mountings**

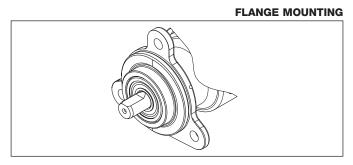


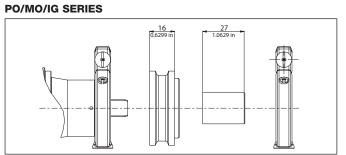
Notes: The drawing illustrates the minimum dimensional requirement of the motor in order to grant the proper alignment between pump and motor.

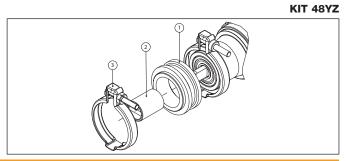
Tool AT-190_1 is available upon request to verify the compliance with the motor to the above requirements.

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



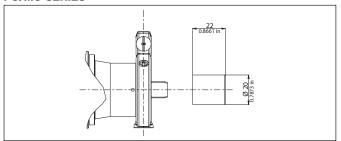




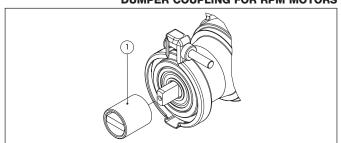
POS	DESCRIPTION	MATERIAL	CODE	QUANTITY	
4	SPACER 48 YZ	PLASTIC	92-01-04	1	
1 —	HIGH TEMPERATURE SPACER 48 YZ	PLASTIC	92-01-05	1	
	CROSS COUPLING MALE/FEMALE	PLASTIC	91-03-06	1	



PO/MO SERIES

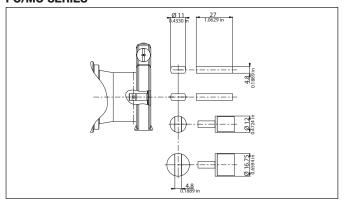


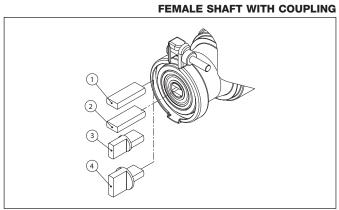
DUMPER COUPLING FOR RPM MOTORS



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

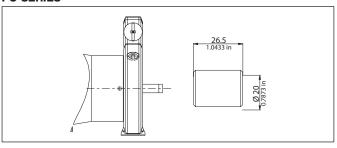
PO/MO SERIES



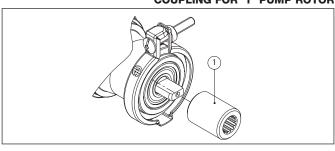


POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	FLAT COUPLING	PLASTIC	91-03-01	1
2	FLAT COUPLING	BRASS	91-03-02	1
3	CROSS COUPLING	BRASS	91-03-04	1
4	CROSS COUPLING	BRASS	91-03-03	1

PO SERIES



COUPLING FOR "I" PUMP ROTOR



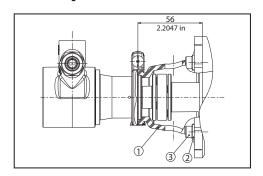
POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	"I" SPLINED COUPLING	PLASTIC	91-03-11	1



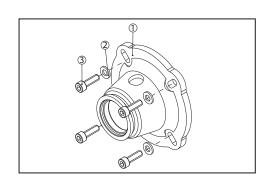




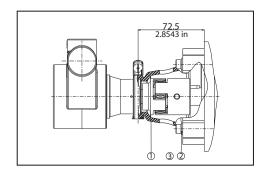
Rotary vane pumps **Adapters and Couplings**



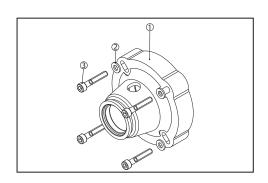
M71 - B14 (92-80-01)



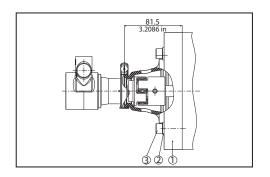
POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	ADAPTER M71 - B14	PLASTIC	92-01-01	1
2	6 MM FLAT WASHER	STEEL	90-21-07	4
3	SCREW M6X20 mm	STEEL	90-01-02	4



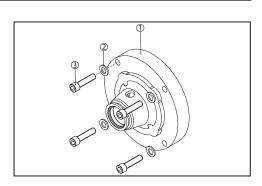
M80 - B14 (92-80-02)



POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	ADAPTER M80 - B14	PLASTIC	92-01-02	1
2	6 MM FLAT WASHER	STEEL	90-21-07	4
3	SCREW M6X35 MM	STEEL	90-01-04	4



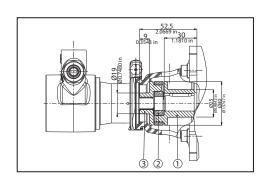
NEMA 56C (92-80-03)



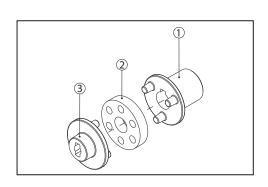
POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	ADAPTER NEMA 56C	PLASTIC	92-01-03	1
2	10 mm FLAT WASHER	STEEL	90-21-08	4
3	SCREW 3/8" 16X1-1/2"	STEEL	90-01-06	Δ



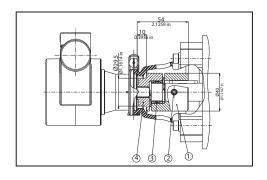




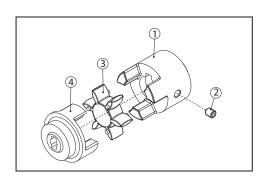
M71 - B14 (91-81-05)



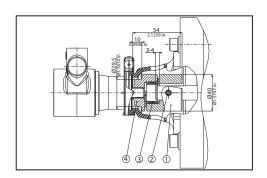
POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	COUPLING WITH 14 mm BORE	BRASS	91-01-06	1
2	INSERT	RUBBER	91-02-03	1
3	COUPLING - FLAT SIDE	BRASS	91-01-03	1



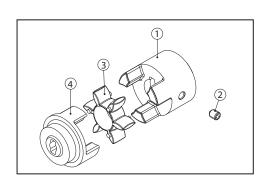
M80 - B14 (91-81-08)



POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	COUPLING WITH 19 mm BORE	STEEL	91-01-12	1
2	SET SCREW M6X8 mm	STEEL	90-03-05	1
3	INSERT	RUBBER	91-02-02	1
4	COUPLING - FLAT SIDE	STEEL	91-01-08	1



NEMA 56C(91-81-11)



POS	DESCRIPTION	MATERIAL	CODE	QUANTITY
1	COUPLING WITH 5/8" BORE	STEEL	91-01-11	1
2	SET SCREW M6X8 mm	STEEL	90-03-05	1
3	INSERT	RUBBER	91-02-02	1
4	COUPLING - FLAT SIDE	STEEL	91-01-08	1







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DIRECT DRIVE ROTARY VANE PUMPS CO-MO SERIES WARRANTY

Every new pump manufactured by Fluid-o-Tech is guaranteed to be free of defects in workmanship and material when leaving the factory for a period of 12 months from the production date stamped on the pump's housing, plus a period of 3 months to cover the warehouse and transit time, or for a period of maximum 15 months from the purchasing date to the product use. In no event shall this period exceed 15 months from date of original invoice.

Fluid-o-Tech will repair or replace at its judgement part or all of the product not conforming to this warranty. Fluid-o-Tech's responsibility under this warranty is limited to the repair or replacement of defective equipment returned to us on a D.A.P. basis, providing that our analysis discloses that such part or parts were defective at the time of sale.

The warranty is not recognized if:

- The directions on how to handle, install or operate the pump are disregarded
- The pump has been disassembled or modified by anyone other than a Fluid-o-Tech (or authorized by Fluid-o-Tech) engineer or repaired with non original components
- The pump operated dry or in cavitation
- Solid extraneous particles are found in the pump
- Evident signs of over pressure are observed compared to the values reported in the data sheet or in the specifications provided by the customer and accepted by Fluid-o-Tech
- The pump has been utilized for an application for which it was not intended to be used where the operating conditions and/or the pumped liquid were incompatible with the pump itself. Furthermore the pump was not explicitly approved by Fluid-o-Tech for such an application
- The operating pressure results to be less than 1 bar below the bypass valve setting.

The adjustment or replacement of defective parts made under this warranty will not extend the original warranty period.









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DECLARATION OF CONFORMITY

DATA: 01/06/2018

Rev.: 11

Product: ROTARY VANE PUMPS CO/MO 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

www.goharab.com ۰۲۱-۷۷۱۱۰۷۶۳ info@goharab.com ۰۲۱- ۸۹۷۸۸۶۶۷ فکس:

