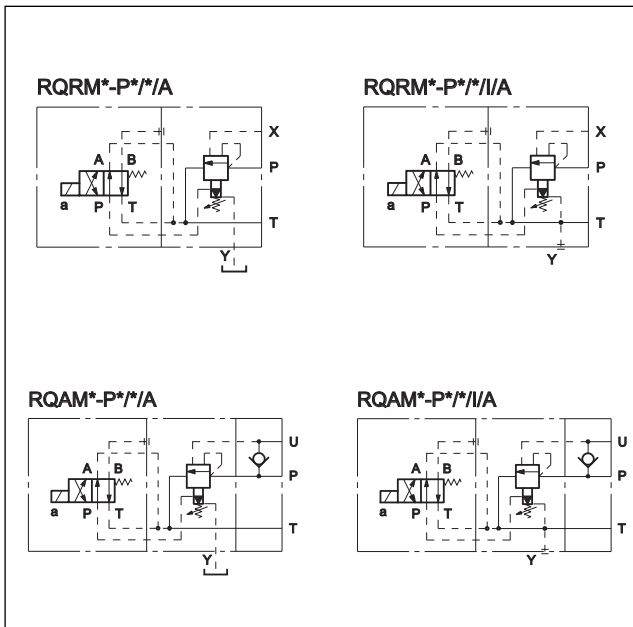


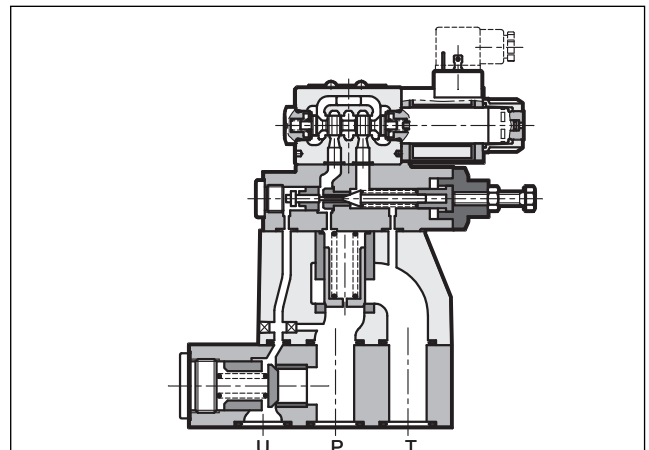
**RQ\*M\*-P**  
UNLOADING VALVE  
WITH AUTOMATIC OR  
SOLENOID OPERATED VENTING  
(FOR CIRCUITS WITH ACCUMULATOR)  
SERIES 51  
**RQRM\*-P**  
FOR REMOTE PILOTING  
**RQAM\*-P**  
WITH INCORPORATED CHECK VALVE

SUBPLATE MOUNTING

HYDRAULIC SYMBOLS



OPERATING PRINCIPLE



- The RQ\*M\*-P valves have not only the normal function of relief valves or safety valves but also the characteristic of freely discharging the pump flow either when the set pressure value is reached, or when the solenoid valve is de-energized. In order to assure this condition, the use of an accumulator that guarantees pressure in the circuit is required. The use of a check valve prevents the accumulator from discharging through the valve in the open position.
- They are made with a balanced shutter main stage that has wide passages for large flows, with reduced pressure drops.

PERFORMANCES

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

		RQRM3-P	RQRM5-P	RQRM7-P	RQAM5-P	RQAM7-P
Maximum operating pressure	bar	350				
Maximum flow rate	l/min	200	400	500	400	500
Ambient temperature range	°C	-20 / +50				
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	5	5,8	8	12	19

NOTE: for the solenoid valve DS3 characteristics see catalogue 41 150

### 1 - IDENTIFICATION CODE

<b>R</b>	<b>Q</b>	<b>M</b>	<b>-</b>	<b>P</b>	<b>/</b>	<b>/</b>	<b>A</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>51</b>	<b>-</b>	<b>K1</b>	<b>/</b>	
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Unloading valve

Automatic venting for circuits with accumulator  
**R** = for remote piloting  
**A** = with embedded check valve (unavailable on size 3)

Solenoid valve for electrical unloading

Size: \_\_\_\_\_  
**3** = (RQRM3-P) ISO 6264-06-09-\* -97 (CETOP R06)  
**5** = (RQRM5-P) ISO 6264-08-13-\* -97 (CETOP R08)  
**5** = (RQAM5-P)  
**7** = (RQRM7-P) ISO 6264-10-17-\* -97 (CETOP R10)  
**7** = (RQAM7-P)

Subplate mounting \_\_\_\_\_

Pressure adjustment range: \_\_\_\_\_  
**3** = up to 70 bar    **6** = up to 280 bar  
**5** = up to 210 bar

Differential pressure (values  $\pm 2.5\%$ ) \_\_\_\_\_  
**1** = pump switch on at 75% of the set value  
**2** = pump switch on at 63% of the set value

Unloading with de-energized solenoid \_\_\_\_\_

**I** = internal drainage (not possible when the backpressure on the return line is greater than 2 bar). Omit for external drainage.

**CM** = manual override, boot protected.  
Omit for override integrated in the tube (standard)

Coil electrical connection: plug for connector type DIN 43650 (standard)

DC power supply  
**D12** = 12 V  
**D24** = 24 V  
**D48** = 48 V  
**D110** = 110 V  
**D220** = 220 V  
**D00** = valve without coils (see NOTE)

AC power supply  
**A24** = 24 V - 50 Hz  
**A48** = 48 V - 50 Hz  
**A110** = 110 V - 50 Hz / 120 V - 60 Hz  
**A230** = 230 V - 50 Hz / 240 V - 60 Hz  
**A00** = valve without coils (see NOTE)  
**F110** = 110 V - 60 Hz  
**F220** = 220 V - 60 Hz

Seals:  
**N** = NBR seals for mineral oil (standard)  
**V** = FPM seals for special fluids

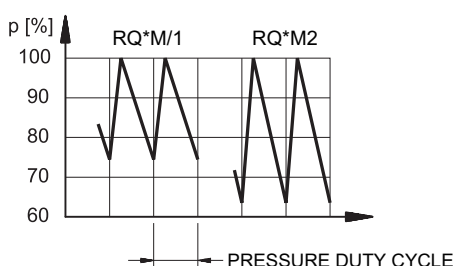
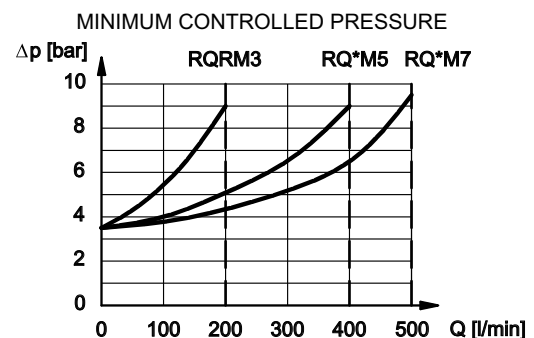
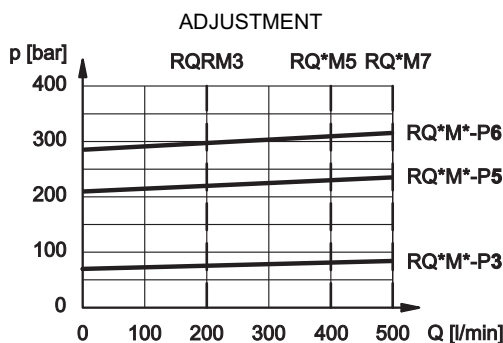
Series No. (the overall and mounting dimensions remain unchanged from 50 to 59)

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

**NOTE:** The locking rings of the coils and the relevant O-Rings are supplied together with valves

### 2 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)



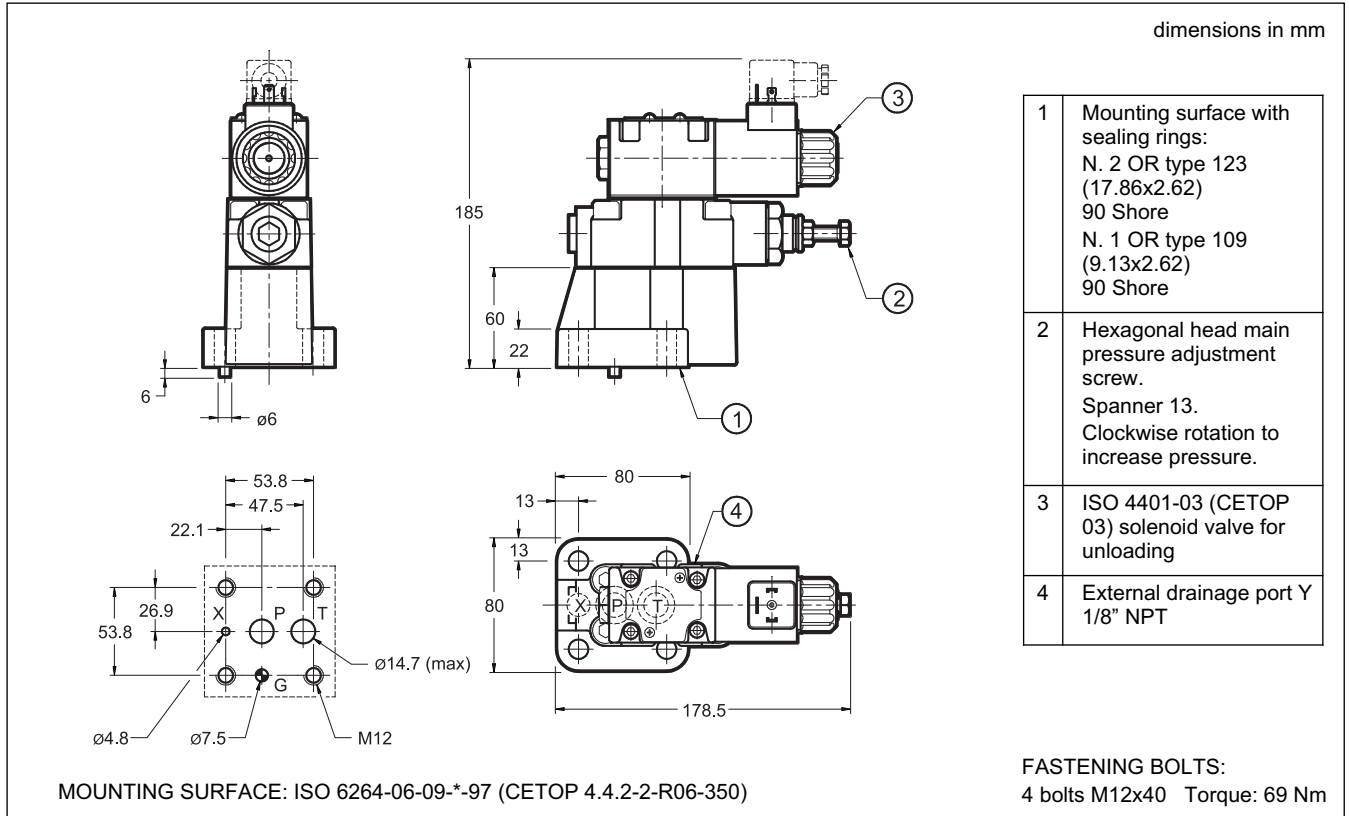
### 3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N). 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.

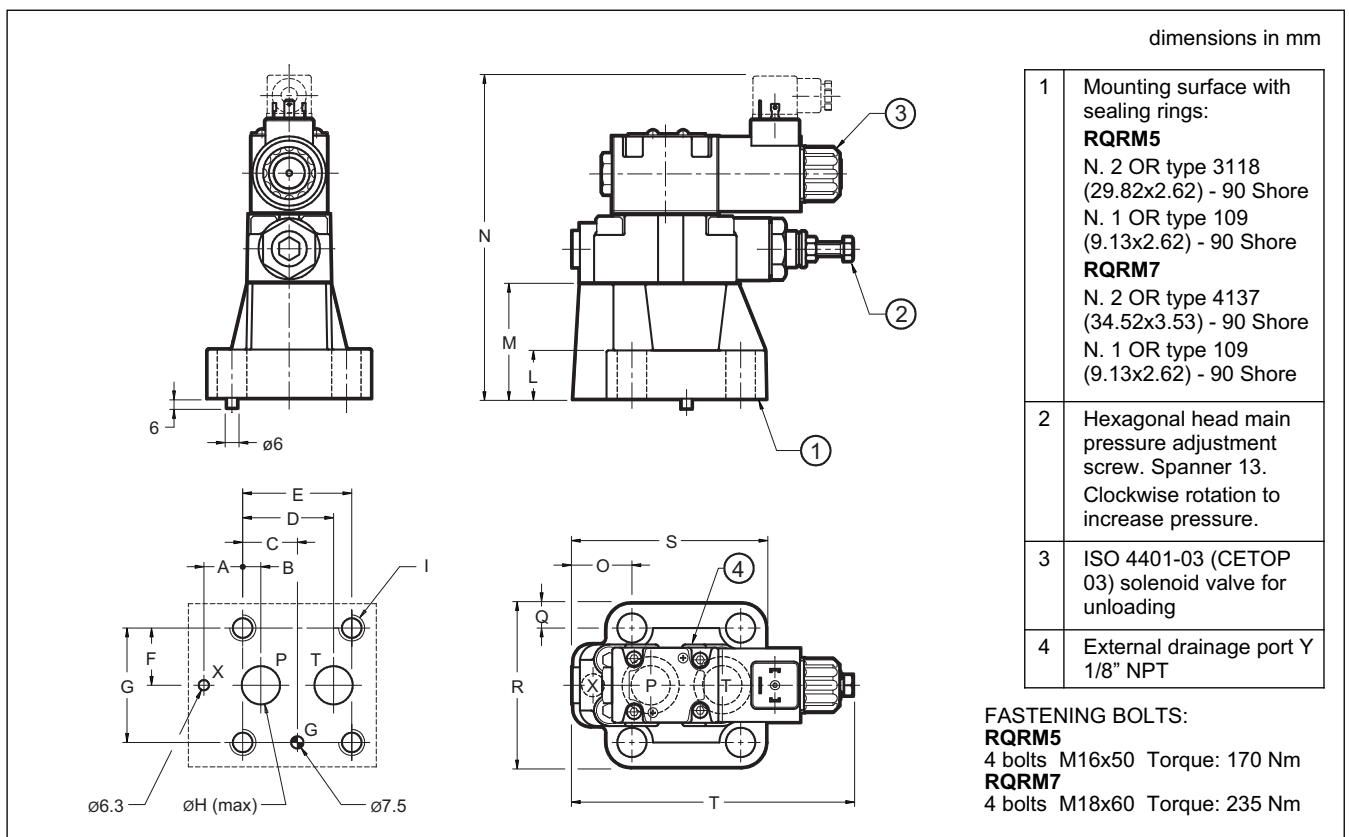
Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

### 4 - RQRM3-P OVERALL AND MOUNTING DIMENSIONS

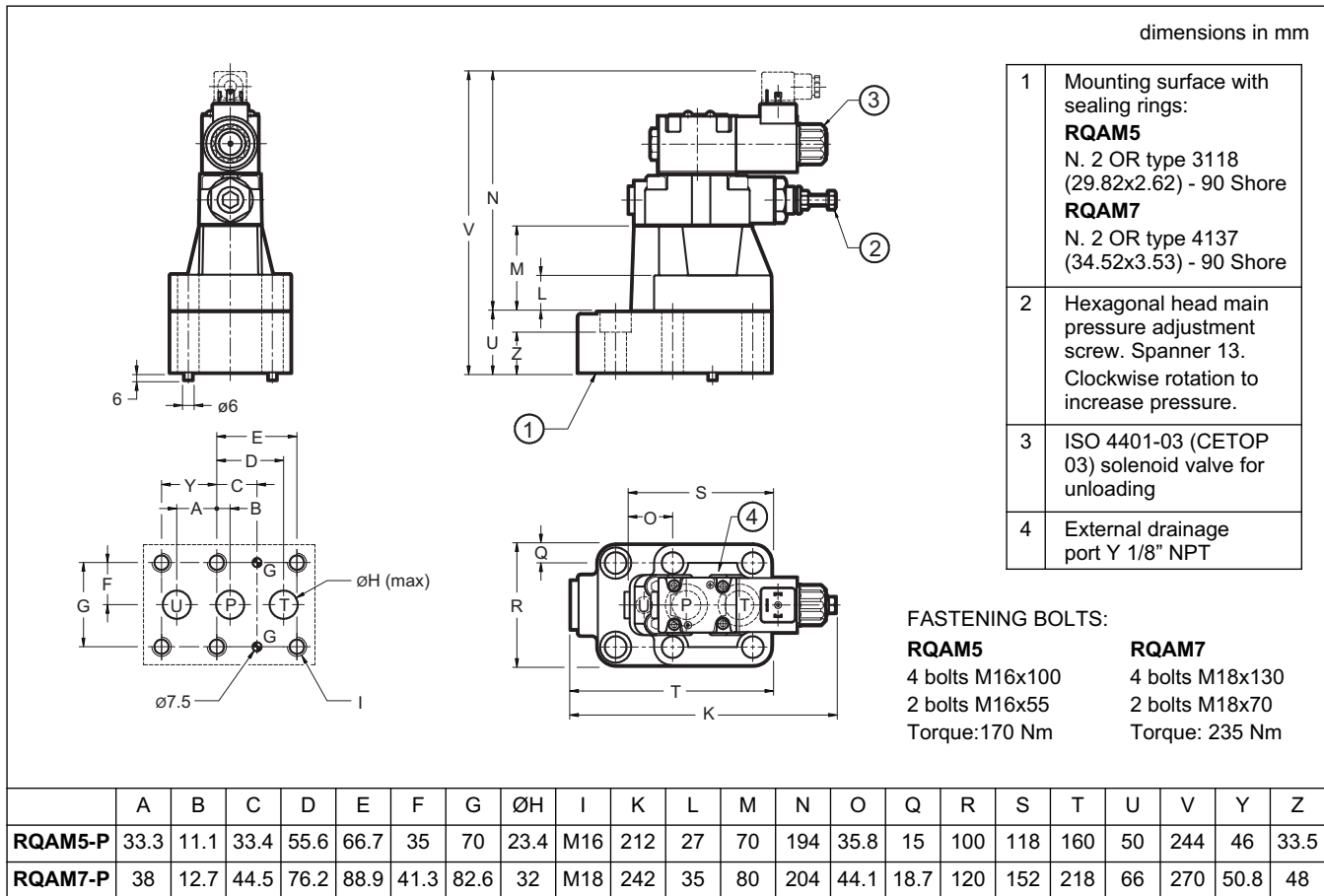


### 5 - RQRM5-P AND RQRM7-P OVERALL AND MOUNTING DIMENSIONS



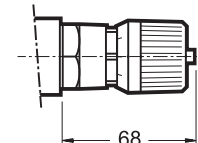
MOUNTING SURFACE		A	B	C	D	E	F	G	ØH	I	L	M	N	O	Q	R	S	T
<b>RQRM5-P</b>	ISO 6264-08-13-*-97 (CETOP 4.4.2-2-R08-350)	23.8	11.1	33.4	55.6	66.7	35	70	23.4	M16	27	70	194	35.8	15	100	118	170
<b>RQRM7-P</b>	ISO 6264-10-17-*-97 (CETOP 4.4.2-2-R10-350)	31.8	12.7	44.5	76.2	88.9	41.3	82.6	32	M18	35	80	204	44.1	18.7	120	152	180

### 6 - RQAM5-P AND RQAM7-P OVERALL AND MOUNTING DIMENSIONS



### 7 - ADJUSTMENT KNOB

The RQ\*M\*-P valves can be equipped with a SICBLOC adjustment knob. To operate it, push and rotate at the same time. To request this option, add: /M (see paragraph 1).



### 8 - ELECTRIC CONNECTORS

The solenoid valves are never supplied with connectors. Connectors must be ordered separately, please see catalogue 49 000.

### 9 - MANUAL OVERRIDE, BOOT PROTECTED: CM

Whenever the solenoid valve installation may involve exposure to atmospheric agents or utilization in tropical climates, use of the manual override, boot protected is recommended. Add the suffix **CM** to request this device (see paragraph 1).

For overall dimensions see catalogue 41 150.

### 10 - SUBPLATES

(see catalogue 51 000)

	<b>RQRM3-P</b>	<b>RQRM5-P</b>	<b>RQRM7-P</b>	<b>RQAM5-P</b>	<b>RQAM7-P</b>
Type	PMRQ3-AI4G rear ports	PMRQ5-AI5G rear ports	PMRQ7-AI7G rear ports	PMRQA5-AI5G rear ports	PMRQA7-AI7G rear ports
P, T, U ports dimensions	P: 1/2" BSP T: 3/4" BSP	1" BSP	1" 1/4 BSP	3/4" BSP	1" 1/4 BSP
X port dimensions	1/4" BSP	1/4" BSP	1/4" BSP	-	-