

**HRA | DOUBLE ACTING HIGH TONNAGE ALUMINIUM CYLINDERS**

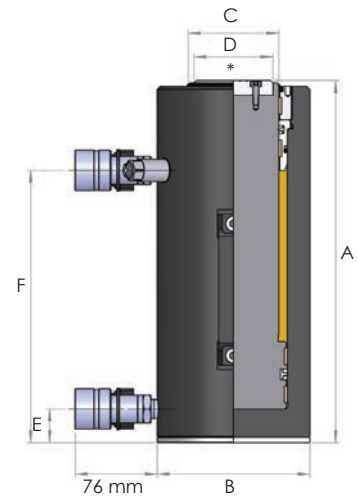


Capacities from 32 to 110 tonnes

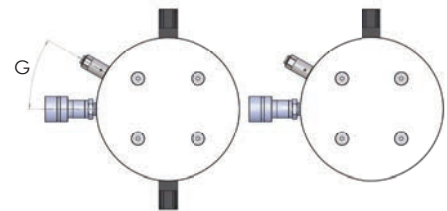
Stroke lengths from 51 to 305 mm

Working pressure 700 bar

\*see pages 24 and 25



Handle positions



- ▶ Lightweight aluminium cylinders for applications where weight and portability are of prime importance
- ▶ Double acting design offers higher work output with improved performance and efficiency
- ▶ Hard anodised piston rod and cylinder for corrosion resistance and increased durability
- ▶ Low friction bearing surfaces
- ▶ Anti-extrusion seals for improved performance at high pressures
- ▶ Steel base plate fitted as standard on models
- ▶ Pressure relief valve on annulus side
- ▶ Optional piston rod saddles listed on pages 24 and 25
- ▶ Customised and special design cylinders are available on request

Model number	Capacity (tonnes)	Stroke (mm)	Oil capacity (cm <sup>3</sup> )	Cylinder eff. area (cm <sup>2</sup> )	Weight (kg)	Handles	Dimensions (mm)						
							A	B	C	D	E	F	G
HRA302	32	51	225.3	44.2	5	-	204	105	60	50	25	136	35
HRA306	32	152	671.5	44.2	7	-	305	105	60	50	25	237	35
HRA3012	32	305	1347.5	44.2	10	1	458	105	60	50	25	390	35
HRA502	51	51	361.5	70.9	10	1	221	135	79	70	30	141	30
HRA506	51	152	1077.4	70.9	13	1	322	135	79	70	30	242	30
HRA5012	51	305	2161.9	70.9	19	1	475	135	79	70	30	395	30
HRA1002	110	51	785.1	153.9	22	2	258	202	110	100	41	172	30
HRA1006	110	152	2339.9	153.9	29	2	359	202	110	100	41	273	30
HRA10012	110	305	4695.1	153.9	39	2	512	202	110	100	41	426	30

Note: If specifying this cylinder for use with the SLF and SLV synchronous lifting systems and associated mounting kit, please consider the increase in dimension A (closed height), see pages 44 and 48.