## REPAIR

## CALIBRATION

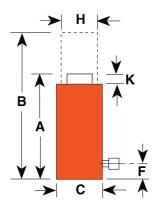


## High Tonnage Cylinders R Series

55-565 Ton Single-Acting

Load-Return

- Visible indicator band alerts when stroke limit is reached; overflow port ("weep hole") stroke limiter prevents piston from being overextended.
- Alloy heat treated piston and body for reliability and strength.
- Plated piston rod increase corrosion resistance and give superior bearing qualities.



			A	В	C	F Base	H Piston	К	Piston			
	Order	Oil	Retracted	Extended	Outside			Rod		Effective	Metric Ton	s
Stroke					Dia.	Port			Dia.		at 700	Weight
(mm)		(cm₃)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(cm <sub>2</sub> )	bar	(kg)
50,8	R552C	362	125,4	176,2	127,0	25,4	95,3	3,2	95,3	71,2	50,1	12,3
152,4	R556C	1.087	227,0	379,4	127,0	25,4	95,3	3,2	95,3	71,2	50,1	22,7
254,0	R5510C	1.811	328,6	582,6	127,0	25,4	95,3	3,2	95,3	71,2	50,1	32,7
50,8	R1002C	677	139,7	190,5	165,1	25,4	130,2	3,2	130,2	133,1	93,6	23,6
152,4	R1006C	2.030	241,3	393,7	165,1	25,4	130,2	3,2	130,2	133,1	93,6	40,4
50,8	R1502C	1.007	161,9	212,7	204,8	31,8	158,8	3,2	158,8	197,9	139,1	41,8
152,4	R1506C	3.019	263,5	415,9	204,8	31,8	158,8	3,2	158,8	197,9	139,1	68,6
254,0	R15010C	5.032	365,1	619,1	204,8	31,8	158,8	3,2	158,8	197,9	139,1	95,3
50,8	R2002C	1.355	190,5	241,3	235,0	41,3	184,2	3,2	184,2	266,3	187,2	65,8
152,4	R2006C	4.062	292,1	444,5	235,0	41,3	184,2	3,2	184,2	266,3	187,2	100,3
50,8	R3552C	2.326	231,8	282,6	298,5	54,0	241,3	3,2	241,3	457,2	321,4	137,1
152,4	R3556C	6.975	333,4	485,8	298,5	54,0	241,3	3,2	241,3	457,2	321,4	197,0
254,0	R35510C	11.624	435,0	689,0	298,5	54,0	241,3	3,2	241,3	457,2	321,4	256,5
50,8	R4302C	2.841	263,5	314,3	330,2	63,5	266,7	3,2	266,7	558,5	392,7	199,8
152,4	R4306C	8.520	365,1	517,5	330,2	63,5	266,7	3,2	266,7	558,5	392,7	276,5
50,8	R5652C	3.710	292,1	342,9	377,8	69,9	304,8	3,2	304,8	729,5	512,9	289,7
152,4	R5656C	11.129	393,7	546,1	377,8	69,9	304,8	3,2	304,8	729,5	512,9	389,5
254,0	R56510C	18.548	495,3	749,3	377,8	69,9	304,8	3,2	304,8	729,5	512,9	489,4
	50,8 152,4 254,0 50,8 152,4 254,0 50,8 152,4 50,8 152,4 254,0 50,8 152,4 254,0 50,8 152,4 254,0	Imm       50.8     R552C       152.4     R556C       254.0     R5510C       50.8     R1002C       152.4     R1006C       50.8     R1502C       152.4     R1506C       254.0     R15010C       50.8     R2002C       152.4     R2006C       50.8     R3550C       152.4     R3556C       254.0     R35510C       50.8     R4302C       152.4     R4306C       50.8     R5550C       50.8     R565C       152.4     R565C       50.8     R565C	Stroke     No.     Cap.       (mm)     (cms)       50.8     R552C     362       152.4     R550C     1.881       50.8     R502C     677       152.4     R1002C     677       152.4     R100C     2.030       50.8     R1002C     5.032       50.8     R100C     5.032       50.8     R2002C     1.355       152.4     R15010C     5.032       50.8     R352C     2.326       152.4     R3556C     6.975       254.0     R35510C     11.624       50.8     R352C     2.841       152.4     R436C     8.520       50.8     R4302C     2.841       152.4     R436C     8.520       50.8     R5652C     3.710       152.4     R4362C     3.710	Stroke     No.     Cap. (mm)     Ht. (mm)       50.8     R552C     362     125.4       152.4     R556C     1.087     227.0       254.0     R5510C     1.811     328.6       50.8     R1002C     677     139.7       152.4     R1066C     2.030     241.3       50.8     R1002C     677     161.9       152.4     R1066C     3.019     263.5       254.0     R15010C     5.032     365.1       50.8     R2002C     1.355     190.5       152.4     R2006C     4.062     292.1       50.8     R3552C     2.326     231.8       152.4     R3556C     6.975     333.4       254.0     R35510C     11.624     435.0       50.8     R3022C     2.841     263.5       152.4     R306C     8.520     365.1       50.8     R562C     3.710     292.1       50.4     R5656C     11.129     393.7       254.0	Stroke     No.     Cap. (mm)     Ht. (mm)     Ht. (mm)     Ht. (mm)       50.8     R552C     362     125.4     176.2       152.4     R556C     1.087     227.0     379.4       254.0     R5510C     1.811     328.6     582.6       50.8     R1002C     677     139.7     190.5       152.4     R1506C     3.019     263.5     415.9       152.4     R1006C     2.030     241.3     393.7       50.8     R1502C     1.007     161.9     212.7       152.4     R1506C     3.019     263.5     415.9       254.0     R15010C     5.032     365.1     619.1       50.8     R2002C     1.355     190.5     241.3       152.4     R256C     6.975     333.4     485.8       254.0     R35510C     11.624     435.0     689.0       50.8     R362C     2.841     263.5     314.3       152.4     R4656C     8.17.0     292.1     3442.9	Stroke     No.     Cap. (mm)     Ht. (mm)     Ht. (mm)     Ht. (mm)     Ht. (mm)     Dia. (mm)       50.8     R552C     362     125.4     176.2     127.0       152.4     R556C     1.087     227.0     379.4     127.0       50.8     R1002C     677     139.7     190.5     165.1       152.4     R550C     2.030     241.3     393.7     165.1       152.4     R100C     2.030     241.3     393.7     165.1       152.4     R100C     5.032     365.1     619.1     204.8       152.4     R100C     5.032     365.1     619.1     204.8       152.4     R200C     1.355     190.5     241.3     235.0       152.4     R256C     6.975     333.4     485.8     298.5       152.4     R3550C     11.624     435.0     689.0     298.5       152.4     R430C     2.841     263.5     314.3     330.2       152.4     R4306C     8.520     365.1 </td <td>Stroke     No.     Cap.     Ht.     Ht.     It.     Dia.     Port       (mm)     (cma)     (mm)     (mm</td> <td>Order Stroke     Order No.     Oil Cap.     Retracted Ht.     Extended (mm)     Outside (mm)     to (mm)     Outside (mm)     opent (mm)     Mod (mm)       50.8     R556C     362     125.4     176.2     127.0     25.4     95.3       152.4     R556C     1.087     227.0     379.4     127.0     25.4     95.3       50.8     R102C     677     139.7     190.5     165.1     25.4     130.2       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2       50.8     R1502C     1.007     161.9     212.7     204.8     31.8     158.8       152.4     R1506C     3.019     263.5     415.9     204.8     31.8     158.8       152.4     R1506C     4.062     292.1     444.5     235.0     41.3     184.2       50.8     R2022C     1.3355     190.5     241.3     <t< td=""><td>Order No.     Oril Cap.     Retracted Ht.     Extended Ht.     Outside Dia.     Rod Port     Rod Dia.     Rod Protrusion       50.8     R552C     Cap.     (mm)     (mm)</td><td>Order Stroke     Oril No.     Retracted Cap.     Extended Ht.     Outside Ht.     No.     Rod Dia.     Rod Protrusion     Bore Dia.       50.8     R552C     362     125,4     176,2     127,0     25,4     95,3     3,2     95,3       152,4     R556C     1.087     227,0     379,4     127,0     25,4     95,3     3,2     95,3       50,8     R550C     1.811     328,6     582,6     127,0     25,4     95,3     3,2     95,3       50,8     R1002C     677     139,7     190,5     165,1     25,4     130,2     3,2     130,2       50,8     R1002C     0.07     161,9     212,7     204,8     31,8     158,8     3,2     158,8       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8       50,8     R2002C     1.355     190,5     241,3     235,0     41,3     184,2     3,2     148,2       50,8     R355C</td><td>Order Stroke     Oil No.     Retracted Cap. (mm)     Extracted Ht.     Extended Ht.     Outside Dia.     Rod Dia.     Rod Protrusion     Bore Dia.     Bore Prote Minitoria     Bore Dia.     Bore Protrusion     Bore Dia.     Area (mm)       50.8     R550C     1007     125,4     176,2     127,0     25,4     95,3     3,2     95,3     71,2       152,4     R556C     1.087     227,0     379,4     127,0     25,4     95,3     3,2     95,3     71,2       50,8     R1002C     677     139,7     190,5     165,1     25,4     130,2     3,2     130,2     133,1       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8     197,9       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8     197,9       152,4     R1506C     3.019     263,5     411,3     236,0     41,3     184,2     3,2     184,8     197,9 <td>Order Stroke     Oil No.     Retracted Cap. (nm)     Extracted Ht.     Extended (nm)     Outside (nm)     No.     Bore Dia.     Effective Protrusion     Bore Dia.     Effective (nm)     Metric Tom: Dia.       50.8     R552C     362     125.4     176.2     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R556C     1.087     227.0     379.4     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R550C     1.811     328.6     582.6     127.0     25.4     95.3     3.2     95.3     71.2     50.1       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2     3.2     130.2     133.1     93.6       152.4     R1506C     3.019     263.5     415.9     204.8     31.8     158.8     3.2     158.8     197.9     139.1       152.4     R1506C     3.019     263.5     41.3     235.0     41.3     184.2     3.2</td></td></t<></td>	Stroke     No.     Cap.     Ht.     Ht.     It.     Dia.     Port       (mm)     (cma)     (mm)     (mm	Order Stroke     Order No.     Oil Cap.     Retracted Ht.     Extended (mm)     Outside (mm)     to (mm)     Outside (mm)     opent (mm)     Mod (mm)       50.8     R556C     362     125.4     176.2     127.0     25.4     95.3       152.4     R556C     1.087     227.0     379.4     127.0     25.4     95.3       50.8     R102C     677     139.7     190.5     165.1     25.4     130.2       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2       50.8     R1502C     1.007     161.9     212.7     204.8     31.8     158.8       152.4     R1506C     3.019     263.5     415.9     204.8     31.8     158.8       152.4     R1506C     4.062     292.1     444.5     235.0     41.3     184.2       50.8     R2022C     1.3355     190.5     241.3 <t< td=""><td>Order No.     Oril Cap.     Retracted Ht.     Extended Ht.     Outside Dia.     Rod Port     Rod Dia.     Rod Protrusion       50.8     R552C     Cap.     (mm)     (mm)</td><td>Order Stroke     Oril No.     Retracted Cap.     Extended Ht.     Outside Ht.     No.     Rod Dia.     Rod Protrusion     Bore Dia.       50.8     R552C     362     125,4     176,2     127,0     25,4     95,3     3,2     95,3       152,4     R556C     1.087     227,0     379,4     127,0     25,4     95,3     3,2     95,3       50,8     R550C     1.811     328,6     582,6     127,0     25,4     95,3     3,2     95,3       50,8     R1002C     677     139,7     190,5     165,1     25,4     130,2     3,2     130,2       50,8     R1002C     0.07     161,9     212,7     204,8     31,8     158,8     3,2     158,8       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8       50,8     R2002C     1.355     190,5     241,3     235,0     41,3     184,2     3,2     148,2       50,8     R355C</td><td>Order Stroke     Oil No.     Retracted Cap. (mm)     Extracted Ht.     Extended Ht.     Outside Dia.     Rod Dia.     Rod Protrusion     Bore Dia.     Bore Prote Minitoria     Bore Dia.     Bore Protrusion     Bore Dia.     Area (mm)       50.8     R550C     1007     125,4     176,2     127,0     25,4     95,3     3,2     95,3     71,2       152,4     R556C     1.087     227,0     379,4     127,0     25,4     95,3     3,2     95,3     71,2       50,8     R1002C     677     139,7     190,5     165,1     25,4     130,2     3,2     130,2     133,1       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8     197,9       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8     197,9       152,4     R1506C     3.019     263,5     411,3     236,0     41,3     184,2     3,2     184,8     197,9 <td>Order Stroke     Oil No.     Retracted Cap. (nm)     Extracted Ht.     Extended (nm)     Outside (nm)     No.     Bore Dia.     Effective Protrusion     Bore Dia.     Effective (nm)     Metric Tom: Dia.       50.8     R552C     362     125.4     176.2     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R556C     1.087     227.0     379.4     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R550C     1.811     328.6     582.6     127.0     25.4     95.3     3.2     95.3     71.2     50.1       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2     3.2     130.2     133.1     93.6       152.4     R1506C     3.019     263.5     415.9     204.8     31.8     158.8     3.2     158.8     197.9     139.1       152.4     R1506C     3.019     263.5     41.3     235.0     41.3     184.2     3.2</td></td></t<>	Order No.     Oril Cap.     Retracted Ht.     Extended Ht.     Outside Dia.     Rod Port     Rod Dia.     Rod Protrusion       50.8     R552C     Cap.     (mm)     (mm)	Order Stroke     Oril No.     Retracted Cap.     Extended Ht.     Outside Ht.     No.     Rod Dia.     Rod Protrusion     Bore Dia.       50.8     R552C     362     125,4     176,2     127,0     25,4     95,3     3,2     95,3       152,4     R556C     1.087     227,0     379,4     127,0     25,4     95,3     3,2     95,3       50,8     R550C     1.811     328,6     582,6     127,0     25,4     95,3     3,2     95,3       50,8     R1002C     677     139,7     190,5     165,1     25,4     130,2     3,2     130,2       50,8     R1002C     0.07     161,9     212,7     204,8     31,8     158,8     3,2     158,8       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8       50,8     R2002C     1.355     190,5     241,3     235,0     41,3     184,2     3,2     148,2       50,8     R355C	Order Stroke     Oil No.     Retracted Cap. (mm)     Extracted Ht.     Extended Ht.     Outside Dia.     Rod Dia.     Rod Protrusion     Bore Dia.     Bore Prote Minitoria     Bore Dia.     Bore Protrusion     Bore Dia.     Area (mm)       50.8     R550C     1007     125,4     176,2     127,0     25,4     95,3     3,2     95,3     71,2       152,4     R556C     1.087     227,0     379,4     127,0     25,4     95,3     3,2     95,3     71,2       50,8     R1002C     677     139,7     190,5     165,1     25,4     130,2     3,2     130,2     133,1       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8     197,9       152,4     R1506C     3.019     263,5     415,9     204,8     31,8     158,8     3,2     158,8     197,9       152,4     R1506C     3.019     263,5     411,3     236,0     41,3     184,2     3,2     184,8     197,9 <td>Order Stroke     Oil No.     Retracted Cap. (nm)     Extracted Ht.     Extended (nm)     Outside (nm)     No.     Bore Dia.     Effective Protrusion     Bore Dia.     Effective (nm)     Metric Tom: Dia.       50.8     R552C     362     125.4     176.2     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R556C     1.087     227.0     379.4     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R550C     1.811     328.6     582.6     127.0     25.4     95.3     3.2     95.3     71.2     50.1       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2     3.2     130.2     133.1     93.6       152.4     R1506C     3.019     263.5     415.9     204.8     31.8     158.8     3.2     158.8     197.9     139.1       152.4     R1506C     3.019     263.5     41.3     235.0     41.3     184.2     3.2</td>	Order Stroke     Oil No.     Retracted Cap. (nm)     Extracted Ht.     Extended (nm)     Outside (nm)     No.     Bore Dia.     Effective Protrusion     Bore Dia.     Effective (nm)     Metric Tom: Dia.       50.8     R552C     362     125.4     176.2     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R556C     1.087     227.0     379.4     127.0     25.4     95.3     3.2     95.3     71.2     50.1       152.4     R550C     1.811     328.6     582.6     127.0     25.4     95.3     3.2     95.3     71.2     50.1       50.8     R1002C     677     139.7     190.5     165.1     25.4     130.2     3.2     130.2     133.1     93.6       152.4     R1506C     3.019     263.5     415.9     204.8     31.8     158.8     3.2     158.8     197.9     139.1       152.4     R1506C     3.019     263.5     41.3     235.0     41.3     184.2     3.2

Base Mounting Holes (Optional) Available on request: Up to 1140 tons capacity and Strokes: 101.6 mm, 203.2 mm & 304.8 mm



## High Tonnage **CYLINDERS R SERIES**

100-565 Ton Double-Acting Hydraulic Return

- Cylinders come standard with swivel caps to reduce the effects of off-center loading.
- Cylinders may be "dead-ended" without damage.
- Hard chrome plated, heat treated piston rod reduces wear on piston and gland nut.
- · Built-in safety relief valve prevents over-pressurization of the retract circuit.
- Each cylinder has two 9796 <sup>3</sup>√8" NPTF female half couplers.

-				A	ABUFUHK										
					Re-	Ex-		Base	Cylinder		Piston		Cylinder		
Cyl.		Order	Oi		tracted	tended		to	Top to	Rod	Rod		Effective	Tons	
	Stroke (mm)	No.		pacity m³ <sup>)</sup>	Height (mm)	Height (mm)	Dia. (mm)	Port (mm)	Port (mm)	Dia. P (mm)	rotrusion (mm)	Dia. (mm)	Area (cm²)	at 700 bar	Weight (kg)
			Push	Return									Push	Push	
100	50,8	R1002D	676	315	168,7	219,5	165,1	25,4	56,0	95,3	7,1	130,2	132,9	93,4	24,5
_100	152,4	R1006D	2.027	945	270,3	422,7	165,1	25,4	56,0	95,3	7,1	130,2	132,9	93,4	36,8
_100	254,0	R10010D	3.378	1.574	371,9	625,9	165,1	25,4	56,0	95,3	7,1	130,2	132,9	93,4	49,0
_150	50,8	R1502D	1.007	485	188,9	239,7	204,8	31,8	57,2	114,3	7,5	158,8	198,0	139,1	43,1
_150	152,4	R1506D	3.021	1.456	290,5	442,9	204,8	31,8	57,2	114,3	7,5	158,8	198,0	139,1	61,7
_200	50,8	R2002D	1.355	643	206,8	257,6	235,0	41,3	58,7	133,4	8,7	184,2	266,4	187,2	61,7
_200	152,4	R2006D	4.064	1.929	308,4	460,8	235,0	41,3	58,7	133,4	8,7	184,2	266,4	187,2	84,9
_200	254,0	R20010D	6.773	3.214	410,0	664,0	235,0	41,3	58,7	133,4	8,7	184,2	266,4	187,2	108,5
_280	152,4	R2806D	5.579	2.322	335,4	447,8	276,2	47,6	65,5	165,1	10,3	215,9	365,7	257,3	134,8
_280	254,0	R28010D	9.299	3.870	437,0	691,0	276,2	47,6	65,5	165,1	10,3	215,9	365,7	257,3	170,7
355	50,8	R3552D	2.326	777	288,9	339,7	298,5	54,0	69,9	196,9	11,1	241,3	457,3	321,4	147,0
355	152,4	R3556D	6.977	2.332	390,5	542,9	298,5	54,0	69,9	196,9	11,1	241,3	457,3	321,4	191,1
430	50,8	R4302D	2.840	977	312,7	363,5	330,2	63,5	75,0	215,9	11,9	266,7	558,6	392,7	199,3
_430	152,4	R4306D	8.521	2.932	414,3	566,7	330,2	63,5	75,0	215,9	11,9	266,7	558,6	392,7	253,3
_430	254,0	R43010D	14.202	4.887	515,9	769,9	330,2	63,5	75,0	215,9	11,9	266,7	558,6	392,7	305,5
565	50,8	R5652D	3.710	1.260	345,3	396,1	377,8	69,9	81,4	247,7	13,9	304,8	729,5	512,9	281,0
	152,4		11.129	3.779	446,9	599,3	377,8	69,9	81,4	247,7		304,8	729,5	512,9	350,4
565	254,0	R56510D	18.548	6.298	548,5	802,5	377,8	69,9	81,4	247,7	13,9	304,8	729,5	512,9	420,4

se Mounting Holes (Optional

vailable on request: Up to 1140 tons capacity and Strokes: 101.6 mm, 203.2 mm & 304.8 mm

