

SPC Superior® Pipeline Cylinder



- Double acting
- MAWP 1450 psi
- Valves - number/size: 8/8.625 in
- Valve velocities: 2500-3800 ft/min
- Air cooled
- Manual or automatic pocket actuation

SPC Specifications

Diameter Range	Lined from 11" – 13" (279 – 330 mm) Unlined 13.5" (343 mm)
Maximum Allowable Working Pressure	1450 psi
Fixed Clearance Volume	4 pockets @ 300 cubic inches (4.9 l) each
Valves - Number/Size	8/8.625 in (219 mm)
Valve Velocities	2500 - 3800 ft/min (12.7 - 19.304 m/sec)
Maximum Nozzle Velocity	2000 ft/min (10.16 m/sec)

Cylinder Clearance Data for MH & WH Compressors			MH - 6" Stroke				WH - 6" Stroke			
			Head End Clearances		Crank End Clearances		Head End Clearances		Crank End Clearances	
Diameter	MAWP	Cyl. Code	HC	FVC	CC	FVC	HC	FVC	CC	FVC
11.00	1450	654L	103.98	52.61	109.81	54.91	103.98	52.61	110.95	55.48
11.50	1450	655L	93.15	48.14	98.04	50.05	93.15	48.14	98.96	50.53
12.00	1450	656L	86.00	44.21	90.22	45.82	86.00	44.21	91.00	46.22
12.50	1450	657L	84.36	40.74	88.18	42.11	84.36	40.74	88.88	42.44
13.00	1450	658L	75.80	37.67	79.06	38.83	75.80	37.67	79.64	39.12
13.50	1450	716K	69.86	34.93	71.85	35.93	69.86	34.93	72.34	36.17

Cylinder Clearance Data for WG Compressors			WG6 - 6" Stroke				WG7 - 7" Stroke			
			Head End Clearances		Crank End Clearances		Head End Clearances		Crank End Clearances	
Diameter	MAWP	Cyl. Code	HC	FVC	CC	FVC	HC	FVC	CC	FVC
11.00	1450	654L	103.98	52.61	111.00	56.12	89.13	45.10	95.15	48.10
11.50	1450	655L	93.15	48.14	99.02	51.06	79.84	41.26	84.87	43.76
12.00	1450	656L	86.00	44.21	91.06	46.66	73.71	37.89	78.05	39.99
12.50	1450	657L	84.36	40.74	88.95	42.82	72.31	34.92	76.24	36.70
13.00	1450	658L	75.80	37.67	79.71	39.43	64.97	32.29	68.32	33.80
13.50	1450	716K	69.86	34.93	72.88	36.44	59.88	29.94	62.48	31.24

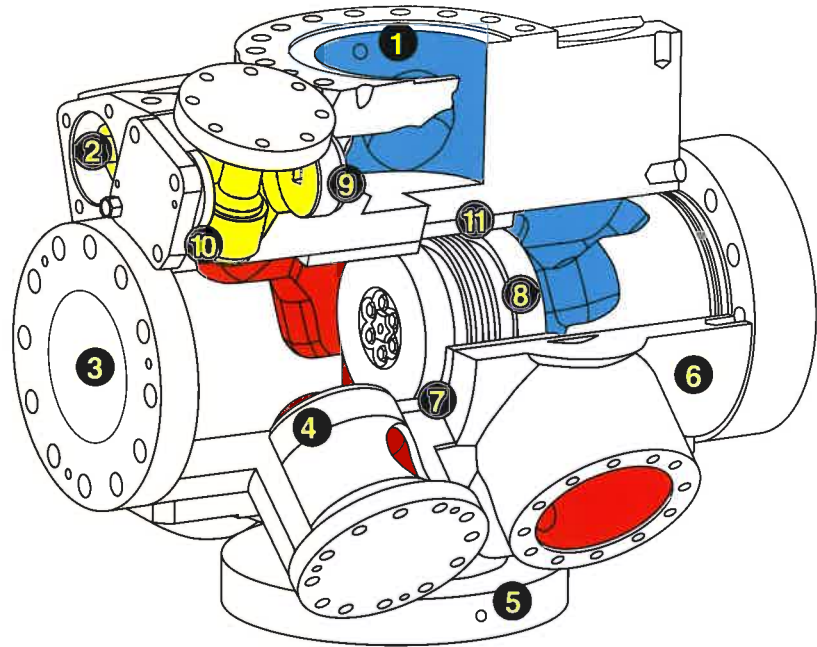
KEY: HC = Head End Clearance; FVC = % Clearance Added Per Fixed Volume Pocket; CC = Crank End Clearance

Note: Standard equipment, specifications and data are subject to change without notice.

SUPERIOR®

Standard Equipment

1. **Large Nozzle and Gas Passages:** Provide unrestricted gas flows and high flows at pipeline compression ratios.
2. **Equipped with Fixed Clearance Volume:** The SPC is designed with four (4) 300 cu. in. cast-in clearance pockets providing easy multiple unloading options. Two (2) of these fixed volume pockets are on the head end and two (2) are on the crank end of the cylinder.
3. **Equipped with a Fixed Clearance Head:** Multiple unloading options built into the cylinder on both the head and crank end to meet specific clearance requirements.
4. **Large Valves:** Specially sized for transmission service, efficient Hoerbiger 200CT plate valves or Superior® Poppet valves can be offered. The valve retainers are port directed designed to maximize efficiency.
5. **1450 psi Maximum Allowable Working Pressure:** At this rating the SPC meets and exceeds the majority of gas transmission requirements.
6. **Air Cooled:** The low ratio of gas transmission compression applications does not require a cylinder water jacket cooling. The result: reduced initial costs.
7. **Lined:** The 11.0" - 13.5" bores are obtained with liners offering multiple choices of cylinder bores throughout the life of the unit. In a case where the operating parameters change, the cost savings of not having to purchase a new cylinder are tremendous. This can be very beneficial to the lease fleet operator.



8. **3-Piece Composite Piston:** All pistons are designed with a center steel band to carry the rings, minimizing piston ring wear and insuring longer piston life. These piston rings consist of separate compression rings and rider bands made from carbon filled TFE material.
9. **Unloading Plug:** A unique patented design enables the head-end to be automatically unloaded.
10. **Unloaders:** Unloading is independent of suction valve function. Therefore maximizing efficiency while providing easy valve access and maintenance.
11. **Common Cylinder Body:** A single machined cylinder body is used for all bore sizes.

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