



RQ*-W

PRESSURE RELIEF VALVE

SERIES 41

THREADED PORTS

p max 350 bar

Q max (see table of performances)

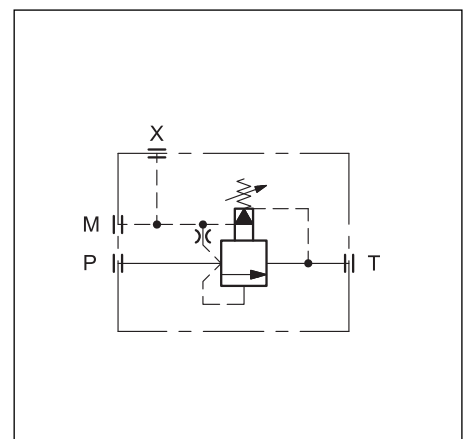
OPERATING PRINCIPLE

- The RQ*-W valves are pilot operated pressure relief valves with threaded ports, available in two nominal sizes for a flow rate up to 400 l/min.
- Main stage with shutter and cone seal.
- Possibility of remote piloting using port X (see par. 4).
- The valves allow the use of the entire flow of the pump even with pressure values near the set value. The wide passages allow reduced pressure drops and fluid heating due to low pressure drop across the valve.
- They are normally supplied with a hexagonal head adjustment screw. Upon request, they can be equipped with a SICBLOC adjustment knob.

PERFORMANCES (measured with mineral oil of viscosity 36 cSt at 50°C)

| | | RQ5-W | RQ7-W |
|----------------------------|---|-----------|-------|
| Maximum operating pressure | bar | 350 | |
| Maximum flow rate | l/min | 250 | 400 |
| Ambient temperature range | °C | -20 / +60 | |
| Fluid temperature range | °C | -20 / +80 | |
| Fluid viscosity range | cSt | 10 ÷ 400 | |
| Fluid contamination degree | According to ISO 4406:1999 class 20/18/15 | | |
| Recommended viscosity | cSt | 25 | |
| Mass | kg | 4,1 | 8 |

HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE

| | | | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|-----------|----------|--|
| | R | Q | - | W | / | / | 41 | / | |
|--|----------|----------|----------|----------|----------|----------|-----------|----------|--|

Pressure control valve _____

Nominal dimension **5** = DN 25
7 = DN 40

BSP threaded ports _____

Pressure adjustment range: _____

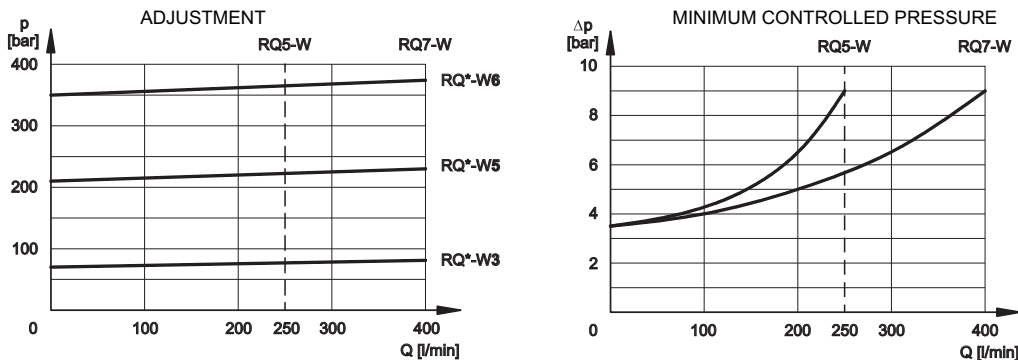
3 = up to 70 bar
5 = up to 210 bar
6 = up to 350 bar

Seals:
omit for mineral oils
V = viton for special fluids

Series No. (the overall and mounting dimensions remain unchanged from 40 to 49)

M = adjustment with SICBLOC knob
(omit for adjustment with hexagonal head screw)

2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

| | |
|---|--|
| 1 | Hexagonal head adjustment screw. Spanner 13. Clockwise rotation to increase pressure |
| 2 | Remote piloting port X: 1/4" BSP |
| 3 | Outlet port T RQ5-W: 1" BSP RQ7-W: 1" 1/2 BSP |
| 4 | Pressure port P RQ5-W: 3/4" BSP RQ7-W: 1" 1/4 BSP |
| 5 | Pressure gauge port 3/8" BSP |
| 6 | SICBLOC adjustment knob. To operate, push and rotate at the same time. |

| | A | B | C | D | ØE | F | G | H | I | L | M | ØN | ØO |
|--------------|-----|----|----|---|----|------|------|-----|-----|-----|----|------|----|
| RQ5-W | 168 | 98 | 49 | 4 | 22 | 21.5 | 44.5 | 123 | 80 | 87 | 53 | 35.5 | 46 |
| RQ7-W | 168 | 98 | 49 | 4 | 22 | 43 | 59.5 | 145 | 102 | 109 | 68 | 50 | 56 |