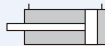
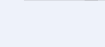

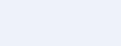



Features

- Compact body design keeps overall length to a minimum.
- Cylinder barrel internally honed to ensure smooth and consistent piston movement.
- High quality materials are used throughout construction.




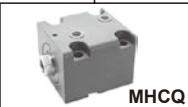








Specification

Model	MHC*						
Tube I.D. (mm)	20	25	32	40	50	63	80
The range of stroke (mm)	30		60	80	90	100	
Medium	Filtered oil						
Material	Carbon steel						
Max. operating pressure	14 MPa						
Ambient temperature	-10~+60°C (No freezing)						

MHCB	Front mounting (Single rod type)	
MHCQ	Side mounting (Single rod type)	
MHCB-D	Front mounting (Double rod type)	
MHCQ-D	Side mounting (Double rod type)	
MHC*-DA	Adjustable forward 25/50mm stroke cylinder	
MHC*-DB	(Double rod type)	

Order example

MHCB — 50 — 30 — ZDA

MODEL	TUBE I.D.	STROKE	ROD END TYPE D: Double rod	
 MHCB	50	30	Blank  Single rod / Female thread	ZD  Double rod / Male thread
 MHCQ			Z  Single rod / Male thread	ZDA  Double rod / Male thread / Adjustable stroke 25mm
			D  Double rod / Female thread	ZDB  Double rod / Male thread / Adjustable stroke 50mm
			DA  Double rod / Female thread / Adjustable stroke 25mm	LD  Double rod / One female thread, One male thread
			DB  Double rod / Female thread / Adjustable stroke 50mm	RD ^(*)  Double rod / One male thread, One female thread

* Only for MHCQ model.

Standard stroke

● Standard products ○ Made to order

Model	Stroke Tube I.D.	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	
MHCB MHCB-Z	ø20	○	●	○	●	○	●	○	●	—	—	—	—	—	—	—	
	ø25	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø32	●	●	●	●	●	●	○	●	○	●	●	—	—	—	—	
	ø40	●	●	●	●	●	●	○	●	○	●	●	●	●	—	—	
	ø50	●	●	●	●	●	●	○	●	○	●	●	●	●	●	—	
	ø63	●	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●
	ø80	●	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●
MHCB-D MHCB-ZD MHCB-LD	ø32	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø40	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø50	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø63	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø80	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
MHCB-DA MHCB-ZDA MHCB-DB MHCB-ZDB	ø32	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø40	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø50	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø63	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	
	ø80	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—	

Model	Stroke Tube I.D.	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100
MHCQ MHCQ-Z	ø32	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø40	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø50	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø63	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
MHCQ-D MHCQ-ZD MHCQ-RD MHCQ-LD	ø32	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø40	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø50	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø63	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
MHCQ-DA MHCQ-ZDA MHCQ-DB MHCQ-ZDB	ø32	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø40	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø50	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—
	ø63	○	●	○	●	○	●	○	●	○	●	—	—	—	—	—

Theoretic force

Unit: KN

Tube I.D. (mm)	Rod (mm)	Area (mm ²)	Operating pressure (MPa)									
			6	7	8	9	10	11	12	13	14	
ø20	ø12	A	314	1.88	2.20	2.51	2.83	3.14	3.46	3.77	4.08	4.40
		B	201	1.21	1.41	1.61	1.81	2.01	2.21	2.41	2.61	2.81
ø25	ø14	A	491	2.95	3.44	3.93	4.42	4.91	5.40	5.89	6.38	6.87
		B	337	2.02	2.36	2.70	3.03	3.37	3.71	4.04	4.38	4.72
ø32	ø20	A	804	4.83	5.63	6.43	7.24	8.04	8.85	9.65	10.46	11.26
		B	490	2.94	3.43	3.92	4.41	4.90	5.39	5.88	6.37	6.86
ø40	ø25	A	1257	7.54	8.80	10.05	11.31	12.57	13.82	15.08	16.34	17.59
		B	766	4.59	5.36	6.13	6.89	7.66	8.42	9.19	9.95	10.72
ø50	ø30	A	1963	11.78	13.74	15.71	17.67	19.63	21.60	23.56	25.53	27.49
		B	1257	7.54	8.80	10.05	11.31	12.57	13.82	15.08	16.34	17.59
ø63	ø35	A	3117	18.70	21.82	24.94	28.06	31.17	34.29	37.41	40.52	43.64
		B	2155	12.93	15.09	17.24	19.40	21.55	23.71	25.86	28.02	30.17
ø80	ø45	A	5027	30.16	35.19	40.21	45.24	50.27	55.29	60.32	65.35	70.37
		B	3436	20.62	24.05	27.49	30.93	34.36	37.80	41.23	44.67	48.11

The method of calculation
(Hydraulic cylinders' force)

$$F = P \times A - f$$

F:	Cylinders' force	(N)
P:	Operating pressure	(MPa)
A:	Piston area	(mm ²)
f :	Friction drag	(N)

How to order the seal kit

MHC□SK □

B
Q

Tube I.D.	Seal kit
20	MHCB20 - Including No.6,7,8,9,10
25	MHCB25 - Including No.6,7,8,9,10
32	MHCB32,MHCQ32 - Including No.6,7,8,9,10
40	MHCB40,MHCQ40 - Including No.6,7,8,9,10
50	MHCB50,MHCQ50 - Including No.6,7,8,9,10
63	MHCB63,MHCQ63 - Including No.6,7,8,9,10
80	MHCB80 - Including No.6,7,8,9,10

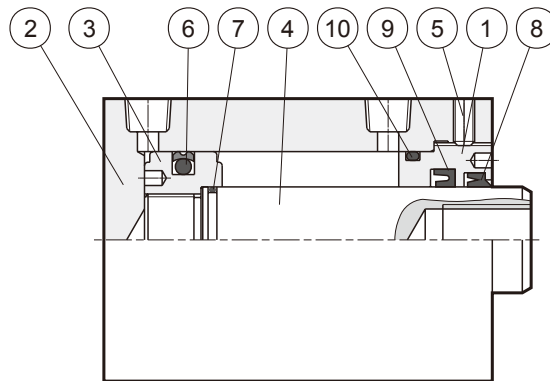
MHC□SK □ D

B
Q

Tube I.D.	Seal kit
32	MHCB32D,MHCQ32D - Including No.6,7,8,9,10
40	MHCB40D,MHCQ40D - Including No.6,7,8,9,10
50	MHCB50D,MHCQ50D - Including No.6,7,8,9,10
63	MHCB63D,MHCQ63D - Including No.6,7,8,9,10
80	MHCB80D - Including No.6,7,8,9,10

MHCB

MHCQ

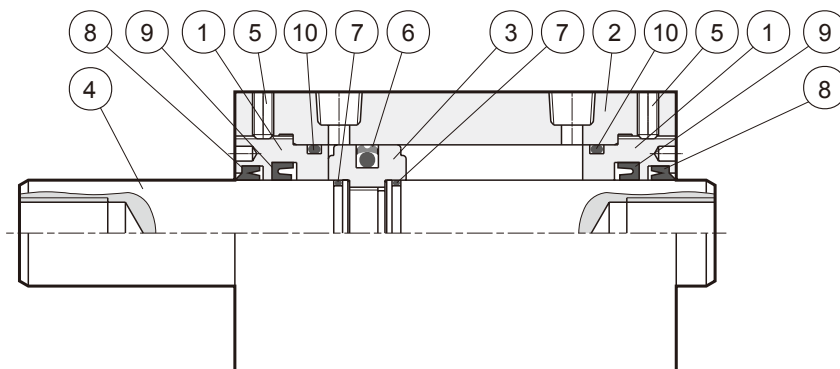


Parts list

No.	Part name	Q'y	No.	Part name	Q'y	No.	Part name	Q'y
1	Rod cover	1	5	Set screw	1	9	Rod packing	1
2	Cylinder tube	1	6	Piston packing	1	10	Cylinder gasket	1
3	Piston	1	7	Piston gasket	1	11		
4	Piston rod	1	8	Dust wiper	1	12		

MHCB-D

MHCQ-D



Parts list

No.	Part name	Q'y	No.	Part name	Q'y	No.	Part name	Q'y
1	Rod cover	2	5	Set screw	2	9	Rod packing	2
2	Cylinder tube	1	6	Piston packing	1	10	Cylinder gasket	2
3	Piston	1	7	Piston gasket	2	11		
4	Piston rod	1	8	Dust wiper	2	12		

How to order the seal kit

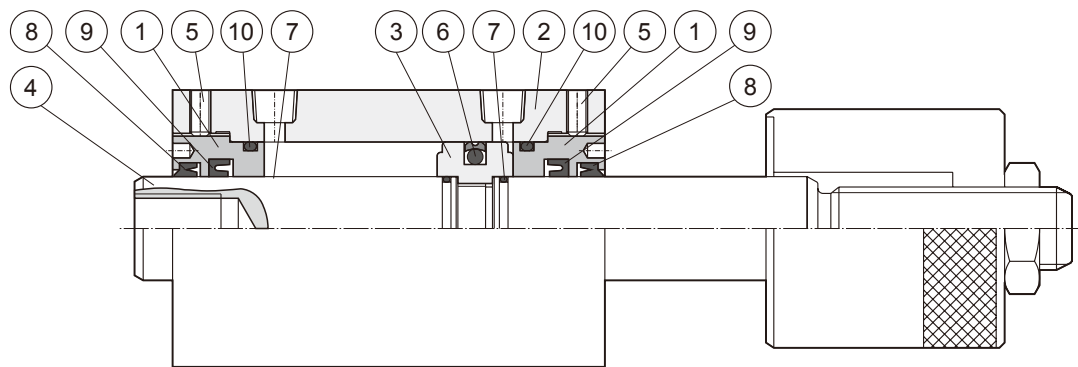
MHC□SK □ D

B
Q

Tube I.D.	Seal kit
32	MHCBSK32D,MHCQSK32D - Including No.6,7,8,9,10
40	MHCBSK40D,MHCQSK40D - Including No.6,7,8,9,10
50	MHCBSK50D,MHCQSK50D - Including No.6,7,8,9,10
63	MHCBSK63D,MHCQSK63D - Including No.6,7,8,9,10
80	MHCBSK80D - Including No.6,7,8,9,10

MHCB-DA

MHCB-DB

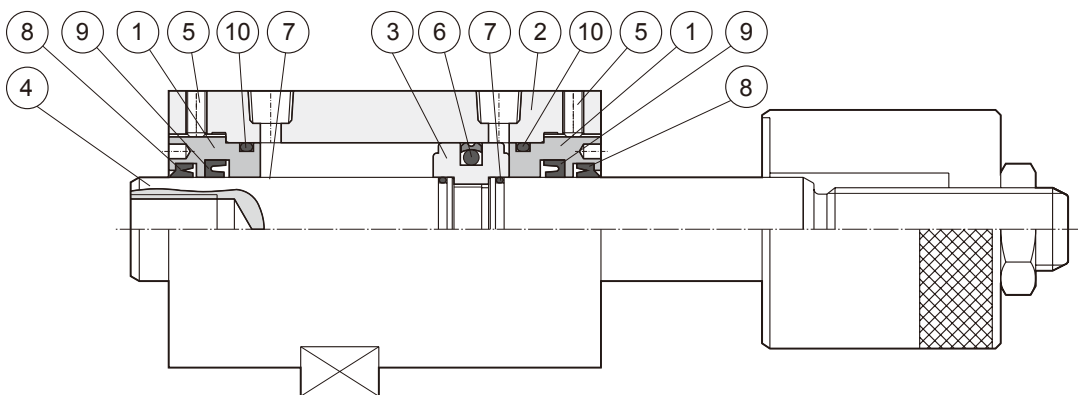


Parts list

No.	Part name	Q'y	No.	Part name	Q'y	No.	Part name	Q'y
1	Rod cover	1	5	Set screw	1	9	Rod packing	1
2	Cylinder tube	1	6	Piston packing	1	10	Cylinder gasket	1
3	Piston	1	7	Piston gasket	1	11		
4	Piston rod	1	8	Dust wiper	1	12		

MHCQ-DA

MHCQ-DB



Parts list

No.	Part name	Q'y	No.	Part name	Q'y	No.	Part name	Q'y
1	Rod cover	2	5	Set screw	2	9	Rod packing	2
2	Cylinder tube	1	6	Piston packing	1	10	Cylinder gasket	2
3	Piston	1	7	Piston gasket	2	11		
4	Piston rod	1	8	Dust wiper	2	12		

Cylinder weight (Including the mounting nut)

Tube I.D.	$\varnothing 20$		$\varnothing 25$		$\varnothing 32$				$\varnothing 40$				$\varnothing 50$				$\varnothing 63$				$\varnothing 80$	
	MHCB		MHCB		MHCB		MHCQ		MHCB		MHCQ		MHCB		MHCQ		MHCB		MHCQ		MHCB	
	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z
5	0.64	0.69	0.88	0.93	1.61	1.71	1.72	1.82	2.00	2.20	2.21	2.41	2.78	3.03	3.27	3.52	4.24	4.69	5.28	5.73	7.46	8.31
10	0.63	0.68	0.87	0.92	1.73	1.83	1.71	1.81	2.15	2.35	2.19	2.39	2.96	3.21	3.24	3.49	4.48	4.93	5.22	5.67	7.80	8.65
15	0.75	0.80	1.02	1.07	1.85	1.95	1.98	2.08	2.30	2.50	2.55	2.75	3.14	3.39	3.71	3.96	4.72	5.17	5.90	6.35	8.14	8.99
20	0.74	0.79	1.01	1.06	1.97	2.07	1.97	2.07	2.45	2.65	2.53	2.73	3.32	3.57	3.68	3.93	4.96	5.41	5.84	6.29	8.48	9.33
25	0.86	0.91	1.16	1.21	2.09	2.19	2.24	2.34	2.60	2.80	2.89	3.09	3.50	3.75	4.15	4.40	5.20	5.65	6.52	6.97	8.82	9.67
30	0.85	0.90	1.15	1.20	2.21	2.31	2.23	2.33	2.75	2.95	2.87	3.07	3.68	3.93	4.12	4.37	5.44	5.89	6.46	6.91	9.16	10.01
35	0.97	1.02	1.30	1.35	2.46	2.56	2.50	2.60	3.07	3.27	3.23	3.43	4.07	4.32	4.59	4.84	5.98	6.43	7.14	7.59	9.93	10.78
40	0.96	1.01	1.29	1.34	2.45	2.55	2.49	2.59	3.05	3.25	3.21	3.41	4.04	4.29	4.56	4.81	5.92	6.37	7.08	7.53	9.84	10.69
45	—	—	1.44	1.49	2.70	2.80	2.76	2.86	3.37	3.57	3.57	3.77	4.43	4.68	5.03	5.28	6.46	6.91	7.76	8.21	10.61	11.46
50	—	—	1.43	1.48	2.69	2.79	2.75	2.85	3.35	3.55	3.55	3.75	4.40	4.65	5.00	5.25	6.40	6.85	7.70	8.15	10.52	11.37
60	—	—	—	—	2.93	3.03	3.01	3.11	3.65	3.85	3.89	4.09	4.76	5.01	5.44	5.69	6.88	7.33	8.32	8.77	11.20	12.05
70	—	—	—	—	3.17	3.27	3.27	3.37	3.95	4.15	4.23	4.43	5.12	5.37	5.88	6.13	7.36	7.81	8.94	9.39	11.88	12.73
80	—	—	—	—	3.41	3.51	3.53	3.63	4.25	4.45	4.57	4.77	5.48	5.73	6.32	6.57	7.84	8.29	9.56	10.01	12.56	13.41
90	—	—	—	—	3.65	3.75	3.79	3.89	4.55	4.75	4.91	5.11	5.84	6.09	6.76	7.01	8.32	8.77	10.18	10.63	13.24	14.09
100	—	—	—	—	3.89	3.99	4.05	4.15	4.85	5.05	5.25	5.45	6.20	6.45	7.20	7.45	8.80	9.25	10.80	11.25	13.92	14.77


* N (Female thread); Z (Male thread)

Tube I.D.	$\varnothing 32$						$\varnothing 40$						$\varnothing 50$						$\varnothing 63$						$\varnothing 80$		
	MHCB_D			MHCQ_D			MHCB_D			MHCQ_D			MHCB_D			MHCQ_D			MHCB_D			MHCQ_D			MHCB_D		
	N	Z	L	N	Z	L,R	N	Z	L	N	Z	L,R	N	Z	L	N	Z	L,R	N	Z	L	N	Z	L,R	N	Z	L
5	1.89	2.06	1.97	1.90	2.07	1.99	2.37	2.71	2.54	2.45	2.79	2.62	3.22	3.65	3.44	3.63	4.05	3.84	4.85	5.61	5.23	5.59	6.35	5.98	10.18	11.63	10.90
10	1.89	2.06	1.97	1.90	2.07	1.99	2.37	2.71	2.54	2.45	2.79	2.62	3.22	3.65	3.43	3.62	4.05	3.84	4.83	5.59	5.21	5.58	6.34	5.96	10.15	11.60	10.88
15	2.11	2.28	2.20	2.14	2.31	2.23	2.66	3.00	2.83	2.77	3.11	2.94	3.58	4.00	3.79	4.05	4.47	4.26	5.32	6.08	5.70	6.18	6.95	6.57	10.87	12.31	11.59
20	2.11	2.28	2.20	2.14	2.31	2.23	2.66	3.00	2.83	2.77	3.11	2.94	3.57	4.00	3.79	4.04	4.47	4.26	5.30	6.07	5.68	6.17	6.93	6.55	10.84	12.28	11.58
25	2.34	2.51	2.42	2.38	2.55	2.47	2.94	3.28	3.11	3.09	3.43	3.26	3.93	4.36	4.14	4.47	4.90	4.68	5.79	6.56	6.17	6.78	7.54	7.16	11.55	12.99	12.27
30	2.34	2.51	2.42	2.39	2.56	2.47	2.95	3.29	3.12	3.10	3.44	3.27	3.93	4.35	4.14	4.47	4.89	4.68	5.77	6.54	6.15	6.76	7.52	7.14	11.52	12.97	12.25
35	2.56	2.73	2.65	2.63	2.80	2.71	3.23	3.57	3.40	3.42	3.76	3.59	4.28	4.71	4.50	4.89	5.32	5.10	6.26	7.03	6.64	7.37	8.13	7.75	12.23	13.68	12.96
40	2.56	2.73	2.65	2.63	2.80	2.71	3.23	3.57	3.40	3.42	3.76	3.59	4.28	4.71	4.49	4.89	5.31	5.10	6.24	7.01	6.63	7.35	8.11	7.73	12.21	13.65	12.93
45	2.79	2.96	2.87	2.87	3.04	2.95	3.52	3.86	3.69	3.74	4.08	3.91	4.64	5.06	4.85	5.31	5.74	5.52	6.73	7.50	7.12	7.96	8.72	8.34	12.92	14.35	13.64
50	2.79	2.96	2.87	2.87	3.04	2.96	3.52	3.86	3.69	3.74	4.08	3.91	4.63	5.06	4.85	5.31	5.73	5.52	6.72	7.48	7.10	7.94	8.71	8.32	12.89	14.34	13.61

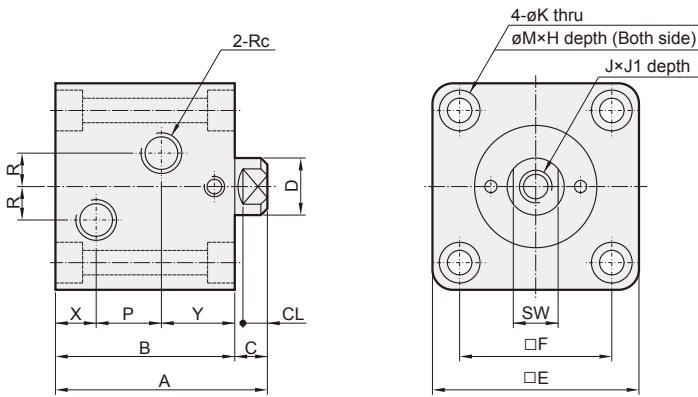
* N (Bilateral Female thread); Z (Bilateral Male thread); L, R (Unilateral Female thread)

Mounting weight

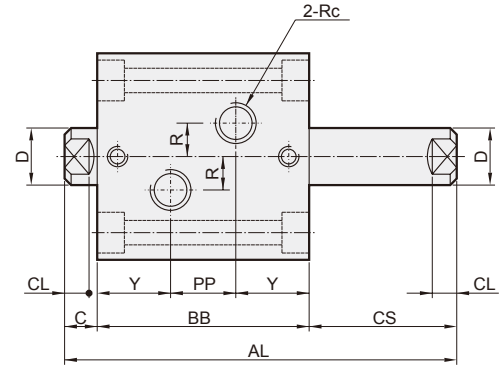
Unit: kg

Tube I.D. (mm)	Adjustable Nut		Nut (Rod)
	A Adjustable Stroke 25mm	B Adjustable Stroke 50mm	
$\varnothing 32$	0.6	0.9	0.02
$\varnothing 40$	1.0	1.45	0.04
$\varnothing 50$	1.15	1.7	0.08
$\varnothing 63$	2.15	3	0.08
$\varnothing 80$	3.4	4.2	0.18

MHCB

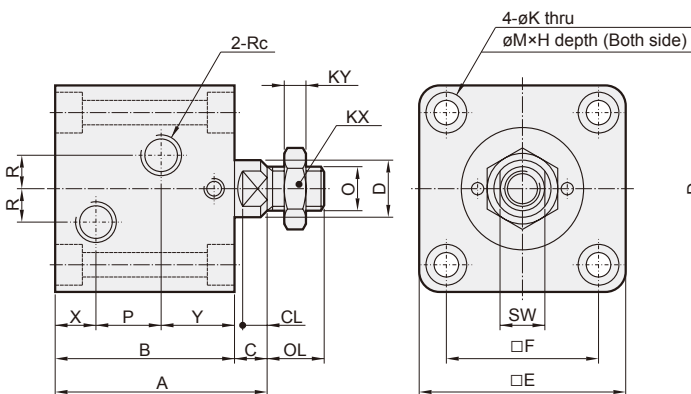


MHCB-D

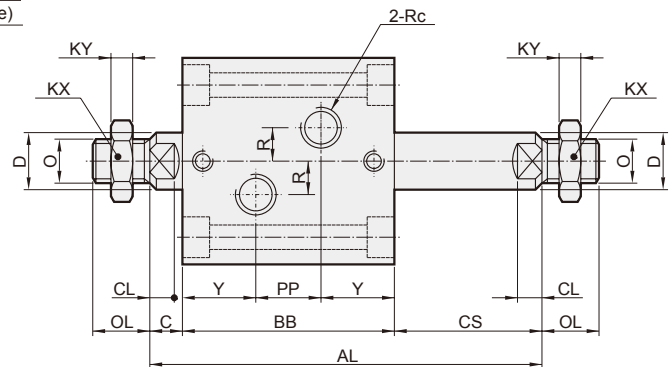


CS=C+stroke

MHCB-Z

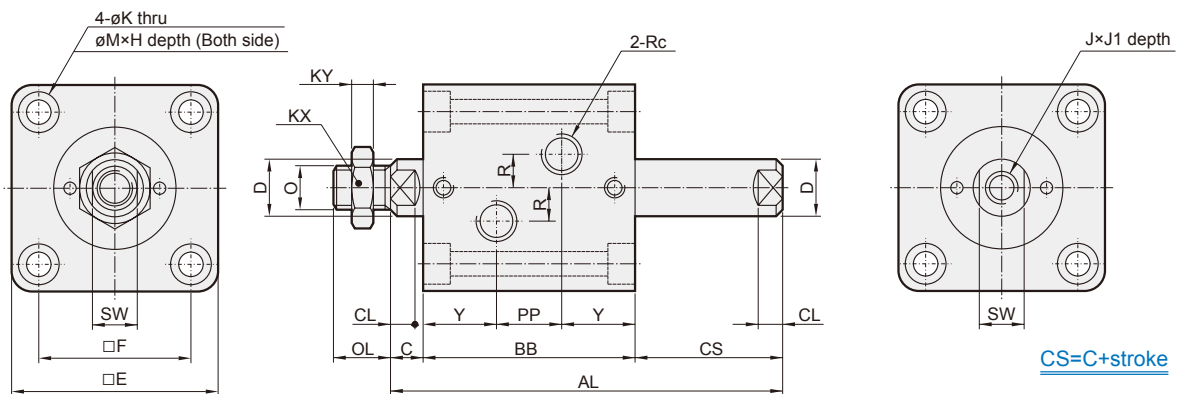


MHCB-ZD



CS=C+stroke

MHCB-LD



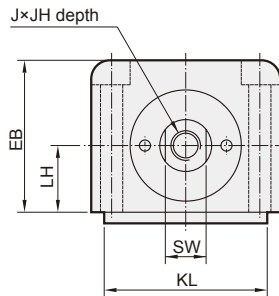
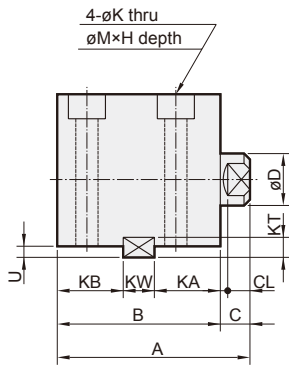
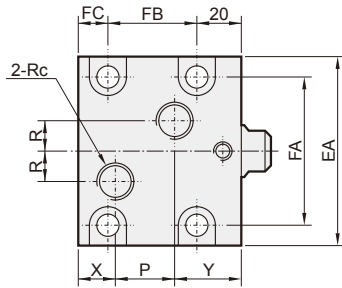
CS=C+stroke

Tube I.D.	Model	MHCB / MHCB-Z														
	Stroke	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100
$\varnothing 20$	A	61	61	71	71	81	81	91	91	-	-	-	-	-	-	-
	B	53	53	63	63	73	73	83	83	-	-	-	-	-	-	-
	P	20	20	30	30	40	40	50	50	-	-	-	-	-	-	-
$\varnothing 25$	A	63	63	73	73	83	83	93	93	103	103	-	-	-	-	-
	B	55	55	65	65	75	75	85	85	95	95	-	-	-	-	-
	P	22	22	32	32	42	42	52	52	62	62	-	-	-	-	-
$\varnothing 32$	A	69	74	79	84	89	94	104	104	114	114	124	-	-	-	-
	B	59	64	69	74	79	84	94	94	104	104	114	-	-	-	-
	P	19	24	29	34	39	44	54	54	64	64	74	-	-	-	-
$\varnothing 40$	A	70	75	80	85	90	95	105	105	115	115	125	135	145	-	-
	B	60	65	70	75	80	85	95	95	105	105	115	125	135	-	-
	P	20	25	30	35	40	45	55	55	65	65	75	85	95	-	-
$\varnothing 50$	A	76	81	86	91	96	101	111	111	121	121	131	141	151	161	-
	B	65	70	75	80	85	90	100	100	110	110	120	130	140	150	-
	P	23	28	33	38	43	48	58	58	68	68	78	88	98	108	-
$\varnothing 63$	A	85	90	95	100	105	110	120	120	130	130	140	150	160	170	180
	B	72	77	82	87	92	97	107	107	117	117	127	137	147	157	167
	P	25	30	35	40	45	50	60	60	70	70	80	90	100	110	120
$\varnothing 80$	A	100	105	110	115	120	125	135	135	145	145	155	165	175	185	195
	B	83	88	93	98	103	108	118	118	128	128	138	148	158	168	178
	P	32	37	42	47	52	57	67	67	77	77	87	97	107	117	127

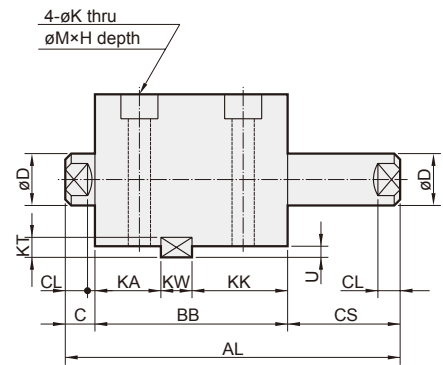
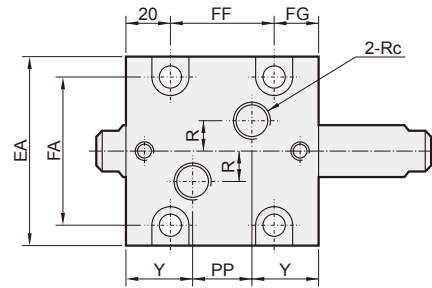
Tube I.D.	Model	MHCB-D / MHCB-ZD / MHCB-LD														
	Stroke	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100
$\varnothing 32$	AL	104	109	124	129	144	149	164	169	184	189	-	-	-	-	-
	BB	79	79	89	89	99	99	109	109	119	119	-	-	-	-	-
	CS	15	20	25	30	35	40	45	50	55	60	-	-	-	-	-
	PP	23	23	33	33	43	43	53	53	63	63	-	-	-	-	-
$\varnothing 40$	AL	105	110	125	130	145	150	165	170	185	190	-	-	-	-	-
	BB	80	80	90	90	100	100	110	110	120	120	-	-	-	-	-
	CS	15	20	25	30	35	40	45	50	55	60	-	-	-	-	-
	PP	24	24	34	34	44	44	54	54	64	64	-	-	-	-	-
$\varnothing 50$	AL	112	117	132	137	152	157	172	177	192	197	-	-	-	-	-
	BB	85	85	95	95	105	105	115	115	125	125	-	-	-	-	-
	CS	16	21	26	31	36	41	46	51	56	61	-	-	-	-	-
	PP	26	26	36	36	46	46	56	56	66	66	-	-	-	-	-
$\varnothing 63$	AL	123	128	143	148	163	168	183	188	203	208	-	-	-	-	-
	BB	92	92	102	102	112	112	122	122	132	132	-	-	-	-	-
	CS	18	23	28	33	38	43	48	53	58	63	-	-	-	-	-
	PP	30	30	40	40	50	50	60	60	70	70	-	-	-	-	-
$\varnothing 80$	AL	142	147	162	167	182	187	202	207	222	227	-	-	-	-	-
	BB	103	103	113	113	123	123	133	133	143	143	-	-	-	-	-
	CS	22	27	32	37	42	47	52	57	62	67	-	-	-	-	-
	PP	37	37	47	47	57	57	67	67	77	77	-	-	-	-	-

Code Tube I.D.	C	CL	D	E	F	H	J	J1	K	KX	KY	M	O	OL	Rc	R	SW	X	Y
$\varnothing 20$	8	6	12	42	30	5.5	M8×1.25	12	5.6	17	6	9	M10×1.25	20	Rc1/8	5	10	10	23
$\varnothing 25$	8	6	14	48	36	5.5	M10×1.5	15	5.6	19	7	9	M12×1.25	22	Rc1/8	5	12	10	23
$\varnothing 32$	10	7	20	62	47	6.5	M12×1.75	15	6.6	24	8	11	M16×1.5	25	Rc1/4	10	17	12	28
$\varnothing 40$	10	7	25	70	52	9	M16×2.0	20	9	32	11	14	M22×1.5	30	Rc1/4	10	22	12	28
$\varnothing 50$	11	8	30	80	58	11	M20×2.5	25	11	35	14	18	M26×1.5	35	Rc1/4	10	27	12.5	29.5
$\varnothing 63$	13	10	35	94	69	13	M27×3.0	35	13	41	13	20	M30×1.5	40	Rc3/8	10	32	16	31
$\varnothing 80$	17	14	45	114	86	15	M30×3.5	35	15	50	10	22	M39×1.5	45	Rc3/8	15	41	18	33

MHCQ

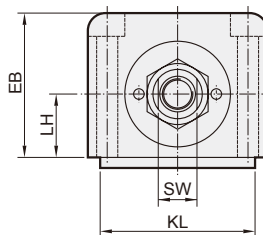
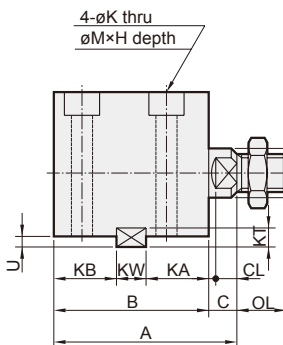
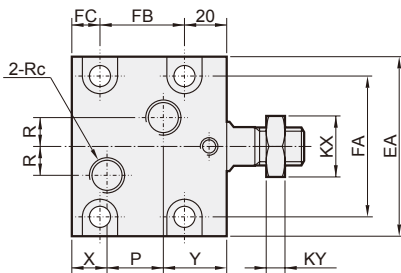


MHCQ-D

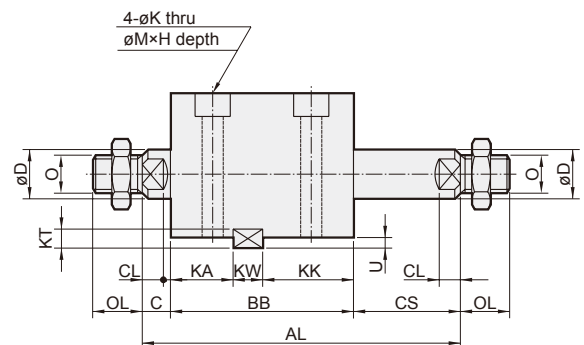
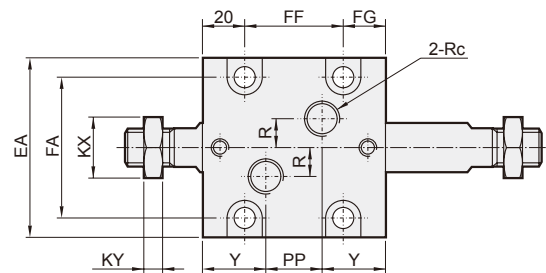


CS=C+stroke

MHCQ-Z



MHCQ-ZD



CS=C+stroke

Tube I.D.	Model	MHCQ / MHCQ-Z									
	Stroke	5	10	15	20	25	30	35	40	45	50
$\phi 32$	A	74	74	84	84	94	94	104	104	114	114
	B	64	64	74	74	84	84	94	94	104	104
	FB	34	34	44	44	54	54	64	64	74	74
	KB	24	24	34	34	44	44	54	54	64	64
	P	24	24	34	34	44	44	54	54	64	64
$\phi 40$	A	75	75	85	85	95	95	105	105	115	115
	B	65	65	75	75	85	85	95	95	105	105
	FB	33	33	43	43	53	53	63	63	73	73
	KB	25	25	35	35	45	45	55	55	65	65
	P	25	25	35	35	45	45	55	55	65	65
$\phi 50$	A	81	81	91	91	101	101	111	111	121	121
	B	70	70	80	80	90	90	100	100	110	110
	FB	37	37	47	47	57	57	67	67	77	77
	KB	27	27	37	37	47	47	57	57	67	67
	P	28	28	38	38	48	48	58	58	68	68
$\phi 63$	A	90	90	100	100	110	110	120	120	130	130
	B	77	77	87	87	97	97	107	107	117	117
	FB	42	42	52	52	62	62	72	72	82	82
	KB	30	30	40	40	50	50	60	60	70	70
	P	30	30	40	40	50	50	60	60	70	70

Tube I.D.	Model	MHCQ-D / MHCQ-ZD									
	Stroke	5	10	15	20	25	30	35	40	45	50
$\phi 32$	AL	104	109	124	129	144	149	164	169	184	189
	BB	79	79	89	89	99	99	109	109	119	119
	CS	15	20	25	30	35	40	45	50	55	60
	FF	42	42	52	52	62	62	72	72	82	82
	KK	39	39	49	49	59	59	69	69	79	79
	PP	23	23	33	33	43	43	53	53	63	63
$\phi 40$	AL	105	110	125	130	145	150	165	170	185	190
	BB	80	80	90	90	100	100	110	110	120	120
	CS	15	20	25	30	35	40	45	50	55	60
	FF	42	42	52	52	62	62	72	72	82	82
	KK	40	40	50	50	60	60	70	70	80	80
	PP	24	24	34	34	44	44	54	54	64	64
$\phi 50$	AL	112	117	132	137	152	157	172	177	192	197
	BB	85	85	95	95	105	105	115	115	125	125
	CS	16	21	26	31	36	41	46	51	56	61
	FF	45	45	55	55	65	65	75	75	85	85
	KK	42	42	52	52	62	62	72	72	82	82
	PP	26	26	36	36	46	46	56	56	66	66
$\phi 63$	AL	123	128	143	148	163	168	183	188	203	208
	BB	92	92	102	102	112	112	122	122	132	132
	CS	18	23	28	33	38	43	48	53	58	63
	FF	52	52	62	62	72	72	82	82	92	92
	KK	45	45	55	55	65	65	75	75	85	85
	PP	30	30	40	40	50	50	60	60	70	70

Code Tube I.D.	C	CL	D	EA	EB	FA	FC	FG	H	J	JH	K	KA	KL
$\phi 32$	10	7	20	70	56	56	10	17	9	M12 \times 1.75	15	9	28	63
$\phi 40$	10	7	25	80	64	62	12	18	11	M16 \times 2.0	20	11	28	70
$\phi 50$	11	8	30	94	74	74	13	20	13	M20 \times 2.5	25	13	29	80
$\phi 63$	13	10	35	114	89	90	15	20	15	M27 \times 3.0	35	15	31	100

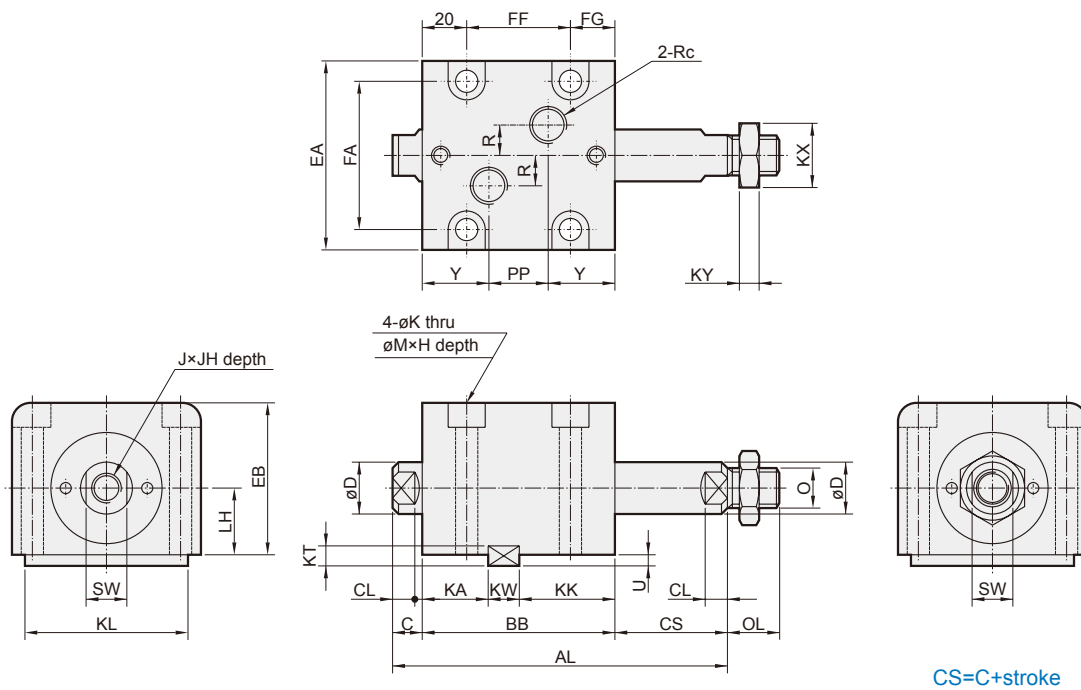
Code Tube I.D.	KT	KW	KX	KY	LH	M	O	OL	Rc	R	SW	U	X	Y
$\phi 32$	8	12	24	8	25	14	M16 \times 1.5	25	Rc1/4	10	17	4.5	12	28
$\phi 40$	8	12	32	11	29	18	M22 \times 1.5	30	Rc1/4	10	22	4.5	12	28
$\phi 50$	9	14	35	14	34	20	M26 \times 1.5	35	Rc1/4	10	27	5	12.5	29.5
$\phi 63$	10	16	41	13	42	22	M30 \times 1.5	40	Rc3/8	10	32	5.5	16	31

MHCQ-*D Dimensions – Double rod $\phi 32 \sim \phi 63$

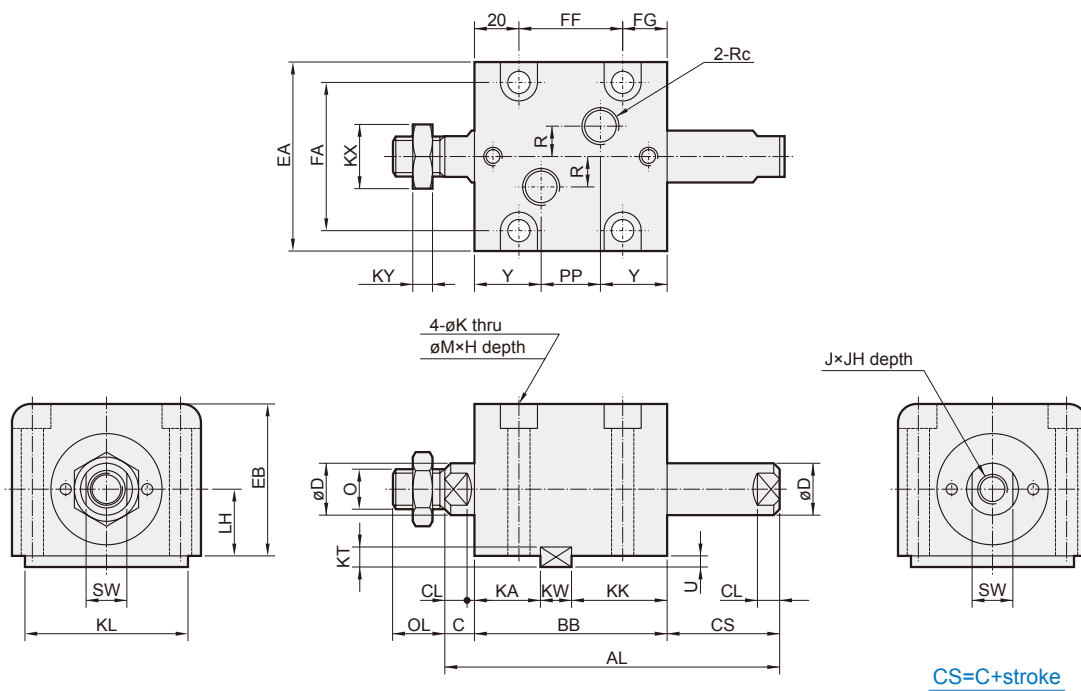
COMPACT HYDRAULIC CYLINDER



MHCQ-RD



MHCQ-LD



MHCQ-*D Dimensions – Double rod ø32~ø63



COMPACT HYDRAULIC CYLINDER

Mindman

Tube I.D.	Model	MHCQ-RD / MHCQ-LD									
	Stroke	5	10	15	20	25	30	35	40	45	50
ø32	AL	104	109	124	129	144	149	164	169	184	189
	BB	79	79	89	89	99	99	109	109	119	119
	CS	15	20	25	30	35	40	45	50	55	60
	FF	42	42	52	52	62	62	72	72	82	82
	KK	39	39	49	49	59	59	69	69	79	79
	PP	23	23	33	33	43	43	53	53	63	63
ø40	AL	105	110	125	130	145	150	165	170	185	190
	BB	80	80	90	90	100	100	110	110	120	120
	CS	15	20	25	30	35	40	45	50	55	60
	FF	42	42	52	52	62	62	72	72	82	82
	KK	40	40	50	50	60	60	70	70	80	80
	PP	24	24	34	34	44	44	54	54	64	64
ø50	AL	112	117	132	137	152	157	172	177	192	197
	BB	85	85	95	95	105	105	115	115	125	125
	CS	16	21	26	31	36	41	46	51	56	61
	FF	45	45	55	55	65	65	75	75	85	85
	KK	42	42	52	52	62	62	72	72	82	82
	PP	26	26	36	36	46	46	56	56	66	66
ø63	AL	123	128	143	148	163	168	183	188	203	208
	BB	92	92	102	102	112	112	122	122	132	132
	CS	18	23	28	33	38	43	48	53	58	63
	FF	52	52	62	62	72	72	82	82	92	92
	KK	45	45	55	55	65	65	75	75	85	85
	PP	30	30	40	40	50	50	60	60	70	70

Code Tube I.D.	C	CL	D	EA	EB	FA	FG	H	J	JH	K	KA	KL	KT
ø32	10	7	20	70	56	56	17	9	M12×1.75	15	9	28	63	8
ø40	10	7	25	80	64	62	18	11	M16×2.0	20	11	28	70	8
ø50	11	8	30	94	74	74	20	13	M20×2.5	25	13	29	80	9
ø63	13	10	35	114	89	90	20	15	M27×3.0	35	15	31	100	10

Code Tube I.D.	KW	KX	KY	LH	M	O	OL	Rc	R	SW	U	Y
ø32	12	24	8	25	14	M16×1.5	25	Rc1/4	10	17	4.5	28
ø40	12	32	11	29	18	M22×1.5	30	Rc1/4	10	22	4.5	28
ø50	14	35	14	34	20	M26×1.5	35	Rc1/4	10	27	5	29.5
ø63	16	41	13	42	22	M30×1.5	40	Rc3/8	10	32	5.5	31

MHCB Dimensions – Adjustable stroke $\phi 32 \sim \phi 80$

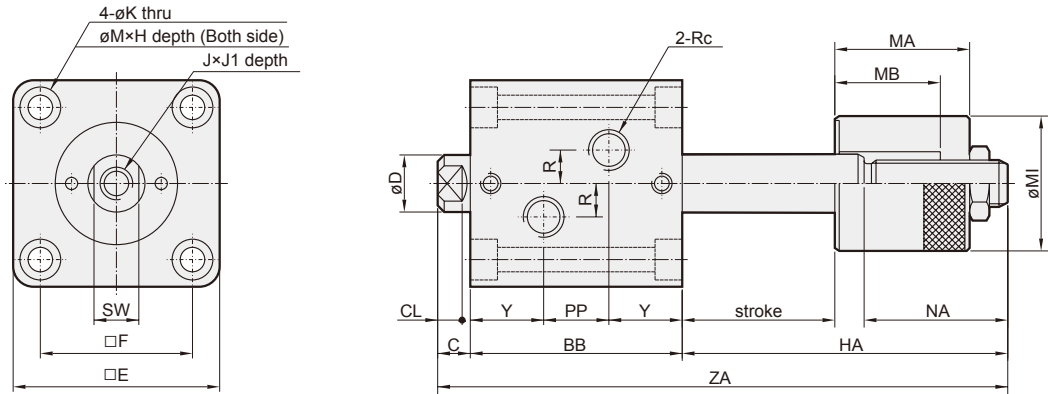


COMPACT HYDRAULIC CYLINDER

Mindman

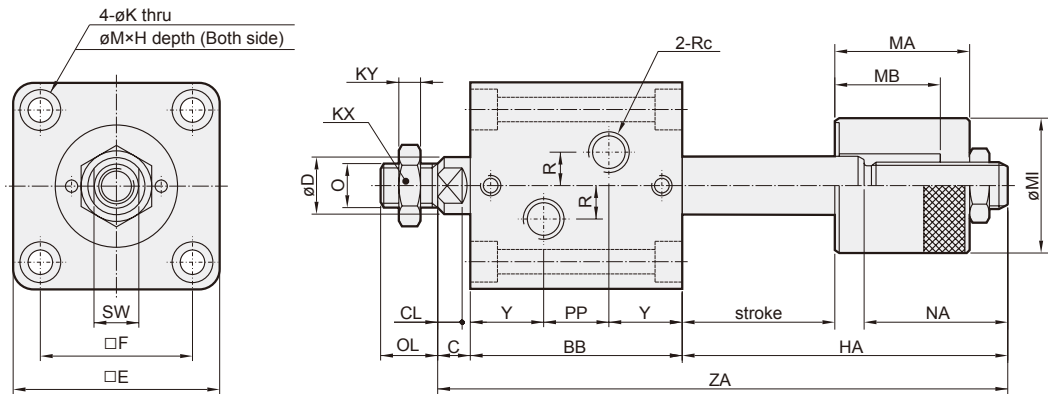
MHCB-DA

Adjustable stroke
25 mm



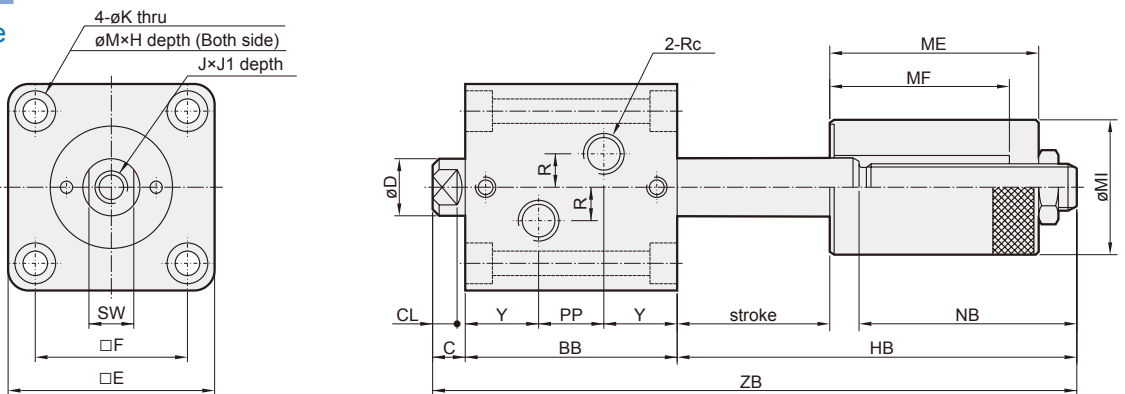
MHCB-ZDA

Adjustable stroke
25 mm



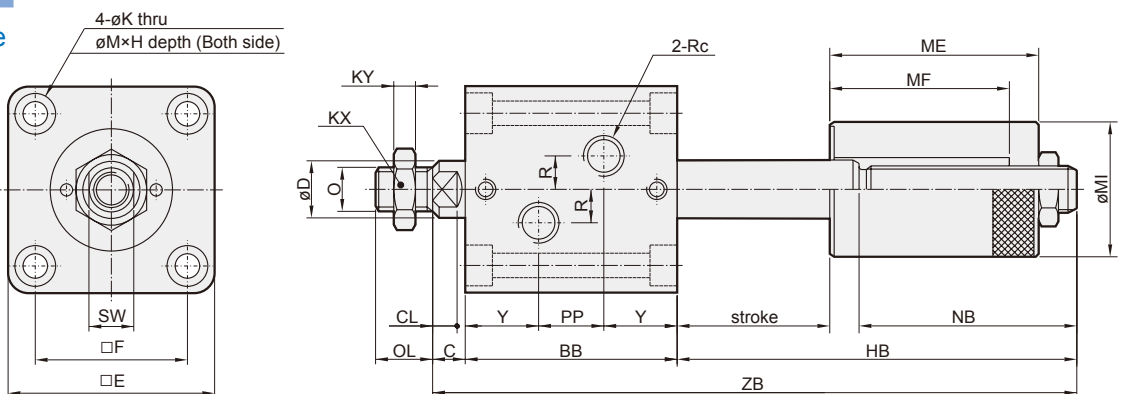
MHCB-DB

Adjustable stroke
50 mm



MHCB-ZDB

Adjustable stroke
50 mm



Tube I.D.	Model	MHCB-DA / MHCB-ZDA														
	Stroke	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100
$\varnothing 32$	ZA	153	158	173	178	193	198	213	218	233	238	-	-	-	-	-
	BB	79	79	89	89	99	99	109	109	119	119	-	-	-	-	-
	PP	23	23	33	33	43	43	53	53	63	63	-	-	-	-	-
	HA	64	69	74	79	84	89	94	99	104	109	-	-	-	-	-
$\varnothing 40$	ZA	163	168	183	188	203	208	223	228	243	248	-	-	-	-	-
	BB	80	80	90	90	100	100	110	110	120	120	-	-	-	-	-
	PP	24	24	34	34	44	44	54	54	64	64	-	-	-	-	-
	HA	73	78	83	88	93	98	103	108	113	118	-	-	-	-	-
$\varnothing 50$	ZA	171	176	191	196	211	216	231	236	251	256	-	-	-	-	-
	BB	85	85	95	95	105	105	115	115	125	125	-	-	-	-	-
	PP	26	26	36	36	46	46	56	56	66	66	-	-	-	-	-
	HA	75	80	85	90	95	100	105	110	115	120	-	-	-	-	-
$\varnothing 63$	ZA	188	193	208	213	228	233	248	253	268	273	-	-	-	-	-
	BB	92	92	102	102	112	112	122	122	132	132	-	-	-	-	-
	PP	30	30	40	40	50	50	60	60	70	70	-	-	-	-	-
	HA	83	88	93	98	103	108	113	118	123	128	-	-	-	-	-
$\varnothing 80$	ZA	207	212	227	232	247	252	267	272	287	292	-	-	-	-	-
	BB	103	103	113	113	123	123	133	133	143	143	-	-	-	-	-
	PP	37	37	47	47	57	57	67	67	77	77	-	-	-	-	-
	HA	87	92	97	102	107	112	117	122	127	132	-	-	-	-	-

Tube I.D.	Model	MHCB-DB / MHCB-ZDB														
	Stroke	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100
$\varnothing 32$	ZB	178	183	198	203	218	223	238	243	258	263	-	-	-	-	-
	BB	79	79	89	89	99	99	109	109	119	119	-	-	-	-	-
	PP	23	23	33	33	43	43	53	53	63	63	-	-	-	-	-
	HB	89	94	99	104	109	114	119	124	129	134	-	-	-	-	-
$\varnothing 40$	ZB	188	193	208	213	228	233	248	253	268	273	-	-	-	-	-
	BB	80	80	90	90	100	100	110	110	120	120	-	-	-	-	-
	PP	24	24	34	34	44	44	54	54	64	64	-	-	-	-	-
	HB	98	103	108	113	118	123	128	133	138	143	-	-	-	-	-
$\varnothing 50$	ZB	196	201	216	221	236	241	256	261	276	281	-	-	-	-	-
	BB	85	85	95	95	105	105	115	115	125	125	-	-	-	-	-
	PP	26	26	36	36	46	46	56	56	66	66	-	-	-	-	-
	HB	100	105	110	115	120	125	130	135	140	145	-	-	-	-	-
$\varnothing 63$	ZB	213	218	233	238	253	258	273	278	293	298	-	-	-	-	-
	BB	92	92	102	102	112	112	122	122	132	132	-	-	-	-	-
	PP	30	30	40	40	50	50	60	60	70	70	-	-	-	-	-
	HB	108	113	118	123	128	133	138	143	148	153	-	-	-	-	-
$\varnothing 80$	ZB	232	237	252	257	272	277	292	297	312	317	-	-	-	-	-
	BB	103	103	113	113	123	123	133	133	143	143	-	-	-	-	-
	PP	37	37	47	47	57	57	67	67	77	77	-	-	-	-	-
	HB	112	117	122	127	132	137	142	147	152	157	-	-	-	-	-

Code Tube I.D.	C	CL	D	E	F	H	J	J1	K	KX	KY	M	MI	MA
$\varnothing 32$	10	7	20	62	47	6.5	M12×1.75	15	6.6	24	8	11	45	46
$\varnothing 40$	10	7	25	70	52	9	M16×2.0	20	9	32	11	14	55	54
$\varnothing 50$	11	8	30	80	58	11	M20×2.5	25	11	35	14	18	60	53
$\varnothing 63$	13	10	35	94	69	13	M27×3.0	35	13	41	13	20	75	63
$\varnothing 80$	17	14	45	114	86	15	M30×3.5	35	15	50	10	22	90	70

Code Tube I.D.	MB	ME	MF	NA	NB	O	OL	Rc	R	SW	Y
$\varnothing 32$	36	71	61	49	74	M16×1.5	25	Rc1/4	10	17	28
$\varnothing 40$	36	79	61	58	83	M22×1.5	30	Rc1/4	10	22	28
$\varnothing 50$	37	78	62	59	84	M26×1.5	35	Rc1/4	10	27	29.5
$\varnothing 63$	39	88	64	65	90	M30×1.5	40	Rc3/8	10	32	31
$\varnothing 80$	43	95	68	65	90	M39×1.5	45	Rc3/8	15	41	33

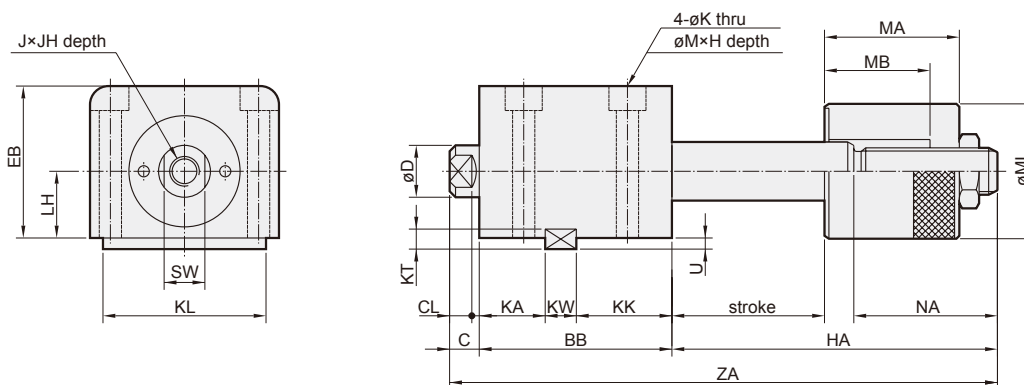
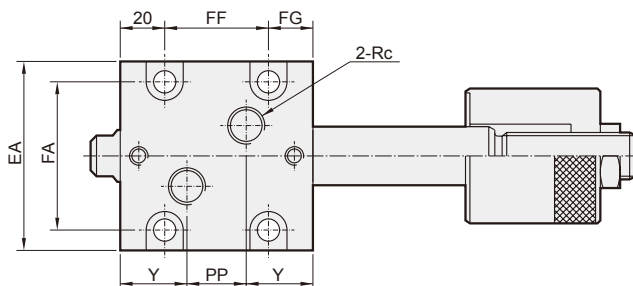
MHCQ-DA Dimensions – Adjustable stroke $\phi 32 \sim \phi 63$

COMPACT HYDRAULIC CYLINDER



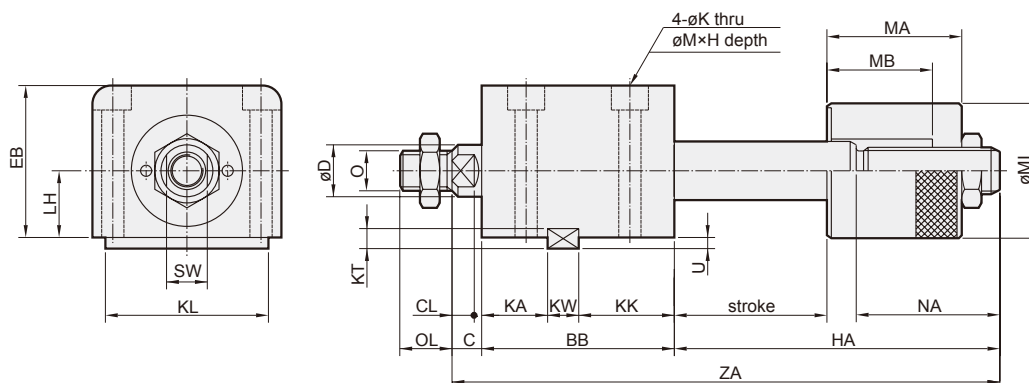
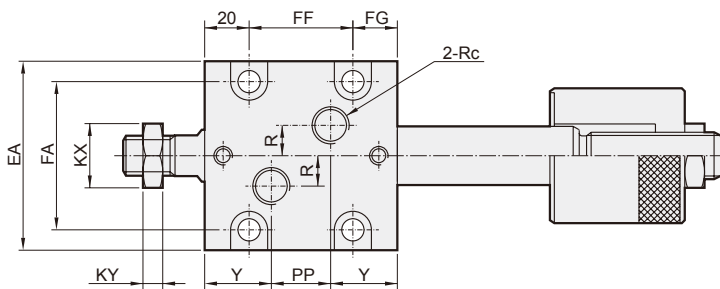
MHCQ-DA

Adjustable stroke 25 mm



MHCQ-ZDA

Adjustable stroke 25 mm



MHCQ-DA Dimensions – Adjustable stroke ø32~ø63



COMPACT HYDRAULIC CYLINDER

Mindman

Tube I.D.	Model	MHCQ-DA / MHCQ-ZDA									
		Stroke	5	10	15	20	25	30	35	40	45
ø32	ZA	153	158	173	178	193	198	213	218	233	238
	BB	79	79	89	89	99	99	109	109	119	119
	FF	42	42	52	52	62	62	72	72	82	82
	KK	39	39	49	49	59	59	69	69	79	79
	PP	23	23	33	33	43	43	53	53	63	63
	HA	64	69	74	79	84	89	94	99	104	109
ø40	ZA	163	168	183	188	203	208	223	228	243	248
	BB	80	80	90	90	100	100	110	110	120	120
	FF	42	42	52	52	62	62	72	72	82	82
	KK	40	40	50	50	60	60	70	70	80	80
	PP	24	24	34	34	44	44	54	54	64	64
	HA	73	78	83	88	93	98	103	108	113	118
ø50	ZA	171	176	191	196	211	216	231	236	251	256
	BB	85	85	95	95	105	105	115	115	125	125
	FF	45	45	55	55	65	65	75	75	85	85
	KK	42	42	52	52	62	62	72	72	82	82
	PP	26	26	36	36	46	46	56	56	66	66
	HA	75	80	85	90	95	100	105	110	115	120
ø63	ZA	188	193	208	213	228	233	248	253	268	273
	BB	92	92	102	102	112	112	122	122	132	132
	FF	52	52	62	62	72	72	82	82	92	92
	KK	45	45	55	55	65	65	75	75	85	85
	PP	30	30	40	40	50	50	60	60	70	70
	HA	83	88	93	98	103	108	113	118	123	128

Code Tube I.D.	C	CL	D	EA	EB	FA	FG	H	J	JH	K	KA	KL	KT	KW
ø32	10	7	20	70	56	56	17	9	M12×1.75	15	9	28	63	8	12
ø40	10	7	25	80	64	62	18	11	M16×2.0	20	11	28	70	8	12
ø50	11	8	30	94	74	74	20	13	M20×2.5	25	13	29	80	9	14
ø63	13	10	35	114	89	90	20	15	M27×3.0	35	15	31	100	10	16

Code Tube I.D.	KX	KY	LH	M	MI	MA	MB	NA	O	OL	Rc	R	SW	U	Y
ø32	24	8	25	14	45	46	36	49	M16×1.5	25	Rc1/4	10	17	4.5	28
ø40	32	11	29	18	55	54	36	58	M22×1.5	30	Rc1/4	10	22	4.5	28
ø50	35	14	34	20	60	53	37	59	M26×1.5	35	Rc1/4	10	27	5	29.5
ø63	41	13	42	22	75	63	39	65	M30×1.5	40	Rc3/8	10	32	5.5	31

MHCQ-DB Dimensions – Adjustable stroke $\phi 32\sim\phi 63$

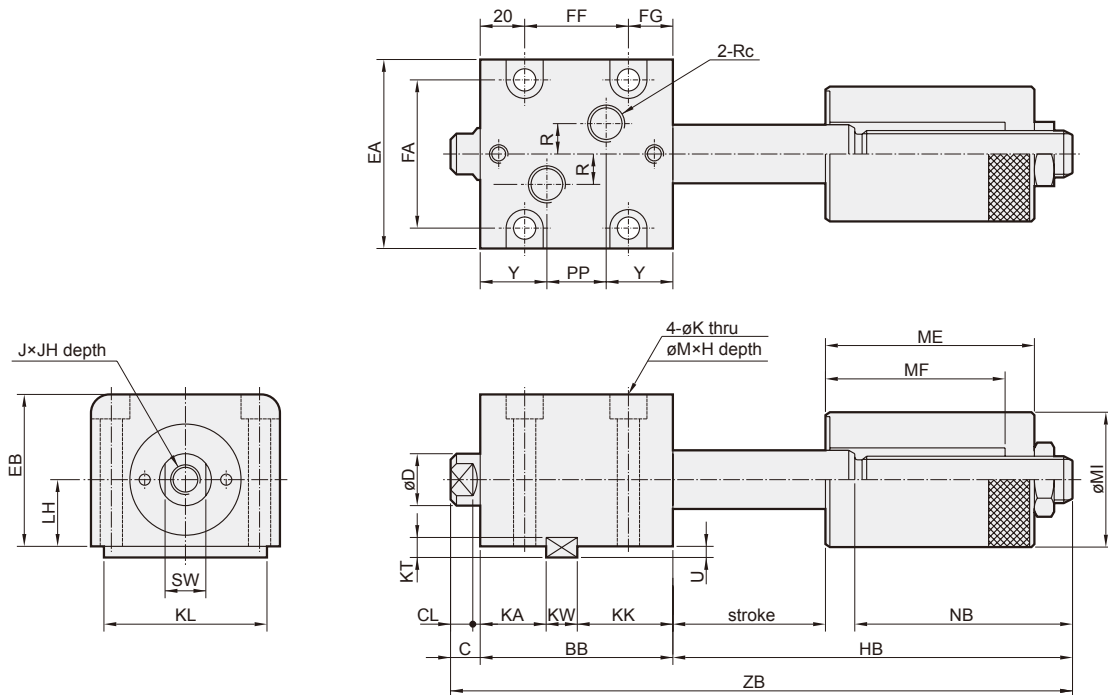


COMPACT HYDRAULIC CYLINDER

mindman

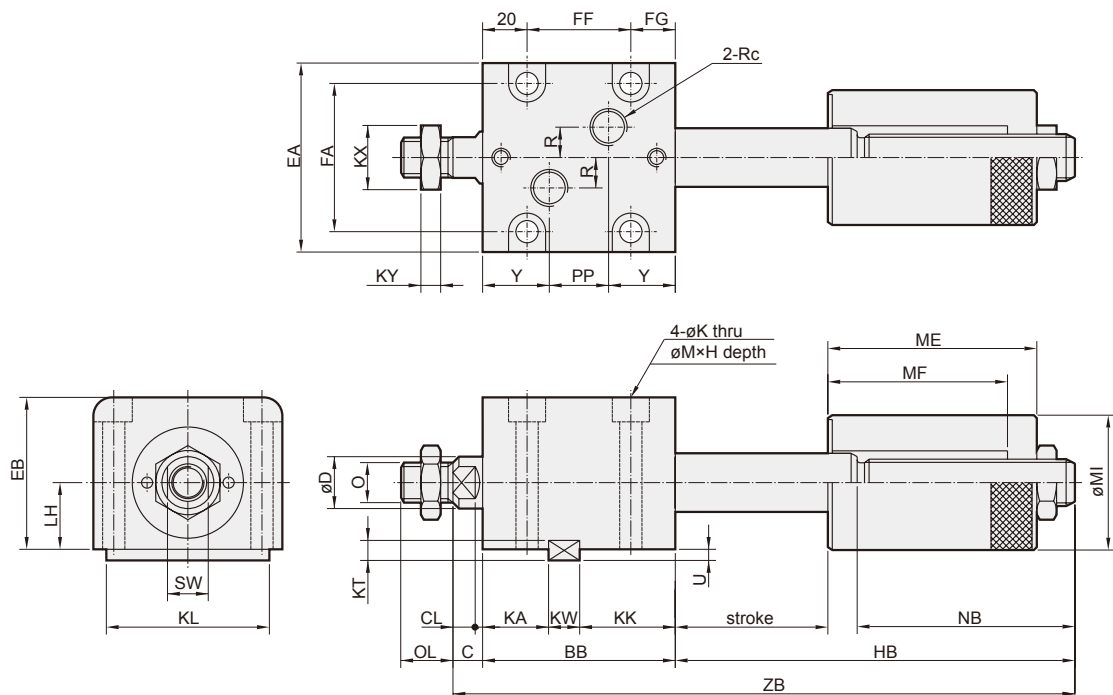
MHCQ-DB

Adjustable stroke 50 mm



MHCQ-ZDB

Adjustable stroke 50 mm



MHCQ-DB Dimensions – Adjustable stroke ø32~ø63



COMPACT HYDRAULIC CYLINDER

Mindman

Tube I.D.	Model	MHCQ-DB / MHCQ-ZDB									
		Stroke	5	10	15	20	25	30	35	40	45
ø32	ZB	178	183	198	203	218	223	238	243	258	263
	BB	79	79	89	89	99	99	109	109	119	119
	FF	42	42	52	52	62	62	72	72	82	82
	KK	39	39	49	49	59	59	69	69	79	79
	PP	23	23	33	33	43	43	53	53	63	63
	HB	89	94	99	104	109	114	119	124	129	134
ø40	ZB	188	193	208	213	228	233	248	253	268	273
	BB	80	80	90	90	100	100	110	110	120	120
	FF	42	42	52	52	62	62	72	72	82	82
	KK	40	40	50	50	60	60	70	70	80	80
	PP	24	24	34	34	44	44	54	54	64	64
	HB	98	103	108	113	118	123	128	133	138	143
ø50	ZB	196	201	216	221	236	241	256	261	276	281
	BB	85	85	95	95	105	105	115	115	125	125
	FF	45	45	55	55	65	65	75	75	85	85
	KK	42	42	52	52	62	62	72	72	82	82
	PP	26	26	36	36	46	46	56	56	66	66
	HB	100	105	110	115	120	125	130	135	140	145
ø63	ZB	213	218	233	238	253	258	273	278	293	298
	BB	92	92	102	102	112	112	122	122	132	132
	FF	52	52	62	62	72	72	82	82	92	92
	KK	45	45	55	55	65	65	75	75	85	85
	PP	30	30	40	40	50	50	60	60	70	70
	HB	108	113	118	123	128	133	138	143	148	153

Code Tube I.D.	C	CL	D	EA	EB	FA	FG	H	J	JH	K	KA	KL	KT	KW
ø32	10	7	20	70	56	56	17	9	M12×1.75	15	9	28	63	8	12
ø40	10	7	25	80	64	62	18	11	M16×2.0	20	11	28	70	8	12
ø50	11	8	30	94	74	74	20	13	M20×2.5	25	13	29	80	9	14
ø63	13	10	35	114	89	90	20	15	M27×3.0	35	15	31	100	10	16

Code Tube I.D.	KX	KY	LH	M	MI	ME	MF	NB	O	OL	Rc	R	SW	U	Y
ø32	24	8	25	14	45	71	61	74	M16×1.5	25	Rc1/4	10	17	4.5	28
ø40	32	11	29	18	55	79	61	83	M22×1.5	30	Rc1/4	10	22	4.5	28
ø50	35	14	34	20	60	78	62	84	M26×1.5	35	Rc1/4	10	27	5	29.5
ø63	41	13	42	22	75	88	64	90	M30×1.5	40	Rc3/8	10	32	5.5	31