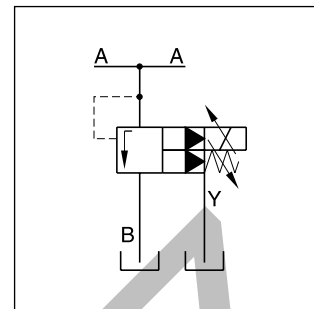
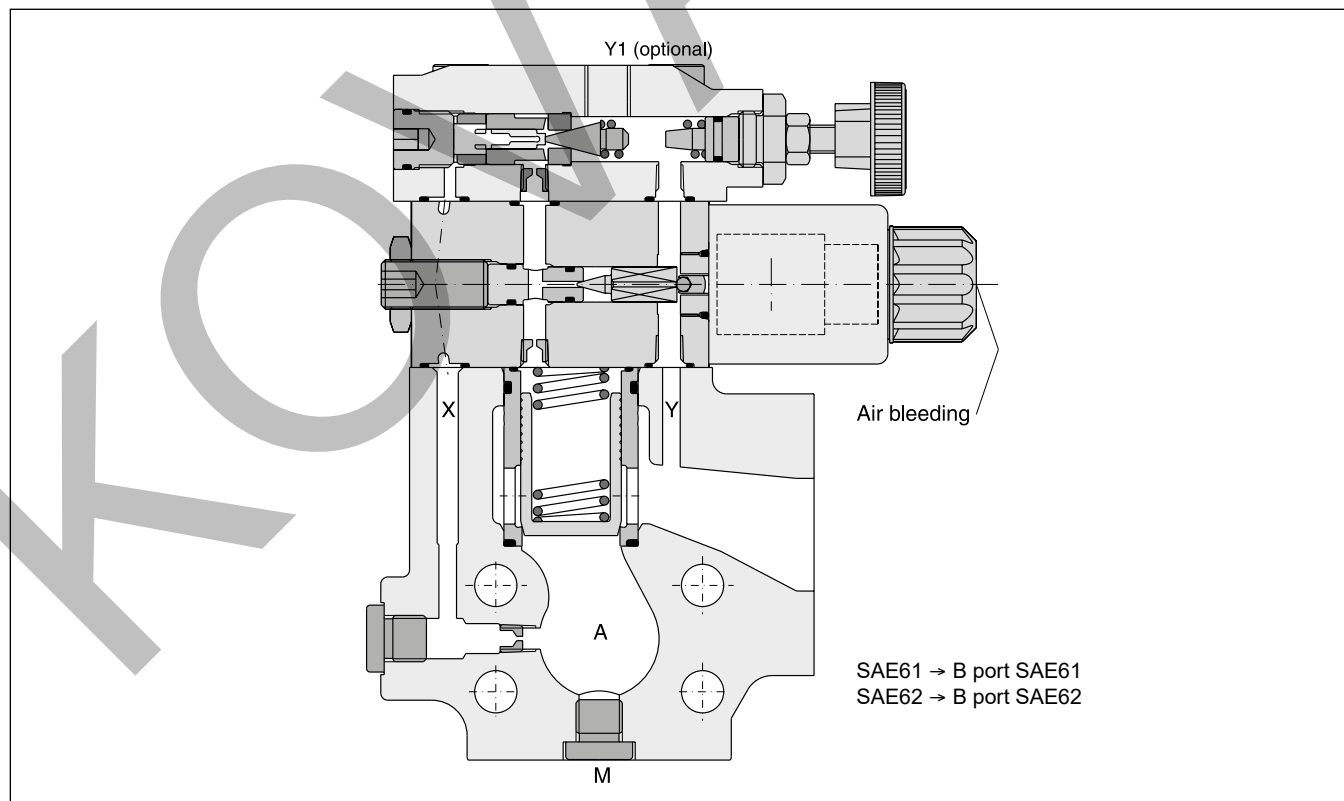


Proportional pressure relief valves series R5V*P2 are based on the mechanically adjusted series R5V. The additional proportional unit between the mechanical pilot valve and the main stage allows continuous pressure adjustment.

The optimum performance can be achieved in combination with the digital amplifier module PCD00A-400.

Features

- Continuous adjustment by proportional solenoid
- R5V with 3-port body
 - 4 sizes (SAE 3/4", 1", 1 1/4", 1 1/2")
 - SAE61 and SAE62 flange
- 3 pressure stages
- With mechanical maximum pressure adjustment

**R5V*P2**

Ordering Code

R5V		—	9					P2	G0R	A			
Proportional pressure relief valve	Nominal size	SAE interface	Body pilot ports Y1 ¹⁾ , X1, M = G½"	Pressure stages	Adjustment	Pilot oil	Proportional pressure control	Solenoid voltage 12 V 2.1 A ³⁾	Design	Seals	Design series (not required for ordering)	Options	

Code	Port size
06	SAE ¾"
08	SAE 1"
10	SAE 1¼"
12	SAE 1½"

SAE61		
Code	Size	Max. pressure [bar]
3	12	210
4	10	280
5	06/08	350

SAE62		
Code	Size	Max. pressure [bar]
6	06/08/10/12	350

Code	Pressure stages
1	up to 105 bar
3	up to 210 bar
5 ²⁾	up to 350 bar

Code	Options
070	Metric 3-port body for R5V10 SAE62: Pressure ports (A): SAE62 with 15 mm through holes (for M14), Tank port: SAE61 (M12)
152 ⁴⁾	3-port body with metric threads

Code	Seals
1	NBR
5	FPM

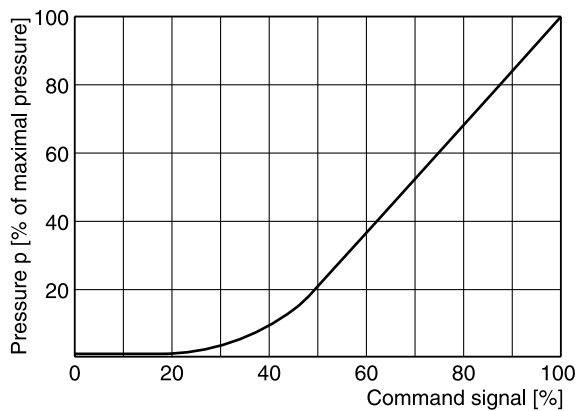
Code	Pilot oil drain line
2	internal
6	external from Y1-port

Code	Adjustment
1	Hand knob
3	Acorn nut with lead seal

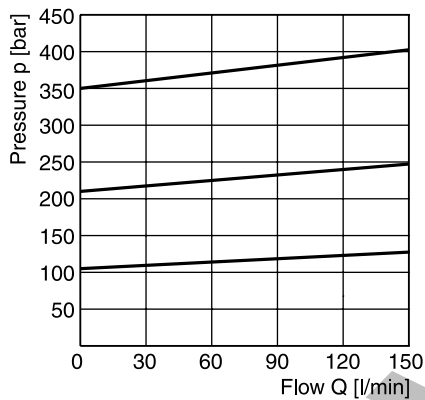
¹⁾ Y1 only available at external drain (pilot oil code 6).²⁾ R5V10-495 up to 280 bar.³⁾ Onboard electronics on request.⁴⁾ R5V08 SAE62: Tank port SAE61 (M10).

General					
Size		06 (¾")	08 (1")	10 (1¼")	12 (1½")
Mounting		Flanged according to SAE61 (size 12 = SAE62)			
Mounting position		unrestricted			
Ambient temperature	[°C]	-20...+60			
MTTF _D value	[years]	75			
Weight	[kg]	5.4	6.4	7.0	9.8
Hydraulic					
Max. operating pressure	[bar]				
	SAE61 Ports A, B	350	350	280	210
	Port Y1	30	30	30	30
	SAE62 Ports A, B	350	350	350	350
	Port Y1	30	30	30	30
Pressure stages	[bar]	105, 210, 350			
Nominal flow	[l/min]	90	300	600	600
Fluid		Hydraulic oil according to DIN 51524			
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)			
Viscosity permitted	[cSt] / [mm²/s]	20...400			
Viscosity recommended	[cSt] / [mm²/s]	30...80			
Filtration		ISO 4406 (1999); 18/16/13			
Electrical (proportional solenoid)					
Duty ratio		100 % ED; CAUTION: coil temperature up to 150 °C possible			
Protection class		IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)			
Code		G0R			
Supply voltage	[V]	12 V =			
Max. current	[A]	2.1			
Coil resistance at 20 °C	[Ohm]	4.28			
Solenoid connection		Connector as per EN 175301-803			
Power amplifier, recommended		PCD00A-400			

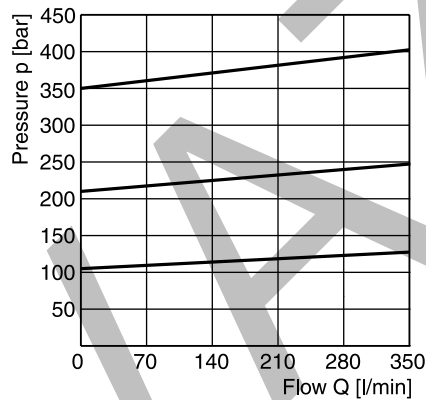
Signal/pressure curve R5V*P2



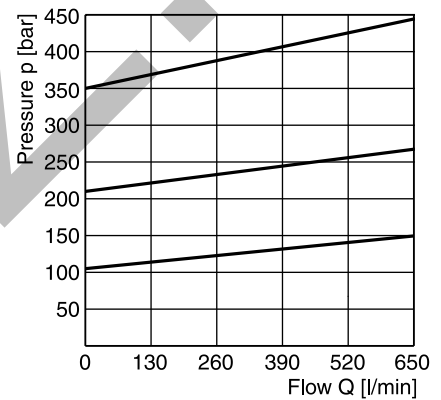
**p/Q performance curve ¹⁾
R5V06*P2**



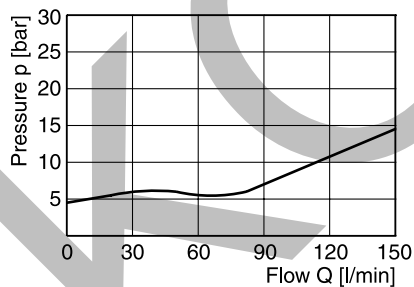
R5V08*P2



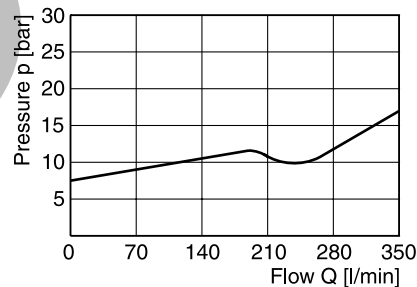
R5V10*P2



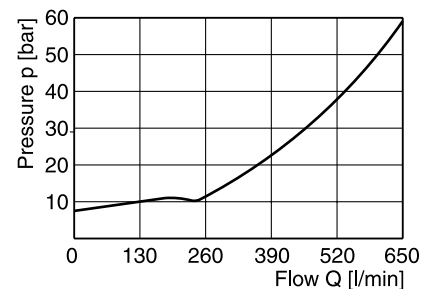
**Minimum pressure curve ¹⁾
R5V06*P2**



R5V08*P2



R5V10*P2



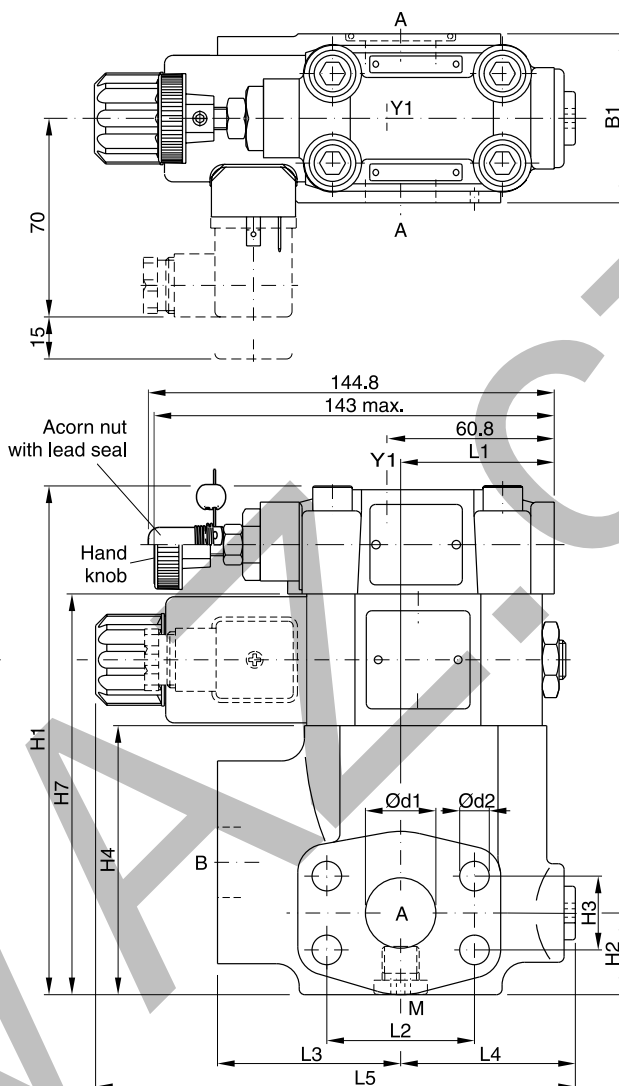
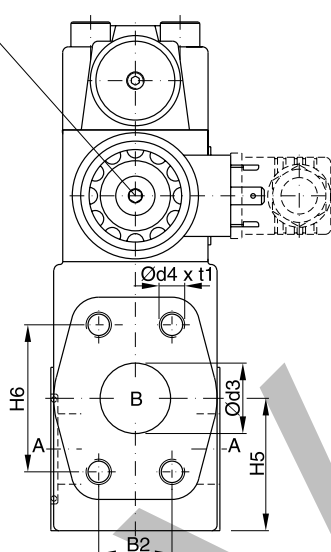
All characteristic curves measured with HLP46 at 50 °C.

¹⁾ The performance curves are measured with external drain. For internal drain the tank pressure has to be added to curve.

Dimensions**Pilot Operated Prop. Pressure Relief Valve
Series R5V*P2****R5V*P2 3-port**

Seal kits		
NG	NBR	FPM
06	S16-91850-0	S16-91850-5
08	S16-91851-0	S16-91851-5
10	S16-91852-0	S16-91852-5
12	S26-27421-0	S26-27421-5
Prop. section P2 *	S26-58473-0	S26-58473-5

Important:
On initial start up and
after long shut down periods
bleed air from this plug.

**SAE61**

NG	B1	B2	H1	H2	H3	H4	H5	H6	H7	L1	L2	L3	L4	L5	d1	d2	d3	d4 (option 152)	t1
06	60	22.2	166	29.5	22.2	81	41	47.6	128	50.3	47.6	63	60	174.6	19	10.5	19	3/8"-16 UNC (M10)	20
08	60	26.2	188	30.5	26.2	103	47	52.4	150	55.8	52.4	65	62	177	25	10.5	25	3/8"-16 UNC (M10)	23
10	75	30.2	198	37.5	30.2	113	65	58.7	160	57.8	58.7	61	68	179.1	32	12.5	30	7/16"-14 UNC (M12)	22
12	80	35.7	225	72	35.7	140	73	69.8	187	37.3	69.8	92.5	59.2	186.8	38	13.5	38	1/2"-13 UNC (M12)	27

SAE62

NG	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	d1	d2	d3	d4 (option 152)	t1
06	60	23.8	119	29.5	23.8	81	41	50.8	50.3	50.8	63	60	152	19	10.5	19	3/8"-16 UNF (M10)	20
08	60	27.8	141	30.5	27.8	103	47	57.2	55.8	57.2	65	62	149	25	12.5	25	7/16"-14 UNC (M10) ¹⁾	22
10	75	31.8	151	37.5	31.8	113	65	66.7	57.8	66.7	61	68	150.5	32	13.5	30	1/2"-13 UNC (M12)	24
12	80	36.5	178	72	36.5	140	73	79.4	37.3	79.4	92.5	59.2	171.2	38	17	38	5/8"-11 UNC (M16)	33

Port	Function	Port size			
		R5V06	R5V08	R5V10	R5V12
A (2)	Pressure	3/4" SAE61/62	1" SAE61/62	1 1/4" SAE61/62	1 1/2" SAE61/62
B	Tank	3/4" SAE61/62	1" SAE61/62	1 1/4" SAE61/62	1 1/2" SAE61/62
Y1	External drain	G 1/4"	G 1/4"	G 1/4"	G 1/4"
M	Pressure gauge	G 1/4"	G 1/4"	G 1/4"	G 1/4"

* Please combine seal kit of one size with seal kit of Prop. section P2 for complete seal kit.

¹⁾ T-port SAE61.