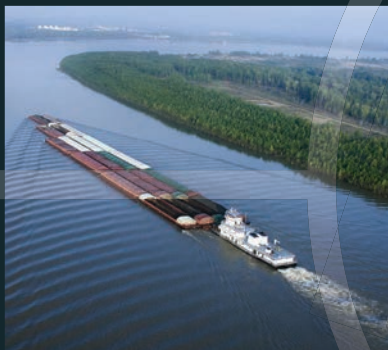


FOR
LAND OR SEA
PNEUMATIC
MADE TO LAST



TURBINE STARTERS

Performance • Reliability • Quality

PRQ 22 Turbine Air Starters (P/N's: 55-33xxx - 55-37xxx)
PRQ 200 Turbine Air Starters (P/N's: 55-40xxx - 55-42xxx)

Conforms with the relevant standards or other standardizing documents:

IEC 60204-1:2009-2	Safety of Machinery - Electrical Equipment of Machine Part 1 General Requirements
EN ISO 12100-2:2003	Basic Concepts, General Principles for Design Part 2 Technical Principles
ISO 14121-1:2008	Safety of Machinery - Risk Assessment Part 1

According to the regulations in: Machinery Directive 2006/42/EC

Engineered Strong for Land or Sea

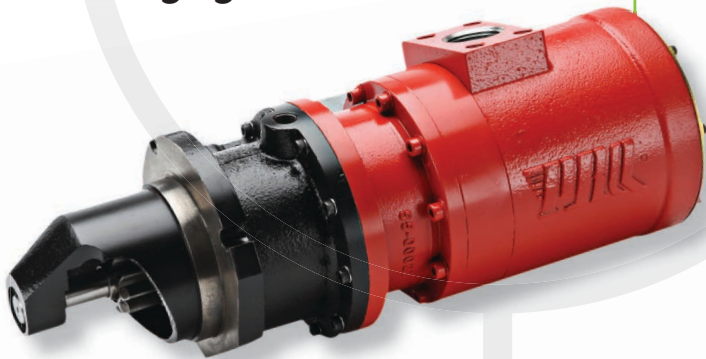
BUILT FOR QUALITY
OVERHUNG PREENGAGED DRIVE
TURBINE STARTERS

**STARTS DIESEL ENGINES TO
1,300 CID (22 LITERS)
GAS ENGINE TO 2,600 CID (44 LITERS)**



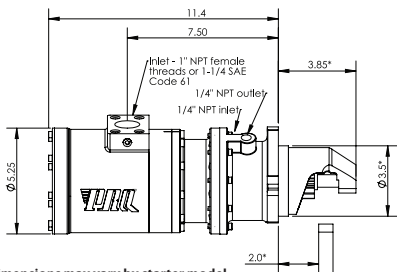

22p

Pre-Engaged Pinion Drive



PRQ 22p

- Pre-engaged pinion
- Forward bearing for a rigid drive shaft



*These dimensions may vary by starter model



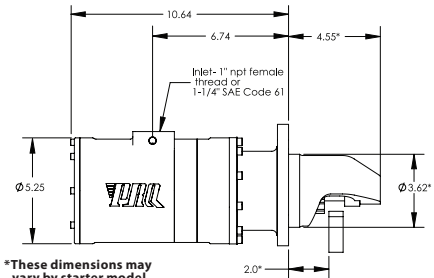
22i

Inertia Drive



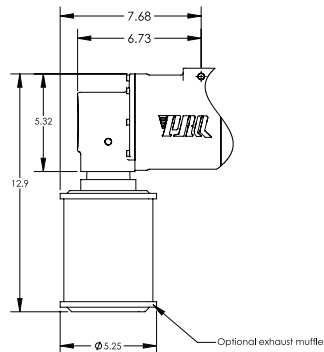
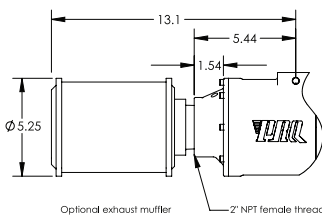
PRQ 22i

- Simple and rugged
- Wide selection of flanges and drives available



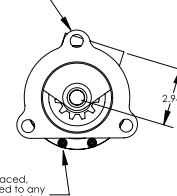
*These dimensions may vary by starter model

PRQ 22 Series Exhaust Adaptor & Muffler Options (Fits 22oh, 22p & 22i)



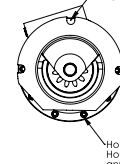
PRQ 22i & 22p Series Standard Flanges

SAE # 3 Flange
Three \varnothing 21/32" mounting
holes for 3/8" bolts, equally
spaced on 5.75" ball circle



Ten 1/4"-28 screws equally spaced.
Bendix housing may be rotated to any
one of 10 positions to accommodate
installation (36° increments)

SAE # 1 Flange
Three \varnothing 13/32" mounting
holes for 3/8" bolts, equally
spaced on 5.0" ball circle



Holes for 1/4"-28 screws
Housing may be rotated
any of 10 positions

Rotation viewed from this end.
Right Hand - Clockwise
Left Hand - Counterclockwise

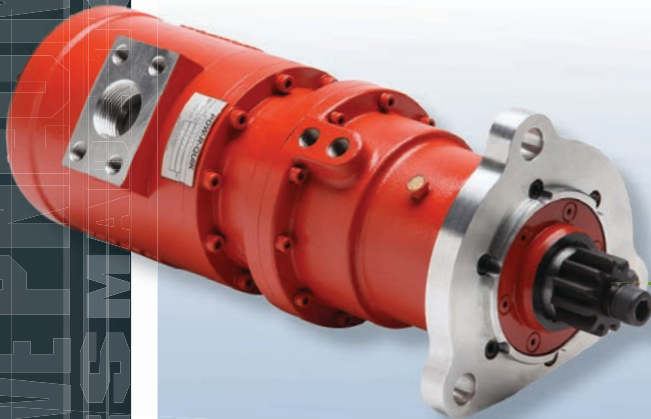
22 Series

TURBINE STARTERS



FEATURES

- Lightweight - 26 lbs. - 12 kg
- Aluminum and steel construction - No plastic parts
- Lubed for Life - gear case and bearings
- All models Gas Sealed
- Clean - No lube in airstream required - No fugitive emissions
- Models to start diesel engines up to 22 liter (44 liter gas)

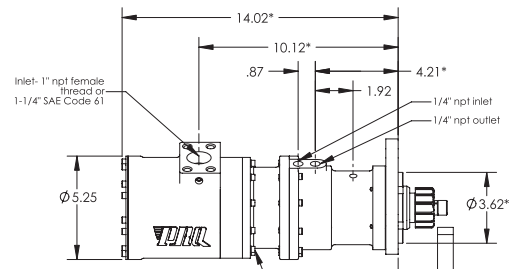
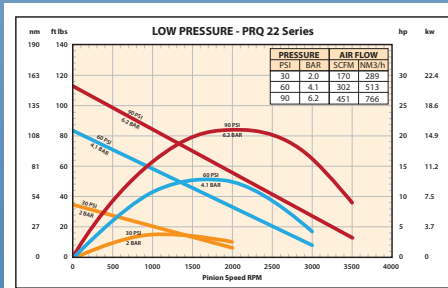
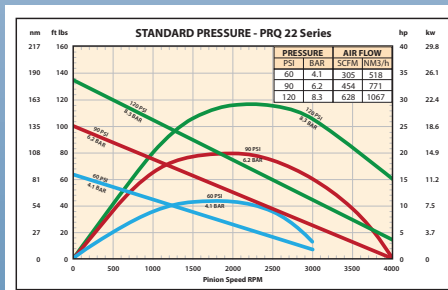
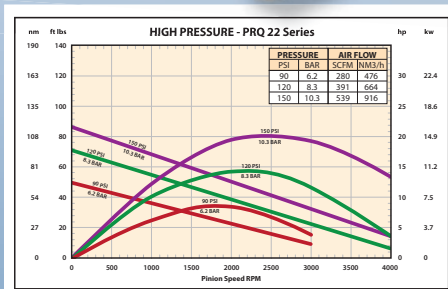


22oh

Overhung Pre-Engaged Drive

PRQ 22oh

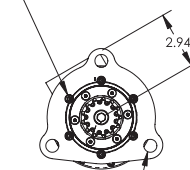
- Fits engines with bell housings that will not accommodate conventional nose cones
- Pinion and flanges available for popular metric engines



*These dimensions may vary by starter model

Ten #10-32 screws equally spaced, inlet housing may be rotated to any one of 10 positions to accommodate installation (36° increments)

Six 1/4"-28 screws equally spaced, flange may be rotated to any one of 6 positions to accommodate installation (60° increments)



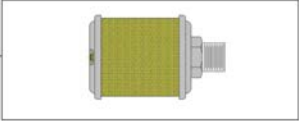


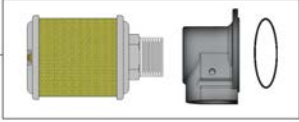
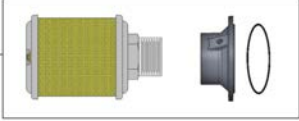
Rotation viewed from this end.
Right Hand - Clockwise
Left Hand - Counterclockwise

PRQ 22oh Series Standard Flange



BEST QUALITY LAND BUILDING PRE-ENGAGED DRIVES

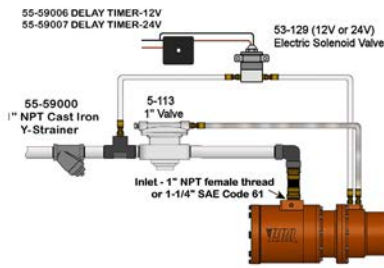
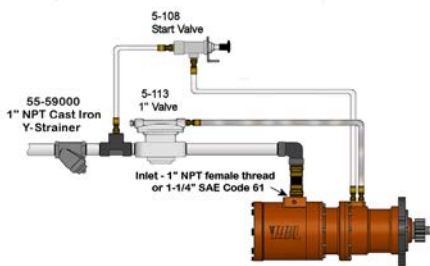
PRQ 22 SERIES MUFFLER & ADAPTER GUIDE

6-5-104 Muffler		55-59003 90° Adapter & O-ring	
55-59002 Straight Adapter & O-ring		55-70013 90° Adapter, Muffler & O-ring	
		55-70014 Straight Adapter, Muffler & O-ring	

PRQ 22 SERIES TURBINE STARTER

22oh

Overhung PreEngaged Drive



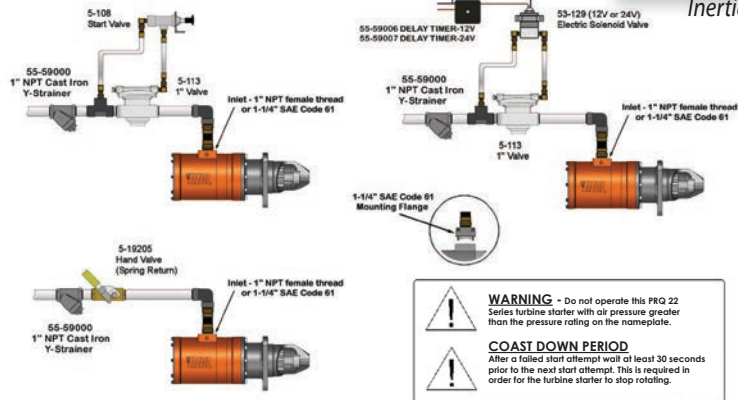
WARNING - Do not operate this PRQ 22 Series turbine starter with air pressure greater than the pressure rating on the nameplate.



COAST DOWN PERIOD
After a failed start attempt wait at least 30 seconds prior to the next start attempt. This is required in order for the turbine starter to stop rotating.

22i

Inertia Drive



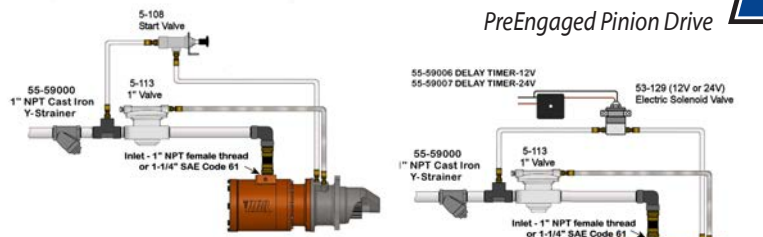
WARNING - Do not operate this PRQ 22 Series turbine starter with air pressure greater than the pressure rating on the nameplate.



COAST DOWN PERIOD
After a failed start attempt wait at least 30 seconds prior to the next start attempt. This is required in order for the turbine starter to stop rotating.

22p

PreEngaged Pinion Drive



WARNING - Do not operate this PRQ 22 Series turbine starter with air pressure greater than the pressure rating on the nameplate.



COAST DOWN PERIOD
After a failed start attempt wait at least 30 seconds prior to the next start attempt. This is required in order for the turbine starter to stop rotating.

1-1/4" SAE Code 61 Mounting Flange



**STARTS DIESEL ENGINES TO
12,000 CID (200 LITERS)
GAS ENGINE TO 24,000 CID (400 LITERS)**



PRQ
200i

Inertia Drive Starters

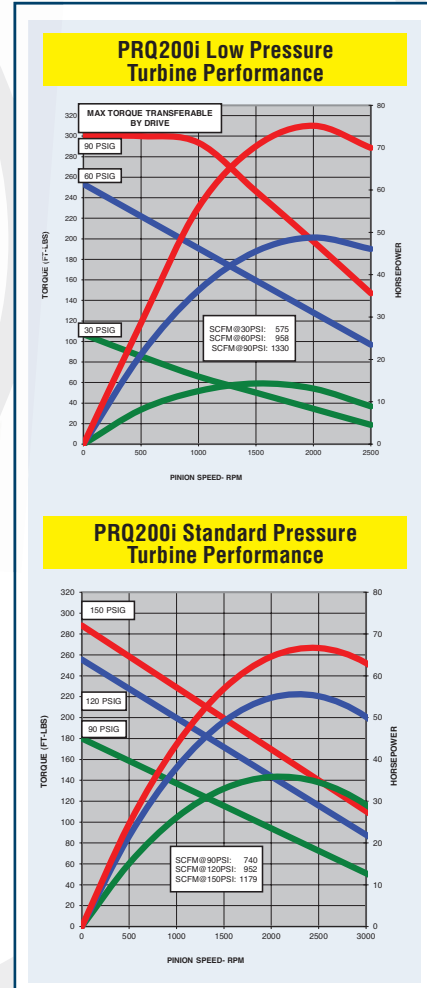
An inertia drive uses the rotation of the starter to force the pinion gear up an acme thread to index and engage the ring gear of the engine. A clutch built into the starter drive prevents damage to the ring gear or drive pinion.

**DIRECT INTERCHANGEABILITY
WITH COMPETITIVE MODELS**

PRQ 200i
can easily replace
competitive starters
with no plumbing
modifications required.



**Talk to your PRQ
representative
for all of the details.**



Compact stainless steel muffler.

ENGINEERING
PERFORMANCE
RELIABILITY

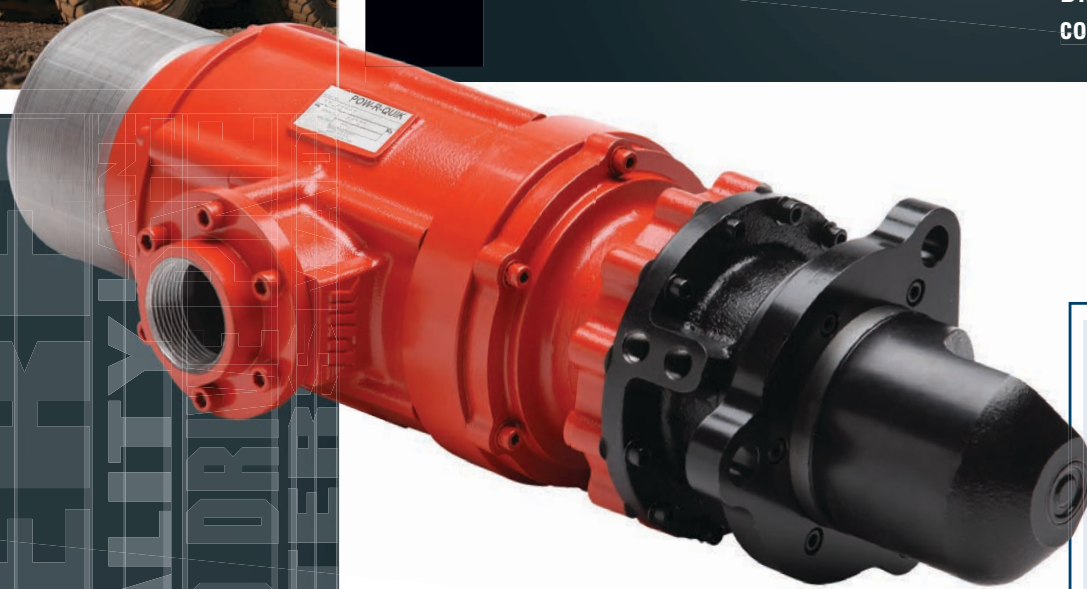
200 Series

TURBINE STARTERS



FEATURES

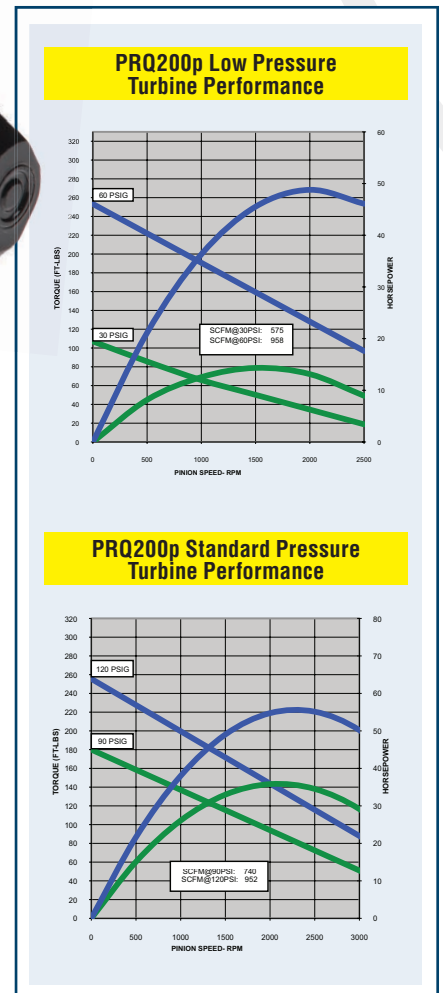
- Aerodynamic speed control prevents gear box burn out
- Grease-packed gears and bearings good for the life of the starter
- No air stream lubrication required
- No fugitive exhaust emissions. Keeps equipment cleaner
- Standard and low pressure models available
- Resists damage from air/gas contamination
- Direct interchangeability with some competitive starters



200p

Pre-Engaged Starters

Pre-engaged models use an air operated piston to index the starter's pinion gear into the engine's ring gear. Only after full engagement is any rotation force applied. This pre-engagement prevents any shock load from damaging the starter's pinion gear or the flywheel.



OR SEA
QUALITY
TO LAST

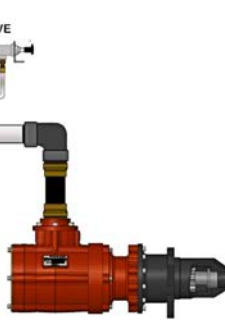
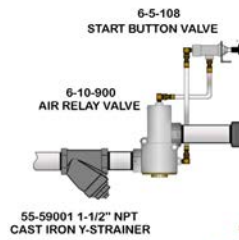


QUALITY
FORGED DRIVES
FORGED DRIVES

PRQ 200 SERIES TYPICAL AIR INSTALLATIONS

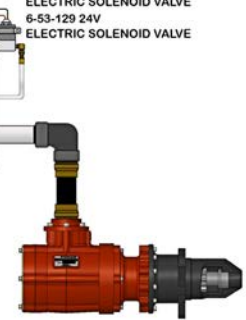
200i

Inertia Drive Starters



55-59006 DELAY TIMER-12V
55-59007 DELAY TIMER-24V

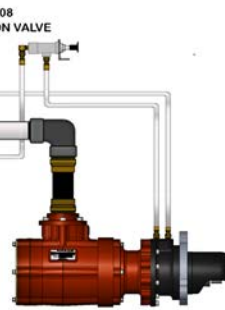
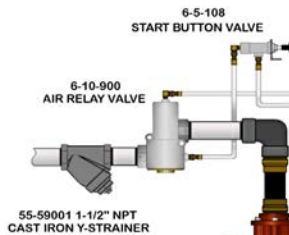
6-53-129 12V
ELECTRIC SOLENOID VALVE
6-53-129 24V
ELECTRIC SOLENOID VALVE



WARNING - Do not operate this PRQ 200i service turbine starter with air pressure greater than the pressure rating on the nameplate.
COAST DOWN PERIOD
After a failed start attempt wait at least 30 seconds prior to the next start attempt. This is required in order for the turbine starter to stop rotating.

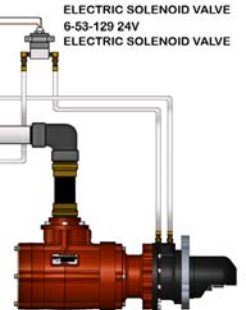
200p

Pre-Engaged Starters



55-59006 DELAY TIMER-12V
55-59007 DELAY TIMER-24V

6-53-129 12V
ELECTRIC SOLENOID VALVE
6-53-129 24V
ELECTRIC SOLENOID VALVE

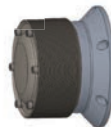


WARNING - Do not operate this PRQ 200p service turbine starter with air pressure greater than the pressure rating on the nameplate.
COAST DOWN PERIOD
After a failed start attempt wait at least 30 seconds prior to the next start attempt. This is required in order for the turbine starter to stop rotating.

PRQ 200 SERIES TURBINE STARTER MUFFLER, FLAPPER & ADAPTER GUIDE



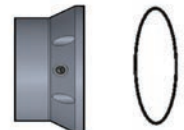
55-59013
Muffer



55-59012
Flapper Valve



55-59010
Straight Adapter & O-Ring



55-59011
90° Adapter & O-Ring



Adapters & Flapper - 4" NPT





Turbine Starters

PRQ 200 Turbine Repair Kits

Major Service Kit*

55-70019	RH Low-Major Turbine Service Kit
55-70020	RH Std-Major Turbine Service Kit
55-70021	LH Low-Major Turbine Service Kit
55-70022	LH Std-Major Turbine Service Kit
55-70028	Inertia Major Gear Service Kit
55-70029	Pre-Engaged Major Gear Service Kit

Motor Service Kit*

55-70023	RH Low-Turbine Service Kit
55-70024	RH Std-Turbine Service Kit
55-70025	LH Low-Turbine Service Kit
55-70026	LH Std-Turbine Service Kit
55-70030	Pre-Engaged / Inertia Gear Service Kit

Hardware Only Kits

55-70027	Turbine Motor Hardware Kit
55-70031	Pre-Engaged Hardware Kit

PRQ 200 Exhaust Adaptors & Muffler

55-59013	Muffler
55-59012	Flapper Valve
55-59010	Straight Adapter
55-59011	90° Adapter

Accessories

Valves

6-5-108G	Gas Rated Push Button Pilot Valve
55-59004	Shuttle Valve (Air Only)
55-59005	Quick Exhaust Valve (Air Only)
55-59008	Explosion Proof Solenoid Valve (12V)
55-59009	Explosion Proof Solenoid Valve (24V)
6-5-108	Push Button Pilot Valve
5-19205	1" Quick Opening Hand Valve
6-5-113	1" NPR Air Relay Valve
6-10-900	1 1/2" NPR Air Relay Valve
6-53-129 12V	12V Solenoid Valve (Air)
6-53-129 24V	24V Solenoid Valve (Air)

Inlet Air Strainer

55-59000	1" - 40 Micron Strainer
55-59001	1 1/2" - 40 Micron Strainer

Miscellaneous Accessories

55-59006	Delay Timer (12V) (Air Only)
55-59007	Delay Timer (24V) (Air Only)



PRQ 22 Turbine Repair Kits

Major Service Kit*

55-70005	High - Major Turbine Service Kit
55-70006	Std-Major Turbine Service Kit
55-70007	Low-Major Turbine Service Kit
55-70009	Inertia Major Gear Service Kit
55-70010	Overhung Major Gear Service Kit

Motor Service Kit*

55-70002	High-Turbine Service Kit
55-70003	Std-Turbine Service Kit
55-70004	Low-Turbine Service Kit
55-70008	Inertia and Overhung Gear Service Kit

Hardware Only Kits

55-70011	Turbine Motor Hardware Kit
55-70012	Overhung/Pre-engaged Hardware Kit

PRQ 22 Exhaust Adaptors & Muffler

55-59002	Straight Exhaust Adapter
55-59003	90° Exhaust Adapter
6-5-104	Muffler
6-6-012	Close Nipple
55-29010	2" Flapper Valve

*Require Special Tools



MARADYNE CORPORATION (HQ)
 4540 West 160th Street, Cleveland, OH 44135
 216.362.0755 phone | 800.537.7444 toll free
 216.362.0799 fax
 email: sales@powrquik.com

Dealer Imprint:

