

### How to Order ?

Series No	Cushion Type	Type No	Bore	X	Stroke	Adjustable stroke	Magnet No	Tail type	Mounting type	Thread type
IA: Stainless steel barrel	C: Air Cushion Blank: Rubber Cushion		8				Blank: No Magnet S: With Magnet	Blank: Swiveling tail U: Flat tail CM: Round tail	Blank: No LB FA SDB TC IJ YJ BJ ....	Blank: G P: PT T: NPT
			10	25	10					
			12	50	20					
			16	75	30					
			20	...	40					
		25		50						
					100					
		Blank: Basic type D: Double shaft type J: Double shaft and adjustable stroke type SA: Single action extend type SB: Single action return type								

### Order Example:

IA series, Double shaft and adjustable stroke type, air cushion, Bore 20mm, stroke 25mm, Adjustable stroke 20, with magnet, NO Mounting type, Round tail, PT thread.

ERP code is: IACJ20\*25-20-S-CM-P

Note: 1.If cylinder with several different mounting accessories, please use this sequential coding: LB/FA/SDB /IJ/YJ/BJ

2.IA Series,Bore 8mm and Bore 10mm,No round tail type is optional.

3.IAC Series,Φ16、Φ20、Φ25 is optional.

### Specifications

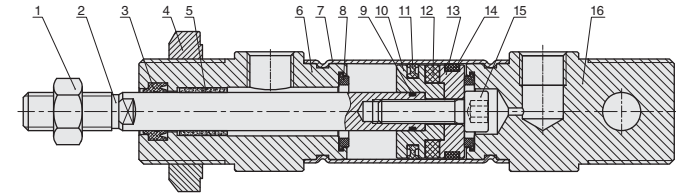
Bore size(mm)	8	10	12	16	20	25
Acting type	Double Acting/Single Acting					
Working medium	Clean Air(40 μ m filtration)					
Working pressure (MPa)	0.1-0.7(Double Acting) / 0.2-0.7(Single Acting)				0.1-1.0(Double Acting) / 0.2-1.0(Single Acting)	
Guaranteed pressure (MPa)	1.5					
Working temperature (°C)	-20-80(Dry air)					
Speed range (mm/s)	50-800					
Cushion type	Bumper			Bumper(Standard) / Air cushion(Adjustable cushion)		
Barrel material	Stainless steel					
Mounting type	LB FA SDB					
Port size	M5 x0.8				G1/8	

① NPT、PT port size is optional.

### Stroke

Bore (mm)	Standard stroke (mm)	Max. stroke (mm)	
Double Acting	8	25 50 75 100 125 150	200
	10	25 50 75 100 125 150 175 200	200
	12	25 50 75 100 125 150 175 200 225 250	500
	16	25 50 75 100 125 150 175 200 225 250 300 350 400 500	500
	20-25	25 50 75 100 125 150 175 200 225 250 300 350 400 500	800
Single Acting	8	10 15 20 25 30 40 50	50
	10	10 15 20 25 30 40 50	50
	12	10 15 20 25 30 40 50	50
	16	10 15 20 25 30 40 50 60 75 80 100	100
	20-25	10 15 20 25 30 40 50 60 75 80 100 125 150	150

### Internal Structure

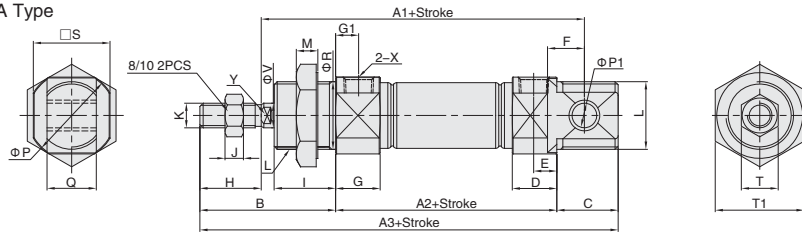


NO.	Part name	Material
1	Nut	Carbon steel
2	Piston rod	IA8、10:SUS304hard chrome carbon steel / IA12-IA25:S45C hard chrome carbon steel
3	Piston rod seal	NBR
4	Nut	Carbon steel
5	Self lubricating bearing	Bronze powder
6	Head cover	Aluminum alloy
7	Barrel	Stainless Steel
8	Anti-bump cushion	TPU
9	O-ring	NBR
10	Piston	IA8、10: Stainless steel / IA12-IA25: Aluminum alloy
11	Piston seal	NBR
12	Magnet	Plastic
13	Magnet base	IA8、10: Stainless steel / IA12-IA25: Aluminum alloy
14	Wear ring	PTFE
15	Hexagon screw	Carbon steel
16	Rear cover	Aluminum alloy

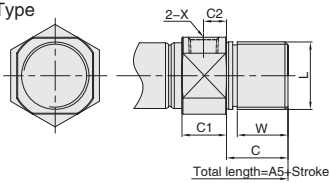
## Main dimensions

 IA  $\Phi 8-\Phi 25$ 

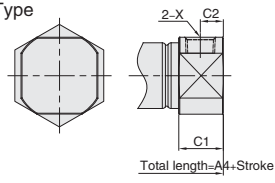
## CA Type



## CM Type



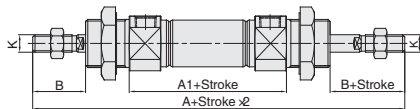
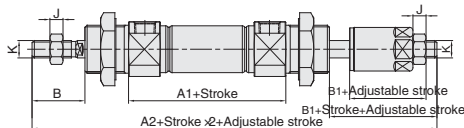
## U Type



Bore/Sign	A1	A2	A3	A4	A5	B	C	C1	C2	D	E	F	G	G1	H	I	J	K	L	M	P	P1	Q	R	S
8	64	46	86	74	-	28	12	9.5	5	9.5	5.2	6	11.5	7	12	12	3	M4X0.7	M12X1.25	7	17	4	8	12	15
10	64	46	86	74	-	28	12	9.5	5	9.5	5.2	6	11.5	7	12	12	3	M4X0.7	M12X1.25	7	17	4	8	12	15
12	75	50	105	88	105	38	17	10	5	10	5	9	12	7	16	17	5	M6X1.0	M16X1.5	6	19.7	6	12	16	18.3
16	82	56	111	94	111	38	17	10.5	5.5	10.5	5.5	9	12.5	7	16	17	5	M6X1.0	M16X1.5	6	22	6	12	16	20
20	95	62	126	106	126	44	20	14.5	7.5	14.5	7.5	12	14.5	7.5	20	20	6	M8X1.25	M22X1.5	7	29	8	16	22	25
25	104	65	137	115	137	50	22	16	8	16	8	12	16	8	22	22	6	M10X1.25	M22X1.5	7	33.5	8	16	22	30

Bore/Sign	T	T1	X	V	W	Y
8	7	17	M5X0.8	4	-	-
10	7	17	M5X0.8	4	-	-
12	10	22	M5X0.8	6	15	5
16	10	22	M5X0.8	6	15	5
20	12	29	1/8"	8	18	6
25	17	29	1/8"	10	20	8

Note: With magnet and without magnet, the dimensions are same.

 IAD  $\Phi 8-\Phi 25$ 

 IAJ  $\Phi 8-\Phi 25$ 


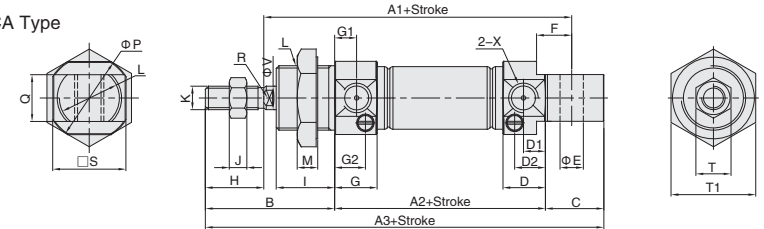
Bore/Sign	A	A1	A2	B	B1	J	K
8	104	48	103.5	15.5	14.7	3	M4X0.7
10	104	48	103.5	15.5	14.7	3	M4X0.7
12	128	52	128	21	21	5	M6X1.0
16	134	58	134	21	21	5	M6X1.0
20	150	62	151	24	25	6	M8X1.25
25	165	65	164	28	27	6	M10X1.25

Note: Unlabeled the same size as standard type.

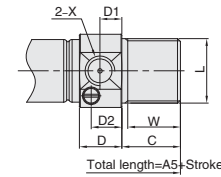
## Main dimensions

 IAC  $\Phi 16-\Phi 25$ 

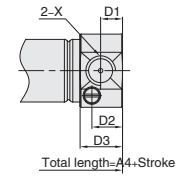
## CA Type



## CM Type



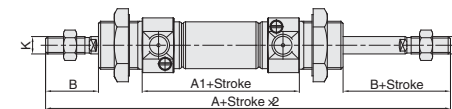
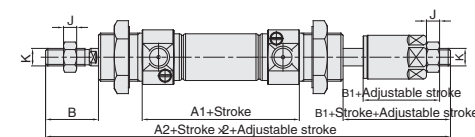
## U Type



Bore/Sign	A1	A2	A3	A4	A5	B	C	D	D1	D2	D3	E	F	G	G1	G2	H	I	J	K	L	M	P	Q	R
16	82	56	111	94	111	38	17	12	6	9	12	6	9	12.5	7	9.5	16	17	5	M6X1.0	M16X1.5	6	22	12	5
20	95	62	126	106	126	44	20	14.5	7.5	11	14.5	8	12	14.5	7.5	11	20	20	6	M8X1.25	M22X1.5	7	29	16	6
25	104	65	137	115	137	50	22	16	8	12.5	16	8	12	16	8	12.5	22	22	6	M10X1.25	M22X1.5	7	33.5	16	8

Bore/Sign	S	T	T1	X	V	W
16	20	10	22	M5X0.8	6	15
20	25	12	29	1/8"	8	18
25	30	17	29	1/8"	10	20

Note: With magnet and without magnet, the dimensions are same.

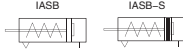
 IACD  $\Phi 16-\Phi 25$ 

 IACJ  $\Phi 16-\Phi 25$ 


Bore/Sign	A	A1	A2	B	B1	J	K
16	134	58	134	21	21	5	M6X1.0
20	150	62	151	24	25	6	M8X1.25
25	165	65	164	28	27	6	M10X1.25

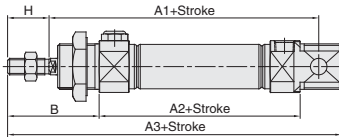
Note: Unlabeled the same size as standard type.

Main dimensions

IASB  $\Phi 12-\Phi 25$



CA Type



CM Type



U Type



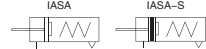
Total length=A5+Stroke

U Type

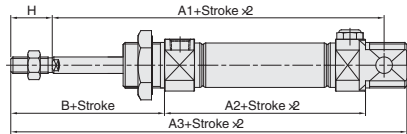


Total length=A4+Stroke

IASA  $\Phi 12-\Phi 25$



CA Type



CM Type



Total length=A5+Stroke x2

U Type



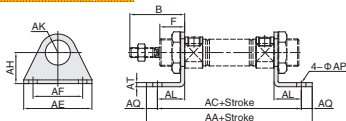
Total length=A4+Stroke x2

Bore\Sign	A1			A2			A3			A4			A5			B	H
	0-50	51-100	101-150	0-50	51-100	101-150	0-50	51-100	101-150	0-50	51-100	101-150	0-50	51-100	101-150		
12	100	-	-	75	-	-	130	-	-	113	-	-	130	-	-	38	16
16	107	132	-	81	106	-	136	161	-	119	144	-	136	161	-	38	16
20	120	145	170	87	112	137	151	176	201	131	156	181	151	176	201	44	20
25	129	154	179	90	115	140	162	187	212	140	165	190	162	187	212	50	22

Note: Unlabeled the same size as standard type.

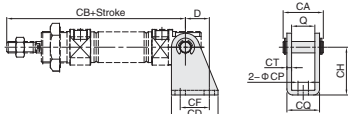
Accessory dimensions

LB Accessory



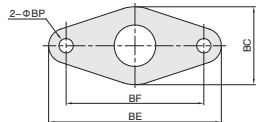
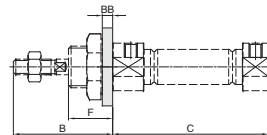
Model\Sign	AA	AC	AE	AF	AH	AK	AL	AP	AQ	AT	B	F
FJ-IA12LB	88	76	42	32	20.5	12.5	13	6	6	4	38	17
FJ-IA16LB	94	82	42	32	20.5	12.5	13	6	6	4	38	17
FJ-IA20LB	114	98	54	40	22.5	20	18	7	8	4	44	20
FJ-IA25LB	117	101	54	40	22.5	20	18	7	8	4	50	22

SDB Accessory



Model\Sign	D	Q	CA	CB	CD	CF	CH	CP	CQ	CT
FJ-IA12SDB	13	12.1	21.5	91	25	15	27	5.5	17.1	2.5
FJ-IA16SDB	13	12.1	21.5	98	25	15	27	5.5	17.1	2.5
FJ-IA20SDB	16	16.1	29	115	32	20	30	6.6	24.1	4
FJ-IA25SDB	16	16.1	29	126	32	20	30	6.6	24.1	4

FA Accessory



Model\Sign	B	C	BB	BC	BE	BF	F
FJ-IA12FA	38	50	4	30	53	40	17
FJ-IA16FA	38	56	4	30	53	40	17
FJ-IA20FA	44	62	5	40	66	50	20
FJ-IA25FA	50	65	5	40	66	50	22

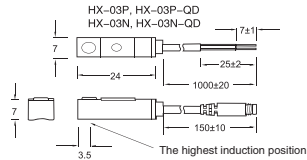
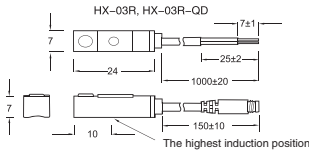


## How to Order?

HX	-	03	-	R	-	H	-	2M	-	QD8
Product code		Series No.			Special model			Wire length		Connection
					No.: Standard sensitive			No: Standard 1M		QD8: QD8 Male fitting
Switch type					B: NC type			1.5M: 1.5M		
R: Two wire reed switch					H: High sensitive type			2M: 2M		
N: NPT type					L: Low sensitive type			5M: 5M		
P: PNP type					X: No indicator type					

- Note: 1. Testing with standard magnet:  $\Phi 15.5 \times \Phi 8 \times 5$  ( Plastic magnet ) ;  
 2. Sine wave/X, Y, Z3 axial direction/ each axial direction three times/ each time 11ms;  
 3. complex amplitude 1.5mm/10Hz-55Hz sweep frequency, last one minute/ each time X, Y, Z axial direction for one hour;  
 4. 1-No/2-output short circuit protection/3=Power reverse connection protection/4=Surge absorption protection

## Dimensions

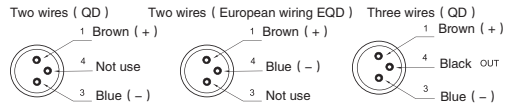


## HX-03 be fixed by PBK steel belt



For  $\Phi 6 - \Phi 63$  round air cylinder

## QD fitting wiring

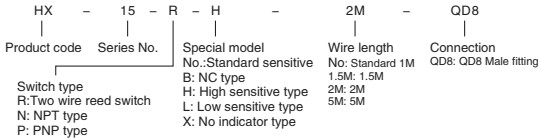


## Specification

Type	HX-03R	HX-03N	HX-03P
Connect Diagram			
Parameter			
Wiring method	2-Wire Type	3-Wire Type	
Switching logic	SPST Normally Open	Solid State Output, Normally Open	
Sensor type	Reed switch	NPN type ( Input )	PNP type ( Output )
Operating voltage	5 - 240V DC/AC	5 - 30V DC	
Max. switching current	100mA	200mA	
Contact rating	10W	6W	
Current consumption	None	20mA max @ 24V	
Voltage drop	3.0V	0.5V max @ 200mA	
Leakage current	None	0.01mA	
Indicator	Red LED	Red LED	Green LED
Max. exchange frequency	200Hz	1000Hz	
Temperature range		-10 - 70°C	
Shock	30G	50G	
Vibration		9G	
Enclosure classification		IEC 529 IP67 (NEMA 6)	
Protection circuit	None	Power reverse connection protection	Surge absorption protection
Cable	2.8Φ, 2C, Gray color, oil resistance PVC		2.8Φ, 3C, Black color, oil resistance PVC

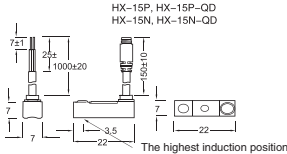
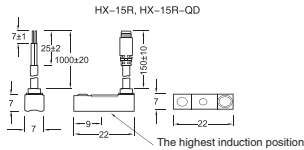


## How to Order?



- Note: 1. Testing with standard magnet:  $\Phi 15.5 \times \Phi 8 \times 5$  (Plastic magnet);  
 2. Sine wave/X, Y, Z3 axial direction/ each axial direction three times/ each time 11ms;  
 3. complex amplitude 1.5mm/10Hz-55Hz sweep frequency, last one minute/ each time X, Y, Z axial direction for one hour;  
 4. 1=No/2=output short circuit protection/3=Power reverse connection protection/4=Surge absorption protection

## Dimensions

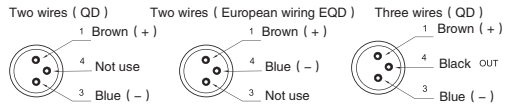


HX-15 be fixed by PBK steel belt



For  $\Phi 6-\Phi 63$  round air cylinder

## QD fitting wiring



## Specification

Type	HX-15R	HX-15N	HX-15P
Connect Diagram			
Parameter			
Wiring method	2-Wire Type	3-Wire Type	
Switching logic	SPST Normally Open	Solid State Output, Normally Open	
Sensor type	Reed switch	NPN type ( Input )	PNP type ( Output )
Operating voltage	5 - 240V DC/AC	5 - 30V DC	
Max. switching current	100 mA max.	200 mA max.	
Contact rating	10 W max.	6 W max.	
Current consumption	None	20mA @ 24V DC max	
Voltage drop	3.0V max.	0.5V @ 200mA max	
Leakage current	None	0.01mA max.	
Indicator	Green LED	Red LED	
Max. exchange frequency	200Hz	1000Hz	
Temperature range		-10 - 70°C	
Shock	30G	50G	
Vibration		9G	
Enclosure classification		IEC 529 IP67 (NEMA 6)	
Protection circuit	None	Power reverse connection protection	Surge absorption protection
Cable	2.8Φ, 2C, Gray color, oil resistance PVC	2.8Φ, 3C, Black color, oil resistance PVC	