

CH-SPH PRESSURE SAMPLER

DATASHEET



WHAT IS THE PRESSURE SAMPLER?

CH-SPH, a primary pressured pipeline sampler designed to operate in a horizontal position, is intended for professional use in mining to extract representative slurry samples from pressurized turbulent streams. It provides continuous or semi-continuous sampling, ensuring accurate analysis and quality control.

The sampler features an internal rubber lining for superior abrasion resistance in demanding environments. With flow rates between 100–300 l/min, it is compatible with additional equipment like composite samplers and on-stream analyzers. The design supports easy installation, maintenance, and periodic flushing to enhance operational efficiency and extend its service life.

Process Connections

Inlet Flange	Outlet Flange	Sampler Flange Compatibility
DN 100/4" – DN 700/28"	DN 100/4" – DN 700/28"	EN 1092-1 PN 10 ASME B16.5 Class 150 SABS 1123-TABLE 10

Other connections available upon request. Sampler is connected straight to the pipeline. The size of the sampler is selected according to the size of the pipeline.

Materials

Sampler body	Mild Steel 5mm (S235 JR)
Inside surfaces	Natural rubber 5 mm, other lining materials available upon request
Outside surfaces	Epoxy paint 210 µm, EP210/2-3-FeSa 2½ - RAL 7026
Sample nozzle	Stainless steel (AISI 304, EN 1.4301)
Abrasion resistant AR cutter	Stainless steel (AISI 304, EN 1.4301), Tungsten Carbide (WC)

Flushing System

Flushing water requirements

Pressure	2–6 bar / 0.2–0.6 MPa / 29–87 PSI
Water consumption	May temporarily rise up to 150 l/min (40 GPM)

Flushing water quality recommendations

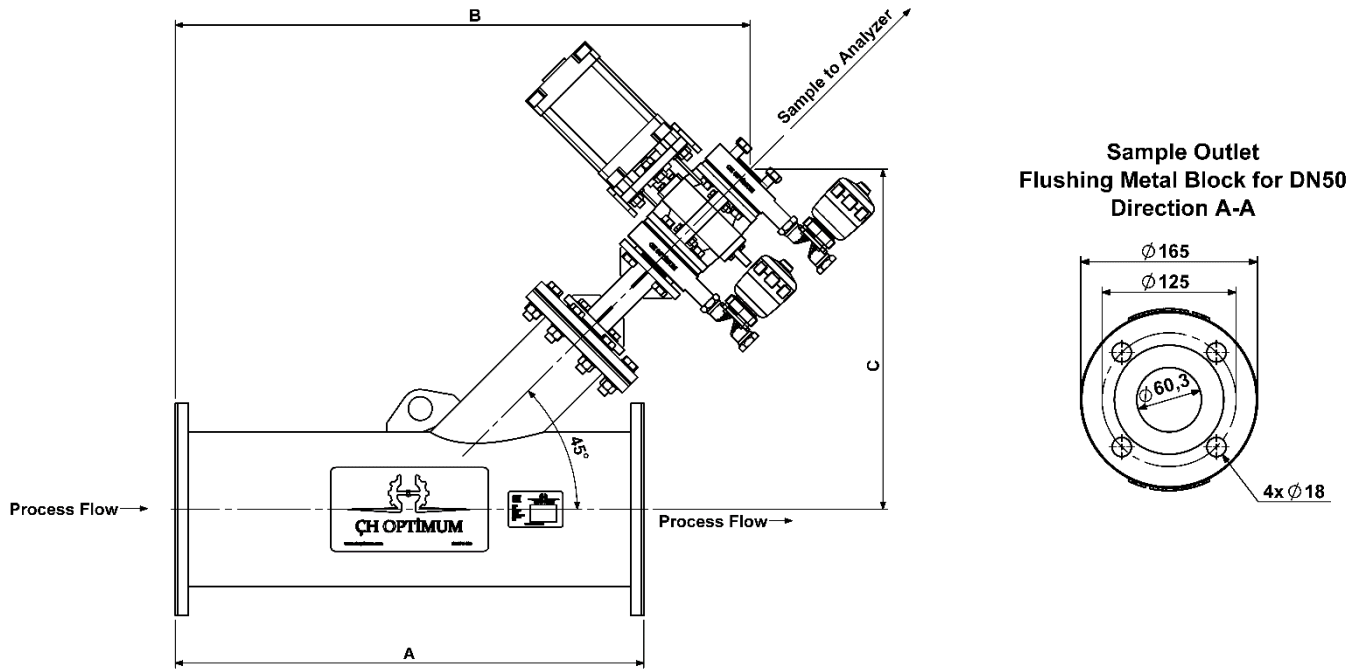
Solid particles	Max. 10 mg/l
Particle size	Max. 50 µm
Permanganate value	Max. 30 (free from humus)
Ferro content	Max. 1 mg/l
Hardness value	Max. 10° dH
Critical particle size	2–5 µm

Flushing water connections

Sample line flanges	DN 50, EN 1092-1, PN10
Water inlet – Main flushing	Hose connector OD 25 mm / 1" or G1" female
Water inlet – Tank flushing	Hose connector OD 25 mm / 1" or G1" female
Pipe threads	According to ISO 228/1

CH-SPH PRESSURE SAMPLER

DATASHEET



Sampler Size	Flow Rate (m ³ /h)	Pressure Loss (m)	Weight (kg)	Sampler Dimensions (mm)				
				A	B	C	Inlet	Outlet
DN100 / 4"	40-120	5,5	142	834	1052	627	DN100	DN100
DN150 / 6"	70-210	5	165	864	1084	655	DN150	DN150
DN200 / 8"	110-350	6,5	187	884	1127	685	DN200	DN200
DN250 / 10	170-500	7	206	924	1161	699	DN250	DN250
DN300 / 12	250-700	8,5	226	982	1204	713	DN300	DN300
DN350 / 14	350-1050	10	249	1022	1247	756	DN350	DN350
DN400 / 16	450-1400	11,5	277	1102	1335	784	DN400	DN400
DN450 / 18	600-1600	12,5	306	1162	1396	815	DN450	DN450
DN500 / 20	670-2000	15	365	1192	1424	843	DN500	DN500
DN600 / 24	1000-3000	16	390	1300	1528	878	DN600	DN600
DN700 / 28	1500-5500	17	467	1400	1608	928	DN700	DN700

CH-SPH PRESSURE SAMPLER

DATASHEET

Air System

Air connections	
Inlet to cylinder	Compatible with 8 mm tube
Inlets to valves	For 6/4 mm tube only
Air requirements	
Instrument air	Oil free, dry instrument air
Quality	Class 2.2.2 according to standard ISO 8573-1
Pressure	6–10 bar / 0.6–1.0 MPa / 88–145 PSI
Air consumption	Momentary 7–120 NI/min (0.25–4.24 cuft/min) depending on cutter frequency

CH-SP Application

Fluid (group)	2 (PED 97/23/EC)
Maximum allowed pressure	1.0 Mpa / 10 bar / 145 PSI (PED 97/23/EC)

Other Specifications

Accessories	
Valve Management Panel (VMP)	For more information, refer to the corresponding datasheet
Optional control devices	
Sampler Management Panel (SMP)	For more information, refer to the corresponding datasheet
Ambient conditions	
Operating temperature	0 – +50°C
Storing temperature	-20 – +50°C