

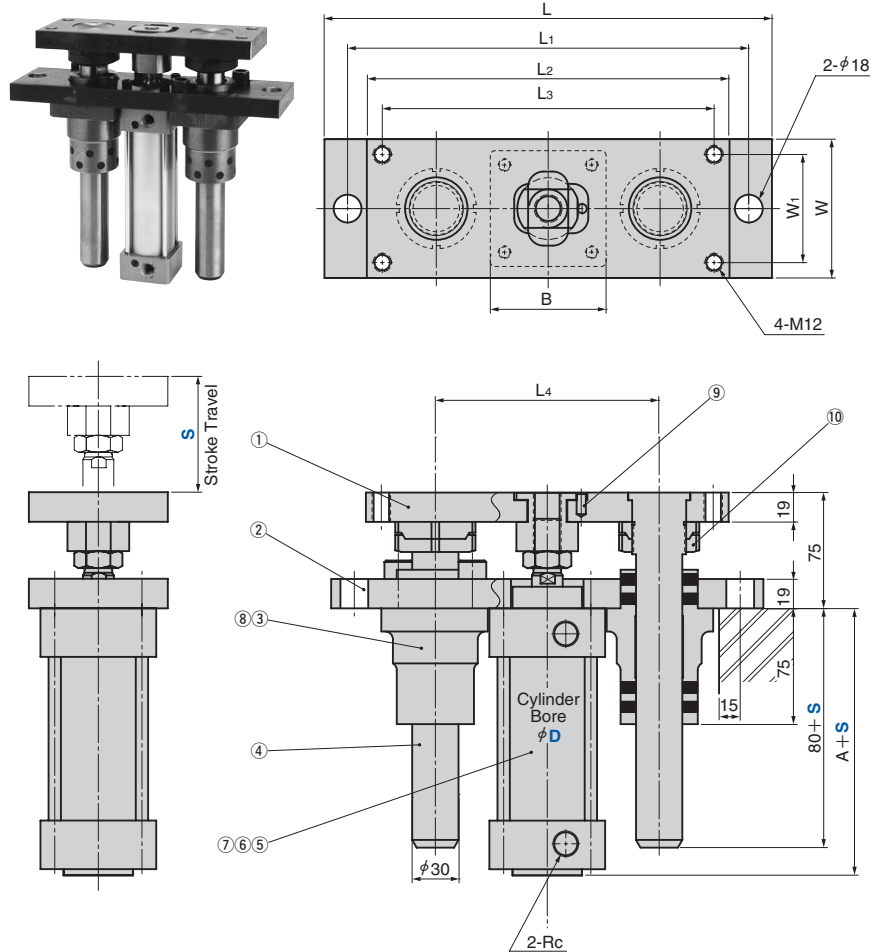
# H-Type Lifter

## Flat Upper Surface Type

### Panel Transfer Components

HLSGF

CAD  
FILE



No.	Description	Qty	Material and Remark
1	Lifter Plate	1	Steel
2	Cylinder Holder Plate	1	Steel
3	Guide Holder	2	SO#50F
4	Guide Pin	2	Steel
5	Air Cylinder	1	SMC (φ 40) SMC (φ 63)

No.	Description	Qty	Material and Remark
6	Joint	1	Steel
7	Hexagon Socket Head Bolt	4	M6x35 (D = 40) M8x35 (D = 63)
8	Hexagon Socket Head Bolt	4	M12x35
9	Spring Pin	1	φ 6x12
10	Hard Lock Nut	2	M35

Catalog No.	Cylinder Bore D	Stroke Travel S	A	B	Rc	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	W	W <sub>1</sub>
HLSGF	40	50	88	52	1/4	270	240	215	190	120	75	45
		75										
		100										
		125										
		150										
		175										
	63	50	98	75	3/8	290	260	235	215	145	90	70
		75										
		100										
		125										
		150										
		175										
		200										
		225										
		250										
		275										
		300										



Catalog No. D - S  
HLSGF 40 - 100

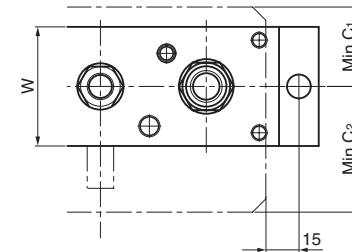
#### Design Guideline

Cylinder actual output Air pressure: 0.5 MPa

φ 40 : Approx. 600x0.7 = 420 N

φ 63 : Approx. 1,500x0.7 = 1,050 N

Refer to the dimension of the casting hole below for installation.



D	W	C <sub>1</sub>	C <sub>2</sub>
40	75	50	85
63	90	60	95

# H-Type Lifter [Overview]

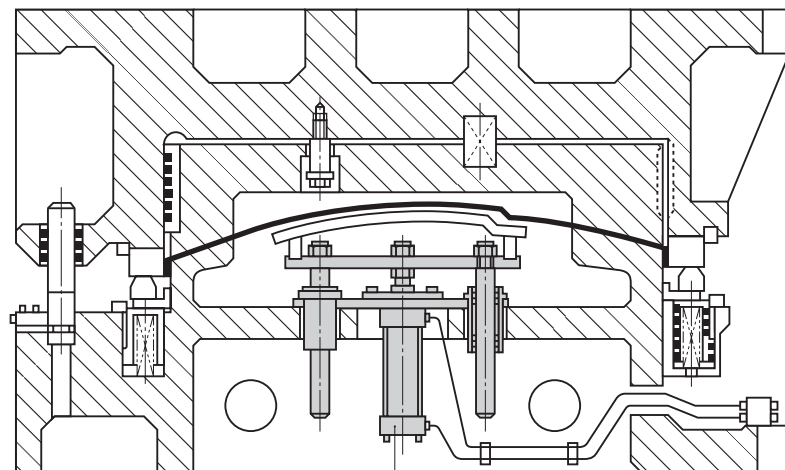
## Panel Transfer Components

This H type lifter uses air pressure to lift panels in stable operation.

### ■Features

- The unit has a rigid structure and shows a stable function of lifting. The unit can be used without lubrication for extended periods.
- A wide range of the travel distance for lifting from 10 to 250 mm is available.
- Guide posts that do not require lubrication are used for the sliding areas.
- Various types of lifters that meet lifting of small to large panels are available.

### ■Example of Operation



HLSGC

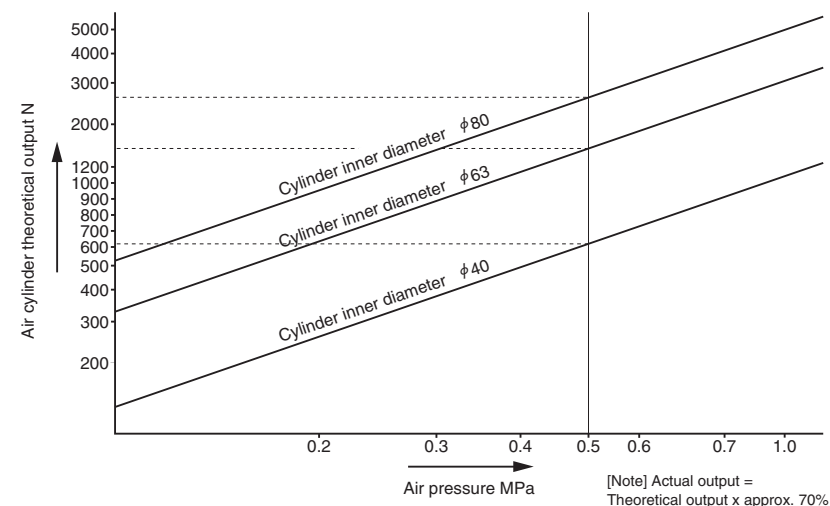
### ■Standard Selection Procedure of H type Lifter

When the required lifting force is 1000N and the H type lifter with the required travel of 95 mm is obtained

**Step 1** The air cylinder theoretical output is  $1000\text{N} \div 0.7 = 1430\text{N}$ . Take the theoretical output of 1430N on the graph of top right. When the air pressure in the plant is 0.5MPa, the cylinder inner diameter is  $\phi 63$  from the intersection. The appropriate type is HLSGT63-S (travel).

**Step 2** In HLSGT63-S (travel), when the required travel for lifting panels is 95 mm or more, S = 100 mm. Therefore, HLSGT63-100 is obtained.

### ● Air Pressure and Cylinder Output



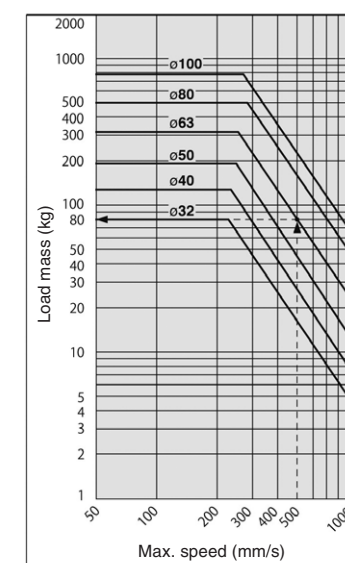
### ■Consideration

If the mass of the load applies excessive force to the cylinder rod tip, the cylinder rod may break. Please use within the values in the graph below. Also, use of a speed controller is recommended to control speed.

When the stroke is long, the lift plate may rattle at the top home position, so use in panel positioning is not recommended.

When precision is required, please set up a separate guide.

### Permissive kinetic energy



Cylinder diameter  $\phi 63$ , if the maximum speed of 500 mm/s, load mass is 80 kg.