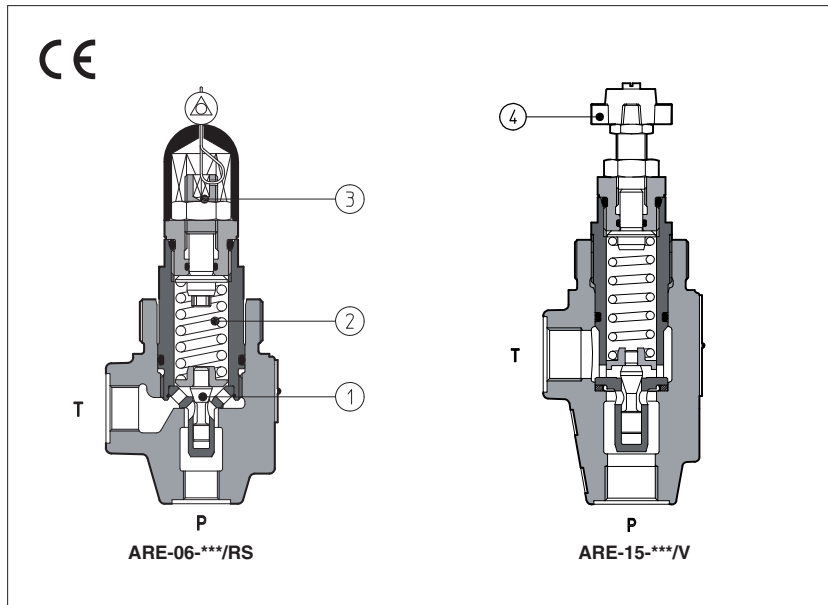


# Pressure relief valves type ARE

direct operated, in line mounting



**ARE** are poppet type, directed operated pressure relief valves, with threaded ports for in line mounting.

The flow P→T is permitted when pressure force acting on the poppet (1) overcomes the force of the spring (2).

Regulation is operated by means of a screw (3) or optionally by means of a handwheel (4) acting on the spring.

Clockwise rotation increases the pressure.

These valves are available in two sizes, with port P=G 1/4" or G 1/2".

Option **RS**, conforms to the Machine Directive (2006/42/CE), with factory preset and lead sealed regulation.

The factory pressure setting required by the customer corresponds to the valve's cracking pressure.

Max flow: **100 l/min:**

Max pressure: ARE-06 up to **500 bar**

ARE-15 up to **420 bar**

## 1 MODEL CODE

<b>ARE</b>	-	<b>06</b>	/	<b>350</b>	/	<b>RS</b>	/	<b>*</b>	/	<b>**</b>	/	<b>*</b>
<p><b>ARE</b> = pressure relief valve with thread connections</p> <p>Available also in cartridge execution, see tab. C010</p> <p>Size:  <b>06</b> = port P G 1/4"  <b>15</b> = port P G 1/2"</p> <p>Max pressure: see section 3</p>										<p>Seals material, see section 4:                  - = NBR  <b>PE</b> = FKM  <b>BT</b> = HNBR</p> <p>Series number</p>		
										<p>Only for RS options:  <b>280</b> = factory pressure setting to be defined depending to the customer requirement (example 280 = 280 bar)</p>		
										<p>Options (1):</p> <p><b>R</b> = leak free execution  <b>RS</b> = leak free execution plus lead sealed regulation conforming to 2006/42/CE</p> <p>Manual override only for standard and /R option:</p> <p><b>V</b> = regulating handwheel  <b>VF</b> = regulating knob  <b>VS</b> = regulating knob with safety locking</p>		

For **PED** version see technical table CY020

(1) Possible combined options:

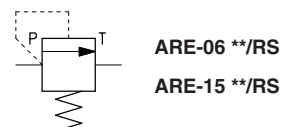
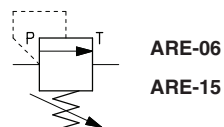
**RV** = leak free and regulating handwheel

**RVF** = leak free and regulating knob

**RVS** = leak free and regulating knob with safety locking

## 2 HYDRAULIC SYMBOLS

Hydraulic symbol



**3 HYDRAULIC CHARACTERISTICS**

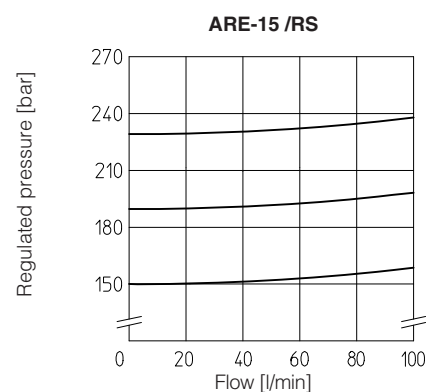
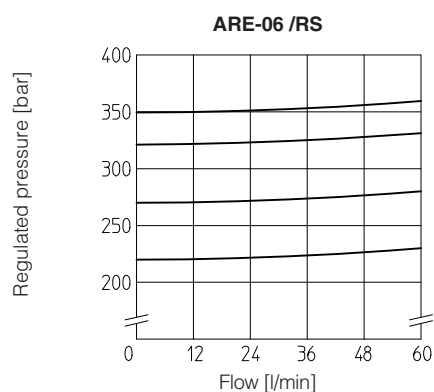
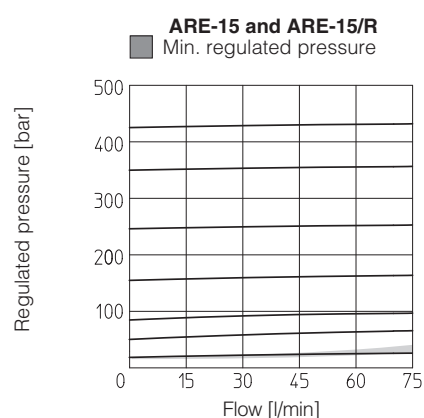
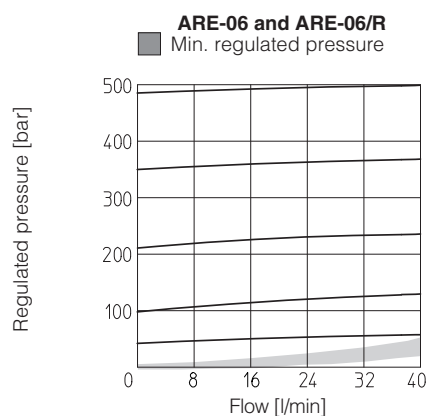
Valve model		ARE-06					ARE-15						
Max pressure setting [bar]	<b>Standard</b>	50	100	210	350	500	15	50	75	150	250	350	420
	<b>/R</b>	50	100	210	350	500	15	50	75	150	250	420	
	<b>/RS</b>	220		270	330	350	150			190	230		
Pressure range [bar]	<b>Standard</b>	2÷50	3÷100	10÷210	15÷350	30÷500	2÷15	3÷50	4÷75	8÷150	8÷250	30÷350	30÷420
	<b>/R (1)</b>	2÷50	3÷100	10÷210	15÷350	30÷500	2÷15	3÷50	4÷75	8÷150	8÷250	30÷420	
	<b>/RS (1)</b>	200÷250		250÷290	290÷350	310÷370	130÷170			170÷210	210÷250		
Max pressure port T [bar]		50					50						
Max flow [l/min]	<b>Standard, /R</b>	40					75						
	<b>/RS</b>	60					100						

(1) The values correspond to the min and max regulation of the valve's craking pressure

**4 MAIN CHARACTERISTICS, SEALS AND FLUIDS** - for other fluids not included in below table, consult our technical office

Assembly position	Any position		
Compliance	RoHS Directive 2011/65/EU as last update by 2015/863/EU REACH Regulation (EC) n°1907/2006		
Ambient temperature	Standard execution = -30°C ÷ +70°C /PE option = -20°C ÷ +70°C /BT option = -40°C ÷ +70°C		
Seals, recommended fluid temperature	NBR seals (standard) = -20°C ÷ +60°C, with HFC hydraulic fluids = -20°C ÷ +50°C FKM seals (/PE option) = -20°C ÷ +80°C HNBR seals (/BT option) = -40°C ÷ +60°C, with HFC hydraulic fluids = -40°C ÷ +50°C		
Recommended viscosity	15÷100 mm²/s - max allowed range 2,8 ÷ 500 mm²/s		
Fluid contamination class	ISO 4406 class 21/19/16 NAS 1638 class 10, in line filters of 25 µm (β25 ≥75 recommended)		
	<b>Hydraulic fluid</b>	<b>Suitable seals type</b>	<b>Classification</b>
Mineral oils	NBR, FKM, HNBR	HL, HLP, HLPD, HVLP, HVLDP	DIN 51524
Flame resistant without water	FKM	HFDU, HFDR	ISO 12922
Flame resistant with water	NBR, HNBR	HFC	

**5 REGULATED PRESSURE VERSUS FLOW DIAGRAMS** (based on mineral oil ISO VG 46 at 50°C)



**6 DIMENSIONS [mm]**

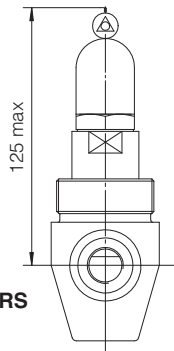
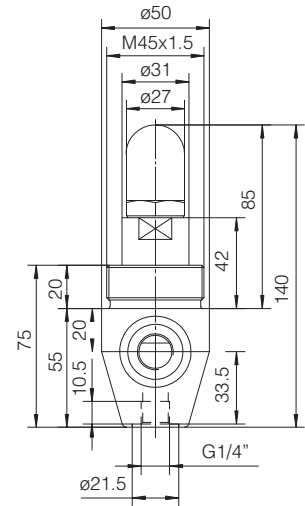
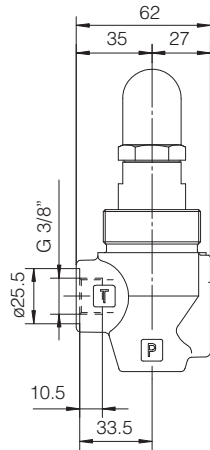
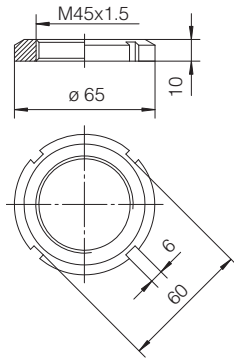
**ARE-06**

**P** = INLET PORT G 1/4"

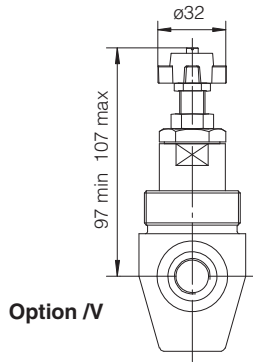
**T** = OUTLET PORT G 3/8"

Locking ring for fastening the valve.

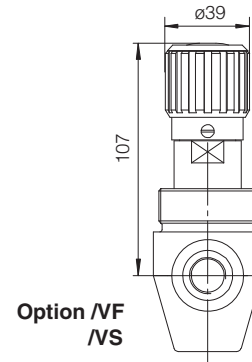
Model code: SP-6-RE-310030



**Option /RS**



**Option /V**



**Option /VF /VS**

Mass: 1 Kg

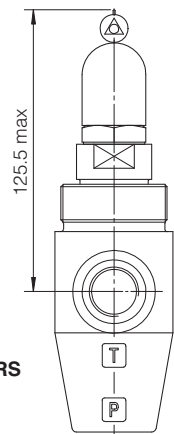
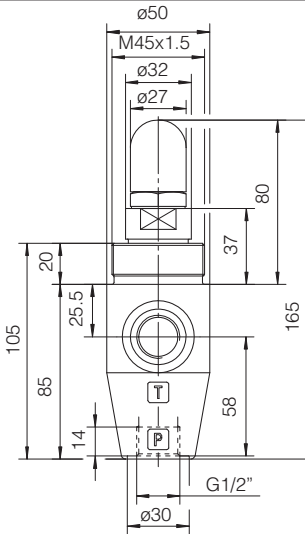
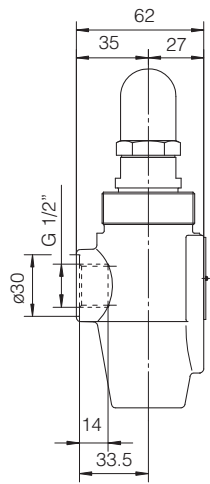
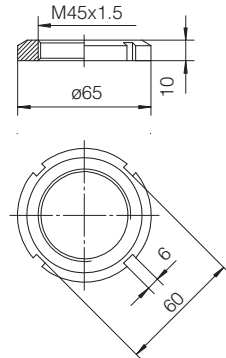
**ARE-15**

**P** = INLET PORT G 1/2"

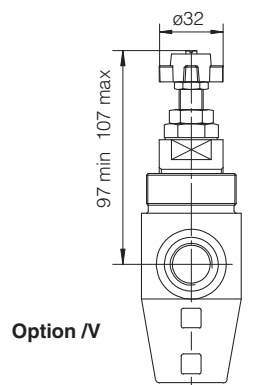
**T** = OUTLET PORT G 1/2"

Locking ring for fastening the valve.

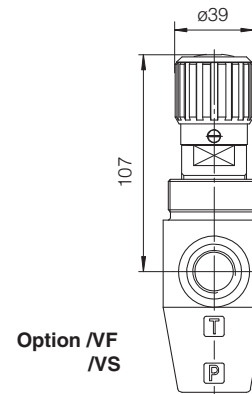
Model code: SP-6-RE-310030



**Option /RS**



**Option /V**



**Option /VF /VS**

Mass: 1,3 Kg

Note:  
For handwheel features, see technical table K150.