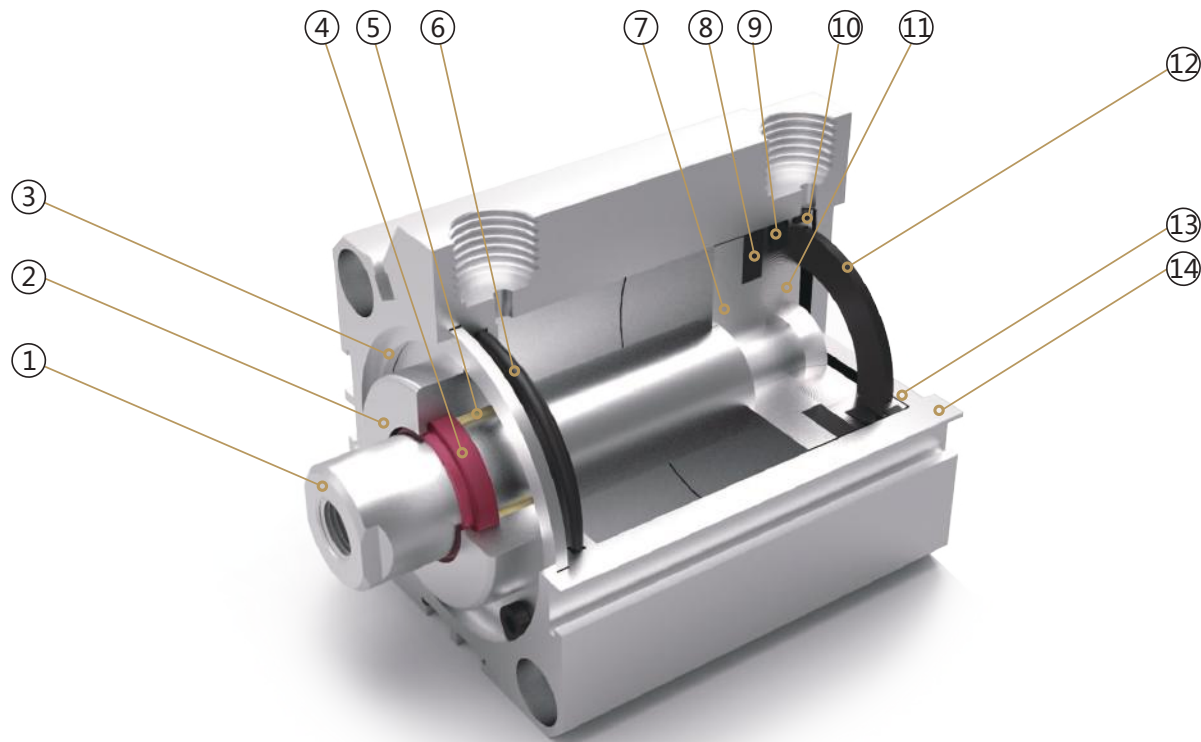


Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL
MALC
MAL/MAC L A.
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ

Internal Structure



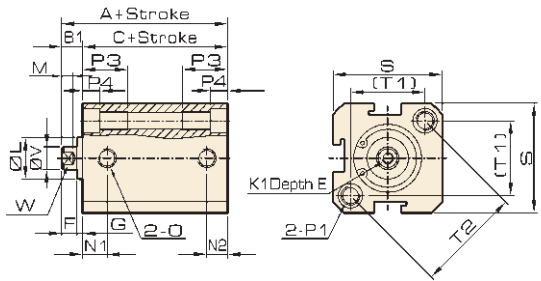
Parts

Number	Name	Number	Name
1	Piston rod	8	Magnet
2	Front cover	9	Piston seal
3	C clip	10	Anti-friction seal
4	Shaft seal	11	Magnet base
5	DU bearing	12	Anti-collision gasket
6	O ring	13	Back cover
7	Piston	14	Body

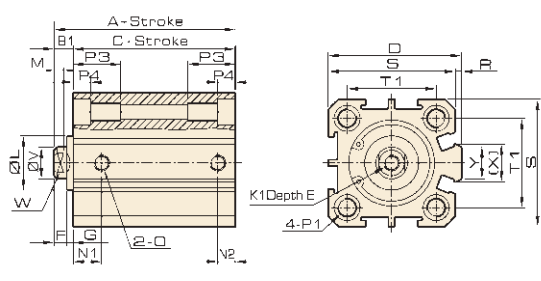
ISO9001:2015 CE

Overall Dimension

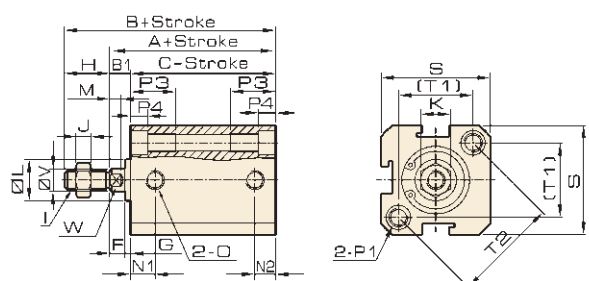
SDA12-16 Female thread



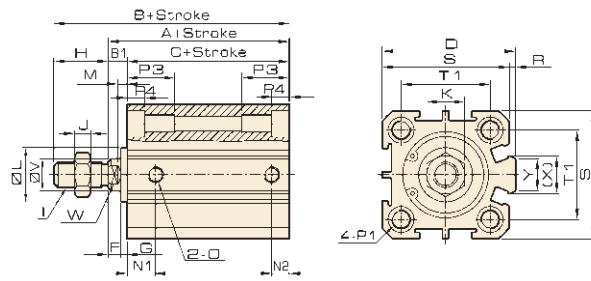
SDA20-100 Female thread



SDA12-16 Male thread



SDA20-100 Male thread



Dimension

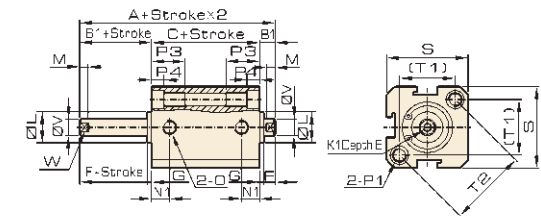
Bore/ Symbol	A		B		C		B1	D	E	F	G	H	I	J	K	K1	L	M
Type	Standard	With magnet	Standard	With magnet	Standard	With magnet												
12	22	32	34	44	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3
16	24	34	36	46	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3
20	25	35	40	50	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3
25	27	37	44	54	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3
32	31.5	41.5	49.5	59.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3
40	33	43	61	71	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3
50	37	47	65	75	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3
63	41	51	69	79	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3
80	52	62	85	95	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4
100	63	73	101	111	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4

Bore/ Symbol	N1		N2		O	P1						P3	P4	R	S	T1	T2	V	W	X	Y
Stroke	S=5	S>5	S=5	S>5																	
12	7.5		5		M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2						12	4.5	-	25	16.3	23	6	5	-	-
16	8		5	5.5	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2						12	4.5	-	29	19.8	28	6	5	-	-
20	8.5		5.5		M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2						14	4.5	2	34	24	-	8	6	11.2	10
25	9		5.5		M5×0.8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6						15	5.5	2	40	28	-	10	8	12	10
32	9	6.5	8		G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6						16	5.5	6	44	34	-	12	10	18	14
40	9		7.5		G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7						20	7.5	6.5	52	40	-	16	14	21	14
50	8	10.5	8	10.5	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7						25	8.5	9.5	62	48	-	20	17	29.5	19
63	9.5	11	9.5	11	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7						25	8.5	9.5	75	60	-	20	17	26	19
80	11.5	14	11.5	14	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3						25	10.5	10	94	74	-	25	22	36	26
100	15	20	15	18	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3						30	13	10	114	90	-	32	27	35.5	26

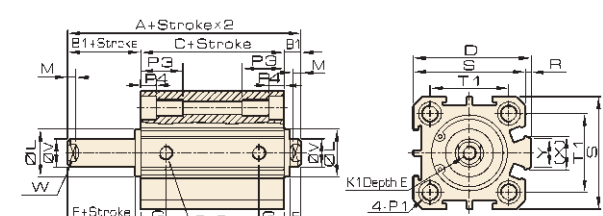
Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL
MALC
MAL/MAC L A.
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic
Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ

• Overall Dimension

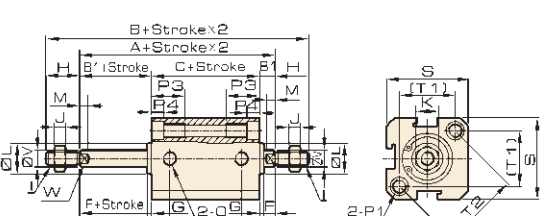
• SDAD12-16 Female thread



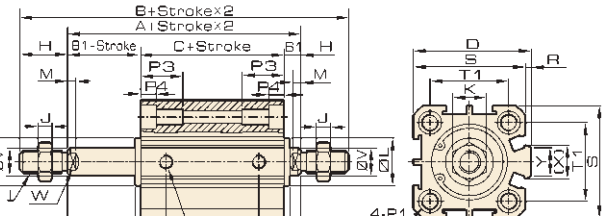
• SDAD20-100 Female thread



• SDAD12-16 Male thread



• SDAD20-100 Male thread



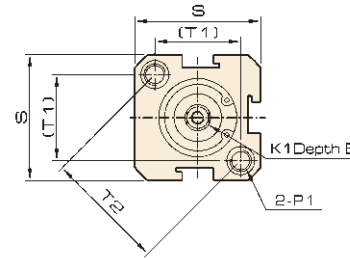
• Dimension

Bore/ Symbol	A		B		C		B1	D	E	F	G	H	I	J	K	K1	L	M	N1	
	Type	Standard	With magnet	Standard	With magnet	Standard													With magnet	S=5
12	27	37	51	61	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3	5.5	6.5
16	29.5	39.5	53.5	63.5	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3	6.5	7.5
20	30.5	40.5	60.5	70.5	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3	7.5	
25	33	43	67	77	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3	8	
32	38.5	48.5	74.5	84.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3	8	9
40	40	50	96	106	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3	8	10
50	46	56	102	112	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3	8	10.5
63	50	60	106	116	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3	9.5	11
80	63	73	129	139	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4	11.5	14
100	75	85	151	161	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4	15	20

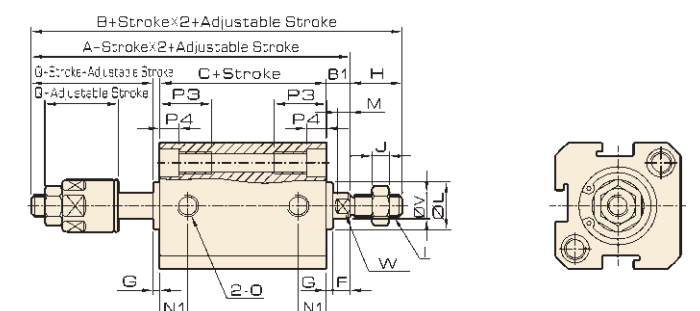
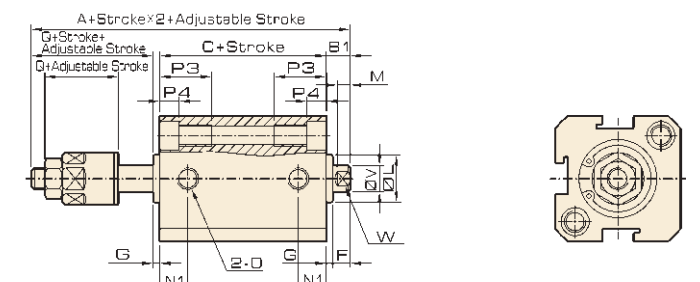
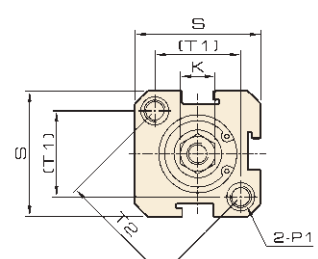
Bore/ Symbol	O	P1	P3	P4	R	S	T1	T2	V	W	X	Y
12	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	25	16.3	23	6	5	-	-
16	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	-	29	19.8	28	6	5	-	-
20	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	14	4.5	2	34	24	-	8	6	11.2	10
25	M5×0.8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	15	5.5	2	40	28	-	10	8	12	10
32	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	6	44	34	-	12	10	18	14
40	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	6.5	52	40	-	16	14	21	14
50	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	62	48	-	20	17	29.5	19
63	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	9.5	75	60	-	20	17	26	19
80	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	10	94	74	-	25	22	36	26
100	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	10	114	90	-	32	27	35.5	26

• Overall Dimension

• SDAJ12-16 Female thread



• SDAJ12-16 Male thread



• Dimension

Bore/ Symbol	A		B		C		B1	D	E	F	G	H	I	J	K	K1	L	M	N1	
	Type	Standard	With magnet	Standard	With magnet	Standard													With magnet	S=5
12	41	51	53	63	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3	5.5	6.5
16	43	53	55	65	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3	6.5	7.5
20	47.5	57.5	62.5	72.5	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3	7.5	
25	53	63	70	80	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3	8	
32	61.5	71.5	79.5	89.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3	8	9
40	64	74	92	102	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3	8	10
50	70	80	98	108	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3	8	10.5
63	74	84	102	112	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3	9.5	11
80	92.5	102.5	125.5	135.5	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4	11.5	14
100	110.5	120.5	148.5	158.5	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4	15	20

Bore/ Symbol	O	P1	P3	P4	Q	R	S	T1	T2	V	W	X	Y
12	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	25	16.3	23	6	5	-	-
16	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	29	19.8	28	6	5	-	-
20	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	14	4.5	21	2	34	24	-	8	6	11.2	10
25	M5×0.8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	15	5.5	24	2	40	28	-	10	8	12	10
32	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	27	6	44	34	-	12	10	18	14
40	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	28	6.5	52	40	-	16	14	21	14
50	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	29	9.5	62	48	-	20	17	29.5	19
63	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	29	9.5	75	60	-	20	17	26	19
80	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	35.5	10	94	74	-	25	22	36	26
100	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	42.5	10	114	90	-	32	27	35.5	26

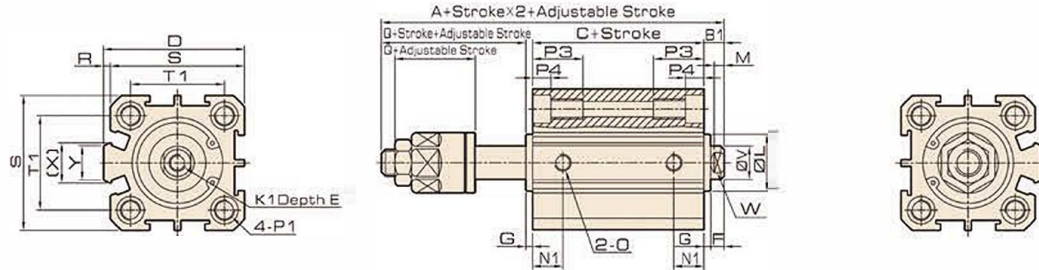
SDA Series

Compact Cylinder

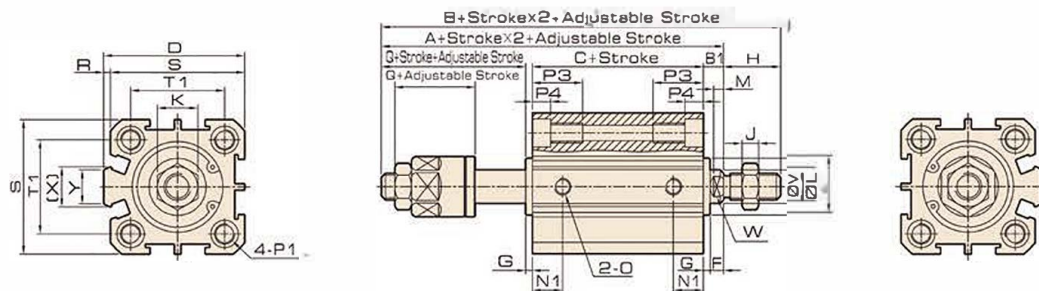


Overall Dimension

SDAJ20-100 Female thread



SDAJ20-100 Male thread



Dimension

Bore/ Symbol	A		B		C		D	E	F	G	H	I	J	K	K1	L	M	N1		
Type	Standard	With magnet	Standard	With magnet	Standard	With magnet												S=5	S=5	
12	41	51	53	63	17	27	5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	10	3	5.5	6.5
16	43	53	55	65	18.5	28.5	5.5	-	6	4	2	12	M5×0.8	4	8	M3×0.5	11	3	6.5	7.5
20	47.5	57.5	62.5	72.5	19.5	29.5	5.5	36	8	4	1.5	15	M6×1.0	5	10	M4×0.7	13	3	7.5	
25	53	63	70	80	21	31	6	42	10	4	2	17	M8×1.25	6	14	M5×0.8	17	3	8	
32	61.5	71.5	79.5	89.5	24.5	34.5	7	50	12	4	3	18	M10×1.25	6	17	M6×1.0	22	3	8	9
40	64	74	92	102	26	36	7	58.5	12	4	3	28	M14×1.5	8	22	M8×1.25	28	3	8	10
50	70	80	98	108	28	38	9	71.5	15	5	4	28	M18×1.5	9	27	M10×1.5	38	3	8	10.5
63	74	84	102	112	32	42	9	84.5	15	5	4	28	M18×1.5	9	27	M10×1.5	40	3	9.5	11
80	92.5	102.5	125.5	135.5	41	51	11	104	20	6	5	33	M22×1.5	13	32	M14×1.5	45	4	11.5	14
100	110.5	120.5	148.5	158.5	51	61	12	124	20	7	5	38	M26×1.5	12	36	M18×1.5	55	4	15	20

Bore/ Symbol	γ	P1	P3	γ	γ	S	T1	2	V	W	γ	Y
12	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	25	16.3	23	6	5	-
16	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	12	4.5	17	-	29	19.8	28	6	5	-
20	M5×0.8	Double Side: Φ6.5, Cog: M5×0.8, Through Hole: Φ4.2	14	4.5	21	2	34	24	-	8	6	11.2
25	M5×0.8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	15	5.5	24	2	40	28	-	10	8	12
32	G1/8	Double Side: Φ8.2, Cog: M6×1, Through Hole: Φ4.6	16	5.5	27	6	44	34	-	12	10	18
40	G1/8	Double Side: Φ10, Cog: M8×1.25, Through Hole: Φ6.7	20	7.5	28	6.5	52	40	-	16	14	21
50	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	29	9.5	62	48	-	20	17	29.5
63	G1/4	Double Side: Φ11, Cog: M8×1.25, Through Hole: Φ6.7	25	8.5	29	9.5	75	60	-	20	17	26
80	G3/8	Double Side: Φ15, Cog: M12×1.75, Through Hole: Φ10.3	25	10.5	35.5	10	94	74	-	25	22	36
100	G3/8	Double Side: Φ17.5, Cog: M14×2, Through Hole: Φ11.3	30	13	42.5	10	114	90	-	32	27	35.5