

Cylinder SELECTION CHART

Choosing the
Right Cylinder
Tonnage, stroke
and retracted height

	Stroke (mm)	Re- tracted Height (mm)	Order No.	Page No.
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2ton pull	127	233	RP25	23
	5ton pull			
	139,7	302	RP55	23
5 ton	14,3	41	RLS50	18
	25,4	111	C51C	15
	82,6	165	C53C	15
	133,4	216	C55C	15
	133,4	267	C55CBT	16
	184,2	273	C57C	15
	235	324	C59C	15

10 ton	11,1	45	RLS100	18
	25,4	92	C101C	15
	38,1	89	RSS101	19
	54	121	C102C	15
	63,5	133	RH102	20
	104,8	172	C104C	15
	155,6	248	C106C	15
	155,6	292	C106CBT	16
	158,8	297	RD106	25
	203,2	287	RH108	20
206,4	299	C108C	15	
254	391	RD1010	25	
257,2	349	C1010C	15	
257,2	394	C1010CBT	16	
308	400	C1012C	15	
358,8	451	C1014C	15	

12 ton	7,9	56	RH120	20
	41,3	122	RH121	20
	41,3	122	RH121T	20
	76,2	184	RH123	20

15 ton	25,4	124	C151C	15
	54	149	C152C	15
	104,8	200	C154C	15
	155,6	271	C156C	15
	206,4	322	C158C	15
	257,2	373	C1510C	15
	308	424	C1512C	15
	358,8	475	C1514C	15
	406,4	522	C1516C	15

17,5 ton	50,8	175	RT172	22
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20 ton	11,1	50,8	RLS200	18
	44,5	95	RSS202	19
	50,8	156	RH202	20
	54	162	RA202	17
	76,2	154	RH203	20
	104,8	213	RA204	17
	152,4	308	RH206	20
	155,6	264	RA206	17

25 ton	25,4	140	C251C	15
	50,8	165	C252C	15
	101,6	216	C254C	15
	158,8	273	C256C	15
	158,8	314	C256CBT	16
	158,8	340	RD256	25
	209,6	324	C258C	15

	Stroke (mm)	Re- tracted Height (mm)	Order No.	Page No.
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25 ton	260,4	375	C2510C	15
	311,2	425	C2512C	15
	362	476	C2514C	15
	362	543	C2514CBT	16
	362	518	RD2514	25

30 ton	12,7	59	RLS300	18
	54	187	RA302	17
	61,9	117	RSS302	19
	63,5	159	RH302	20
	63,5	214	RT302	22
	76,2	179	RH303	21
	104,8	238	RA304	17
	149,2	283	RHA306	20
	152,4	248	RH306	20
	152,4	281	RH306D	21
155,6	289	RA306	17	
257,2	438	RH3010	21	

50 ton	15,9	67	RLS500S	18
	60,3	127	RSS502	19
	76,2	181	RH503	20
	76,2	268	RT503	22

55 ton	50,8	125,4	R552C	26
	50,8	162	R552L	29
	50,8	175	C552C	15
	54	171	RA552	17
	104,8	222	RA554	17
	108	232	C554C	15
	152,4	264	R556C	26
	152,4	321	R556L	28
	155,6	273	RA556	17
	155,6	318	RA556L	28
	158,8	283	C556C	15
	158,8	329	RD556	25
	254	328,6	R5510C	26
	254	365	R5510L	29
	254	384	RA5510	26
260,4	384	C5510C	15	
333,4	504	RD5513	25	
336,6	460	C5513C	15	
463,6	657	RD5518	25	

60 ton	76,2	235	RH603	20
	101,6	241	RHA604D	21
	127	241	RH605	21
	152,4	318	RH606	20
	257,2	459	RH6010	21

75 ton	15,9	79	RLS750S	18
	155,6	314	C756C	15
	333,4	492	C7513C	15

80 ton	333,4	518	RD8013	25
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100 ton	15,9	86	RLS1000S	18
	38,1	144	RSS1002D	19
	38,1	165	RH1001	21
	50,8	139,7	R1002C	26
	50,8	169	R1002D	27
	50,8	184	R1002L	29
	50,8	219	C1002C	15
	54	197	RA1002	19

	Stroke (mm)	Re- tracted Height (mm)	Order No.	Page No.
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100 ton	57,2	139,7	RSS1002	19
	76,2	254	RH1003	20
	123,8	384	RT1004	22
	152,4	241,3	R1006C	26
	152,4	270	R1006D	27
	152,4	286	R1006L	29
	152,4	314	RH1006	21
	158,8	298	RA1006	17
	158,8	340	RA1006L	28
	168,3	337	C1006C	15
	168,3	350	RD1006	25
	254	342,9	R10010C	*
	254	372	R10010D	27
	254	387	R10010L	29
	260,4	503	RH10010	21
260,4	429	C10010C	15	
333,4	515	RD10013	25	
511,2	718	RD10020	25	

150 ton	14,3	102	RLS1500S	18
	50,8	162	R1502C	26
	50,8	189	R1502D	27
	50,8	206	R1502L	29
	127	308	RH1505	21
	152,4	264	R1506C	26
	152,4	291	R1506D	27
	152,4	308	R1506L	29
	168,3	378	RD1506	25
	203,2	349	RH1508	21
	254	365	R15010C	*
	254	392	R15010D	27
	254	410	R15010L	29
	333,4	543	RD15013	25
	460,4	674	RD15018	25

200 ton	50,8	191	R2002C	26
	50,8	207	R2002D	27
	50,8	241	R2002L	29
	152,4	292	R2006C	26
	152,4	308	R2006D	27
	152,4	343	R2006L	29
	168,3	406	RD2006	25
	203,2	408	RH2008	21
	254	394	R20010C	*
	254	410	R20010D	27
	254	445	R20010L	29
	333,4	572	RD20013	25
	460,4	723,9	RD20018	25

250 ton	76,2	290	RSS2503	19
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280 ton	50,8	191	R2802C	*
	50,8	234	R2802D	*
	50,8	248	R2802L	29
	152,4	292	R2806C	*
	152,4	335	R2806D	27
	152,4	349	R2806L	29
	254	394	R28010C	*
	254	437	R28010D	27
254	451	R28010L	29	

300 ton	152,4	439	RD3006	25
	330,2	617	RD30013	25

355 ton	50,8	232	R3552C	26
	50,8	292	R3552L	27
	50,8	290	R3552D	26
	152,4	333	R3556C	27
	152,4	394	R3556L	29
	152,4	448	R3556D	27
	254	435	R35510C	26
	254	495	R35510L	*
254	550	R35510D	26	

400 ton	152,4	473	RD4006	25
	330,2	651	RD40013	25

430 ton	50,8	264	R4302C	*
	50,8	333	R4302L	29
	50,8	313	R4302D	27
	152,4	365	R4306C	26
	152,4	435	R4306L	29
	152,4	413	R4306D	27
	254	467	R43010C	27
	254	537	R43010L	29
	254	516	R43010D	27

500 ton	152,4	499,3	RD5006	25
	330,2	677	RD50013	25

565 ton	50,8	292	R5652C	26
	50,8	371	R5652L	29
	50,8	345	R5652D	27
	152,4	394	R5656C	26
	152,4	473	R5656L	29
	152,4	447	R5656D	27
	254	495	R56510C	26
	254	575	R56510L	26
	254	548	R56510D	27

*For these and special cylinder requirements, contact your local sales office.

Selection

Choosing The Right Cylinder

Step 1 Select the hydraulic cylinder that best suits the application. See page 7, 12-13.

Step 2 Select the hydraulic pump, with valve option, that best matches the cylinder and application. See pages 6, 38-44.

Step 3 Select the hydraulic accessories you need. See pages 30-35.

CONSIDERATIONS:

1. What push or pull tonnage is required per cylinder in your application? (Rule of thumb; Always choose a cylinder with a tonnage rating of 20% or more than what is required to lift the load.)
2. What is the push or pull stroke length required?
3. Does the cylinder need to push, pull or both? (Single-acting cylinders extend the piston under hydraulic pressure; double-acting cylinders extend and retract the piston under pressure.)
4. Does the application require multiple cylinders?
5. Is the application stationary, or must the components be light in weight for easy portability?
6. Do you need to extend a rod or cable through the center of the cylinder for the application, as in a tensioning operation?
7. Does the application require that the cylinder fit within limited-clearance work areas?

8. Does the application require that the cylinder be "dead-ended" at the end of it's work stroke?
9. Will the cylinder need to withstand off-center loads? Cylinders with swivel caps are available.
10. Does the application require that the lifted load be supported for extended periods of time? Locking collars are ideal for such jobs, as are cribbing blocks.
11. Is corrosion resistance required? Our unique "Power Tech" surface treatment is standard on many Power Team cylinders, and optional on many of our cylinders which feature steel construction.
12. Will the application involve high cycles (over 2,500 in the cylinders lifetime)? Our "RD", "RH", "RP" and "C" series cylinders are ideal choices. Please refer to pages 12-13 for the capabilities of each cylinder.

ONLY POWER TEAM PROVIDES THE "POWER TECH" SURFACE TREATMENT:

- High corrosion and wear resistance, anti-galling properties.
- Significantly increases the life expectancy of a cylinder.
- Retains lubricants, prevents bronze and other materials from sticking to surface.
- Increases fatigue strength and impact strength.
- Increases surface yield and tensile strength.
- Provides improved abrasion and scratch resistance.
- Causes no appreciable dimensional change.
- 56 Rc minimum surface hardness.
- Passes ASTM B117-85 100 hour salt spray corrosion resistance tests.

The "Power Tech" surface treatment is standard on the gland nut, cylinder body and piston/piston rod of the following cylinders: RLS50, RLS100, RLS200, RLS300, RLS500S, RLS750S, RLS1000S, RLS1500S, and RSS1002. NOTE: Bronze plating may be used in place of the "Power Tech" surface finish for the piston/piston rod of any of the above cylinders. The "Power Tech" surface treatment is standard on the standpipe of all "RH" series single and double-acting cylinders. The "Power Tech" surface treatment is standard on the piston/piston rod of the RT172, RT302 and RT503 cylinders.

WHAT TYPE OF CYLINDER DO YOU NEED?

1. To determine a cylinder's force capacity:

FORCE
kg

Cylinder Effective Area (cm²)

X

bar from Pump

2. To determine oil capacity of a cylinder:

OIL CAPACITY
(cm³)

Cylinder Effective Area (cm²)

X

Cylinder Stroke (cm)

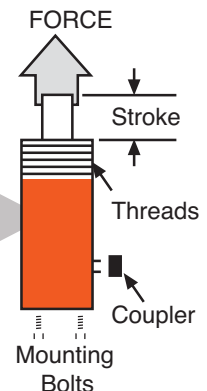
3. To determine reservoir capacity needed for a multiple cylinder system:

USABLE OIL

Oil Cap. of Cyl. (cm³)

X

Number of Cyl. in System



Note: For double-acting cylinders, oil in rod end of cylinder must be subtracted to determine capacity.