

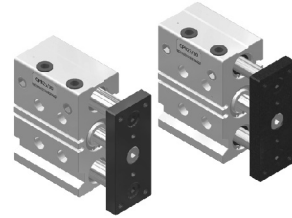
Guiding and stopper cylinders

GPB

Oilless Bearing Type

GPU

Linear Bearing Type






- Guide cylinders are made of uni-body aluminium alloy with high anti-rotation, torsion and side load ability.
- Simplifying structure design planning, drawing and installation.
- Piston with magnet is standard accessory in the GP series cylinders.

Specification

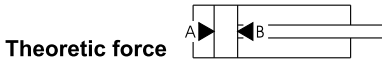
Type	GPB, GPU							
Bore sizes of cylinder (mm)	φ 12	φ 16	φ 20	φ 25	φ 32	φ 40	φ 50	φ 63
The range of stroke (mm)	10~100		20~175			25~150		
Power fluid	Filtered air with or without lubrication							
The range of pressure (MPa)	0.2~0.7							
The range of temperature (°C)	-10~ + 60							

How to order

GPB	40	／	100	LN09D	×	2
Type	Bore		Stroke	Sensor switch		Quantity
	12—φ 12mm 16—φ 16mm 20—φ 20mm 25—φ 25mm 32—φ 32mm 40—φ 40mm 50—φ 50mm 63—φ 63mm		10—10mm 20—20mm 25—25mm 30—30mm 40—40mm 50—50mm 75—75mm 100—100mm 125—125mm 150—150mm 175—175mm			1: 1pc 2: 2pcs
						Note: 1.Can choose NPN or PNP type (3-Wire type, 24VDC). 2.Can choose plug-in cable. 3.For details see page 4-1.5.

Cylinder bore and stroke

Type	Bore	Standard stroke (Piston with magnet)										
		10	20	25	30	40	50	75	100	125	150	175
GPB-□ Oilless Bearing Type	φ 12	●	●		●	●	●	●	●			
	φ 16	●	●		●	●	●	●	●			
	φ 20		●		●	●	●	●	●	●	●	●
	φ 25		●		●	●	●	●	●	●	●	●
	φ 32			●			●	●	●	●	●	
	φ 40						●	●	●	●	●	
	φ 50			●			●	●	●	●	●	
GPU-□ Linear Bearing Type	φ 12	●	●		●	●	●	●	●			
	φ 16	●	●		●	●	●	●	●			
	φ 20		●		●	●	●	●	●	●	●	●
	φ 25		●		●	●	●	●	●	●	●	●
	φ 32			●			●	●	●	●	●	
	φ 40			●			●	●	●	●	●	
	φ 50			●			●	●	●	●	●	
φ 63			●			●	●	●	●	●		



Unit:N

Type	Bore (mm)	Rod dia. (mm)	Pressure area (mm ²)	Operating pressure (MPa)											
				0.2		0.3		0.4		0.5		0.6		0.7	
				A	B	A	B	A	B	A	B	A	B	A	B
GPB-□ Oilless Bearing Type	φ 12	φ 6	113	23	17	34	25	45	34	57	42	68	51	79	59
	φ 16	φ 8	201	40	30	60	45	80	60	101	75	121	90	141	106
	φ 20	φ 10	314	63	47	94	71	126	94	157	118	188	141	220	165
GPU-□ Linear Bearing Type	φ 25	φ 12	491	98	76	147	113	196	151	245	189	295	227	344	264
	φ 32	φ 16	804	161	121	241	181	322	241	402	302	483	362	563	422
	φ 40	φ 16	1257	251	211	377	317	503	422	628	528	754	633	880	739
	φ 50	φ 20	1963	393	330	589	495	785	660	982	825	1178	990	1374	1155
	φ 63	φ 20	3117	623	561	935	841	1247	1121	1559	1402	1870	1682	2182	1962

DA

DP

DS

DQ

DB

DN

BN

ST

NT

DU

DJ

TA

GP

GS

GM

GT

RT

CT

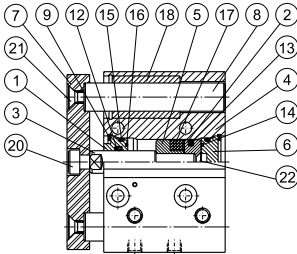
CH

How to order the seal kit

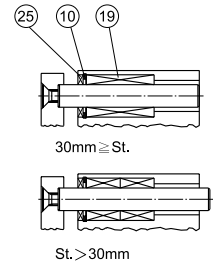
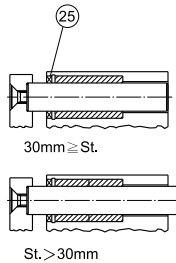
GPSK

Bore	Seal kit
12	GPSK12 - Including No.12,13,15
16	GPSK16 - Including No.12,13,15
20	GPSK20 - Including No.12,13,15
25	GPSK25 - Including No.12,13,15

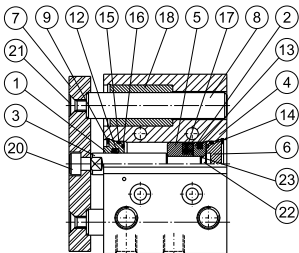
GPB12, 16



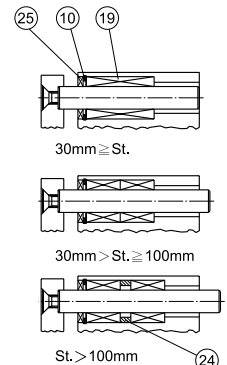
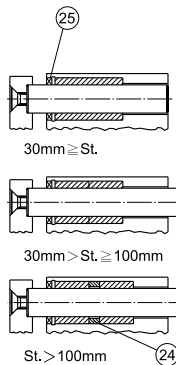
GPU12, 16



GPB20, 25



GPU20, 25



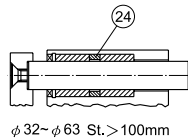
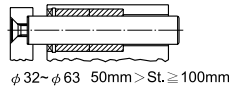
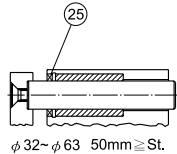
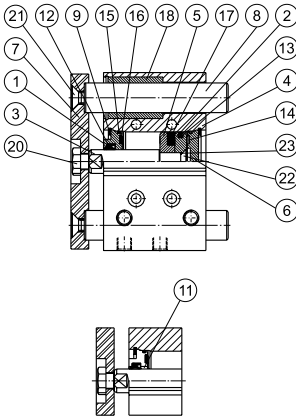
Parts List

No.	Part name	Quantity	No.	Part name	Quantity	No.	Part name	Quantity
1	Rod cover	1	10	Snap ring	2	19	Linear bearing (St.>30mm)	2(4)
2	Piston	1	11	Oilless bearing	1	20	Hexagon socket head screw	1
3	Piston rod	1	12	Rod packing	1	21	bolt	2
4	Cylinder tube	1	13	Piston packing	1	22	bolt	1
5	Magnet holder	1	14	Rubber lining	1	23	O-ring	1
6	End cover	1	15	Cylinder gasket	2	24	stroke pad	2
7	Guide plate	1	16	Rubber lining	1	25	Dust cover	2
8	Guide stem	2	17	Magnet	1			
9	Snap ring	2	18	Oilless bearing (St.>30mm)	2(4)			

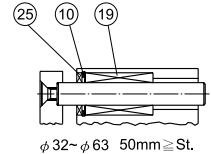
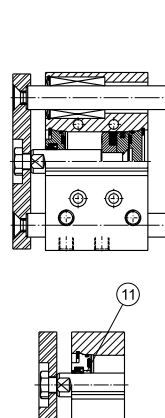
How to order the seal kit

Bore	Seal kit
32	GPSK32 - Including No.12,13,15
40	GPSK40 - Including No.12,13,15
50	GPSK50 - Including No.12,13,15
63	GPSK63 - Including No.12,13,15

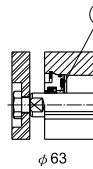
GPB32~63



GPU32~63



φ 32- φ 63 50mm > St. ≤ 100mm

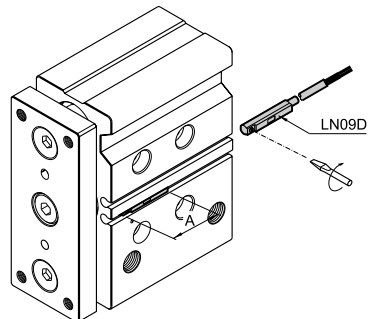
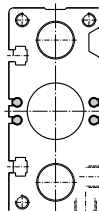


Parts List

No.	Part name	Quantity	No.	Part name	Quantity	No.	Part name	Quantity
1	Rod cover	1	10	Snap ring	2	19	Linear bearing (St.>50mm)	2(4)
2	Piston	1	11	Oilless bearing	1	20	Hexagon socket head screw	1
3	Piston rod	1	12	Rod packing	1	21	bolt	2
4	Cylinder tube	1	13	Piston packing	1	22	bolt	1
5	Magnet holder	1	14	Rubber lining	1	23	O-ring	1
6	End cover	1	15	Cylinder gasket	2	24	stroke pad	2
7	Guide plate	1	16	Rubber lining	1	25	Dust cover	2
8	Guide stem	2	17	Magnet	1			
9	Snap ring	2	18	Oilless bearing (St.>50mm)	2(4)			

Installation of sensor switches

Bore	Sensor switch	A
φ 12	LN09D	25.5
φ 16	LN09D	25.5
φ 20	LN09D	25.5
φ 25	LN09D	25.5
φ 32	LN09D	25.5
φ 40	LN09D	25.5
φ 50	LN09D	25.5
φ 63	LN09D	25.5



DA

DP

DS

DQ

DB

DN

BN

ST

NT

DU

DJ

TA

GP

GS

GM

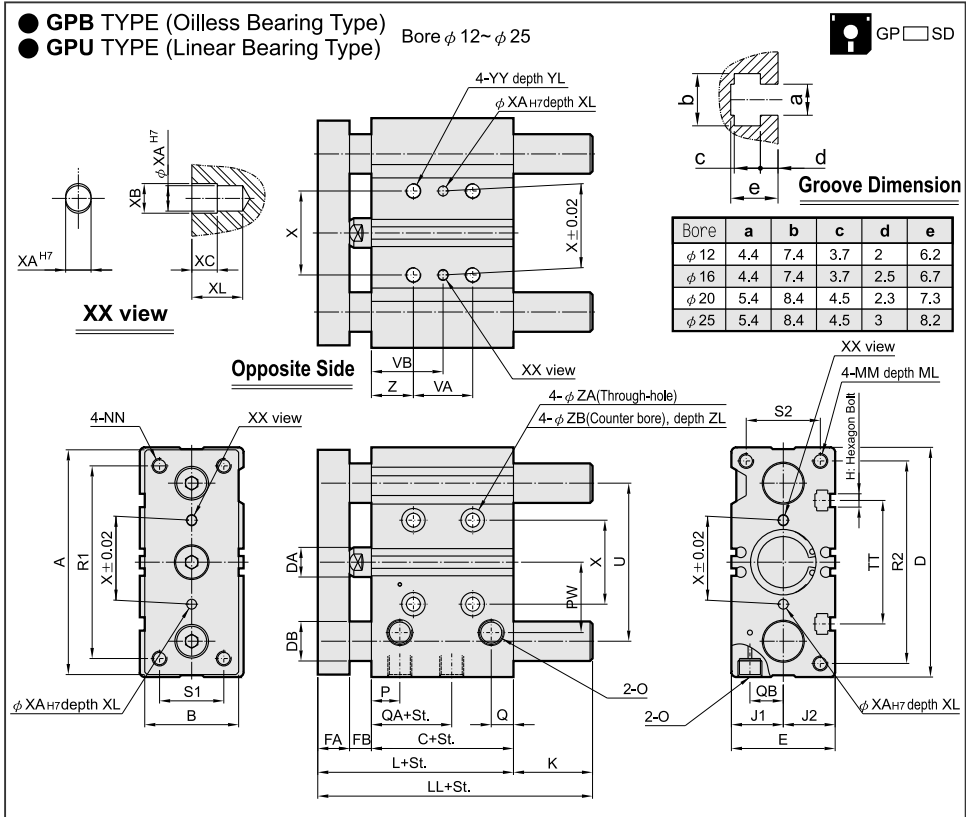
GT

RT

CT

CH

Dimensional features



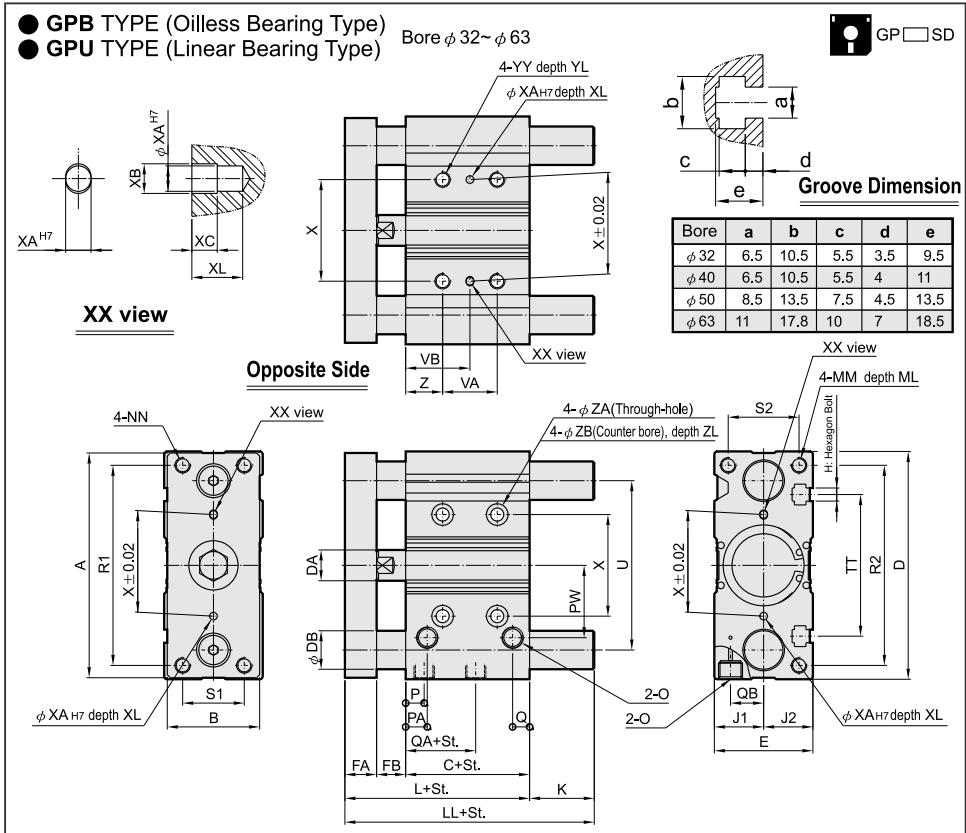
Dimensional Table

Bore	St.	A	B	C	D	DA	DB		E	FA	FB	H	J1	J2	L	MM	ML	NN	O	P	Q
							GPB	GPU													
φ 12	10~100	56	22	29	58	6	8	6	26	8	5	M4	13	13	42	M4×0.7	10	M4×0.7	M5×0.8	11	7.5
φ 16	10~100	62	25	33	64	8	10	8	30	8	5	M4	15	15	46	M5×0.8	12	M5×0.8	M5×0.8	11	8
φ 20	20~175	81	30	37	83	10	12	10	36	10	6	M5	18	18	53	M5×0.8	13	M5×0.8	PT 1/8	11.5	9
φ 25	20~175	91	38	37.5	93	12	16	12	42	10	6	M5	21	21	53.5	M6×1.0	15	M6×1.0	PT 1/8	11.5	9

Bore	St.	QA	QB	PW	TT	U	VA			VB			S1	S2	R1	R2	X	XA	XB	XC
							St.≤30	30<St.≤100	St.>100	St.≤30	30<St.≤100	St.>100								
							St.≤50	St.>50	St.≤50	St.>50	St.≤30	30<St.≤100								
φ 12	10~100	12	7.5	18	37	41	20	40	—	15	25	—	14	18	48	50	23	3	3.5	3
φ 16	10~100	14	10	19	38	46	24	44	—	17	27	—	16	22	54	56	24	3	3.5	3
φ 20	20~175	12.5	11.5	25	44	54	24	44	120	29	39	77	18	24	70	72	28	3	3.5	3
φ 25	20~175	12.5	13.5	28.5	50	64	24	44	120	29	39	77	26	30	78	82	34	4	4.5	3

Bore	St.	XL	YY	YL	Z	ZA	ZB	ZL	GPB				GPU						
									K		LL		K		LL				
									St.≤50	St.>50	St.≤50	St.>50	St.≤30	30<St.≤100	St.>100	St.≤30	30<St.≤100	St.>100	
φ 12	10~100	6	M5×0.8	10	5	4.3	8	4.5	0	15	42	57	0	15	—	—	42	57	—
φ 16	10~100	6	M5×0.8	10	5	4.3	8	4.5	0	22	46	68	0	22	—	—	46	68	—
φ 20	20~175	6	M6×1.0	12	17	5.6	9.5	5	0	28	53	81	0	28	52	53	81	81	105
φ 25	20~175	6	M6×1.0	12	17	5.6	9.5	5.5	0	29	53.5	82.5	0	31	50	53.5	84.5	103.5	—

Dimensional features



Dimensional Table

Bore	St.	A	B	C	D	DA	DB		E	FA	FB	H	J1	J2	L	MM	ML	NN	O	P	Q		
							GPB	GPU															
φ 32	25,50	110	44	37.5	112	16	20	16	20	16	48	12	10	M6	24	24	59.5	M8×1.25	20	M8×1.25	PT 1/8	11.5	10
φ 40	75,100	118	44	44	120	16	20	16	54	12	10	M6	27	27	66	M8×1.25	20	M8×1.25	PT 1/8	14	11		
φ 50	125,150	146	60	44	148	20	25	20	64	16	12	M8	32	32	72	M10×1.5	22	M10×1.5	PT 1/4	12	11		
φ 63		158	70	49	162	20	25	20	78	16	12	M10	39	39	77	M10×1.5	22	M10×1.5	PT 1/4	16.5	13		

Bore	St.	QA	QB	PA	PW	TT	U	VA			VB			S1	S2	R1	R2	X	XA	XB
								25	50~100	St.>100	25	50~100	St.>100							
φ 32	25,50	5	16.5	11.5	34	63	78	24	48	124	33	45	83	30	34	96	98	42	4	4.5
φ 40	75,100	11	18	14	38	72	86	24	48	124	34	46	84	30	40	104	106	50	4	4.5
φ 50	125,150	9	21.5	14	47	92	110	24	48	124	36	48	86	40	46	130	130	66	5	6
φ 63		14	28	16.5	55	110	124	28	52	128	38	50	88	50	58	130	142	80	5	6

Bore	St.	XC	XL	YY	YL	Z	ZA	ZB	ZL	GPB		GPU							
										K	LL	K		LL					
										25, 50	St.>50	25, 50	St.>50	25, 50	75, 100	St.>100	25, 50	75, 100	St.>100
φ 32	25,50	3	6	M8×1.25	16	21	6.5	11	7.5	8	45	67.5	104.5	8	45	65	67.5	104.5	124.5
φ 40	75,100	3	6	M8×1.25	16	22	6.5	11	7.5	1.5	38.5	67.5	104.5	1.5	38.5	58.5	67.5	104.5	124.5
φ 50	125,150	4	8	M10×1.5	20	24	8.5	14	9	6.5	48.5	78.5	120.5	6.5	48.5	68.5	78.5	120.5	140.5
φ 63		4	8	M10×1.5	20	24	8.5	14	9	1.5	43.5	78.5	120.5	1.5	43.5	63.5	78.5	120.5	140.5

- DA
- DP
- DS
- DQ
- DB
- DN
- BN
- ST
- NT
- DU
- DJ
- TA
- GP
- GS
- GM
- GT
- RT
- CT
- CH