

COMPACT CYLINDER WITH NON ROTATING PISTON ROD –NRCXHC2



- Compact cylinders2 (CXHC2) ,with piston rod connecting rod and guide rod to form Non-rotating compact cylinders2。
- The stroke is according to the specification of CXHC2,but long stroke is limited.
- Bore (mm):
NR -CXHC2: 20、 25、 32、 40、 50、 63、 80、 100

Tie-rod
Hydraulic
Cylinder

Mold
Hydraulic
Cylinders

Swivel &
Clamp
Hydraulic
Cylinders

Booster
Cylinders
&
Unclamping
cylinders

ISO
Specifications
Cylinders

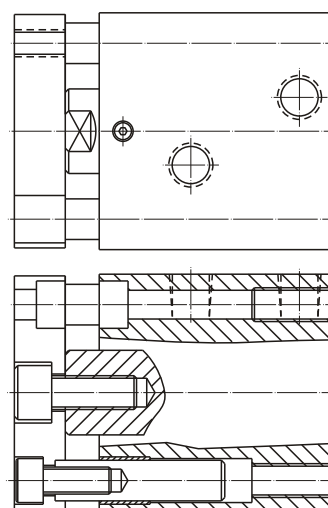
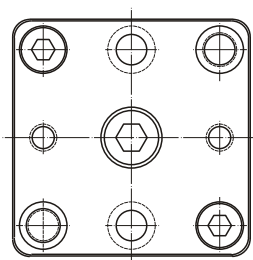
Round
Hydraulic
Cylinders

Specific
Hydraulic
Cylinders

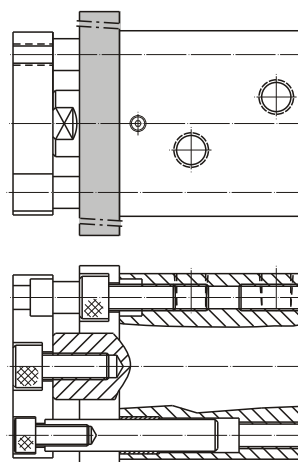
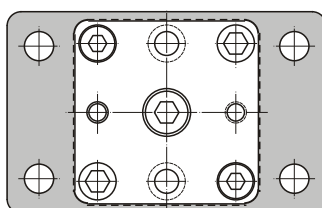
Systems
&
Fittings

INSTALLATION FORM

- SD basic

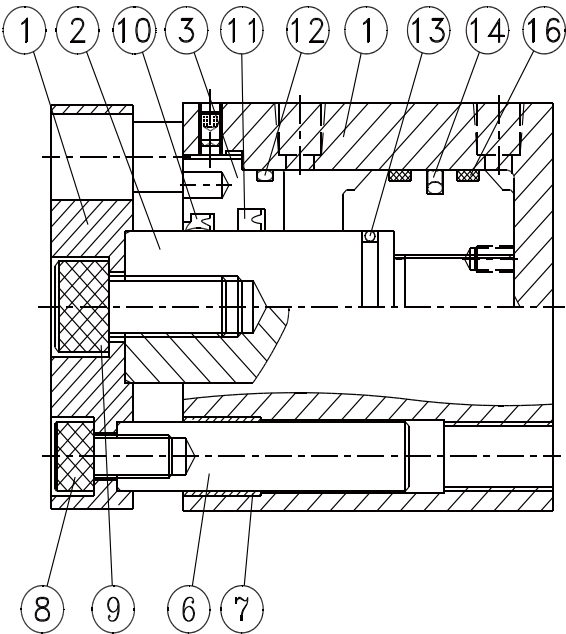
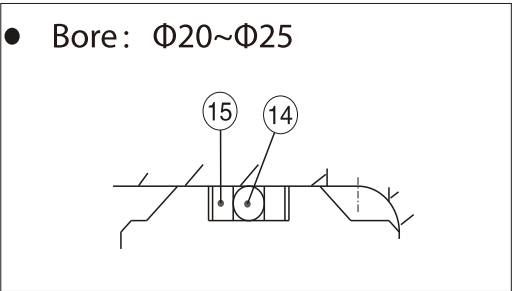


- FA Rod Flange



INTERNAL STRUCTURE
AND PART NAMES

- NR-CXHC2 Compact cylinder with non rotating piston rod
- SD Bore: $\Phi 32\sim\Phi 100$



item	part name	qty	item	part name	qty	item	part name	qty	item	part name	qty
①	tube	1	⑤	fixed board	1	⑨	fxed board bolt	1	⑬	piston O ring	1
②	rod	1	⑥	guide rod	2	⑩	rod cover dust seal	1	⑭	piston seal	1
③	rod cover	1	⑦	guide rod seal	2	⑪	piston cover	1	⑮	piston back-up ring	2
④	piston	1	⑧	guide rod bolt	2	⑫	rod cover O-ring	1	⑯	wear ring	2

THEORETICAL FORCE

Unit:kg

Bore (mm)	Shaft (mm)	Piston pressure area(c m ²)		theoretical force(P=70kgf/c m ²)		theoretical force(P=140kgf/c m ²)	
		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

Tie-rod
Hydraulic
CylinderMold
Hydraulic
Cylinders

ORDER INDICATION

NRCXHC2		SD	32	50ST			
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Type
NR-CXHC :
Compact cylinder with
non rotating piston rod

Performance
blank =indicates standard
J: heat/acid & alkali
resistance
(max. tem.200℃)

Installation
SD : basic
FA : foot flange

Bore(mm)
NRCXHC : 20 , 25 , 32 , 40 , 50 , 63 ,
80 , 100

Stroke (mm)
Refer to stroke form P082

● pilot check valve
Refer to P128

● flow regulator
Refer to P128

flow regulator

Standard	Install position	Order indication	Qty	Bore
KC	FC	KC-02	x1	φ 32~φ 63
	RC	KC-03	x1	φ 80~φ 100
	FC/RC	KC-04	x1	φ 125

pilot check valve

Standard	Install position	Order indication	Qty	Bore
PCVI	FC	PCVI-03	x1	φ 32~φ 100
	RC			
	FC/RC	PCV-03T	x1	φ 125~φ 200

Note: (pilot check valve)
1. The selected standards are matched according to the size of the bore, and no need to indicated.
2. Install position need to indicated.

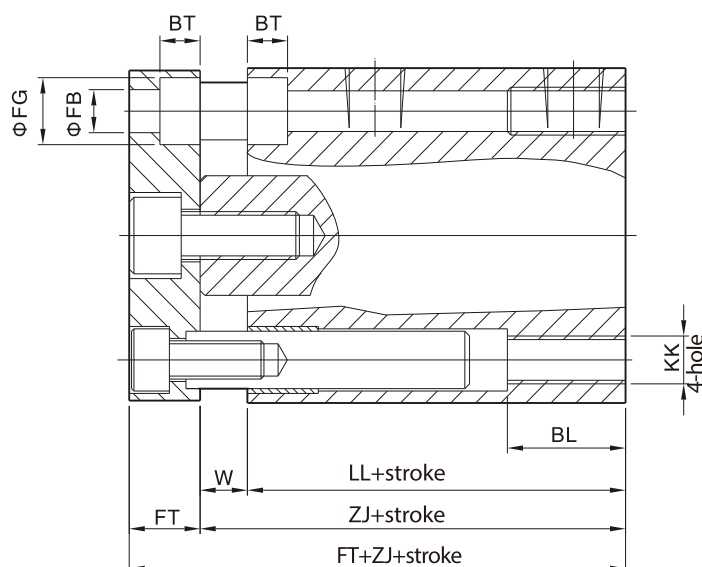
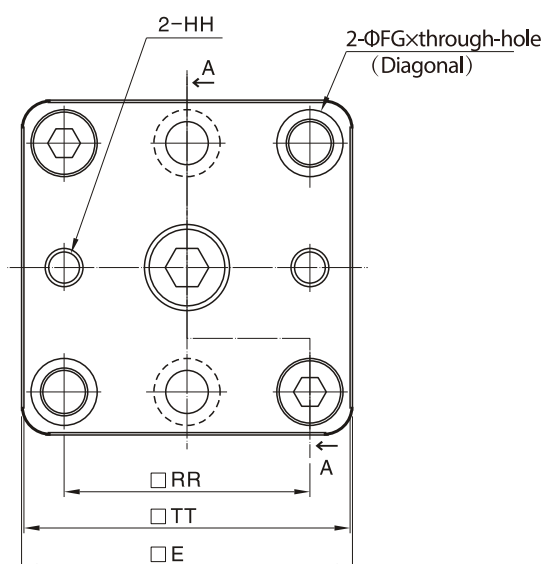
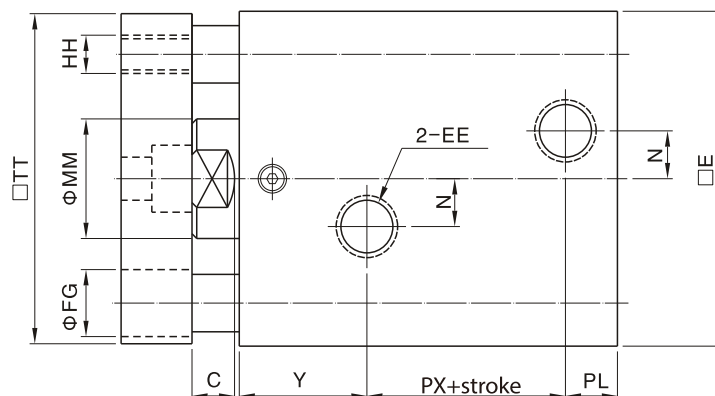
seal material
blank = indicates standard(PU)
2:NBR
3: FPM

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&
Fittings

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

EXTERNAL DIMENSIONS

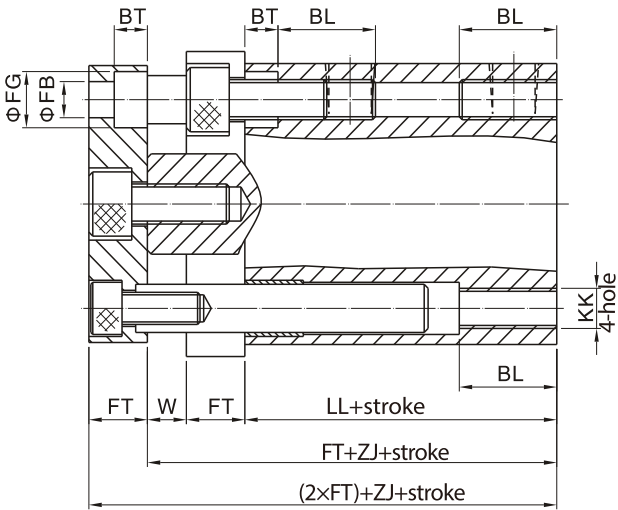
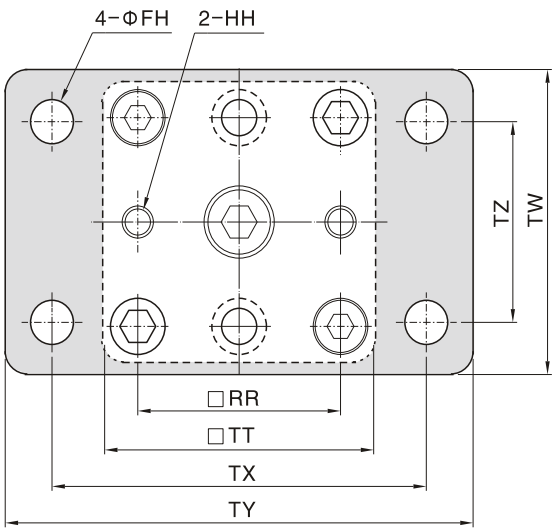
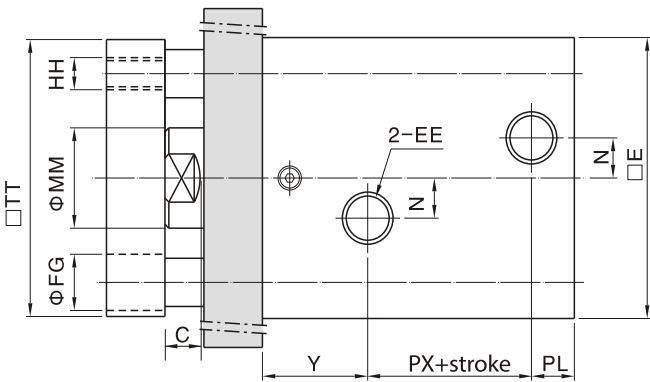
- NR-CXHC2: Compact cylinder with non rotating piston rod ($\Phi 20 \sim \Phi 100$)
- SD



Symbol Bore	BT	BL	C	E	EE	FB	FG	FT	HH	KK	LL	MM	N	PL	RR	TT	W	Y	ZJ	PX
20	5.4	15	7	45	RC1/8"	5.5	9.5	8	M5 × 0.8	M6 × 1.0	43	12	0	12	30	43	8	20.5	51	10.5
25	5.4	15	7	50	RC1/8"	5.5	9.5	8	M5 × 0.8	M6 × 1.0	45	14	0	12	36	49	8	20.5	53	12.5
32	6.5	20	9	62	RC1/4"	7	11	12	M6 × 1.0	M8 × 1.25	64	20	10	10.5	47	61	10	27	74	26.5
40	8.6	25	9	70	RC1/4"	9	14	15	M8 × 1.25	M10 × 1.5	65	25	10	11	52	69	10	27	75	27
50	10.8	25	10	80	RC1/4"	11	17.5	18	M10 × 1.5	M12 × 1.75	70	30	10	11	58	79	11	28	81	31
63	13	28	11	94	RC1/4"	14	20	21	M12 × 1.75	M16 × 2.0	80	35	10	14	69	93	13	30	93	36
80	15.2	33	14	114	RC3/8"	16	23	24	M14 × 2.0	M20 × 2.5	91	40	15	18	86	113	17	35	108	38
100	17.5	36	15	134	RC3/8"	18	26	30	M16 × 2.0	M20 × 2.5	98	56	15	21	102	132	17	39	115	38

EXTERNAL DIMENSIONS

- NR-CXHC2: Compact cylinder with non rotating piston rod (Φ20~Φ100)
- FA



Symbol Bore	BT	BL	C	E	EE	FB	FH	FG	FT	HH	KK	LL	MM	N	PL	RR	TT	TW	TX	TY	TZ	W	Y	ZJ	PX
20	5.4	15	7	45	RC1/8"	5.5	9	9.5	8	M5 × 0.8	M6 × 1.0	43	12	0	12	30	43	46	60	80	26	8	20.5	51	10.5
25	5.4	15	7	50	RC1/8"	5.5	9	9.5	8	M5 × 0.8	M6 × 1.0	45	14	0	12	36	49	52	70	90	32	8	20.5	53	12.5
32	6.5	20	9	62	RC1/4"	7	11	11	12	M6 × 1.0	M8 × 1.25	64	20	10	10.5	47	61	66	84	105	40	10	27	74	26.5
40	8.6	25	9	70	RC1/4"	9	11	14	15	M8 × 1.25	M10 × 1.5	65	25	10	11	52	69	75	96	120	50	10	27	75	27
50	10.8	25	10	80	RC1/4"	11	14	17.5	18	M10 × 1.5	M12 × 1.75	70	30	10	11	58	79	84	105	135	52	11	28	81	31
63	13	28	11	94	RC1/4"	14	18	20	21	M12 × 1.75	M16 × 2.0	80	35	10	14	69	93	100	125	160	65	13	30	93	36
80	15.2	33	14	114	RC3/8"	16	22	23	24	M14 × 2.0	M20 × 2.5	91	40	15	18	86	113	124	150	190	75	17	35	108	38
100	17.5	36	15	134	RC3/8"	18	22	26	30	M16 × 2.0	M20 × 2.5	98	56	15	21	102	132	140	174	215	90	17	39	115	38

Tie-rod
Hydraulic
Cylinder

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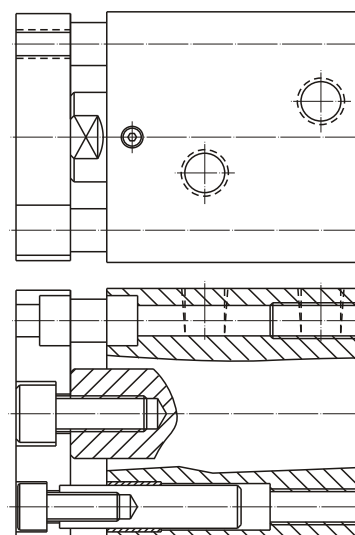
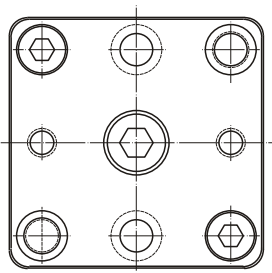
COMPACT CYLINDER FOR MAGNETIC SENSORS WITH NON ROTATING PISTON ROD-NRMGCXHC



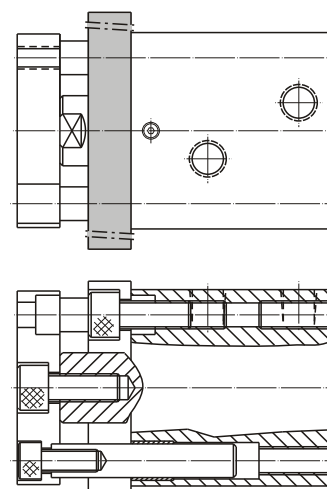
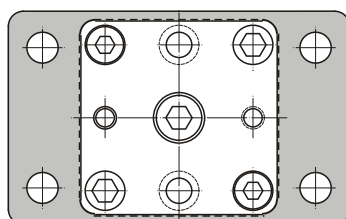
- MGCXHC with piston rod connecting rod and guide rod to form non-rotating inductive compact cylinders.
- The stroke is according to the specification of MGCXHC, but long stroke is limited.
- Bore (mm):
NRMG -CXHC: 32、40、50、63、80、100

INSTALLATION FORM

- SD basic

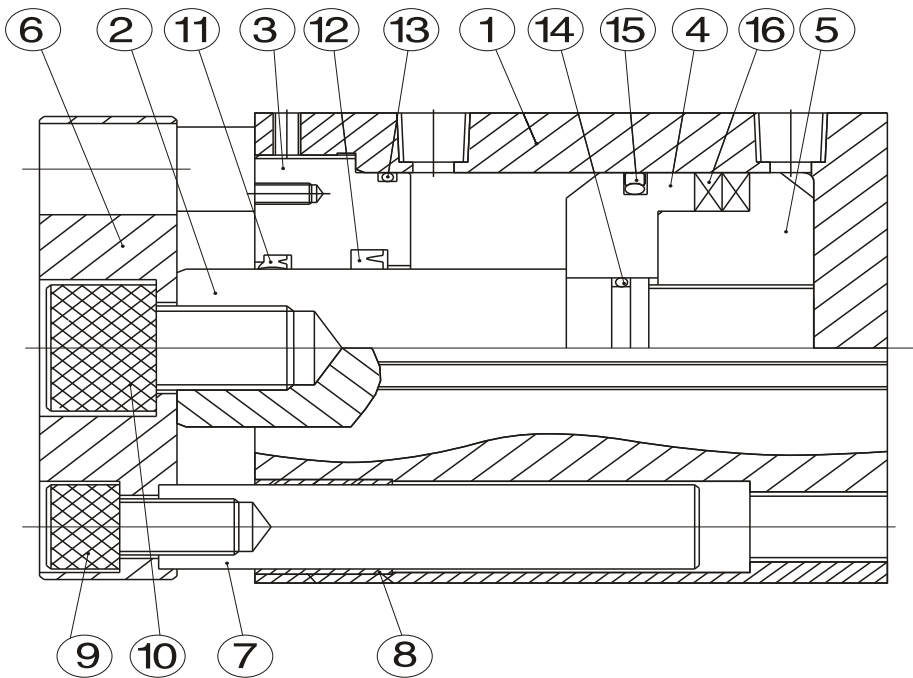


- FA Rod Flange



INTERNAL STRUCTURE AND PART NAMES

- NRMG-CXHC Compact cylinder for magnetic sensors with non rotating piston rod
- SD



item	part name	qty	item	part name	qty
①	tube	1	⑨	guide rod bolt	2
②	rod	1	⑩	fxed board bolt	1
③	rod cover	1	⑪	rod cover dust seal	1
④	Rod piston	1	⑫	rod cover seal	1
⑤	Head piston	1	⑬	rod cover O ring	1
⑥	fxed board	1	⑭	piston O ring	1
⑦	guide rod	2	⑮	piston seal	1
⑧	guide rod seal	2	⑯	induction magnet	2

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

THEORETICAL FORCE

Unit:kg

Bore (mm)	Shaft (mm)	Piston pressure area(c m ²)		theoretical force(P=70kgf/c m ²)		theoretical force(P=140kgf/c m ²)	
		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

ORDER INDICATION

NRMGCXHC			SD	32	50ST				T×n																		
Type NRMG-CXHC : Compact cylinder for magnetic sensors with non rotating piston rod								Inductive switch Spec.: JFS-04 T : 2 wires,standard 2 meters P: PNP3 wires,standard 2 meters N: NPN 3 wires,standard 2 meters n : Quantity																			
Performance blank =indicates standard J: heat/acid & alkali resistance (max. tem.200℃)								• pilot check valve Refer to P128																			
Installation SD : basic FA : foot flange								• flow regulator Refer to P128																			
Bore(mm) NRMGCXHC : 32 , 40 , 50 , 63 , 80 , 100								flow regulator <table border="1"> <thead> <tr> <th>Standard</th> <th>Install position</th> <th>Order indication</th> <th>Qty</th> <th>Bore</th> </tr> </thead> <tbody> <tr> <td rowspan="3">KC</td> <td>FC</td> <td>KC-02</td> <td>x1</td> <td>φ 32~φ 63</td> </tr> <tr> <td>RC</td> <td>KC-03</td> <td>x1</td> <td>φ 80~φ 100</td> </tr> <tr> <td>FC/RC</td> <td>KC-04</td> <td>x1</td> <td>φ 125</td> </tr> </tbody> </table>		Standard	Install position	Order indication	Qty	Bore	KC	FC	KC-02	x1	φ 32~φ 63	RC	KC-03	x1	φ 80~φ 100	FC/RC	KC-04	x1	φ 125
Standard	Install position	Order indication	Qty	Bore																							
KC	FC	KC-02	x1	φ 32~φ 63																							
	RC	KC-03	x1	φ 80~φ 100																							
	FC/RC	KC-04	x1	φ 125																							
Stroke (mm) boreφ32 : maximum stroke80mm boreφ40 : maximum stroke110mm boreφ50 : maximum stroke160mm boreφ63 : maximum stroke170mm boreφ80~φ100 : maximum stroke150mm Exceed the above specifications, please contact our business department.								pilot check valve <table border="1"> <thead> <tr> <th>Standard</th> <th>Install position</th> <th>Order indication</th> <th>Qty</th> <th>Bore</th> </tr> </thead> <tbody> <tr> <td rowspan="3">PCVI</td> <td>FC</td> <td>PCVI-03</td> <td>x1</td> <td>φ 32~φ 100</td> </tr> <tr> <td>RC</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FC/RC</td> <td>PCV-03T</td> <td>x1</td> <td>φ 125~φ 200</td> </tr> </tbody> </table>		Standard	Install position	Order indication	Qty	Bore	PCVI	FC	PCVI-03	x1	φ 32~φ 100	RC				FC/RC	PCV-03T	x1	φ 125~φ 200
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PCVI	FC	PCVI-03	x1	φ 32~φ 100																							
	RC																										
	FC/RC	PCV-03T	x1	φ 125~φ 200																							

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

Note:For all cylinders with magnetic sensors,
to prevent sensor failure, please note the following points

- ①.minimum stroke > 20mm
- ②.working temperature range: -25~+70℃
- ③.The cylinder cannot be installed in an environment

where the magnetic field strength is greater than 1ka/m,
and it is forbidden to place soft magnetic materials and soft magnetic iron filings nearby

seal material

blank = indicates standard(PU)

2:NBR

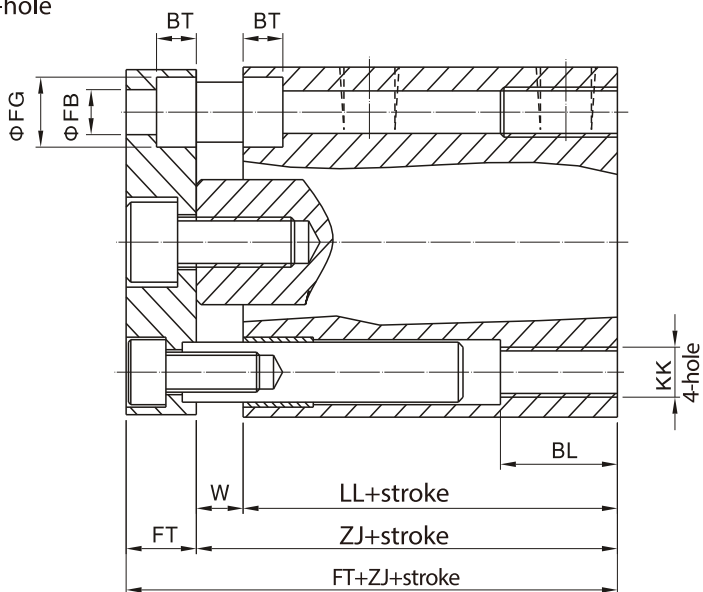
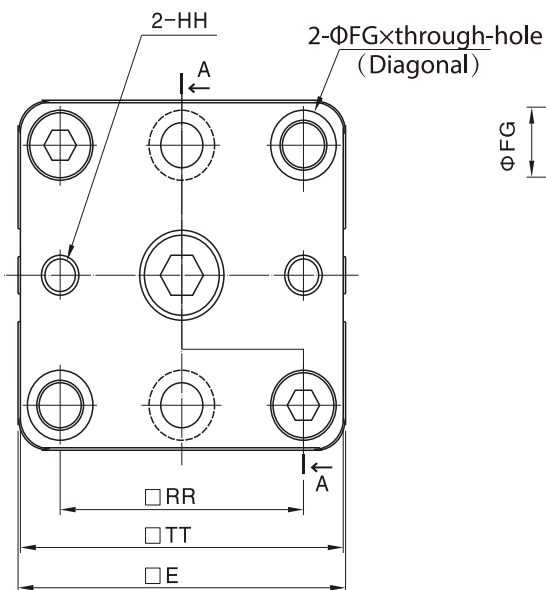
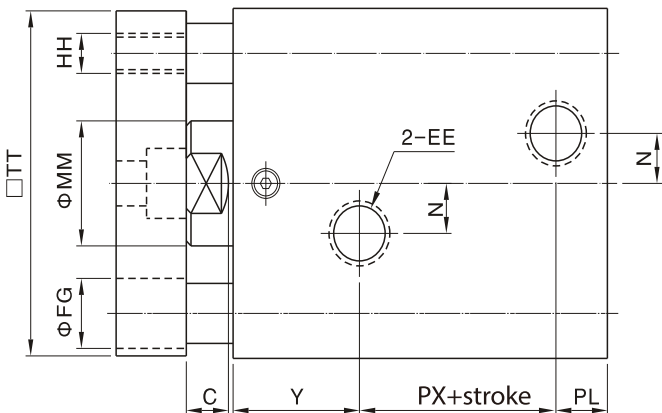
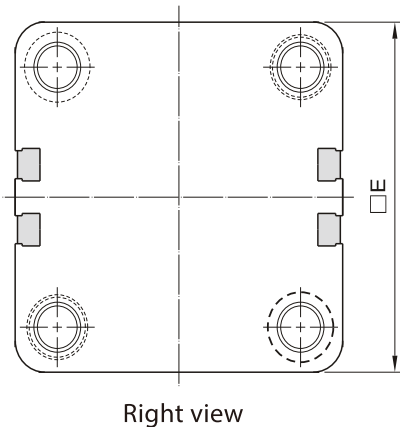
3: FPM

Note: (pilot check valve)

1. The selected standards are matched according to the size of the bore, and no need to indicated.
2. Install position need to indicated.

EXTERNAL DIMENSIONS

- NRMG-CXHC Compact cylinder for magnetic sensors with non rotating piston rod(Φ32~Φ100)
- SD



Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

Round Hydraulic Cylinders

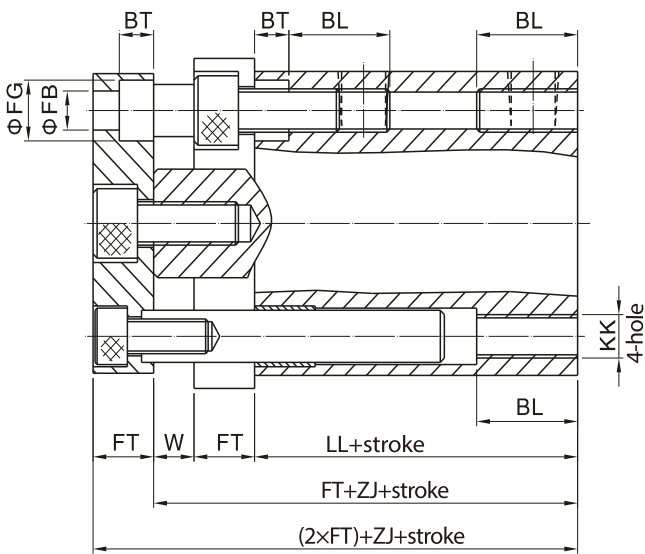
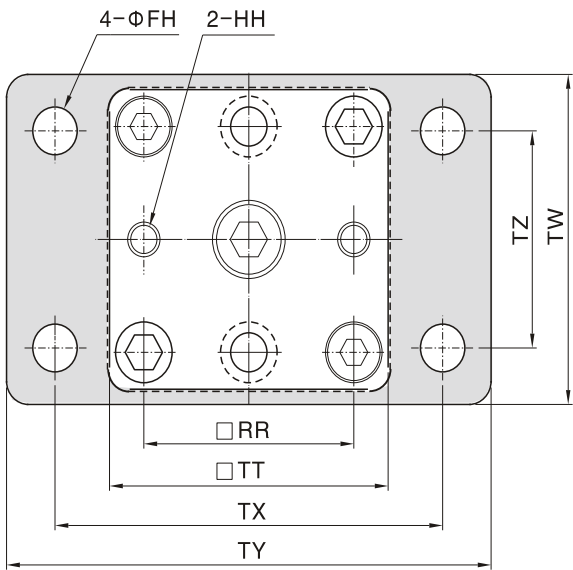
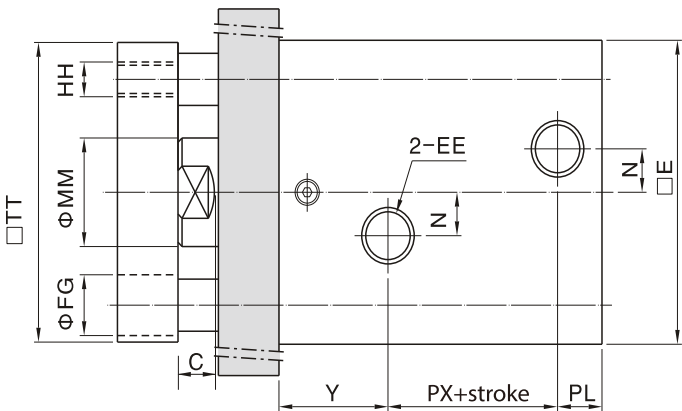
Specific Hydraulic Cylinders

Systems & Fittings

Symbol	BT	BL	C	E	EE	FB	FG	FT	HH	KK	LL	MM	N	PL	RR	TT	W	Y	ZJ	PX
Bore																				
32	6.5	20	9	62	RC1/4"	7	11	12	M6 × 1.0	M8 × 1.25	73	20	10	17	47	61	10	27	83	29
40	8.6	25	9	70	RC1/4"	9	14	15	M8 × 1.25	M10 × 1.5	70	25	10	16	52	69	10	27	80	27
50	10.8	25	10	80	RC1/4"	11	17.5	18	M10 × 1.5	M12 × 1.75	75	30	10	16	58	79	11	28	86	31
63	13	25	11	94	RC1/4"	14	20	21	M12 × 1.75	M16 × 2.0	84	35	10	18	69	93	13	30	97	36
80	15.2	30	14	114	RC3/8"	16	23	24	M14 × 2.0	M20 × 2.5	95	40	15	22	86	113	17	35	112	38
100	17.5	30	14	134	RC3/8"	18	26	30	M16 × 2.0	M20 × 2.5	100	56	15	25	102	132	17	39	117	36

EXTERNAL DIMENSIONS

- NRMG-CXHC Compact cylinder for magnetic sensors with non rotating piston rod(Φ32~Φ100)
- FA



Symbol	BT	BL	C	E	EE	FB	FG	FH	FT	HH	KK	LL	MM	N	PL	RR	TT	TW	TX	TY	TZ	W	Y	ZJ	PX
Bore																									
32	6.5	20	9	62	RC1/4"	7	11	11	12	M6×1.0	M8×1.25	73	20	10	17	47	61	66	84	105	40	10	27	83	29
40	8.6	25	9	70	RC1/4"	9	14	11	15	M8×1.25	M10×1.5	70	25	10	16	52	69	75	96	120	50	10	27	80	27
50	10.8	25	10	80	RC1/4"	11	17.5	14	18	M10×1.5	M12×1.75	75	30	10	16	58	79	84	105	135	52	11	28	86	31
63	13	25	11	94	RC1/4"	14	20	18	21	M12×1.75	M16×2.0	84	35	10	18	69	93	100	125	160	65	13	30	97	36
80	15.2	30	14	114	RC3/8"	16	23	22	24	M14×2.0	M20×2.5	95	40	15	22	86	113	124	150	190	75	17	35	112	38
100	17.5	30	14	134	RC3/8"	18	26	22	30	M16×2.0	M20×2.5	100	56	15	25	102	132	140	174	215	90	17	39	117	36