Model RPSA Cylinder Filling Pumps



Specifications: standard RPSA models

Bore x Stroke	in	1.57, 1.77 x .79	1.57, 1.77 x 1.26
		1.57, 1.77 × .79	1.57, 1.77 × 1.20
	mm	40, 45 x 20	40, 45 x 32
Flow Rate	gpm	.66 - 3.2	1.0 - 5.1
	lpm	2.5 - 12.2	4.0 - 19.4
Pump Design Rating	hp	10	15
	kw	7.5	11
Maximum Discharge Pressure	psi	1,740	1,740
	bar	120	120
Maximum Suction Pressure	psi	435	435
	bar	30	30
Speed Range	rpm	117 - 450	117 - 450

Consult Nikkiso ACD engineering to confirm available sizes and ratings.

Features & Benefits

- Tungsten carbide coated piston helps increase the life of the seals
- Simple cold end design assembly for easy maintenance
- Heavy duty grease lubricated drive for longer life and less maintenance (regreasing not necessary)
- Pump packing is adjusted through a large access port for easy adjustments and extended packing life

Applications

- Carbon dioxide cylinder filling
- Nitrous oxide cylinder filling

Liquids Pumped

- Carbon Dioxide
- Nitrous Oxide

Typical Scope of Supply

- Cold end, grease lubricated drive assembly, and electric motor
- Galvanized steel base plate with belt guard
- Surge chamber and relief valve

FOR PUMPS INTENDED TO BE USED IN NITROUS OXIDE SERVICE:

Liquid Nitrous Oxide is a potentially dangerous fluid and must be handled with extreme care. See Compressed Gas Association standard CGA G-8.3-2016 for further information. Under certain combinations of temperature and pressure Nitrous Oxide can explosively decompose with serious consequences. Nitrous Oxide is an oxidizer that actively supports combustion. Nitrous Oxide handling equipment must be cleaned for Oxygen service. Design and construction of storage and piping systems for pumping liquid Nitrous Oxide must assure material compatibility and be such as to prevent loss of prime or "dry running" of pumps. Nitrous Oxide is an active solvent for many materials and material compatibility with Nitrous Oxide must be confirmed before their use. For additional historical information relating to hazards associated with Nitrous Oxide decomposition refer to Chemical Safety Board report number 2016-04-I-FL Dated February 2017.