

Horizontal Metering Valve Type HZ "Special-Duty"

A totally different rotary valve

Horizontal metering valves can be used for continuous, controlled discharge and dosing of virtually all products stored in silos or hoppers. Horizontal rotary valves combine a large inlet area with a relatively small rotor volume. Even poor flowing products susceptible to bridging and rat holes can be discharged accurately at high rates by fitting specially designed agitators to the vertical rotor shaft.

It can be readily applied to feed products into pneumatic conveying systems with no resistance to flow from air leakage through the valve.

Application

For gravity feed applications and pneumatic conveying systems

By combining the three basic functions of discharging, dosing and pressure differential containment into one device, it is possible to replace a bin activator, feeder and standard rotary valve combination with a single horizontal valve

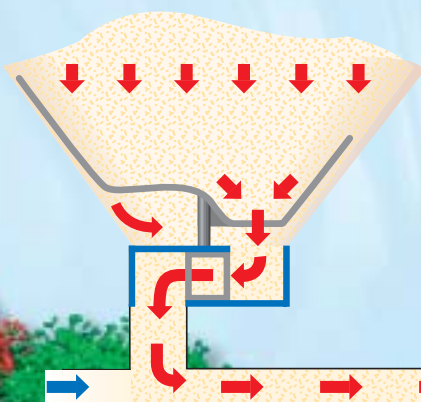
- **Type HZK:** with chain transmission
- **Type HZMP:** with direct drive



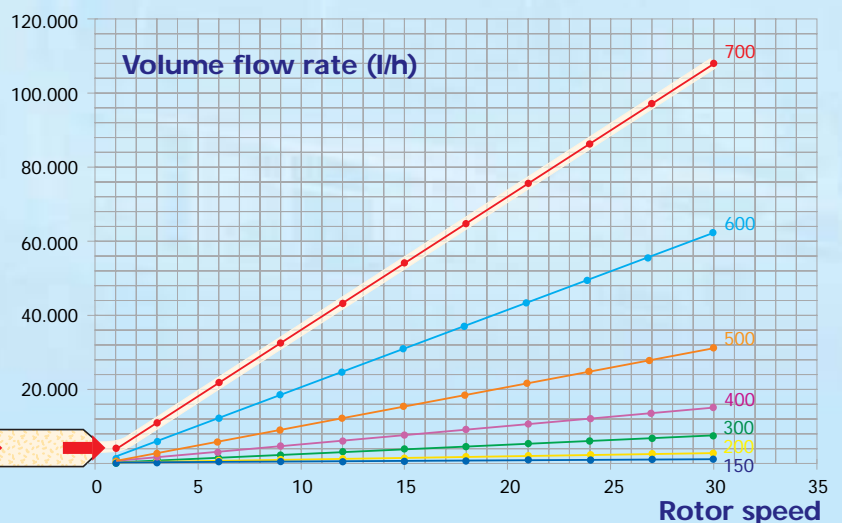
Valve features

- ATEX 95 certified for both dust and gas zones
- Explosion shock resistant up to 10 bar
- Flange size: DN150 - DN700
- Feed rate: up to 100.000 l/h
- Max. operating pressure differential: 1,5 bar
- Standard design temperature: 120 °C
- Highly accurate and repeatable dosing characteristics
- Accurate dosing of poor flowing materials
- Self-contained activation of product flow
- Large inlet area with connection flange PN10/ PN6/ANSI
- Product agitators available for poor flowing materials
- Pulsation-free feed of the product
- Complete emptying of rotor pockets
- Consistent high filling efficiency of rotor
- Constant product flow relative to rpm

Operating Principle



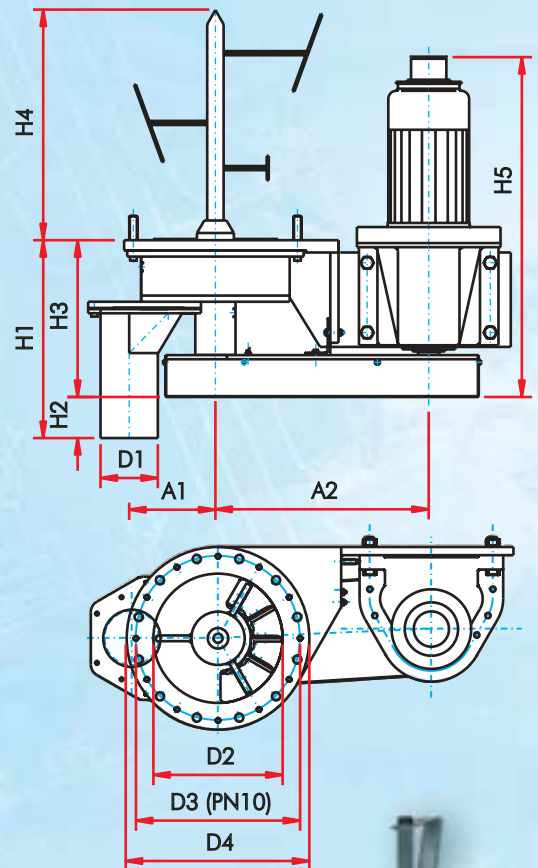
Capacity chart Type HZ 150-700



Dimensions horizontal rotary valve

Valve size	Rotor vol.	A1	A2	D1	D2	D3	D4
150	0,5	120	260	60,3	155	240	285
200	1,4	150	350	76,1	215	295	340
300	4	220	465	88,9	310	400	445
400	11	285	594	114,3	395	515	565
500	23	285	870	168,3	495	620	670
600	35	360	900	219,1	595	725	780
700	60	420	950	273	695	840	895
Valve size	Rotor vol.	H1	H2	H3	H4	H5	Weight (kg)
150	0,5	400	100	300	250	540	77
200	1,4	425	100	325	400	550	115
300	4	480	100	380	480	580	210
400	11	670	110	560	520	820	460
500	23	700	110	590	580	860	565
600	35	800	120	680	700	950	850
700	60	900	120	780	800	1060	1060

Note: All dimensions are approximate and subject to change



Valve construction

Body and end covers

- Steel S235JR, S355JR, stress relieved
- Steel S235JR, internally hard chrome plated
- Steel S235JR, chemically nickel plated
- Steel S235JR, internally Tungsten Carbide coated
- Stainless steel DIN 1.4301 / 1.4401

Rotors

- Steel S275JR
- Steel S275JR, hard chrome plated shaft ends
- Steel S275JR, Tungsten Carbide coated shaft ends
- Stainless steel DIN 1.4301 / 1.4401

Rotor blades

- Steel S275JR
- Steel S275JR, hardened
- Stainless steel DIN 1.4301 / 1.4401
- Polyurethane (PUR)
- Brass/bronze (non-sparking applications)
- Hardox 400

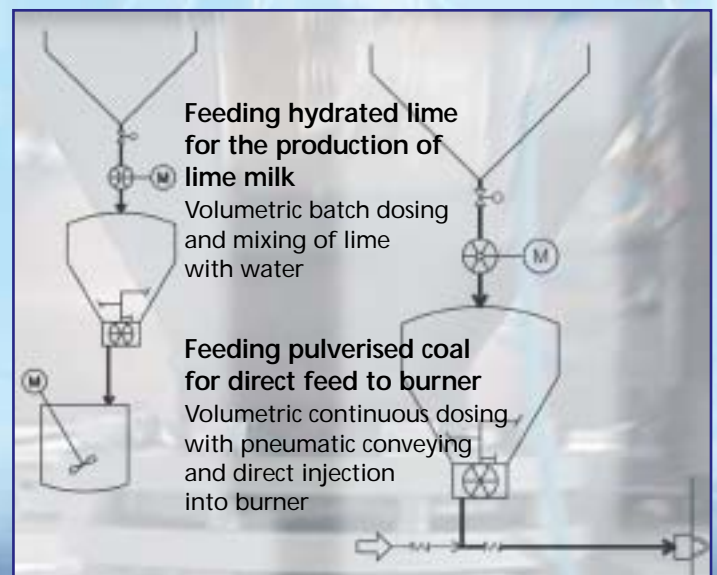
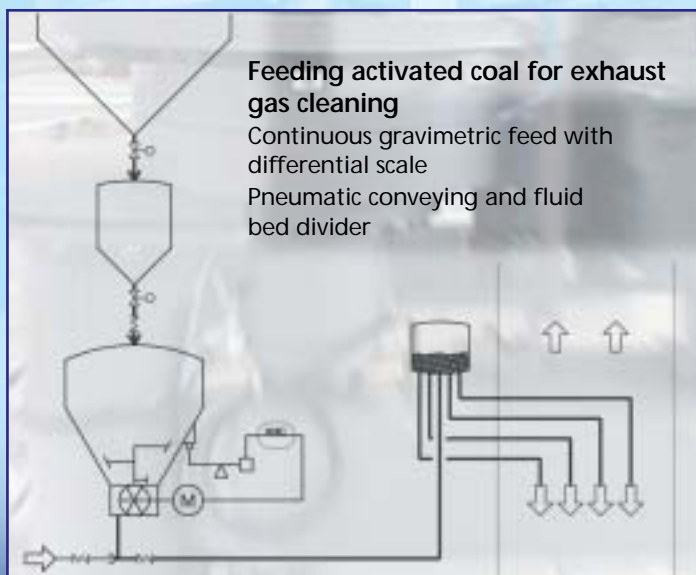
Horizontal metering valve type HZMP with direct drive and agitator.

Application: volumetric dosing and discharging of bentonite and barite.

Capacity: 30.000 ltr/hr



Type HZMP 400



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