

# KENDALL PUMPS

RELIABLE PUMPS

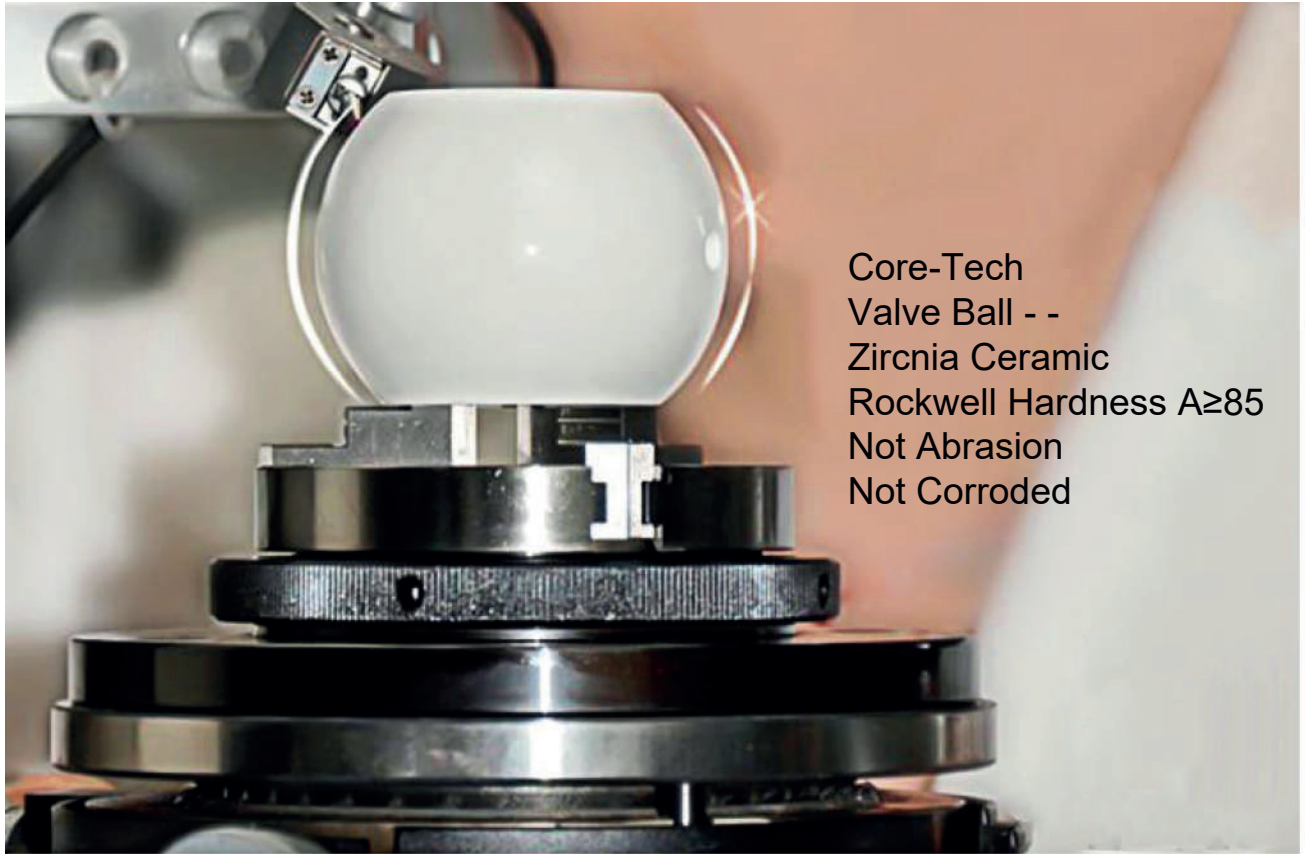


**Mechanical Diaphragm Metering Pump  
MZ/MD - SERIES**

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◆ OUR CORE TECHNOLOGY

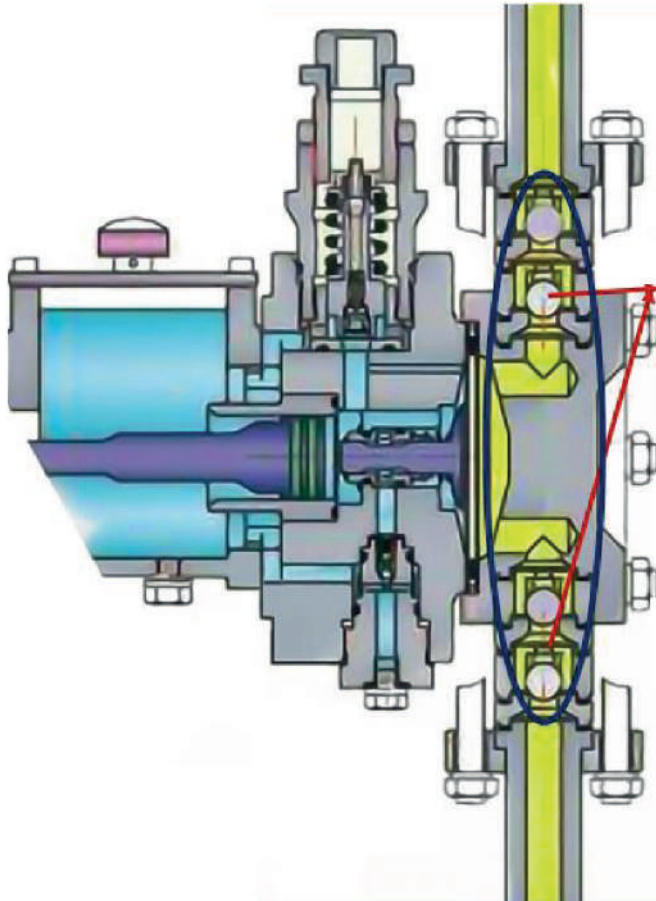


Core-Tech  
Valve Ball - -  
Zirconia Ceramic  
Rockwell Hardness A $\geq$ 85  
Not Abrasion  
Not Corroded

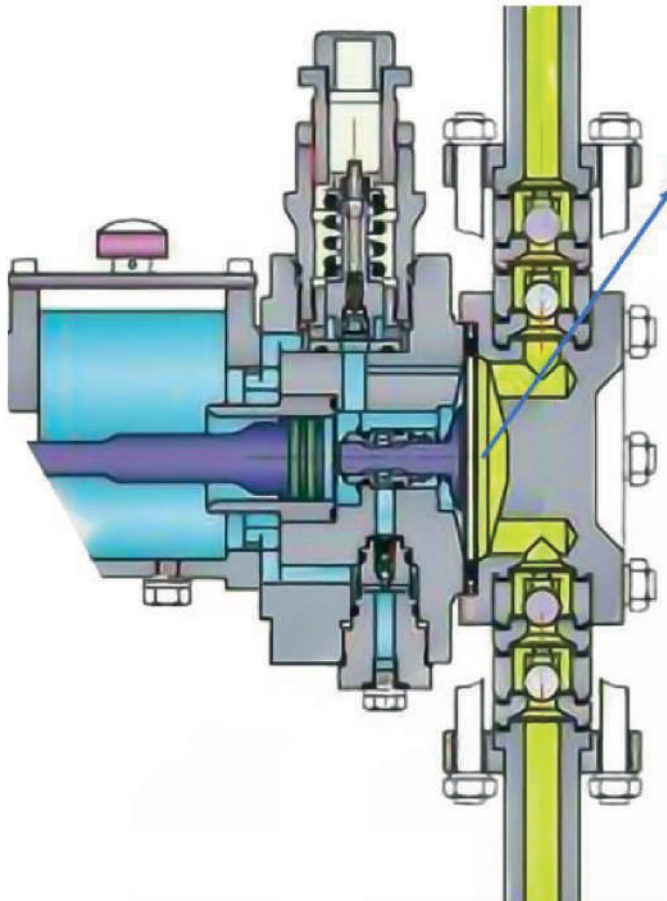
- Inlet & Outlet Both Double Check Valve Balls.
- Check Valve Ball and The Valve Set Material---- Zirconia Ceramic.
- Ceramic are sintered at 1680 °C&HRA  $\geq$  85 for long - life pump head no wear and no corrosion



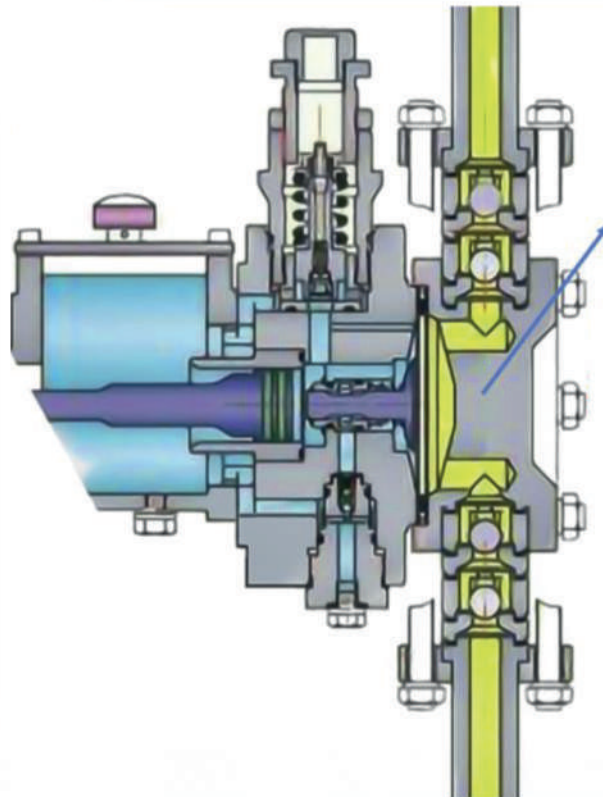
Zirconia Ceramic for  
Check Valve Ball  
Valve Seat  
Valve Guide



**Double Check Valve Balls**  
Input/Output Check Valves  
Both With Double Balls.  
Double Zirconia Ceramic  
Check Balls Just For  
Permanent One-way



**Double Layer Diaphragm**  
PTFE + EPDM  
Double Diaphragms.  
1-PTFE Contact With Liquid  
2-EPDM is Not Wet-end  
Double Diaphragm  
Double Protection  
Just For Long Life.



### 4 Kinds Materials

#### Head Materials

High-precision mold making  
Strong & Never Leakage.

- 1-PVC
- 2-PVDF
- 3-SS304
- 4-SS316

## ◆ FLUID CORROSIVE VS MATERIALS LIST

Fluids and Materials Recommendation Form

Fluid	Ceramic	PVDF	PP	PVC	PTFE	FPM	EPDM	PE	SUS316
CH3COOH(75%)	○	●	●	●	●	x	●	●	●
AL2(SO4)3	●	●	●	●	●	●	●	●	●
R-NH2	●	○	●	x	●	x	○	●	●
Ca(OH)2	●	●	●	●	●	●	●	●	●
Ca(OCL)2	●	●	●	●	●	●	●	●	x
CuSO4	●	●	●	●	●	●	●	●	●
FeCL3	●	●	●	●	●	●	●	●	x
HF(40%)	x	●	●	○	●	●	x	●	x
HCL	●	●	●	●	●	●	x	●	x
H2O2(30%)	●	●	●	●	●	●	○	●	●
HNO3(65%)	●	●	○	x	●	●	x	○	○
H3PO4(50%)	●	●	●	●	●	●	●	●	○
NaOH	○	●	●	●	●	○	●	●	●
NaHSO3	●	●	●	●	●	●	●	●	○
Na2CO3	○	●	●	●	●	○	●	●	●
NaOCL-NaCL	●	●	●	●	●	●	●	●	x
H2SO4(85%)	●	●	●	●	●	●	x	●	○
H2SO4(98.5%)	●	●	x	x	●	●	x	x	x
KMnO4(10%)	●	●	●	●	●	●	●	●	●

●	GOOD
○	Ordinary
x	NO



**MZ Series/PVC Pump Head**



**MZ Series/PVDF Pump Head**



**MZ Series/SS Pump Head/  
Flange Connection**



**MD Series/SS Pump Head  
Inverter Motor**



**MD Series/SS Pump Head  
Explosion-proof Motors**



**MZ Series/PVC Pump Head**



**MD Series/PCV Pump Head**

**Color Can Be Customized**

◆ **MODEL INTRODUCTION**

MO XXX / YY – 000		
Code	Pump Parameters	
M	Mechanical Diaphragm Metering Pump	
○	Z	Z Series 2.25-500Lhr
	D	D Series 82-2000L/hr
	X2	Double Pump Head 50-480L/hr
	D2	Double Pump Head 1300-5800L/hr
XXX	Flow Rate (L/hr or ml/min)	
YY	Pressure Max (Bar)	
○	1	Pump Head Material - PVC
	2	Pump Head Material - PP
	3	Pump Head Material - PTFE
	4	Pump Head Material - PVDF
	5	Pump Head Material - SUS304 or CF8
	6	Pump Head Material - SUS316L or CF3M
○	1	Power Supply - 380VAC/50Hz
	2	Power Supply - 220VAC/50Hz
	3	Power Supply - 420VAC/50Hz
	4	Power Supply - 110VAC/50Hz
	5	Power Supply - DC24V
○	1	Normal Motor
	2	Inverter Motor
	3	Explosion - Proof Motor



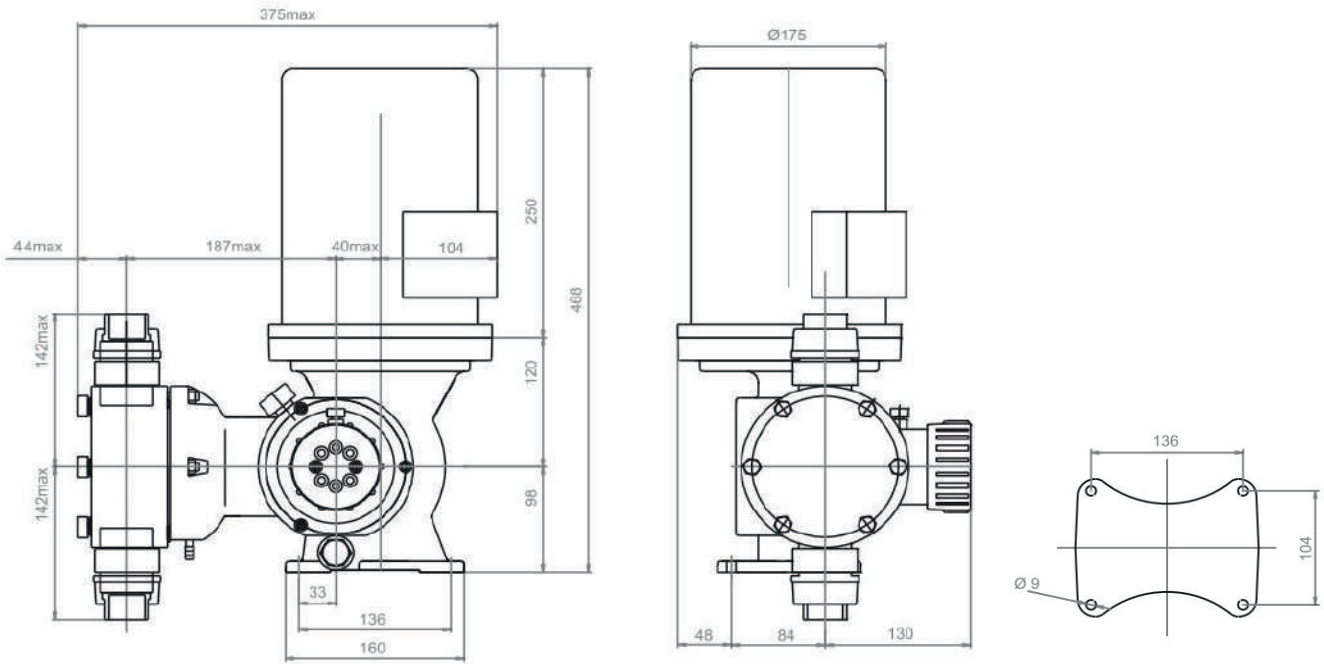
◆ **MZ/MD MODELS & PARAMETERS**

Pump Model	Flow Rate (L/hr)	Pressure (Bar)	Diaphragm	Motor (KW)	Connection Size	Weight (Kg)
MZ-2.25-12	2.25	12	PTFE	0.37	DN15	18
MZ-4.5-12	4.5	12				
MZ-09-12	9	12				
MZ-22-12	22	12				
MZ-44-12	44	12				
MZ-85-10	85	10				
MZ-120-7	120	7				
MZ-170-7	170	7				
MZ-240-7	240	7				
MZ-315-5	315	5		0.55	DN25	
MZ-400-5	400	5				
MZ-500-5	500	5				

Pump Model	Flow Rate (L/hr)	Pressure (Bar)	Diaphragm	Motor (KW)	Connection Size	Weight (Kg)
MD-82-10	82	10	PTFE	0.55	DN15	30
MD-167-10	167	10				
MD-237-10	237	10				
MD-334-10	334	10		0.75	DN25	
MD-410-10	410	10				
MD-460-7	460	7				
MD-580-7	580	7				
MD-656-4	656	4		1.5	DN40	40
MD-940-3	940	4				
MD-1200-3	1200	4				
MD-1500-3	1500	3				
MD-1800-3	1800	3				
MD-2000-3	2000	3				

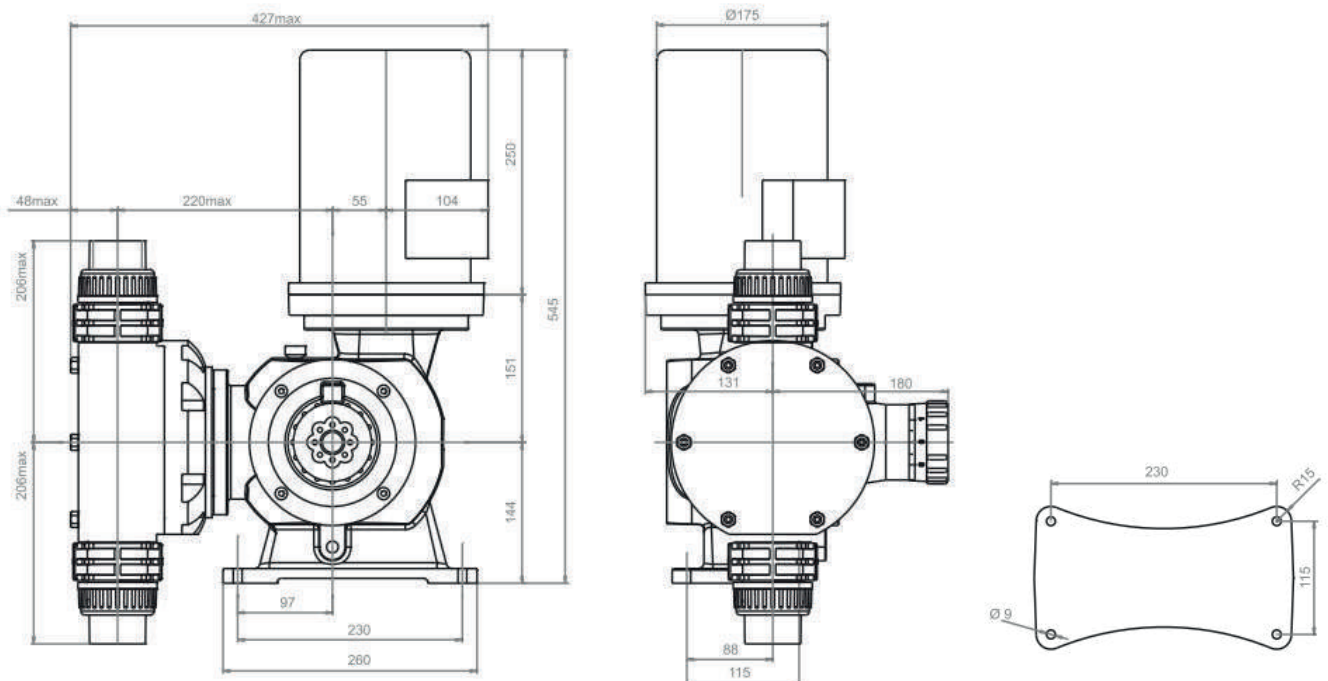
◆ **DIMENSIONAL DRAWINGS**  
◆ **MZ SERIES**

DN 15 PIPE/DN25 PIPE



◆ **MD SERIES**

DN 15 PIPE/DN25 PIPE/DN40 PIPE



# KENDALL PUMPS

RELIABLE PUMPS