

PRESSURE CONTROL

Pressure reducing valve RP 810 Eck

High pressure valve for high to very high flow rates



Technical data

Connection DN	40 - 150
Nominal pressure PN	16 - 160
Inlet pressure	up to 160 bar
Outlet pressure	1 - 40 bar
K _{vs} value	20 - 250 m³/h
Temperature	130 °C
Medium	liquids and gases

Description

The pressure reducing valve RP 810 Eck is a pilot-operated regulating valve consisting of a main valve with a pilot valve fixedly mounted on the cover and a throttle block with integrated strainer, non-return valve and throttle valves. The valve cone is either metallic or soft-sealed.

Once the outlet pressure has reached the pre-set nominal value, the pilot valve starts to throttle. In doing so, the control pressure rises and pushes the main valve piston to a regulating position. The throttles D1 and D2 serve to optimise the regulating behaviour. The bypass equipped with a non-return valve brings about rapid closure.

If the outlet pressure exceeds the nominal value, the pilot valve closes. The control pressure is equivalent to the inlet pressure. The main valve closes because the piston diameter is larger than the valve seat. In addition, the spring also has a closing effect.

These valves are no shut-off elements ensuring a tight closing of the valve. In accordance with DIN EN 60534-4 and/or ANSI FCI 70-2 they may feature a leakage rate in closed position in compliance with the leakage classes III or V.

Standard

- » Pilot valve made of stainless steel
- » Throttle block with integrated strainer and throttle valves completely made of stainless steel
- » Internal piping made of stainless steel

Optionen

- » Damping for gas applications
- » Hard-faced valve cone and seat
- » Special materials such as Duplex, Superduplex, Hastelloy® or titanium, others on request
- » Various O-ring and seal materials suitable for your medium
- » Special connections: Aseptic, ANSI or JIS flanges, welding ends, other connections on request
- » Special versions on request

Product



Picture similar

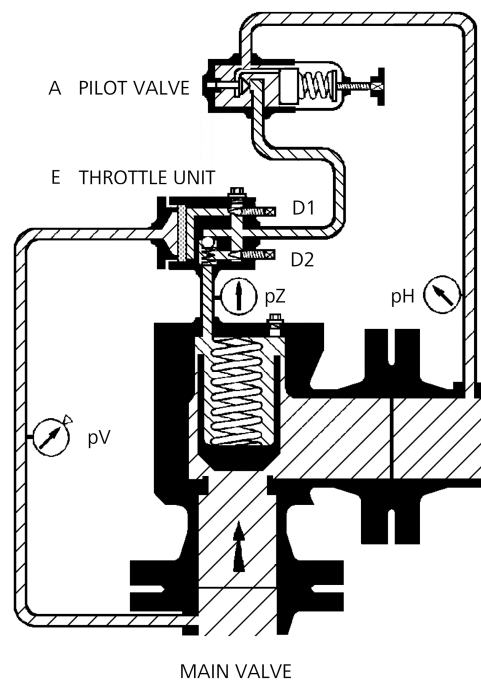
Technical specification

Valeur K_{vs} [m³/h]

nominal diameter DN	40	50	65	80	100	125	150
K _{vs} values m³/h	20	32	50	60	70	150	250

Setting ranges [bar], nominal pressure

1 - 5	4 - 12	10 - 20	15 - 40
PN 16-160/10	PN 16-160/16	PN 16-160/40	PN 16-160/63



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Materials

Materials		
Temperature	80 °C	130 °C
Body	Steel optional stainless steel	
Cover	Steel optional stainless steel	
Inner parts	Stainless steel	
Valve seal	NBR or stainless steel	EPDM or stainless steel
O-ring	NBR	EPDM
Pilot valve	Stainless steel	Stainless steel
Throttle unit		

Dimensions and weights

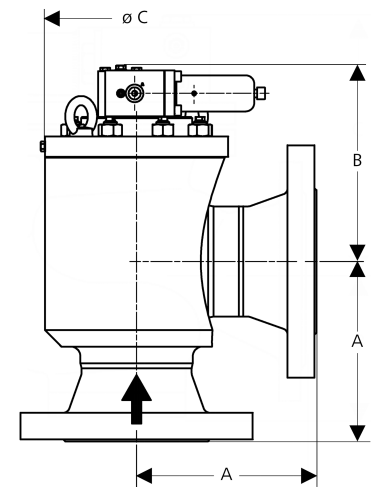
Dimensions [mm]								
nominal pressure	size	nominal diameter DN						
		40	50	65	80	100	125	150
PN 10 - 16	A*	115	125	145	155	175	200	225
PN 25 - 40	A*	115	125	145	155	175	200	225
PN 63 - 160	A*	130	150	170	190	215	250	275
all PN	B	200	210	210	230	260	290	300
all PN	C	160	160	180	200	220	280	280

*overall length tolerances in acc. with DIN EN 558

Weights [kg]								
nominal pressure	nominal diameter DN							
	40	50	65	80	100	125	150	
PN 10 - 16	*	*	*	70	*	*	*	
PN 25 - 40	*	40	*	*	100	*	*	
PN 63 - 160	35	*	50	*	*	180	200	

* on request

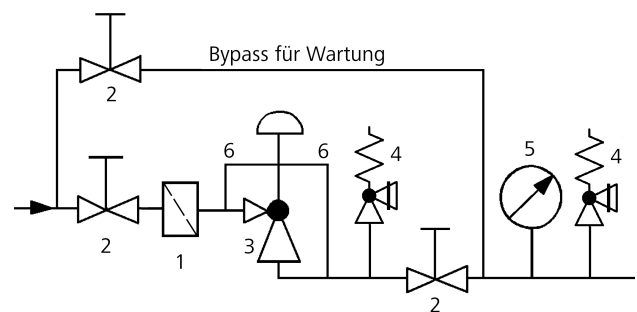
Customs tariff number	
84811019	



Recommended installation

- | | |
|---------------------------|------------------|
| 1 Strainer | 4 Safety valve |
| 2 Shut-off valves | 5 Pressure gauge |
| 3 Pressure reducing valve | 6 Sense line |

Sense line connection 10 DN before and behind the valve



Authorised Distributor:



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Website: www.ampmech.com

Please send us your enquiry and allow us to advise you. Special designs on request.

The pressure has always been indicated as overpressure. Mankenberg reserves the right to alter technical specifications without notice.