



Compact Hydraulic Cylinder - CHGH Series

Maximum working pressure up to 160 bar



ENGINEERING YOUR SUCCESS.



WARNING - USER RESPONSIBILITY

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Offer of Sale

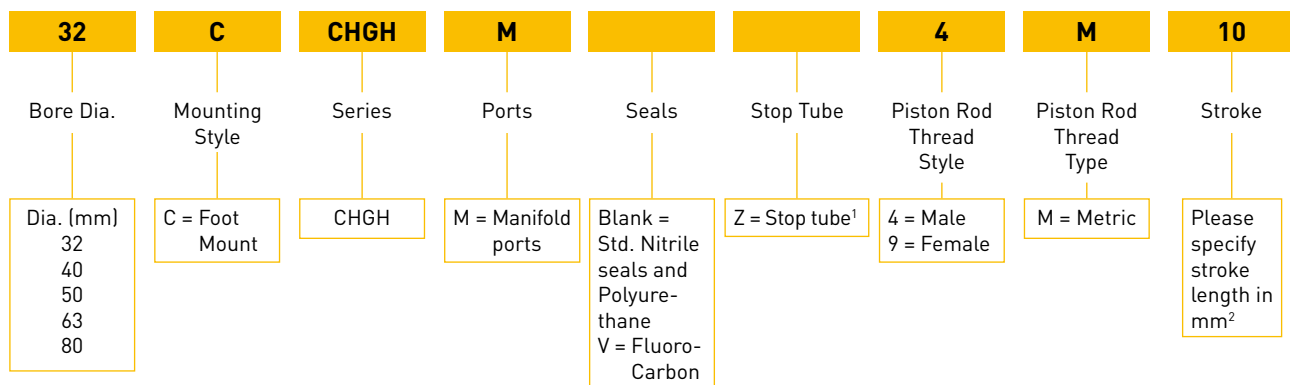
Please contact your Parker representation for a detailed "Offer of Sale" .

As one of the biggest industrial hydraulic cylinder suppliers globally, Parker Hannifin introduces newly developed CHGH series compact hydraulic cylinder to meet product requirements of installation room saving, fixed ports and mounting positions from customer. These features would help customer simplify machine design process and contribute to easy installation, which means less R & D time and improved efficiency.

CHGH series cylinder is featured as compact design, raw materials saving and installation room saving. The use of Parker patented seal kits means less risks of leakage and long service life of the machine.



Ordering Code - CHGH Series



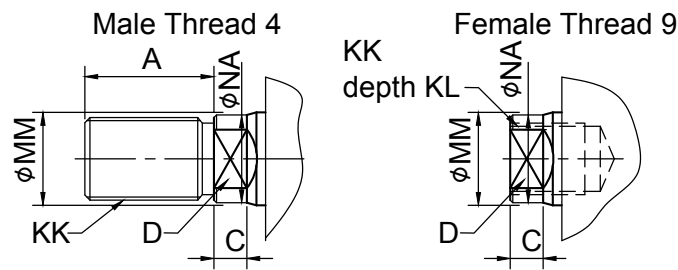
1. Only applicable and a must option for bore size Ø63 and Ø80 with stroke length over 200 mm;
2. stroke length in 5 mm increment is highly recommended;
For bore size 32, 40 & 50, the maximum stroke length is 200 mm;
For bore size 63 & 80, the maximum stroke length is 240 mm;(Please consult Division when stroke length over 240 mm).

Standard Technical Specifications

- Standard foot mounting style
- Bore size: Ø32 ~ 80 mm
- Piston rode dia.: Ø18 ~ 45 mm
- Max. working pressure up to 160 bar
- Max. stroke up to 200mm (up to 240 mm for bore size 63 & 80 having stop tube)
- Temperature range: -23°C ~ 121°C (depending on seal class)

Seal Classes	Typical Fluids	Temperature Range
Standard Nitrile & Polyurethane	Mineral oil	-23 °C (-10 °F) ~ +74 °C (+165 °F)
Fluorocarbon seals	Fire resistant fluids based on phosphate esters (HFD-R)	-23 °C (-10 °F) ~ +121 °C (+250 °F) FKM seals may be operated up to +204 °C (+400 °F) with reduced service life.

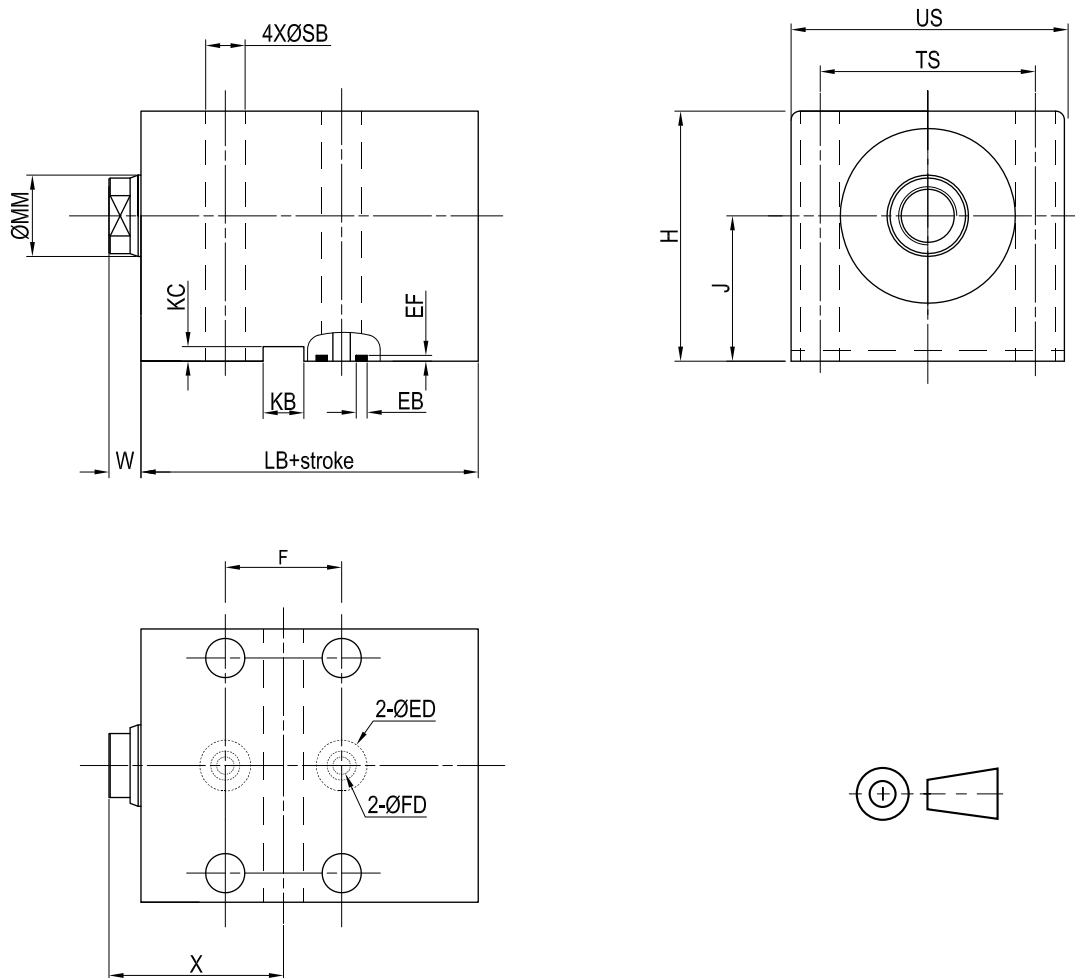
Piston Rod End Thread



Bore size ∅	MM ∅	A	C	D	KK		NA ∅	KL
					Female	Male		
32	18	18	8	15	M12x1.75	M12x1.25	17	15
40	22	22	8	19	M16x2	M16x1.5	21	20
50	28	28	9	24	M20x2.5	M20x1.5	27	24
63	36	36	11	32	M27x3	M27x2	35	30
80	45	45	13	39	M33x3.5	M33x2	43	35

All dimensions are in mm unless otherwise stated

Style C Foot Mounting – Single Piston Rod – Bore size 32 mm ~ 80 mm



Style C Foot Mounting – Single Piston Rod – Dimensions

Bore Dia. Ø	EB	ED	EF	F	FD	H	J	KB	KC	LB	MM Ø	SB	TS	US	W	X
32	3.6	15	2.1	32	5	66	38	10±0.025	5	67	18	9	56	70	10	52
40	3.6	17.5	2.1	36	6	76	45	10±0.025	5	78	22	11	62	80	10	56
50	3.6	17.5	2.1	40	6	86	50	14±0.025	5	86	28	13.5	74	94	11	60
63	3.6	19	2.1	46	8	106	60	16±0.025	5	98	36	17	90	114	13	70
80	3.6	19	2.1	50	8	127	70	18±0.025	5	115	45	21	118	151	17	80

Note: For bore size 63 mm or 80 mm with stop tube option, overall length = LB + stroke + 10;
All dimensions are in mm unless otherwise stated

Theoretical Force - Push and Pull

Output force could be calculated by formula:

$$F = \frac{P \times A}{10000}$$

F - output force, KN

P - pressure in cylinder body, bar

A - valid piston area, mm²

In order to specify bore size, you may follow below steps:

1. select pressure ratings from working pressure column;
2. select force needed to push/pull load (always round up);
Choose value from "push" row correspondingly when piston rod is subject to press force;
Choose value from "pull" row correspondingly when piston rod is subject to pull force;
3. you'll get bore size at left.

If bore size selected is too big to install in given application, try higher working pressure if possible and repeat steps 1 - 3 again.

Bore size Ø	Rod size Ø	Force	Piston area (mm ²)	Working pressure(bar)					
				50	75	100	125	150	160
32	18	Push	804	4.02	6.03	8.04	10.1	12.1	12.9
32	18	Pull	550	2.75	4.12	5.5	6.87	8.25	8.8
40	22	Push	1257	6.28	9.42	12.6	15.7	18.8	20.1
40	22	Pull	877	4.38	6.57	8.8	11	13.1	14
50	28	Push	1963	9.82	14.7	19.6	24.5	29.5	31.4
50	28	Pull	1348	6.74	10.1	13.5	16.8	20.2	21.6
63	36	Push	3117	15.6	23.4	31.2	39	46.8	49.9
63	36	Pull	2099	10.5	15.7	21	26.2	31.5	33.6
80	45	Push	5027	25.1	37.7	50.3	62.8	75.4	80.4
80	45	Pull	3436	17.2	25.8	34.4	43	51.5	55

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