HYDRAULIC CYLINDER

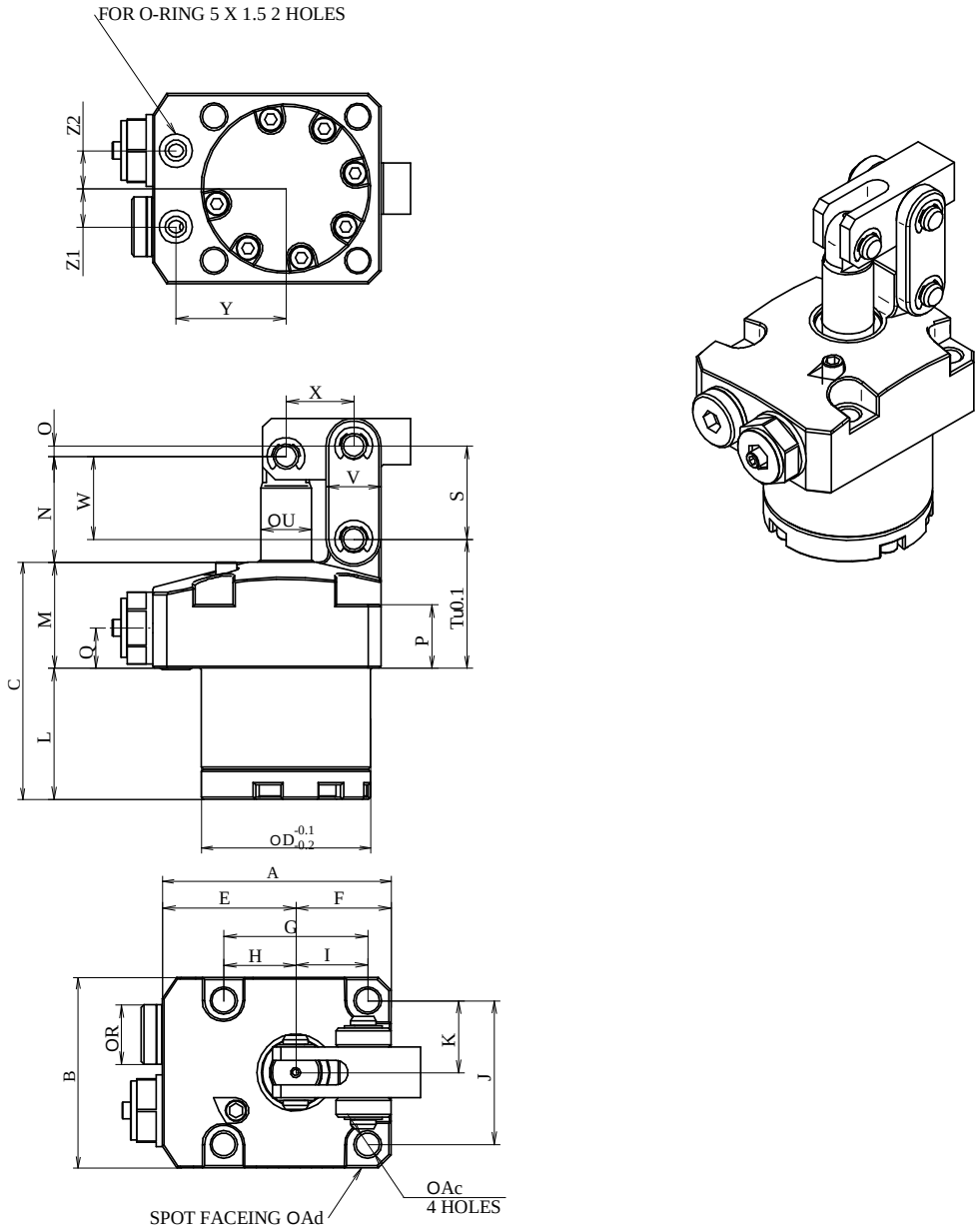
Key features:

- One-piece rigid body.
- As an option speed control valve is available for possible fine adjustment.
- Most compact as compare to other cylinders available in market.
- As an option quick change hinge pins are available.
- 58~60 HRC hardness on all sliding parts in contact with O-ring for dent free operation.

Clamp Directions:

LEFT CLAMPING CENTRE CLAMPING RIGHT CLAMPING

External Dimensions



GK	26	40	CC	S	QH
	1	2	3	4	5

1 - CYLINDER BORE DIA

2 - CYLINDER OD

3 - LEVER DIRECTION

- CC- CENTRE CLAMPING
- LH – LEFT HAND CALMPING
- RH- RIGHT HAND CLAMPING

4. OPTIONAL:

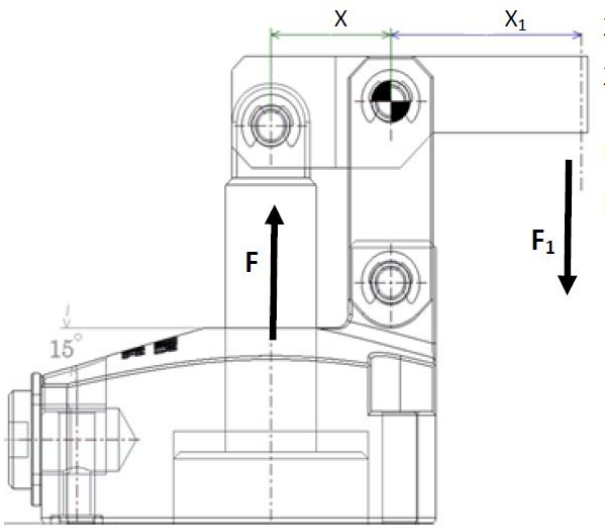
S- WITH SPEED CONTROL VALVE

5. OPTIONAL:

QH: WITH QUICKCHANGE HING PIN

Specifications:

MODEL No.	GK 26 40	GK 30 48	GK 35 55	GK 45 65	GK 55 75	GK 65 90	GK 80 105
BORE DIA.	26	30	35	45	55	65	80
STROKE LENGTH	18.5	22	25	28.5	34	41	46.7
BALANCE STROKE	3	3	3	3	3	3	3
A	54	61	69	81	94.5	109	127
B	45	51	60	70	85	100	120
C	56	62	97.3	78	84	101	115
Ø D	40	48	55	65	75	90	105
E	31.5	35.5	39	46	52	59.5	67
F	22.5	25.5	30	35	42.5	50	60
G	34	40	47	55	63	75	88
H	17	20	23.5	27.5	31.5	37.5	44
I	17	20	23.5	27.5	31.5	37.5	44
J	34	40	47	55	63	75	88
K	17	20	23.5	27.5	31.5	37.5	44
L	31	34	39.3	48	47	61	65
M	25	28	28	30	37	40	50
N	25	29	31.5	37	45	52	62
O	2.5	3.5	6	7.5	9.5	13	16
P	15	16	13.5	16	17.5	17	22
Q	11	12	12	13	16	16	19
ØR	14	14	14	16	16	22	22
S	27.5	32.5	37.5	44.5	55.5	65	78
S	22	26	30	35.5	43.5	52.5	64
T	30.5	34.5	35.5	39	48	52	64
U	12	14	16	20	22	28	36
V	13	13	16	19	25	28	32
W	19.5	22.5	24	28	34	39.5	48
X	16	18.5	21	24.5	30	36	44
Ø Ac	5.5	5.5	6.8	6.8	6.8	11	14
Ø Ad	9	9	11	11	11	17.5	20
Y	26	30	33.5	39.5	45	52.5	60
Z1	9	11	12	15	16	18.5	22.5
Z2	9	11	12	15	16	18.5	22.5
All dimensions in mm							



X = Fix Distance Between Piston & Hinge Pin (mm).

X_1= Distance Between Hinge pin & Clamping Point (mm)

F = CYLINDER FORCE DUE TO HYD. PRESSURE (KN)

F_1= ACTUAL APPLIED FORCE ON WORKPIECE (KN)

By law of moments,

$$F\,X = F_1\,X_1$$

$$F = \frac{F_1 \times X_1}{X}$$

$$F = \frac{A \times P}{10}$$

Actual Applied force (KN) $F = \frac{A \times P}{10} \times 0.9$ (90% Efficiency)

A = Area of Cylinder (cm^2); P = Operating Pressure (MPa)

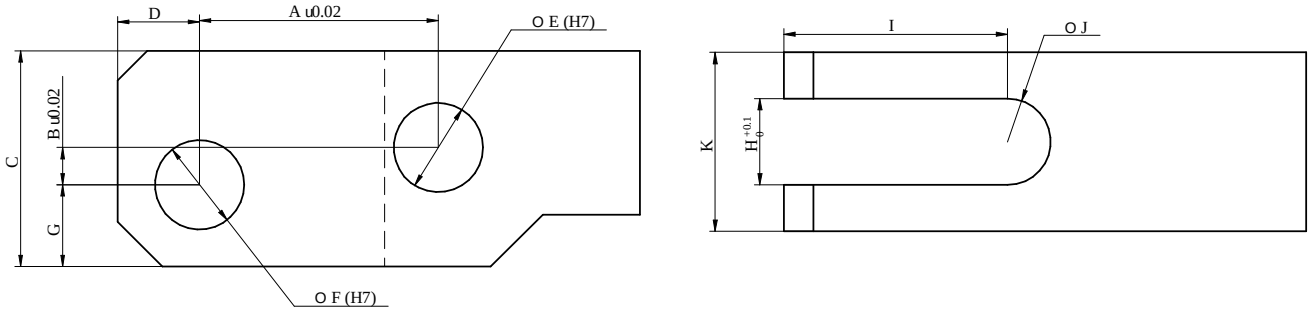
MODEL No.	GK 26 40	GK 30 48	GK 35 55	GK 45 65	GK 55 75	GK 65 90	GK 80 105
CYL.BORE.(cm)	2.6	3	3.5	4.5	5.5	6.5	8
AREA(cm2)	5.3093	7.0686	9.6211	15.9043	23.7583	33.1831	50.2655
X (mm)	16	18.5	21	24.5	30	36	44
Min. Operating pressure (MPa)				1			
Max. Operating pressure (MPa)				7			

Min. Operating Pressure = 10 Bar

Max. Operating Pressure = 70 Bar

Max. Operating Temperature = 100°C

Link Lever Design Dimensions



MODEL No.	GK 26 40	GK 30 48	GK 35 55	GK 45 65	GK 55 75	GK 65 90	GK 80 105
A	16	18.5	21	24.5	30	36	44
B	2.5	3.5	6	7.5	9.5	13	16
C	14.5	16	20	25	35	38	45
D	5.5	6	6	8	10	11	13
ØE	6	6	8	10	12	15	18
ØF	6	6	6	8	10	12	15
G	5.5	6	6	8	10	11	13
H	5.8	6	7.8	9.8	10.8	12.8	15.8
I	15	16	18	21	30	30	38
ØJ	15	16	18	21	30	30	38
K	12	12	16	19	22	25	32
All dimensions in mm							