

SPXX[®]

➤ Power Team

**Professional Grade High Performance
Hydraulic Products, Systems and Tools**



HYDRAULIC PUMPS ▪ CYLINDERS ▪ JACKS ▪ PULLERS ▪ TOOLS

PT0910-MSL05 Catalog

ELECTRIC PUMP

Hydraulic **PQ60** Series
0,98 l/min, 1,49 kW
Two-Speed
700 bar (10,000 psi)

PUMP DESIGNED SPECIFICALLY FOR HEAVY DUTY, EXTENDED CYCLE OPERATION.

- For operating single- or double-acting cylinders.
- Metal shroud keeps dirt and moisture out of motor and electrical components.
- Electrical shut-down feature prevents unintentional restarting of motor following an electrical service interruption.
- Internal relief valve limits pressure to 700 bar. External relief valve is adjustable from 70 to 700 bar.
- Pumps operate below maximum OSHA noise limitation (74-76 dBA).
- Start and operate under full load, even with voltage reduced 10%.
- Equipped with a 1.49 kW (2 hp), 1,725rpm, single-phase, 50Hz induction motor.



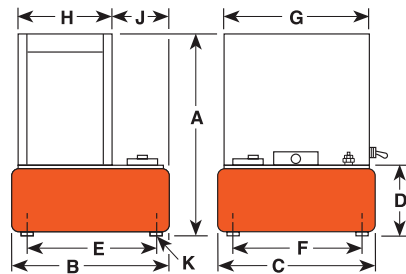
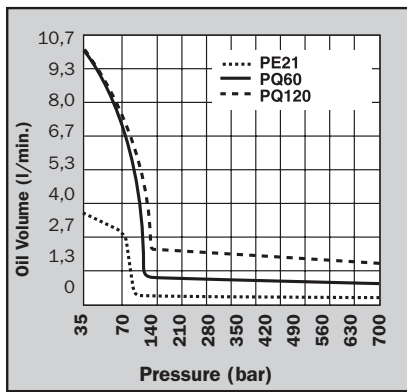
PQ603



700 bar



PQ604S



Pump No.	Max. Pressure Output bar	rpm	Noise level at Idle and 700 bar (dBA)	Amp Draw at 700 bar (A)	Oil Del. (l/min at..)				A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (in)	Prod. Wt. w/Oil (kg)
					7 bar	70 bar	350 bar	700 bar											
PQ60 Series	700	1.437	74/76*	See below	12,0	1,1	1,1	0,98	638	362	394	184	308	338	373	237	122,2	1/2-20 UNF	76,6**

Amp draw 220V at 700 bar: 11 Amps.

Amp draw 115V at 700 bar: 22 Amps.

* Measured at a 0,9 m distance, all sides.

*** For 50,8 mm dia. swivel casters, order (4) No. 10494.

** Total weight with oil and 3-way solenoid valve. Subtract 4,5 kg to obtain weight of pump with manual valve.

For use with Cyl. Type	Description	Order No.	Valve Type	Valve No.	Valve Function	Max. Amp Draw at 700 bar (A)	Motor	Reservoir Usable (l)
Single-Acting	1,49 kW pump with 21,6 l reservoir and manual valve,	PQ603-50-220	3-Way	9520*	Advance Hold Return	230V - 11 amps	1,49 kW, 220 Volt 50 Hz, Single phase	20
Single-Acting	PQ603-50-220, except has solenoid operated remote valve.	PQ603S-50-220	3-Way	9599†	Advance Hold Return	230V - 11 amps	1,49 kW, 220 Volt 50 Hz, Single phase	20
†† Single-Acting Double-Acting	1,49 kW pump with 21,6 l reservoir and manual valve.	PQ604-50-220	4-Way	9506*	Advance Hold Return	230V - 11 amps	1,49 kW, 220 Volt 50 Hz, Single phase	20
Double-Acting	PQ604-50-220, except has solenoid operated remote valve.	PQ604S-50-220	4-Way	9512†	Advance Hold Return	230V - 11 amps	1,49 kW, 220 Volt 50 Hz, Single phase	20

* Manual valve. Pump is equipped with RUN/OFF/PULSE switch for control of motor.

† 24V Solenoid valve. Pump is equipped with a remote control switch with 3,1 m cord.

†† For single-acting operation, off the electric motor when manual valve in "Retract" position.

Available with 230 Volt, 60Hz motor (to order, remove suffix "-50-220" behind pump order number)

Available with 115 Volt, 60Hz motor (to order, remove suffix "-50-220" & add "-115" behind pump order number)

LOW PROFILE

RLS Series Cylinders

5 - 150 Ton

Single-Acting, Spring-Return

700 bar (10,000 psi)



CYLINDERS

IDEAL FOR CONFINED AREAS FROM 41 TO 101,6 MM CLEARANCE.

- Cylinder body, piston and gland nut "Power Tech" treated for corrosion and abrasion resistance (See page 8).
- Standard domed piston rod (5-30 ton) or swivel cap (50-150 ton) minimize effects of off-center loading.
- Unique heavy duty spring provides fast piston return.
- A 9796 3/8" NPTF female half coupler is standard with each cylinder (the RLS50 has a 3/8" coupler which is not angled).
- Oil ports are 3/8" NPTF.
- Couplers on all cylinders, except RLS50, are angled upward for extra clearance.



RLS100

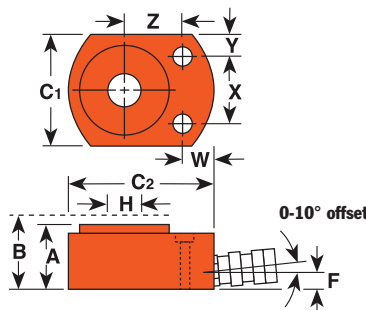
MOUNTING HOLES FOR "RLS" CYLINDERS

RLS50	8,6mm C'bore x 6,4mm deep, 5,6mm thru hole	RLS500S	17,8mm C'bore x 12,7mm deep, 11,9mm thru hole
RLS100	10,7mm C'bore x 8,7mm deep, 7,1mm thru hole	RLS750S	20,3mm C'bore x 14,2mm deep, 13,5mm thru hole
RLS200	15,5mm C'bore x 10,4mm deep, 10,4mm thru hole	RLS1000S	20,3mm C'bore x 14,2mm deep, 13,5mm thru hole
RLS300	15,5mm C'bore x 11,2mm deep, 10,4mm thru hole	RLS1500S	20,6mm C'bore x 14,2mm deep, 13,5mm thru hole



RLS1000S

ASME B30.1
700 bar



Cyl. Cap. (Tons)	Stroke (mm)	Order No.	Oil Cap. (cm ³)	A Re-tracted Height (mm)	B Ex-tended Height (mm)	C1 & C2 Outside Dia. (mm)	F Base Port (mm)	H Piston Rod Prod. Dia. (mm)	W	X	Y	Z	Metric Tons at 700 bar			
													Bore Dia. (mm)	Cyl. Area (cm ²)	Eff. 700 bar	Weight (kg)
5	14,3	RLS50	10	41,3	55,6	41,3x65,1	19,1	15,9	19,1	28,6	6,4	25,4	28,6	6,4	4,5	1,0
10	11,1	RLS100	17	44,5	55,6	55,6x82,6	15,9	19,1	17,5	36,5	9,5	33,3	42,9	14,4	10,1	1,5
20	11,1	RLS200	33	50,8	61,9	76,2x101,6	16,7	28,6	18,3	49,2	13,5	39,7	60,3	28,6	20,1	2,5
30	12,7	RLS300	53	58,7	71,4	95,3x114,3	18,3	34,9	20,6	52,4	21,4	44,5	73,0	41,9	29,5	3,9
50	15,9	RLS500S	99	66,7	82,6	114,3x139,7	21,4	44,5	23,8	66,7	23,8	54,0	88,9	62,1	43,6	6,3
75	15,9	RLS750S	163	79,4	95,3	140,5x165,1	25,4	54,0	23,8	76,2	32,1	65,9	114,3	102,6	72,2	10,6
100	15,9	RLS1000S	202	85,7	101,6	152,4x177,8	25,4	63,5	20,6	76,2	38,1	71,4	127,0	126,6	89,1	13,6
150	14,3	RLS1500S	282	101,6	115,9	190,5x215,9	33,3	76,2	33,3	117,5	36,5	79,4	158,8	197,9	139,2	23,6

Note: RLS Series cylinders may be supplied with QPQ-coating on its pistons & bodies (See page 8).

COUPLERS

Standard & Flush-Face
700 bar (10,000 psi)



9795 Cylinder and
Hose Couplers



9796



9798



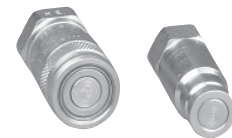
9794 No-Spill Hose
Couplers



9793



9792



9794 Flush-Face couplers



9797



9799



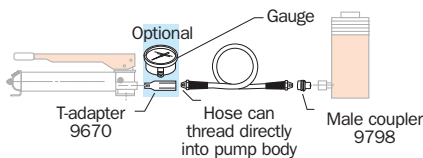
9800

ACCESSORIES

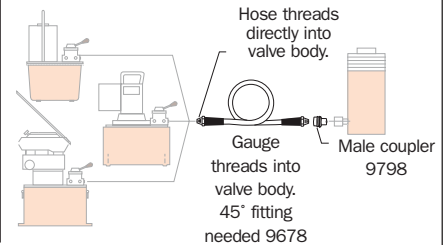
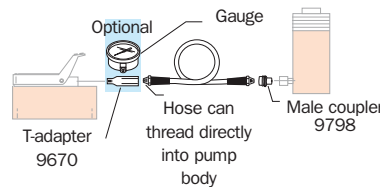


Air, Electric & Gas Pumps with valve system hook-up

Hand pump system hook-up
T-adapter necessary for P12, P19, P23, P59 & P59F pumps.
All other hand pumps have a gauge mounting port.



Single-acting air pump system hook-up



CYLINDER AND HOSE COUPLERS

Designed for use up to 700 bar with hydraulic jacks, cylinders, etc. They are the threaded union type for interchanging cylinders in seconds. Each half is valved with a precision ball for a tight shutoff when disconnected. These couplers also permit the separation of cylinders or hose from pump when at 0 psi with minimal oil loss.

No. 9795 – Complete quick coupler, 3/8" NPTF.
(Includes two 9800 dust caps.)

No. 9798 – Male (hose) half coupler (less hose half dust cap), 3/8" NPTF.

No. 9796 – Female (cylinder) half coupler with No. 9800 dust cap, 3/8" NPTF.

No. 9796-V – Same as 9796, but with Viton seals.

No. 9796-E – Same as 9796, but with EPR seals.

No. 9799 – Optional metal dust cap (hose half).

No. 9797 – Optional metal dust cap (cylinder half).

NO-SPILL, PUSH-TO-CONNECT HYDRAULIC HOSE COUPLERS

High flow, no-spill, push-to-connect couplers with locking collar and flush face designed for high pressure applications. The flush-face concept makes it easy to clean both coupler ends before connecting. Our unique push-to-connect, "dry-break" design eliminates oil spillage. The locking collar makes accidental disconnects a thing of the past. For 700 bar operation. Designed to permit high oil flow.

No. 9792 – Female (cylinder) half quick coupler only.
Wt., 0.1 kg.

No. 9793 – Male (hose) half quick coupler only. Wt., 0.1 kg.

No. 9794 – Complete quick coupler (male and female). Dust caps not included. Wt., 0.2 kg.

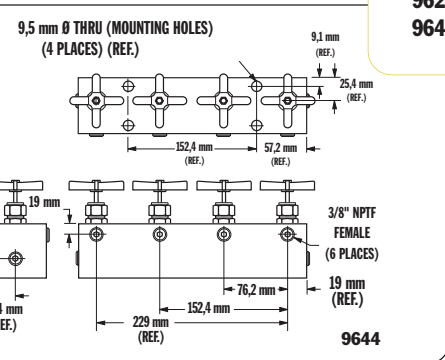
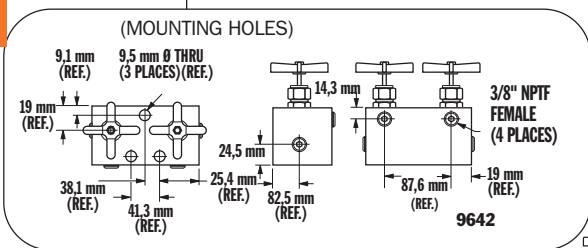
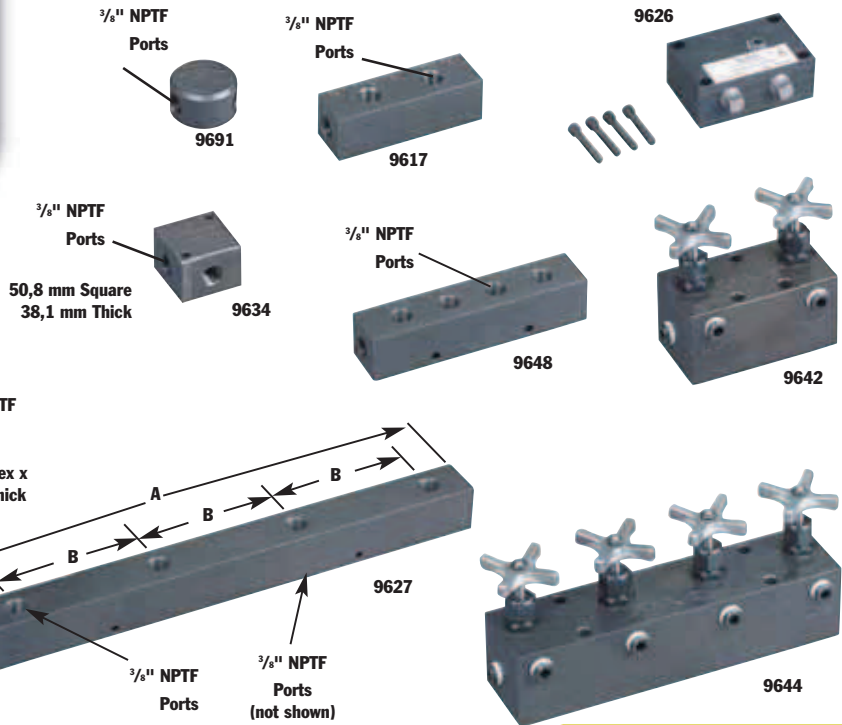
HYDRAULIC COUPLER DUST CAP

Dust cap fits either male or female half couplers.

No. 9800 – Dust cap. For male or female 3/8" NPTF half couplers. Wt., 0.1 kg.

MANIFOLDS

Remote and Pump Mounted
700 bar (10,000 psi)



Manifold No.	A (mm)	B (mm)	C (mm)
9627	406,4	114,3	38,1
9648	177,8	38,1	38,1

No. 9691 – "Y" Manifold
Extremely useful when connecting two hydraulic cylinders to a single line. Has three 3/8" NPTF ports.
Wt. 0,45 kg.

No. 9634 – Manifold block
This manifold is for multiple-cylinder installations, has four 3/8" NPTF ports and two 1/4" mounting holes.
Wt. 0,7 kg.

No. 9635 – Manifold block
This hex-shaped manifold offers extra versatility with six 3/8" NPTF ports and two 1/4" mounting holes.
Wt. 0,9 kg.

No. 9617 – Manifold block
When a multiple-cylinder installation is required, this manifold is invaluable.

Has six 3/8" NPTF ports to handle larger multiple-cylinder systems.
Wt. 1.4 kg.

No. 9648 – Manifold block
This 178 mm long manifold block has seven 3/8" NPTF ports and two 6,4 mm mounting holes. Wt.1,2 kg.

No. 9627 – Manifold block
This 406,4 mm long manifold block allows you to mount the 9575 or 9596 valves without interference. Has seven 3/8" NPTF ports and two 6,4 mm mounting holes. Wt. 2,7 kg.

No. 9626 – Pump mounted manifold block
Converts pumps with pump mounted valves for use with remote mounted valves. This manifold block is subplate mounted on the pump cover plate and

provides 3/8" NPTF pressure and return ports. Maximum recommended flow rate is 19 l/min. Note: If used on PE30 or PG30 series pump, 12,7mm longer mounting screws are required. Order four (4) No. 11956 screws separately.

9642 AND 9644 MANIFOLD BLOCKS WITH NEEDLE VALVES

For independent multiple-cylinder operation, feature needle valves for precise manual control. Designed for remote-mounted applications. Can be used with all Power Team pumps.

No. 9642 – Manifold with two needle valves for control of two cylinders. Has four 3/8" NPTF ports. Wt. 3,7 kg
No. 9644 – Manifold with four needle valves for control of four cylinders. Has six 3/8" NPTF ports. Wt. 7,4 kg

ACCESSORIES


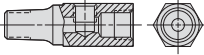
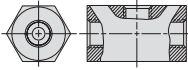
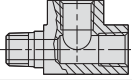
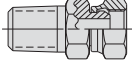
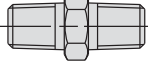
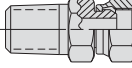
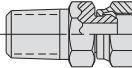
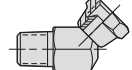
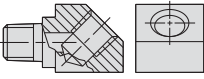
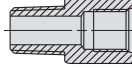

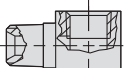
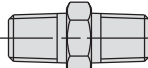
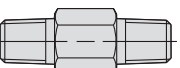
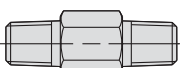
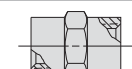



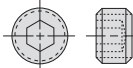
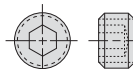
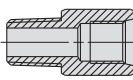
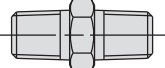
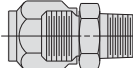
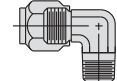

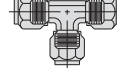
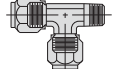
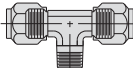

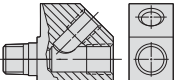
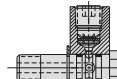


9670

FITTINGS

Hydraulic Fittings:
All applications.
700 bar (10,000 psi)

	9190	Hyd. tubing. 3/8" O.D. x .065" wall, 15,3 m. (10 pieces 1,53 m long.) Wt. 5,5 kg.
	9670	Tee adapter. For installing gauge between pump and hose coupling. Has 1/4" and 3/8" NPTF female and 3/8" NPTF male ports. Wt. 0,2 kg.
	9671	Double tee adapter. Permits use of more than one cylinder in series with one pump. Three 3/8" NPTF female ports. Wt. 0,5 kg.
	9672	Service tee. Two 3/8" NPTF female internal, one 3/8" NPTF male external. Wt. 0,3 kg.
	9673*	Swivel connector. 3/8" NPSM male, 1/4" NPSM female. Wt. 0,1 kg.
	9674	Male connector. 43 mm long, 1/4" x 3/8" NPTF. Wt. 0,1 kg.
	9675*	Swivel connector. 3/8" NPTF male, 3/8" NPSM female. Wt. 0,1 kg.
	9676*	Swivel connector. 1/4" NPTF male, 3/8" NPSM female. Wt. 0,1 kg.
	9677*	45° swivel connector. 3/8" NPTF male, 3/8" NPSM female. Wt. 0,1 kg.
	9678	45° fitting. Used when mounting gauge at an angle on connection such as 9670. Male and female 1/4" NPTF ends. Wt. 0,1 kg.
	9679	Connector. 1/4" NPTF female and 3/8" NPTF male. Wt. 0,1 kg.
	9680	Coupling. Both ends 3/8" NPTF female. Wt. 0,1 kg.
	9681	Street elbow. Male and female 3/8" NPTF ends. Wt. 0,1 kg.
	9682	Male connector. 43 mm long, 3/8" NPTF male ends. Wt. 0,1 kg.
	9683	Male connector. 57 mm long, 3/8" NPTF male ends. Wt. 0,1 kg.
	9684	Male connector. 57 mm long, 1/4" NPTF male ends. Wt. 0,1 kg.
	9685	Coupling. 1/4" NPTF female and 3/8" NPTF female. Wt. 0,1 kg.

	9686	90° elbow. 3/8" NPTF female ends. Wt. 0,2 kg.
	9687	Pipe plug. Heat-treated, 3/8" NPTF. Wt. 0,1 kg.
	9688	Pipe plug. Heat-treated, 1/4" NPTF. Wt. 0,1 kg.
	9689	Connector. 1/4" NPTF male and 3/8" NPTF female. Wt. 0,1 kg.
	9690	Male connector. 43 mm long, 1/4" NPTF male ends. Wt. 0,1 kg.
	9692	Straight connector. 3/8" tube x 3/8" male NPTF. Wt. 0,1 kg.
	9693	90° elbow. 3/8" tube x 3/8" male NPTF. Wt. 0,1 kg.
	9694	45° elbow. 3/8" tube x 1/4" male NPTF. Wt. 0,1kg.
	9695	Tee. 3/8" tube. Wt. 0,1 kg.
	9696	Male run tee. 3/8" tube x 1/4" male NPTF. Wt. 0,1 kg.
	9697	Male branch tee. 3/8" tube x 1/4" male NPTF. Wt. 0,1 kg.
	9698	Cross. 3/8" tube. Wt. 0,2 kg.
	9699	45° gauge fitting. 3/8" NPTF male and female, and 1/4" NPTF female at 45°. Wt. 0,3 kg.
	9705	Fitting, swivel. 3/8" NPTF male to 3/8" NPTF female. 90° fitting with internal 370 micron screen. May be rotated 360° about male thread axis.

NOTE: Power Team hydraulic fittings are intended for use with our high pressure hydraulic products and are suitable for use at max. working pressures of 700 bar unless otherwise noted.

* **CAUTION:** On part numbers 9673, 9675, 9676 and 9677 the female swivel end of these adapters is a straight pipe thread (NPSM) with a 30° seat. All male pipe fittings that are used with these female swivel adapters must have an internal 30° seat in order to effect a proper seal. All Power Team male fittings are manufactured with a 30° seat except 9687 and 9688.



HOSES

Polyurethane
Rubber
Non-Conductive
700 bar (10,000 psi)

- All have plastic hose guards except for the 1/4" I.D. polyurethane hoses which have spring guards.
- 3/8" NPTF fittings on both ends.
- Operating pressure is 700 bar (10,000psi). All comply with MHI standard IJ100.

BE SAFE!

- INSPECT BEFORE AND AFTER EACH USE.
- REPLACE IF ANY SIGNS OF DEGRADATION OR WEAR THAT MAY AFFECT SAFETY OR PERFORMANCE.
- KEEP THE PRODUCT CLEAN.
- STORE PROPERLY.

Non-conductive hose

For applications requiring electrical isolation by the hose, non-conductive hose has a leakage factor of less than 50 microamperes, considered a safe level of conductivity by SAE standards. The covering is polyurethane and colored orange for easy identification as non-conductive hose. The covering is not perforated, preventing moisture from entering the hose and affecting its overall conductivity. All non-conductive hoses have a minimum burst pressure of 2800 bar (40,000 psi).

Rubber hose

2-ply rated hose reinforced with two braids of high tensile steel wire. The rubber covering is oil and weather resistant.

Polyurethane hose

Made up of nylon core tube with polyester fiber reinforcement which will withstand the minimum SAE bend radius without shortening service life. These hoses last up to seven times longer than rubber hose, and are suitable for continuous service at temperatures from -40° to 150° F (-40° to 66°C).

Hydraulic hose assembly

No. 9764 – Hose assembly consisting of 9767 (1,8 m hose), 6,4mm I.D. polyurethane with 9798 hose half coupler and 9800 dust cap.

No. 9754 – Hose assembly consisting of 9756 (1,8 m hose), 6,4 mm I.D. rubber with 9798 hose half coupler and 9800 dust cap.



A = 3/8" I.D. Polyurethane
B = 1/4" I.D. Polyurethane
C = 1/4" & 3/8" I.D. Rubber
D = 1/4" I.D. Non-Conductive

Hoses

The figures show the relative effect two styles of hose can have on return time. Actual times may vary.

CYLINDER RETURN TIME

	No. 9769 3,1 m Hose 6,4 mm I.D.	No. 9781 3,1 m Hose 9,5 mm I.D.
Cylinder		
C2514C	51 sec.	14 sec.
C556C	1 min., 30 sec.	24 sec.
C5513C	4 min., 12 sec.	59 sec.
C10010C	6 min., 56 sec.	1 min., 3 sec.

Hose Type	Hose I.D.	Hose Length	Burst Rating	Order No.	Hose Type	Hose I.D.	Hose Length	Burst Rating	Order No.
Polyurethane	6,4 mm	0,6 m	1 400 bar	9765	Rubber, Wire-braid	6,4 mm	2,4 m	1 400 bar	9757
Polyurethane	6,4 mm	0,9 m	1 400 bar	9766	Rubber, Wire-braid	6,4 mm	3,1 m	1 400 bar	9758
Polyurethane	6,4 mm	1,8 m	1 400 bar	9767	Rubber, Wire-braid	6,4 mm	3,7 m	1 400 bar	9759
Polyurethane	6,4 mm	1,8 m	1 400 bar	9764*	Rubber, Wire-braid	6,4 mm	6,1 m	1 400 bar	9760
Polyurethane	6,4 mm	2,4 m	1 400 bar	9768	Rubber, Wire-braid	6,4 mm	9,1 m	1 400 bar	9761
Polyurethane	6,4 mm	3,1 m	1 400 bar	9769	Rubber, Wire-braid	6,4 mm	15,3 m	1 400 bar	9762
Polyurethane	6,4 mm	3,7 m	1 400 bar	9770	Rubber, Wire-braid	9,5 mm High Flow	0,9 m	1 400 bar	9733
Polyurethane	6,4 mm	6,1 m	1 400 bar	9771	Rubber, Wire-braid	9,5 mm High Flow	1,8 m	1 400 bar	9776
Polyurethane	6,4 mm	15,3 m	1 400 bar	9772	Rubber, Wire-braid	9,5 mm High Flow	3,1 m	1 400 bar	9777
Polyurethane	6,4 mm	22,9 m	1 400 bar	9750	Rubber, Wire-braid	9,5 mm High Flow	4,6 m	1 400 bar	9734
Polyurethane	6,4 mm	30,5	1 400 bar	9751	Rubber, Wire-braid	9,5 mm High Flow	6,1 m	1 400 bar	9778
Polyurethane	9,5 mm High Flow	1,8 m	2 100 bar	9780	Rubber, Wire-braid	9,5 mm High Flow	9,1 m	1 400 bar	9735
Polyurethane	9,5 mm High Flow	3,1 m	2 100 bar	9781	Rubber, Wire-braid	9,5 mm High Flow	12,2 m	1 400 bar	9736
Polyurethane	9,5 mm High Flow	6,1 m	2 100 bar	9782	Rubber, Wire-braid	9,5 mm High Flow	15,3 m	1 400 bar	9779
Polyurethane	9,5 mm High Flow	15,3 m	2 100 bar	9783	Non-Conductive	6,4 mm	1,8 m	2 800 bar	9773
Rubber, Wire-braid	6,4 mm	0,9 m	1 400 bar	9755	Non-Conductive	6,4 mm	3,1 m	2 800 bar	9774
Rubber, Wire-braid	6,4 mm	1,8 m	1 400 bar	9756	Non-Conductive	6,4 mm	6,1 m	2 800 bar	9775
Rubber, Wire-braid	6,4 mm	1,8 m	1 400 bar	9754*					

NOTE: Polyurethane hoses not recommended for use where heat or weld splatter conditions exist.

* Furnished with 9798 hose half coupler and 9800 dust cap.



GAUGES

Analog & Digital
700 bar (10,000 psi)

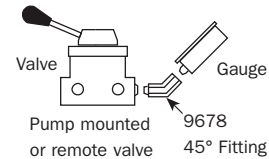
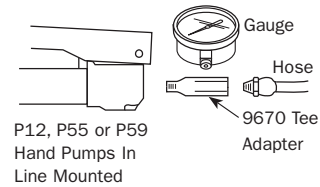
ASME B40.1
GRADE B



Heavy-duty Hydraulic Analog Pressure Gauges

- Gauges feature an easily readable and highly visible, red day-glo needle.
- High strength steel bourdon tube ensures high cycle life.
- Stainless steel cases and lens locking rings.
- Have 1/4" NPT connections.
- 4" and 6" dry gauges* shipped 'dry' and user can convert to 'wet' using liquid silicone (#9046).

Typical Mounting Situations



STANDARD PRESSURE GAUGE ORDERING INFORMATION

Face Dia.	psi / Bar	U.S. Short Tons	Major Graduations	Minor Graduations	Silicone Filled	Use With Cylinder Series	Gauge No.
63,5 mm	0-10,000 / 0-690	-	2500 psi, 100 Bar	500 psi, 20 Bar	No	All	9041
63,5 mm	0-10,000 / 0-690	-	2500 psi, 100 Bar	500 psi, 20 Bar	Yes	All	9040
100 mm	0-10,000 / 0-690	-	1000 psi, 100 Bar	200 psi, 10 Bar	No*	All	9051
100 mm	0-10,000 / 0-690	-	1000 psi, 100 Bar	200 psi, 10 Bar	Yes	All	9052
100 mm	0-10,000 / 0-690	0-17.5, 0-30 and 0-50	2000 psi, 5 Ton	200 psi, .5 Ton on 30, 50 Ton Scales; .2 Ton on 17.5 Ton Scale	No*	RT172, RT302, RT503	9059
100 mm	0-10,000 / 0-690	0-5	2000 psi, 1 Ton	200 psi, .1 Ton	No	C & RLS	9053
100 mm	0-10,000 / 0-690	0-10	2000 psi, 1 Ton	200 psi, .1 Ton	No*	C, RD, RH, RLS & RSS	9055
100 mm	0-10,000 / 0-690	0-25	2000 psi, 5 Ton	200 psi, .5 Ton	No*	C & RD	9063
100 mm	0-10,000 / 0-690	0-30	2000 psi, 5 Ton	200 psi, .5 Ton	No*	RH†, RLS & RSS	9065
100 mm	0-10,000 / 0-690	0-50	2000 psi, 5 Ton	200 psi, .5 Ton	No*	RH†, RLS & RSS	9067
100 mm	0-10,000 / 0-690	0-55	2000 psi, 5 Ton	200 psi, .5 Ton	No*	C, R, RA & RD	9069
100 mm	0-10,000 / 0-690	0-60	2000 psi, 5 Ton	200 psi, 1 Ton	No*	RH	9071
100 mm	0-10,000 / 0-690	0-100	2000 psi, 10 Ton	200 psi, 1 Ton	No*	C, R, RA, RD, RH, RLS†, RSS† & RT1004†	9075
100 mm	0-10,000 / 0-690	0-150	2000 psi, Initial 10 Then 20 Ton	200 psi, 2 Ton	No*	C, R, RD & RLS	9077
100 mm	0-10,000 / 0-690	0-200	2000 psi, 20 Ton 10 Then 20 Ton	200 psi, 2 Ton	No*	R, RD & RH†	9079
150 mm	0-10,000 / 0-690		1000 psi, 100 Bar	100 psi, 10 Bar	No*	All	9089

† The tonnage scale on the gauge is based on a different effective area.

A slight error in tonnage reading will occur relative to the different effective area.

Note: Remarketing & calibration of **9062** pressure gauge to metric tonne or kN scale based on given effective area of cylinder bore for load test or measurement available upon request. (See page 73)

ACCESSORIES



MEASUREMENTS/ SPECIFICATIONS

Manufacturing Standards



INTERNATIONAL QUALITY STANDARD

Power Team's commitment to quality is evident in everything we do, from raw material receipt to how we support our customers years after they purchase our products. Power Team is registered to ISO 9001: 2000 international quality standard. ISO 9001: 2000 requires compliance with standards for management, administration, product development, manufacturing and continual improvement. Our Registration verifies that Power Team has adopted and maintains documentation for processes ranging from suppliers to customers, inspection, handling, and training. ISO 9001 also requires periodic internal and external audits to ensure all aspects of work affecting quality control are monitored. This always has been, and will continue to be, our philosophy. That's our guarantee to you.

ASME B30.1

Power Team hydraulic cylinders fully comply with the criteria set forth in the American Society of Mechanical Engineers standard ASME B30.1:

1. Our cylinders are designed to have a minimum of a 2-to-1 safety factor on typical material yield strength; Each cylinder is tested at 125 percent of rated pressure at full travel and is inspected to assure functionality and freedom from leaks.

ASME B40.1

Power Team heavy-duty pressure gauges are designed in accordance with the recommendations set forth in the American Society of Mechanical Engineers standard ASME B40.1, Grade B.



Power Team is committed to designing, manufacturing, and marketing products that meet or exceed the needs of the customers we serve. Power Team supplies a Letter of Incorporation or a Declaration of Conformity and CE Marking for products that conform with European community directives.

IJ100

Power Team hoses meet the criteria set forth in the Material Handling Institute's specification #IJ100 for hydraulic hose. Under the procedures outlined in this standard, hydraulic hose shall:

1. Have an average minimum life of 30,000 cycles at full rated capacity.
2. Have a minimum burst pressure of at least twice the rated operating pressure.



Where specified, Power Team electric power pump assemblies meet the design, assembly, and test requirements of the Canadian Standards Association.

Note: If CSA certification is required, it must be requested at the time the pump is ordered.

NEMA

Where specified, Power Team electric power pump assemblies meet the design, assembly, and test requirements of NEMA 12, a National Electrical Manufacturers' Association standard relating to electrical components used to resist moisture and dust.

POWER TEAM PRODUCT DESIGN CRITERIA

All Power Team brand hydraulic components are designed and/or tested to be safe for use at maximum operating pressures of 700 bar (10,000 psi) unless otherwise specifically noted.

QUALITY ASSURANCE

All of our hydraulic cylinders are subjected to quality checks during production. All steel bar is certified and has material traceability to the mill. Before leaving the factory, all cylinders are pressure tested to 875 bar (12,500 psi), except the RT series which are tested to 700 bar (10,000 psi) to insure on-the-job reliability. We have made every effort to include the latest specifications for our products in this catalog. Please call the Power Team factory for the most current product specifications. The Power Team Lifetime Marathon Warranty is described in more detail on page 163 of this catalog.



LIFETIME
MARATHON™
WARRANTY

POWER TEAM®

All Power Team products and parts, with the exception noted below, are warranted against defects in materials and workmanship for the life of the product or part. (The life of the product or part is defined as that point in time when it no longer functions due to normal wear.) This warranty does not cover any product or part that has been worn out, abused, heated, ground or otherwise altered, used for a purpose other than that for which it was intended or used in a manner inconsistent with any instructions regarding its use. Chains, batteries, electric motors, gas engines, knives and cutter blades which are sold with Power Team products are not covered by this warranty. All electric motors and gas engines are separately warranted by their manufacturer under the conditions stated in their separate warranty.

Power Team's electronic products are warranted against defects in material and workmanship for one year.

To qualify for warranty consideration, return the Power Team product, freight prepaid, to a Power Team authorized repair center or to the Power Team factory. If any product or part manufactured by Power Team is found to be defective by Power Team, in its sole judgement, Power Team will, at its option, either repair or replace such defective product or part and return it via best ground transportation, freight prepaid. THIS REMEDY SHALL BE THE EXCLUSIVE REMEDY AVAILABLE FOR ANY DEFECTS IN THE PRODUCTS OR PARTS MANUFACTURED AND SOLD BY POWER TEAM OR FOR DAMAGES RESULTING FROM ANY OTHER CAUSE WHATSOEVER, INCLUDING WITHOUT LIMITATION, POWER TEAM'S NEGLIGENCE. POWER TEAM SHALL NOT, IN ANY EVENT, BE LIABLE TO ANY BUYER FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, WHETHER FOR DEFECTIVE OR NON-CONFORMING GOODS, NEGLIGENCE, ON THE BASIS OF STRICT LIABILITY OR FOR ANY OTHER REASON.

Power Team's warranty is expressly limited to persons who purchase Power Team's products or parts for the resale or use in the ordinary course of the buyer's business.

THIS WARRANTY IS EXCLUSIVE, AND POWER TEAM MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS MANUFACTURED AND SOLD BY IT, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER. No agent, employee or representative of Power Team has any authority to bind Power Team to any affirmation, representation or warranty concerning Power Team products or parts, except as stated herein.

The purpose of this exclusive remedy shall be to provide the buyer with repair or replacement of products or parts manufactured by Power Team found to be defective in materials or workmanship or negligently manufactured. This exclusive remedy shall not be deemed to have failed of its essential purpose so long as Power Team is willing and able to replace said defective products or parts in the prescribed manner.