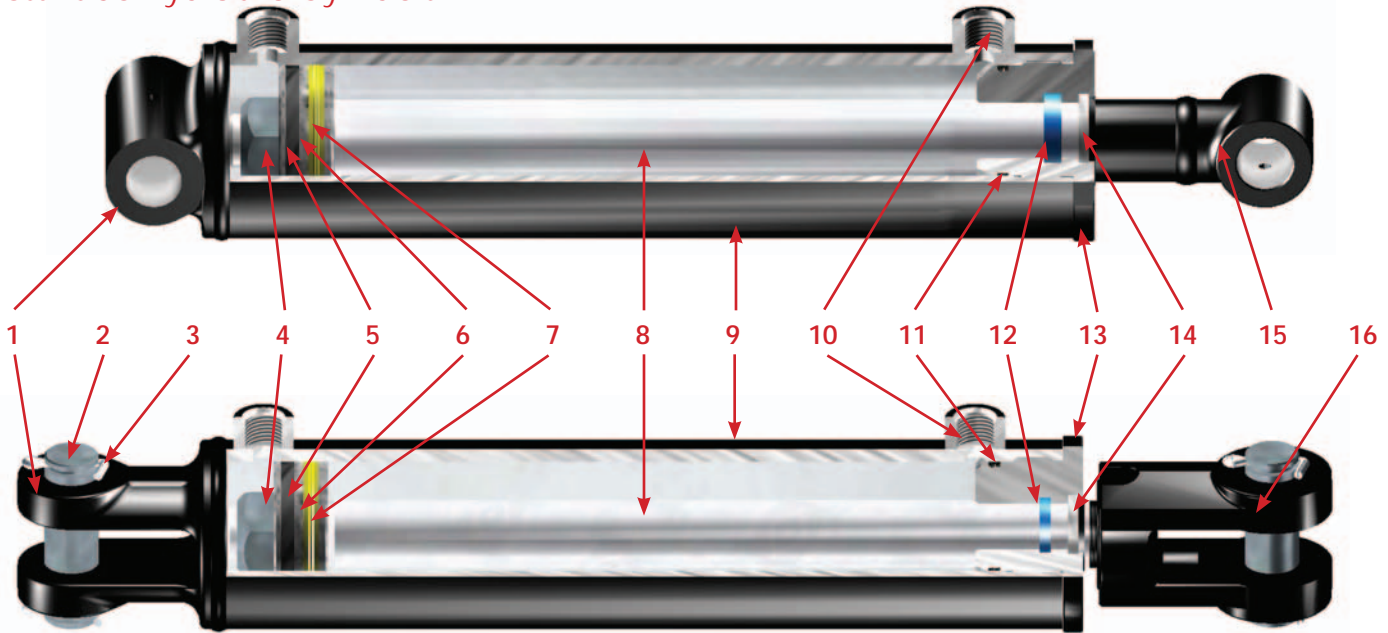


WX Series

Cross Tube Hydraulic Cylinders



WH Series

Double Lug Hydraulic Cylinders

3000 PSI Working Pressure
6000 PSI Proof Pressure

- 1 End Cap** - Durable steel cast end able to withstand continuous high loads.
- 2, 3 WH Series: Pins & Retainers** - High tensile steel, zinc plated to prevent corrosion, comes with cotter pin retainers.
- 4 Piston Nut** - Heavy duty, torqued, self locking piston nut holds piston in place under high cycle loading.
- 5 Piston Wear Ring** - 33% glass filled nylon wear ring incorporated in piston to provide side load bearing area, preventing scoring of cylinder tube.
- 6 Piston** - Precision machined providing a malleable bearing surface for extended cylinder life.
- 7 Piston Seal** - PSP crown piston seal comes with expander to provide a positive piston seal with minimal friction, extending seal operation under high pressure applications.
- 8 Cylinder Shaft** - High tensile steel, hard chrome plated shaft provides extended cylinder life in harsh applications.
- 9 Tube** - Precision finished skived and burnished heavy wall steel tubing for extended seal and cylinder life.
- 10 Ports** - ORB for positive sealing. Unless otherwise stated, cylinders assembled as follows:
WX Series: Ports 90° to pins.
WH Series: Ports inline with pins.
- 11 Tube Seal** - 90 durometer o-ring with anti-extrusion back-up washer to prevent leakage under high pressure and cycle loading.
- 12 Rod Seal** - Polyurethane U-Cup providing long wearing, positive seal.
- 13 Cylinder Head** - Offering increased bearing surface for high shock and side load applications. Comes with machined wrench flats for ease of servicing.
- 14 Rod Wiper** - Heavy duty, nitrile preventing contaminants from entering cylinder.
- 15 WX Series: Cross Tube End** - Durable steel cast end able to withstand continuous high loads.
- 16 WH Series: Rod Clevis** - Ductile iron comes with 360° thread contact area and positive set screw locking device able to withstand continuous high loads.



WX Series

Cross Tube Hydraulic Cylinders

Code	Model	Bore	Stroke	Rod Dia	Retracted	Pin Dia	Ship Wt	Full Extension Column Load Limitation (psi)	Allowable load (lbF)
644950	15WX08-100	1.50	8.00	1.00	16.00	.75	8.8	3000	5301
644951	15WX10-100	1.50	10.00	1.00	18.00	.75	9.8	3000	5301
644952	15WX12-100	1.50	12.00	1.00	20.00	.75	10.9	3000	5301
644953	15WX14-100	1.50	14.00	1.00	22.00	.75	11.9	3000	5301
644954	15WX16-100	1.50	16.00	1.00	24.00	.75	12.9	3000	5301
644955	15WX18-100	1.50	18.00	1.00	26.00	.75	13.9	3000	5301
644956	15WX20-100	1.50	20.00	1.00	28.00	.75	14.9	3000	5301
644957	15WX24-100	1.50	24.00	1.00	32.00	.75	17.0	2618*	4626
644900	20WX08-112	2.00	8.00	1.13	16.00	1.00	12.8	3000	9425
644901	20WX10-112	2.00	10.00	1.13	18.00	1.00	14.1	3000	9425
644902	20WX12-112	2.00	12.00	1.13	20.00	1.00	15.3	3000	9425
644903	20WX14-112	2.00	14.00	1.13	22.00	1.00	16.6	3000	9425
644904	20WX16-112	2.00	16.00	1.13	24.00	1.00	17.9	3000	9425
644905	20WX18-112	2.00	18.00	1.13	26.00	1.00	19.2	3000	9425
644906	20WX20-112	2.00	20.00	1.13	28.00	1.00	20.5	3000	9425
644907	20WX24-112	2.00	24.00	1.13	32.00	1.00	23.0	2359*	7411
644910	25WX08-125	2.50	8.00	1.25	16.00	1.00	16.5	3000	14726
644911	25WX10-125	2.50	10.00	1.25	18.00	1.00	18.1	3000	14726
644912	25WX12-125	2.50	12.00	1.25	20.00	1.00	19.7	3000	14726
644913	25WX14-125	2.50	14.00	1.25	22.00	1.00	21.3	3000	14726
644914	25WX16-125	2.50	16.00	1.25	24.00	1.00	22.9	3000	14726
644915	25WX18-125	2.50	18.00	1.25	26.00	1.00	24.5	3000	14726
644916	25WX20-125	2.50	20.00	1.25	28.00	1.00	26.0	3000	14726
644917	25WX24-125	2.50	24.00	1.25	32.00	1.00	29.2	2301*	11295
644920	30WX08-150	3.00	8.00	1.50	16.00	1.00	24.1	3000	21206
644921	30WX10-150	3.00	10.00	1.50	18.00	1.00	26.6	3000	21206
644922	30WX12-150	3.00	12.00	1.50	20.00	1.00	29.0	3000	21206
644923	30WX14-150	3.00	14.00	1.50	22.00	1.00	31.5	3000	21206
644924	30WX16-150	3.00	16.00	1.50	24.00	1.00	33.9	3000	21206
644925	30WX18-150	3.00	18.00	1.50	26.00	1.00	36.4	3000	21206
644926	30WX20-150	3.00	20.00	1.50	28.00	1.00	38.8	3000	21206
644927	30WX24-150	3.00	24.00	1.50	32.00	1.00	43.3	3000	21206
644930	35WX08-175	3.50	8.00	1.75	16.00	1.00	31.5	3000	28863
644931	35WX10-175	3.50	10.00	1.75	18.00	1.00	35.3	3000	28863
644932	35WX12-175	3.50	12.00	1.75	20.00	1.00	38.3	3000	28863
644933	35WX14-175	3.50	14.00	1.75	22.00	1.00	41.3	3000	28863
644934	35WX16-175	3.50	16.00	1.75	24.00	1.00	44.4	3000	28863
644935	35WX18-175	3.50	18.00	1.75	26.00	1.00	47.4	3000	28863
644936	35WX20-175	3.50	20.00	1.75	28.00	1.00	50.4	3000	28863
644937	35WX24-175	3.50	24.00	1.75	32.00	1.00	56.5	3000	28863
644940	40WX08-200	4.00	8.00	2.00	16.00	1.00	39.1	3000	37699
644941	40WX10-200	4.00	10.00	2.00	18.00	1.00	42.8	3000	37699
644942	40WX12-200	4.00	12.00	2.00	20.00	1.00	46.5	3000	37699
644943	40WX14-200	4.00	14.00	2.00	22.00	1.00	50.1	3000	37699
644944	40WX16-200	4.00	16.00	2.00	24.00	1.00	53.8	3000	37699
644945	40WX18-200	4.00	18.00	2.00	26.00	1.00	57.5	3000	37699
644946	40WX20-200	4.00	20.00	2.00	28.00	1.00	61.1	3000	37699
644947	40WX24-200	4.00	24.00	2.00	32.00	1.00	68.5	3000	37699

* Note: Indicates cylinder column strengths affected. Affected cylinders should not be operated beyond these limits as the cylinder rods may buckle or bend causing failure.



WH Series

Double Lug Hydraulic Cylinders

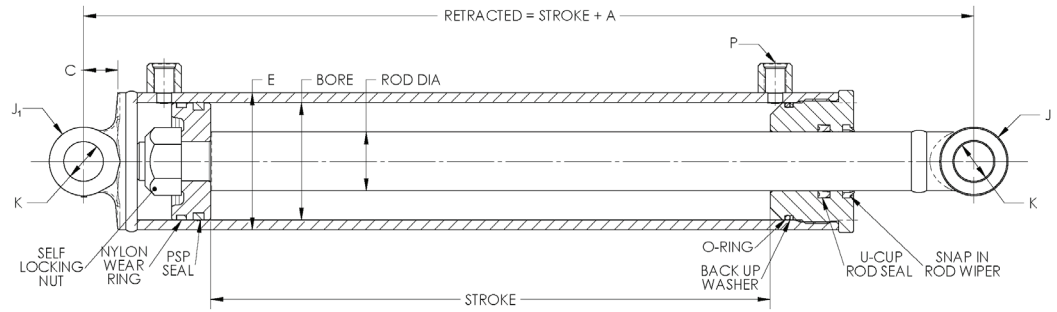
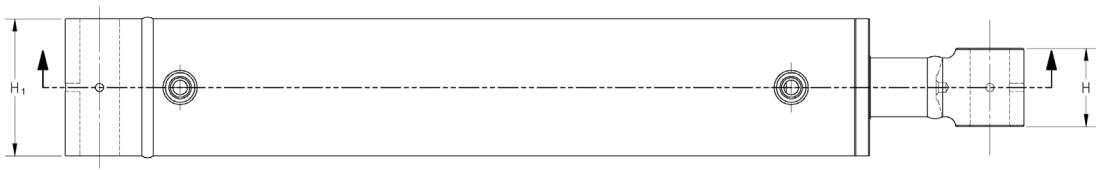
Code	Model	Bore	Stroke	Rod Dia	Retracted	Pin Dia	Ship Wt	Full Extension Column Load Limitation (psi)	Allowable load (lbF)
644800	20WH08-112	2.00	8.00	1.13	18.25	1.00	15.8	3000	9425
644808	20WH08-112 ASAE	2.00	8.00	1.13	20.25	1.00	16.4	3000	9425
644801	20WH10-112	2.00	10.00	1.13	20.25	1.00	17.1	3000	9425
644802	20WH12-112	2.00	12.00	1.13	22.25	1.00	18.4	3000	9425
644803	20WH14-112	2.00	14.00	1.13	24.25	1.00	19.7	3000	9425
644804	20WH16-112	2.00	16.00	1.13	26.25	1.00	21.0	3000	9425
644805	20WH18-112	2.00	18.00	1.13	28.25	1.00	22.3	3000	9425
644806	20WH20-112	2.00	20.00	1.13	30.25	1.00	23.6	2930*	9204
644807	20WH24-112	2.00	24.00	1.13	34.25	1.00	26.1	2180*	6849
644810	25WH08-112	2.50	8.00	1.13	18.25	1.00	19.3	3000	14726
644818	25WH08-112 ASAE	2.50	8.00	1.13	20.25	1.00	19.9	3000	14726
644811	25WH10-112	2.50	10.00	1.13	20.25	1.00	20.7	3000	14726
644812	25WH12-112	2.50	12.00	1.13	22.25	1.00	22.2	3000	14726
644813	25WH14-112	2.50	14.00	1.13	24.25	1.00	23.7	3000	14726
644814	25WH16-125	2.50	16.00	1.25	26.25	1.00	26.2	3000	14726
644815	25WH18-125	2.50	18.00	1.25	28.25	1.00	27.8	3000	14726
644816	25WH20-125	2.50	20.00	1.25	30.25	1.00	29.4	2855*	14014
644817	25WH24-125	2.50	24.00	1.25	34.25	1.00	32.6	2125*	10431
644820	30WH08-125	3.00	8.00	1.25	18.25	1.00	26.2	3000	21206
644828	30WH08-125 ASAE	3.00	8.00	1.25	20.25	1.00	26.9	3000	21206
644821	30WH10-125	3.00	10.00	1.25	20.25	1.00	28.4	3000	21206
644822	30WH12-125	3.00	12.00	1.25	22.25	1.00	30.5	3000	21206
644823	30WH14-125	3.00	14.00	1.25	24.25	1.00	32.7	3000	21206
644824	30WH16-150	3.00	16.00	1.50	26.25	1.00	37.3	3000	21206
644825	30WH18-150	3.00	18.00	1.50	28.25	1.00	39.7	3000	21206
644826	30WH20-150	3.00	20.00	1.50	30.25	1.00	42.2	3000	21206
644827	30WH24-150	3.00	24.00	1.50	34.25	1.00	47.1	3000	21206
644830	35WH08-125	3.50	8.00	1.25	18.25	1.00	30.4	3000	28863
644838	35WH08-125 ASAE	3.50	8.00	1.25	20.25	1.00	31.5	3000	28863
644831	35WH10-125	3.50	10.00	1.25	20.25	1.00	32.7	3000	28863
644832	35WH12-125	3.50	12.00	1.25	22.25	1.00	35.1	3000	28863
644833	35WH14-125	3.50	14.00	1.25	24.25	1.00	37.5	2516*	24207
644834	35WH16-150	3.50	16.00	1.50	26.25	1.00	42.3	3000	28863
644835	35WH18-150	3.50	18.00	1.50	28.25	1.00	45.0	3000	28863
644836	35WH20-150	3.50	20.00	1.50	30.25	1.00	47.6	3000	28863
644837	35WH24-150	3.50	24.00	1.50	34.25	1.00	53.0	2250*	21647
644840	40WH08-138	4.00	8.00	1.38	18.25	1.00	35.7	3000	37699
644848	40WH08-138 ASAE	4.00	8.00	1.38	20.25	1.00	36.5	3000	37699
644841	40WH10-138	4.00	10.00	1.38	20.25	1.00	38.4	3000	37699
644842	40WH12-138	4.00	12.00	1.38	22.25	1.00	41.1	3000	37699
644843	40WH14-138	4.00	14.00	1.38	24.25	1.00	43.9	2821*	35450
644844	40WH16-175	4.00	16.00	1.75	26.25	1.00	50.8	3000	37699
644845	40WH18-175	4.00	18.00	1.75	28.25	1.00	54.1	3000	37699
644846	40WH20-175	4.00	20.00	1.75	30.25	1.00	57.3	3000	37699
644847	40WH24-175	4.00	24.00	1.75	34.25	1.00	63.8	3000	37699

* Note: Indicates cylinder column strengths affected. Affected cylinders should not be operated beyond these limits as the cylinder rods may buckle or bend causing failure.

WX Series

Cross Tube Hydraulic Cylinders 3000 PSI

Welded Steel cross tube casting base end, welded steel cross tube casting rod end, 3000 psi, hard chrome rod, PSP crown piston seals, U-cup rod seals, skived tubing, ORB ports



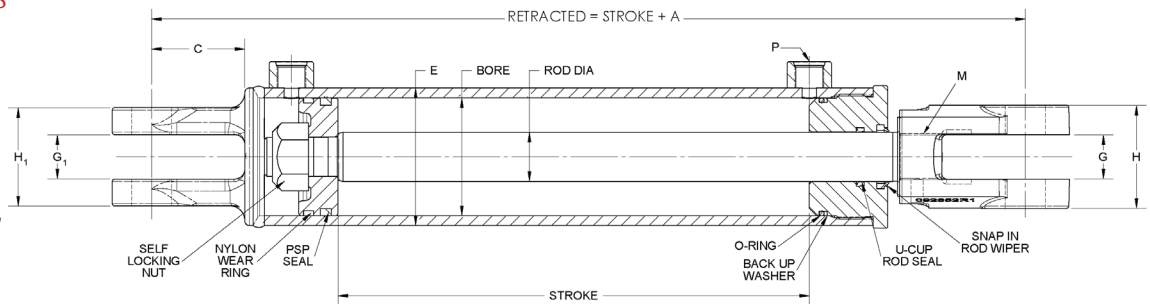
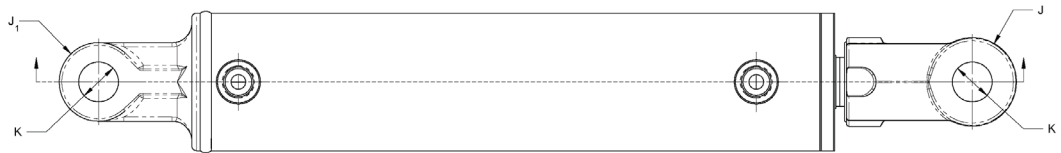
Bore	1.5	2.0	2.5	3.0	3.5	4.0
A*	8.00	8.00	8.00	8.00	8.00	8.00
C	0.75	0.88	0.88	0.88	1.00	1.00
E	1.88	2.38	2.88	3.50	4.00	4.50
H	1.50	2.00	2.00	2.00	2.50	4.00
H1	1.88	2.38	2.88	3.50	4.00	4.50
J	1.50	1.75	1.75	1.75	2.00	2.00
J1	1.50	1.75	1.75	1.75	2.00	2.00
K	0.77	1.02	1.02	1.02	1.02	1.02
P	9/16-18	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16

*stroke + A = retracted

WH Series

Double Lug Hydraulic Cylinders 3000 PSI

Welded Steel clevis casting base end, threaded ductile iron clevis casting rod end, 3000 psi, hard chrome rod, PSP crown piston seals, U-cup rod seals, skived tubing, ORB ports



Bore	2.0	2.5	3.0	3.5	4.0
A*	10.25	10.25	10.25	10.25	10.25
A ASAE-8*	12.25	12.25	12.25	12.25	12.25
C	2.06	2.06	2.38	2.38	2.38
E	2.38	2.88	3.50	4.00	4.50
G	1.13	1.13	1.13	1.13	1.13
G1	1.13	1.13	1.13	1.13	1.13
H	2.50	2.50	2.63	2.63	2.63
H1	2.17	2.50	2.50	2.50	2.75
J	2.00	2.00	2.25	2.25	2.25
J1	2.00	2.00	2.00	2.00	2.13
K	1.02	1.02	1.02	1.02	1.02
M	1 1/8-12	1 1/8-12	1 1/4-12	1 1/4-12	1 1/4-12
P	3/4-16	3/4-16	3/4-16	3/4-16	3/4-16

*stroke + A = retracted

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