



**CM PUMPS AND SYSTEMS PVT. LTD.**

# Sealless Magnetic Drive Chemical Process Pumps



**CERTIFIED**

EN ISO 9001  
CERTIFICATE NO. 20100163001473  
TÜV AUSTRIA CERT GMBH



**ATEX 2014/34/EU**



## About Us

We are the Pioneer and the first Indian Manufacturer and Exporter of Sealless Magnetic Drive Centrifugal pumps used for the Industrial Segments – Chemical Process Industries, Pharmaceutical industries, Petrochemical Industries, Refineries, Water treatment plant, Metal processing industries, Recycling industries, Refrigeration industries , Heating plant and Tank storage. We offer a wide range in Magnetic Drive Centrifugal Pumps according to DIN EN 22858/ISO 2858 Standards.

Our Sales and Service support team is always prompt to serve you better and provide professional and seamless service. CM Pumps and Systems Pvt Ltd has engaged the services of leading Management Consultant to train and develop all CM Pumps personnel to serve their customers professionally and efficiently



## Our Mission and Moto

The mission and moto is to successfully develop and produce superior quality and energy efficient pump sets at right price for global market.

## Our Vision

Our Vision is to be the environment friendly, global manufacturer and supplier of high efficiency and excellent quality multi application Magnetic Drive centrifugal pumps sets.

## Our Team

The reason behind our enviable leadership in global market is the result of sustained work comes from our competent professionals. They are not only highly qualified but also are consistently working towards improvising on our innovative range of pumps as per prevailing quality standards. Our professionals make full use of available facilities to cater to ever increasing demands of various Industries.

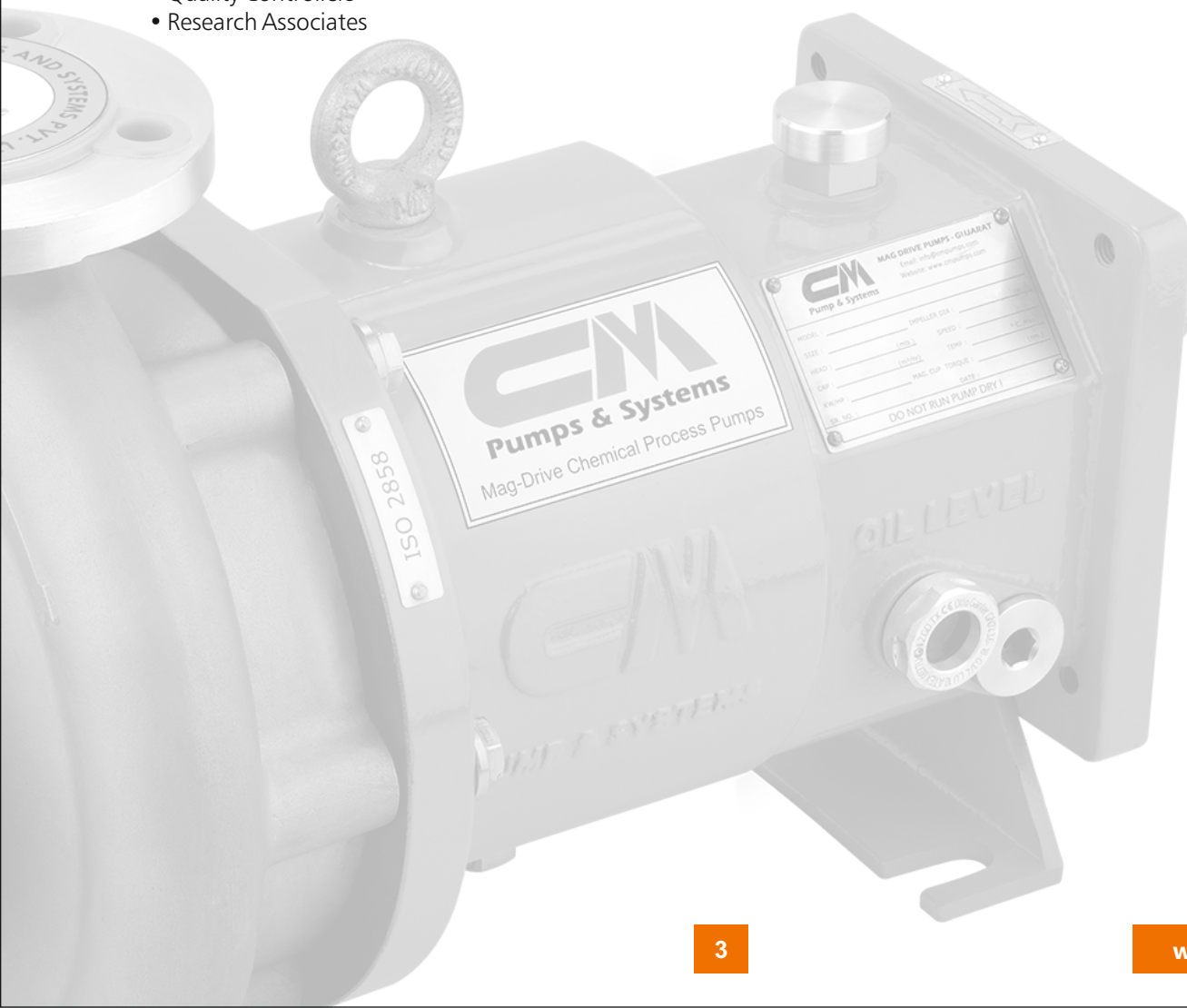
Our team comprise:

- Engineers
- Technicians
- Quality Controllers
- Research Associates

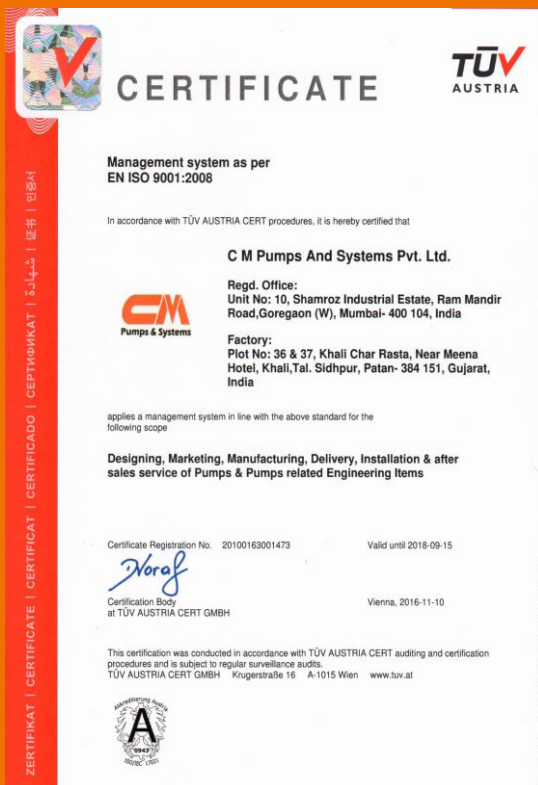
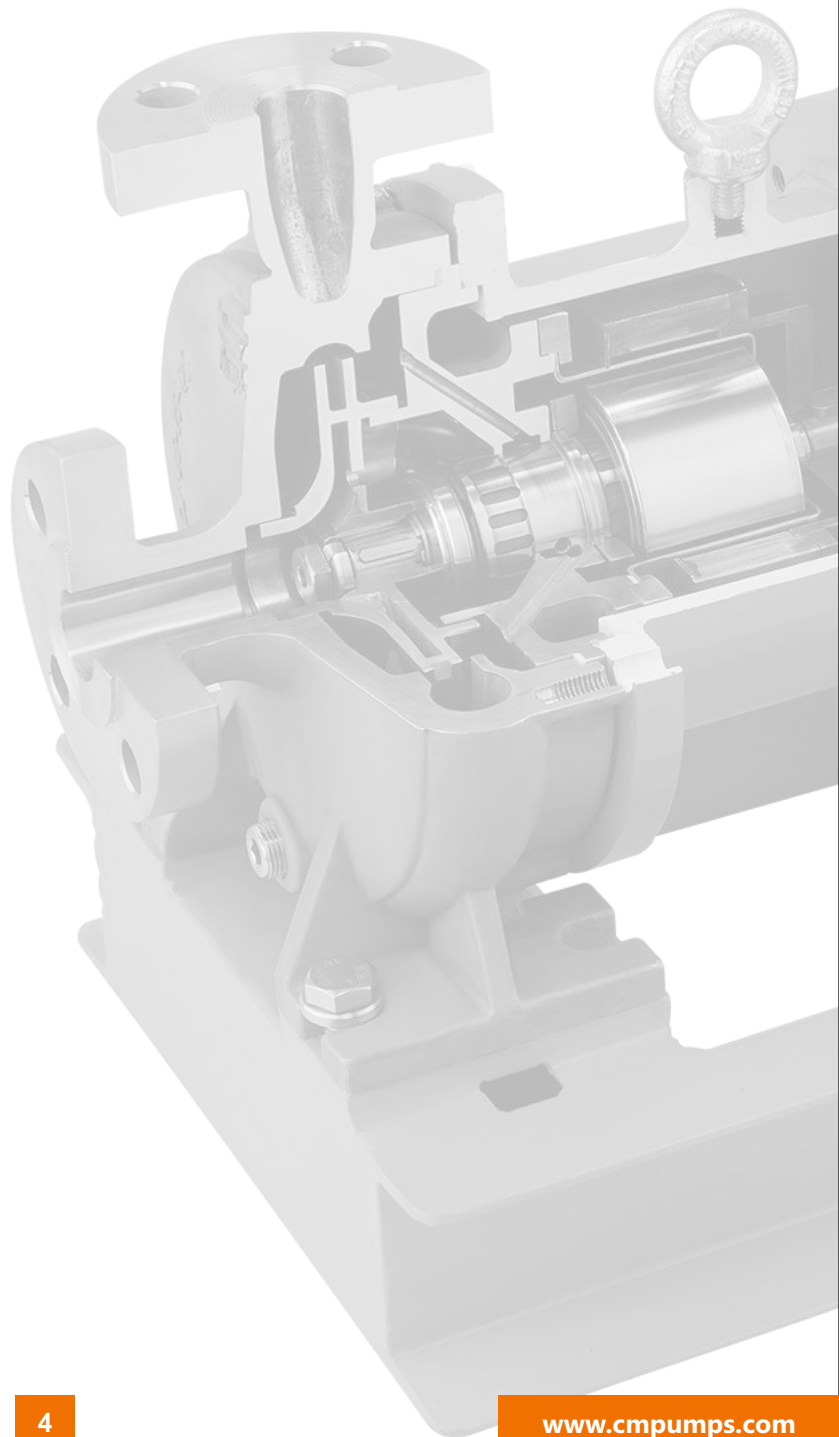
Our professionals keep themselves abreast and equivalent with latest technology and work in sync to cater to specific and customized demands of our clients. Their unstinted support and service have enabled us to come up with innovative products for our esteemed client.

## Why us?

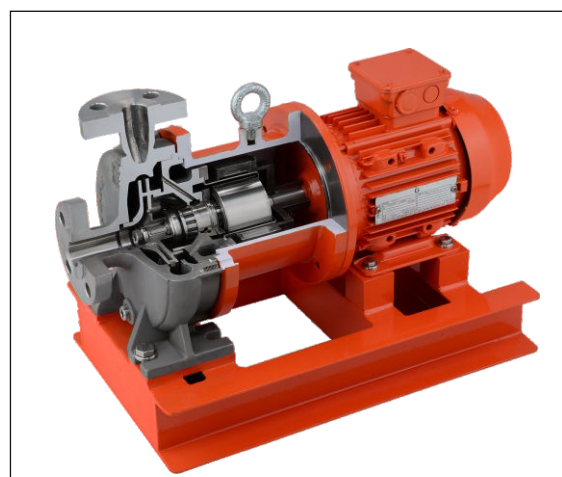
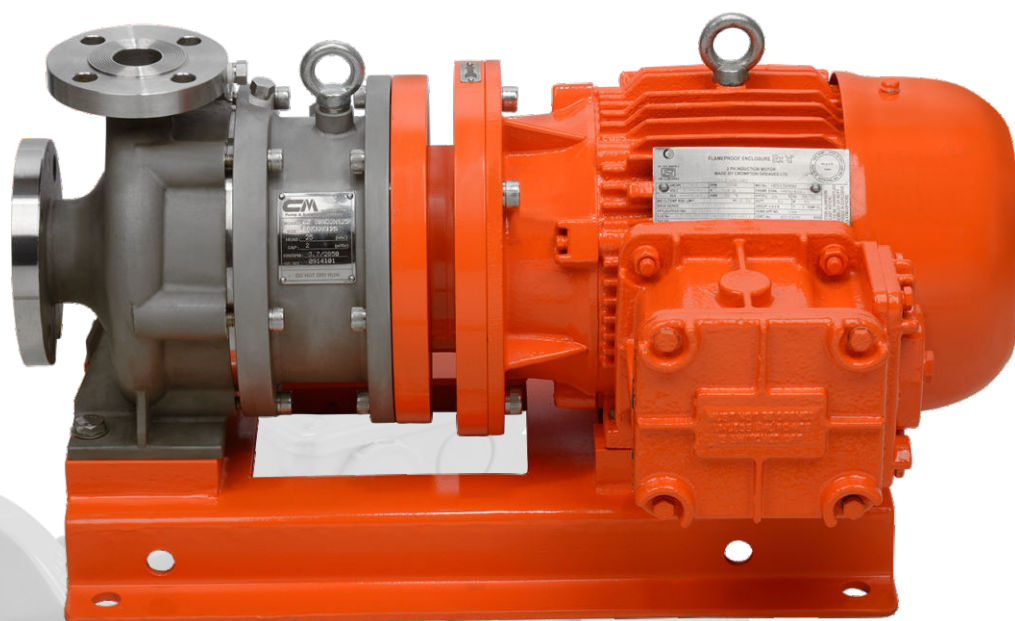
- Professional and well Managed Pvt. Ltd. Co.
- State-of-the-art infrastructure.
- Superior quality with right price.
- Shortest delivery period, with proven quality products.
- Readiness to offer required technical support.
- Prompt after sales services.
- Client-centric approach.
- Experienced professionals-competent & committed.
- Modern management technique.
- Effective quality controls measures
- Research oriented professionals.



# Certifications



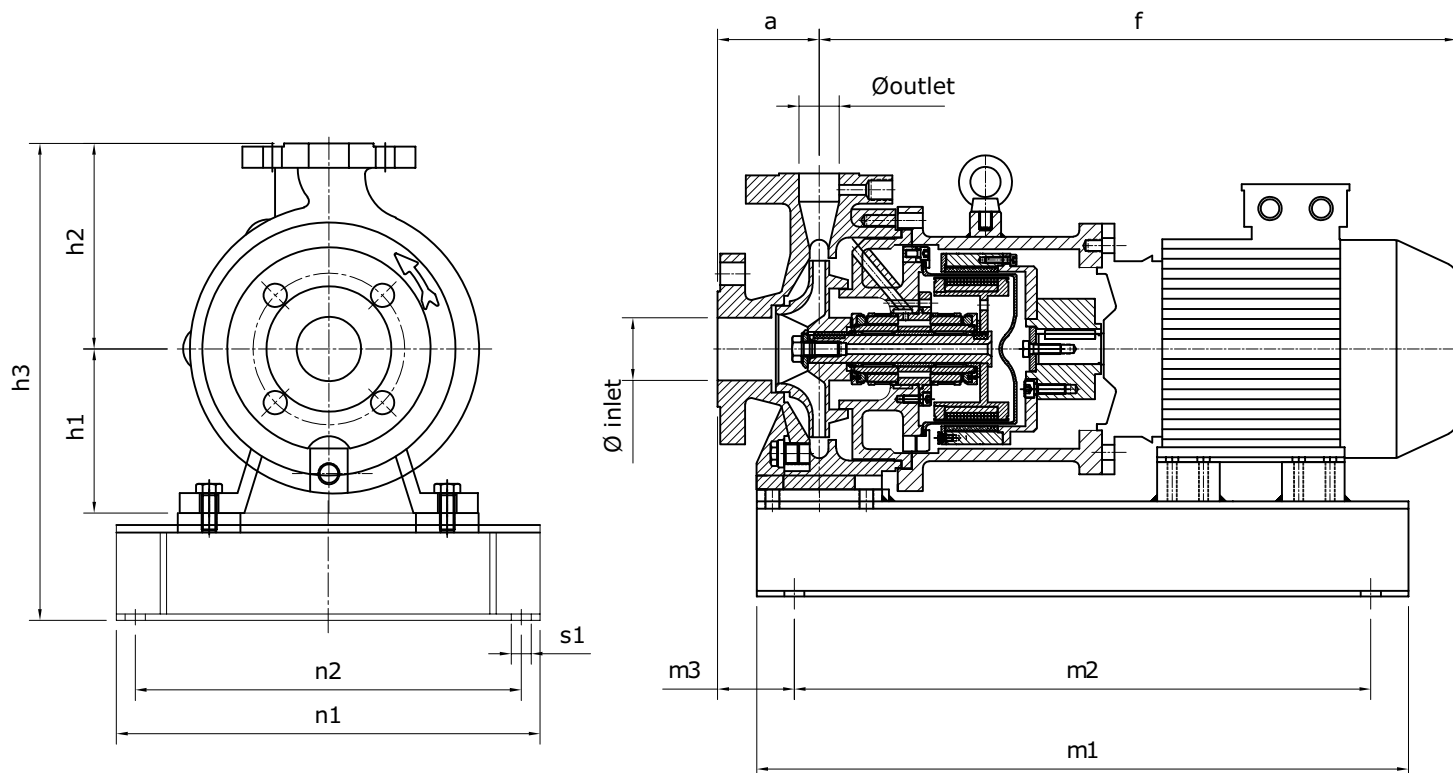
## CZ Series – SS Magnetic Drive Chemical Process Close Coupled Pump



### Description

- Single Stage, Horizontal Centrifugal Pump.
- Hydraulic Performance and Dimensions according to DIN EN ISO 2858
- Technical design based on DIN EN ISO 15783
- Permanent Magnet Drive
- Maintenance Free
- Separation of Liquid Chamber to Atmosphere by Means of Isolation Shell
- Slipless Power Transfer
- Materials : Steel, Stainless Steel, Nickel Based Materials
- Close Coupled Block Design
- Hydraulically balanced impeller for minimum bearing loads
- Product-Lubricated Journal Bearings; made of Silicon Carbide (SSiC) or Customized Materials

## CZ Series – SS Magnetic Drive Chemical Process Close Coupled Pump




### Technical Data

Operation Range  
 Flow Rate : max. 100m<sup>3</sup>/h  
 Delivery Head : max. 100 metre  
 Pressure Rating : Class 150  
 Temperatures : -35°C to +250°C  
 Kinematic viscosities : 0.5 to 350 mm<sup>2</sup>/s

### Casing & Impeller Materials

Stainless steel SS 316, SS 316L, SS 304, SS 304L  
 Other materials duplex alloys , nickel-base alloys  
 (e.g. Hastelloy®),

Working Principle : Radial flow pump  
 Stages : Single stage  
 Priming Method : Flooded suction  
 Sealing System : Magnetic coupling  
 Standards : DIN EN ISO 2858  
 Standards : DIN EN ISO 15783  
 ATEX : 2014/34/EU 

## 2 POLE (2900 RPM)

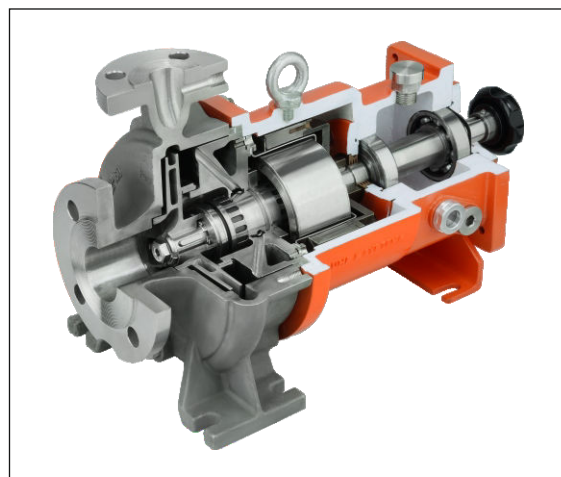
Pump Model	Size Description			Nominal duty point		Dimension in millimetres											Motor			
	∅ inlet mm	∅ outlet mm	impeller (nominal) mm	Q m <sup>3</sup> /h	H m	Pump				Support							Rated			
						a	f	h1	h2	h3	m1	m2	m3	n1	n2	S1	hp	kw	rpm	amps
CZ 25 x 25 -125	25	25	125	4	20	82	425	112	142	340	465	405	62	300	270	∅16	1	0.75	2900	1.6
CZ 32 x 25 -125	32	25	125	5	20	82	475	112	142	340	465	405	62	300	270	∅16	1.5	1.1	2900	2.3
CZ 32 x 25 -150	32	25	150	5	30	82	475	112	142	340	465	405	62	300	270	∅16	2	1.5	2900	3.1
CZ 50 x 32 -125	50	32	125	12.5	20	80	665	112	140	338	604	554	46	338	308	∅16	3/5	2.2/3.7	2900	4.3/7
CZ 50 x 32 -160	50	32	160	12.5	32	80	665	132	160	380	604	554	46	338	308	∅16	5/7.5	3.7/5.5	2900	7/10
CZ 50 x 32 -200	50	32	200	12.5	50	80	720	160	180	430	700	675	50	350	320	∅16	10/12.5	7.5/9.3	2900	13.7/16.5
CZ 50 x 32 -250	50	32	250	12.5	80	100	800	180	225	490	700	675	50	400	370	∅16	15/20	11/15	2900	19.3/26
CZ 65 x 40 -125	65	40	125	25	20	80	665	112	140	338	604	554	46	338	308	∅16	5/7.5	3.7/5.5	2900	7/10
CZ 65 x 40 -160	65	40	160	25	32	80	665	132	160	380	604	554	46	338	308	∅16	7.5/10	5.5/7.5	2900	10/13.7
CZ 65 x 40 -200	65	40	200	25	50	100	800	160	180	430	700	675	50	350	320	∅16	12.5/15	9.3/11	2900	16.5/19.3
CZ 65 x 40 -250	65	40	250	25	80	100	850	180	225	500	750	700	50	450	410	∅16	20/30	15/22.5	2900	26/37.5
CZ 80 x 50 -125	80	50	125	50	20	100	700	132	160	380	650	600	50	338	308	∅16	7.5/10	5.5/7.5	2900	10/13.7
CZ 80 x 50 -160	80	50	160	50	32	100	800	160	180	430	650	600	50	338	308	∅16	12.5/15	9.3/11	2900	16.5/19.3
CZ 80 x 50 -200	80	50	200	50	50	100	900	160	200	470	750	700	50	450	410	∅16	20/30	15/22.5	2900	26/37.5

## 4 POLE (1450 RPM)

Pump Model	Size Description			Nominal duty point		Dimension in millimetres											Motor			
	∅ inlet mm	∅ outlet mm	impeller (nominal) mm	Q m <sup>3</sup> /h	H m	Pump				Support							Rated			
						a	f	h1	h2	h3	m1	m2	m3	n1	n2	S1	hp	kw	rpm	amps
CZ 25 x 25 -125	25	25	125	2	5	82	400	112	142	340	440	400	62	300	270	∅16	0.25	0.18	1450	0.56
CZ 32 x 25 -125	32	25	125	3	5	82	400	112	142	340	440	400	62	300	270	∅16	0.25	0.18	1450	0.56
CZ 32 x 25 -150	32	25	150	3	10	82	450	112	142	340	440	400	62	300	270	∅16	0.5	0.37	1450	1
CZ 50 x 32 -125	50	32	125	6.3	5	80	600	112	140	338	580	530	46	338	308	∅16	0.5	0.37	1450	1
CZ 50 x 32 -160	50	32	160	6.3	8	80	600	132	160	380	580	530	46	338	308	∅16	1	0.75	1450	1.7
CZ 50 x 32 -200	50	32	200	6.3	12.5	100	600	160	180	430	650	600	50	350	320	∅16	1.5	1.1	1450	2.4
CZ 50 x 32 -250	50	32	250	6.3	20	100	650	180	225	490	650	600	50	400	370	∅16	3	2.2	1450	4.3
CZ 65 x 40 -125	65	40	125	12.5	5	80	600	112	140	338	580	530	46	338	308	∅16	1	0.75	1450	1.7
CZ 65 x 40 -160	65	40	160	12.5	8	80	600	132	160	380	580	530	46	338	30	∅16	1.5	1.1	1450	2.4
CZ 65 x 40 -200	65	40	200	12.5	12.5	100	600	160	180	430	650	600	50	350	320	∅16	2	1.5	1450	3
CZ 65 x 40 -250	65	40	250	12.5	20	100	650	180	225	500	650	600	50	450	410	∅16	5	3.7	1450	7.8
CZ 80 x 50 -125	80	50	125	25	5	100	650	132	160	380	580	530	50	338	308	∅16	1.5	1.1	1450	2.4
CZ 80 x 50 -160	80	50	160	25	8	100	700	160	180	430	580	530	50	338	308	∅16	2	1.5	1450	3
CZ 80 x 50 -200	80	50	200	25	12.5	100	750	160	200	470	650	600	50	450	410	∅16	5	3.7	1450	7.8

**NOTE :** 1) All above Motor KW (HP) selection is as per water.  
2) Motor KW (HP) will be change as per liquid specific gravity.

## CZ Series – SS Magnetic Drive Chemical Process



### Description


- Single Stage, Horizontal Centrifugal Pump.
- Hydraulic Performance and Dimensions according to DIN EN ISO 2858
- Technical design based on DIN EN ISO 15783
- Permanent Magnet Drive
- Maintenance Free
- Separation of Liquid Chamber to Atmosphere by Means of Isolation Shell
- Slipless Power Transfer
- Materials : Steel, Stainless Steel, Nickel Based Materials
- Hydraulically balanced impeller for minimum bearing loads
- Product-Lubricated Journal Bearings; made of Silicon Carbide (SSiC) or Customized Materials

### Technical Data

Operation Range  
 Flow Rate : max. 100m<sup>3</sup>/h  
 Delivery Head : max. 100 metre  
 Pressure Rating : Class 150  
 Temperatures : -35°C to +250°C  
 Kinematic viscosities : 0.5 to 350 mm<sup>2</sup>/s

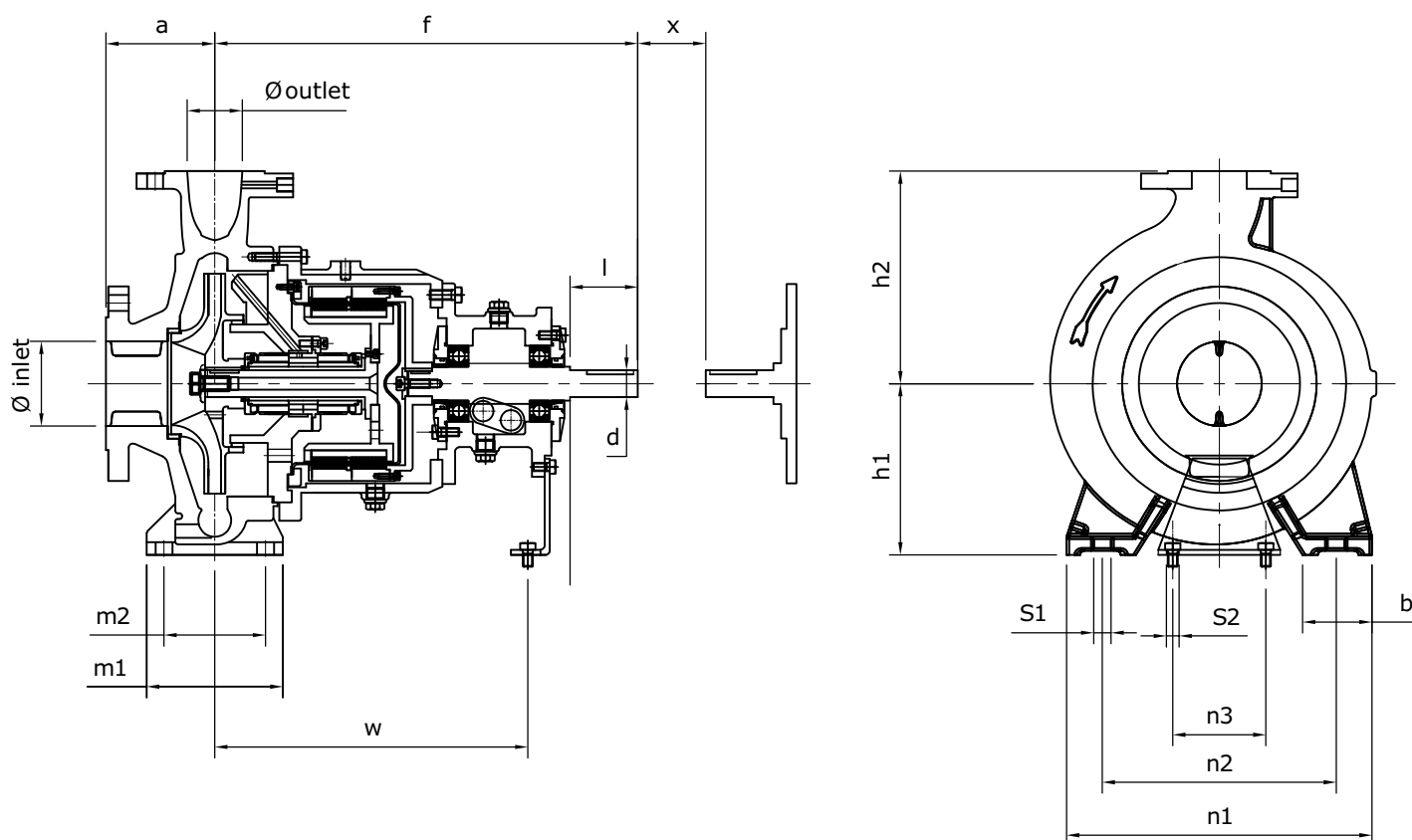
### Casing & Impeller Materials

Stainless steel SS 316, SS 316L, SS 304, SS 304L  
 Other materials duplex alloys , nickel-base alloys (e.g. Hastelloy<sup>®</sup>),

Working Principle : Radial flow pump  
 Stages : Single stage  
 Priming Method : Flooded suction  
 Sealing System : Magnetic coupling  
 Standards : DIN EN ISO 2858  
 Standards : DIN EN ISO 15783  
 ATEX : 2014/34/EU 

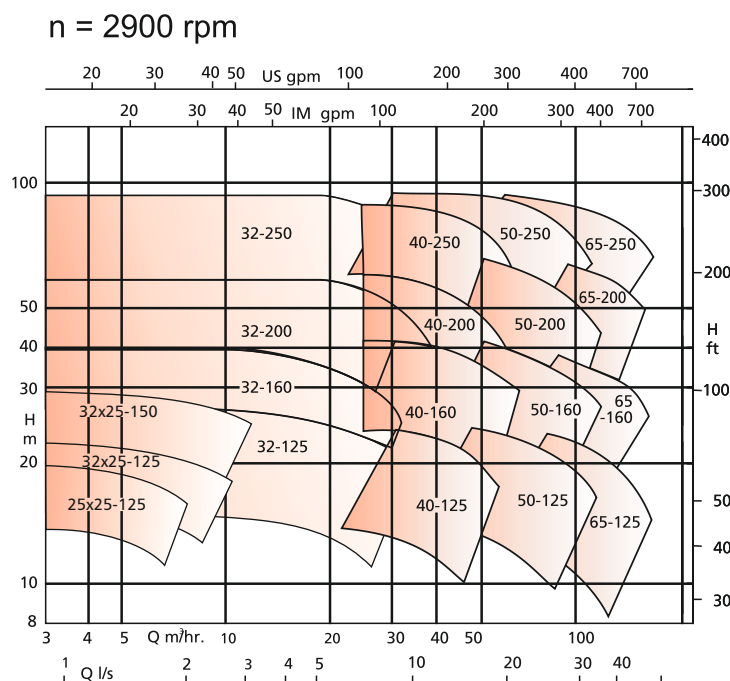
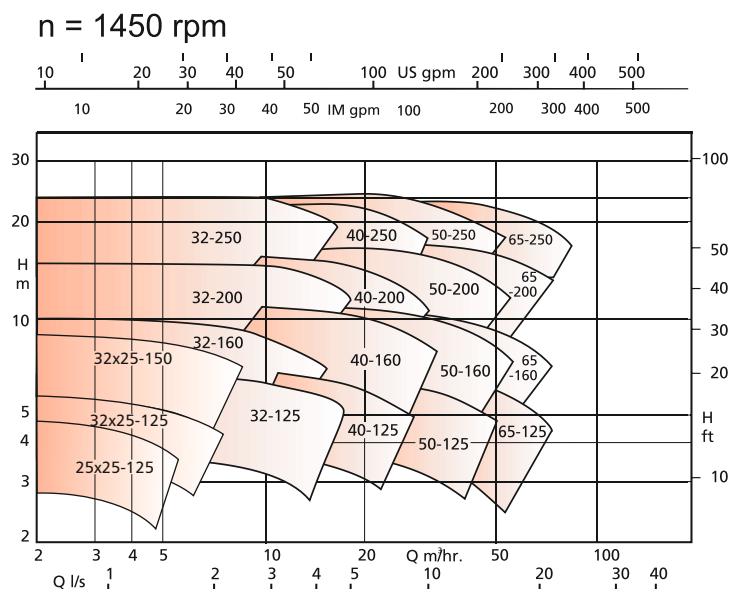


## CZ Series – SS Magnetic Drive Chemical Process



Pump Model	Size Description			Nominal duty point				Dimension in millimetres																
	Ø inlet mm	Ø outlet mm	impeller (nominal) mm	n 1450 min		n 2900 min		Pump				Support						Clearance holes for bolts		Shaft end		x		
				Q m³/h	H m	Q m³/h	H m	a	f	h1	h2	b	m1	m2	n1	n2	n3	w	S1	S2	d		l	
CZB 25 x 25 -125	25	25	125	2	5	4	20	80	312	112	142		50	100	80	190	140	50	270	M12	M10	20	35	15
CZB 32 x 25 -125	32	25	125	3	10	5	30	80	312	112	142	50	100	80	190	140	50	270	M12	M10	20	35	15	
CZB 32 x 25 -150	32	25	150																					
CZB 50 x 32 -125	50	32	125	6.3	12.5	20	32	80	385	112	140	50	100	70	190	140	110	285	M12	M12	24	50	100	
CZB 50 x 32 -160	50	32	160																					
CZB 50 x 32 -200	50	32	200																					
CZB 50 x 32 -250	50	32	250																					
CZB 65 x 40 -125	65	40	125	12.5	25	20	32	80	385	112	140	50	100	70	210	160	110	285	M12	M12	24	50	100	
CZB 65 x 40 -160	65	40	160																					
CZB 65 x 40 -200	65	40	200																					
CZB 65 x 40 -250	65	40	250																					
CZB 80 x 50 -125	80	50	125	25	50	20	32	100	385	132	160	50	100	70	240	190	110	285	M12	M12	24	50	100	
CZB 80 x 50 -160	80	50	160																					
CZB 80 x 50 -200	80	50	200																					
CZB 80 x 50 -250	80	50	250																					
CZB 100 x 65 -125	100	65	125	50	100	20	32	100	385	160	180	65	125	95	280	212	110	285	M12	M12	24	50	100	
CZB 100 x 65 -160	100	65	160																					
CZB 100 x 65 -200	100	65	200																					
CZB 100 x 65 -250	100	65	250																					
CZB 100 x 65 -250	100	65	250		20	80	125	125	500	200	250	80	160	120	360	280		370	M16		32	80	140	

## Performance Curves



## Industries

- Chemical Processing : basic and fine chemicals
- Agrochemicals, speciality chemicals
- Pharmaceuticals
- Biotechnology processing
- Food and beverage
- Pulp and Paper
- Refinery & Petrochemicals
- Metal processing
- Tanks storage

## Processes

- Aseptic Processes
- Chlor-alkali electrolysis
- MDI Processes
- Refrigeration and heating cycles
- Tank unloading
- TDI Processes

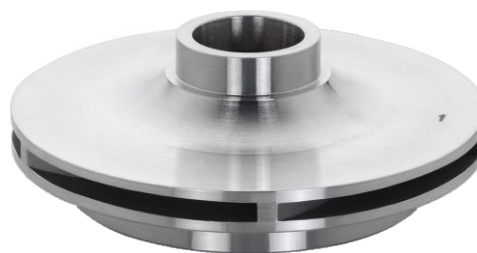
## Fluids

- Hydrogen peroxide
- Molten Sulphur
- Nitric Acid
- Oleum
- Phosgene
- Phosphoric acid
- Potassium hydroxide solution
- Sodium hydroxide solution
- Sulphuric acid
- Toluene
- Solvents
- Alkalis
- Toxic liquids
- Corrosive liquids

## Basic Components



**Cartridge Bearing**



**Impeller**



**Drive Magnet**



**Casing**



**Casing Cover**



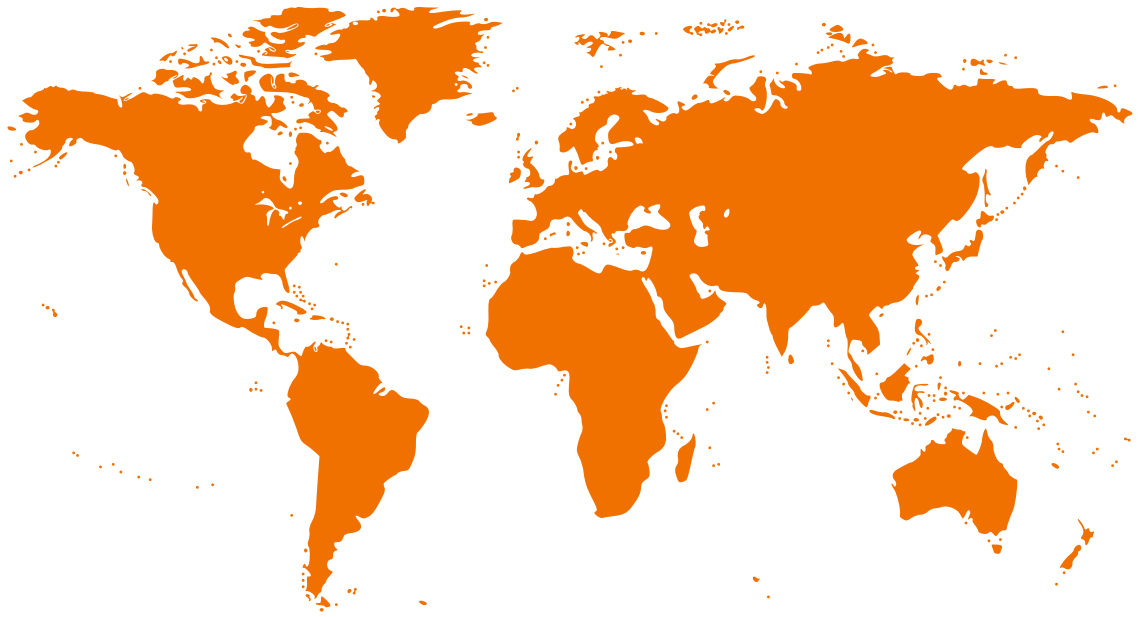
**Can**



**Driven Magnet**



**Shaft**



DISTRIBUTOR



## **CM PUMPS AND SYSTEMS PVT. LTD.**

**Head Office :** Unit No. 10, 1st Floor, Shamroz Indl. Estate,  
Ram Mandir Road, Opp. Movie Star Cinema,  
Goregaon (W), Mumbai - 400104. Maharashtra (INDIA)

**Tel.:** +91-22-26764504 / 05 / 06

**Email:** info@cmpumps.com / cmpumpsystems@gmail.com

**Website :** www.cmpumps.com

**Factory:** Plot No. 36-37, Khali Char Rasta, Near Meena Hotel, Khali,  
Ta.: Siddhpur, Patan – 384151 GUJARAT, (INDIA).