

KPM KS Pulp Samplers

Testing and industry-specific instruments



With high performance sampling for screened and unscreened applications, ABB offers the widest portfolio of cost-effective, durable and versatile sample valves for all applications. The KPM KS2 covers low consistency screened applications. The KPM KS4 and KPM KS6 samplers handle unscreened extractions with a cutting piston.

Manual and pneumatic versions available

KPM KS2 is available in manual and pneumatic versions; KPM KS4 and KPM KS6 are pneumatically operated only. Saddle and threaded mounts are options for KPM KS2 and KPM KS4 samplers, while KPM KS6 is saddle mounted only.

Safe and representative sampling

The KPM KS-line sampler heads penetrate the water layer inside the pipe, eliminating dewatering from the sampling process. KPM KS4 and KPM KS6 have stroke depth adjustment for sample flow, ensuring reliable operation with unscreened pulp.

Water flushing

A separate water connection allows cleaning of the sample valve after a collection. Flushing ensures a repeatable and representative sampling procedure.

Reduced maintenance costs

All KPM KS samplers have seal-less construction, allowing a maintenance-free operation.

Pneumatic operating valve

All pneumatic KPM KS samplers are equipped with an operation valve. An optional electric switch detects the pistons position.

Optional indicator

Electric position indicator for sampling pistons enables time stamping in the DCS.

Specifications	
Consistency range	KPM KS2: Low consistency 0–8% Cs screened pulp KPM KS4: Low consistency 0–8% Cs screened and unscreened pulps, no knots KPM KS6: Medium consistency 0–18% Cs screened and unscreened pulps
Process connection	KPM KS2: NS40 Sandvik Saddle or threaded NPT1½" Materials: AISI316L, titanium Gr2, 254SMO, SAF2205 KPM KS4: NS40 Sandvik Saddle or threaded NPT1½" Materials: AISI316L, titanium Gr2, 254SMO, SAF2205 KPM KS6: NS70 Sandvik Saddle or Materials: AISI316L, titanium Gr2, 254SMO, SAF2205, titanium saddle for FRP-pipes DN80 flange AISI316L, titanium Gr2, 254SMO, SAF2205
Flush water connection	KPM KS2: R¼" internal thread, compatible with NPT¼" KPM KS4: R½" external thread, compatible with NPT½" KPM KS6: R½" external thread, compatible with NPT½"
Flush water pressure	2–10 bar (30–150 psi)
Air pressure (P-models)	KPM KS2: 2–10 bar (30–150 psi), KPM KS4: 2–10 bar (30–150 psi), recommendation min 4 bar (60 psi) KPM KS6: 5–10 bar (30–150 psi), recommendation min 5 bar (75 psi)
Sample outlet connection	KPM KS2: 38 mm, (1 ½") hose connection KPM KS4: 38 mm (1 ½") hose or welded hard pipe connection KPM KS6: 50 mm (2") hose or welded hard pipe connection
Process pressure	Maximum pressure: 25 bar (370 psi) The minimum operating pressure required is a function of the sample consistency. KPM KS2 and KPM KS4 min. process pressure: KPM KS6 min. process pressure: 0–3% 0.5 bar (7 psi) below 8% 1.0 bar (15 psi) 3–5% 1.0 bar (15 psi) over 8% 2.0 bar (30 psi) 5–8% 2.0 bar (30 psi)
Sample flow	The sample flow is a function of process pressure, fiber type and consistency. The flow diminishes at higher consistencies. KPM KS4 and KPM KS6 piston stroke opening and piston orientation are adjustable.
Materials	KPM KS2: AISI 316L, titanium Gr2, 254SMO KPM KS4: AISI 316L KPM KS6: AISI 316L, titanium Gr2
Weight	KPM KS2-M: 1.8 kg (4.0 lbs) KPM KS2-P: 2.0 kg (4.4 lbs) KPM KS4: 2.3 kg (5.1 lbs) KPM KS6 Sandvik: 3.7 kg (8.2 lbs) KPM KS6 Flange: 5.0 kg (11 lbs)
Options	Electric position switch of sampling piston for stamping the time in the DCS