



DYNAMIC™
HYDRAULICS



Ver. 1.1 | 2023

Hydraulic Clamping Devices

www.dynamichydraulics.co.in

GO DYNAMIC™

Swing clamp

Product code: DS



Swing clamp

Product code: DS



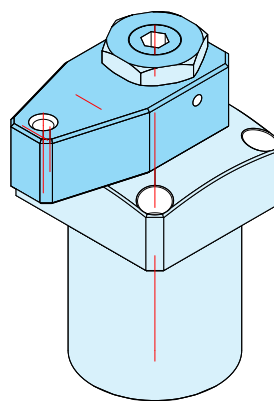
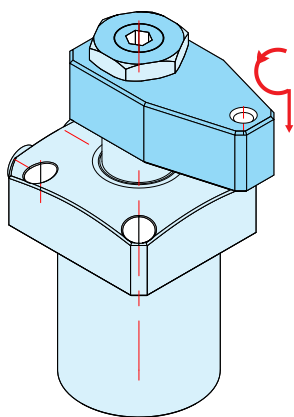
Information:

The **Swing clamp** rotates 90 degree (Clockwise or Counterclockwise) to clamp the workpiece. Clamping force is applied to a structure in a vertical direction to ensure stable clamping.

- Hardened and chromed alloy steel piston rods run longer with less wear
- Wiper seals reduce contamination of dust for the long run of **Swing clamp**
- Special coating on the cylinder body helps prevent rusting and scratching

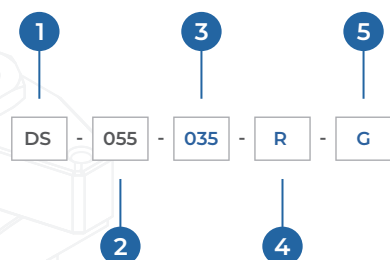
Specifications:

- Minimum operating pressure: 15 Bar
- Maximum operating pressure: 70 Bar
- Operating temperature: 10 - 70 °C



Clamping action

Ordering method:



1 Product code

DS

2 Outer diameter

040 048 055 065 075 090

3 Bore diameter

028 035 040 050 060 075

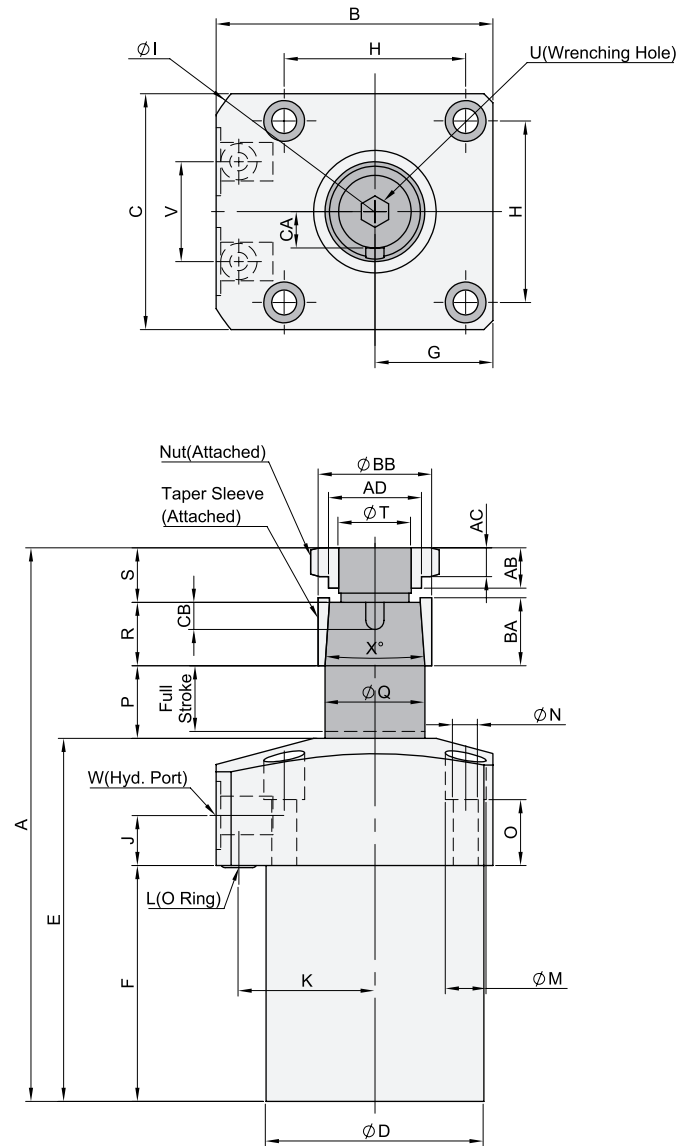
4 Position for lever

C Centre R Clockwise L Counterclockwise

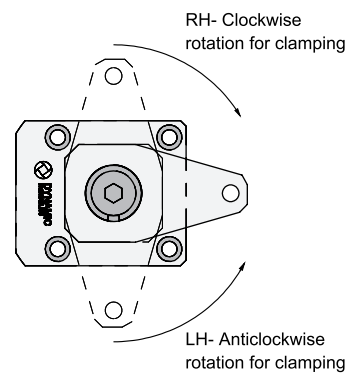
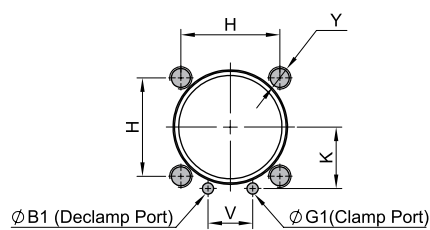
5 Piping method

C Internal piping
G External piping
GC External piping with internal piping

Swing clamp - Top mount



Mounting details



All dimensions are in mm except otherwise specified.

Swing clamp - Top mount

Model No.	DS-040-	DS-048-	DS-055-	DS-065-	DS-075-	DS-090-
Piston (Bore) Ø	28	35	40	50	60	75
A	115	122	138	145	171.5	185
B	54	61	69	81	92	107
C	45	52	60	70	80	95
Ø D (e8)	40	48	55	65	75	90
E	75	80	87	93	108	114
F	50	52	59	63	71	74
G	22.5	26	30	35	40	47.5
H	34	40	47	55	63	75
Ø I	73	82	88	106	120	136
J	11	11	11	11	12	16
K	26	30	33.5	39	45	52.5
L (O Ring)	4 x 2	4 x 2	4 x 2	6 x 2	6 x 2	6 x 2
Ø M	9	9	11	11	14	17.5
Ø N	5.5	5.5	6.6	6.6	9	11
O	14.5	16	14.5	16	19.5	20
P	17	16	19	20	23.5	25
Ø Q	18	22	25	30	36	45
R	12	14	20	20	26	32
S	11	12	12	12	14	14
T	M14 x 1.5	M16 x 1.5	M18 x 1.5	M22 x 1.5	M30 x 1.5	M36 x 1.5
U (Hex. x Depth)	5 x 7	8 x 10	8 x 10	10 x 12	10 x 12	14 x 16
V	18	22	24	30	32	35
W (Hyd. Port)	G1/8"	G1/8"	G1/8"	G1/4"	G1/4"	G1/4"
X°	6	6	6	6	6	11
AA	4 x 6	4 x 6	4 x 6	6 x 8	6 x 8	8 x 10
AB	10	9	10	10	12	12
AC	-	6	7	7	8	8
Ø AD	-	20.5	22.9	27.9	32.8	41.7
BA	13	15	21	21	27	33
Ø BB	20.5	25	28	34	40	49
CA	7	8	9	11	14	18
CB	7	5.5	5.5	7.5	7.5	9.5
Lock Cyl. Area (cm²)	3.6	5.8	7.6	12.5	18.1	28.3
Full Stroke (mm)	14	14	17	18	21.5	23
Swing Stroke (90°)	6	6	8	8	9.5	11
Locking Stroke	8	8	9	10	12	12
Cyl. Vol. (cm³)	Clamp	5.1	8.2	13	22.6	39.8
	Declamp	8.6	13.5	21.4	35.3	62.2
Clamping force at 70 Bar (Kg.)	205	345	429	622	928	1469
Design Pressure (Bar)	105					
Operating Temp. (°C)	10 - 70					
Weight (Kg.)	1	1.5	2.1	3.3	5.1	7.84
Ø B1, Ø G1	2	2	2	2.5	2.5	2.5
Ø D1 (E8)	40	48	55	65	75	90
F1 ± 0.2	52	54	61	65	73	76

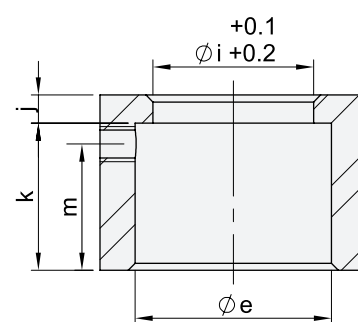
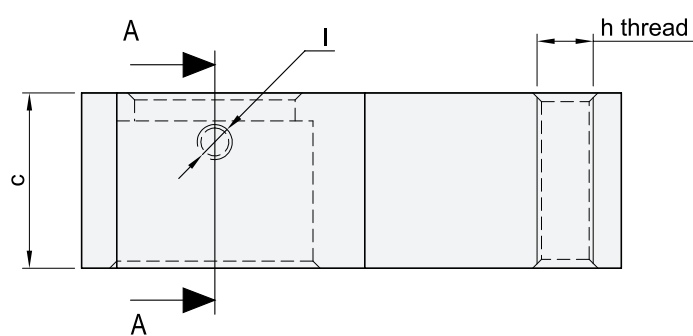
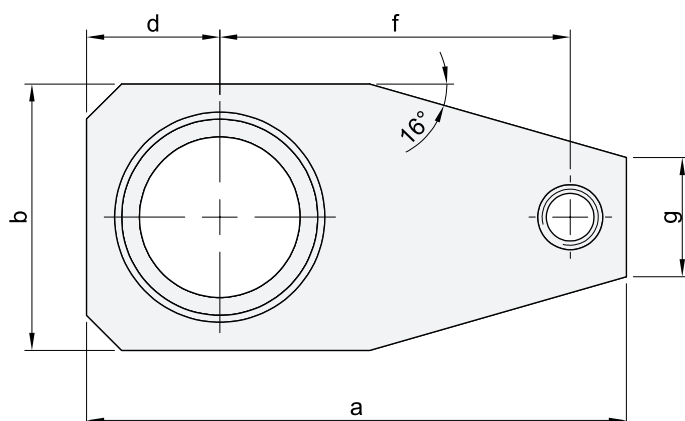
Ordering Method: [Product code - DS](#)

Note: Actual force may vary by 10% - 15% due to friction loss. **Warning:** Operating above 70 Bar may damage the [Swing clamp](#) and will void the warranty.

Levers are to be sold separately.

Never allow the [Swing clamp](#) lever to contact the fixture or workpiece during the swing stroke.

Swing clamp - Lever



SECTION A-A

All dimensions are in mm except otherwise specified.

Swing clamp - Lever

Model No.	DS - 040X -	DS - 048X -	DS - 055X -	DS - 065X -	DS - 075X -	DS - 090X -
a	56.5	65.5	77	91.5	105	127
b	28	35	38	50	58	75
c	16	20	25	25	32	38
d	14	17.5	19	25	29	38
øe	20.5	25	28	34	40	48
f	36.5	42	50	56.5	65	75
g	12	12	15	19	22	27
h	M6	M6	M8	M10	M12	M16
øi	16.5	20.5	22.9	27.9	32.8	41.7
j	3	5	4	4	5	5
k	13	15	21	21	27	33
l	-	4	4	6	6	8
m	-	12	18	17	23	28

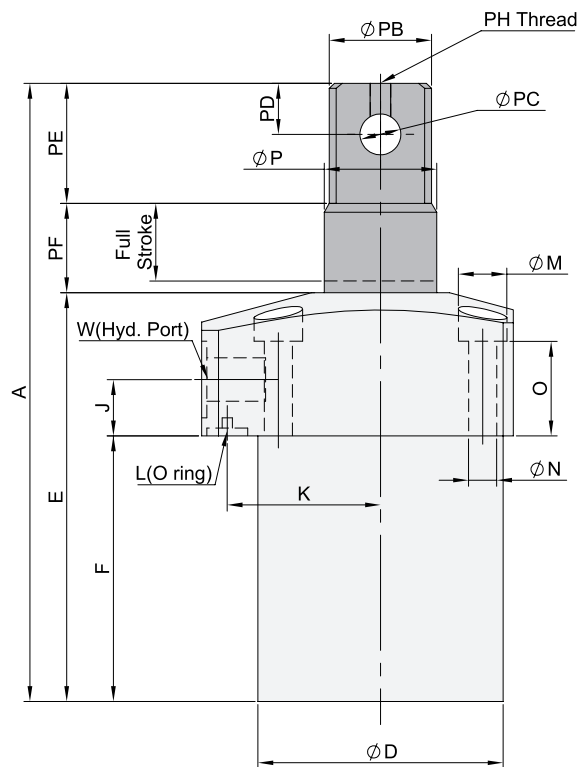
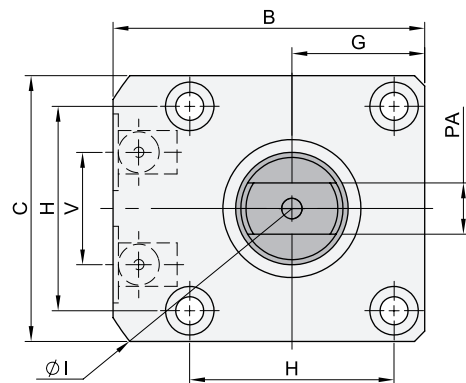
Ordering Method: [Product code - DS](#)

Note: Actual force may vary by 10% - 15% due to friction loss.

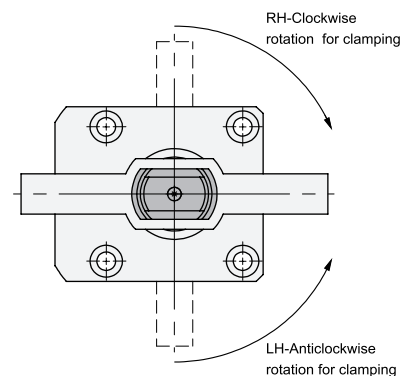
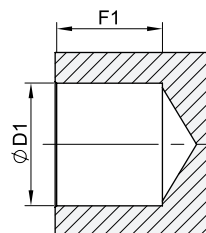
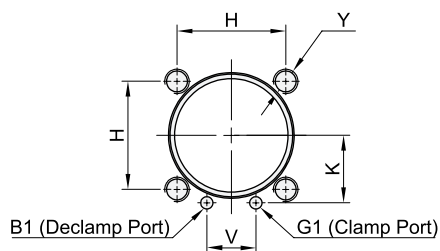
Warning: Operating above 70 Bar may damage the [Swing clamp](#) and will void the warranty.

Never allow the [Swing clamp](#) lever to contact the fixture or workpiece during the swing stroke.

Swing clamp - Top mount (P type)



Mounting details



All dimensions are in mm except otherwise specified.

Swing clamp - Top mount (P type)

Model No.	DSP - 048 -	DSP - 055 -	DSP - 065 -	DSP - 075 -	DSP - 090 -
Piston (Bore) $\varnothing$	35	40	50	60	75
A	121	136	145	171.5	185
B	61	69	81	92	107
C	52	60	70	80	95
$\varnothing D$ (e8)	48	55	65	75	90
E	80	87	93	108	114
F	52	59	63	71	74
G	26	30	35	40	47.5
H	40	47	55	63	75
$\varnothing I$	82	88	106	120	136
J	11	11	11	12	16
K	30	33.5	39	45	52.5
L (O Ring)	4 x 2	4 x 2	6 x 2	6 x 2	6 x 2
$\varnothing M$	9	11	11	14	17.5
$\varnothing N$	5.5	6.6	6.6	9	11
O	16	14.5	16	19.5	20
$\varnothing P$	22	25	30	36	45
PA	10	12	14	16	22
PB	20	23	28	34	43
$\varnothing PC$ (H8)	8	10	12	12	16
PD	10	12	15	16.5	20
PE	23.5	29	30.5	38.5	44.5
PF	17.5	20	21.5	25	27.5
PH (Thread)	M4	M5	M6	M6	M8
V	22	24	30	32	35
W (Hyd. Port)	G1/8"	G1/8"	G1/4"	G1/4"	G1/4"
Lock Cyl. Area (cm ²)	5.8	7.6	12.5	18.5	28.5
Full Stroke (mm)	14	17	18	21.5	23
Swing Stroke (90°)	6	8	8	9.5	11
Locking Stroke	8	9	10	12	12
Cyl. Vol. (cm ³)	Clamp	8.2	13	22.6	39.8
	Declamp	13.5	21.4	35.3	62.2
Clamping force at 70 Bar (Kg.)	345	429	622	928	1469
Design Pressure (Bar)	105				
Operating Temp. (°C)	10 - 70				
Weight (Kg.)	1.3	1.8	2.6	4	5.9
$\varnothing B1, \varnothing G1$	2	2	2.5	2.5	2.5
$\varnothing D1$ (E8)	48	55	65	75	90
F1 $\pm$ 0.2	54	61	65	73	76

Ordering Method: Product code - DSP

Note: Actual force may vary by 10% - 15% due to friction loss.

Levers are to be sold separately.

Warning: Operating above 70 Bar may damage the **Swing clamp** and will void the warranty.

Never allow the **Swing clamp** lever to contact the fixture or workpiece during the swing stroke.



Use the allen key and spanner for tightening



Do not use a hammer on the assembly



www.dynamichydraulics.co.in

The dimensions shown in the catalogue can be changed without prior notice to improve product quality.

Since certain products are undergoing research and development, please refer to our website for new updates.

Designed by: Exontrix Systems

 +91 917 283 9607

 527, Shiye Bawada Road, Opposite
MIDC Shirol, Kolhapur - 416122,
Maharashtra, India.

GO DYNAMIC™