

## Compact Cylinders CXHC3



- CXHC3 is the upgraded product of CXHC2, the mounting holes are fixed, save customers oil circuit board space.
- CXHC3 adopts wear-resistant ring, which greatly improves the support and load resistance of the cylinder.
- The piston rod sleeve is made of imported famous brand PU material, which guarantees the wear resistance and pressure resistance.
- Direct installation without any accessories.
- Suit the mold or installation space is limited.
- There are many ways to connect the piston rod (eg:IN,EX,T)

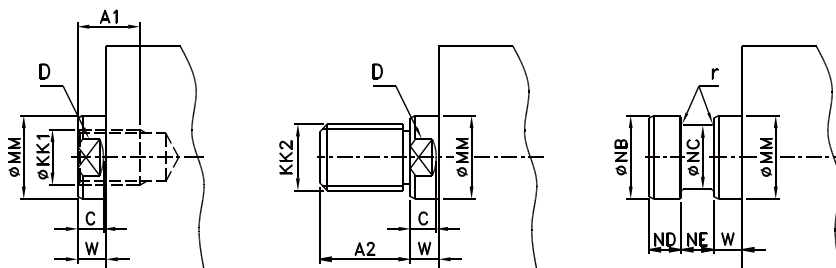
## THEORETICAL FORCE

| Bore (mm) | Shaft (mm) | Piston pressure area (c m <sup>2</sup> ) |       | theoretical force (P=70kgf/c m <sup>2</sup> ) |      | theoretical force (P=140kgf/c m <sup>2</sup> ) |      |
|-----------|------------|--|-------|---|------|--|------|
|           |            | Push                                     | Pull  | Push  | Pull | Push   | Pull |
| 32        | 20         | 8.0                                      | 4.9   | 560   | 343  | 1120   | 686  |
| 40        | 25         | 12.6                                     | 7.7   | 880   | 536  | 1760   | 1072 |
| 50        | 30         | 19.6                                     | 12.6  | 1375  | 880  | 2750   | 1760 |
| 63        | 35         | 31.2                                     | 21.65 | 2182  | 1508 | 4343   | 3016 |
| 80        | 40         | 50.3                                     | 38    | 3519  | 2660 | 7038   | 5320 |
| 100       | 56         | 78.5                                     | 53.9  | 5498  | 3774 | 10995  | 7548 |

## TYPE AND INSTALLATION FORM

| Type                   | Mark    | Graphics | Heat resistance | Graphics | Installation form |
|------------------------|---------|----------|-----------------|----------|-------------------|
|                        |         |          |                 |          | LA foot flange    |
| Double acting cylinder | CXHC3-A |          | CXHC3-A-J       |          |                   |

## TYPE OF PISTON ROD SHAFT END



IN:Internal thread

EX:External thread

T:T-slot

| Symbol | MM | KK1      | A1 | KK2     | A2 | NB | NC | ND   | NE   | r | C  | D  | W  |
|--------|----|----------|----|---------|----|----|----|------|------|---|----|----|----|
| Bore   |    |          |    |         |    |    |    |      |      |   |    |    |    |
| 32     | 20 | M12×1.75 | 15 | M16×1.5 | 25 | 20 | 15 | 12.5 | 12.5 | 1 | 9  | 17 | 10 |
| 40     | 25 | M16×2.0  | 20 | M20×1.5 | 30 | 25 | 19 | 12.5 | 12.5 | 1 | 9  | 21 | 10 |
| 50     | 30 | M20×2.5  | 24 | M24×1.5 | 35 | 30 | 23 | 12.5 | 12.5 | 1 | 10 | 27 | 11 |
| 63     | 35 | M27×3.0  | 33 | M30×1.5 | 45 | 35 | 25 | 15   | 15   | 1 | 11 | 32 | 13 |
| 80     | 40 | M30×3.5  | 33 | M36×1.5 | 55 | 40 | 26 | 15   | 15   | 2 | 14 | 37 | 17 |
| 100    | 56 | M36×4.0  | 40 | M48×1.5 | 70 | 56 | 38 | 20   | 20   | 2 | 15 | 50 | 17 |

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

Round Hydraulic Cylinders

Specific Hydraulic Cylinders

Systems & Fittings

## SEAL MATERIAL

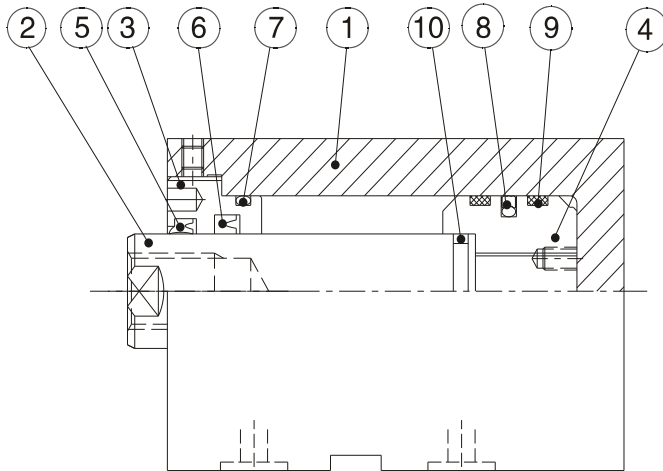
| Material<br>Symbol | (NBR)                            | (PU) | (FPM)        |
|--------------------|----------------------------------|------|--------------|
| Oil                | 1                                | 2    | 3            |
| mineral            | ○                                | ○    | ○            |
| water solution     | ○                                | ×    | ○            |
| soluble            | ○                                | ×    | ○            |
| phosphate ester    | ×                                | ×    | ○            |
| temperature        | -10°C~+80°C                      |      | -10°C~+200°C |
| viscosity          | 20~400mm <sup>2</sup> /s { cst } |      |              |

**⚠ Note:**

- 1、 mineral oil: ISO-VG32。
- 2、 If mineral oil is used, there is no need to mark it. Our company will provide standard oil seal (NBR).
- 3、 If phosphate ester oil is used or high temperature is applied, will shown as symbol 3.
- 4、 symbol O = ok, × = cannot be used.
- 5、 Temperature of FPM must set below 150°C when operate long time.

## INTERNAL STRUCTURE AND PART NAMES

CXHC3-LA(bore 32-100)



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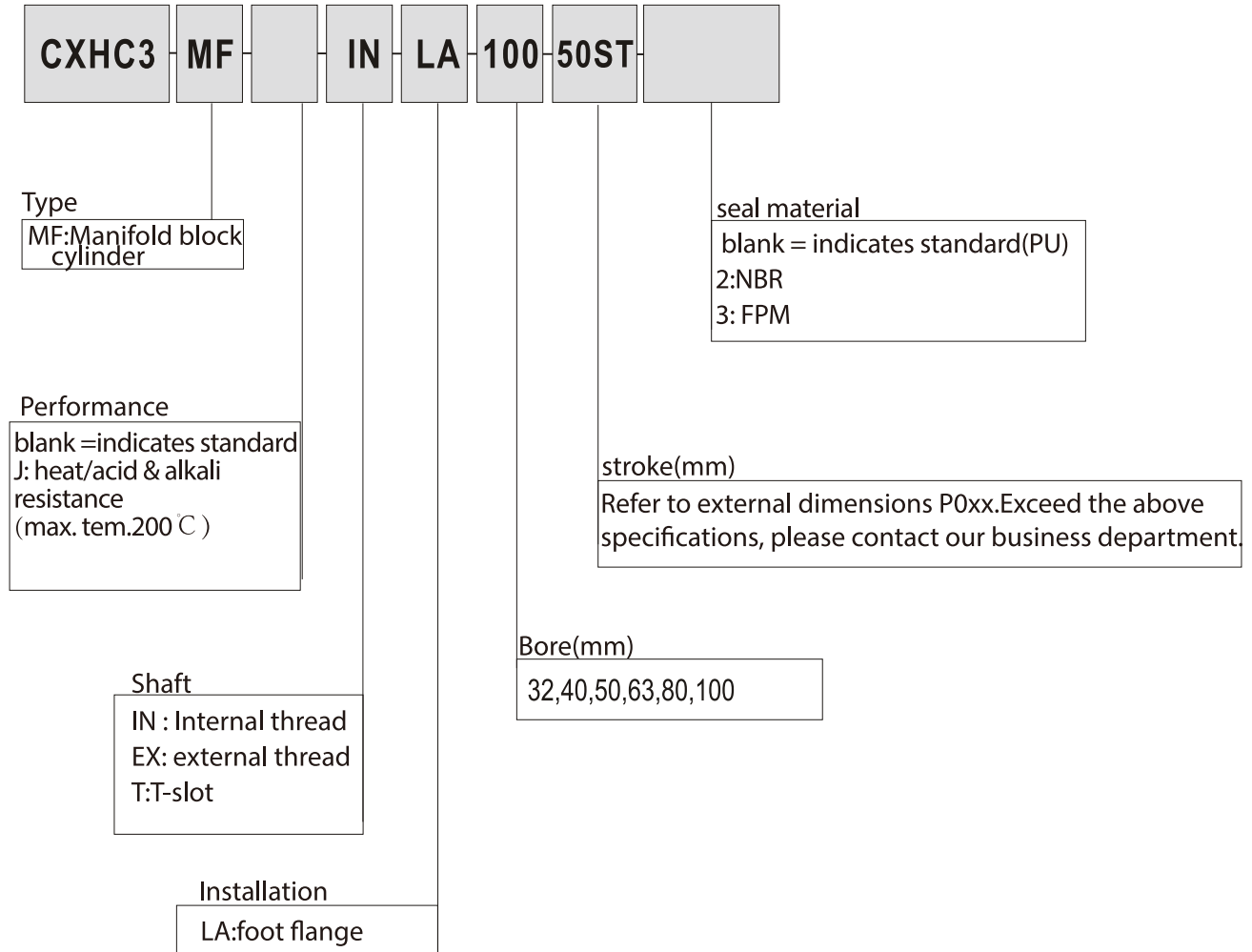
| item | part name           | qty | item | part name        | qty |
|------|---------------------|-----|------|------------------|-----|
| ①    | tube                | 1   | ⑥    | rod cover seal   | 1   |
| ②    | rod                 | 1   | ⑦    | rod cover O-ring | 1   |
| ③    | rod cover           | 1   | ⑧    | piston seal      | 1   |
| ④    | piston              | 1   | ⑨    | wear ring        | 2   |
| ⑤    | rod cover dust seal | 1   | ⑩    | piston O-ring    | 1   |

## SEAL SPEC.

| Item        | ⑤                        | ⑥                   | ⑦                     | ⑧                | ⑩             | ⑫                         |
|-------------|--------------------------|---------------------|-----------------------|------------------|---------------|---------------------------|
| Name<br>qty | rod cover dust seal (PU) | rod cover seal (PU) | rod cover O-ring (IA) | piston seal (PU) | piston O ring | piston backing ring(PTFE) |
|             | 1                        | 1                   | 1                     | 1                | 2             | 2                         |
| Bore        |                          |                     |                       |                  |               |                           |
| 32          | 20X28X6                  | 20X28X5             | G25                   | 32×21×4.2        | P16           | —                         |
| 40          | 25X33X6                  | 25X33X5             | G35                   | 40×29×4.2        | P21           | —                         |
| 50          | 30X38X6.5                | 30X40X6             | G45                   | 50×39×4.2        | G25           | —                         |
| 63          | 35X43X6.5                | 35X45X6             | G58                   | 63×52×4.2        | G30           | —                         |
| 80          | 40X48X6.5                | 40X50X6             | G75                   | 80×69×4.2        | G35           | —                         |
| 100         | 56X64X6.5                | 56X66X6             | G95                   | 100×84.5×6.3     | G50           | —                         |

Note:1.The above form is the reference specification.

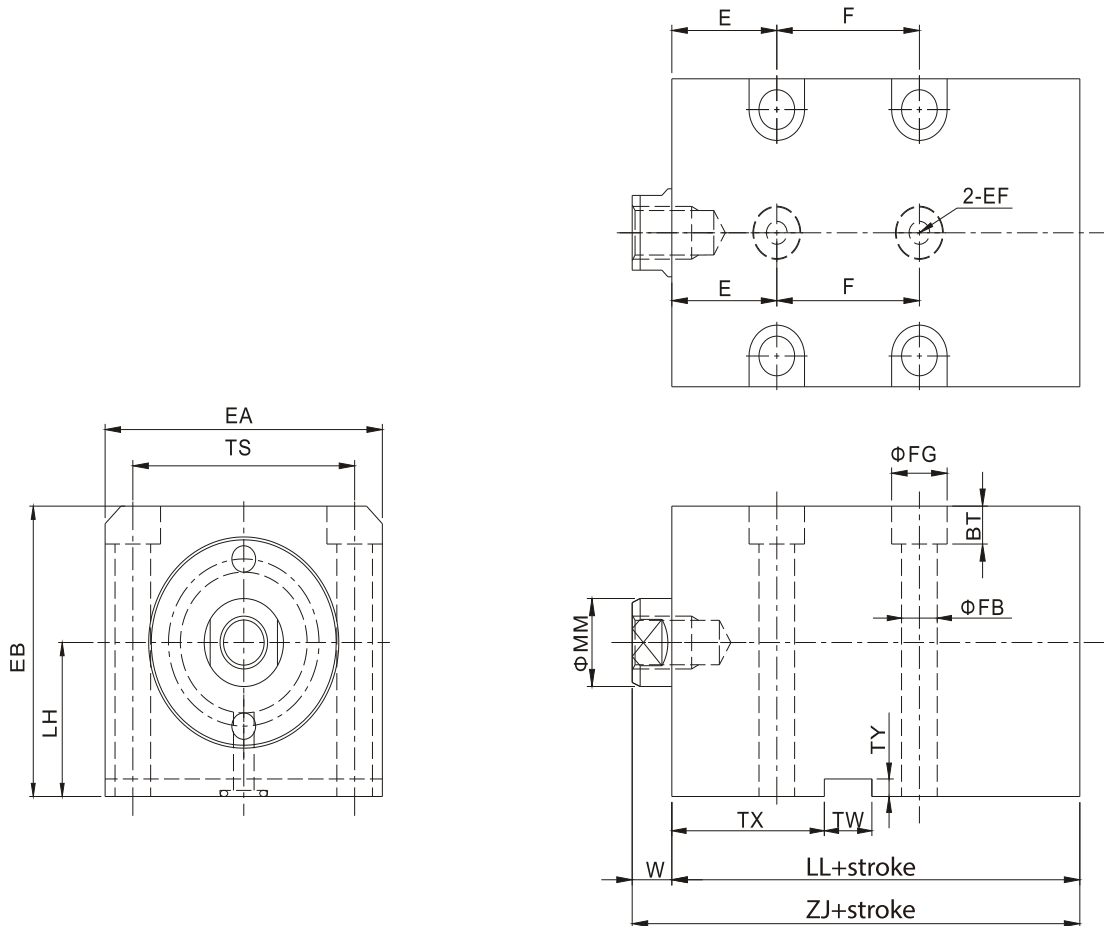
## ORDER INDICATION



▲ blank = standard, there is no need to indicate when ordering.

## EXTERNAL DIMENSIONS

- CXHC3-MF-LA manifold block, foot flange



| Symbol<br>Bore | stroke<br>range | MM | W  | TS  | EA  | EF                       | TW | BT   | FG | FB | TY | LL | ZJ  | E    | F  | TX   | EB  | LH |
|----------------|-----------------|----|----|-----|-----|--------------------------|----|------|----|----|----|----|-----|------|----|------|-----|----|
| 32             | ≤80             | 20 | 10 | 56  | 70  | Φ12x1.4DPbottom holeΦ5.2 | 12 | 8.6  | 14 | 9  | 4  | 68 | 78  | 26.5 | 36 | 38.5 | 66  | 35 |
| 40             | ≤110            | 25 | 10 | 62  | 80  | Φ12x1.4DPbottom holeΦ5.2 | 12 | 10.8 | 18 | 11 | 4  | 72 | 82  | 28   | 42 | 43   | 77  | 42 |
| 50             | ≤150            | 30 | 11 | 74  | 94  | Φ15x1.8DPbottom holeΦ6   | 14 | 13   | 20 | 14 | 4  | 76 | 87  | 29   | 46 | 45   | 87  | 47 |
| 63             | ≤150            | 35 | 13 | 90  | 114 | Φ15x1.8DPbottom holeΦ7   | 16 | 15.2 | 23 | 16 | 4  | 83 | 96  | 30   | 52 | 48   | 100 | 53 |
| 80             | ≤150            | 40 | 17 | 110 | 134 | Φ15x1.8DPbottom holeΦ9   | 16 | 15.2 | 23 | 16 | 4  | 93 | 110 | 35   | 54 | 54   | 119 | 62 |
| 100            | ≤150            | 56 | 17 | 134 | 160 | Φ15x1.8DPbottom holeΦ9   | 16 | 17   | 26 | 18 | 5  | 98 | 115 | 38   | 56 | 58   | 139 | 72 |

O-ring spec.

| Bore     | Spec. |
|----------|-------|
| Φ32~Φ40  | P9    |
| Φ50~Φ100 | P11   |

Note: 1.IN/EX/T size refer to P096 type of piston rod shaft end.

2.Exceed the above specifications, please contact our business department.

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