

## HHR - DOUBLE ACTING HOLLOW PISTON CYLINDERS



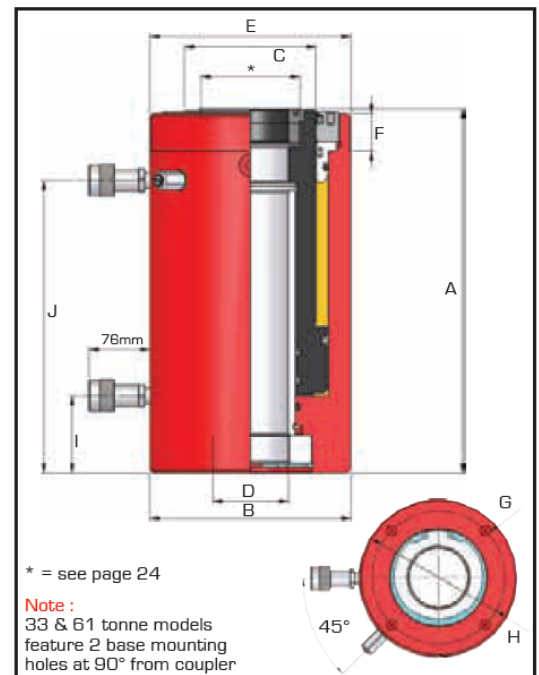
Capacities from 33 to 247 tonnes

Stroke lengths from 50 to 305mm

Working pressure 700 Bar

The HHR double acting hollow piston cylinder range incorporates all of the design features of the HHS range with the added benefit of double acting design, which greatly enhances speed of operation and performance particularly in the longer length stroke options. Additionally a substantial hydraulic pulling force is available in the piston retraction mode of operation. Standard range models are featured in this catalogue, however other stroke and tonnage options are available on request.

- >> Double acting design
- >> Nitrocarburised piston rod
- >> Annular area overload protection valve
- >> Low friction bearing surfaces
- >> Anti-extrusion seals
- >> Optional piston rod saddles [see page 23]
- >> Collar thread protector supplied as standard



Model number	Capacity		Stroke mm	Oil cap. cm <sup>3</sup>	Cyl. eff. area cm <sup>2</sup>	Weight kg	Dimensions in mm (unless otherwise stated)									
	Push tonnes	Pull tonnes					A	B	C	D	E	F	G	H	I	J
<b>HHR302</b>	33	24	51	238	46.7	12.2	180	115	60.3	35	4 1/2"-12un	40	M8	92	28	119
<b>HHR306</b>	33	24	150	701	46.7	17.6	279	115	60.3	35	4 1/2"-12un	40	M8	92	28	218
<b>HHR3012</b>	33	24	305	1424	46.7	25.7	434	115	60.3	35	4 1/2"-12un	40	M8	92	28	373
<b>HHR603</b>	61	38	76	652	85.7	30.6	239	160	92	55	6 1/4"-12un	45	M12	130	31	166
<b>HHR606</b>	61	38	152	1304	85.7	41.6	315	160	92	55	6 1/4"-12un	45	M12	130	31	242
<b>HHR6010</b>	61	38	254	2179	85.7	52.5	417	160	92	55	6 1/4"-12un	45	M12	130	31	344
<b>HHR1002</b>	102	43	50	715	143.1	61.3	283	213	140	80	8 3/8"-12un	40	M16	178	82	208
<b>HHR1003</b>	102	43	76	1087	143.1	68.5	310	213	140	80	8 3/8"-12un	40	M16	178	82	234
<b>HHR1006</b>	102	43	152	2174	143.1	90.0	386	213	140	80	8 3/8"-12un	40	M16	178	82	310
<b>HHR1508</b>	152	71	203	4320	212.8	170.0	503	270	184	102	n/a	n/a	n/a	n/a	98	389
<b>HHR2508</b>	247	76	203	7039	346.5	269.0	505	350	254	150	n/a	n/a	n/a	n/a	98	389

Dimensions in mm (unless otherwise stated)										
A	B	C	D	E	F	G	H	I	J	
180	115	60.3	35	4 1/2"-12un	40	M8	92	28	119	
279	115	60.3	35	4 1/2"-12un	40	M8	92	28	218	
434	115	60.3	35	4 1/2"-12un	40	M8	92	28	373	
239	160	92	55	6 1/4"-12un	45	M12	130	31	166	
315	160	92	55	6 1/4"-12un	45	M12	130	31	242	
417	160	92	55	6 1/4"-12un	45	M12	130	31	344	
283	213	140	80	8 3/8"-12un	40	M16	178	82	208	
310	213	140	80	8 3/8"-12un	40	M16	178	82	234	
386	213	140	80	8 3/8"-12un	40	M16	178	82	310	
503	270	184	102	n/a	n/a	n/a	n/a	98	389	
505	350	254	150	n/a	n/a	n/a	n/a	98	389	