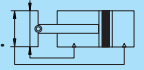


**DOUBLE ACTING
MAGNETIC TYPE**

DKB


Specifications

Type		DKB			
Bore		Φ 10、16、20、25			
Power fluid		Filtered air with or without lubrication			
The range of pressure		3 ~ 7.1 kgf/cm ²			
Proof pressure		10 kgf/cm ²			
The range of temperature		-5 ~ +70 °C (No freezing)			
Repeatability		Initial value : ±0.1 mm		At 10 million cycles : ±0.2 mm	
Life		10 million cycles on condition that the load is evenly applied to each finger			
Max. operating frequency		90 c.p.m			
Gripping force	Closed side	Φ 10 : (P-0.04)(90-8L)	Φ 16 : (P-0.03)(180-20L)	Φ 20 : (P-0.02)(285-25L)	Φ 25 : (P-0.02)(440-32L)
	Closed side	Φ 10 : (P-0.04)(90-8L)	Φ 16 : (P-0.03)(135-20L)	Φ 20 : (P-0.02)(225-25L)	Φ 25 : (P-0.02)(340-32L)
		L : Length of attachments from the end of fingers to the center of the workpiece (cm)			
Weight		Φ 10 : 75g	Φ 16 : 130g	Φ 20 : 240g	Φ 25 : 480g
Max.length of attachment from finger end		Φ 10 : 3.0 cm	Φ 16 : 4.0 cm	Φ 20 : 5.0 cm	Φ 25 : 5.0 cm
Max. weight of one attachment		Φ 10 : 30g	Φ 16 : 50g	Φ 20 : 80g	Φ 25 : 5.0 cm

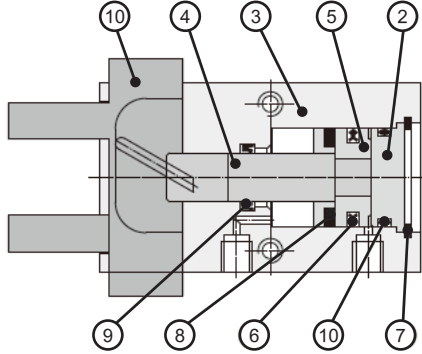
How to order

DKB	16	-	DTH-F9B	1
Type	Bore		Sensor switch	Quantity
	10 : Φ 10 16 : Φ 16 20 : Φ 20 25 : Φ 25		DTH-F9B Two wire type No reed switch	1 : 1pc 2 : 2pcs
			DTH-F9BV Two wire type No reed switch	
			DTH-F9N Three wire type NPN Current sinking	
			DTH-F9NV Three wire type NPN Current sinking	
			DTH-F9P Three wire type PNP Current sourcing	
			DTH-F9PV Three wire type PNP Current sourcing	
			DTD11047 Fixing frame	

Stroke table

Bore	Φ 10	Φ 16	Φ 20	Φ 25
Stroke	6	8	10	12

DKB Inside structure

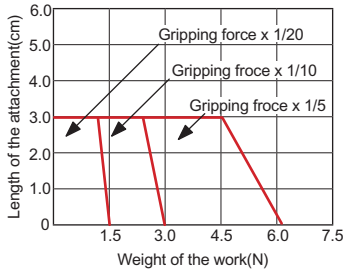


Parts list

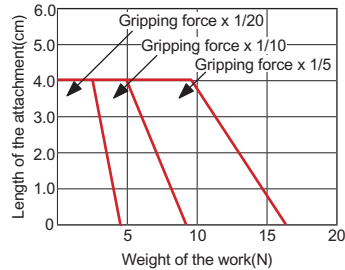
No.	Part name	Material	Quantity	No.	Part name	Material	Quantity	No.	Part name	Material	Quantity
1	Finger	Chromium molybdenum steel	2	5	Piston	Aluminium alloy	1	9	Piston rod seal	NBR	1
2	Rear end cover	Anodized aluminium alloy	1	6	Magnet	Resinous magnet	1	10	End cover seal	NBR	1
3	Barrel	Hard anodized aluminium alloy	1	7	Snap ring	Steel alloy	1				
4	Piston rod	Hardened chrome steel	1	8	Piston seal	NBR	1				

Gripping force diagram

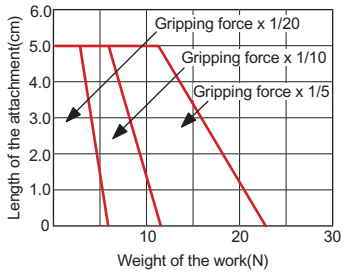
DKB10



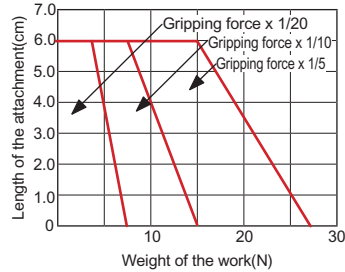
DKB16



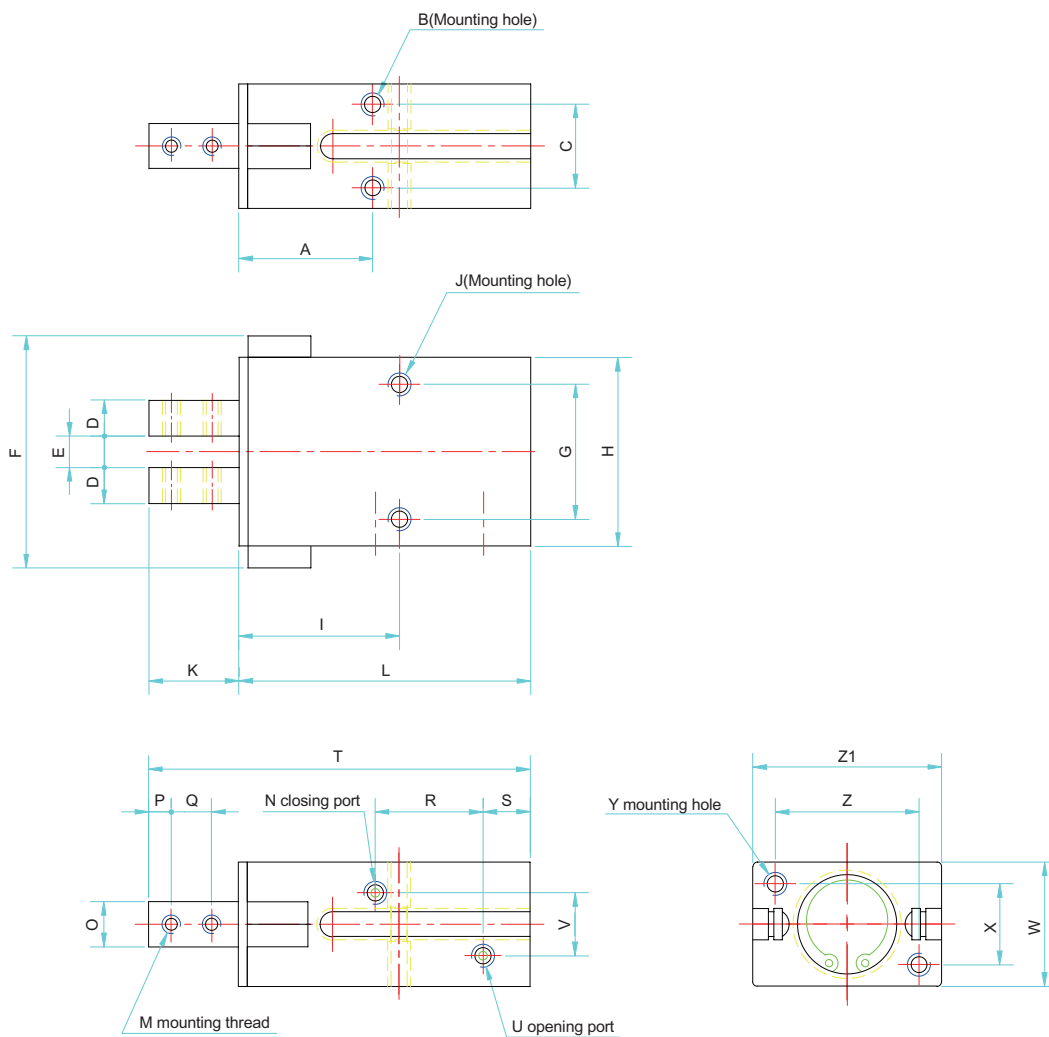
DKB20



DKB25



DKB Dimensional features



Dimensional table

Mark Bore	A	B	C	D	E	F	G	H	I	J	K	L	M
Φ 10	18	2-M3x0.5 deep 4.5	11.4	4	min. 5.2 ~ Max. 9.8	open Max. 28	16	23	22	4-M3x0.5 deep 4.5	12	45	4-M2.5x0.45
Φ 16	22.3	2-M4x0.7 deep 6	16	5	min. 6.5 ~ Max. 14.5	open Max. 39	24	30.6	27.8	4-M4x0.7 deep 8	15	52.3	4-M3x0.5
Φ 20	29.8	2-M5x0.8 deep 6	18.6	8	min. 7 ~ Max. 16.6	open Max. 51.6	30	42	35.8	4-M5x0.8 deep 10	20	65	4-M4x0.7
Φ 25	41.2	2-M6x1.0 deep 10	22	10	min. 8.6 ~ Max. 22.5	open Max. 66.36	36	52	47.7	4-M6x1.0 deep 12	25	78	4-M5x0.8

Mark Bore	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Z1
Φ 10	M3x0.5	5 ⁰ _{-0.10}	3	5.7	17.5	9.5	(57)	M3x0.5	8.6	16.4	12	2-M3x0.5 deep 6	18	23
Φ 16	M5x0.8	8 ⁰ _{-0.10}	4	7	21.5	8.5	(67.3)	M5x0.8	14	23.6	15	2-M4x0.7 deep 8	22	30.6
Φ 20	M5x0.8	10 ⁰ _{-0.10}	5	9	24	10.5	(85)	M5x0.8	14	27.6	18	2-M5x0.8 deep 10	32	42
Φ 25	M5x0.8 deep 6	12 ⁰ _{-0.10}	6	12	28	8.5	(103)	M5x0.8 deep 6	15	33.6	22	2-M6x1.0 deep 12	40	52