

Cast Iron, Ni-Resist or Silver Series XL®

Series 4001 4-Roller



- Port size: 3/4" NPT
- Max. fluid temperature: 140°F/60°C
- Housing: Cast Iron (C), Ni-Resist (N) or Silvercast (XL)
- Pump shaft rotation: CW (CCW available)*
- Weight: 5 lbs./2.3 kg
- Rollers: Super Rollers standard [Poly (T3), Teflon (T2) and Buna-N (G) available]
- Shaft Seals: Viton standard [Buna-N (M) available]
- Available shaft adapters: See page 74
- Special torque arm and base kit is available for gas engines
- Rotor: Cast Iron, Ni-Resist or Silvercast
- Standard rotation directly couples to gasoline engines

Pressure in PSI and BAR	GPM	HP	GPM	HP	GPM	HP
	LPM	HP	LPM	HP	LPM	HP
	@1100 RPM		@1400 RPM		@1800 RPM	
0 PSI	5.5	.06	7.1	.10	9.1	.14
0 BAR	20.8	.06	26.9	.10	34.4	.14
25 PSI	4.9	.14	6.4	.20	8.5	.30
1.7 BAR	18.5	.14	24.2	.20	32.2	.30
50 PSI	4.4	.24	5.9	.32	8.0	.46
3.4 BAR	16.6	.24	22.3	.32	30.3	.46
75 PSI	4.1	.34	5.6	.44	7.6	.62
5.2 BAR	15.5	.34	21.2	.44	28.7	.62
100 PSI	3.8	.41	5.3	.56	7.3	.78
6.9 BAR	14.4	.41	20.1	.56	27.6	.78
125 PSI	3.5	.50	5.0	.68	7.0	.95
8.6 BAR	13.2	.50	18.9	.68	26.5	.95
150 PSI	3.3	.62	4.8	.78	6.7	1.1
10.3 BAR	12.5	.62	18.2	.78	25.4	1.1

Order Information

Model Number	Max GPM	Max PSI	Max RPM	Shaft Output
4001C	9.1	150	1800	5/8" solid shaft
4001C-H	9.1	150	1800	1/2" hollow shaft
4001N	9.1	150	1800	5/8" solid shaft
4001N-H	9.1	150	1800	1/2" hollow shaft
4001XL	9.1	150	1800	5/8" solid shaft
4001XL-H	9.1	150	1800	1/2" hollow shaft

Teflon rollers - Add Suffix "T2" - (i.e.: 4001C-AT2).
 Polypropylene rollers - Add Suffix "T3" - (i.e.: 4001C-AT3).
 Buna-N seals - Add Suffix "M" - (i.e.: 4001C-AM).
 Reverse rotation* - Add Suffix "R" - (i.e.: 4001C-AR).

Cast Iron, Ni-Resist or Silver Series XL®

Series 4101 4-Roller



- Port size: 3/4" NPT
- Max. fluid temperature: 140°F/60°C
- Housing: Cast Iron (C), Ni-Resist (N) or Silvercast (XL)
- Pump shaft rotation: CW (CCW available)*
- Weight: 5 lbs./2.27 kg
- Rollers: Super Rollers standard [Poly (T3), Teflon (T2) and Buna-N (G) available]
- Shaft Seals: Viton standard [Buna-N (M) available]
- Available shaft adapters: See page 74
- Special torque arm and base kit is available for gas engines
- Rotor: Cast Iron, Ni-Resist or Silvercast
- Standard rotation directly couples to gasoline engines

Pressure in PSI and BAR	GPM	HP	GPM	HP	GPM	HP
	LPM	HP	LPM	HP	LPM	HP
	@1800 RPM		@2200 RPM		@2600 RPM	
0 PSI	5.0	.11	6.2	.14	7.2	.16
0 BAR	18.9	.11	23.5	.14	27.3	.16
25 PSI	4.8	.21	5.8	.27	6.9	.30
1.7 BAR	18.1	.21	21.9	.27	26.1	.30
50 PSI	4.5	.34	5.6	.40	6.6	.46
3.4 BAR	17.0	.34	21.2	.40	25.0	.46
75 PSI	4.2	.45	5.4	.55	6.4	.62
5.2 BAR	15.9	.45	20.4	.55	24.2	.62
100 PSI	3.9	.56	5.0	.68	6.0	.76
6.9 BAR	14.8	.56	18.9	.68	22.7	.76
125 PSI	3.7	.68	4.7	.82	5.7	.92
8.6 BAR	14.0	.68	17.8	.82	21.6	.92
150 PSI	3.4	.78	4.4	.96	5.4	1.08
10.3 BAR	12.9	.78	16.6	.96	20.4	1.08

Order Information

Model Number	Max GPM	Max PSI	Max RPM	Shaft Output
4101C	7.2	150	2600	5/8" solid shaft
4101C-H	7.2	150	2600	1/2" hollow shaft
4101C-D	7.2	150	2600	5/8" hollow shaft adapter 1320-0016 installed
4101N	7.2	150	2600	5/8" solid shaft
4101N-H	7.2	150	2600	1/2" hollow shaft
4101N-D	7.2	150	2600	5/8" hollow shaft adapter 1320-0016 installed
4101XL-D	7.2	150	2600	5/8" solid shaft
4101XL-H	7.2	150	2600	1/2" hollow shaft
4101XL-H	7.2	150	2600	5/8" hollow shaft adapter 1320-0016 installed

Teflon rollers - Add Suffix "T2" - (i.e.: 4101C-AT2).
 Polypropylene rollers - Add Suffix "T3" - (i.e.: 4101C-AT3).
 Buna-N seals - Add Suffix "M" - (i.e.: 4101C-AM).
 Reverse rotation* - Add Suffix "R" - (i.e.: 4101C-AR).

* CCW (counterclockwise) and CW (clockwise) are determined when looking at the shaft end.

Roller Pumps

Hypro roller pumps are the most popular pumps worldwide for agricultural tasks. These low-cost, highly-versatile pumps are used for spraying and transferring a variety of fluids including insecticides, herbicides, fungicides, emulsives, aromatic solvents, liquid fertilizers and many other non-abrasive liquids. All pumps are available in three materials: Cast Iron, Ni-Resist or Silver Series XL®. On average, the Silver Series XL® pumps last up to 10 times longer* than the competition. (See page 65 for further details.)

These pumps contain rollers that revolve inside the pump housing to force the spray solution through the outlet to the nozzle. Hypro roller pumps are easily adaptable to PTO, gas engine or electric motor drives. The pumps operate efficiently at PTO speeds of 540 and 1000 rpm. Pressure ranges are up to 300 psi (20.7 bar) with flow rates of 2 to 62 gpm (7.6 to 235 lpm).

* Based on independent laboratory tests.

Hypro roller pump quality features:

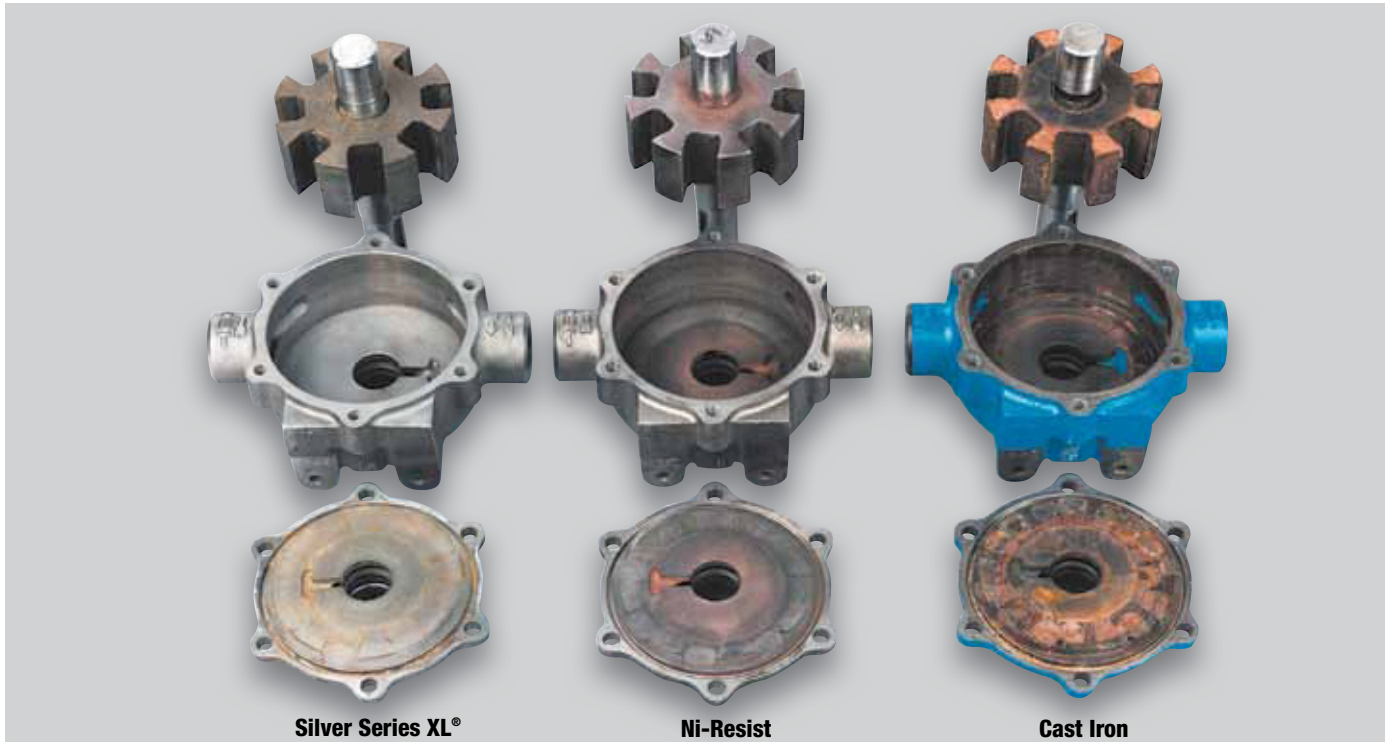
- Housing available in Cast Iron, Ni-Resist or Silver Series XL®
 - Ni-Resist is a high nickel content alloy for better corrosion resistance
 - Silver Series XL® has a custom alloy that provides the best corrosion resistance and is *Ready for use with Roundup®*
- Self-priming operation; roller pumps should NOT be run dry
- Adaptable to PTOs or gas engines
- Standard seals are Viton or Buna-N



Roller Pump Comparisons

Herbicide Users

Get up to 10 times longer pump life with Hypro Silver Series XL® Roller pumps!

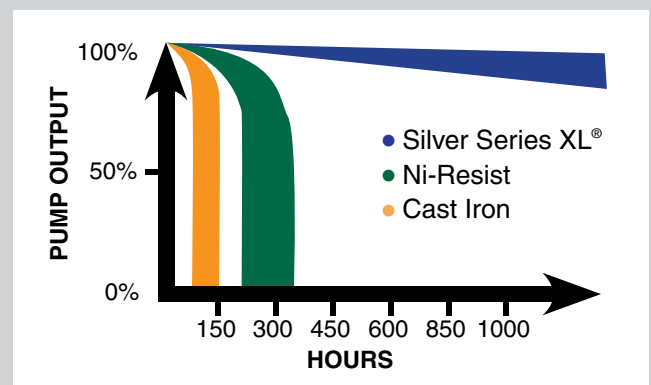


The three pumps shown above were photographed after being tested with a 30:1 mix of water and Roundup® herbicide. The Ni-Resist and Cast Iron indicate damage from pitting and corrosion, but the Silver Series XL® is in like-new condition after more than 1000 hours of use.

Herbicide users:

Get up to 10 times longer pump life!

- Cast Iron pumps lasted to 140 hours before failure.
- Ni-Resist pumps lasted to 332 hours before failure.
- Silver Series XL® pumps ran over 1000 hours and still met new pump specs!



Roundup is a registered trademark of Monsanto Company. Silver Series XL is a registered trademark of Hypro.

Pump Recommendations for Applications

WHICH ROLLER PUMP, ROLLERS AND SEALS SHOULD YOU USE?

Material options for rollers and seals are listed in the order of recommendations for usage. These recommendations are only a general guide. For suggestions on specific chemicals or applications, call Hypro's Technical/Applications Department at (800) 445-8360.

APPLICATION	SPECIFIC CHEMICALS	SUGGESTED PUMP, ROLLERS AND SEALS
WEED CONTROL CHEMICALS	Emulsions, soluble powders, sodium arsenate.	Use a Silver Series XL [®] , Ni-Resist, or Cast Iron pump, Super Rollers and Viton seals NOTE: For weed control chemicals containing glyphosate (such as Roundup [®]) or other acidics, use only a Silver Series pump with Super or poly rollers and Viton seals. Teflon (T2) rollers may be used up to 100 psi.
INSECT CONTROL	Emulsions not containing aromatic solvents.	
BRUSH CONTROL	Heavy-duty sprays using diesel oil for carrier.	
PEST CONTROL CHEMICALS, FUMIGANTS, ETC.	This category or use includes mosquito sprays, termite control liquids, nematocides, soil and grain fumigants where any of the following chemicals with aromatic solvents are present: Pentachlorophenol, xylene, xylol, benzene, high sulphur fuel or diesel oil. Fumigants containing: ethylene dichloride, ethylene dibromide, carbon tetrachloride, perchlorethylene, trighlorethylene, methyl bromide, and other aromatic solvents.	Use a Silver Series XL [®] , Ni-Resist or Cast Iron pump with Super Rollers. Use Viton seals.
LIQUID FERTILIZERS	Up to 32% nitrogen content, or others if the liquid is atmospheric pressure and the temperature is handled.	Use a Silver Series XL [®] or Ni-Resist pump with poly rollers and Buna-N seals.
POWDERED FERTILIZERS	Fertilizers dissolved in water (greenhouse plant food).	
PUMPING	Large quantities of plain water.	Use a Silver Series XL [®] , Ni-Resist or Cast Iron pump; Super, Buna-N or poly rollers and Buna-N or Viton seals.
SPRAYING	Wettable powder sprays.	NOTE: Limit pressure to 100 psi when using Buna-N rollers or wettable powders.
MATERIAL HANDLING	Heavy abrasive powders in suspension.	
ACIDS	Mild sulfuric acid for spraying. Mild muriatic acid, inhibited muriatic, etc.	Use a Silver Series XL [®] pump, poly or Teflon rollers and Viton seals. NOTE: Limit pressure to 100 psi when using Teflon rollers.