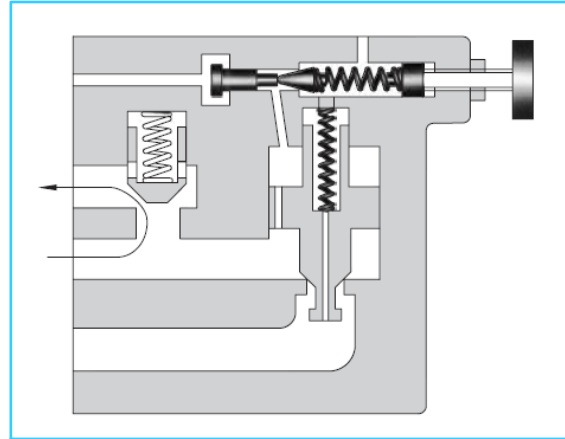


Unloading Relief valves

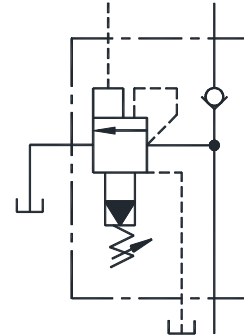
Unloading relief valves are used to operate pumps under a minimum load in accumulator or 2-pressure pump circuits etc.



Specifications

| Model Number | Max. Operating Pressure Kgf/cm ² | Max. Flow L/min. | Mass Kg. |
|------------------|--|---------------------|-------------|
| BUCG-06-※-※-3080 | 210 | 125 | 12 |

Graphic Symbol



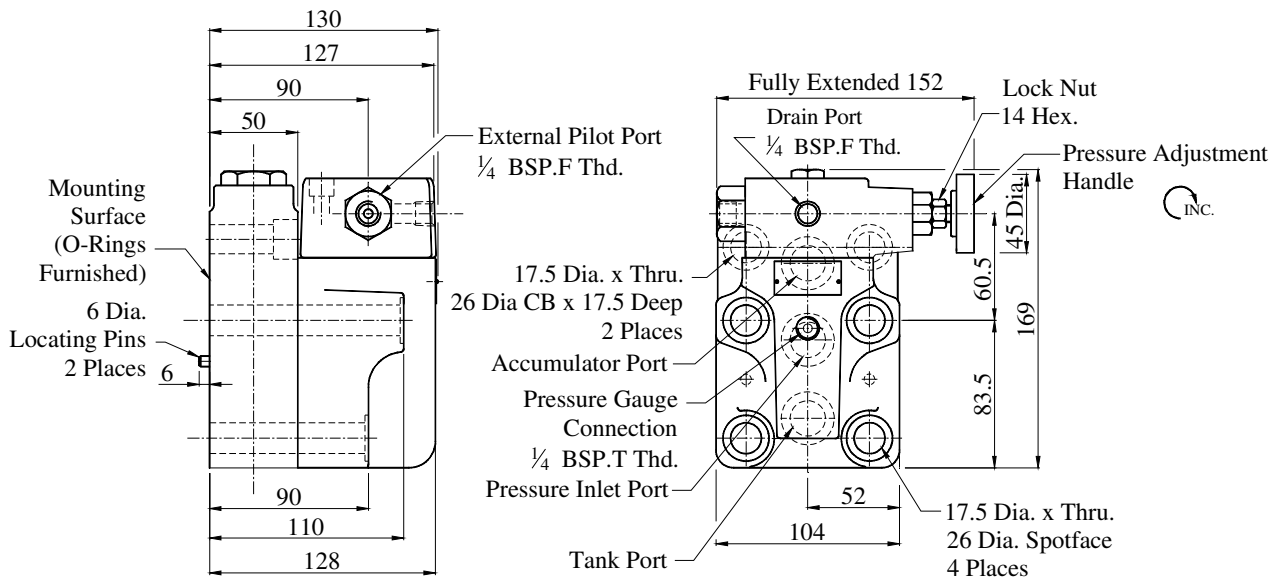
Model Number Designation

| F- | BUC | G | -06 | -B | V | -30 | 80 |
|---|--|---------------------------------|------------|---|--|---------------|------------------|
| Special Seals | Series Number | Type of Mounting | Valve Size | Cut-out Pres. Adj. Range Kgf/cm ² | High Venting ^{*1} Pres. Feature | Design Number | Design Standards |
| F: Special Seals for Phosphate Ester Type Fluids. (Omit if not required) | BUC: Unloading Relief Valves | G: Sub-Plate Mounting | 06 | B: 25~70 C: 35~140 H: 70~210 | V: For High Venting Pressure Feature (Omit if not required) | 30 | 80 |

*1 Use the high venting pressure type to reduce the shift time from unloading to onloading .

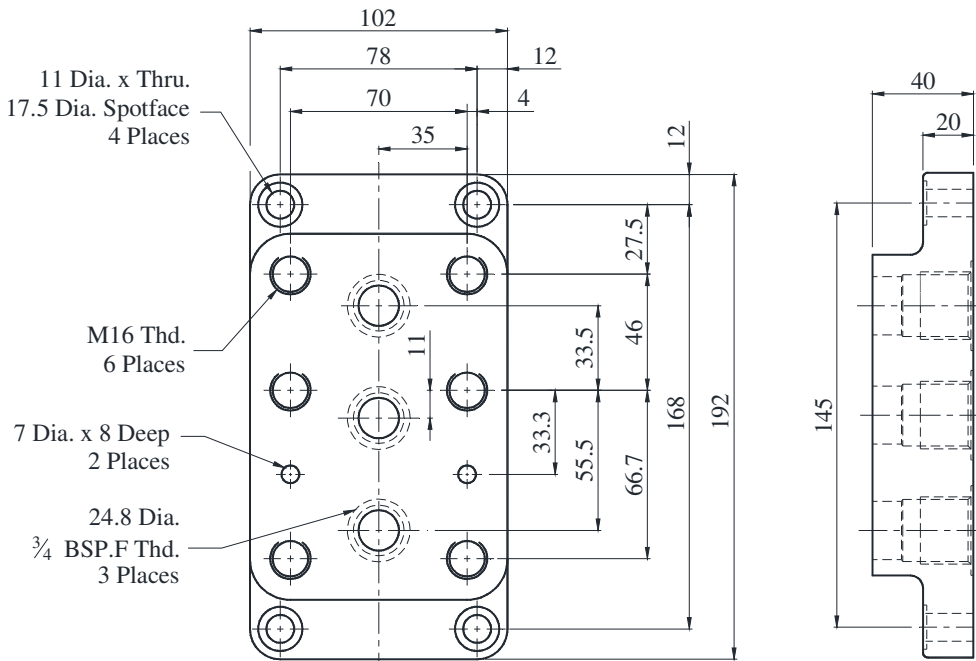
● **BUCG-06-※-※-3080**

| Model Number | “A” Thd. | “B” Thd. |
|------------------|------------|-----------|
| BUCG-06-※-※-3080 | 1/4 BSP.Tr | 1/4 BSP.F |



DIMENSIONS IN MILLIMETRES

● **Sub-Plate: BUCGM-06-2080**



■ Unloading Relief Valves

● Mounting Bolts

| Valve Model Number | Socket head Cap Screw | Qty. | Blot Kit Ordering Code |
|--------------------|-----------------------|--------|------------------------|
| BUCG-06 | M16 x 55 Lg. | 2 Nos. | BKBUCG-06-20 |
| | M16 x 110 Lg. | 2 Nos. | |
| | M16 x 130 Lg. | 2 Nos. | |

■ Instructions

- To adjust the pressure, loosen the lock nut and turn the pressure adjustment handle slowly clockwise for higher pressures or anti-clockwise for lower pressures. After adjustments, do not forget to tighten the lock nut.
- Take care not to neglect connecting the drain pipe to the tank; otherwise not only will the valve fail to operate properly but also the line pressure will rise infinitely. Extend the end of the drain pipe into fluid.
- Limit the pressure drop between the valve and the accumulator in a accumulator circuit below 10% of the cut-out pressure.
- Limit the drain port back pressure below 2% of the cut-out pressure.

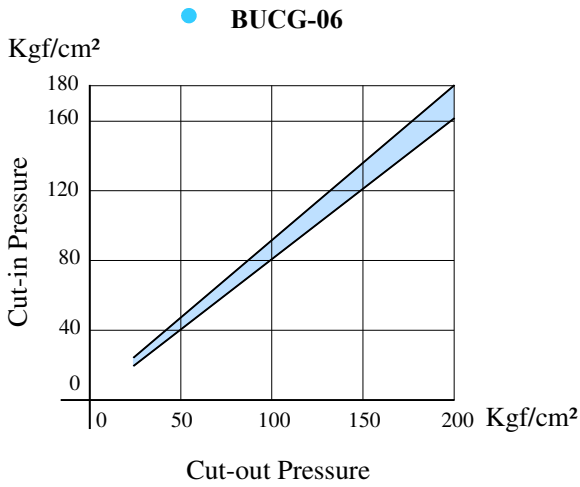
■ Sub-plate

| Valve Model Number | Sub-Plate Model Number* | Thread Size | Mass Kg. |
|--------------------|-------------------------|-------------|----------|
| BUCG-06 | BUCGM-06-2080 | 3/4 BSP.F | 4.4 |

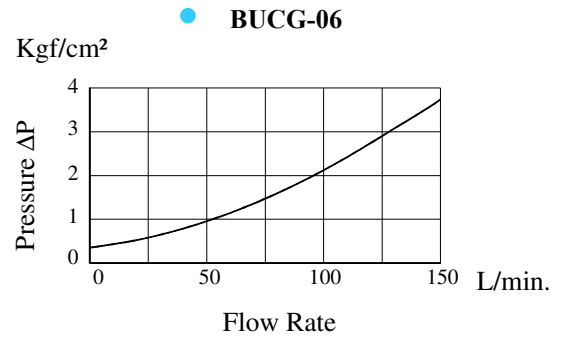
* Sub-plates are available. Specify sub-plate model from the table above. When sub-plates are not used, the mounting surface should have a good machined finish.

Typical Performance Characteristics Oil Viscosity 35 cSt [ISO VG 46, 50°C]

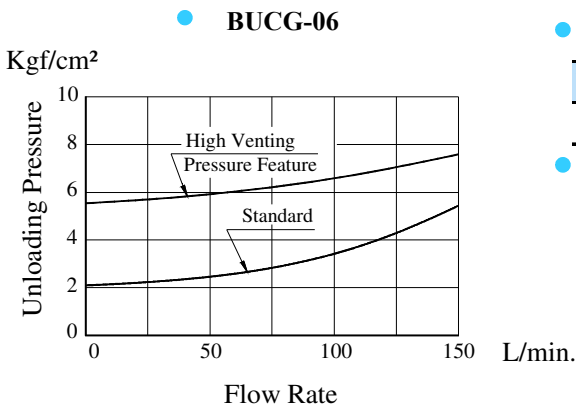
Cut-in Pressure Vs. Cut-out Pressure



Pressure Drop for Check Valve



Unloading Pressure Vs. Flow



For any other viscosity, multiply the factors in the table below.

| Viscosity cSt | 15 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|---------------|------|------|------|------|------|------|------|------|------|------|
| Factor | 0.81 | 0.87 | 0.96 | 1.03 | 1.09 | 1.14 | 1.19 | 1.23 | 1.27 | 1.30 |

For any other specific gravity (G'), the pressure drop (ΔP') is obtained from the formula below.
 $\Delta P' = \Delta P (G'/0.85)$

Spare Parts List

List of Seals

| Sl. No. | Name of Parts | Part number | Quantity |
|---------|---------------|-------------|----------|
| 1 | O-Ring | SO-NB-P6 | 3 |
| 2 | O-Ring | SO-NA-P9 | 1 |
| 3 | O-Ring | SO-NB-P11 | 1 |
| 4 | O-Ring | SO-NB-P12 | 1 |
| 5 | O-Ring | SO-NB-P18 | 1 |
| 6 | O-Ring | SO-NB-P24 | 1 |
| 7 | O-Ring | SO-NB-P28 | 5 |
| 8 | O-Ring | SO-NB-P32 | 1 |

Note : When ordering the seals, please specify the seal kit number KS-BUCG-06-30