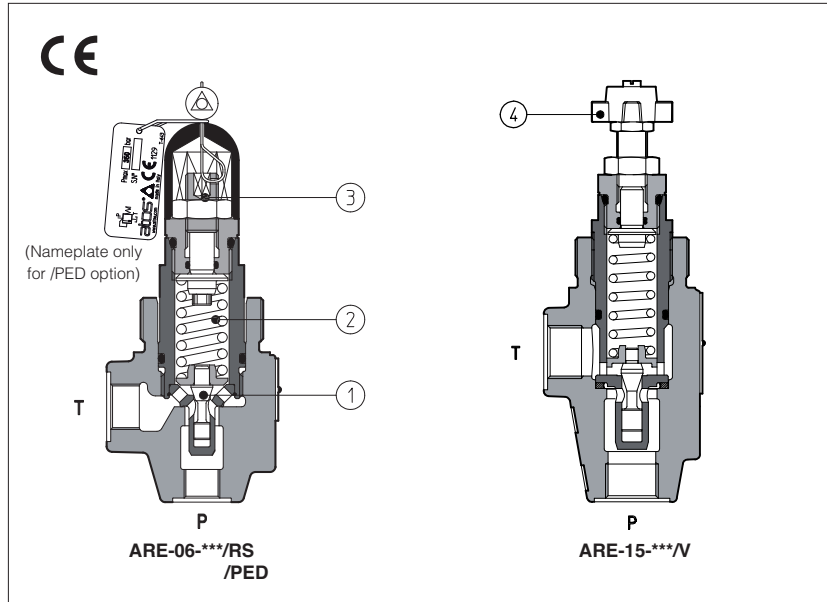


Pressure relief valves type ARE

direct operated, in line mounting - G 1/4" and G 1/2" threaded ports



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".

Also available in safety options with sealed regulation:

/RS conforming to Machine Directive (2006/42/CE). The factory preset regulation required by the customer corresponds to the valve's cracking pressure.

/PED conforming to PED Directive (2014/68/UE). The valves are factory set at the pressure level required by the customer with a flow through the valve as shown in section 5.

For this version, the P, Q limits are shown in section 7.

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

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

ARE-15 up to **420 bar**

1 MODEL CODE

ARE	-	06	/	350	/	*	/	*	/	**	/	*
<p>ARE = pressure relief valve with thread connections Available also in cartridge execution, see tab. C010</p>										<p>Seals material, see section 4: - = NBR PE = FKM BT = HNBR</p>		<p>Series number</p>
<p>Size: 06 = port P G 1/4" 15 = port P G 1/2"</p>										<p>Only for RS, PED options: 280 = factory pressure setting to be defined depending to the customer requirement (example 280 = 280 bar)</p>		
<p>Setting:</p>		for size 15:								<p>Options (1)(2):</p>		
for size 06:		15 = 2 → 15 bar								<p>R = reduced leakage for special applications RS = as /R, plus conforming to 2006/42/CE PED = as /R, plus conforming to 2014/68/UE</p>		
50 = 2 → 50 bar		50 = 3 → 50 bar								<p>Only for standard and /R option: V = regulating handwheel VF = regulating knob VS = regulating knob with safety locking</p>		
100 = 3 → 100 bar		75 = 4 → 75 bar										
210 = 10 → 210 bar		150 = 8 → 150 bar										
350 = 15 → 350 bar		250 = 8 → 250 bar										
500 = 30 → 500 bar		350 = 30 → 350 bar										
		420 = 30 → 420 bar										

(1) For handwheel and knob features and availability, see section 7 and technical table K150.

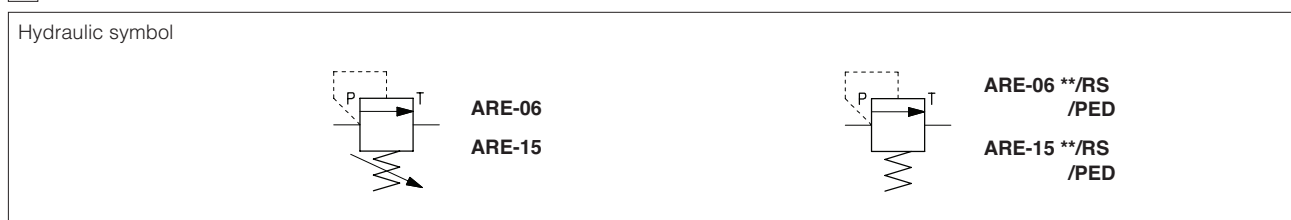
(2) Possible combined options:

RV = reduced leakages and regulating handwheel

RVF = reduced leakages and regulating knob

RVS = reduced leakages and regulating knob with safety locking

2 HYDRAULIC SYMBOLS



3 HYDRAULIC CHARACTERISTICS

Valve model		ARE-06					ARE-15						
Setting	Standard	/50	/100	/210	/350	/500	/15	/50	/75	/150	/250	/350	/420
	/R	/50	/100	/210	/350	/500	/15	/50	/75	/150	/250	/420	
	/RS	/220	/270	/330	/350		/150	/190	/230				
	/PED	/100	/210	/350	/500		/75	/150	/250	/350	/420		
Pressure range [bar]	Standard	2÷50	3÷100	10÷210	15÷350	30÷500	2÷15	3÷50	4÷75	8÷150	8÷250	30÷350	30÷420
	/R	2÷50	3÷100	10÷210	15÷350	30÷500	2÷15	3÷50	4÷75	8÷150	8÷250	30÷420	
	/RS	200÷250	250÷290	290÷350	310÷370		130÷170	170÷210	210÷250				
	/PED	25÷100	100÷210	210÷350	350÷500		25÷75	75÷150	150÷250	250÷350	350÷420		
Max pressure port T [bar]		50					50						
Max flow [l/min]	Standard, /R	40					75						
	/RS, /PED	60					100						

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

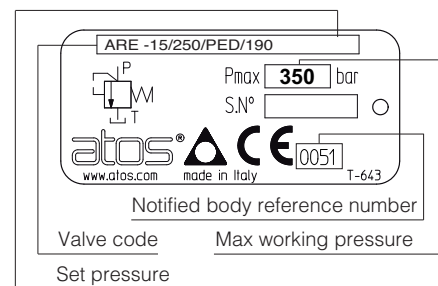
Assembly position	Any position		
Ambient temperature	Standard execution = -30°C ÷ +70°C /PE option = -20°C ÷ +70°C /BT option = -40°C ÷ +70°C		
Seals, recommended fluid temperature	NBR seals (standard) = -20°C ÷ +60°C, with HFC hydraulic fluids = -20°C ÷ +50°C FKM seals (/PE option) = -20°C ÷ +80°C HNBR seals (/BT option) = -40°C ÷ +60°C, with HFC hydraulic fluids = -40°C ÷ +50°C		
Recommended viscosity	15÷100 mm ² /s - max allowed range 2,8 ÷ 500 mm ² /s		
Fluid contamination class	ISO 4406 class 21/19/16 NAS 1638 class 10, in line filters of 25 µm (β ₂₅ ≥ 75 recommended)		
	Hydraulic fluid	Suitable seals type	Classification
Mineral oils		NBR, FKM, HNBR	HL, HLP, HLPD, HVLP, HVLPD
Flame resistant without water		FKM	HFDR, HFDR
Flame resistant with water		NBR, HNBR	HFC
			Ref. Standard
			DIN 51524
			ISO 12922

5 SETTING OF VALVES WITH /PED OPTION

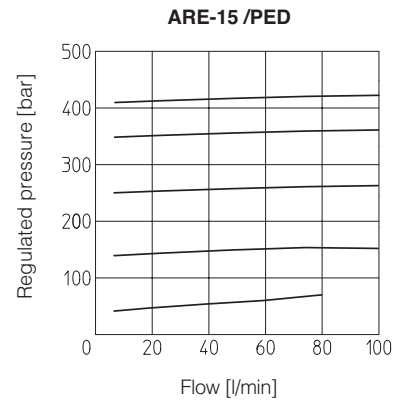
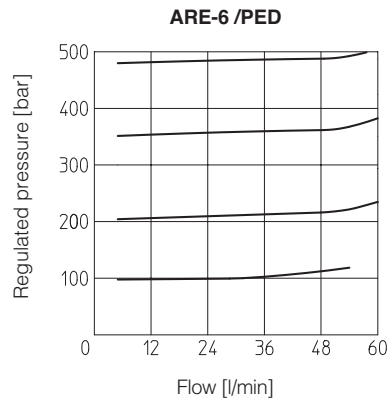
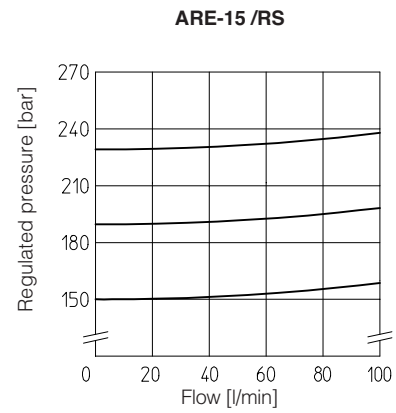
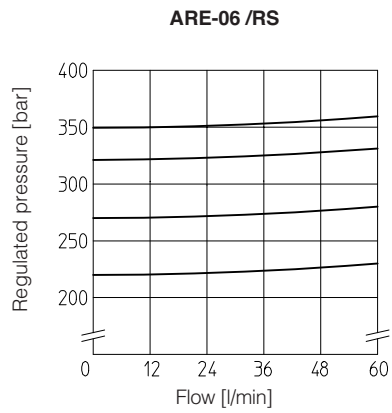
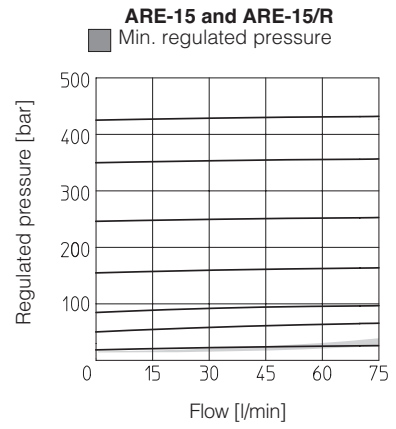
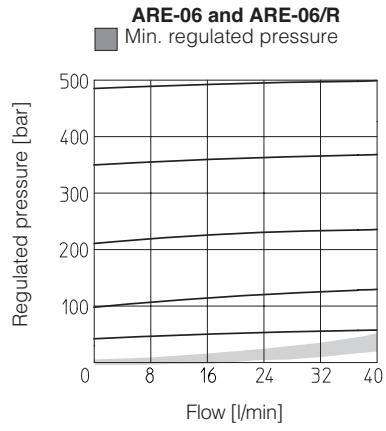
The /PED valves are factory set at the pressure level required by the customer (every 1 bar) at the following flow shown in the table. The set pressure is marked on the valve nameplate, see section 5.1

VALVE MODEL	FLOW FOR FACTORY PRESSURE SETTING (l/min)
ARE-06	12
ARE-15	12

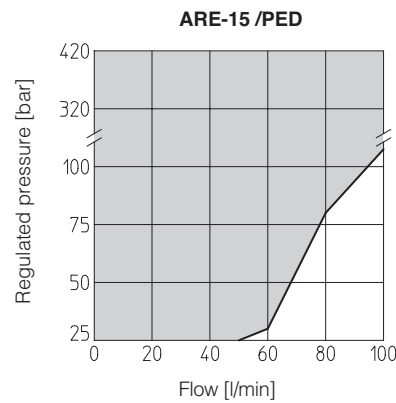
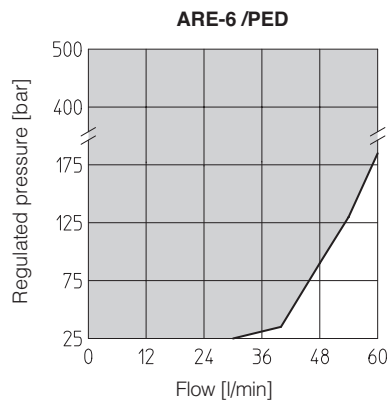
5.1 EXAMPLE OF NAMEPLATE FOR /PED OPTION



6 REGULATED PRESSURE VERSUS FLOW DIAGRAMS based on mineral oil ISO VG 46 at 50°C



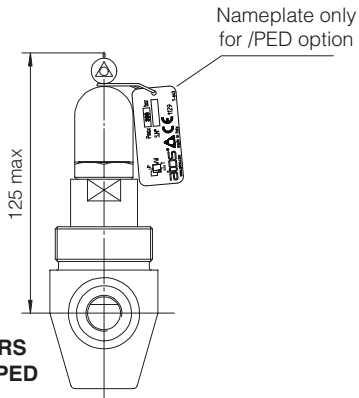
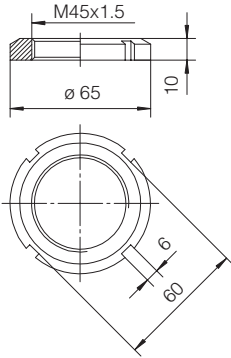
7 PERMISSIBLE RANGES (shaded area)
 based on mineral oil ISO VG 46 at 50°C



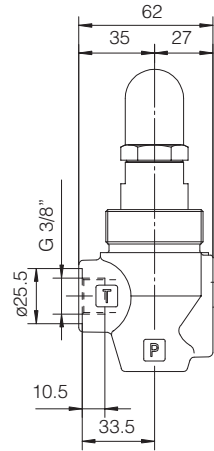
8 DIMENSIONS [mm]

ARE-06

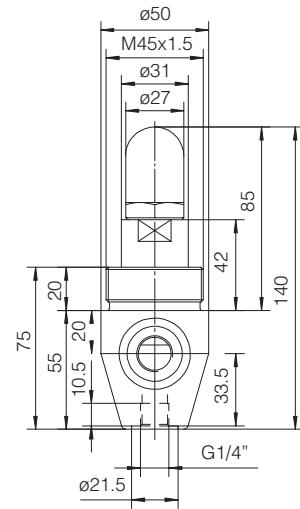
P = INLET PORT G 1/4"
T = OUTLET PORT G 3/8"
 Locking ring for fastening the valve.
 Model code: SP-6-RE-310030



**Option /RS
/PED**



Option /V

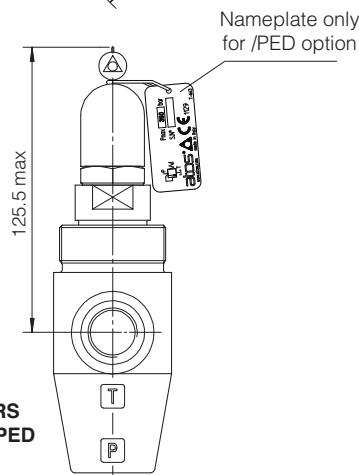
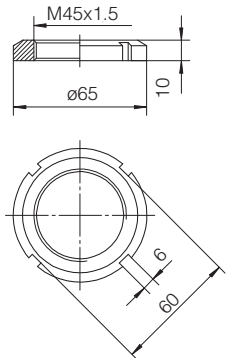


**Option /VF
/VS**

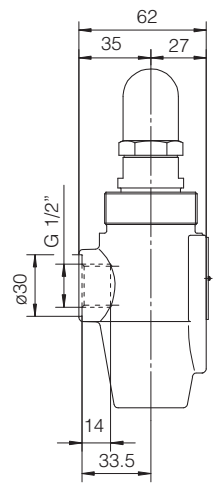
Mass: 1 Kg

ARE-15

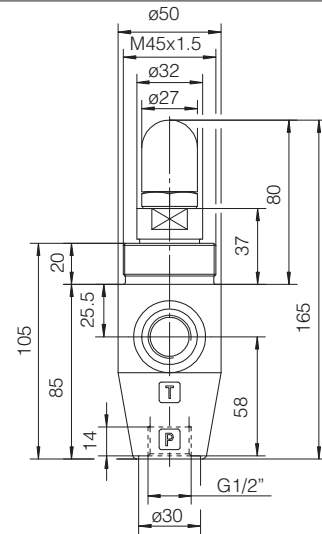
P = INLET PORT G 1/2"
T = OUTLET PORT G 1/2"
 Locking ring for fastening the valve.
 Model code: SP-6-RE-310030



**Option /RS
/PED**



Option /V



**Option /VF
/VS**

Mass: 1,3 Kg

Note:
 For handwheel features, see technical table K150.