

# 050 系列

转角油缸-上法兰式

安装形式: 管式与板式一体



## Application

- n 050 series owns smallest height for mounting when space is limited, but it is necessary to manufacture a hole for installing swing clamp on fixture platen, the cylinder body can be inserted into the fixture platen.
- n Installing is very simple, you just need 3-4 pcs of bolts to fix your clamp cylinder, and the mounting type owns piping mounting and manifold mounting. It has single acting and double acting type.

## Feature

### Double acting

Oil circuits control clamping and unclamping, you can control the clamp and unclamp by changing the direction of direction valve.

### Single acting:

The design for oil circuit is simpler, it is not necessary to design for unclamp, it can return back to original position by spring, the system design is simple because of few accessories.

## Note

- n It can return back to position under free load.
- n The blot for 050 series and 030 series is the same, they are interchangeable.
- n Please be careful not to let coolant and chip be sucked into cylinder body when you machine parts. If the oil is polluted, please change it to new oil to protect the life of cylinder.
- n Please keep flow velocity not over max. value.

## Ordering example:

<u>050</u> Base No.	<u>L</u> Swivel Direction	<u>D</u> Acting Type	<u>L</u> Stroke	- <u>92</u> Type
(Upper Flange)	L: Left R: Right	S: Single Acting D: Double Acting	L: Long Stroke	11 22 52 92 121 202 352

# 050 系列

转角油缸-上法兰式

安装形式: 管式与板式一体

## 050LS/050RS – Hydraulic Swing Clamps, Upper Flange, 35-350 kg/cm<sup>2</sup>, Single Acting

	Left 90°	050LS-22	050LS-52	050LS-92	050LS-121	050LS-202	050LS-352
	Right 90°	050RS-22	050RS-52	050RS-92	050RS-121	050RS-202	050RS-352
Operating Pressure	35-350 kg/cm <sup>2</sup>						
Acting Type	Single Acting						
Clamp Force (kN) (350 kg/cm <sup>2</sup> )		210	490	800	1070	1740	3310
Clamping Stroke (mm)		8.1	9.9	11.9	12.7	14.0	16.0
Total Stroke (mm)		16.5	22.6	22.1	28.4	27.9	30.0
Effect Area – Clamp (cm <sup>2</sup> )		0.77	1.81	3.16	4.06	7.10	12.39
Effect Area – Unclamp (cm <sup>2</sup> )		--	--	--	--	--	--
Oil Capacity – Clamp (cm <sup>3</sup> )		1.31	4.10	6.88	11.47	19.99	37.20
Oil Capacity – Unclamp (cm <sup>3</sup> )		--	--	--	--	--	--
Max. Oil Velocity (L/min)		0.2	0.4	1.0	1.6	2.3	3.9
Clamp Arm		CAS-22	CAS-52	CAS-92	CAS-121	CAS-202	CAS-352
A (mm)		112	134.9	143.0	171.5	165.1	186.4
B (mm)		59	69	75	86	86	98
C (mm)		26	27	28	27	28	28
φD (mm)		27.9	34.8	47.8	47.8	63.0	77.0
D1 (mm)		47.2	54.1	70.1	66.8	85.1	100.1
D2 (mm)		45	57	54	73	70	89
φF (mm)		10	16	25	22	32	38
H (mm)		11	10	13	10	13	13
K (mm)		16	19	25	30	30	40
N (mm)		15.5	19.1	26.9	25.4	35.1	44.5
P (mm)		24	40	45	51	55	68
R (mm)		--	--	26	--	26	25
S (mm)		--	--	23.6	--	29.2	35.6
U (mm)		40	50	42	64	55	70
φU1 (mm)		42	50	--	64	--	--
φV (mm)		5.7	6.8	6.9	8.8	8.5	10.8
W (mm)		53.1	66.0	68.1	85.9	79.0	88.4
X (mm)		--	--	28.7	--	35.6	40.6
Z°		60	110	--	110	--	--

# 050 系列

转角油缸-上法兰式

安装形式: 管式与板式一体

050LD/050RD – Hydraulic Swing Clamps, Upper Flange, 35-350 kg/cm <sup>2</sup> , Double Acting										
Left 90°	050LD	050LD	050LD	050LD	050LDL	050LD	050LDL	050LD	050LD	050LDL
Right 90°	050RD	050RD	050RD	050RD	050RDR	050RD	050RDR	050RD	050RD	050RDR
Size	-11	-22	-52	-92	-92	-121	-121	-202	-235	-352
Operating Pressure	35-350 kg/cm <sup>2</sup>									
Acting Type	Double Acting									
Clamp Force (kN) (350 kg/cm <sup>2</sup> )	130	220	560	900	900	1160	1160	1870	3380	3380
Clamping Stroke (mm)	6.6	8.1	9.9	11.9	32.0	12.7	31.8	14.0	16.0	31.8
Total Stroke (mm)	13.0	16.5	22.6	22.1	41.9	28.4	47.5	27.9	30.0	46.5
Effect Area – Clamp (cm <sup>2</sup> )	0.45	0.77	1.81	3.16	3.16	4.06	4.06	7.10	12.39	12.39
Effect Area – Unclamp (cm <sup>2</sup> )	0.97	1.55	3.81	8.06	8.06	7.94	7.94	15.16	23.74	23.74
Oil Capacity – Clamp (cm <sup>3</sup> )	0.66	1.31	4.10	6.88	13.27	11.47	15.90	19.99	37.20	57.85
Oil Capacity – Unclamp (cm <sup>3</sup> )	1.31	2.62	8.69	17.70	30.48	22.94	37.69	42.61	71.28	110.94
Max. Oil Velocity (L/min)	0.2	0.2	0.4	1.0	1.0	1.6	1.6	2.3	3.9	3.9
Clamp Arm	CAS-11	CAS-22	CAS-52	CAS-92	CAS-92	CAS-121	CAS-121	CAS-202	CAS-352	CAS-352
A (mm)	93.2	112	134.9	143.0	182.9	171.5	228.6	165.1	186.4	217.9
B (mm)	53	59	69	75	95	86	105	86	98	114
C (mm)	28	26	27	28	28	27	27	28	28	28
φD (mm)	25.4	27.9	34.8	47.8	47.8	47.8	47.8	63.0	77.0	77.0
D1 (mm)	45.2	47.2	54.1	70.1	70.1	66.8	66.5	85.1	100.1	100.1
D2 (mm)	42	45	57	54	54	73	73	70	89	89
φF (mm)	8	10	16	25	25	22	22	32	38	38
H (mm)	11	11	10	13	13	10	10	13	13	13
K (mm)	12	16	19	25	25	30	30	30	40	40
N (mm)	13.5	15.5	19.1	26.9	26.9	25.4	25.4	35.1	44.5	44.5
P (mm)	20	24	40	45	45	51	51	55	68	68
R (mm)	--	--	--	26	26	--	--	26	25	25
S (mm)	--	--	--	23.6	23.6	--	--	29.2	35.6	35.6
U (mm)	35	40	50	42	42	64	64	55	70	70
φU1 (mm)	40	42	50	--	--	64	64	--	--	--
φV (mm)	4.8	5.7	6.8	6.9	6.9	8.8	8.8	8.5	10.8	10.8
W (mm)	40.1	53.1	66.0	68.1	87.9	85.9	124.0	79.0	88.4	88.4
X (mm)	--	--	--	28.7	28.7	--	--	35.6	40.6	40.6
Z°	60	60	110	--	--	110	110	--	--	--

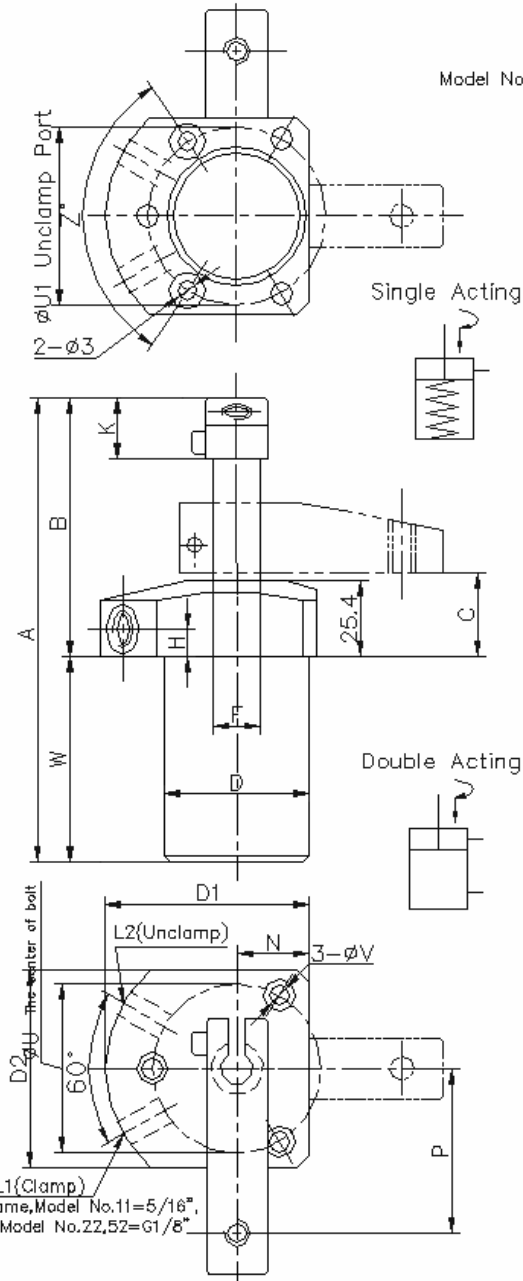
# 050 系列

转角油缸-上法兰式

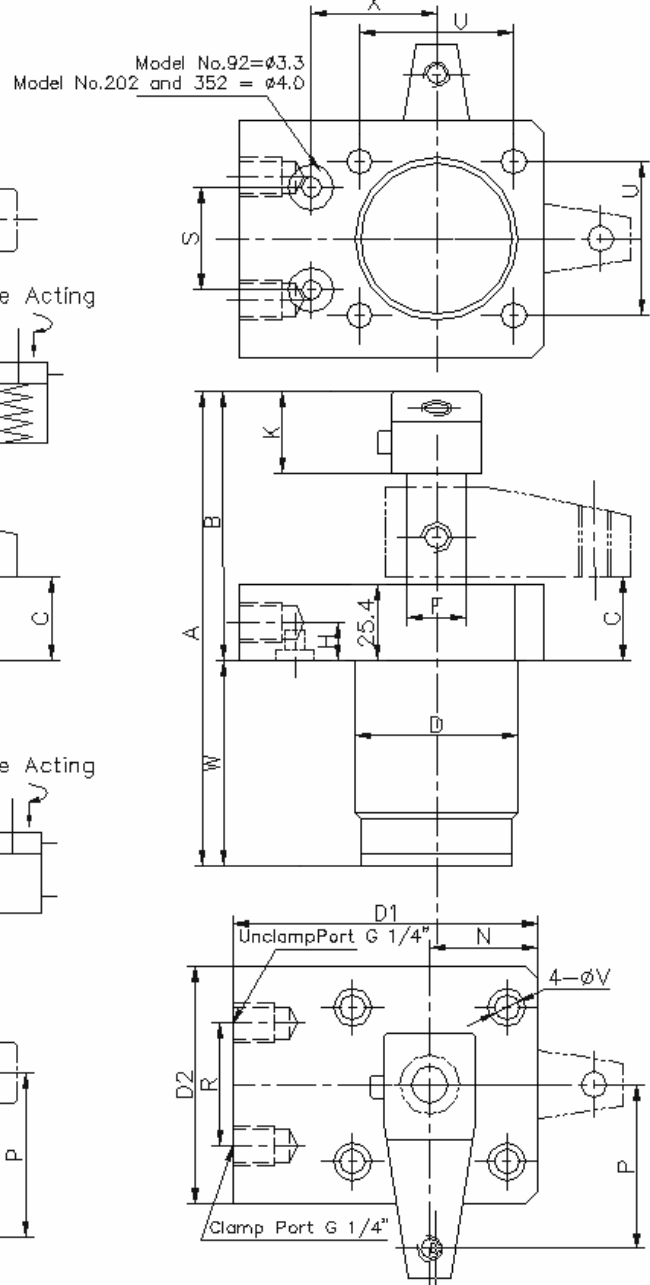
安装形式: 管式与板式一体

## Drawing

Model No.-11,22,52,121



Model No.-92,202,352



# 050 系列

转角油缸-上法兰式

安装形式: 管式与板式一体

## Mounting Drawing

