DP Stainless Steel Body Pen Cylinders

AEROTEK

φ6~φ16

Double-Single acting cylinders

DPAI, DPUI, DPRI
Single Acting - Normally Retracted Piston Rod Type

DPUO, DPRO
Single Acting - Normally Extended Piston Rod Type

DPA
Double Acting - Single End Rod Type

DPU
Double Acting - Rear Clevis Type

DPR
Double Acting - Central Rear Port Type

DPD
Double Acting - Double End Rod Type

- Piston with magnet is standard accessory in the DP series cylinders.
- The rod cover and End cap, molded by rolling and riveting, are of high concentricity and stability.

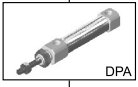
Specification

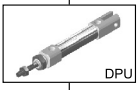
Bore sizes of cylinder (mm)	φ6	φ10	φ16
Stroke (Single acting) (mm)	15, 30, 45, 60,		
Stroke (Double acting) (mm)	15, 30, 45, 60, 75, 100, 125, 150, 175, 200		
Power fluid	Filtered air with or without lubrication		
Material of cylinder barrel	Stainless steel		
Max. pressure (MPa)	0.7 Mpa		
Min. pressure (MPa)	0.12 Mpa	0.06 Mpa	
The range of temperature (℃)	-10 ℃ ~ +60 ℃		

How to order

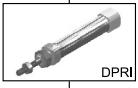
D P A 10 × 60 LB — Y — LN01M — 2

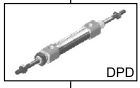
Type

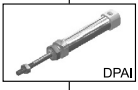

DPA

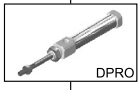

DPU

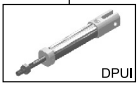
DPR


DPRI


DPD


DPAI


DPRO


DPUI

DPUO

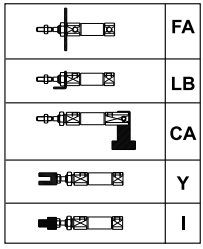
Bore

6- φ6mm
10- φ10mm
16- φ16mm

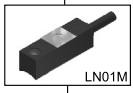
Stroke

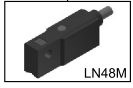
15 -15mm
30 -30mm
45 -45mm
60 -60mm
75 -75mm
100 -100mm
125 -125mm
150 -150mm
175 -175mm
200 -200mm

Accessory



Sensor switch


LN01M


LN48M

Note:
1.Can choose NPN or PNP type (3-Wire type, 24VDC).
2.Can choose plug-in cable.
3.For details see page 4-1.2 or 4-1.7

	Double Acting				Single Acting				
Bore	DPA	DPU	DPR	DPD	DPAI	DPUI	DPUO	DPRI	DPRO
φ6	–	–	○	–	–	–	–	○	○
φ10	○	○	○	○	○	○	○	○	○
φ16	○	○	○	○	○	○	○	○	○

Quantity

1: 1pc
2: 2pcs

Standard stroke

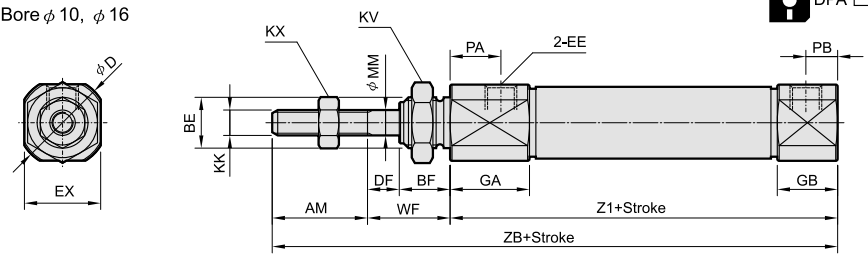
	Double Acting	Single Acting
φ6	15, 30, 45, 60	15, 30, 45, 60
φ10	15, 30, 45, 60, 75, 100, 125, 150	15, 30, 45, 60
φ16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200	15, 30, 45, 60

Dimensional features of double acting cylinders

● **DPA** TYPE

Bore φ10, φ16

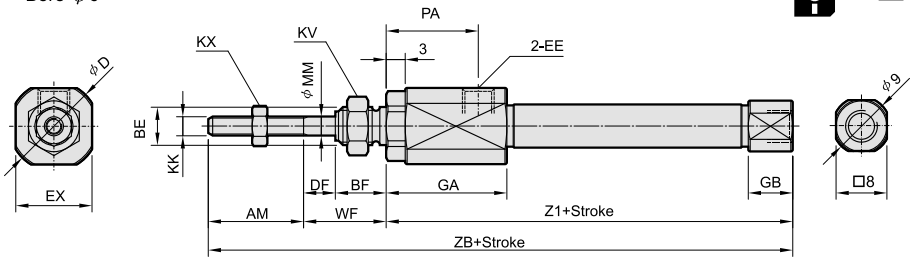
DPA □SD



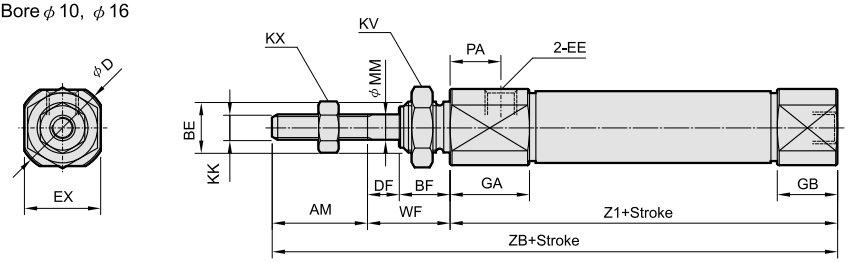
● **DPR** TYPE

Bore φ6

DPR □SD



Bore φ10, φ16



Dimensional Table

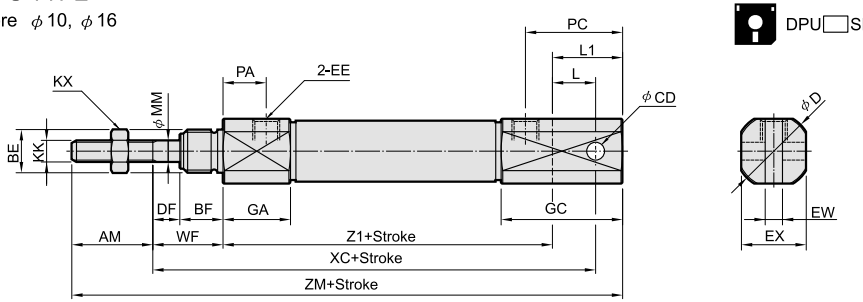
Bore	AM	BE	BF	D	DF	EE	EX	GA	GB	KK	KV	KX	MM	PA	PB	WF	Z1	ZB
φ6	15	M6×1.0P	8	14	5	M5×0.8P	12	19	7	M3×0.5P	8	5.5	3	14.5	-	13	49	77
φ10	15	M8×1.0P	8	14	5	M5×0.8P	12	12.5	9.5	M4×0.7P	11	7	4	8	5	13	46	74
φ16	15	M10×1.0P	8	20	5	M5×0.8P	18	12.5	9.5	M5×0.8P	14	8	5	8	5	13	47	75

Dimensional features of double acting cylinders

● DPU TYPE

Bore ϕ10, ϕ16

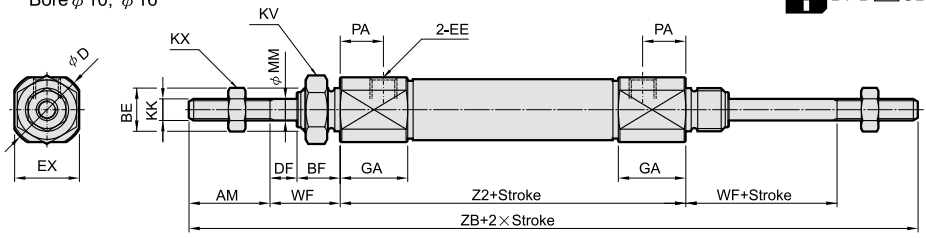
DPU□SD



● DPD TYPE

Bore ϕ10, ϕ16

DPD□SD

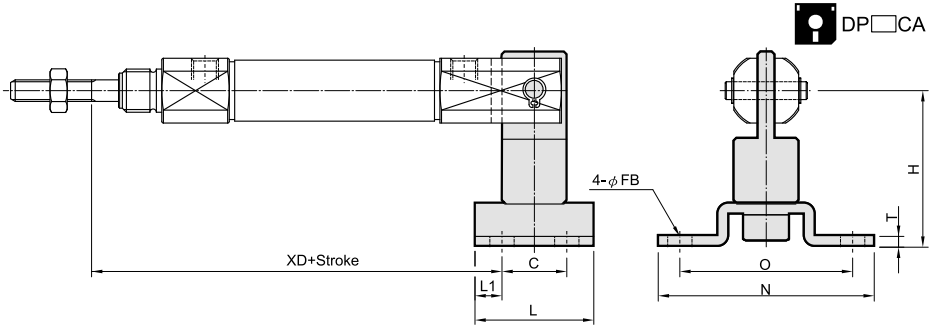


Dimensional Table

Bore	AM	BE	BF	CD	D	DF	EE	EX	EW	GA	GC	KK	KV	KX	L	L1	MM	PA	PC	WF	XC	Z1	Z2	ZB	ZM
ϕ10	15	M8×1.0P	8	3.3	14	5	M5×0.8P	12	3.2	12.5	22.5	M4×0.7P	11	7	8	13	4	8	18	13	67	46	49	105	87
ϕ16	15	M10×1.0P	8	5	20	5	M5×0.8P	18	6.5	12.5	27.5	M5×0.8P	14	8	10	18	5	8	23	13	70	47	50	106	93

Mounting Dimension of Double Acting Cylinders

DP□CA



Dimensional Table

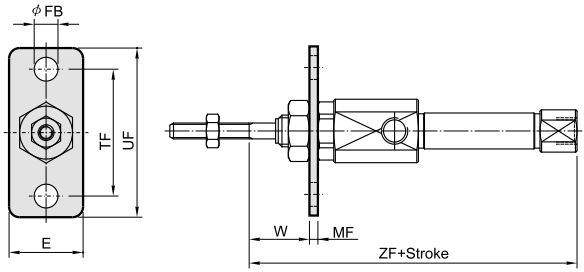
Type	Bore	C	FB	H	L	L1	N	O	T	XD
CA-10	ϕ10	12	4.5	29	22	5	40	32	2	61
CA-16	ϕ16	16	5.5	35	28	6	48	38	2.3	62

Mounting Dimension of Double Acting Cylinders

● FA TYPE

Bore φ6

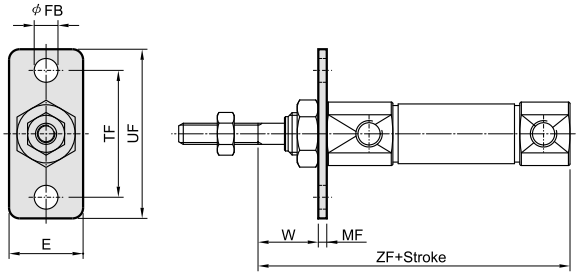
DP□FA



Dimensional Table

Type	Bore	E	FB	MF	TF	UF	W	ZF
FA-06	φ6	14	4.5	1.6	24	32	11.4	62
FA-10	φ10	14	4.5	1.6	24	32	11.4	59
FA-16	φ16	20	5.5	2.3	33	42	10.7	60

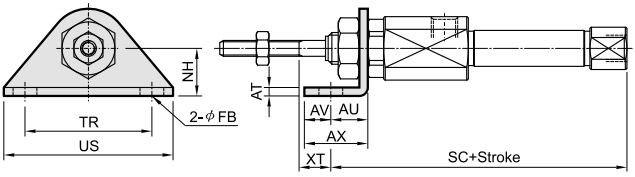
Bore φ10, φ16



● LB TYPE

Bore φ6

DP□LB

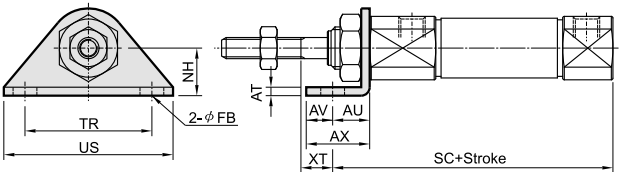


Dimensional Table

Type	Bore	AT	AU	AV	AX	FB
LB-06	φ6	1.6	7	5	12	4.5
LB-10	φ10	1.6	7	5	12	4.5
LB-16	φ16	2.3	9	6	15	5.5

Type	Bore	NH	SC	TR	US	XT
LB-06	φ6	9	56	24	32	6
LB-10	φ10	9	53	24	32	6
LB-16	φ16	14	56	33	42	4

Bore φ10, φ16

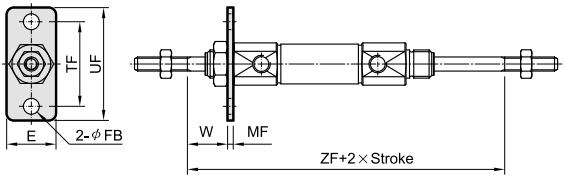


Mounting Dimension of Double Acting Cylinders

● FA TYPE

Bore φ10, φ16

DP□FA



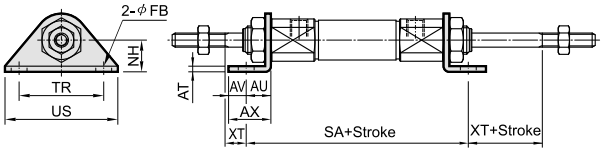
Dimensional Table

Type	Bore	E	FB	MF	TF	UF	W	ZF
FA-10	φ10	14	4.5	1.6	24	32	11.4	75
FA-16	φ16	20	5.5	2.3	33	42	10.7	76

● LB TYPE

Bore φ10, φ16

DP□LB



Dimensional Table

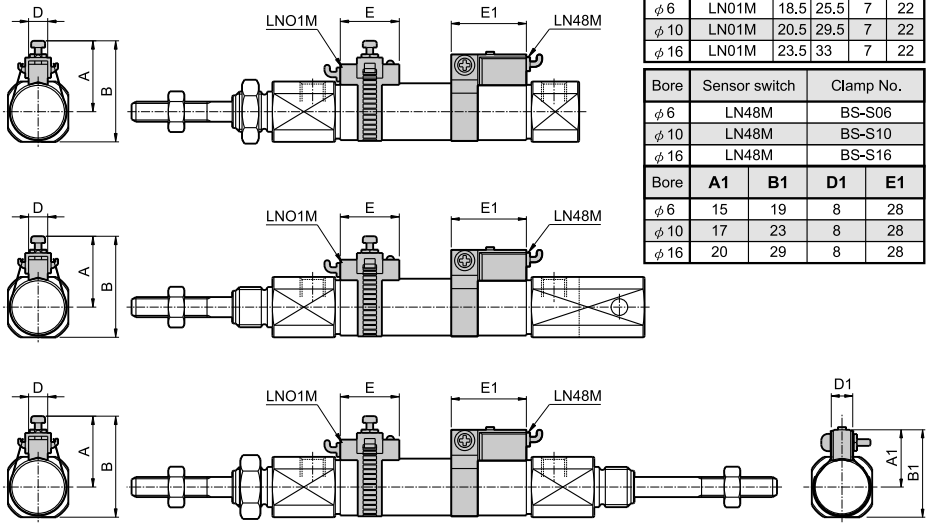
Type	Bore	AT	AU	AV	AX	FB	NH
LB-10	φ10	1.6	7	5	12	4.5	9
LB-16	φ16	2.3	9	6	15	5.5	14

Type	Bore	SA	TR	US	XT
LB-10	φ10	63	24	32	6
LB-16	φ16	68	33	42	4

Installation of sensor switchs

● DP TYPE

Bore φ6~φ16



Dimensional Table

Bore	Sensor switch	A	B	D	E
φ6	LN01M	18.5	25.5	7	22
φ10	LN01M	20.5	29.5	7	22
φ16	LN01M	23.5	33	7	22

Bore	Sensor switch	Clamp No.
φ6	LN48M	BS-S06
φ10	LN48M	BS-S10
φ16	LN48M	BS-S16

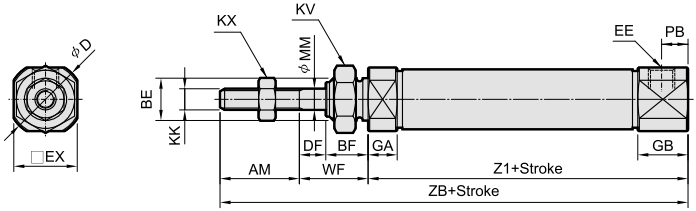
Bore	A1	B1	D1	E1
φ6	15	19	8	28
φ10	17	23	8	28
φ16	20	29	8	28

Mounting Dimension of Single Acting Cylinders

● DPAI TYPE

Bore φ10, φ16

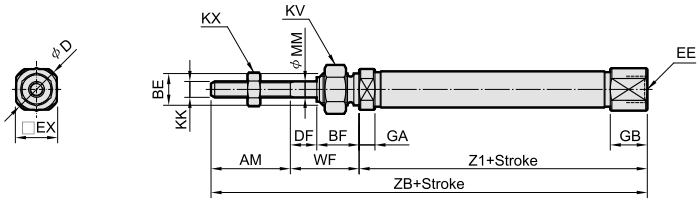
DPAI□SD



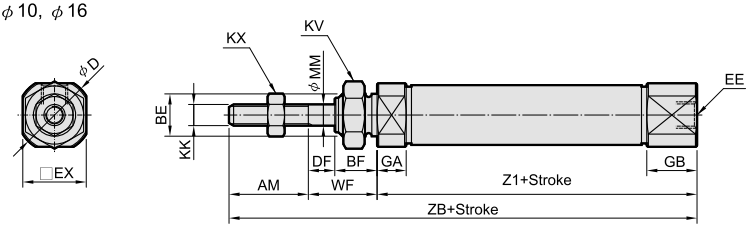
● DPRI TYPE

Bore φ6

DPRI□SD



Bore φ10, φ16



Dimensional Table

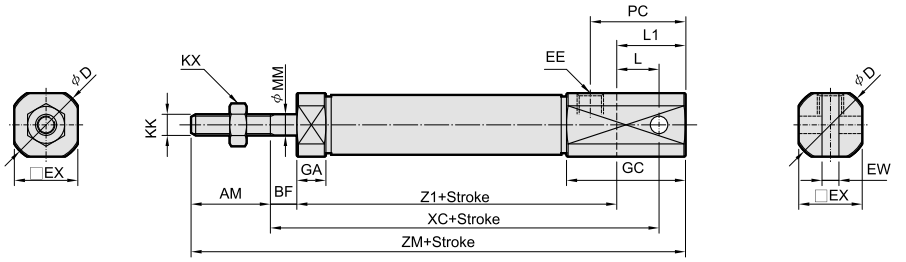
Bore	AM	BE	BF	D	DF	EE	EX	GA	GB	KK	KV	KX	MM	PB	WF
φ6	15	M6×1.0P	8	9	5	M5×0.8P	8	3	7	M3×0.5P	8	5.5	3	-	13
φ10	15	M8×1.0P	8	14	5	M5×0.8P	12	5.5	9.5	M4×0.7P	11	7	4	5	13
φ16	15	M10×1.0P	8	20	5	M5×0.8P	18	5.5	9.5	M5×0.8P	14	8	5	5	13

Bore	Stroke5~15		Stroke16~30		Stroke31~45		Stroke46~60	
	Z1	ZB	Z1	ZB	Z1	ZB	Z1	ZB
φ6	39.5	67.5	48.5	76.5	52.5	80.5	66.5	94.5
φ10	45.5	73.5	53	81	65	93	77	105
φ16	45.5	73.5	54	82	66	94	78	106

Mounting Dimension of Single Acting Cylinders

● **DPUI** TYPE
Bore φ10, φ16

DPUI□SD



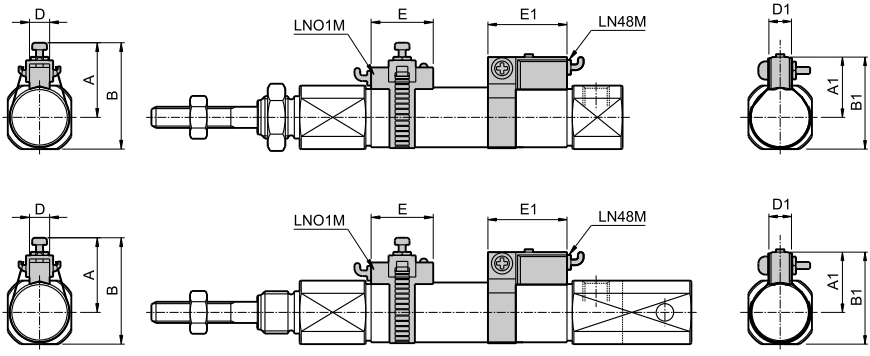
Dimensional Table

Bore	AM	BF	D	EE	EW	EX	GA	GC	KK	KX	MM	PC	L	L1	Stroke 5~15		
															XC	Z1	ZM
φ10	15	5	14	M5×0.8P	3.2	12	5.5	22.5	M4×0.7P	7	4	18	8	13	58.5	45.5	78.5
φ16	15	5	20	M5×0.8P	6.5	18	5.5	27.5	M5×0.8P	8	5	23	10	18	60.5	45.5	83.5

Bore	Stroke 16~30			Stroke 31~45			Stroke 46~60		
	XC	Z1	ZM	XC	Z1	ZM	XC	Z1	ZM
φ10	66	53	86	78	65	98	90	77	110
φ16	69	54	92	81	66	104	93	78	116

Installation of sensor switchs

● **DP□I** TYPE Bore φ6~φ16



Dimensional Table

Bore	Sensor switch	A	B	D	E
φ6	LN01M	18.5	25.5	7	22
φ10	LN01M	20.5	29.5	7	22
φ16	LN01M	23.5	33	7	22

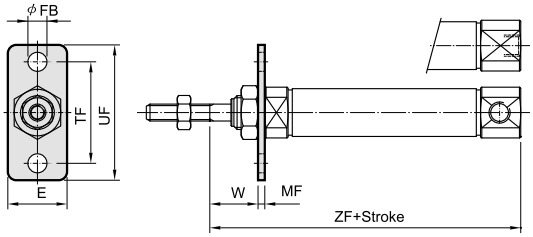
Bore	Sensor switch	Clamp No.	A1	B1	D1	E1
φ6	LN48M	BS-S06	15	19	8	28
φ10	LN48M	BS-S10	17	23	8	28
φ16	LN48M	BS-S16	20	29	8	28

Mounting Dimension of Single Acting Cylinders

● FA TYPE

Bore φ6 ~ φ16

DP□FA



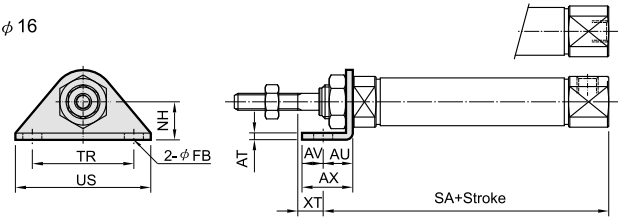
Dimensional Table

Type	Bore	E	FB	MF	TF	UF	W	ZF			
								Stroke 5~15	Stroke 16~30	Stroke 31~45	Stroke 46~60
FA-06	φ6	14	4.5	1.6	24	32	11.4	52.5	61.5	65.5	79.5
FA-10	φ10	14	4.5	1.6	24	32	11.4	58.5	66	78	90
FA-16	φ16	20	5.5	2.3	33	42	10.7	58.5	67	79	91

● LB TYPE

Bore φ6 ~ φ16

DP□LB



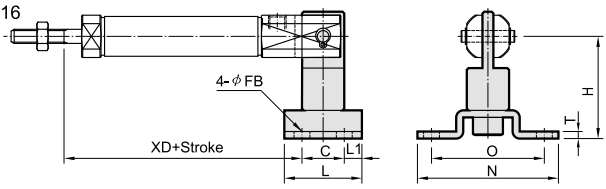
Dimensional Table

Type	Bore	AT	AU	AV	AX	FB	NH	TR	US	XT	SA			
											Stroke5~15	Stroke16~30	Stroke31~45	Stroke46~60
LB-06	φ6	1.6	7	5	12	4.5	9	24	32	6	46.5	55.5	59.5	73.5
LB-10	φ10	1.6	7	5	12	4.5	9	24	32	6	52.5	60	72	84
LB-16	φ16	2.3	9	6	15	5.5	14	33	42	4	54.5	63	75	87

● CA TYPE

Bore φ10 ~ φ16

DP□CA



Dimensional Table

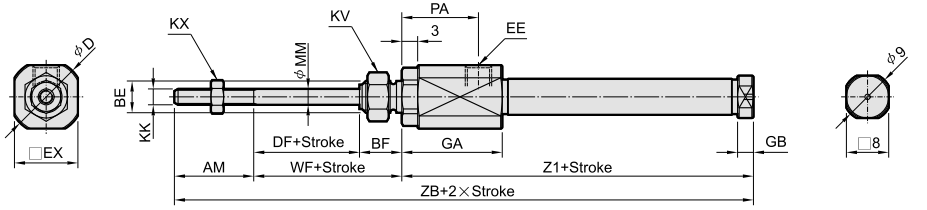
Type	Bore	C	FB	H	L	L1	N	O	T	XD			
										Stroke5~15	Stroke16~30	Stroke31~45	Stroke46~60
CA-10	φ10	12	4.5	29	22	5	40	32	2	52.5	60	72	84
CA16	φ16	16	5.5	35	28	6	48	38	2.3	52.5	61	73	85

Mounting Dimension of Single Acting Cylinders

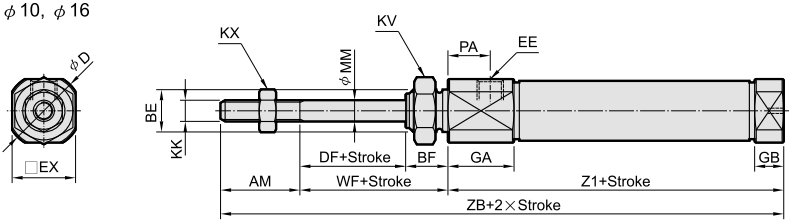
● DPRO TYPE

Bore φ6

DPRO□SD



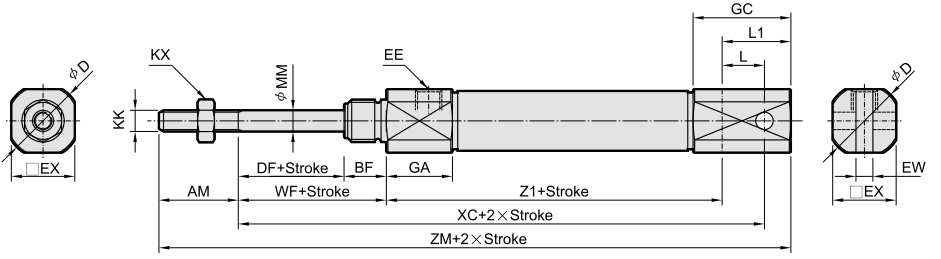
Bore φ10, φ16



● DPUO TYPE

Bore φ10, φ16

DPUO□SD



Dimensional Table

Bore	AM	BE	BF	D	DF	EE	EW	EX	GA	GB	GC	KK	KV	KX	MM	PA	WF	L	L1
φ6	15	M6×1.0P	8	14	5	M5×0.8P	-	12	19	3	-	M3×0.5P	8	5.5	3	14.5	13	-	-
φ10	15	M8×1.0P	8	14	5	M5×0.8P	3.2	12	12.5	5.5	18.5	M4×0.7P	11	7	4	8	13	8	13
φ16	15	M10×1.0P	8	20	5	M5×0.8P	6.5	18	12.5	5.5	23.5	M5×0.8P	14	8	5	8	13	10	18

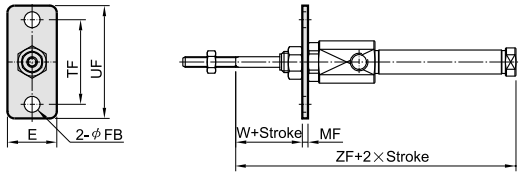
Bore	Stroke 5~15				Stroke 16~30				Stroke 31~45				Stroke 46~60			
	XC	Z1	ZB	ZM	XC	Z1	ZB	ZM	XC	Z1	ZB	ZM	XC	Z1	ZB	ZM
φ6	-	51.5	79.5	-	-	60.5	88.5	-	-	64.5	92.5	-	-	78.5	106.5	-
φ10	69.5	48.5	76.5	89.5	77	56	84	97	89	68	96	109	101	80	108	121
φ16	71.5	48.5	76.5	94.5	80	57	85	103	92	69	97	115	104	81	109	127

Mounting Dimension of Single Acting Cylinders

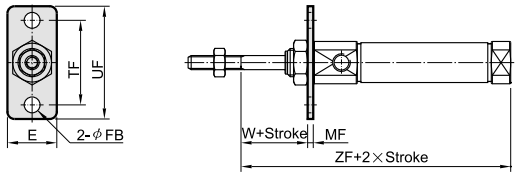
● FA TYPE

DP□FA

Bore φ6



Bore φ10 , φ16



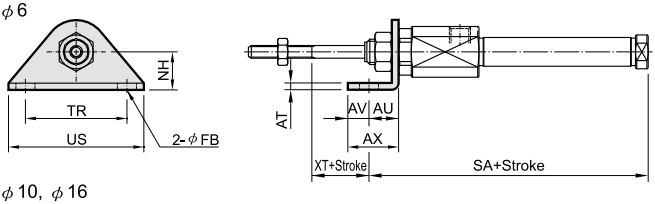
Dimensional Table

Type	Bore	E	FB	MF	TF	UF	W	ZF			
								5~15 Stroke	16~30 Stroke	31~45 Stroke	46~60 Stroke
FA-06	φ6	14	4.5	1.6	24	32	11.4	64.5	73.5	77.5	91.5
FA-10	φ10	14	4.5	1.6	24	32	11.4	61.5	69	81	93
FA-16	φ16	20	5.5	2.3	33	42	10.7	61.5	70	82	94

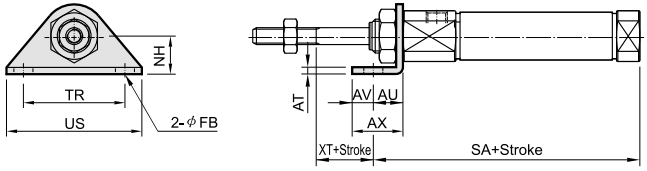
● LB TYPE

DP□LB

Bore φ6



Bore φ10, φ16



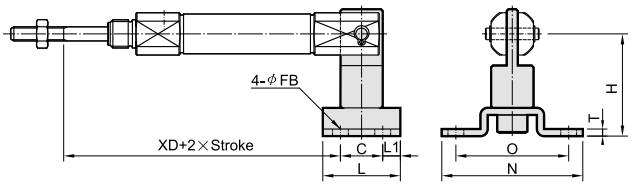
Dimensional Table

Type	Bore	AT	AU	AV	AX	FB	NH	TR	US	XT	SA			
											5~15 Stroke	16~30 Stroke	31~45 Stroke	46~60 Stroke
LB-06	φ6	1.6	7	5	12	4.5	9	24	32	6	58.5	67.5	71.5	85.5
LB-10	φ10	1.6	7	5	12	4.5	9	24	32	6	55.5	63	75	87
LB-16	φ16	2.3	9	6	15	5.5	14	33	42	4	57.5	66	78	90

Mounting Dimension of Single Acting Cylinders

● **CA** TYPE
Bore ϕ10, ϕ16

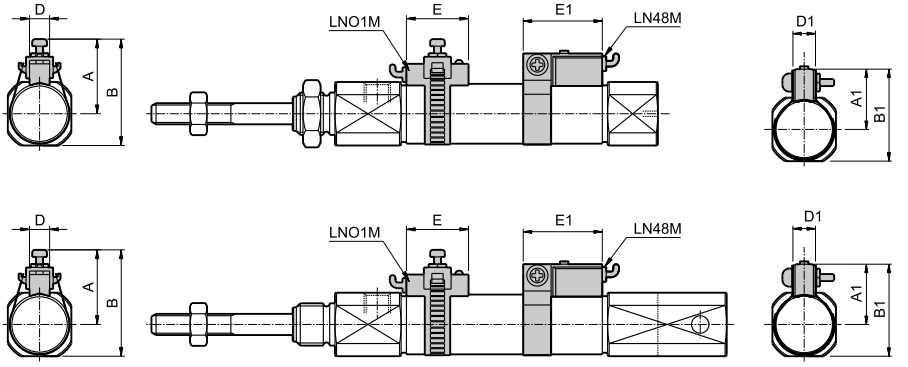
DP□CA



Type	Bore	C	FB	H	L	L1	N	O	T	XD			
										Stroke 5~15	Stroke 16~30	Stroke 31~45	Stroke 46~60
CA-10	ϕ10	12	4.5	29	22	5	40	32	2	63.5	71	83	95
CA-16	ϕ16	16	5.5	35	28	6	48	38	2.3	63.5	72	84	96

Installation of sensor switchs

● **DP□O** TYPE Bore ϕ6~ϕ16



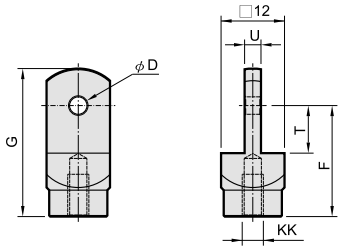
Dimensional Table

Bore	Sensor switch	A	B	D	E
ϕ6	LN01M	18.5	25.5	7	22
ϕ10	LN01M	20.5	29.5	7	22
ϕ16	LN01M	23.5	33	7	22

Bore	Sensor switch	Clamp No.	A1	B1	D1	E1
ϕ6	LN48M	BS-S06	15	19	8	28
ϕ10	LN48M	BS-S10	17	23	8	28
ϕ16	LN48M	BS-S16	20	29	8	28

Accessories

● I Rod end mounting

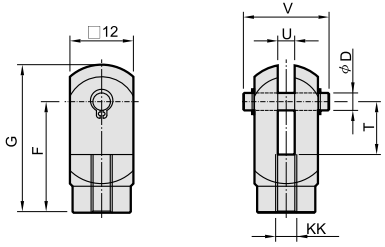


Dimensional Table

Type	Bore	D	F	G	KK	T	U
I-M4×0.7	φ10	3.3	21	28	M4×0.7	9	3.1
I-M5×0.8	φ16	5	25	32	M5×0.8	14	6.4

Type	Filename
I-M4×0.7	IM04070
I-M5×0.8	IM05080

● Y Rod Clevis (With Pin)

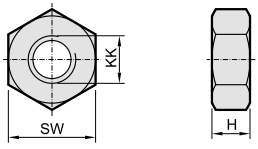


Dimensional Table

Type	Bore	D	F	G	KK	T	U	V
Y-M4×0.7	φ10	3.3	21	28	M4×0.7	10	3.2	16
Y-M5×0.8	φ16	5	21	28	M5×0.8	10	6.5	16.6

Type	Filename
Y-M4×0.7	YM04070
Y-M5×0.8	YM05080

● Mounting Nut



Dimensional Table

Type	Bore	H	KK	SW
N-M3×0.5	φ6	2.4	M3×0.5	5.5
N-M4×0.7	φ10	3.2	M4×0.7	7
N-M5×0.8	φ16	4	M5×0.8	8
N-M6×1.0	φ6	4	M6×1.0	8
N-M8×1.0	φ10	4	M8×1.0	11
N-M10×1.0	φ16	4	M10×1.0	14

Type	Filename
N-M4×0.7	NM04070
N-M5×0.8	NM05080
N-M6×1.0	NM06100
N-M8×1.0	NM08100
N-M10×1.0	NM10100