





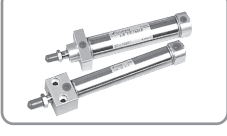




ISO6432 Round Cylinders

SERIES Products Content

1.Round cylinder in accordance with ISO-6432 international standard.

	IUA Double acting cylinders	∅ 16~∅ 40 P.180
	IUB Single acting cylinders	∅ 16~∅ 40 P.186
	IUC Double rods cylinders	∅ 16~∅ 40 P.189
	IUD Double rods with forward alignment cylinders	∅ 16~∅ 40 P.190
	IUT Brake cylinders	∅ 16~∅ 25 P.192
	IUK Air/ Oil acting cylinders	∅ 16~∅ 40 P.194
	IUBK Square head cylinders	∅ 20~∅ 40 P.195

Feature


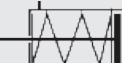




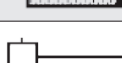
bore (mm)	16, 20, 25, 32, 40	
fluid	filter compressed air (need lubricating oil/ ISO-VG32)	
working pressure (kgf/cm ²)	0.5~9.9	
temperature (°C)	0~+60	
piston speed (m/s)	50~750	
cushion length (mm)	∅16	15
	∅20, ∅25	17
	∅32	18
	∅40	20

Theoretical output table

units:kg

bore (mm)	rod (mm)	action	pressure area (cm ²)	working pressure(kgf/cm ²)					
				3	4	5	6	7	8
16	6	push	2	6	8	10	12	14	16
		pull	1.72	5.2	6.9	8.6	10.3	12	13.8
20	8	push	3.14	9.4	12.6	15.7	18.8	22	25.1
		pull	2.64	7.9	10.6	13.2	15.8	18.5	21.1
25	10	push	4.9	14.7	19.6	24.5	29.4	34.3	39.2
		pull	4.11	12.3	16.4	20.6	24.7	28.8	32.9
32	12	push	8.04	24.1	32.2	40.2	48.2	56.3	64.3
		pull	6.91	20.7	27.6	34.6	41.5	48.4	55.3
40	16	push	12.56	37.7	50.2	62.8	75.4	87.9	100.5
		pull	10.56	31.7	42.2	52.8	63.4	73.9	84.5

Type

Type	Mark	Graphics	Sensor	Heat resist.	Dust cover	Bore (mm)				
						16	20	25	32	40
Double acting	IU-A		IU-AG	IU-AJ	IU-AH	●	●	●	●	●
Single acting	IU-B		IU-BG	IU-CJ	IU-CH	●	●	●	●	●
Double rods	IU-C		IU-CG	IU-CJ	IU-CH	●	●	●	●	●
Double rods with forward alignment	IU-D		IU-DG	IU-DJ	IU-DH	●	●	●	●	●
Brake	IU-T		IU-TG	IU-TJ	IU-TH	●	●	●	—	—
Air/oil acting	IU-K		IU-KG	IU-KJ	IU-KH	●	●	●	●	●
Square head	IU-BK		IU-BKG	IU-BKJ	IU-BKH	—	●	●	●	●

Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

Parts Weight

units:g

bore \ symbol	FA/FB	LB	Y	P
16	43	39	20	4
20	71	75	39	9
25	71	75	68	15
32	77	76	68	15
40	108	126	122	27

⚠ Y connector include pins and latches

Example:

IUA-FA-20-100ST(no cushion)

weight (ST=0) ----- 153.3g

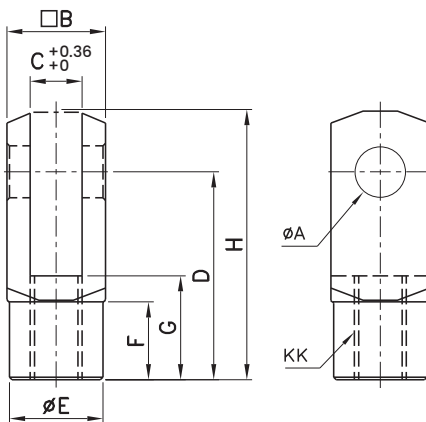
increase stroke weight -- $(100/50) \times 37.35 = 74.7g$

part weight ----- 71g

■ Total weight = $153.3 + 74.7 + 71 = 299g$

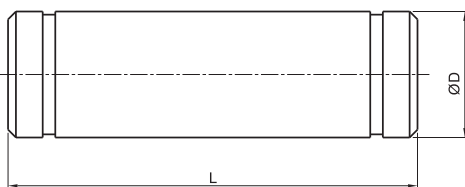
Parts Dimensions

● Y connector



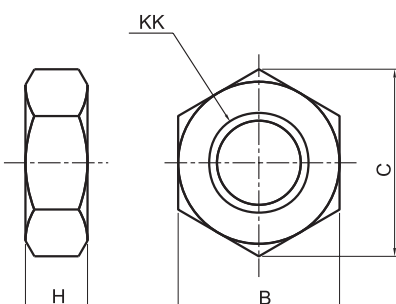
bore \ symbol	A	B	C	D	E	F	G	H	KK
16	6	13	6	24	10	7	12	31	M6x1.0
20	8	16	8	32	14	11	16	42	M8x1.25
25,32	10	19	10	40	18	15	20	52	M10x1.25
40	12	25	12	48	20	19	24	62	M14x1.5

● PIN



bore \ symbol	D	L
16	6	18
20	8	22
25.32	10	25
40	12	31

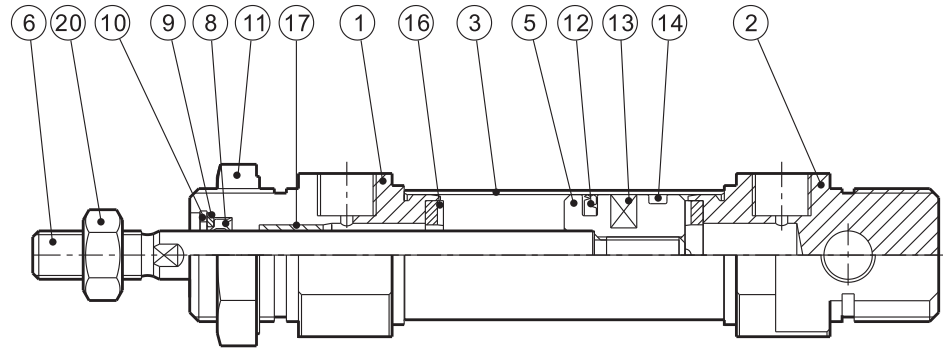
● rod nut



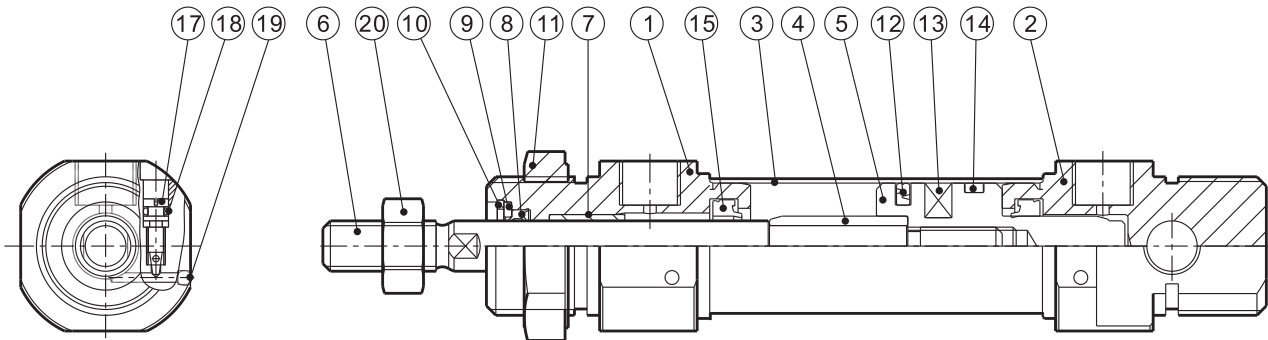
bore \ symbol	KK	B	C	H
16	M5X0.8	8	9.2	4
20	M8X1.25	13	15	6.5
25.32	M10X1.25	17	19.6	6
40	M12X1.25	19	21.9	7

Internal structure and parts name

● no cushion



● cushion



item	part name	qty	item	part name	qty
①	rod cover	1	⑪	rod cover cap	1
②	head cover	1	⑫	piston seal	1
③	tube	1	⑬	magnet	1
④	front cushion	1	⑭	piston wear ring	1
⑤	piston	1	⑮	cushion seal	2
⑥	rod	1	⑯	cushion gasket	2
⑦	self-lubricating rod	1	⑰	cushion screw	2
⑧	rod cover seal	1	⑱	cushion screw O-ring	2
⑨	rod seal gasket	1	⑲	steel ball	2
⑩	rod seal buckle	1	⑳	rod cap	1

Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

Weight

units:g

bore	16		20		25		32		40	
	X	/	X	/	X	/	X	/	X	/
SD type, stroke ST = 0	85.5	93.3	153.3	158.5	205.7	212.7	274.7	281.6	558.3	575.1
add weight for every 50mm increase in stroke	25.3	25.3	37.35	37.35	52.65	52.65	76.25	76.25	118.35	118.35

/ =with cushion
X =no cushion

Parts' Group Weight

units:g

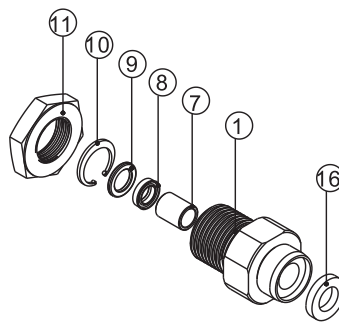
bore		16		20		25		32		40	
part's group name		X	/	X	/	X	/	X	/	X	/
rod cover grp	★ with seal	37.7	36.6	60.2	61.1	63.4	66.6	80.5	80.4	162.1	161.1
head cover grp		17.9	17	34.5	33.6	44.1	40.6	78.9	71.8	151.7	137.8
piston grp		21	30.8	13.6	18.6	21.7	29.3	28.6	43.1	57.9	88.5

/ =with cushion
X =no cushion

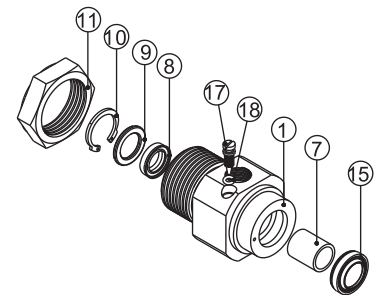
Rod Cover Grp

item	part name	qty
①	rod cover	1
⑦	self-lubricating rod	1
⑧	rod cover seal	1
⑨	rod seal gasket	1
⑩	rod seal buckle	1
⑪	rod cover cap	1
⑮	cushion seal	1
⑯	cushion gasket	1
⑰	cushion screw	1
⑱	cushion screw O-ring	1

● gasket



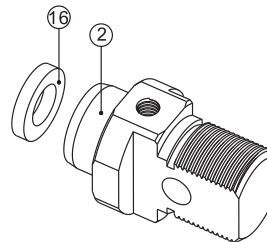
● air



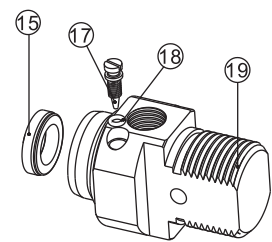
Head Cover Grp

item	part name	qty
②	head cover	1
⑮	cushion seal	1
⑯	cushion gasket	1
⑰	cushion screw	1
⑱	cushion screw O-ring	1

● gasket



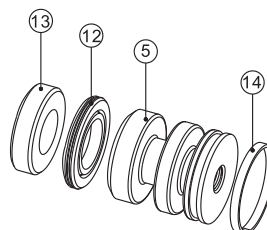
● air



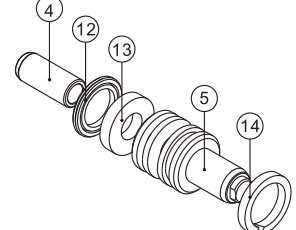
Piston Grp

item	part name	qty
④	front cushion	1
⑤	piston	1
⑫	piston seal	1
⑬	magnet	1
⑭	piston wear ring	1

● gasket



● air



IUA Double Acting Round Cylinders



1. ISO specification cylinder diameter only includes 8, 10, 12, 16, 20, 25
2. The external size of bore 32 and 40 is compatible with the SMC product CM2
3. The cylinder can be equipped with an induction magnet and a magnetic sensor

Standard Stroke

bore (mm)		stroke (mm)
cushion	16	25, 50, 75, 100, 125, 150, 200, 250, 300
	20, 25, 32, 40	25, 50, 75, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500
no cushion	16	25, 50, 75, 100, 125, 150, 200, 250, 300
	20, 25, 32, 40	25, 50, 75, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500

Order Indication

IUA		SD	20	100ST					T × n
series	performance	installation type	bore	stroke	pipng threads	cushion	connector	end connectors	magnetic sensor
double acting round cylinders	blank: indicates standard G: sensor H: shaft with dust cover J: heat/ acid & alkali resistance note: 1. usual working temp. is 0°C~+60°C 2. heat resist. seal working temp. is -10~+120°C	SD: basic CV: flat head cover FA: front flange FB: rear flange LB: end flange	16:16mm 20:20mm 25:25mm 32:32mm 40:40mm	refer to standard stroke	blank : G (basic) N : NPT RC: RC	blank: gasket front & back B: both cover with cushion R: rod cover with cushion H: head cover with cushion ▲ note: only for bore Ø16~Ø40	CABK: standard with connector	Y : Y connector PHS: fish eye KGT: floating joint	JFS01 & JFS03 T: 2 outgoing lines, standard line is 2 m P:PNP 3 outgoing lines, standard line is 2 m N:NPN 3 outgoing lines, standard line is 2 m n: qty *The order with G mark but no T x n mark indicates that only induction magnet is attached without magnetic sensor

▲ blank = indicates standard, no need to specify when order

Air Preparation (FRL)

Pneumatic Valves







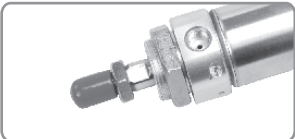






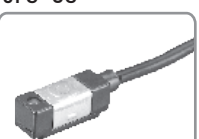
Pneumatic Cylinders

Pneumatic Connectors

Sensors

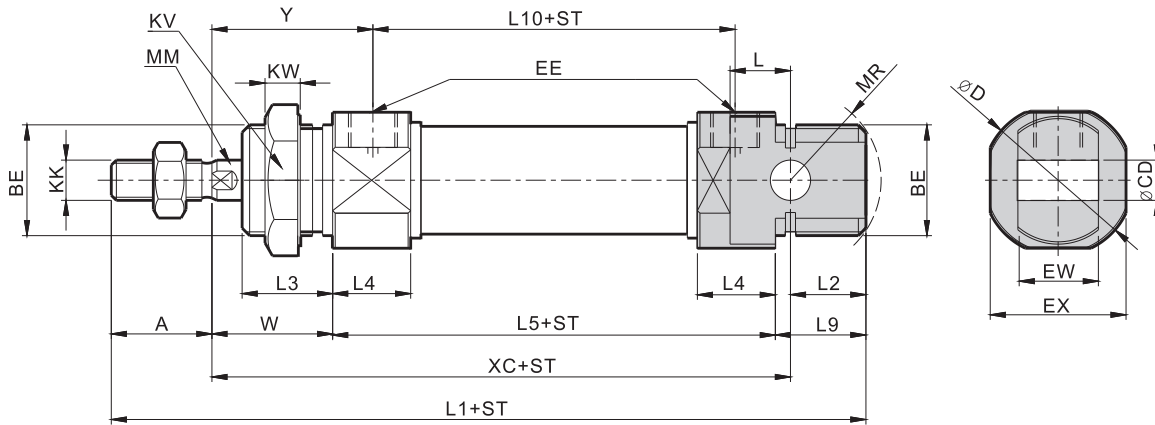
Pneumatic Accessories

Order Indication

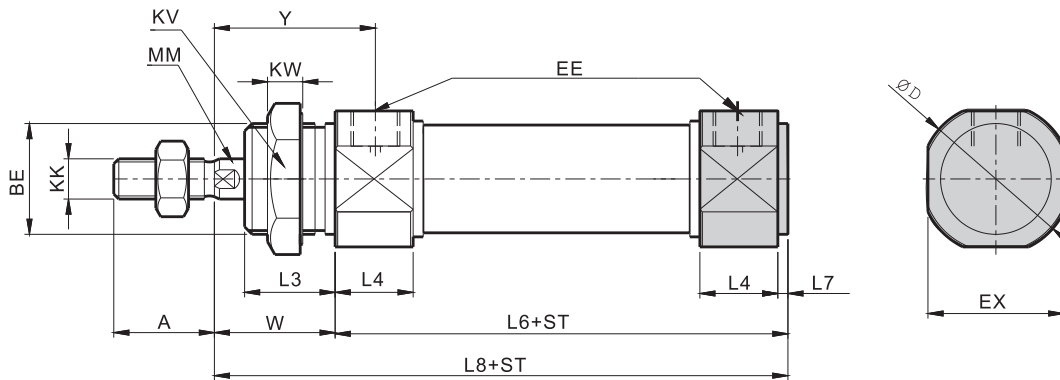
performance	<p>G: sensor</p> 	<p>H: shaft with dust cover</p> 		
installation type	<p>CA: basic</p> 	<p>CV: flat head cover</p> 	<p>FA/FB: front/rear flange</p> 	<p>LB: end flange</p> 
cushion type	 <p>Please adjust the cushion screw to the required cushion state by yourself.</p>			
connectors	<p>CA-BK: standard with connector</p> 			
end connectors	<p>Y : Y connector</p> 	<p>PIN: pin</p> 	<p>KGT: floating joint</p> 	<p>PHS: fish eye</p> 
magnetic sensor	<p>JFS-01</p>  <p>bore: Ø20~Ø40</p>	<p>JFS-03</p>  <p>bore: Ø16</p>		

External Dimensions

● IUA-CA basic



● IUA-CV flat head cover



symbol bore	MM	KK	A	BE	W	EE	XC	EW	CD	L	MR	Y
16	6	M6x1.0	16	M16x1.5	22	M5X0.8	82	12	6	9	16	27.5
20	8	M8x1.25	20	M22x1.5	24	1/8	95	16	8	12	18	32
25	10	M10x1.25	22	M22x1.5	28	1/8	104	16	8	12	18	36
32	12	M10x1.25	22	M26x1.5	23	1/8	102	20	10	14.5	20	31
40	16	M14x1.5	24	M32x2.0	26	1/4	129	20	10	14.5	20	37

symbol bore	D	EX	KV	KW	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
16	24	22	24	6	111	13	17	10.5	56	58	2	80	17	45
20	30	27	26	7	130	15	18	15.5	68	70.5	2.5	94.5	18	52
25	30	27	26	7	141	15	22	15.5	69	71.5	2.5	99.5	22	53
32	37	34	32	8	136	12	13	15	64	66.5	2.5	89.5	27	48
40	46	42.5	38	10	165	12	16	21.5	88	91	3	117	27	66

Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

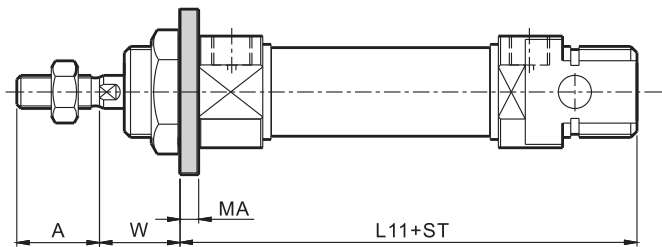
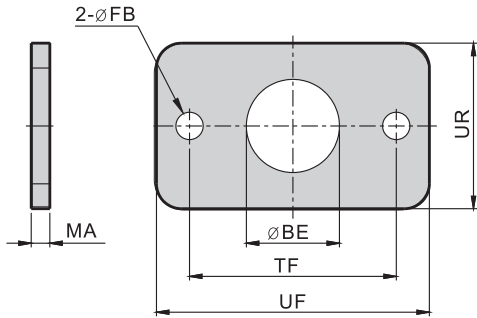
Pneumatic Connectors

Sensors

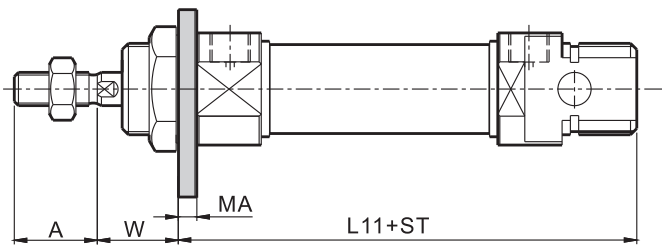
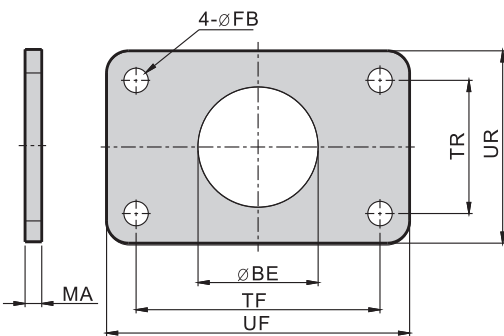
Pneumatic Accessories

External Dimensions

- IUA-FA front flange
- bore: $\varnothing 16 \sim \varnothing 32$



- bore: $\varnothing 40$

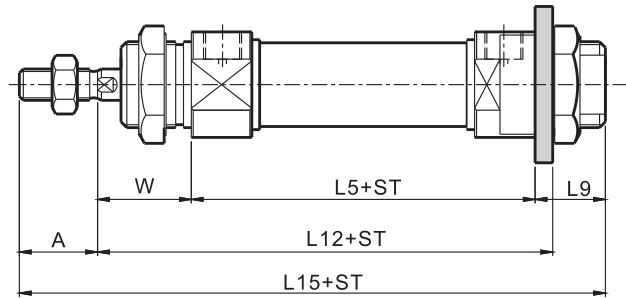
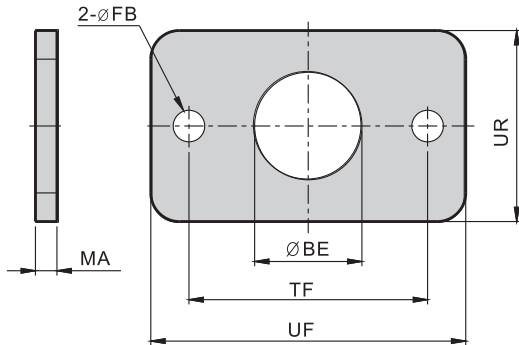


bore / symbol	A	W	MA	BE	TF	UF	FB	UR	TR	L11
16	16	17.5	4.5	16.5	40	53	5.5	30	-	77.5
20	20	19.5	4.5	22.5	50	66	6.6	40	-	90.5
25	22	23.5	4.5	22.5	50	66	6.6	40	-	95.5
32	22	18.5	4.5	26.5	60	75	6.6	40	-	95.5
40	24	21.5	4.5	32.5	66	82	6.6	52	36	119.5

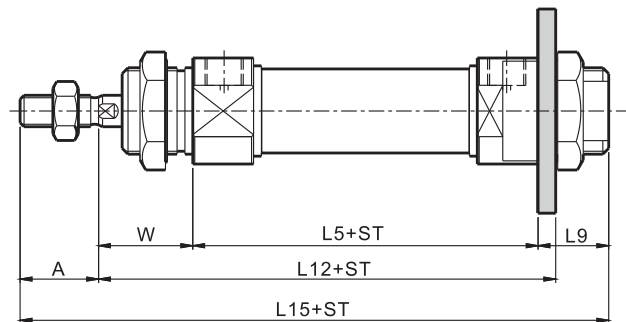
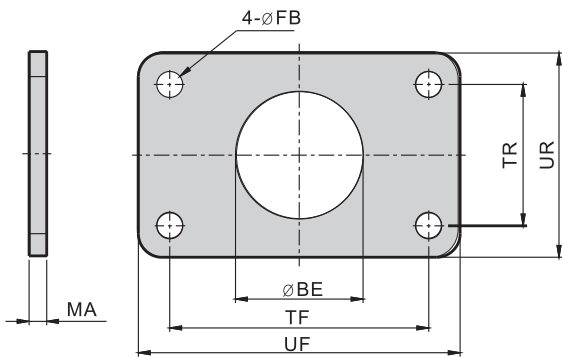
External Dimensions

- IUA-FB rear flange

- bore: $\varnothing 16 \sim \varnothing 32$



- bore: $\varnothing 40$



bore \ symbol	W	MA	BE	TF	UF	UR	TR	A	FB	L5	L9	L12	L15
16	22	4.5	16.5	40	53	30	-	16	5.5	56	17	82.5	111
20	24	4.5	22.5	50	66	40	-	20	6.6	68	18	96.5	130
25	28	4.5	22.5	50	66	40	-	22	6.6	69	22	101.5	141
32	23	4.5	26.5	60	75	40	-	22	6.6	64	27	91.5	136
40	26	4.5	32.5	66	82	52	36	24	6.6	88	27	118.5	165

Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

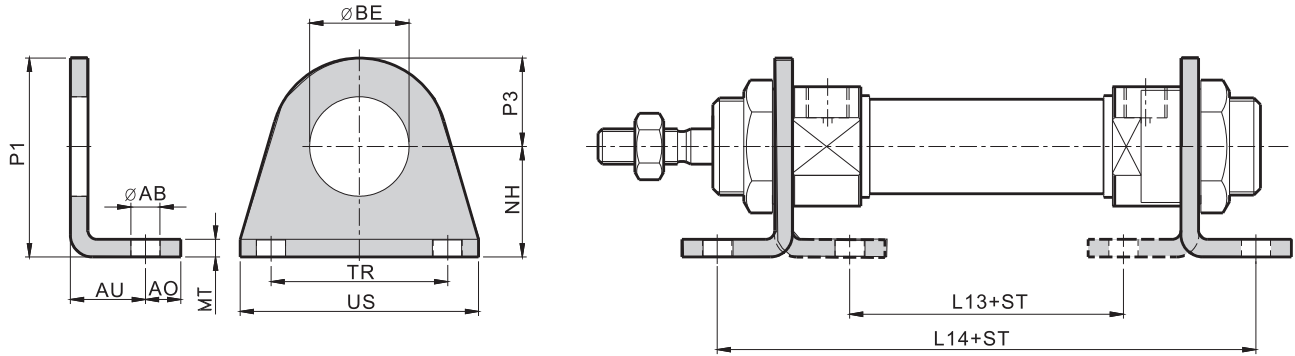
Pneumatic Connectors

Sensors

Pneumatic Accessories

External Dimensions

● IUA-LB end flange



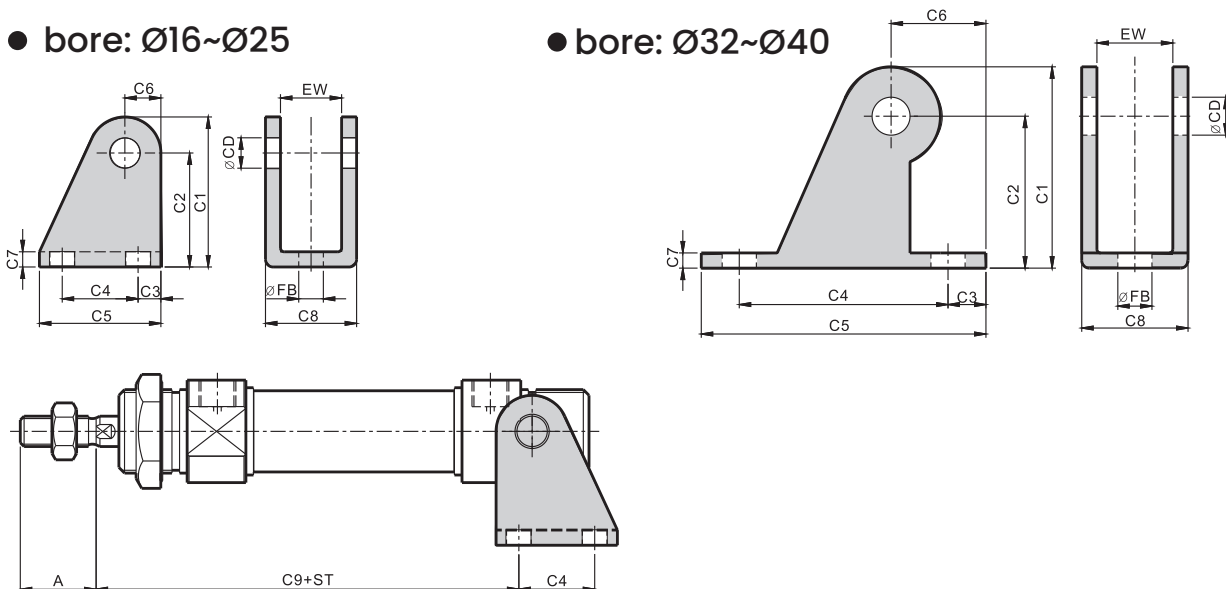
symbol bore	NH	P1	P3	BE	TR	US	MT	AB	AU	AO	L13	L14
16	20	33	13	16.5	32	42	4	5.5	14	6	36	84
20	25	45	20	22.5	40	54	4	6.6	17	8	42	102
25	25	45	20	22.5	40	54	4	6.6	17	8	43	103
32	28	47	19	26.5	40	56	4	6.6	20	8	32	104
40	30	54	24	32.5	55	76	4	6.6	23	10	50	134

External Dimensions

● IUA-CABK clevis with pin + snap ring

● bore: Ø16~Ø25

● bore: Ø32~Ø40





symbol bore	A	EW	FB	CD	C1	C2	C3	C4	C5	C6	C7	C8	C9
16	16	12.1	5.5	6	33.5	27	5	15	25	6.5	3	18	80.5
20	20	16.1	6.5	8	39.5	30	6	20	32	9.5	4	24	91.5
25	22	16.1	6.5	8	39.5	30	6	20	32	9.5	4	24	100.5
32	22	20.1	9	10	53	40	10	55	75	25	4	28	87
40	24	20.1	9	10	53	40	10	55	75	25	4	28	114

IUB Single Acting Round Cylinders



1. spring position (1) BF: push (spring is in front of the piston) (2) BR: in (spring is behind the piston)
2. powder copper silencer for escapement device
3. adopt a simple design to make it more convenient for assembly and maintenance

Order Indication

IUB		BF	SD	20	50ST					T x n
series	performance	spring position	installation type	bore	stroke	pipng threads	cushion	connector	end connectors	magnetic sensor
single acting round cylinders	blank: indicates standard G: sensor H: shaft with dust cover J: heat/ acid & alkali resistance note: 1. usual working temp. is 0°C~+60°C 2. heat resist. seal working temp. is -10~+120°C	BF: push (spring in front of the piston) BR: in (spring behind the piston)	SD: basic CV: flat head cover FA: front flange FB: rear flange LA: foot flange LB: end flange	16:16mm 20:20mm 25:25mm 32:32mm 40:40mm		blank : G (basic) N : NPT RC: RC	blank: gasket front & back B: both cover with cushion R: rod cover with cushion H: head cover with cushion ⚠ note: only for bore Ø16~Ø40	CABK: standard with connector	Y : Y connector PHS: fish eye KGT: floating joint	JFS01 & JFS03 T: 2 outgoing lines, standard line is 2 m P:PNP 3 outgoing lines, standard line is 2 m N:NPN 3 outgoing lines, standard line is 2 m n: qty *The order with G mark but no T x n mark indicates that only induction magnet is attached without magnetic sensor
										 

⚠ blank = indicates standard, no need to specify when order

Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

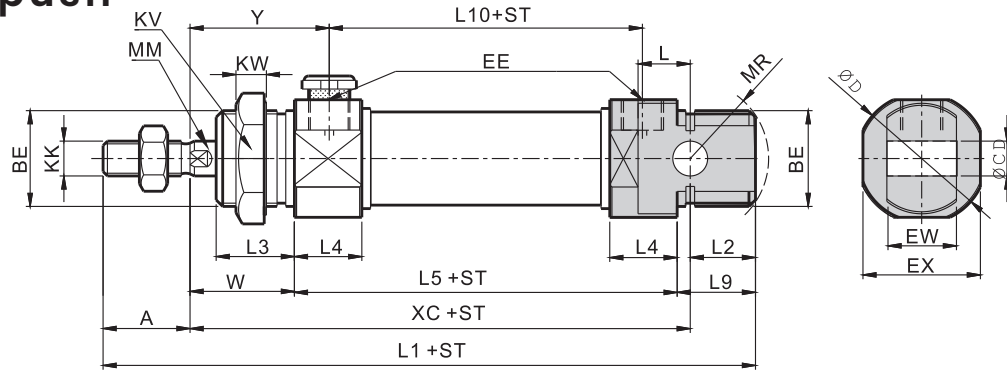
Pneumatic Connectors

Sensors

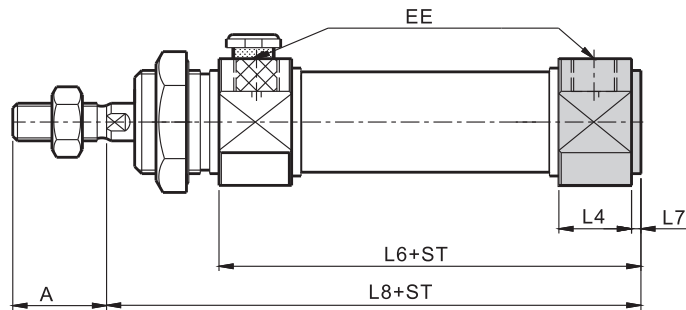
Pneumatic Accessories

External Dimensions

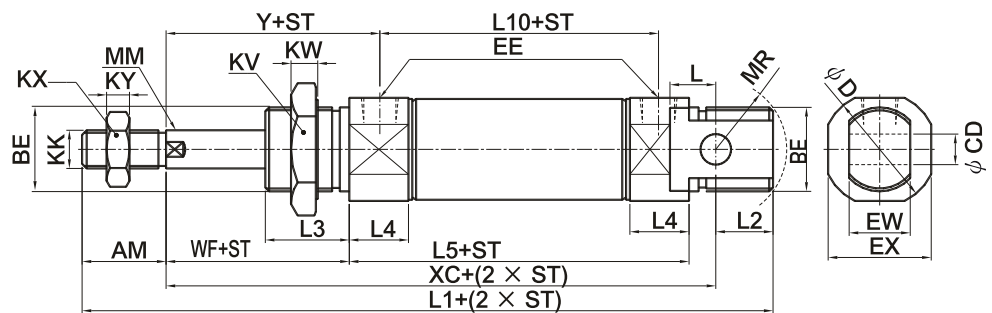
● BF-CA push



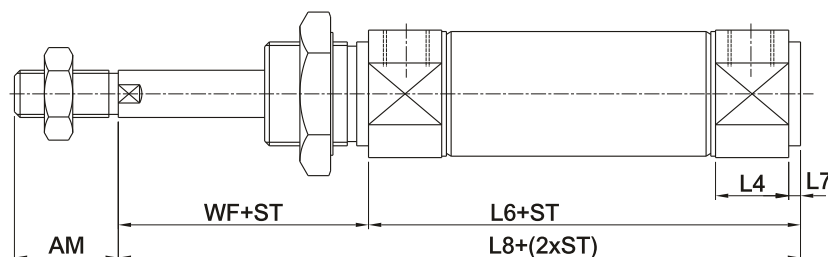
● BF-CV push



● BR-CA in



● BR-CV in



symbol bore	MM	KK	A	BE	W	EE	EW	CD	L	MR	Y	D	EX	KV	KW	L2	L3	L4	L7	L9
16	6	M6x1.0	16	M16x1.5	22	M5x0.8	12	6	9	16	27.5	24	22	24	6	13	17	10.5	2	17
20	8	M8x1.25	20	M22x1.5	24	1/8	16	8	12	18	32	30	27	26	7	15	18	15.5	2.5	18
25	10	M10x1.25	22	M22x1.5	28	1/8	16	8	12	18	36	30	27	26	7	15	22	15.5	2.5	22
32	12	M10x1.25	22	M26x1.5	23	1/8	20	10	14.5	20	31	37	34	32	8	12	13	15	2.5	27
40	16	M14x1.5	24	M32x1.5	26	1/4	20	10	14.5	20	37	46	42.5	38	10	12	16	21.5	3	27

symbol bore	L1						L5					
	0~25	26~50	51~75	76~100	101~125	126~150	0~25	26~50	51~75	76~100	101~125	126~150
16	136	161	186	211	236	261	81	106	131	156	181	206
20	155	180	205	230	255	280	93	118	143	168	193	218
25	166	191	216	241	266	291	94	119	144	169	194	219
32	161	186	211	236	261	286	89	114	139	164	189	214
40	190	215	240	265	290	315	113	138	163	188	213	238

symbol bore	L6						L8					
	0~25	26~50	51~75	76~100	101~125	126~150	0~25	26~50	51~75	76~100	101~125	126~150
16	83	108	133	158	183	208	105	130	155	180	205	230
20	95.5	120.5	145.5	170.5	195.5	220.5	119.5	144.5	169.5	194.5	219.5	244.5
25	96.5	121.5	146.5	171.5	196.5	221.5	124.5	149.5	174.5	199.5	224.5	249.5
32	91.5	116.5	141.5	166.5	191.5	216.5	114.5	139.5	164.5	189.5	214.5	239.5
40	116	141	166	191	216	241	142	167	192	217	242	267

symbol bore	L10						XC					
	0~25	26~50	51~75	76~100	101~125	126~150	0~25	26~50	51~75	76~100	101~125	126~150
16	70	95	120	145	170	195	107	132	157	182	207	232
20	77	102	127	152	177	202	120	145	170	195	220	245
25	78	103	128	153	178	203	129	154	179	204	229	254
32	73	98	123	148	173	198	127	152	177	202	227	252
40	91	116	141	166	191	216	154	179	204	229	254	279

note: For external dimensions of other accessories, please refer to P.180~P.185 IUA double-acting cylinder.

Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

IUC Double Rods Round Cylinders



1. ISO specification cylinder diameter only includes 8, 10, 12, 16, 20, 25
2. The external size of bore 32 and 40 is compatible with the SMC product CM2
3. The cylinder can be equipped with an induction magnet and a magnetic sensor

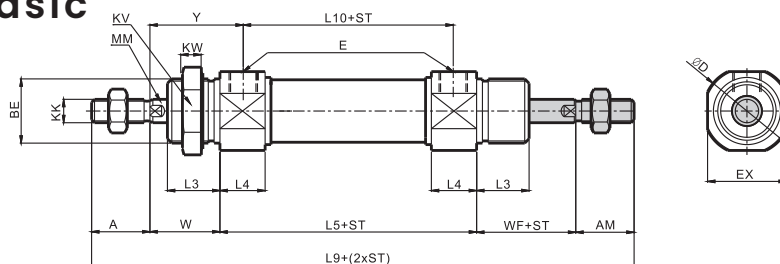
Order Indication

⚠ blank = indicates standard, no need to specify when order

IUC		SD	20	100ST				T x n
series	performance	installation type	bore	stroke	pipng threads	cushion	end connectors	magnetic sensor
double rod round cylinders	blank: indicates standard G: sensor H: shaft with dust cover J: heat/ acid & alkali resistance note: 1. usual working temp. is 0°C~+60°C 2. heat resist. seal working temp. is -10~+120°C	SD: basic FA: front flange FB: rear flange LB: end flange	16:16mm 20:20mm 25:25mm 32:32mm 40:40mm		blank : G (basic) N : NPT RC: RC	blank: gasket front & back B: both cover with cushion R: rod cover with cushion H: head cover with cushion ⚠ only for bore Ø16~Ø40	Y : Y connector PHS: fish eye KGT: floating joint	JFS01 & JFS03 T: 2 outgoing lines, standard line is 2 m P:PNP 3 outgoing lines, standard line is 2 m N:NPV 3 outgoing lines, standard line is 2 m n: qty *The order with G mark but no T x n mark indicates that only induction magnet is attached without magnetic sensor

External Dimensions

● IUC-SD basic



symbol bore	MM	KK	A	BE	W	EE	Y	D	EX	KV	KW	L3	L4	L5	L9	L10
16	6	M6x1.0	16	M16x1.5	22	M5X0.8	27.5	24	22	24	6	17	10.5	56	132	45
20	8	M8x1.25	20	M22x1.5	24	1/8	32	30	27	26	7	18	15.5	68	156	52
25	10	M10x1.25	22	M22x1.5	28	1/8	36	30	27	26	7	22	15.5	69	169	53
32	12	M10x1.25	22	M26x1.5	23	1/8	31	37	34	32	8	13	15	64	154	48
40	16	M14x1.5	24	M32x2.0	26	1/4	37	46	42.5	38	10	16	21.5	88	188	66

note: For external dimensions of other accessories, please refer to P.180~P.185 IUA double-acting cylinder.

IUD Double Rods Round Cylinders (with forward alignment)

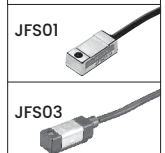


1. ISO specification cylinder diameter only includes 8, 10, 12, 16, 20, 25
2. The external size of bore 32 and 40 is compatible with the SMC product CM2
3. The cylinder can be equipped with an induction magnet and a magnetic sensor

Order Indication

IUD		SD	20	100ST					T × n
series	performance	installation type	bore	stroke	pipng threads	cushion	adjustable stroke	end connectors	magnetic sensor
double rods round cylinders (with forward alignment)	blank: indicates standard G: sensor H: shaft with dust cover J: heat/acid & alkali resistance note: 1. usual working temp. is 0°C~+60°C 2. heat resist. seal working temp. is -10~+120°C	SD: basic FA: front flange FB: rear flange LB: end flange	16:16mm 20:20mm 25:25mm 32:32mm 40:40mm		blank : G (basic) N : NPT RC: RC	blank: gasket front & back B: both cover with cushion R: rod cover with cushion H: head cover with cushion **only for bore Ø16~Ø40	25mm & 50mm	Y : Y connector PHS: fish eye KGT: floating joint	JFS01 & JFS03 T: 2 outgoing lines, standard line is 2 m P:PNP 3 outgoing lines, standard line is 2 m N:NPN 3 outgoing lines, standard line is 2 m n: qty ▲The order with G mark but no T x n mark indicates that only induction magnet is attached without magnetic sensor

▲ blank = indicates standard, no need to specify when order



Air Preparation (FRL)

Pneumatic Valves

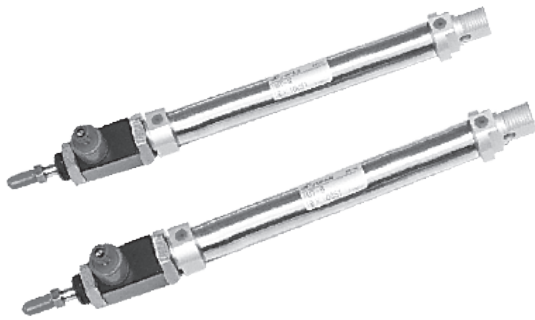
Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

IUT Brake Cylinders



1. When the power is out or the air pressure is interrupted, the brake head is stuck in the piston rod to prevent slipping.
2. Applicable cylinder diameter of this product: 16, 20, 25
3. The brake head and cylinder can be separated, which

Air Preparation (FRL)

Pneumatic Valves



Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

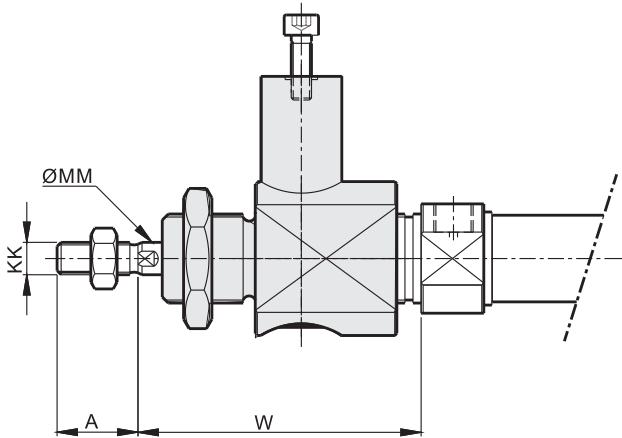
Order Indication

IUT		SD	20	100ST					T × n
series	performance	installation type	bore	stroke	pipng threads	cushion	connector	end connectors	magnetic sensor
brake cylinders	blank: indicates standard G: sensor H: shaft with dust cover J: heat/acid & alkali resistance note: 1. usual working temp. is 0°C~+60°C 2. heat resist. seal working temp. is -10~+120°C	SD: basic FA: front flange FB: rear flange LB: end flange	16:16mm 20:20mm 25:25mm		blank : G (basic) N : NPT RC: RC	blank: gasket front & back B: both cover with cushion R: rod cover with cushion H: head cover with cushion	CABK: standard with connector	Y : Y connector PHS: fish eye KGT: floating joint	JFS01 & JFS03 T: 2 outgoing lines, standard line is 2 m P:PNP 3 outgoing lines, standard line is 2 m N:NPN 3 outgoing lines, standard line is 2 m n: qty *The order with G mark but no T x n mark indicates that only induction magnet is attached without magnetic sensor
									 

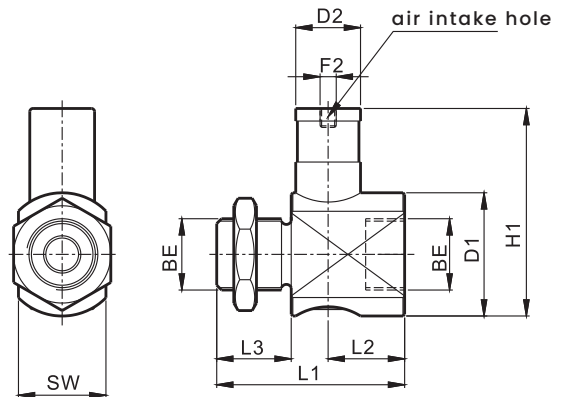
! blank = indicates standard, no need to specify when order

External Dimensions

● rod brake group



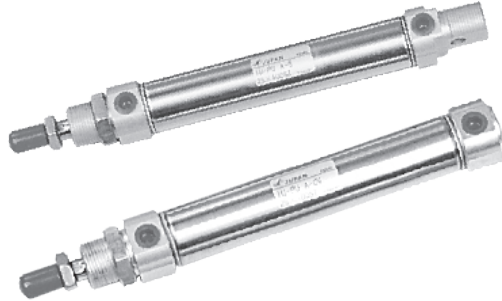
● brake head



symbol bore	MM	KK	A	W	BE	D1	H1	F2	D2	SW	L1	L2	L3
16	6	M6x1.0	16	55	M16x1.5	20	35	M5	16	20	42	21	12
20	8	M8x1.25	20	73	M22x1.5	38	64	M5	20	27	58	24	23
25	10	M10x1.25	22	77	M22x1.5	38	64	M5	20	27	58	24	23

note: For external dimensions of other accessories, please refer to P.180~P.185 IUA double-acting cylinder.

IUK Air/Oil Acting Round Cylinders



1. ISO specification cylinder diameter only includes 8, 10, 12, 16, 20, 25
2. The external size of bore 32 and 40 is compatible with the SMC product CM2
3. The cylinder can be equipped with an induction magnet and a magnetic sensor

Order Indication

IUK		SD	20	100ST					T × n
series	performance	installation type	bore	stroke	pipng threads	cushion	connector	end connectors	magnetic sensor
air/oil acting round cylinders	blank: indicates standard G: sensor H: shaft with dust cover J: heat/acid & alkali resistance note: 1. usual working temp. is 0°C~+60°C 2. heat resist. seal working temp. is -10~+120°C	SD: basic FA: front flange FB: rear flange LB: end flange	16:16mm 20:20mm 25:25mm 32:32mm 40:40mm		blank : G (basic) N : NPT RC: RC	blank: gasket front & back B: both cover with cushion R: rod cover with cushion H: head cover with cushion	CABK: standard with connector	Y : Y connector PHS: fish eye KGT: floating joint	JFS01 & JFS03 T: 2 outgoing lines, standard line is 2 m P:PNP 3 outgoing lines, standard line is 2 m N:NPN 3 outgoing lines, standard line is 2 m n: qty *The order with G mark but no T x n mark indicates that only induction magnet is attached without magnetic sensor

▲ blank = indicates standard, no need to specify when order

note: For external dimensions of other accessories, please refer to P.180~P.185 IUA double-acting cylinder.



Air Preparation (FRL)

Pneumatic Valves

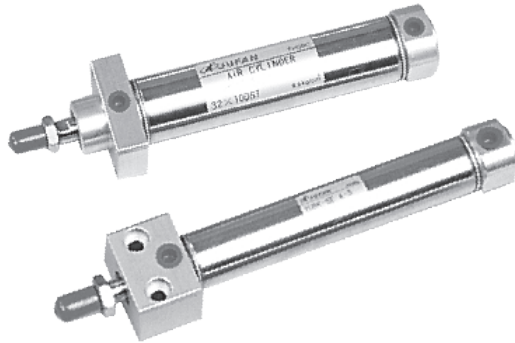
Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

IUBK Square Head Cylinders

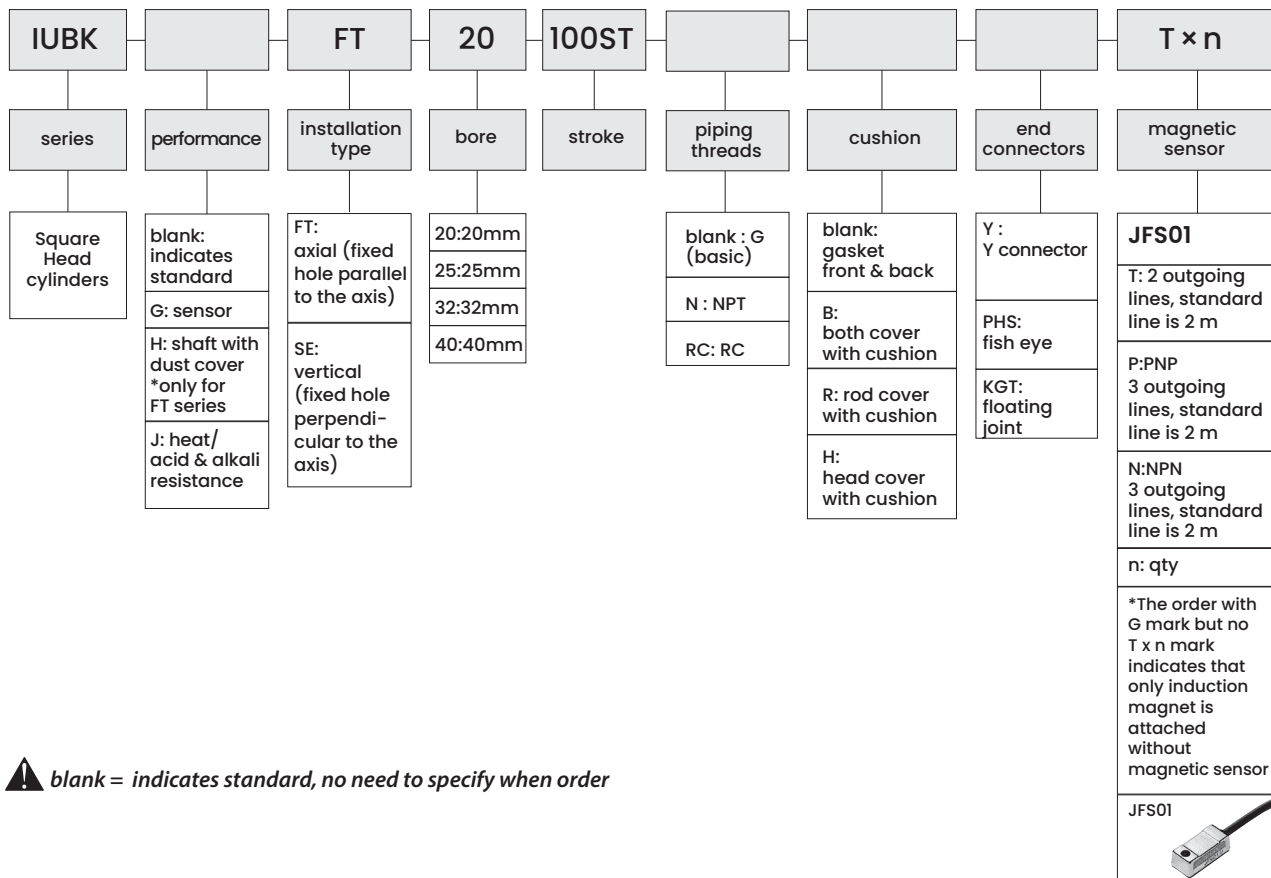


1. save space
2. enhance installation accuracy
3. shorten the installation time
4. no cushion type and cushion type
5. round tie-rod series and non-rotating tie-rod series

Standard Stroke

bore (mm)	stroke (mm)
20, 25, 32, 40	25, 50, 75, 100, 125, 150, 200, 250, 300

Order Indication



blank = indicates standard, no need to specify when order



Weight

/ =with cushion
X =no cushion

units:g

bore	SE type								FT type							
	20		25		32		40		20		25		32		40	
	X	/	X	/	X	/	X	/	X	/	X	/	X	/	X	/
SD type, stroke ST = 0	149.4	162.5	226.3	239.5	357.1	372.2	703.3	720.5	145.1	156.2	205	215	284.2	289.3	523.3	538.3
add weight for every 50mm increase in stroke	37.35	37.35	52.65	52.65	76.25	76.25	118.4	118.4	37.35	37.35	52.65	52.65	76.25	76.25	118.4	118.4

Parts' Group Weight

/ =with cushion
X =no cushion

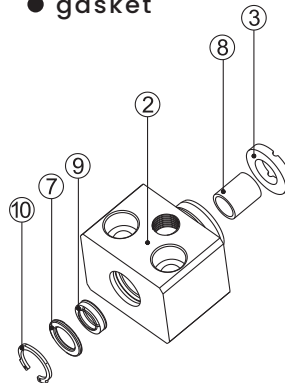
units:g

bore		20		25		32		40	
part's group name	★ with seal	X	/	X	/	X	/	X	/
rod cover grp		64	63	83	81	166	163	306	303
head cover grp		23	22.3	32	30	47	45	69	66
piston grp		13.6	18.6	21.7	29.3	28.6	43.1	57.9	88.5

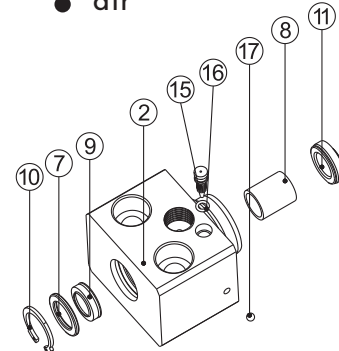
Rod Cover Grp

item	part name	qty
②	rod cover	1
③	cushion	1
⑦	rod seal gasket	1
⑧	self-lubricating rod	1
⑨	rod seal	1
⑩	rod cover buckle	1
⑪	cushion seal	1
⑮	cushion screw	1
⑯	cushion screw O-ring	1
⑰	steel ball	1

● gasket



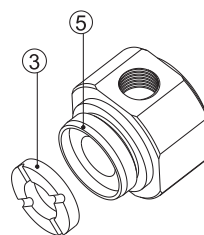
● air



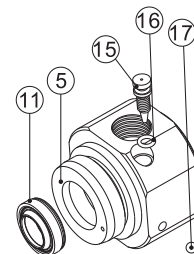
Head Cover Grp

item	part name	qty
③	cushion	1
⑤	head cover	1
⑪	cushion seal	1
⑮	cushion screw	1
⑯	cushion screw O-ring	1
⑰	steel ball	1

● gasket



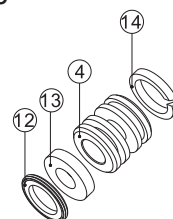
● air



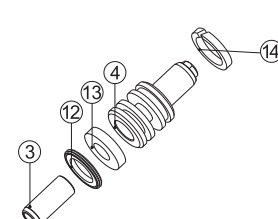
Piston Grp

item	part name	qty
③	cushion	1
④	piston	1
⑫	piston seal	1
⑬	magnet	1
⑭	piston wear ring	1

● gasket



● air



Air Preparation (FRL)

Pneumatic Valves

Pneumatic Cylinders

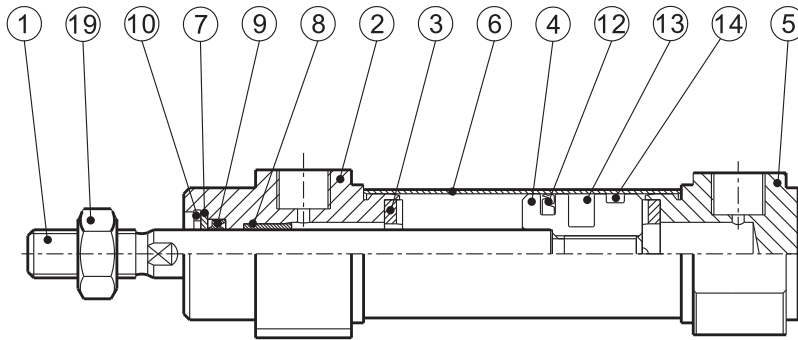
Pneumatic Connectors

Sensors

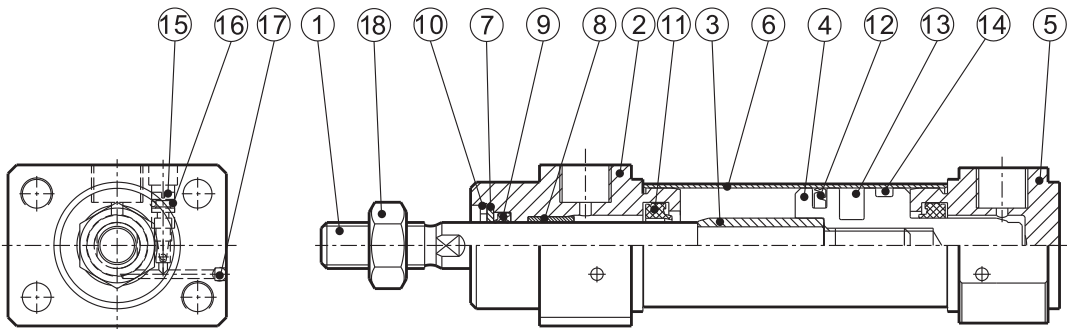
Pneumatic Accessories

Internal structure and parts name

● no cushion



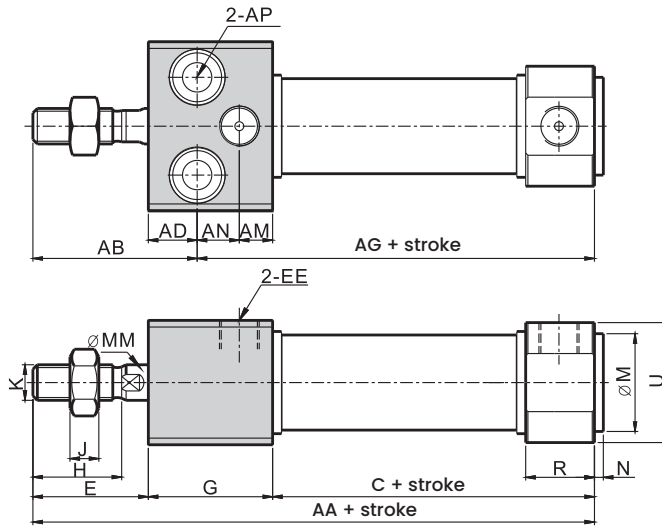
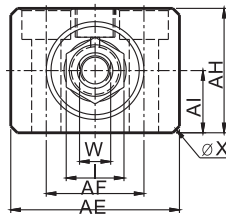
● cushion



item	part name	qty	item	part name	qty
①	rod	1	⑩	rod cover buckle	1
②	rod cover	1	⑪	cushion seal	2
③	cushion	1	⑫	piston seal	1
④	piston	1	⑬	magnet	1
⑤	head cover	1	⑭	wear ring	1
⑥	tube	1	⑮	cushion screw	2
⑦	rod seal gasket	1	⑯	cushion screw O-ring	2
⑧	self-lubricating rod	1	⑰	steel ball	2
⑨	rod seal	1	⑱	rod cap	1

External Dimensions

● SE (fixed vertical)



symbol bore	MM	K	H	E	AI	AH	AF	AE	AP	AB	AG	AD	AN
20	8	M8x1.25	20	26	14	28	22	38	∅6.6 hole, posthole ∅11 x depth 7	37	69.5	11	9.5
25	10	M10x1.25	22	28	15	30	26	42	∅6.6 hole, posthole ∅11 x depth 7	40	71.5	12	10.5
32	12	M10x1.25	22	32	18	36	34	54	∅9 hole, posthole ∅14 x depth 9	46	74	14	14
40	16	M14x1.5	24	34	22	44	46	68	∅11 hole, posthole ∅17.5 x depth 11	51	93	17	19

symbol bore	AM	AA	G	C	R	EX	W	I	J	M	N	EE	EE
20	7.5	106.5	28	52.5	15.5	27	7	13	6.5	22	2.5	1/8	27
25	7.5	111.5	30	53.5	15.5	27	9	17	6	22	2.5	1/8	27
32	8	120	36	52	15	34	10	17	6	26	2.5	1/8	34
40	8	144	44	66	21.5	42.5	14	19	8	32	3	1/4	46

Air Preparation (FRL)

Pneumatic Valves

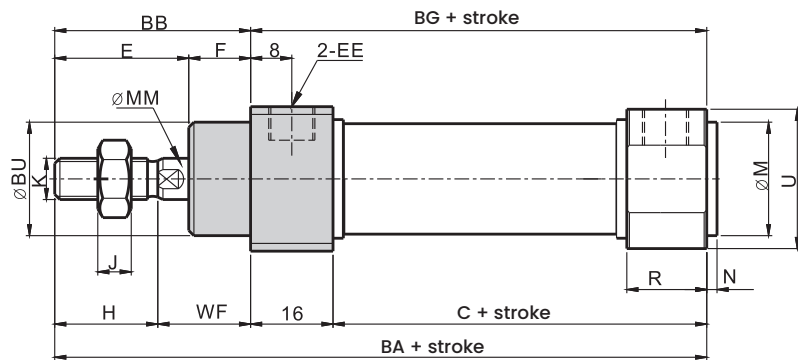
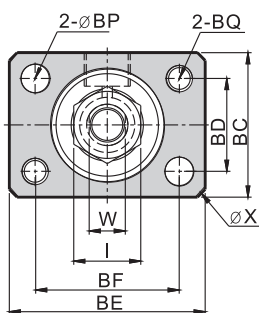
Pneumatic Cylinders

Pneumatic Connectors

Sensors

Pneumatic Accessories

● FT (fixed axial)



symbol bore	MM	K	H	E	BU	F	BB	WF	BQ	BP	BD	BC	BF	BE	BG	BA
20	8	M8x1.25	20	26	22	12	38	18	M5x0.8	5.5	18	28	28	38	68.5	106.5
25	10	M10x1.25	22	28	24	14	42	20	M5x0.8	5.5	20	30	32	42	69.5	111.5
32	12	M10x1.25	22	32	28	14	46	24	M6x1.0	6.6	24	36	42	54	68	114
40	16	M14x1.5	24	34	34	14	48	24	M8x1.25	9	28	44	52	68	82	130

symbol bore	C	R	EX	W	I	J	M	N	EE
20	52.5	15.5	27	7	13	6.5	22	2.5	1/8
25	53.5	15.5	27	9	17	6	22	2.5	1/8
32	52	15	34	10	17	6	26	2.5	1/8
40	66	21.5	42.5	14	19	8	32	3	1/4