SWS Series Water Separator



Compressed air from the compressor, which contains moisture, enters the water trap from one side. After separating water and oil droplets down to approximately 20 microns, the air exits from the other side and is directed to the pneumatic system (air tank and dryer). At the bottom of the compressor's water trap, there's either a manual drain valve or an automatic valve (electric or mechanical) that discharges the separated water and oil.

The water separator prevents rust and corrosion in components by capturing water vapor present in compressed air. This device is typically installed in compressed air pipelines and optimizes compressor performance while extending equipment lifespan by reducing moisture levels. Compressed air exiting the compressor may contain a significant amount of water, depending on environmental conditions. This air enters the water trap at high speed and, upon impact with internal vanes, creates a swirling, centrifugal motion. Through this process and the centrifugal force, liquid vapor particles coalesce until they gain sufficient mass and become heavy. Since water is denser than air, the water droplets settle at the bottom of the separator (water trap), ready for discharge.



Features

- The water separator body is made of cast aluminium, providing a robust structure.
- Before painting, the water trap body undergoes degreasing and anti-abrasion treatment.
- Parallel installation with filters allows for easy setup and maintenance.
- Efficiency exceeding 99% under normal operating conditions at 7 bar pressure.
- Utilizes centrifugal force to separate water and oil droplets.

Advantages

- Protection of downstream equipment.
- Provides high-quality compressed air to meet international standards.
- Reduces production, repair, and maintenance costs.
- Improves performance and quality with minimal pressure drop.
- Compatible with all types of air compressors and various lubricants.

Technical Specification

Model	Pipe Size inch	Flow Rate					Dimension (mm)							Pressure		Temp Range	
		l,	/S	m³/min cfr		fm	W		н			А		Range bar		° C	
SWS 126	1/2	35	5,0	2.1	7	74,2	109		396			28		5 - 13		1,5 - 65	
SWS 180	3/4	50	0,0	3	1	05,9	109		396			28		5 - 13		1,5 - 65	
SWS 330	1	9	1,6	5.5	1	94,2	109		396			28		5 - 13		1,5 - 65	
SWS 540	1 - 1/4	14	19,9	9	3	17,8	109		396			28		5 - 13		1,5 - 65	
SWS 750	1 - 1/2	20	18,3	12.5	441,4		109		396			28		5 - 13		1,5 - 65	
SWS 450 200	2	33	3,2	20,0	7	706,3		175		680,0		130		5 - 18		1,5 - 85	
SWS 450 300	3	49	9,8	30,0	10)59,4	210		765,0			130		5 - 18		1,5 - 85	
SWS 450 500	3	83	3,0	50,0	17	1765,7		210		925,0		130		5 - 18		1,5 - 85	
Pressure	Barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Psig	15	29	44	59	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor		0.38	0.53	0.65	0.63	0.85	0.93	1	1.07	1.13	1.19	1.23	1.31	1.36	1.41	1.46	1.51



SWS 126 - 750



SWS 450200 - 500

Be on the Safe side!