

# DRIVING LIQUID POWER



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### >OUR HISTORY

#### NU.ER.T. SRL WAS ESTABLISHED IN 1988 BY MR. GIANPAOLO QUATTRIN IN THE FIRST PLANT SITUATED IN LESTANS (PN).

1991 represents the beginning of the production of professional espresso coffee machines.

During the following years the pumps range is enlarged cooperating with the major producers of drinks machines (soda, sparkling water, beer, ultra-purified water) for then developing in the industrial, aeronautic, chemical and pharmaceutical fields.

As a consequence to the entrance in these fields, magnetic drive models are developed in order to satisfy the needs of chemical resistance to aggressive liquids and the increase in the reliability and duration of the pumps in the continuous working systems.





THE EXPANDING COMPANY MOVES FIRSTLY TO THE FACTORY IN ZOPPOLA AND LATER IN THE ACTUAL STRUCTURE IN CUSANO DI ZOPPOLA IN PORDENONE PROVINCE.



### >NU.ER.T. IN NUMBERS







PRODUCTION: 130.000 pumps (per year) AVERAGE GROWTH IN TURNOVER 8% (per year)

FOREIGN SALES:

more than 60%

NU.ER.T is in constant development, thanks to customers present in over 40 countries all over the world, mainly in Europe, U.S.A., Canada, Asia (China, South Korea, India) with more than 60% turnover related to foreign sales. Nowadays the company counts on 60 partners, producing about 130.000 pumps yearly and it is in constant growth in terms of turnover, which has increased from 2015 to 2018 of an average of about 8% per year.



### >VISION TO REALIZE EXCELLENT PRODUCTS AND TO CREATE INNOVATIVE TECHNOLOGIC SOLUTIONS, EVEN PERSONALIZED, USING BIO AND ECO COMPATIBLE MATERIALS COMPLETELY SATISFYING CUSTOMER'S REQUIREMENTS.

### >MISSION

WE DO OUR BEST EVERYDAY REACHING FOR EXCELLENCE, LISTENING AND UNDERSTANDING CUSTOMER'S NEEDS. WE SUPPORT THE CUSTOMER AS A FLEXIBLE PARTNER FOR THE DEVELOPMENT AND THE SUPPLY OF ADVANCE PRODUCTS WHICH RESPECT OF THE MANKIND AND OF THE ENVIRONMENT.

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WE DESIGN AND PROJECT EACH COMPONENT OF OUR PUMPS, PRODUCING IT DIRECTLY INSIDE OUR FIRM OR FOLLOWING UP PERSONALLY THE OUTSIDE WORKING OPERATIONS.

We produce upon request, with possibility of Kanban's framework agreements, open orders or security provisions. We are flexible and able to manufacture also small batches customizing the pumps even in co-design with the customer. 100% of the pumps is checked with hydraulic and electrical tests. Upon specific customers' request, we can supply customized packaging. We can supply pumps complete of electric motors suitable

for customer's needs and for its applications or even, upon specific requirements. Over 30% of our customized products is sold with the brand

required by the customer or with the design suggested.

### >TECHNOLOGIES



WE DISPOSE OF INNOVATIVE AND CONSTANTLY UP-DATED TECHNOLOGIES

- H24 Robotized system with 5 working stations
- 2 semi-automatic or manual trial desks
- 1 trial desk for the air seal
- 1 desk for multi-tensions trials from 0,48 volt DC and from 110 to 480 volt at 50/60 Hz.
- 3D design







# >PRODUCTS

#### **MAGNETIC DRIVE PUMPS:**

>MAG-PR series >MAG-PRG series MECHANICAL SEALS PUMPS:

- > PRS series> MCR series> PRM series
- > PR series
- > PRG series

#### NUERT ROTATIVE VANE PUMPS ARE VOLUMETRIC, SELF-PRIMING AT HIGH PERFORMANCES.

The quality of these pumps is that of maintaining a flow rate almost constant by increasing the hydraulic head. Silence, low energy consumes and reduced dimensions make it a very versatile and performing product. According to the size dimensions and to the performances, we may offer the following standard series of pumps both in brass than in stainless steel.

Where required, our products are certified NSF (since 1996), MOCA, Reach, RoSH, DM174, WRAS, UL/CSA.

### > MAGNETIC DRIVE PUMPS MAG-PR PUMPS SERIES

#### ALL THE ADVANTAGES OF THE VANE VOLUMETRIC PUMPS COMBINED TO THE MAGNETIC DRIVE.

These pumps are mechanical seal-less and for that they grant an excellent endurance, without any leak or dropping even with hard liquids. Minor mechanic frictions grant an higher efficiency and an even higher reliability.Ideal for moving chemical liquids or as re-circuits pumps with low energetic consume. They can work with liquids from -30°C to +200°C. Available in stainless steel, with or without bypass valve, with different types of seals (NBR, EPDM, FKM, PTFE or Silicone). Flow rates from 50 to 1.080 I/h, with pressures up to 18 bar. Magnets available in NdFeB and SmCo. They match standard motors IEC B14 size 56,63 or 71 or motors with special connection.





#### **APPLICATIONS**

>Chemical blends
>Solar-thermic plants re-circuits
>Coffee machines
>Cooling circuits

#### >CHARACTERISTIC CURVES MAG-PR SERIES















	MAG-PR	flow rat	e (L/h) a	t 1400 rp	m	flow rate (GPH) at 1750 rpm					
	series	0 bar	5 bar	9 bar	14 bar	0 PSI	75 PSI	130 PSI	200 PSI		
ODE	MAG-PR 06	90	78	63	55	29	25	21	18		
	MAG-PR 1	125	115	110	85	41	37	36	28		
	MAG-PR 15	175	160	150	135	57	52	49	44		
9	MAG-PR 2	230	220	205	185	75	72	67	60		
M	MAG-PR 3	320	310	295	280	104	101	96	91		
đ	MAG-PR 35	370	355	340	330	120	116	111	107		
	MAG-PR 4	420	405	390	380	137	132	127	124		

Approximate flow rates referred to: pump without by-pass, motor with constant speed at 1400 rpm, water at 20°C (68°F)

Approximate flow rates referred to: pump without by-pass, motor with constant speed at 1750 rpm, water at 20°C (68°F)

### >MAGNETIC DRIVE PUMPS MAG-PRG PUMPS SERIES

#### VANE PUMPS WITH MAGNETIC DRIVE.

Vane pumps with magnetic drive. These pumps are mechanical seal-less and for that they grant an excellent endurance, without any leak or dropping even with hard liquids. Minor mechanic frictions grant an higher efficiency and an even higher reliability. Ideal for moving chemical liquids or as re-circuits pumps with low energetic consume. They can work with liquids from -30°C to +200°C. Pump body in stainless steel, with or without bypass valve, with different types of gaskets (NBR, EPDM, FKM, PTFE or Silicone). Flow rates from 50 to 1.080 I/h, with pressures up to 18 bar. Magnets available in NdFeB and SmCo.

They match standard motors IEC B14 size 71 or 80 or motors with special connection.





### APPLICATIONS

Chemical blendsSolar-thermic plants re-circuitsCooling circuits

#### >CHARACTERISTIC CURVES MAG-PRG SERIES















	MAG-PRG series	<b>flow rat</b> 0 bar	<b>e (L/h) a</b> 5 bar	<b>t 1400 rp</b> 9 bar	<b>m</b> 14 bar	<b>flow ra</b> t 0 psi	t <b>e (GPH)</b> 75 psi	<b>at 1750 r</b> 130 psi	<b>ʻpm</b> 200 psi
P CODE	MAG-PRG 5	535	510	490	475	174	166	195	155
	MAG-PRG 6	640	620	590		208	202	192	
	MAG-PRG 7	730	715	690		238	233	225	
Σ	MAG-PRG 8	830	815	800		270	265	260	
P	MAG-PRG 9	930	920	905		303	299	295	
	MAG-PRG 10	1100	1080	1070		358	352	348	

Approximate flow rates referred to: pump without by-pass, motor with constant speed at 1400 rpm, water at 20°C (68°F)

Approximate flow rates referred to: pump without by-pass, motor with constant speed at 1750 rpm, water at 20°C (68°F)

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### >MCR PUMPS SERIES

#### **COMPACT, SILENT AND HIGHLY RELIABLE PUMPS.**

Due to their small size, they are perfect for use in machines with limited space. Available in brass or stainless steel, with or without bypass valve, with NBR gaskets and motor connections. Flow rates from 50 to 150 l/h, with pressures up to 18 bar.Can be combined with special two- pole motors.









#### **APPLICATIONS**

>Coffee machines
>Carbonation
>Nebulizer machines pumps
>Mosquito control systems
>Water dispensers
>Food liquid transfer

#### >CHARACTERISTIC CURVES MCR SERIES











1/4" GAS

05,5

Ø 25 +0,07 +0,02

⊕

	MCR series	flow rat	te (L/h) a	t 1400 rp	m	flow rate (GPH) at 1750 rpm				
PUMP CODE		0 bar	5 bar	9 bar	14 bar	0 psi	75 psi	130 psi	200 psi	
	MCR 05	87	63	55	23	28	21	18	7	
	MCR 15	163	137	105	50	53	45	34	16	
	Indicative capacitie pump without bypas speed at 2800 rpm	es referred ss, motor w , water at !	<mark>d to:</mark> /ith constar 20°C (68°F	nt =)		Indicative capacities referred to: pump without bypass, motor with constant speed at 3360 rpm , water at 20°C (68°F)				

speed at 2800 rpm , water at 20°C (68°F)





### >PRM PUMPS SERIES

#### **COMPACT PUMPS, SILENT AND HIGHLY RELIABLE.**

Due to the limited overall dimensions, they are perfect to be installed on small size machines. Available in brass or in stainless steel, with or without by-pass valve, with different type of seals (NBR, EPDM or FKM) and connections to the motor. Flow rates from 50 to 270 I/h, with pressures up to 18 bar. They match standard motors IEC 63 and 71 or motors with special 48 YZ connection.











#### **APPLICATIONS**

- >Coffee machines
- >Water carbonation
- >Chemical blends
- >Reverse osmosis systems
- >Water purification and ultra-purification
- >Steam cleaning machines

#### >CHARACTERISTIC CURVES PRM SERIES















	PRM	flow rat	e (L/h) a	t 1400 rp	m	flow rate (GPH) at 1750 rpm					
Щ	series	0 bar	5 bar	9 bar	14 bar		0 psi	75 psi	130 psi	200 psi	
JMP COD	PRM 05	75	62	56	43		24	20	18	14	
	PRM 08	105	94	85	75		34	31	28	24	
	PRM 15	160	150	140	135		52	49	46	44	
d	PRM 21	220	208	195	182		72	68	63	59	
	PRM 27	280	268	255	245		91	87	83	80	

Indicative flow rates referred to: pump without by-pass valve, speed 1400 rpm, water at 20°C (68°F) Indicative flow rates referred to: pump without by-pass valve, speed 1750 rpm, water at 20°C (68°F)

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### >PR PUMPS SERIES

#### THE BALANCE BETWEEN HIGH PERFORMANCES AND REDUCED OVERALL DIMENSIONS MAKE THEM THE MOST USED MODEL ON THE MARKET.

Silent and highly reliable, they are appreciated even for the wide possibility of personalization.

Available both in brass than in stainless steel, with or without by-pass valve, equipped with different types of seals (NBR, EPDM or FKM) and connections to the motor.

Flow rates from 60 to 500 l/h, with pressures up to 18 bar. They match standard motors IEC 63, 71 and 80 or motors with 48 YZ special connection.











#### **APPLICATIONS**

- >Soft drinks distributors
- >Coffee machines
- >Water carbonation
- >Cooling circuits
- >Chemical blends
- >Reverse osmosis systems
- >Water purification and ultra-purification
- >Water, perfumes or pesticides nebulization plants

#### >CHARACTERISTIC CURVES PR SERIES















PR series	flow ra	ite (L/h)	at 1400 rpm			flow rate (GPH) at 1750 rpm				
	0 bar	5 bar	9 bar	14 bar		0 psi	75 psi	130 psi	200 psi	
PR 06	90	78	63	55		29	25	21	18	
PR 1	125	115	110	85		41	37	36	28	
PR 15	175	160	150	135		57	52	49	44	
PR 2	230	220	205	185		75	72	67	60	
PR 3	320	310	295	280		104	101	96	91	
PR 35	370	355	340	330		120	116	111	107	
PR 4	420	405	390	380		137	132	127	124	
PR 5	500	490	475	458		163	159	155	149	

Indicative flow rates referred to: pump without by-pass valve, speed 1400 rpm, water at 20°C (68°F)

PUMP CODE

Indicative flow rates referred to: pump without by-pass valve, speed 1750 rpm, water at 20°C (68°F)

### >PRG PUMPS SERIES

#### **MOSTLY USED IN INDUSTRY**

These pumps boast hydraulic heads and flow rates normally comparable to the more bulky and expensive models. Available in brass and stainless steel, with or without by-pass valve, equipped with different types of seals (NBR, EPDM or FKM) and connections to the motor.

Flow rates from 500 a 1.080 l/h, with pressures up to 18 bar. They match standard motors IEC 71, 80 or 90 or motors with special 48 YZ connection.











#### APPLICAZIONI

- >Reverse osmosis systems
- >Water purification and ultra-purification
- >Water, perfumes or pesticides nebulization plants
- >Cooling circuits
- >Chemical blends

#### >CHARACTERISTIC CURVES PRG SERIES















	PRG series	<b>flow ra</b> t 0 bar	t <b>e (L/h) a</b> 5 bar	i <b>t 1400 rp</b> 9 bar	<b>om</b> 14 bar	<b>fi</b> 0	l <b>ow rat</b> psi	<b>e (GPH)</b> 75 psi	<b>at 1750 r</b> 130 psi	<b>pm</b> 200 psi
CODE	PRG 5	535	510	490	475	1	74	166	159	155
	PRG 6	640	620	590	575	2	08	202	192	187
	PRG 7	730	715	690	675	2	38	233	225	220
MF	PRG 8	830	815	800	780	2	70	265	260	254
Ы	PRG 9	930	920	905	880	3	03	299	295	286
	PRG 10	1100	1080	1070	1030	3	58	352	348	335

#### Indicative flow rates referred to: pump without by-pass valve,

speed 1400 rpm, water at 20°C (68°F)

Indicative flow rates referred to: pump without by-pass valve, speed 1750 rpm, water at 20°C (68°F)



### (A) PR (1) AS (1) A G N E (2)

A: NSF listed -: Not NSF listed Vane pump Series: PRM PR PRG PIL	Bypass valve Setting: -: 10 bar (standard) 2: 2 bar 3: 3 bar 4: 4 bar 5: 5 bar 6: 6 bar 7: 7 bar 8: 8 bar 9: 9 bar 10: 10 bar 11: 11 bar
Flow rate at 1400 rpm: 04: 40 l/h 3: 300 l/h 05: 50 l/h 35: 350 l/h 06: 60 l/h 4: 400 l/h 11: 100 l/h 5: 500 l/h 15: 150 l/h 7: 700 l/h 2: 200 l/h 8: 800 l/h 21: 210 l/h 9: 900 l/h 25: 250 l/h 10: 1080 l/h 27: 270 l/h	12: 12 bar         13: 13 bar         14: 14 bar         15: 15 bar         16: 16 bar         17: 17 bar         18: 18 bar         19: 19 bar         20: 20 bar         Bypass screw:         A: standard screw         B: screw with hole
<ul> <li>Pump body and Mounting style:</li> <li>A: Connection to the electric motor through metal clamp</li> <li>B: Pump with integrated filter. Connection to the electric motor throug metal clamp</li> <li>C: Connection to the electric motor through flange (3 holes)</li> <li>F: Connection to the electric motor through flange (2 holes)</li> </ul>	C: hexagonal screw D: hexagonal screw and locknut E: brass screw F: S/Steel screw Special body: N: standard body A: filter, 8 mm quick connection B: body for ogive tube C: PRM, 1/4" thread E: PRM, without bypass, 6 mm quick connection H: in-line 3/8" GAS I: in-line with 3/8" quick connection M: AISI 316 S/Steel without bypass O: PR, 3/8" quick connection B: DBM 8-8 mm quick connection
By-pass valve: S: normal Z: bilanced H: without bypass T: normal + cover cup	R: 1/8" side conection T: PR, 12-12 quick connection V: PRM, 8-6 mm quick connection V: PRM, 8-6 mm quick connection In/out: G: cylindrical thread (GAS) N: conical thread (NPT) A: quick connection
Pump body material: 1: brass 2: low Lead Brass (Pb < 0,25%) X: stainless Steel	Rotor: A: standard for PR series (I) style B: flange for PR series (D) style C: female for PR series D: standard for PRM series
Gaskets and Mechanical Seals: C: Silicon Carbide + NBR E: EPDM N: NBR S: Silicone V: FKM	E: small for PRM series (I) style F: flange for PRM series G: standard for PRG series H: female for PRG series I: flange for PRG series L: standard for PRS series M: female for PRS serie N: standard for PR series 500 l/h O: standard in AISI 316L



### >SPECIAL PUMPS:

In NU.ER.T.'s DNA lies the capacity of consultation, problem solving, innovation, service and flexibility which allow us being a serious and reliable Partner cooperating a close contact with the customer in the co-projects, development and production of customized solutions also for minimum batches. The possibilities are endless, here you can find some examples:



## >ACCESSORIES:

#### A SPECIFIC SERIES OF ACCESSORIES FOR OUR PUMPS IS AVAILABLE:

#### > External bypass

- > Insulating no-condense shells
- > Couplings and adaptors for motors IEC B14
- > Plastic separators for reducing the thermic exchange between pump and motor...and much more.



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