

May 15, 2025



Cylinders, Valves, Pumps, Motors, & Accessories





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QUALITY

Prince Manufacturing Corporation's Wolverine line is our globally-sourced brand of quality hydraulic components. Prince understands customers want choices so we introduced the Wolverine line of products to target a different segment of the market, resulting in more competitively priced products.

Product testing and evaluation is done at Prince's own R & D test lab before any new product is added to the Wolverine line. This has resulted in numerous product improvements that were implemented before the products were placed on our warehouse shelves.

This confirms these products meet their stated specifications and helps ensure consistent quality.



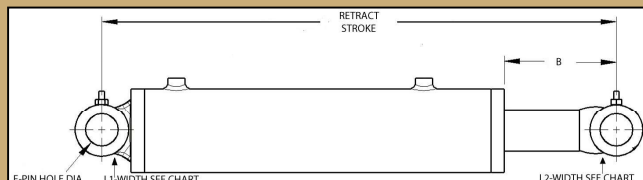
C Y L I N D E R S

3000 PSI Welded Cross Tube Cylinders



FEATURES:

- 100% tested for quality assurance
- Hard chrome rod plating for corrosion & wear resistance
- Cast steel end fittings for high strength & low cost
- Top port design
- SAE O-ring ports for reliable & leak-free connection
- Thread-in gland design for serviceability
- Grease zerks included for extended pin life
- High luster black paint for protection from the elements
- Individually bagged & boxed for secure storage & transport



MODEL	BORE	PORTS	CROSS TUBE WIDTH		B	F
			L1-BASE END	L2-ROD END		
WWXT1500-S	1.5	SAE 4	2.25	2.00	2.62	3/4
WWXT2000-S	2.0	SAE 6	2.75	2.25	2.25	1
WWXT2500-S	2.5	SAE 8	3.25	2.25	2.25	1
WWXT3000-S	3.0	SAE 8	3.75	2.25	2.25	1
WWXT3500-S	3.5	SAE 8	4.25	2.25	4.00	1.25
WWXT4000-S	4.0	SAE 8	4.75	2.50	3.75	1.50

MODEL	BORE x STROKE			RETRACT	ROD DIA.	COLUMN LOAD RATINGS	WT/LBS	LIST PRICE
WWXT1504-S	1.5	X	4	12	1	FULL PSI	8	167.00
WWXT1506-S	1.5	X	6	14	1	FULL PSI	9	174.00
WWXT1508-S	1.5	X	8	16	1	FULL PSI	10	235.00
WWXT1512-S	1.5	X	12	20	1	FULL PSI	13	198.00
WWXT1516-S	1.5	X	16	24	1	FULL PSI	15	214.00
WWXT2004-S	2	X	4	12	1.25	FULL PSI	12	207.00
WWXT2006-S	2	X	6	14	1.25	FULL PSI	13	283.00
WWXT2008-S	2	X	8	16	1.25	FULL PSI	15	295.00
WWXT2010-S	2	X	10	18	1.25	FULL PSI	17	236.00
WWXT2012-S	2	X	12	20	1.25	FULL PSI	19	323.00
WWXT2014-S	2	X	14	22	1.25	FULL PSI	20	256.00
WWXT2016-S	2	X	16	24	1.25	FULL PSI	22	266.00
WWXT2018-S	2	X	18	26	1.25	FULL PSI	24	363.00
WWXT2020-S	2	X	20	28	1.25	FULL PSI	25	376.00
WWXT2024-S	2	X	24	32	1.25	7300 (2330 PSI)*	29	306.00
WWXT2030-S	2	X	30	38	1.25	4900 (1560 PSI)*	34	444.00
WWXT2036-S	2	X	36	44	1.25	3500 (1120 PSI)*	39	489.00
WWXT2504-S	2.5	X	4	12	1.50	FULL PSI	16	248.00
WWXT2506-S	2.5	X	6	14	1.50	FULL PSI	18	345.00
WWXT2508-S	2.5	X	8	16	1.50	FULL PSI	20	273.00
WWXT2510-S	2.5	X	10	18	1.50	FULL PSI	22	286.00
WWXT2512-S	2.5	X	12	20	1.50	FULL PSI	25	298.00
WWXT2516-S	2.5	X	16	24	1.50	FULL PSI	29	324.00
WWXT2518-S	2.5	X	18	26	1.50	FULL PSI	31	446.00
WWXT2520-S	2.5	X	20	28	1.50	FULL PSI	34	464.00
WWXT2524-S	2.5	X	24	32	1.50	FULL PSI	38	497.00
WWXT2530-S	2.5	X	30	38	1.50	10300 (2100 PSI)*	45	548.00
† WWXT2536-S	2.5	X	36	44	1.50	7400 (1510 PSI)*	51	Call

*THESE MODELS HAVE A COLUMN LOAD RESTRICTION THAT LIMITS THE MAXIMUM PUSH LOAD THAT THE CYLINDER CAN SAFELY BE OPERATED AT.

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



C Y L I N D E R S

3000 PSI Welded Cross Tube Cylinders

MODEL	BORE x STROKE			RETRACT	ROD DIA.	COLUMN LOAD RATINGS	WT/LBS	LIST PRICE
WWXT3004-S	3	X	4	12	1.5	FULL PSI	19	291.00
WWXT3006-S	3	X	6	14	1.5	FULL PSI	22	Call
WWXT3008-S	3	X	8	16	1.5	FULL PSI	24	423.00
WWXT3010-S	3	X	10	18	1.5	FULL PSI	27	441.00
WWXT3012-S	3	X	12	20	1.5	FULL PSI	29	346.00
WWXT3014-S	3	X	14	22	1.5	FULL PSI	32	360.00
WWXT3016-S	3	X	16	24	1.5	FULL PSI	34	496.00
† WWXT3018-S	3	X	18	26	1.5	FULL PSI	36	Call
WWXT3020-S	3	X	20	28	1.5	20700 (2930 PSI)*	39	401.00
WWXT3024-S	3	X	24	32	1.5	15200 (2150 PSI)*	44	428.00
WWXT3030-S	3	X	30	38	1.5	10300 (1460 PSI)*	51	469.00
† WWXT3032-S	3	X	32	40	1.5	9200 (1300 PSI)*	54	Call
WWXT3036-S	3	X	36	44	1.5	7400 (1050 PSI)*	59	512.00
† WWXT3042-S	3	X	42	50	1.5	5675 (800 PSI)	65	Call
† WWXT3048-S	3	X	48	56	1.5	4400 (620 PSI)*	73	Call
† WWXT3508-S	3.5	X	8	18	1.75	FULL PSI	33	Call
† WWXT3510-S	3.5	X	10	20	1.75	FULL PSI	36	Call
† WWXT3512-S	3.5	X	12	22	1.75	FULL PSI	39	Call
† WWXT3516-S	3.5	X	16	26	1.75	FULL PSI	45	Call
WWXT3518-S	3.5	X	18	28	1.75	FULL PSI	48	475.00
WWXT3524-S	3.5	X	24	34	1.75	26200 (2730 PSI)*	57	526.00
† WWXT3530-S	3.5	X	30	40	1.75	20200 (2100 PSI)	67	Call
† WWXT3532-S	3.5	X	32	42	1.75	16100 (1670 PSI)*	70	Call
† WWXT3536-S	3.5	X	36	46	1.75	13100 (1360 PSI)*	76	Call
† WWXT3540-S	3.5	X	40	50	1.75	10900 (1130 PSI)*	82	Call
† WWXT3548-S	3.5	X	48	58	1.75	7800 (810 PSI)*	94	Call
† WWXT4010-S	4	X	10	20	2	FULL PSI	45	Call
WWXT4012-S	4	X	12	22	2	FULL PSI	49	513.00
† WWXT4014-S	4	X	14	24	2	FULL PSI	52	Call
WWXT4016-S	4	X	16	26	2	FULL PSI	56	552.00
WWXT4018-S	4	X	18	28	2	FULL PSI	60	571.00
WWXT4020-S	4	X	20	30	2	FULL PSI	63	798.00
WWXT4024-S	4	X	24	34	2	37200 (2960 PSI)*	71	851.00
† WWXT4030-S	4	X	30	40	2	24900 (1980 PSI)*	82	Call
† WWXT4032-S	4	X	32	42	2	22400 (1780 PSI)*	85	Call
† WWXT4036-S	4	X	36	46	2	18100 (1440 PSI)*	93	Call
† WWXT4040-S	4	X	40	50	2	14600 (1160 PSI)*	100	Call
† WWXT4042-S	4	X	42	52	2	13500 (1350 PSI)	104	Call
WWXT4048-S	4	X	48	58	2	10600 (840 PSI)*	115	1,073.00

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UNIVERSAL SEAL KITS		
PART NO.	DESCRIPTION	LIST PRICE
PMCK-WW1500	1.5 BORE	40.00
PMCK-WW2000	2 BORE	34.00
PMCK-WW2500	2.5 BORE	50.00
PMCK-WW3000	3 BORE	50.00
PMCK-WW3500	3.5 BORE	66.00
PMCK-WW4000	4 BORE	66.00

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



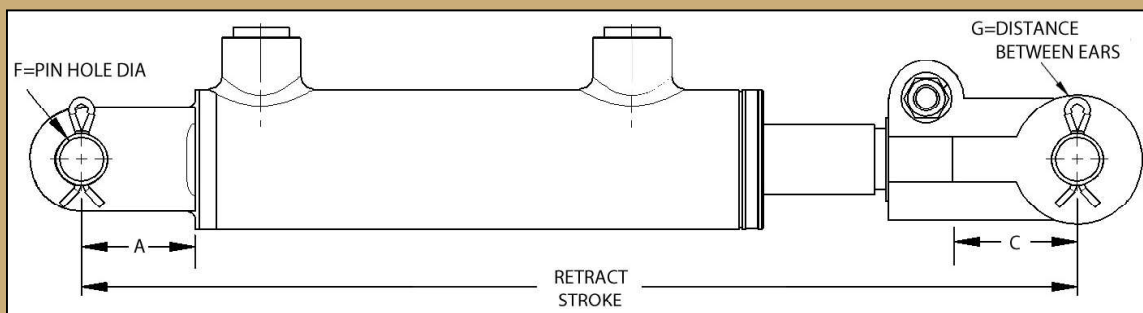
C Y L I N D E R S

3000 PSI Welded Adjustable Clevis Cylinders



FEATURES:

- 100% tested for quality assurance
- Hard chrome rod plating for corrosion & wear resistance
- Cast steel end fittings for high strength & low cost
- Top port design
- SAE O-ring ports for reliable & leak-free connection
- Spin on rod devis
- Thread-in gland design for serviceability
- High luster black paint for protection from the elements
- Individually bagged & boxed for secure storage & transport



MODEL	BORE	PORTS	A	C	F	G
WWCL1500-S	1.5	SAE 6	1.63	1.62	0.75	0.88
WWCL2000-S	2.0	SAE 8	2.13	2.12	1.00	1.13
WWCL2500-S	2.5	SAE 8	2.13	2.13	1.00	1.13
WWCL3000-S	3.0	SAE 8	1.88	2.13	1.00	1.13
WWCL3500-S	3.5	SAE 8	1.88	2.13	1.00	1.13
WWCL4000-S	4.0	SAE 8	1.75	2.13	1.00	1.13

MODEL	BORE x STROKE			RETRACT	ROD DIA.	COLUMN LOAD RATINGS	WT/LBS	LIST PRICE
WWCL1504-S	1.5	X	4	14.25	1	FULL PSI	10	226.00
WWCL1506-S	1.5	X	6	16.25	1	FULL PSI	11	237.00
WWCL1508-S	1.5	X	8	18.25	1	FULL PSI	12	254.00
WWCL1508-ASAE	1.5	X	8	20.25	1	FULL PSI	13	192.00
WWCL1510-S	1.5	X	10	20.25	1	FULL PSI	13	259.00
WWCL1512-S	1.5	X	12	22.25	1	FULL PSI	15	204.00
WWCL1516-S	1.5	X	16	26.25	1	FULL PSI	17	291.00
WWCL1518-S	1.5	X	18	28.25	1	4800 (2720 PSI)*	18	303.00

WWCL2004-S	2	X	4	14.25	1.13	FULL PSI	16	222.00
WWCL2006-S	2	X	6	16.25	1.13	FULL PSI	17	230.00
WWCL2008-S	2	X	8	18.25	1.13	FULL PSI	19	318.00
WWCL2008-ASAE	2	X	8	20.25	1.13	FULL PSI	20	231.00
WWCL2010-S	2	X	10	20.25	1.13	FULL PSI	20	330.00
WWCL2012-S	2	X	12	22.25	1.13	FULL PSI	22	349.00
† WWCL2014-S	2	X	14	24.25	1.13	FULL PSI	24	Call
WWCL2016-S	2	X	16	26.25	1.13	FULL PSI	25	277.00
WWCL2018-S	2	X	18	28.25	1.13	FULL PSI	27	382.00
WWCL2020-S	2	X	20	30.25	1.13	9100 (2900 PSI)*	28	394.00
WWCL2024-S	2	X	24	34.25	1.13	6700 (2130 PSI)*	31	315.00
WWCL2030-S	2	X	30	40.25	1.13	4600 (1470 PSI)*	36	343.00
WWCL2036-S	2	X	36	46.25	1.13	3400 (1080 PSI)*	41	496.00

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C Y L I N D E R S

3000 PSI Welded Adjustable Clevis Cylinders

MODEL	BORE x STROKE			RETRACT	ROD DIA.	COLUMN LOAD RATINGS	WT/LBS	LIST PRICE
† WWCL2504-S	2.5	X	4	14.25	1.25	FULL PSI	19	Call
WWCL2506-S	2.5	X	6	16.25	1.25	FULL PSI	21	352.00
WWCL2508-S	2.5	X	8	18.25	1.25	FULL PSI	23	368.00
WWCL2508-ASAE	2.5	X	8	20.25	1.25	FULL PSI	24	368.00
WWCL2510-S	2.5	X	10	20.25	1.25	FULL PSI	24	382.00
WWCL2512-S	2.5	X	12	22.25	1.25	FULL PSI	26	398.00
† WWCL2514-S	2.5	X	14	24.25	1.25	FULL PSI	28	Call
WWCL2516-S	2.5	X	16	26.25	1.25	FULL PSI	30	429.00
† WWCL2518-S	2.5	X	18	28.25	1.25	FULL PSI	32	Call
WWCL2520-S	2.5	X	20	30.25	1.25	FULL PSI	34	458.00
† WWCL2524-S	2.5	X	24	34.25	1.25	14000 (2850 PSI)*	38	Call
† WWCL2530-S	2.5	X	30	40.25	1.25	9600 (1960 PSI)*	44	Call
† WWCL2536-S	2.5	X	36	46.25	1.25	7000 (1430 PSI)*	49	Call
† WWCL2548-S	2.5	X	48	58.25	1.25	3500 (710 PSI)*	50	Call
WWCL3004-S	3	X	4	14.25	1.5	FULL PSI	24	306.00
WWCL3006-S	3	X	6	16.25	1.5	FULL PSI	26	444.00
WWCL3008-S	3	X	8	18.25	1.5	FULL PSI	29	453.00
WWCL3008-ASAE	3	X	8	20.25	1.5	FULL PSI	31	339.00
WWCL3010-S	3	X	10	20.25	1.5	FULL PSI	31	468.00
† WWCL3012-S	3	X	12	22.25	1.5	FULL PSI	34	Call
WWCL3014-S	3	X	14	24.25	1.5	FULL PSI	36	509.00
WWCL3016-S	3	X	16	26.25	1.5	FULL PSI	39	529.00
† WWCL3018-S	3	X	18	28.25	1.5	FULL PSI	41	Call
WWCL3020-S	3	X	20	30.25	1.5	18800 (2660 PSI)*	43	417.00
† WWCL3024-S	3	X	24	34.25	1.5	14000 (1980 PSI)*	48	Call
† WWCL3030-S	3	X	30	40.25	1.5	9600 (1360 PSI)*	56	Call
† WWCL3036-S	3	X	36	46.25	1.5	7000 (990 PSI)*	63	Call
WWCL3504-S	3.5	X	4	14.25	1.75	FULL PSI	29	357.00
† WWCL3506-S	3.5	X	6	16.25	1.75	FULL PSI	32	Call
† WWCL3508-S	3.5	X	8	18.25	1.75	FULL PSI	35	Call
† WWCL3508-ASAE	3.5	X	8	20.25	1.75	FULL PSI	38	Call
† WWCL3510-S	3.5	X	10	20.25	1.75	FULL PSI	38	Call
† WWCL3512-S	3.5	X	12	22.25	1.75	FULL PSI	41	Call
† WWCL3514-S	3.5	X	14	24.25	1.75	FULL PSI	44	Call
† WWCL3516-S	3.5	X	16	26.25	1.75	FULL PSI	47	Call
† WWCL3518-S	3.5	X	18	28.25	1.75	FULL PSI	50	Call
† WWCL3520-S	3.5	X	20	30.25	1.75	FULL PSI	53	Call
WWCL3524-S	3.5	X	24	34.25	1.75	26000 (2700 PSI)*	59	525.00
† WWCL3530-S	3.5	X	30	40.25	1.75	17900 (1860 PSI)*	68	Call
† WWCL3536-S	3.5	X	36	46.25	1.75	13000 (1350 PSI)*	78	Call
† WWCL4004-S	4	X	4	14.25	2	FULL PSI	35	Call
† WWCL4006-S	4	X	6	16.25	2	FULL PSI	38	Call
† WWCL4008-S	4	X	8	18.25	2	FULL PSI	42	Call
WWCL4008-ASAE	4	X	8	20.25	2	FULL PSI	46	472.00
WWCL4010-S	4	X	10	20.25	2	FULL PSI	46	482.00
WWCL4012-S	4	X	12	22.25	2	FULL PSI	49	502.00
† WWCL4014-S	4	X	14	24.25	2	FULL PSI	53	Call
WWCL4016-S	4	X	16	26.25	2	FULL PSI	57	539.00
WWCL4018-S	4	X	18	28.25	2	FULL PSI	60	559.00
† WWCL4020-S	4	X	20	30.25	2	FULL PSI	64	Call
WWCL4024-S	4	X	24	34.25	2	FULL PSI	71	841.00
† WWCL4030-S	4	X	30	40.25	2	25200 (2010 PSI)*	83	Call
† WWCL4036-S	4	X	36	46.25	2	18200 (1450 PSI)*	94	Call

*THESE MODELS HAVE A COLUMN LOAD RESTRICTION THAT LIMITS THE MAXIMUM PUSH LOAD THAT THE CYLINDER CAN SAFELY BE OPERATED AT.

UNIVERSAL SEAL KITS

PART NO.	DESCRIPTION	LIST PRICE	PART NO.	DESCRIPTION	LIST PRICE
PMCK-WW1500	1.5 BORE	40.00	PMCK-WW3000	3 BORE	50.00
PMCK-WW2000	2 BORE	34.00	PMCK-WW3500	3.5 BORE	66.00
PMCK-WW2500	2.5 BORE	50.00	PMCK-WW4000	4 BORE	66.00

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

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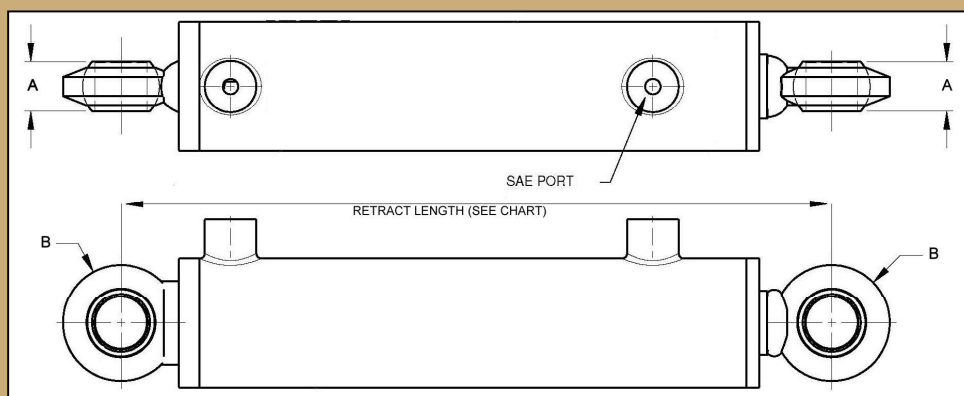
C Y L I N D E R S

3000 PSI Welded Swivel Ball End Cylinders



FEATURES:

- 100% tested for quality assurance
- Hard chrome rod plating for corrosion & wear resistance
- Cast steel end fittings for high strength & low cost
- Top port design
- SAE O-ring ports for reliable & leak-free connection
- Thread-in gland design for serviceability
- High luster black paint for protection from the elements
- Individually bagged & boxed for secure storage & transport
- Spherical End Fittings



MODEL	(A) SWIVEL WIDTH	(B) SWIVEL DIAMETER
WWSB1000-S	1.0"	2.0"
WWSB1500-S	1.0"	2.0"
WWSB2000-S	1.0"	2.25"
WWSB2500-S	1.0"	2.25"
WWSB3000-S	1.75"	3.13"

MODEL	BORE x STROKE	RETRACT	ROD DIA.	COLUMN LOAD RATINGS (PSI)	PORTS	PIN HOLE	WT/LBS	LIST PRICE
WWSB1004-S	1 X 4	10	0.625	FULL PSI	#6 SAE	0.5	5	214.00
WWSB1006-S	1 X 6	12	0.625	FULL PSI	#6 SAE	0.5	5	169.00
WWSB1008-S	1 X 8	14	0.625	FULL PSI	#6 SAE	0.5	6	156.00
WWSB1010-S	1 X 10	16	0.625	FULL PSI	#6 SAE	0.5	7	185.00
WWSB1012-S	1 X 12	18	0.625	2200 (2800 PSI)*	#6 SAE	0.5	7	171.00

WWSB1504-S	1.5 X 4	11.25	1	FULL PSI	#6 SAE	0.77	6	216.00
WWSB1506-S	1.5 X 6	13.25	1	FULL PSI	#6 SAE	0.77	7	216.00
WWSB1508-S	1.5 X 8	15.25	1	FULL PSI	#6 SAE	0.77	9	187.00
WWSB1510-S	1.5 X 10	17.25	1	FULL PSI	#6 SAE	0.77	10	187.00
WWSB1512-S	1.5 X 12	19.25	1	FULL PSI	#6 SAE	0.77	11	209.00
WWSB1516-S	1.5 X 16	23.25	1	FULL PSI	#6 SAE	0.77	13	363.00

WWSB2006-S	2 X 6	13.5	1.25	FULL PSI	#8 SAE	1.01	15	288.00
WWSB2008-S	2 X 8	15.5	1.25	FULL PSI	#8 SAE	1.01	16	223.00
WWSB2010-S	2 X 10	17.5	1.25	FULL PSI	#8 SAE	1.01	17	244.00
WWSB2012-S	2 X 12	19.5	1.25	FULL PSI	#8 SAE	1.01	19	381.00
WWSB2016-S	2 X 16	23.5	1.25	FULL PSI	#8 SAE	1.01	22	444.00
WWSB2024-S	2 X 24	31.5	1.25	FULL PSI	#8 SAE	1.01	27	381.00
WWSB2030-S	2 X 30	37.5	1.25	6300 (2000 PSI)*	#8 SAE	1.01	32	424.00

*THESE MODELS HAVE A COLUMN LOAD RESTRICTION THAT LIMITS THE MAXIMUM PUSH LOAD THAT THE CYLINDER CAN SAFELY BE OPERATED AT.



C Y L I N D E R S

3000 PSI Welded Swivel Ball End Cylinders

MODEL	BORE x STROKE	RETRACT	ROD DIA.	COLUMN LOAD RATINGS (PSI)	PORTS	PIN HOLE	WT/LBS	LIST PRICE
WWSB2506-S	2.5 X 6	13.5	1.5	FULL PSI	#8 SAE	1.01	17	243.00
WWSB2508-S	2.5 X 8	15.5	1.5	FULL PSI	#8 SAE	1.01	19	380.00
WWSB2510-S	2.5 X 10	17.5	1.5	FULL PSI	#8 SAE	1.01	21	410.00
WWSB2512-S	2.5 X 12	19.5	1.5	FULL PSI	#8 SAE	1.01	23	300.00
WWSB2524-S	2.5 X 24	31.5	1.5	FULL PSI	#8 SAE	1.01	34	422.00

WWSB3006-S	3 X 6	14.25	1.5	FULL PSI	#8 SAE	1.01	20	272.00
WWSB3008-S	3 X 8	16.25	1.5	FULL PSI	#8 SAE	1.01	22	418.00
† WWSB3010-S	3 X 10	18.25	1.5	FULL PSI	#8 SAE	1.01	24	Call
WWSB3012-S	3 X 12	20.25	1.5	FULL PSI	#8 SAE	1.01	26	348.00
WWSB3016-S	3 X 16	24.25	1.5	FULL PSI	#8 SAE	1.01	31	384.00
† WWSB3020-S	3 X 20	28.25	1.5	FULL PSI	#8 SAE	1.01	36	Call
† WWSB3024-S	3 X 24	32.25	1.5	19500 (2750 PSI)*	#8 SAE	1.01	41	Call

*THESE MODELS HAVE A COLUMN LOAD RESTRICTION THAT LIMITS THE MAXIMUM PUSH LOAD THAT THE CYLINDER CAN SAFELY BE OPERATED AT.

UNIVERSAL SEAL KITS

PART NO.	DESCRIPTION	LIST PRICE
PMCK-WW1500	1.5 BORE	40.00
PMCK-WW2000	2 BORE	34.00
PMCK-WW2500	2.5 BORE	50.00
PMCK-WW3000	3 BORE	50.00

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



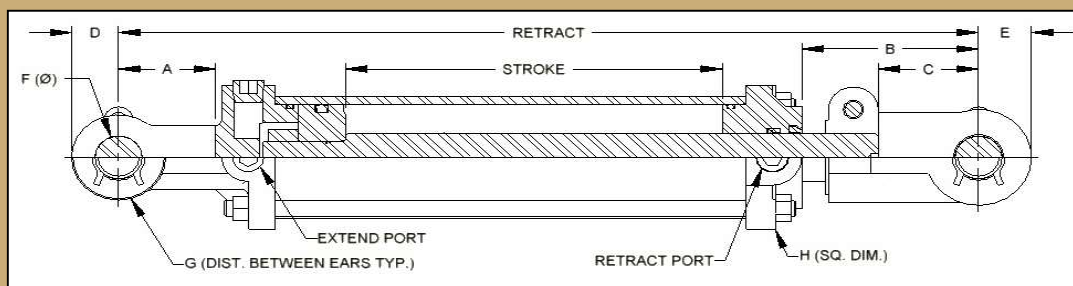
C Y L I N D E R S

2500 PSI Tie-Rod Cylinders



FEATURES:

- Steel rod clevis & base clevis
- 100% tested
- Clevis meets ASAE specs
- Individually bagged & boxed
- Side port configuration
- SAE O-ring ports for reliable & leak-free connection



MODEL	BORE	EXT PORT SAE	RET PORT SAE	A	B	C	D	E	F	G	H
W200000-S	2.0	#6	#6	2.00	3.75	2.13	.97	1.03	1.00	1.13	2.82
W250000-S	2.5	#6	#6	2.00	3.75	2.13	.97	1.13	1.00	1.13	3.38
W300000-S	3.0	#8	#8	2.00	3.75	2.13	1.00	1.13	1.00	1.13	3.90
W350000-S	3.5	#8	#8	2.00	3.75	2.13	1.13	1.13	1.00	1.13	4.62
W400000-S	4.0	#8	#8	2.00	3.75	2.13	1.13	1.25	1.00	1.13	4.75

MODEL	BORE x STROKE		RETRACT	ROD DIAMETER	COLUMN LOAD LBS)/PSI*	WT	LIST PRICE
W200040-S	2	X 4	14.25	1.125	FULL PSI	16	215.00
W200060-S	2	X 6	16.25	1.125	FULL PSI	17	285.00
W200080-S	2	X 8	18.25	1.125	FULL PSI	17	297.00
W200080-S	2	X 8	20.25	1.125	FULL PSI	18	303.00
W200100-S	2	X 10	20.25	1.125	FULL PSI	20	320.00
W200120-S	2	X 12	22.25	1.125	FULL PSI	21	342.00
W200160-S	2	X 16	26.25	1.125	FULL PSI	23	365.00
† W200160-S	2	X 16	31.50	1.125	7,400 LB / 2,350 PSI*	24	Call
W200180-S	2	X 18	28.25	1.125	7,850 LB / 2,490 PSI*	24	218.00
W200200-S	2	X 20	30.25	1.125	7,500 LB / 2,390 PSI*	25	230.00
W200240-S	2	X 24	34.25	1.125	5,500 LB / 1,770 PSI*	27	242.00
W200300-S	2	X 30	40.25	1.125	3,800 LB / 1,220 PSI*	35	453.00
W200360-S	2	X 36	46.25	1.125	2,750 LB / 875 PSI*	40	289.00
W250040-S	2.5	X 4	14.25	1.125	FULL PSI	18	312.00
W250060-S	2.5	X 6	16.25	1.125	FULL PSI	19	183.00
W250080-S	2.5	X 8	18.25	1.125	FULL PSI	20	191.00
W250080-S	2.5	X 8	20.25	1.125	FULL PSI	21	343.00
W250100-S	2.5	X 10	20.25	1.125	FULL PSI	22	232.00
W250120-S	2.5	X 12	22.25	1.125	FULL PSI	24	368.00
† W250140-S	2.5	X 14	24.25	1.125	FULL PSI	25	Call
W250160-S	2.5	X 16	26.25	1.125	11,050 LB / 2,250 PSI*	27	238.00
W250180-S	2.5	X 18	28.25	1.250	FULL PSI	28	441.00
† W250200-S	2.5	X 20	30.25	1.250	FULL PSI	30	Call
W250240-S	2.5	X 24	34.25	1.250	8,650 LB / 1,760 PSI*	33	282.00
W250300-S	2.5	X 30	40.25	1.250	5,900 LB / 1,200 PSI*	45	323.00
† W250360-S	2.5	X 36	46.25	1.250	4,300 LB / 875 PSI*	56	Call
† W250480-S	2.5	X 48	58.25	1.25	2,500 LB / 500 PSI*	68	Call

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME. CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



C Y L I N D E R S

2500 PSI Tie-Rod Cylinders

MODEL	BORE x STROKE			RETRACT	ROD DIAMETER	COLUMN LOAD (LBS)/PSI*	WT	LIST PRICE
W300040-S	3	X	4	14.25	1.25	FULL PSI	20	189.00
W300060-S	3	X	6	16.25	1.25	FULL PSI	25	354.00
W300080-S	3	X	8	18.25	1.25	FULL PSI	25	292.00
➤ V300080-S	3	X	8	20.25	1.25	FULL PSI	25	211.00
W300100-S	3	X	10	20.25	1.25	FULL PSI	30	265.00
W300120-S	3	X	12	22.25	1.25	FULL PSI	28	243.00
W300140-S	3	X	14	24.25	1.25	FULL PSI	30	436.00
W300160-S	3	X	16	26.25	1.25	FULL PSI	33	474.00
➤ V300160-S	3	X	16	31.50	1.5	FULL PSI	35	277.00
W300180-S	3	X	18	28.25	1.5	FULL PSI	35	498.00
W300200-S	3	X	20	30.25	1.5	FULL PSI	37	529.00
W300240-S	3	X	24	34.25	1.5	FULL PSI	42	564.00
W300300-S	3	X	30	40.25	1.5	12,150 LB / 1,720 PSI*	59	592.00
W300360-S	3	X	36	46.25	1.5	12,150 LB / 1,720 PSI*	63	511.00
† W350060-S	3.5	X	6	16.25	1.25	FULL PSI	25	Call
† W350080-S	3.5	X	8	18.25	1.25	FULL PSI	27	Call
➤ V350080-S	3.5	X	8	20.25	1.25	FULL PSI	29	278.00
W350100-S	3.5	X	10	20.25	1.25	FULL PSI	30	284.00
W350120-S	3.5	X	12	22.25	1.25	FULL PSI	33	304.00
W350140-S	3.5	X	14	24.25	1.25	FULL PSI	35	319.00
W350160-S	3.5	X	16	26.25	1.25	17,000 LB / 1,760 PSI*	37	557.00
➤ V350160-S	3.5	X	16	31.50	1.5	FULL PSI	39	343.00
W350180-S	3.5	X	18	28.25	1.25	14,000 LB / 1,450 PSI*	40	351.00
† W350200-S	3.5	X	20	30.25	1.5	FULL PSI	42	Call
† W350240-S	3.5	X	24	34.25	1.5	18,000 LB / 1,870 PSI*	51	Call
† W350300-S	3.5	X	30	40.25	1.5	12,000 / 1,250 PSI	65	Call
† W350360-S	3.5	X	36	46.25	1.5	9,000 / 940 PSI	78	Call
W400040-S	4.0	X	4	14.25	1.5	FULL PSI	30	277.00
† W400080-S	4.0	X	8	18.25	1.5	FULL PSI	34	Call
➤ V400080-S	4.0	X	8	20.25	1.5	FULL PSI	36	319.00
W400100-S	4.0	X	10	20.25	1.5	FULL PSI	37	330.00
W400120-S	4.0	X	12	22.25	1.5	FULL PSI	40	348.00
† W400140-S	4.0	X	14	24.25	1.5	FULL PSI	42	Call
W400160-S	4.0	X	16	26.25	1.5	FULL PSI	48	413.00
➤ V400160-S	4.0	X	16	31.50	2	FULL PSI	64	421.00
W400180-S	4.0	X	18	28.25	1.5	30,000 LB / 2,380 PSI*	51	686.00
† W400200-S	4.0	X	20	30.25	1.5	25,000 LB / 2,150	54	Call
W400240-S	4.0	X	24	34.25	2	FULL PSI	70	525.00
† W400300-S	4.0	X	30	40.25	2	FULL PSI	87	Call
W400360-S	4.0	X	36	46.25	2	27,000 LB / 2,150 PSI*	98	698.00

UNIVERSAL SEAL KITS

PART NO.	DESCRIPTION
PMCK-WW2000	2 BORE
PMCK-WW2500	2.5 BORE
PMCK-WW3000	3 BORE
PMCK-WW3500	3.5 BORE
PMCK-WW4000	4 BORE

* These models have a column load restriction that limits the maximum push load that the cylinder can safely operate at.

➤ NOTE: V models are built to ASAE retract dimensions.

The "B" dimension shown in the chart will be 2.00 inches longer for 8.0 inch stroke V models and will be 5.25 inches longer for 16.0 inch stroke V models. Also, Model V300160, V350160, & V400160 will have a 1.25 pin.

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



V A L V E S

20 Gallon Heavy Duty Sectional Valves



FEATURES:

- Replaces Parker/Gresen V20 & Prince Series 20 valves
- Circuit: Parallel/Open center/Closed center
- Capacity: 25 gpm nominal
- Max Operating Pressure: 3500 psi SAE ports only
- Max Tank Pressure: 500 psi
- Adjustable relief
- Seals are included with each work section
- Inlet/outlet #12 SAE port
- Work ports #10 SAE port
- Black Phosphate Coating

Inlet Sections

WV20 - LC - 12

WV-Series
20 - 25 GPM

LC - Left
Cover

Port Size
12 - SAE 12

Approximate Weight (Lbs.)

Part	Inlet	Outlet	Work Section
WV20	7	4	10

Inlet Sections

PART NUMBER	DESCRIPTION	REPLACEMENT FOR GRESN		LIST PRICE
		MODEL NO.	PART NO.	
WV20-LC-12	INLET COVER BODY ONLY / PORT SIZE #12 SAE	20-LC-12	8650029	337.00
WV20-WH-1700	SHIM ADJUSTABLE 1250-1749 SET @ 1700 PSI	WH-1700	8650418	125.00
WV20-WH-1950	SHIM ADJUSTABLE 1750-1999 SET @ 1950 PSI	WH-1950	8650419	125.00
WV20-WH-2550	SHIM ADJUSTABLE 2000-2599 SET @ 2550 PSI	WH-2550	8650420	122.00
WV20-HRP51A-2000	ADJUSTABLE 500-3500 SET @ 2000 PSI	RP51A-2000	8650421	135.00
WV20-HRP51A-3000	ADJUSTABLE 500-3500 SET @ 3000 PSI	RP51A-3000	8650421	135.00
WV20-K-NR	NO RELIEF PLUG	K-20-NR	8650382	37.00

Note: For complete inlet must order inlet body and main relief cartridge.

Work Sections

PART NUMBER	DESCRIPTION	REPLACE- MENT FOR GRESN	LIST PRICE
WV20-10-03	3 WAY 3 POSITION SINGLE ACTING W/SPRING RETURN / #10 SAE WORK PORTS	20-10-03	549.00
WV20-10-04	4 Way 3 POSITION DOUBLE ACTING W/SPRING RETURN / #10 SAE WORK PORTS	20-10-04	557.00
WV20-10-D4	4 Way 3 POSITION W/3 POSITION DETENT / #10 SAE WORK PORTS	20-10-D4	576.00
WV20-10-DF4	4 WAY 3 POSITION MOTOR SPOOL W/3 POSITION DETENT / #10 SAE WORK PORTS	20-10-DF4	571.00
WV20-10-F4	4 WAY 3 POSITION FREE FLOW MOTOR W/SPRING RETURN / #10 SAE WORK PORTS	20-10-F4	542.00

Note: O-rings for between sections included with ordering a work section.

Note: Handles are NOT included with work sections, see page 12.

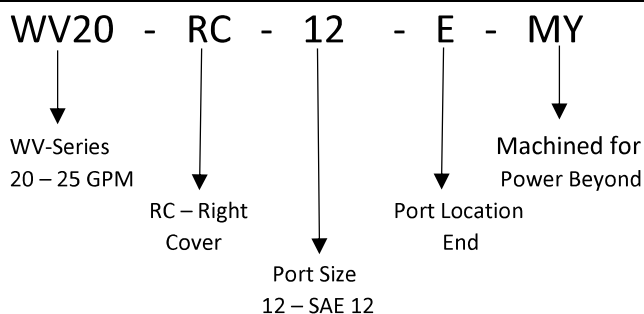


V A L V E S

Work Port Accessories

PART NUMBER	REPLACEMENT FOR GRESN	RELIEF VALVE	RELIEF & ANTI-CAVITATION CHECK	ANTI-CAVITATION CHECK	500-1249 SET @ 1200 PSI	1250-1749 SET @ 1700 PSI	1750-1999 SET @ 1950 PSI	2000-2599 SET @ 2550 PSI	LIST PRICE
WV20-CRA-1200	CRA-A-1200		X		X				125.00
WV20-CRA-1700	CRA-A-1700		X			X			125.00
WV20-CRA-1950	CRA-A-1950		X				X		125.00
WV20-CRA-2550	CRA-A-2550		X					X	125.00
WV20-RC-500	RC-A-500	X			X				110.00
WV20-RC-1200	RC-A-1200	X			X				110.00
WV20-RC-1700	RC-A-1700	X				X			110.00
WV20-RC-1950	RC-A-1950	X					X		110.00
WV20-RC-2550	RC-A-2500	X						X	110.00
WV20-K-AC	K-20-AC			X					59.00

Outlet Sections



Outlet Covers

PART NUMBER	DESCRIPTION	REPLACEMENT FOR GRESN	PORT SIZE & LOCATION # 12 SAE	LIST PRICE
WV20-RC-12-E (Body)	OPEN CENTER W/NO POWER BEYOND OPTION	20-RC-12-E	END	198.00
WV20-RC-12-E-MY (Body)	OPEN CENTER W/ POWER BEYOND CAPABILITY	20-RC-E-MY	END	200.00
WV20-K-10-Y	#10 SAE POWER BEYOND SLEEVE	K-20-10-Y		49.00
WV20-K-C	CLOSED CENTER PLUG	K-20-C		32.00
WV20-K-X	CONVERSION PLUG	K-20-X		22.00



V A L V E S

Handle Options

PART NUMBER	DESCRIPTION	REPLACEMENT FOR GRESN	LIST PRICE
WV20-K-HH-B	HORIZONTAL HANDLE & LINKAGE KIT (BLACK)	K-20-HH-B	44.00
WV20-K-VH-B	VERTICAL HANDLE & LINKAGE KIT (BLACK)	K-20-VH-B	42.00

Stud Kits

PART NUMBER	DESCRIPTION	REPLACEMENT FOR GRESN	LIST PRICE
WV20-K-1	1 WORK SECTION STUD KIT	K-20-1	22.00
WV20-K-2	2 WORK SECTION STUD KIT	K-20-2	25.00
WV20-K-3	3 WORK SECTION STUD KIT	K-20-3	30.00
WV20-K-4	4 WORK SECTION STUD KIT	K-20-4	42.00
WV20-K-5	5 WORK SECTION STUD KIT	K-20-5	44.00
WV20-K-6	6 WORK SECTION STUD KIT	K-20-6	57.00
WV20-K-7	7 WORK SECTION STUD KIT	K-20-7	59.00
WV20-K-8	8 WORK SECTION STUD KIT	K-20-8	61.00

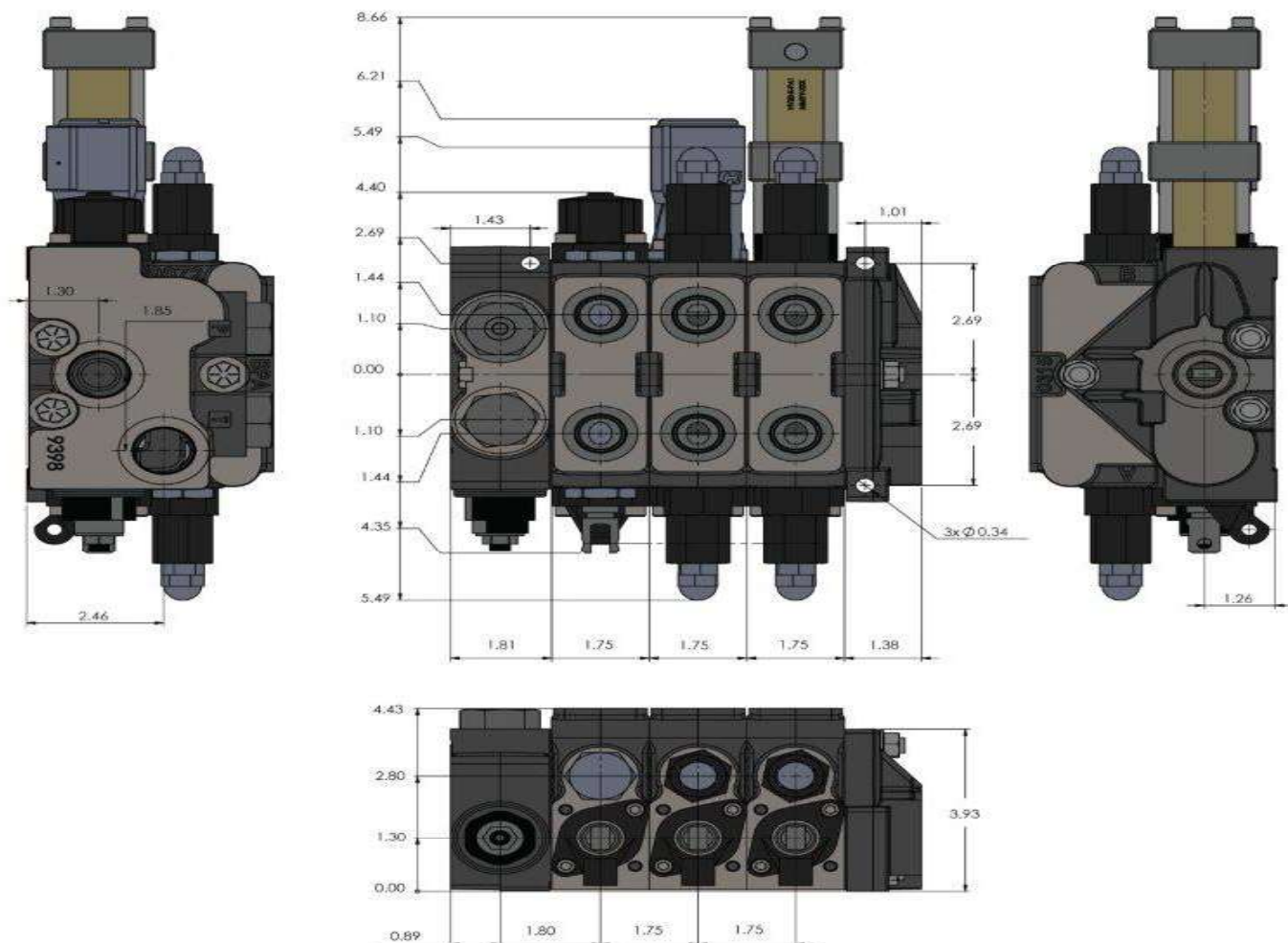
Spool Positioners

PART NUMBER	DESCRIPTION	REPLACEMENT FOR GRESN	LIST PRICE
WV20-K-D	3 POSITION DETENT	K-20-D	40.00
WV20-K-PA1	PNEUMATIC SPOOL POSITIONER KIT	K-20-PA-1	296.00
WV20-K-R	SPOOL "IN" DETENT w/ SPRING RETURN TO NEUTRAL	K-20-R	176.00
WV20-K-RO	SPOOL "OUT" DETENT w/ SPRING RETURN TO NEUTRAL	K-20-RO	176.00

Seal Kits

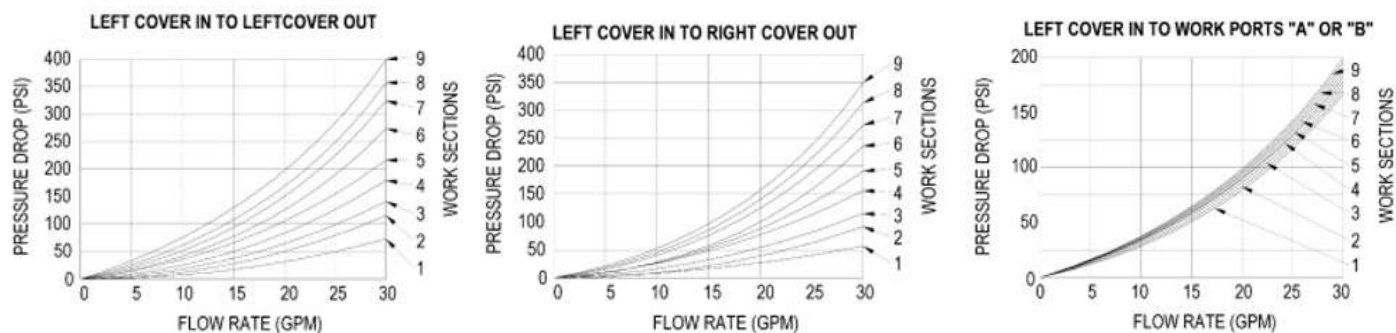
PART NUMBER	DESCRIPTION	REPLACEMENT FOR GRESN	LIST PRICE
WV20-K-6035	SPOOL SEALS	K-6035	13.00
WV20-K-6121	SECTION SEALS	K-6121	5.00

20 Gallon Sectional Valve Specifications & Dimensional Data



Performance Curves

(All tests run using 150 SUS oil, at 120°F. SAE-12 inlet and outlet ports and SAE-10 work section ports)





V A L V E S

Mono-Block Directional Control Valves



FEATURES:

- 1-6 spool mono-block
- 3500 PSI rating
- #8 SAE O-ring in/out Ports
- #8 SAE O-ring work ports
- Interchangeable motor spool
- Load check
- Parallel cylinder spools
- Adjustable relief
- Enclosed handle design
- Open center – field convertible to power beyond & closed center included
- Low spool leakage (3cc/min @ 1500 PSI)
- Hardened steel spools

MB Mono-Block Directional Control Valve Assemblies

VALVE MODEL NO.	NO. OF SPOOLS	SPOOL TYPE, ACTION	WEIGHT (POUNDS)	LIST PRICE
MB11B5C1	1	4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, ALL SPOOLS	6.9	249.00
MB11C5C1	1	4 WAY 3 POSITION MOTOR, 3 POSITION DETENT, ALL SPOOLS	7.2	300.00
+MB11G5C1	1	4 WAY 4 POSITION FLOAT, SPRING CENTER W/FLOAT DETENT	7.2	Call
MB21BB5C1	2	4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, ALL SPOOLS	9.7	403.00
MB21GB5C1	2	4 WAY 4 POSITION FLOAT, SPRING CENTER W/FLOAT DETENT, 1 ST SPOOL 4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, 2 ND SPOOL	10.2	448.00
MB31BBB5C1	3	4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, ALL SPOOLS	12.8	652.00
MB41BBBB5C1	4	4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, ALL SPOOLS	16.1	582.00
MB51BBBBB5C1	5	4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, ALL SPOOLS	19.2	935.00
MB61BBBBBB5C1	6	4 WAY 3 POSITION, SPRING CENTER TO NEUTRAL, ALL SPOOLS	22.2	1098.00

MB Mono-Block Directional Control Valve Parts

PART NO.	DESCRIPTION	LIST PRICE
612000001	3 WAY TANDEM SPOOL (single acting)	104.00
612100001	MOTOR SPOOL	104.00
660170055	HANDLE WITH KNOB	41.00
660170056	GLASS FILLED NYLON ENCLOSED HANDLE HOUSING	58.00
660170057	SPRING CENTER KIT	41.00
660170058	THREE POSITION DETENT KIT	96.00
660170060	ALUMINUM ENCLOSED HANDLE HOUSING	65.00
660170061	JOYSTICK KIT (field installable)	226.00
660270005	RELIEF VALVE (2000-3500)	113.00
660270006	NO RELIEF PLUG	Call
660570003	SEAL KIT	96.00
670300133	580 – 1160 PSI RELIEF SPRINGS	53.00
670300134	913 – 2900 PSI RELIEF SPRINGS	Call
671400306	ALUMINUM END CAP WITH SCREWS	41.00
671400307	GLASS FILLED NYLON END CAP WITH SCREWS	27.00
671900122	POWER BEYOND PLUG / CLOSED CENTER PLUG	20.00

+ NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.

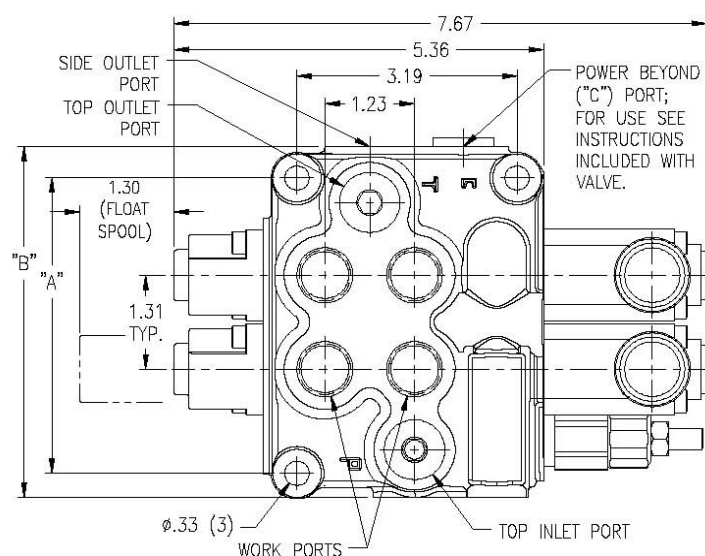


V A L V E S

MB Specifications and Dimensional Data

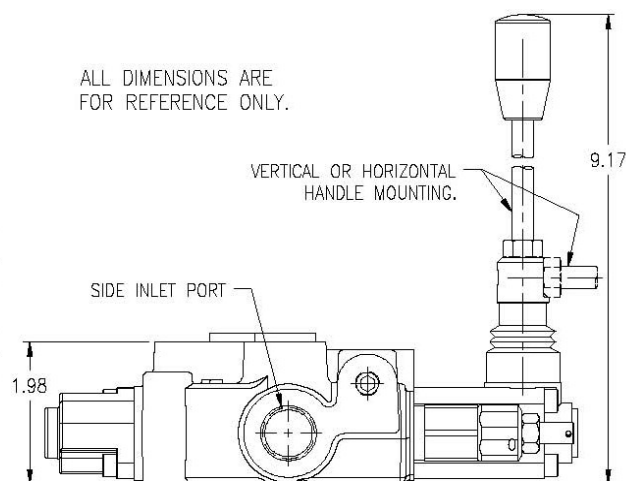
MAXIMUM OPERATING PRESSURE	3500 PSI
MAXIMUM POWER BEYOND PRESSURE	3000 PSI
MAXIMUM TANK PRESSURE	500 PSI
NOMINAL FLOW RATING	8 GPM
MAXIMUM OPERATING TEMPERATURE	180° F

STRAIGHT HANDLE LENGTH: 5.8 INCHES
 FILTRATION RECOMMENDATIONS: ISO 4406 19 / 17 / 14
 SPOOL SEALS IN INTERNAL O-RING GROOVES
 HIGH PRESSURE ADJUSTABLE RELIEF ADJUSTMENT RANGE
 2000-3500 PSI (PRESET TO 2500 PSI @ 6 GPM)



INLET AND OUTLET PORTS: #8 SAE/ORB (3/4-16UNF-2B)
 ALL WORK PORTS: #8 SAE/ORB (3/4-16UNF-2B)
 POWER BEYOND PORT: #8 SAE/ORB (3/4-16UNF-2B)

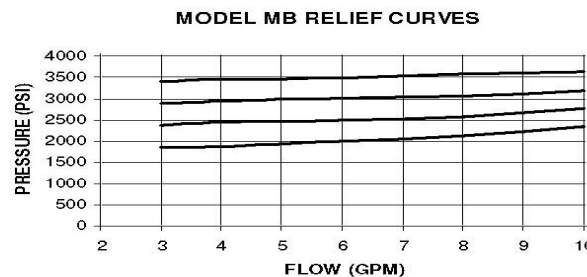
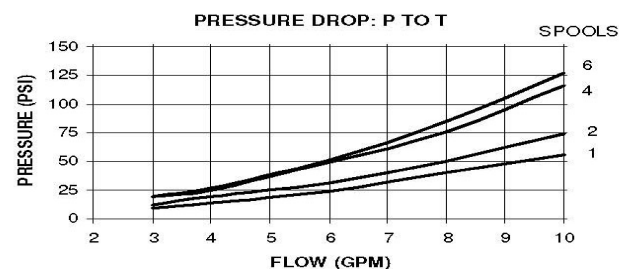
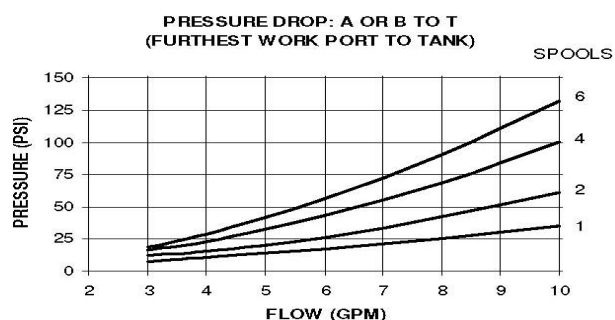
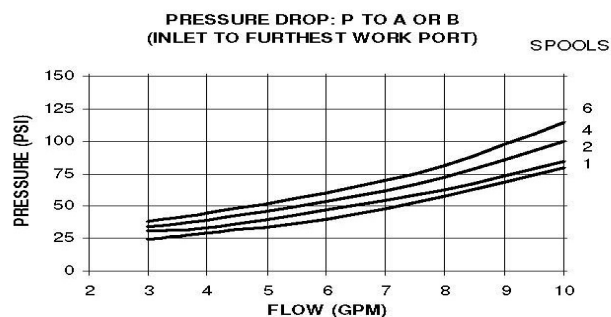
ALL DIMENSIONS ARE
 FOR REFERENCE ONLY.



NUMBER OF SPOOLS:

	1	2	3	4	5	6
"A"	2.87	4.33	5.79	7.24	8.70	10.16
"B"	3.78	5.16	6.62	8.07	9.53	10.99

Performance Curves





V A L V E S

Log Splitter Valves

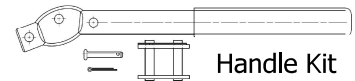
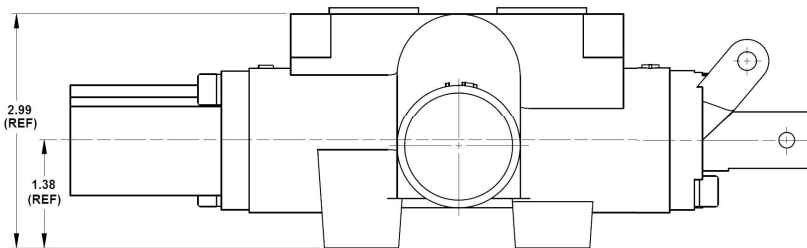


FEATURES:

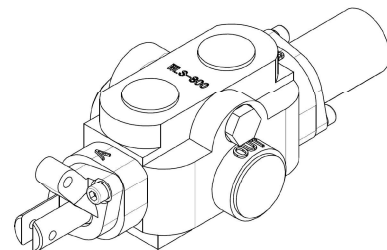
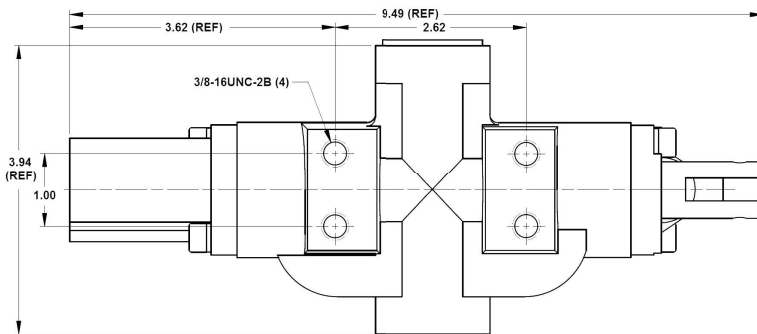
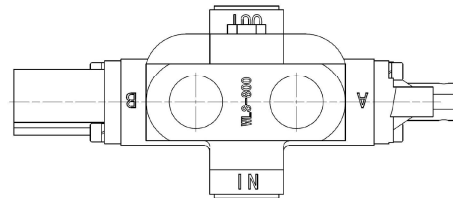
- Pressure release detent at end of retract stroke / detent in spool in position
- Relief set to 2,250 PSI
- Max tank port pressure 500 PSI
- Max operating temperature 180° F

Log Splitter Valves

MODEL No.	DESCRIPTION	PORT SIZE WORK / IN-OUT	MAX PSI	MAX FLOW	SHIPPING WEIGHT	LIST PRICE
WLS-800	Log Splitter Valve	1/2"NPTF / 3/4"NPTF	3,265 PSI	30 GPM	10	Call



Handle Kit





V A L V E S

Adjustable Flow Control Valves



The W-1900 is a pressure compensated adjustable flow control valve. By rotating the handle, the flow out the "CF" or controlled flow port can be varied within the range given in the chart below. Any remaining flow is bypassed to the "EF" or excess flow port. This flow can be used to power another circuit or can be returned to tank. Once the controlled flow is set, it will remain nearly constant with variations in pressure on either the controlled or excess flow ports. Please note, if during operation the controlled flow port is blocked, the valve will compensate in such a way as to shut off flow to the excess port.

This valve can also be used as a restrictive flow control by plugging the excess flow port.

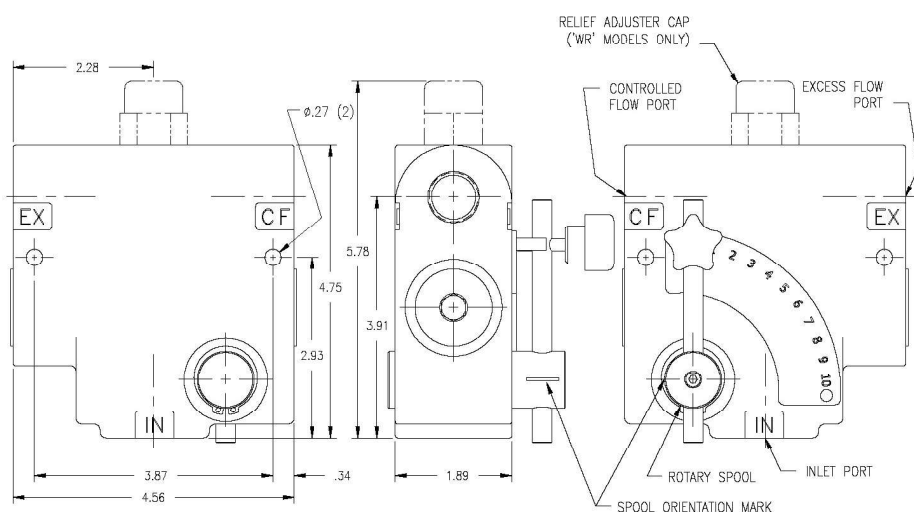
The WR-1900 has a built-in adjustable pressure relief. For this model, the excess flow port **must** be connected to tank. It should be noted that whenever this or any valve is used to bypass or restrict flow, heat will be generated. Steps may be required to keep oil temperature from becoming too high.

W/WR Adjustable Flow Control Valves

MODEL No.	DESCRIPTION	CROSS REF.	WEIGHT (POUNDS)	LIST PRICE
W-1950-8	1/2-NPTF PORTS (0-8 GPM CF SPOOL)	FC51-1/2 37	9	230.00
W-1908-8	#8 SAE/ORB PORTS (0-8 GPM CF SPOOL)	FC51-8	9	230.00
W-1950-16	1/2-NPTF PORTS (0-16 GPM CF SPOOL)	FC51-1/2	9	230.00
W-1975-30	3/4-NPTF PORTS (0-30 GPM CF SPOOL)	FC51-3/4	9	122.00
W-1912-30	#12 SAE/ORB PORTS (0-30 GPM CF SPOOL)	FC51-12	9	122.00
WR-1950-16	1/2-NPTF PORTS (0-16 GPM W/RELIEF)	FCR51-1/2	9	259.00
WR-1975-30	3/4 NPTF PORTS (0-30 GPM W/RELIEF)	FCR51-3/4	9	259.00
WR-1912-30	#12 SAE/ORB PORTS (0-30 GPM W/RELIEF)	FCR51-12	9	259.00
WR-1937-8	3/8-NPTF PORTS (0-8 GPM CF SPOOL)	FCR51-3/8	9	138.00

RELIEF PRESSURE INFORMATION:

Inlet relief protection available on "WR" models. Relief pressure preset at 1500 PSI and is adjustable from 1250 to 3000 PSI. To adjust, remove acorn nut, turn adjusting screw clockwise to increase pressure, counterclockwise to reduce pressure. Reinstall acorn nut after adjusting. Use a pressure gauge when making adjustments.



VALVE SPECIFICATIONS

- 30 GPM max flow
- 3000 PSI max
- 180° F max temp
- Filtration 17/14/19
- For use with mineral based hydraulic fluid
- Side port configuration
- 100% Tested
- External seals on rotary spool prevent contamination from locking up spool

KITS

PART NO.	DESCRIPTION	LIST PRICE
660170064	HANDLE KIT	27.00
660170086	RELIEF KIT	64.00
660570004	SEAL KIT	Call



V A L V E S

In-Line Flow Control Valves



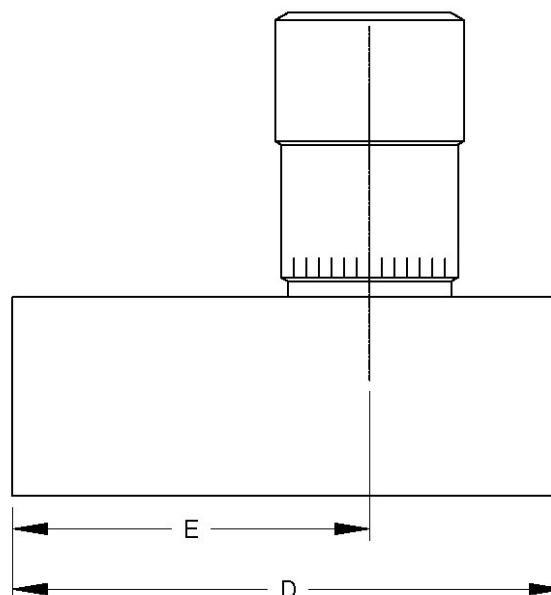
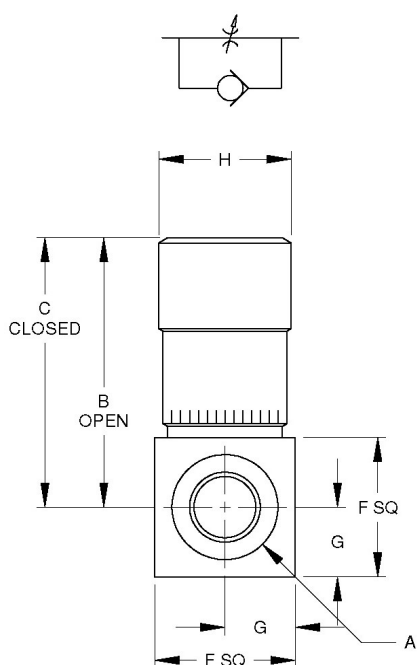
FEATURES:

- Carbon steel body
- Designed to provide precision flow control & shut off in one flow direction & provide free flow in the opposite direction
- Color bands allow fast return to a previous setting
- Set screw locks valve to any setting
- Operating temp range -20°F through 210°F

In-Line Flow Control Valves

MODEL No.	PORT SIZE	MAX PSI	MAX FLOW	SHIPPING WEIGHT	LIST PRICE
WFC-400	1/4" NPTF	5,000 PSI	5 GPM	0.5	54.00
WFC-600	3/8" NPTF	5,000 PSI	8 GPM	0.9	57.00
WFC-800	1/2" NPTF	5,000 PSI	15 GPM	1.5	83.00

MODEL NO.	MAX FLOW	A	B	C	D	E	F	G	H
WFC-400	5 GPM	1/4 NPTF	1.79	1.59	2.62	1.66	.81	.41	.811
WFC-600	8 GPM	3/8 NPTF	2.18	1.94	2.75	1.75	1	.5	1
WFC-800	15 GPM	1/2 NPTF	2.70	2.42	3.44	2.23	1.25	.63	1.19





V A L V E S

In-Line Needle Valves



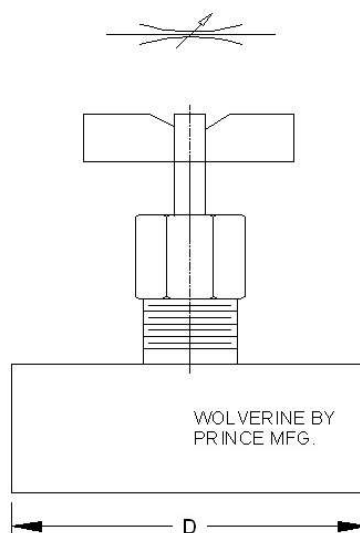
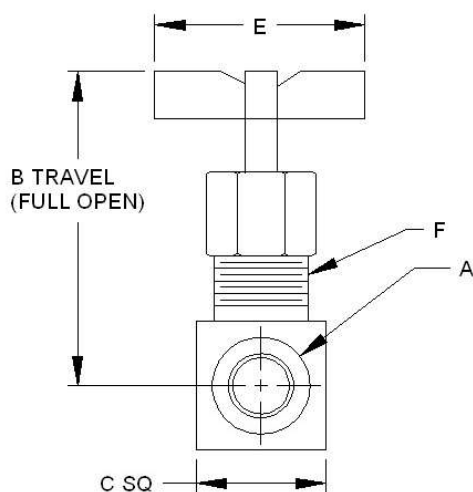
FEATURES:

- Carbon steel body
- Designed to provide precision flow control
- Operating temp range -20°F through 210°F

In-Line Needle Valves

MODEL No.	PORT SIZE	MAX PSI	MAX FLOW	SHIPPING WEIGHT	LIST PRICE
WNV-400	1/4" NPTF	5,000 PSI	5 GPM	0.6	52.00
WNV-600	3/8" NPTF	5,000 PSI	8 GPM	1.0	69.00
+ WNV-800	1/2" NPTF	5,000 PSI	16 GPM	1.8	Call

MODEL NO.	MAX FLOW	MAX PSI	A	B	C	D	E	F
WNV-400	5 GPM	5000	1/4 NPTF	2.6	0.75	2	2	M18-1.8
WNV-600	8 GPM	5000	3/8 NPTF	4.2	1	2.5	2.5	M22-1.5
WNV-800	16 GPM	5000	1/2 NPTF	5.1	1.25	2.62	3.25	M28-1.5



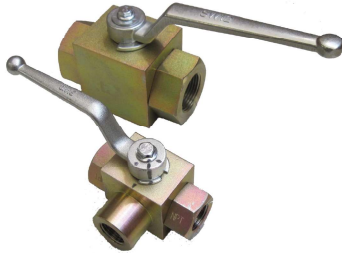
† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



V A L V E S

Ball Valves for Hydraulic Use

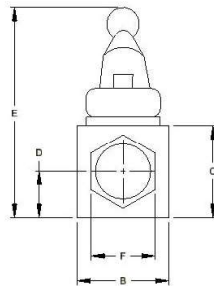
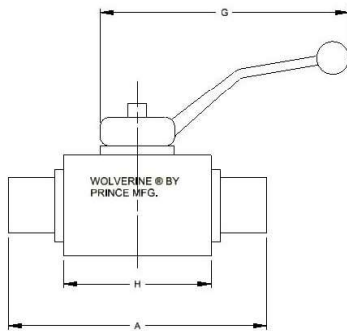


FEATURES:

- 1/4", 3/8", 1/2" sizes 7,250 PSI (CWP)
- Carbon Steel Body Zinc Plated
- Hard Chrome Plated Steel Ball, POM Seat
- 3 way valves are "L" Type
- Operating Temp -20° to 175° F
- Not Recommended for Steam, Gas, or Water Service

2 Way High Pressure Ball Valves

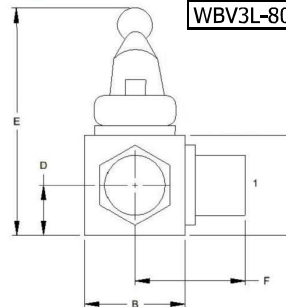
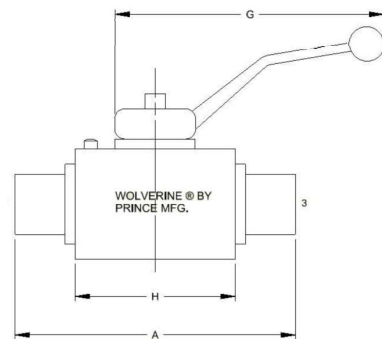
MODEL No.	PORT SIZE	MAX PSI	SHIPPING WEIGHT	LIST PRICE
WBV2-400	1/4" NPTF	7,250 PSI	1.0	60.00
WBV2-600	3/8" NPTF	7,250 PSI	1.5	Call
WBV2-800	1/2" NPTF	7,250 PSI	2.0	84.00
WBV2-SAE6	SAE6	7,250 PSI	1.5	38.00
WBV2-SAE8	SAE8	7,250 PSI	2.0	45.00



MODEL NO.	A	B	C	D	E	F	G	H
WBV2-400	2.72	1.02	1.30	.53	2.83	.86	4.31	1.57
WBV2-600	2.83	1.25	1.42	.63	2.87	1.06	4.72	1.65
WBV2-800	3.27	1.38	1.50	.70	2.95	1.18	4.72	1.65
WBV2-SAE6	2.83	1.25	1.42	.63	2.87	1.06	4.72	1.65
WBV2-SAE8	3.27	1.38	1.50	.70	2.95	1.18	4.72	1.85

3 Way High Pressure Ball Valves (L-Bore)

WBV3L-600	3/8" NPTF	7,250 PSI	2.0	Call
WBV3L-800	1/2" NPTF	7,250 PSI	2.5	Call



MODEL NO.	A	B	C	D	E	F	G	H
WBV3L-600	2.83	1.25	1.42	.63	2.87	2.05	4.72	1.65
WBV3L-800	3.27	1.38	1.50	.70	2.95	2.26	4.72	1.85



PUMPS

Hand Pumps



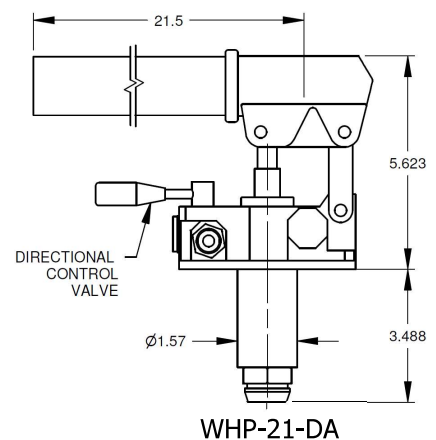
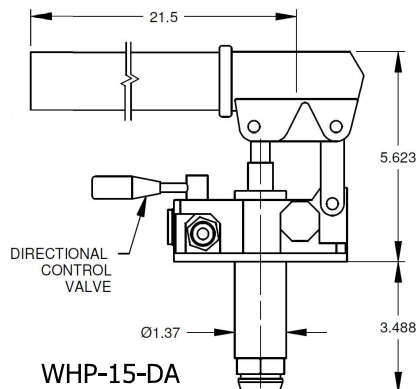
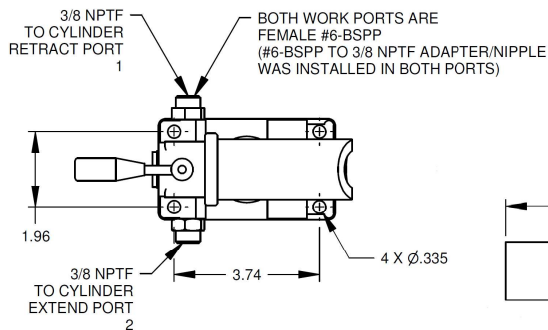
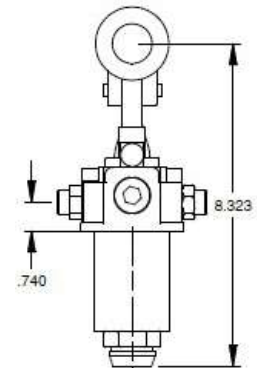
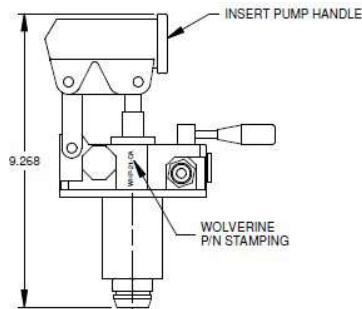
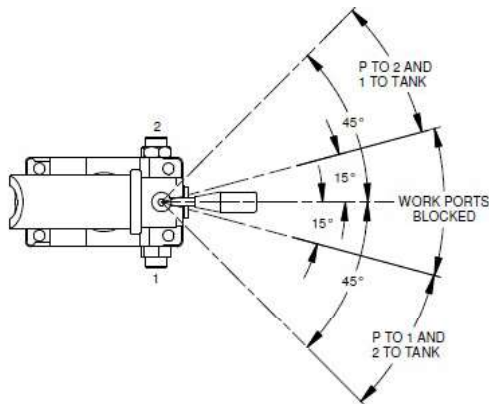
FEATURES:

- Up to 3500 PSI Working Pressure
- "DA" Series have a built in Directional Control Valve
- 1.5 and 2.1 Cubic Inch Per Cycle (one up and one down)



Hand Pumps – Double Acting Heads

MODEL No.	DESCRIPTION	SHIPPING WEIGHT (pounds)	LIST PRICE
WHP-15-DA	1.5 CUBIC INCH DOUBLE ACTING HEAD	10	249.00
WHP-21-DA	2.1 CUBIC INCH DOUBLE ACTING HEAD	10	276.00
240040088	HEAD / TANK SEAL KIT	1	41.00





PUMPS

Hand Pumps



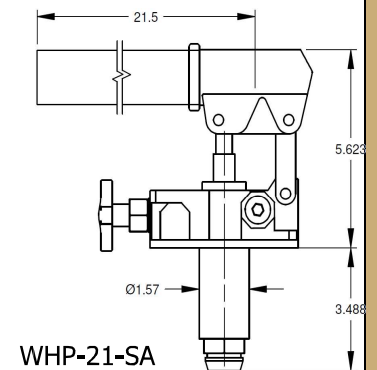
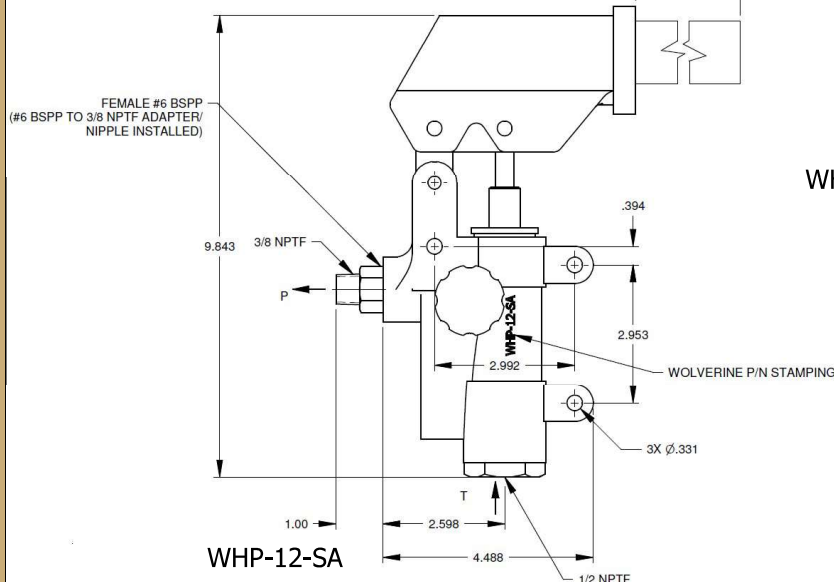
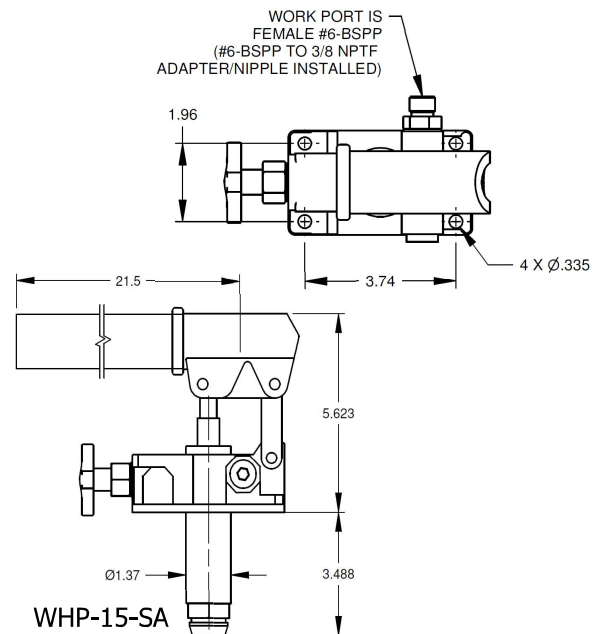
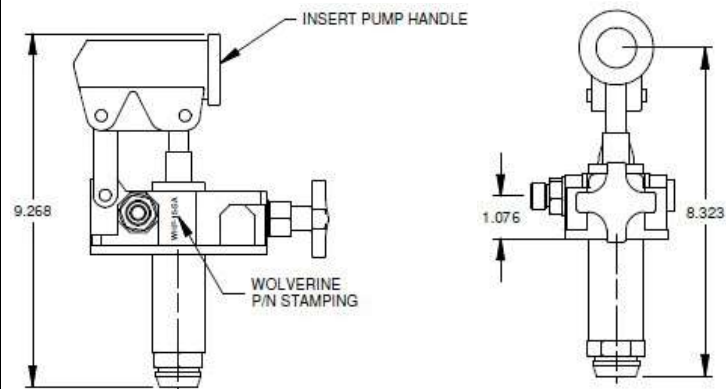
FEATURES:

- Up to 3500 PSI Working Pressure
- "SA" Series is Single Acting
- 1.5 and 2.1 Cubic Inch Per Cycle (one up and one down)



Hand Pumps – Single Acting Heads

MODEL No.	DESCRIPTION	SHIPPING WEIGHT (pounds)	LIST PRICE
WHP-15-SA	1.5 CUBIC INCH SINGLE ACTING HEAD	10	230.00
WHP-21-SA	2.1 CUBIC INCH SINGLE ACTING HEAD	10	256.00





P U M P S

Hand Pumps



FEATURES:

- Steel tanks
- Mounting brackets standard feature
- Painted black
- Drain port ¼ BSPP
- Fill port ⅜ BSPP

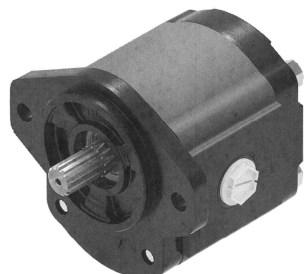
Hand Pump Tanks

MODEL No.	DESCRIPTION	SHIPPING WEIGHT (pounds)	LIST PRICE
WHP-T-300	STEEL TANK, 300 CU IN. 1.3 GAL	7	100.00
WHP-T-180	STEEL TANK, 180 CU IN. 0.8 GAL	5	85.00
WHP-T-60	STEEL TANK, 60 CU IN. 0.25 GAL	4	71.00



P U M P S

Gear Pumps



FEATURES:

- Reversible gear sets
- Cast iron front & back covers
- Viton seals available
- Working pressures up to 3600 PSI
- Customization available
 - Flanges
 - Shaft sizes
 - Flow control rear cover
- Double pumps: Available in WPA, WPB & WPC
- Maximum speed from 2500 to 4000 RPM using SAE 10W oil
- Displacement covers 0.27 in³/rev. to 4.48 in³/rev.
- Inlet pressure: Pump inlet should not exceed 5 in. of mercury vacuum or 14 PSI positive pressure
- Ports: SAE straight thread O-ring boss for WPA, WPB & WPC
- Working oil: A mineral based oil with additives to resist corrosion oxidation, & foaming is recommended. Viscosity at any running condition should be 60 SUS minimum & 250 SUS maximum. 180° F is the maximum recommended system operating temperature
- Filtration: Per ISO cleanliness code level 17/14/15 micron filtration for full PSI is recommended

WP Gear Pumps

MODEL NUMBER	DISPLACEMENT CU IN/REV	RATED PRESSURE (PSI)	SHAFT TYPE	WT LBS.	LIST PRICE
WPA06A2R	.4	3600	5/8 KEYED	7.7	464.00
† WPA06A3R	.4	3600	SAE 11T SPLINE	7.7	Call
WPA06A9R	.4	3600	SAE 9T SPLINE	7.7	337.00
† WPA08A2L	.5	3600	5/8 KEYED	7.9	Call
WPA08A2R	.5	3600	5/8 KEYED	7.9	342.00
WPA08A4R	.5	3600	3/4 KEYED	7.9	342.00
WPA08A9L	.5	3600	SAE 9T SPLINE	7.9	342.00
WPA08A9R	.5	3600	SAE 9T SPLINE	7.9	342.00
† WPA10A2L	.65	3600	5/8 KEYED	8.2	Call
WPA10A2R	.65	3600	5/8 KEYED	8.2	481.00
WPA10A4R	.65	3600	3/4 KEYED	8.2	481.00
WPA11A2R	.68	3600	5/8 KEYED	8.3	483.00
† WPA11A9L	.68	3600	SAE 9T SPLINE	8.3	Call
† WPA11A9L-P150	.68	3600	SAE 9T SPLINE	8.5	Call
WPA11A9R	.68	3600	SAE 9T SPLINE	8.3	483.00
WPA14A2R	.84	3600	5/8 KEYED	8.5	488.00
† WPA14A4L	.84	3600	3/4 KEYED	8.5	Call
WPA14A4R	.84	3600	3/4 KEYED	8.5	Call
WPA14A9R	.84	3600	SAE 9T SPLINE	8.5	488.00
† WPA14D9R	.84	3600	SAE 9T SPLINE	8.5	Call
WPA16A2L	1.01	3500	5/8 KEYED	8.8	469.00
WPA16A2R	1.01	3500	5/8 KEYED	8.8	505.00
WPA16A4R	1.01	3500	3/4 KEYED	8.8	366.00
WPA16A9L	1.01	3600	SAE 9T SPLINE	8.8	Call
WPA16A9R	1.01	3500	SAE 9T SPLINE	8.8	505.00
† WPA19A2L	1.18	3600	5/8 KEYED	9.2	Call
WPA19A2R	1.18	3000	5/8 KEYED	9.2	518.00
† WPA19A4L	1.18	3000	3/4 KEYED	9.2	Call
WPA19A9L	1.18	3000	SAE 9T SPLINE	9.2	376.00
WPA19A9R	1.18	3000	SAE 9T SPLINE	9.2	518.00
WPA23A2R	1.37	2750	5/8 KEYED	9.5	530.00
WPA23A9L	1.37	2900	SAE 9T SPLINE	9.5	530.00
WPA23A9R	1.37	2750	SAE 9T SPLINE	9.5	383.00
WPA26A2R	1.58	2500	5/8 KEYED	10.1	535.00
† WPA26A9R	1.58	2500	SAE 9T SPLINE	10.1	Call

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



P U M P S

WP Gear Pumps (continued)

MODEL NUMBER	DISPLACEMENT CU IN/REV	RATED PRESSURE (PSI)	SHAFT TYPE	WT LBS.	LIST PRICE
† WPB19A5R	1.16	3600	SAE 13T SPLINE	7.9	Call
WPB22A6R	1.35	3600	7/8 KEYED	8.3	752.00
WPB28A6R	1.68	3600	7/8 KEYED	9.9	557.00
† WPB32A6R	1.97	3300	7/8 KEYED	10.5	781.00
† WPB38A5L	2.32	2900	SAE 13T SPLINE	11	Call
† WPB38A5R	2.32	2900	SAE 13T SPLINE	11	Call
WPB38A6R	2.32	2900	7/8 KEYED	11	810.00
WPB44A5R	2.69	2500	SAE 13T SPLINE	11.7	596.00
WPB44A6R	2.69	2500	7/8 KEYED	11.7	822.00
WPC21A5R-RD	1.26	3600	SAE 13T SPLINE	13	998.00
† WPC27A6R-RD	1.65	3600	7/8 KEYED	13.5	Call
WPC55A5R-RD	3.30	3200	SAE 13T SPLINE	15	1,320.00
WPC55A6R	3.30	3200	7/8 KEYED	15	1,014.00
† WPC55A6R-RD	3.30	3200	7/8 KEYED	22.4	Call
WPC65A5L	3.85	2900	SAE 13T SPLINE	15.5	1,072.00
† WPC65A5L-RD	3.85	2900	SAE 13T SPLINE	15.5	Call
WPC65A6L	3.85	2900	7/8 KEYED	15.5	879.00
† WPC65A6R	3.85	2900	7/8 KEYED	15.5	1,213.00
† WPC65A6R-RD	3.85	2900	7/8 KEYED	15.5	Call
† WPHL0616A2R	0.4 / 1.41	3600 / 600	5/8 KEYED	14	Call
† WPHL0823A2R	0.5 / 1.87	3600 / 600	5/8 KEYED	15	Call

SEAL KIT	LIST PRICE
PMCK-WPA	66.00
PMCK-WPB	66.00
PMCK-WPC	73.00

† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



P U M P S

WPA A Flange Gear Pumps Specifications & Dimensional Data

WPA 08 A 4 R

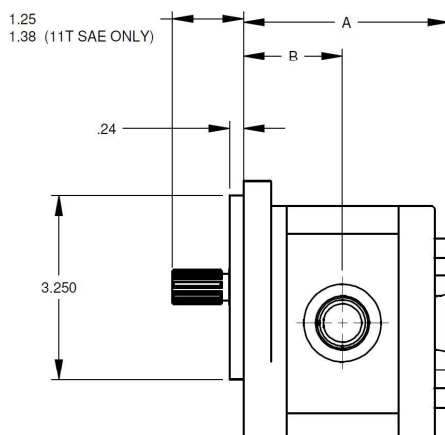
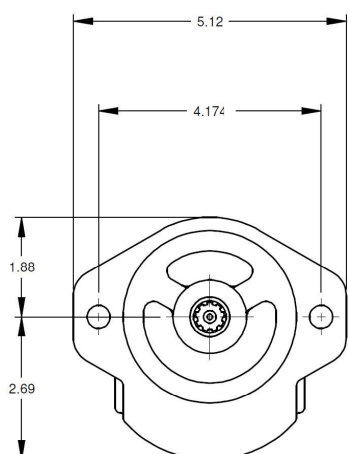
DISPLACEMENT CODE	CC / REV	CU. IN. / REV	CONTINUOUS PSI	RATED SPEED (RPM)	INLET PORT SIZE	OUTLET PORT SIZE	"A"	"B"
04	4.6	0.27	3600	4000	#12 SAE	#10 SAE	3.50	1.68
06	6.5	0.40	3600	4000	#12 SAE	#10 SAE	3.60	1.73
08	8.2	0.50	3600	3500	#12 SAE	#10 SAE	3.62	1.79
10	10.6	0.65	3600	3500	#12 SAE	#10 SAE	3.73	1.86
11	11.5	0.68	3600	3500	#12 SAE	#10 SAE	3.87	1.92
12	12.5	0.77	3600	3500	#12 SAE	#10 SAE	3.93	1.95
14	13.8	0.84	3600	3500	#12 SAE	#10 SAE	4.00	2.00
16	16.6	1.01	3600	3000	#12 SAE	#10 SAE	4.15	2.08
19	19.4	1.18	3200	3000	#12 SAE	#10 SAE	4.31	2.24
23	22.9	1.37	2900	2750	#12 SAE	#10 SAE	4.63	2.34
26	25.8	1.58	2600	2500	#12 SAE	#10 SAE	4.84	2.46

ROTATION (FACING END OF SHAFT)	
L	(COUNTER CLOCKWISE)
R	(CLOCKWISE)

SHAFT CODE	SHAFT TYPE
9	9 T SAE SPLINE
2	SAE 5/8" STRAIGHT KEYED
3	11 T SAE SPLINE
4	3/4" STRAIGHT KEYED

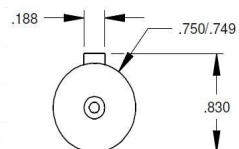
PORT LOCATION CODE	PORT LOCATION
A	SIDE INLET AND OUTLET
C*	BOTH SIDE AND REAR PORTS W/ STEEL PLUGS
D*	REAR INLET AND OUTLET

* ADD 0.35" FOR LENGTH "A" FOR REAR PORTS

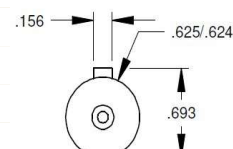


SHAFT OPTIONS

3/4" KEYED SHAFT (CODE 4)



5/8" KEYED SHAFT (CODE 2)



SPLINED SHAFT OPTIONS

SHAFT CODE 9
9 TOOTH SAE
16/32 DP
30° PA

SHAFT CODE 3
11T SAE
16/32 DP
30° PA

WPA Performance Data

MODEL		RPM								PRESSURE (PSI)
		500	1000	1500	2000	2500	3000	3500	4000	
WPA06	FLOW (GPM)	0.73	1.54	2.37	3.16	3.99	4.84	5.65	6.45	3600
	INPUT HP	2.07	4.13	6.20	8.26	10.33	12.39	14.46	16.52	
WPA08	FLOW (GPM)	0.92	1.95	2.99	3.98	5.03	6.10	7.12		
	INPUT HP	2.61	5.21	7.82	10.42	13.03	15.63	18.24		
WPA10	FLOW (GPM)	1.19	2.52	3.86	5.15	6.51	7.89	9.21		
	INPUT HP	3.37	6.74	10.11	13.47	16.84	20.21	23.58		
WPA11	FLOW (GPM)	1.32	2.79	4.28	5.71	7.22	8.76	10.21		
	INPUT HP	3.74	7.47	11.21	14.95	18.69	22.42	26.16		
WPA14	FLOW (GPM)	1.55	3.28	5.03	6.70	8.47	10.27	11.99		
	INPUT HP	4.39	8.77	13.16	17.54	21.93	26.31	30.70		
WPA16	FLOW (GPM)	1.86	3.94	6.05	8.06	10.19	12.36			
	INPUT HP	5.28	10.55	15.83	21.10	26.38	31.65			
WPA19	FLOW (GPM)	2.18	4.61	7.07	9.42	11.91	14.44			3000
	INPUT HP	5.43	10.85	16.28	21.70	27.13	32.55			
WPA23	FLOW (GPM)	2.57	5.44	8.34	11.12	14.06				
	INPUT HP	5.82	11.64	17.46	23.29	29.11				
WPA26	FLOW (GPM)	2.89	6.13	9.40	12.53	15.84				
	INPUT HP	5.90	11.81	17.71	23.61	29.51				



P U M P S

WPB B Flange Gear Pumps Specifications & Dimensional Data

WPB 38 A 5 R

DISPLACEMENT CODE	CU. IN. / REV	CONTINUOUS PSI	RATED SPEED (RPM)	INLET PORT SIZE	OUTLET PORT SIZE	"A"	"B"
16	0.97	3600	3000	SAE #12	SAE #10	4.45	2.05
19	1.16	3600	3000	SAE #12	SAE #10	4.53	2.13
22	1.35	3600	3000	SAE #12	SAE #10	4.66	2.2
25	1.53	3600	3000	SAE #16	SAE #12	4.95	2.35
28	1.68	3600	3000	SAE #16	SAE #12	5.25	2.5
32	1.97	3300	3000	SAE #16	SAE #12	5.47	2.61
38	2.32	2900	2750	SAE #16	SAE #12	5.77	2.72
44	2.69	2450	2500	SAE #16	SAE #12	6.02	2.9

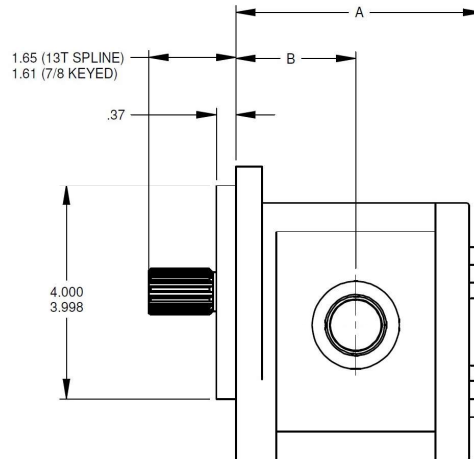
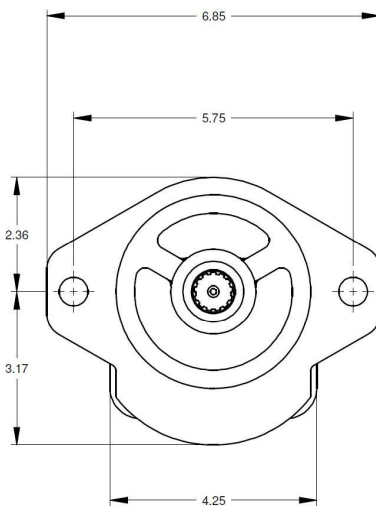
ROTATION (FACING END OF SHAFT)

L (COUNTER CLOCKWISE)

R (CLOCKWISE)

SHAFT CODE	SHAFT TYPE
5	SAE 13 TOOTH SPLINE
6	SAE 7/8" KEYED STRAIGHT

PORT LOCATION CODE	PORT LOCATION
A	SIDE INLET AND OUTLET
C	BOTH SIDE AND REAR PORTS W/ STEEL PLUGS
D	REAR INLET AND OUTLET

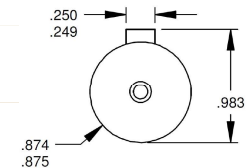


SHAFT OPTIONS

SHAFT CODE 5

SAE 13T SPLINE
16/32 DP
30° PA

SHAFT CODE 6
7/8" STRAIGHT KEYED



WPB Performance Data

MODEL		RPM						PRESSURE
		500	1000	1500	2000	2500	3000	(PSI)
WPB19	FLOW (GPM)	2.17	4.59	7.03	9.38	11.85	14.37	3600
	INPUT HP	6.13	12.27	18.40	24.53	30.67	36.80	
WPB22	FLOW (GPM)	2.49	5.27	8.09	10.78	13.63	16.53	
	INPUT HP	7.05	14.11	21.16	28.22	35.27	42.33	
WPB28	FLOW (GPM)	3.10	6.56	10.06	13.41	16.94	20.55	
	INPUT HP	8.77	17.54	26.31	35.08	43.85	52.62	
WPB32	FLOW (GPM)	3.64	7.70	11.80	15.74	19.89	24.12	3000
	INPUT HP	9.47	18.94	28.42	37.89	47.36	56.83	
WPB38	FLOW (GPM)	4.27	9.05	13.88	18.51	23.39		
	INPUT HP	9.69	19.37	29.06	38.74	48.43		
WPB44	FLOW (GPM)	4.96	10.50	16.10	21.47	27.13		2500
	INPUT HP	9.55	19.10	28.65	38.20	47.76		



P U M P S

WPC B Flange Gear Pumps Specifications & Dimensional Data

WPC 44 A 5 R

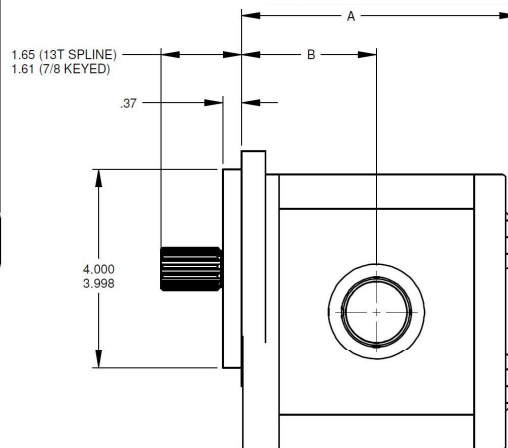
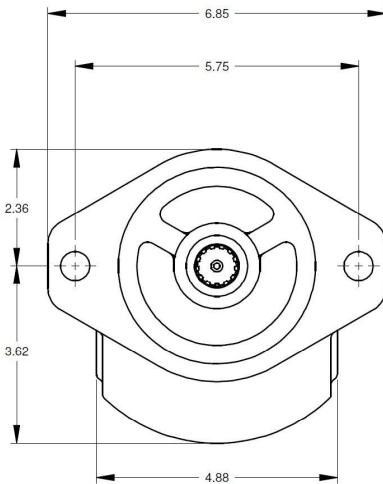
DISPLACEMENT CODE	CU. IN. / REV	CONTINUOUS PSI	RATED SPEED (RPM)	INLET PORT SIZE	OUTLET PORT SIZE	"A"	"B"
21	1.26	3600	3000	SAE #16	SAE #12	5.06	2.33
27	1.65	3600	3000	SAE #16	SAE #12	5.26	2.43
33	2.04	3600	3000	SAE #16	SAE #12	5.46	2.52
38	2.36	3600	2750	SAE #16	SAE #12	5.61	2.60
46	2.86	3600	2750	SAE #20	SAE #16	6.24	2.92
55	3.3	3200	2500	SAE #20	SAE #16	6.43	3.04
65	3.85	2900	2500	SAE #20	SAE #16	6.75	3.17
75	4.48	2600	2500	SAE #20	SAE #16	7.03	3.31

ROTATION (FACING END OF SHAFT)
L (COUNTER CLOCKWISE)
R (CLOCKWISE)

SHAFT CODE	SHAFT TYPE
5	SAE 13 TOOTH SPLINE
6	SAE 7/8" KEYED STRAIGHT
7	SAE 15 TOOTH SPLINE

PORT LOCATION CODE	PORT LOCATION
A	SIDE INLET AND OUTLET
C	BOTH SIDE AND REAR PORTS W/ STEEL PLUGS*

* ADD 0.14" TO LENGTH "A" FOR REAR PORTS

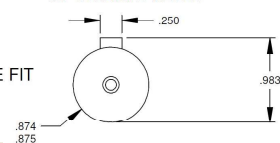


SHAFT OPTIONS

SHAFT CODE 5

SAE 13T SPLINE
16/32 DP
30° PA
FLAT ROOT SIDE FIT

SHAFT CODE 6 7/8" STRAIGHT KEYED



WPC Performance Data

MODEL		RPM					PRESSURE (PSI)
		500	1000	1500	2000	2500	
WPC55	FLOW (GPM)	6.07	12.85	19.71	26.28	33.21	3300
	INPUT HP	15.13	30.26	45.39	60.51	75.64	
WPC65	FLOW (GPM)	7.08	14.99	22.99	30.65	38.73	3000
	INPUT HP	16.04	32.08	48.12	64.17	80.21	



P U M P S

Aluminum / Cast Iron Center PTO Pumps



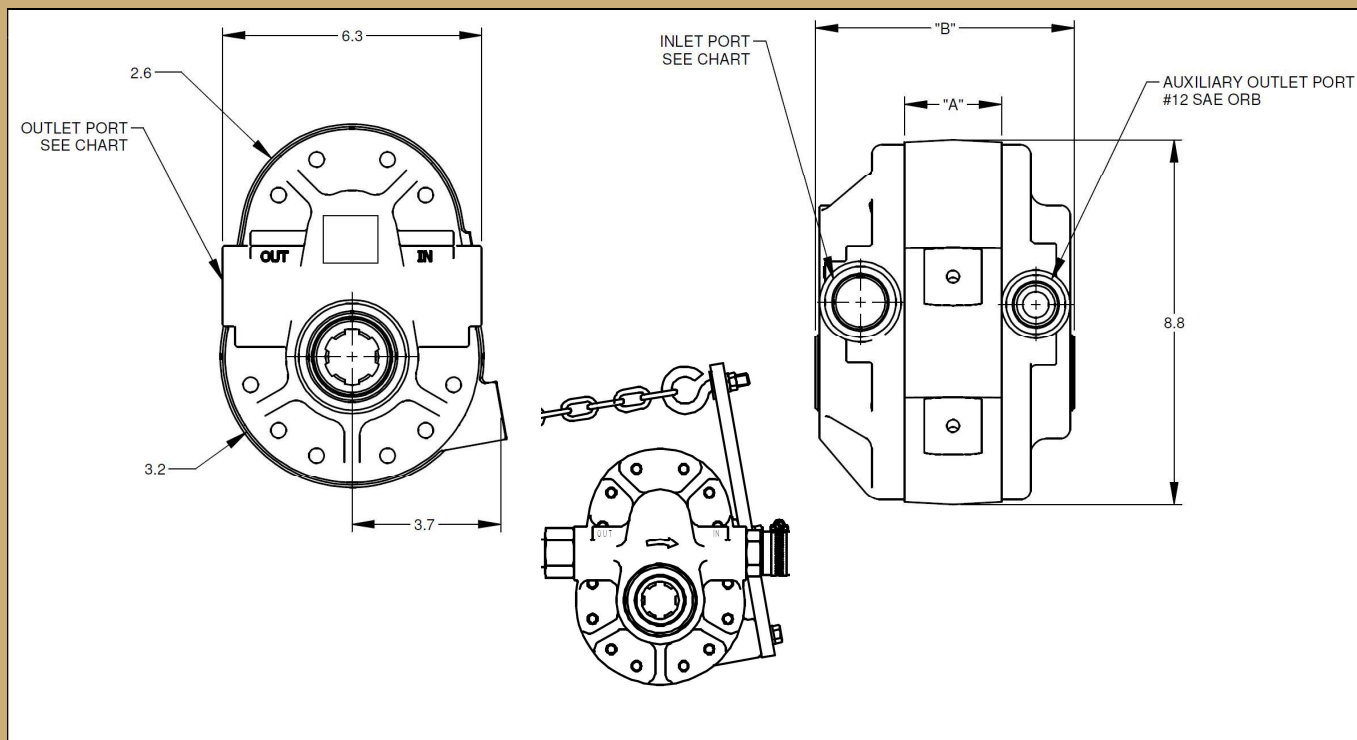
FEATURES:

- Cast iron end plates with aluminum center section
- Self-adjusting wear plates
- Tapped holes for a torque arm kit to prevent pump rotation
- Hose barb for inlet port & NPT adapter for outlet port
- Slips onto tractor PTO shaft (no gear box required)

MODEL NUMBER	DISPLACEMENT CU. IN/REV	RPM	DRIVE SHAFT	INLET PORT	OUTLET PORT	"A"	"B"	GPM OUTPUT (Full RPM)	INLET ADAPTER	WT LBS.	LIST PRICE
WP-PTO-1A *	9.8	540	6 TOOTH	SAE #16	SAE #12	2.4	6.3	21	1 1/4"	45	914.00
WP-PTO-2A *	5.5	540	6 TOOTH	SAE #16	SAE #12	1.6	5.6	11	1"	41	854.00
WP-PTO-7A *	3.6	540	6 TOOTH	SAE #16	SAE #12	1.3	5.2	7	1"	37	854.00
WP-PTO-8A *	3.6	1000	21 TOOTH	SAE #16	SAE #12	1.3	5.2	13	1"	38	854.00
WP-PTO-9A *	7.6	540	6 TOOTH	SAE #16	SAE #12	2.0	6.0	17	1 1/4"	43	854.00
WP-PTO-K11 **	9.8	1000	21 TOOTH	SAE #20	SAE #16	2.4	6.3	40	2"	45	1320.00
WP-PTO-1AC *	9.8	540	6 TOOTH	SAE #16	SAE #12	2.4	6.3	21	1 1/4"	51	1405.00
WP-PTO-2AC *	5.5	540	6 TOOTH	SAE #16	SAE #12	1.6	5.6	11	1"	45	925.00
WP-PTO-K11C **	9.8	1000	21 TOOTH	SAE #20	SAE #16	2.4	6.3	40	2"	51	925.00

** Ports on the WP-PTO-K11 & WP-PTO-K11C are located facing rear of the pump

SEAL KITS	LIST PRICE
PMCK-WP-PTO-SS *	42.00
PMCK-WP-PTO-RR **	42.00





MOTORS

Gerotor Motors – Low Speed – High Torque



FEATURES:

- High-torque, low speed with gerotor
- Instantly reversible by reversing the flow
- Cross-over for many popular models in the market

- 2 Bolt Flange
- 1.0" keyed shaft
- 4 Bolt flange
- ½ NPTF ports

APPLICATIONS:

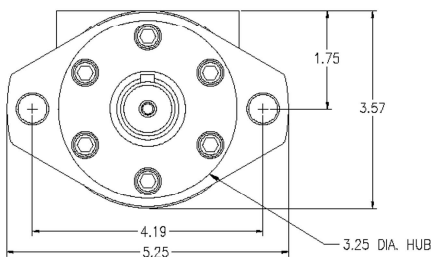
Use the CMM Series for light to medium duty applications such as grain augers and elevators, salt and sand spreaders, car wash and sweeper brushes, conveyors, winches, scissor lifts, and many others. To assure optimum motor life, run motor for approximately one hour at 30% of rated pressure before application of full load.

CMM MOTORS

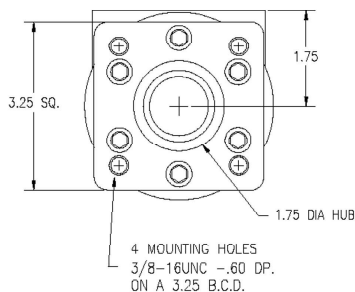
MODEL NUMBER	DISPLACEMENT IN ³ /REV	MAXIMUM PRESSURE PSI		MAXIMUM SPEED RPM		WT LBS.	LIST PRICE
		CONTINUOUS	INTERMITTENT	CONTINUOUS	INTERMITTENT		
†CMM100-2RP	6.1	1300	2000	600	750	13.4	Call
†CMM150-2RP	9.2	1200	1900	400	500	14.0	Call
CMM200-2RP	12.2	1200	1800	300	400	14.5	343.00
CMM400-2RP	24.4	900	1300	125	160	16.7	695.00
CMM50-4RP	3.0	1400	2200	800	1000	12.8	574.00
CMM100-4RP	6.1	1300	2000	600	750	13.4	576.00
CMM150-4RP	9.2	1200	1900	400	500	14.0	333.00
CMM200-4RP	12.2	1200	1800	300	400	14.5	343.00
CMM300-4RP	17.9	1000	1600	200	250	15.5	675.00
CMM400-4RP	24.4	900	1300	125	160	16.7	695.00

It is not recommended to operate at a condition requiring both maximum torque and speed. Intermittent operation is 10% of any minute. Normal operating temperature 80°F to 140°F, max temperature 185°F. Max inlet pressure 2500 psi for motors in series. Max back pressure 1000 psi. For use with mineral based hydraulic fluid 100-200 SUS @ operating PSI. Maximum axial thrust load on shaft 1000 lbs. Oil filtration 10 micron on fine, oil cleanliness per ISO code level 17/14.

2 BOLT FLANGE



4 BOLT FLANGE

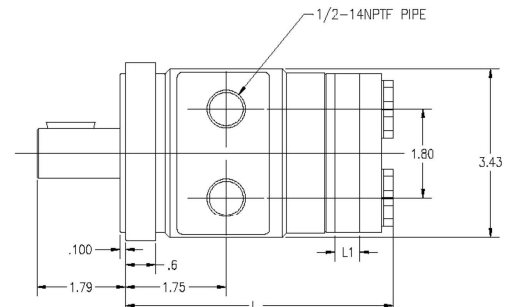


STANDARD 1" KEYED SHAFT

1.00 DIA. X 1/4 WIDE STD. WOODRUFF KEY

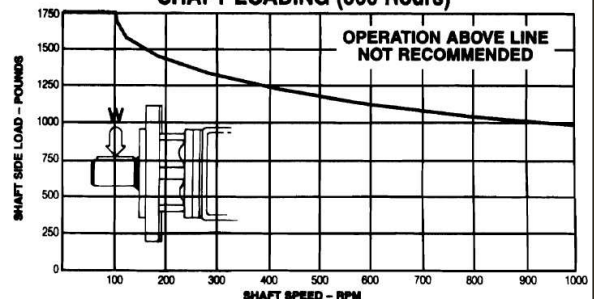
.9995 ±.0005 DIA.

1/4-20 UNC .63 DP



CMM	50	100	150	200	300	400
L	5.63	5.86	6.18	6.38	7.00	7.40
L1	.27	.51	.83	1.02	1.65	2.05

SHAFT LOADING (500 Hours)



† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



MOTORS

Gerotor Motor – Low Speed – High Torque

Performance Data

346
280

Bold number on top = TORQUE (in lbs.)
Number on bottom = SPEED (RPM)

■ GREATEST EFFICIENCY
■ HIGH EFFICIENCY

CMM 50		3.0 Cu. In. REV		Δ PSI				Peak
		200	400	600	800	1000	1200	1400
G	2	69	139	209	279	349	419	489
		149	143	137	131	125	119	113
	4	66	136	206	276	346	416	486
		304	298	292	286	280	274	268
P	6	62	132	202	272	342	412	482
		459	453	447	441	435	429	423
	8	55	125	195	265	335	405	475
		614	608	602	596	590	584	578
M	10	47	117	187	257	327	397	467
		769	763	757	751	745	739	733
	12	37	107	177	247	317	387	457
		924	918	912	906	900	894	888

CMM 200		12.15 Cu. In. REV		Δ PSI				Peak
		200	400	600	800			
G	2	283	563	843	1123			
		35	32	29	26			
	4	273	553	833	1113			2305
		74	71	68	65			45
P	6	258	538	818	1098			2290
		112	109	106	103			83
	8	237	517	797	1077			2269
		149	146	143	140			120
M	10	209	489	769	1049			2241
		187	184	181	178			158
	12	180	460	740	1020			2112
		225	223	220	217			197
	14	136	416	696	976			2168
		264	261	258	255			235

CMM 100		6.07 Cu. In. REV		Δ PSI				Peak
		200	400	600	800	1000	1200	
G	2	144	292	440	588	736	884	1437
		72	68	64	60	56	52	30
	4	138	286	434	582	730	878	1431
		147	143	139	135	131	127	105
P	6	130	278	426	574	722	870	1423
		222	219	216	213	210	207	185
	8	119	267	415	563	711	859	1412
		300	297	294	291	288	285	263
M	10	104	252	400	548	696	844	1397
		375	372	369	366	363	360	368
	12	85	233	381	529	677	825	1378
		452	449	446	443	440	437	415
	14	64	212	360	508	656	804	1357
		528	525	522	519	516	513	491

CMM 300		17.9 Cu. In. REV		Δ PSI				Peak
		200	400	600	800			
G	2	426	856	1286	1716			
		23	21	18	16			
	4	413	843	1273	1703			2890
		49	46	44	41			27
P	6	392	822	1252	1682			2865
		75	72	70	67			53
	8	362	791	1222	1652			2830
		101	98	95	93			79
M	10	324	754	1184	1614			2785
		126	124	121	119			105
	12	277	707	1137	1567			2735
		152	150	147	144			131
	14	222	652	1082	1512			2680
		178	175	173	170			157

CMM 150		9.37 Cu. In. REV		Δ PSI				Peak
		200	400	600	800	1000	1200	
G	2	221	467	713	959	1205	1451	2193
		46	43	40	37	34	31	15
	4	214	460	706	952	1198	1444	2186
		95	92	89	86	83	80	64
P	6	202	448	694	940	1186	1432	2174
		145	142	139	136	133	130	114
	8	186	432	678	924	1170	1416	2158
		194	191	188	185	182	179	163
M	10	164	410	656	902	1148	1394	2136
		242	239	236	233	230	227	211
	12	137	383	629	875	1121	1367	2109
		291	288	285	282	279	276	260
	14	106	352	598	844	1090	1336	2078
		340	337	334	331	328	325	309

CMM 400		24.4 Cu. In. REV		Δ PSI				Peak
		200	400	600	800			
G	2	565	1136	1707	2279			
		16	14	12	10			
	4	549	1120	1691	2262			3392
		36	33	31	29			20
P	6	520	1091	1663	2229			3371
		55	53	51	48			39
	8	481	1053	1624	2195			3335
		74	73	70	68			59
M	10	430	1002	1573	2144			3274
		94	91	89	86			77
	12	368	939	1511	2082			3213
		113	110	108	106			97
	14	296	867	1438	2009			3147
		132	130	127	125			116

Δ PSI – is the actual pressure difference between the inlet and outlet ports.

A SITUATION OF SIMULTANEOUS PEAK TORQUE AND MAXIMUM RPM SHOULD NOT BE ALLOWED TO OCCUR.

Operating motors at both low RPM (10-20 depending on disp.) and low torque may result in RPM fluctuations during operation.

To calculate horsepower from chart data use formula:

$$HP (out) = \frac{RPM \times TORQUE (in-lbs.)}{63025}$$

MOTOR CROSS REFERENCE

	SHAFT	PORTS	MOTOR BRAND	DISPLACEMENT CU. IN./REV.				
				2.9	6.1	11.7	17.5	23.4
2 Bolt Flange Mounting	Woodruff Keyed	½" NPT	Prince Charlyn H Danfoss DH		CMM100-2RP 101-1027 151-2083	CMM200-2RP 101-1029 151-2086		CMM400-2RP 101-1032 151-2089
4 Bolt Flange Mounting	Woodruff Keyed	½" NPT	Prince Charlyn H Danfoss DH	CMM50-4RP 101-1001 151-2121	CMM100-4RP 101-1003 151-2123	CMM200-4RP 101-1005 151-2126	CMM300-4RP 101-1007 151-2128	CMM400-4RP 101-1008 151-2129

NOTE: THE CROSS REFERENCE INFORMATION IN THIS CHART IS TO BE USED ONLY AS A REFERENCE FOR GUIDELINE PURPOSES ONLY. AFTER SELECTING A MODEL FROM ABOVE, REVIEW THE MOTOR SPECIFICATIONS TO DETERMINE COMPATIBILITY WITH SPECIFIC APPLICATION.

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