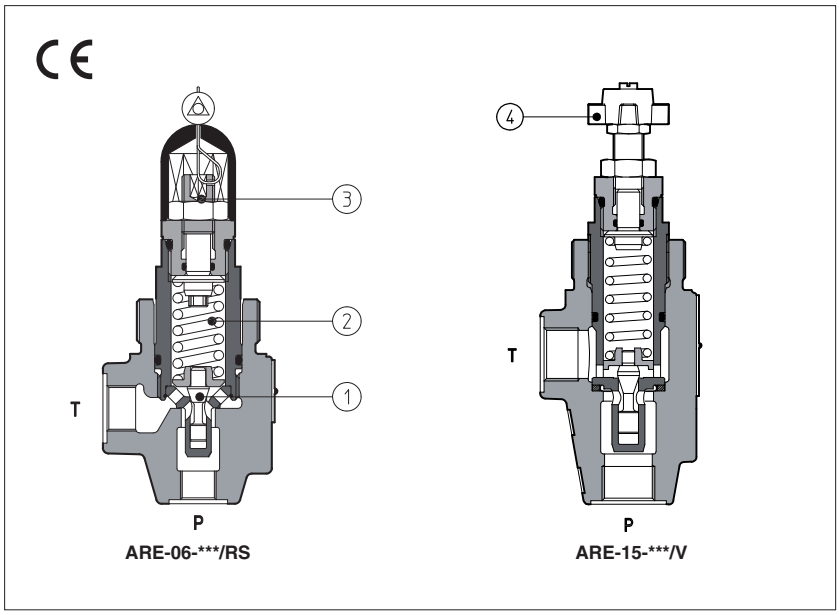
Pressure relief valves type ARE

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 costumer 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

ARE	-	06	/	350	/	RS	/	*		**	/	*

ARE = pressure relief valve with thread connections
Available also in cartridge execution, see tab. C010

Size:
06 = port P G 1/4"
15 = port P G 1/2"

Max pressure:
see section 3

Options **(2)**:
R = leak free execution **(2)**
RS = leak free execution plus lead sealed regulation conforming to 2006/42/CE

Manual override only for standard and /R option:
V = regulating handwheel
VF = regulating knob
VS = regulating knob with safety locking

Only for RS options:
280 = factory pressure setting to be defined depending to the customer requirement (example 280 = 280 bar)

Series number

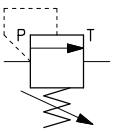
Seals material, see section 4:
- = NBR
PE = FKM
BT = HNBR

For **PED** version see technical table CY020

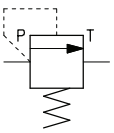
(1) Possible combined options:
RV = reduced leakages and regulating handweel
RVF = reduced leakages and regulating knob
RVS = reduced leakages and regulating knob with safety locking

2 HYDRAULIC SYMBOLS

Hydraulic symbol



ARE-06
ARE-15



ARE-06 **/RS
ARE-15 **/RS

DOMINGA INDUSTRY SERVICE
UAB "Domingos prekyba" www.dominga.lt/eshop email: info@dominga.lt
Savanorių pr. 187- 4 korp., LT-02300 Vilnius, Lietuva, tel.: +370 5 2322231, faks. + 370 5 2648229

3 HYDRAULIC CHARACTERISTICS

Valve model		ARE-06					ARE-15						
Max pressure setting [bar]	**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		
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 (1)	2÷50	3÷100	10÷210	15÷350	30÷500	2÷15	3÷50	4÷75	8÷150	8÷250		30÷420
	/RS (1)	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]	**Standard, /R**	40					75						
	/RS	60					100						

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

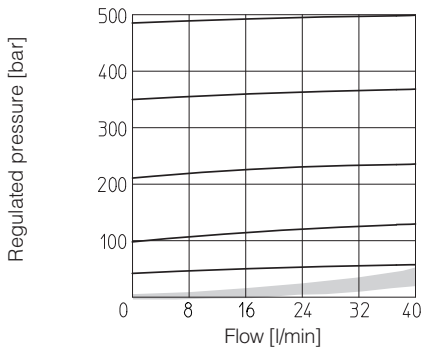
4 MAIN CHARACTERISTICS, SEALS AND FLUIDS - for other fluids not included in below table, consult our technical office

Assembly position	Any position
Compliance	RoHS Directive 2011/65/EU as last update by 2015/65/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)

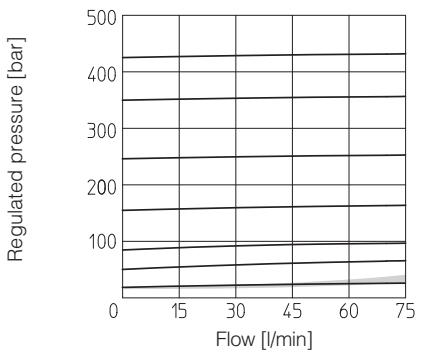
Hydraulic fluid	Suitable seals type	Classification	Ref. Standard
Mineral oils	NBR, FKM, HNBR	HL, HLP, HLPD, HVLP, HVLPD	DIN 51524
Flame resistant without water	FKM	HFDU, HFDR	ISO 12922
Flame resistant with water	NBR, HNBR	HFC	

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

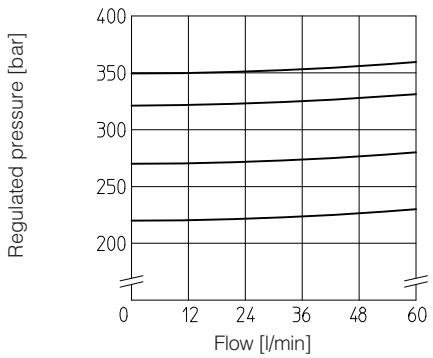
ARE-06 and ARE-06/R



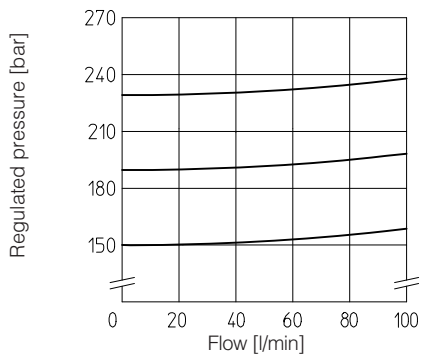
ARE-15 and ARE-15/R



ARE-06 /RS



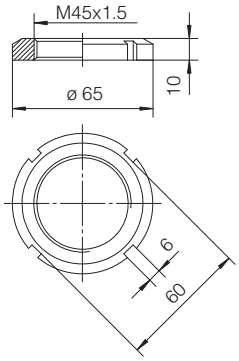
ARE-15 /RS

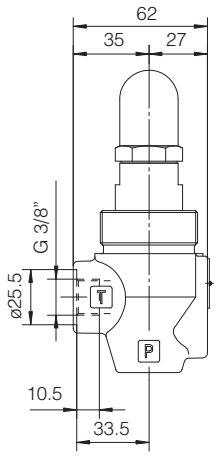


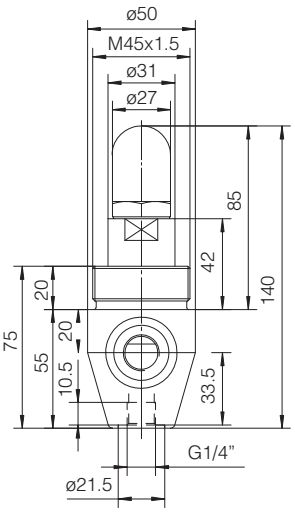
6 DIMENSIONS [mm]

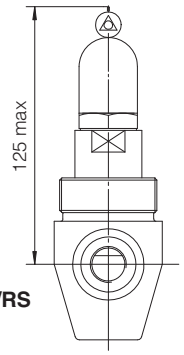
ARE-06

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

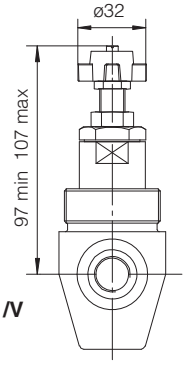




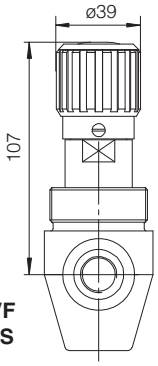




Option /RS



Option /V

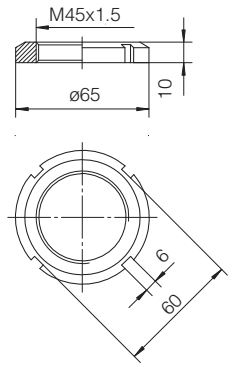


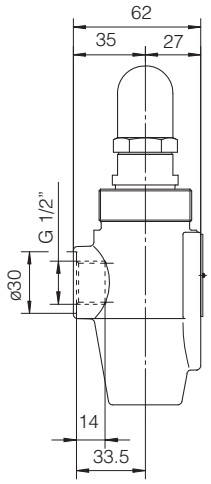
Option /VF /VS

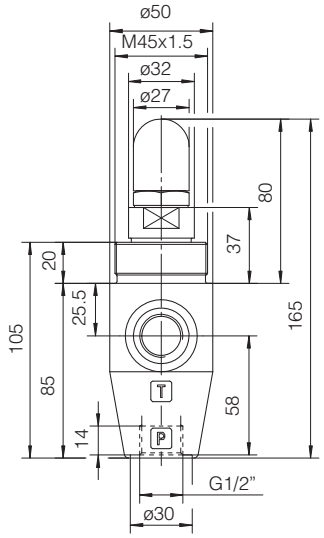
Mass: 1 Kg

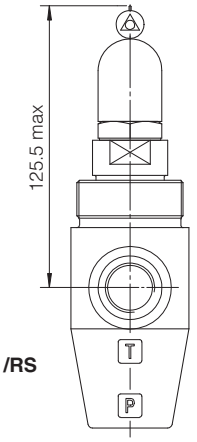
ARE-15

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

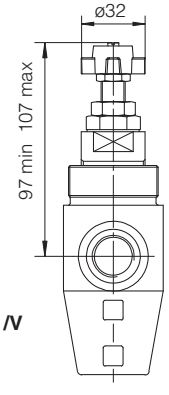




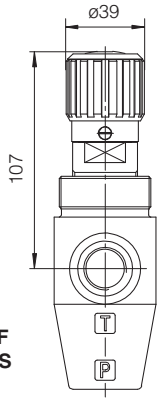




Option /RS



Option /V



Option /VF /VS

Note:
For handwheel features, see technical table K150.

Mass: 1,3 Kg