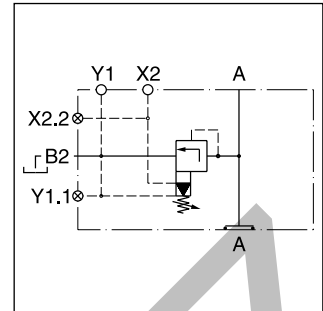


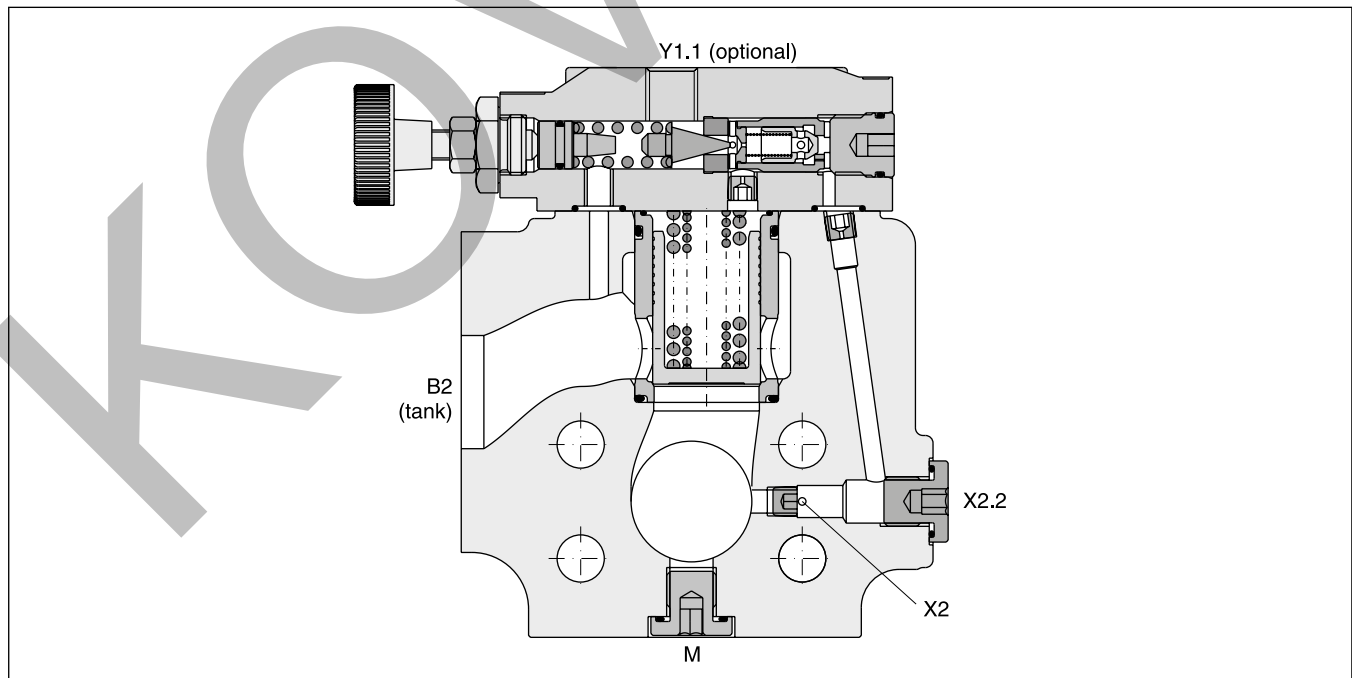
Direct operated 3-way pressure compensators series R5P can be combined with any type of fixed or adjustable flow resistor (throttle) to provide a load compensated flow.

The combination with the proportional throttle valve F5C serves as a compact 3-way flow control unit in SAE flange design. The R5P is typically used as meter-in compensator in front of the flow resistor.

The R5P is additionally equipped with a pressure relief pilot, that controls the compensator cartridge and operates as system pressure relief valve. The R5P*P2 provides a proportional relief function.

**Features**

- Seated type 3-way pressure compensator
- SAE61 flange
- 8.4 bar control pressure
- Pressure relief function (optionally proportional)
- With optional vent function
- 3 sizes, SAE 3/4", 1", 1 1/4"
- Load compensated flow in combination with F5C

9

R5P

General						
Size			06 (¾")		08 (1")	10 (1¼")
Mounting			Flanged according to SAE61			
Mounting position			unrestricted			
Ambient temperature [°C]			-20...+60			
MTTF _D value [years]			150			
Weight R5P		[kg]	3.7	4.4	5.3	
R5P with VV01		[kg]	5.4	6.1	7.0	
Hydraulic						
Max. operating pressure		Ports A, B [bar]	350		280	
Pressure stages		[bar]	105, 210, 350			
Nominal flow		[l/min]	90		600	
Fluid			Hydraulic oil according to DIN 51524			
Fluid temperature [°C]			-20...+70 (NBR: -25...+70)			
Viscosity permitted		[cSt] / [mm²/s]	20...400			
recommended		[cSt] / [mm²/s]	30...80			
Filtration			ISO 4406 (1999); 18/16/13			
Electrical (solenoid) R5P with VV01						
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	G0Q	GAR	GAG
			W30		W31	
Supply voltage [V]			12 V =	24 V =	98 V =	205 V =
Tolerance supply voltage [%]			±10	±10	±10	±10
Current consumption hold		[A]	2.72	1.29	0.33	0.13
in rush		[A]	2.72	1.29	0.33	0.13
Power consumption hold		[W]	32.7	31	31.9	28.2
in rush		[W]	32.7	31	31.9	28.2
Solenoid connection			Connector as per EN175301-803, solenoid identification as per ISO 9461			
Wiring min.		[mm²]	3 x 1.5 recommended			
Wiring length max.		[m]	50 recommended			

R5P*P2

General					
Size			06 (¾")	08 (1")	10 (1¼")
Mounting			Flanged according to SAE61		
Mounting position			unrestricted		
Ambient temperature		[°C]	-20...+60		
MTTF _D value		[years]	75		
Weight		[kg]	5.5	6.2	7.1
Hydraulic					
Max. operating pressure	Ports A, B	[bar]	350	350	280
Pressure stages		[bar]	105, 210, 350		
Nominal flow		[l/min]	90	300	600
Fluid			Hydraulic oil according to DIN 51524		
Fluid temperature		[°C]	-20...+70 (NBR: -25...+70)		
Viscosity	permitted	[cSt] / [mm²/s]	20...400		
	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		

R5P

R5P										A		
3-port compensator		Nominal size	SAE 61 Interface	Pilot ports	Pressure stages	Adjustment	Pilot connection	Switching type	Solenoid voltage	Design series	Seals	Options
Code	Port size										Code	Seals ⁶⁾
06	SAE 3/4"										1	NBR
08	SAE 1"										5	FPM
10	SAE 1 1/4"											
SAE61 interface											Code	Solenoid voltage
Code	Size	Max. pressure [bar]									omit	Standard w/o vent function
4	10	280									G0R	12 V=
5	06/08	350									G0Q	24 V=
											GAR ⁵⁾	98 V=
											GAG ⁵⁾	205 V=
Code	Pilot ports	Port Y1 ¹⁾									W30	110 V / 50 Hz 120 V / 60 Hz
9	G 1/4"	plugged									W31	230 V / 50 Hz 240 V / 60 Hz
P		open										
Code	Pressure stages										Code	Switching type
1	7...105 bar										omit	Standard w/o vent function
3	7...210 bar										09	Solenoid not activated unpressure circulation
5 ²⁾	7...350 bar										11	Solenoid activated unpressure circulation
Code	Adjustment										Code	Pilot connection
1	Hand knob										2	internal PD internal PP ⁴⁾
3	Acorn nut with lead seal										6	external PD ³⁾ internal PP ⁴⁾

¹⁾ Y1 port is used in combination with F5C, when the F5C should be drained through the R5P (internal or external drain).

²⁾ R5P10-4*5 up to 280 bar.

³⁾ Through port Y1.1.

⁴⁾ PP through port X1 in outlet flange.

⁵⁾ To be used in combination with rectifier plugs at 120 VAC/230 VAC power supply.

⁶⁾ Further seals on request.

R5P*P2

R5P		—						P2	G0R	A		
3-port compensator	Nominal size	SAE 61 Interface	Pilot ports	Pressure stages	Adjustment	Pilot connection	Proportional pressure control	Solenoid voltage 12 V 2.1 A	Design series	Seals	Options	
Code	Port size										Code	Seals ⁵⁾
06	SAE 3/4"										1	NBR
08	SAE 1"										5	FPM
10	SAE 1 1/4"											
SAE61 interface												
Code	Size	Max. pressure [bar]									Code	Pilot connection
4	10	280									2	internal PD internal PP ⁴⁾
5	06/08	350									6	external PD ³⁾ internal PP ⁴⁾
Code	Pilot ports	Port Y1 ¹⁾									Code	Adjustment
9	G 1/4"	plugged									1	Hand knob
P		open									3	Acorn nut with lead seal
Code	Pressure stages											
1	7...105 bar											
3	7...210 bar											
5 ²⁾	7...350 bar											

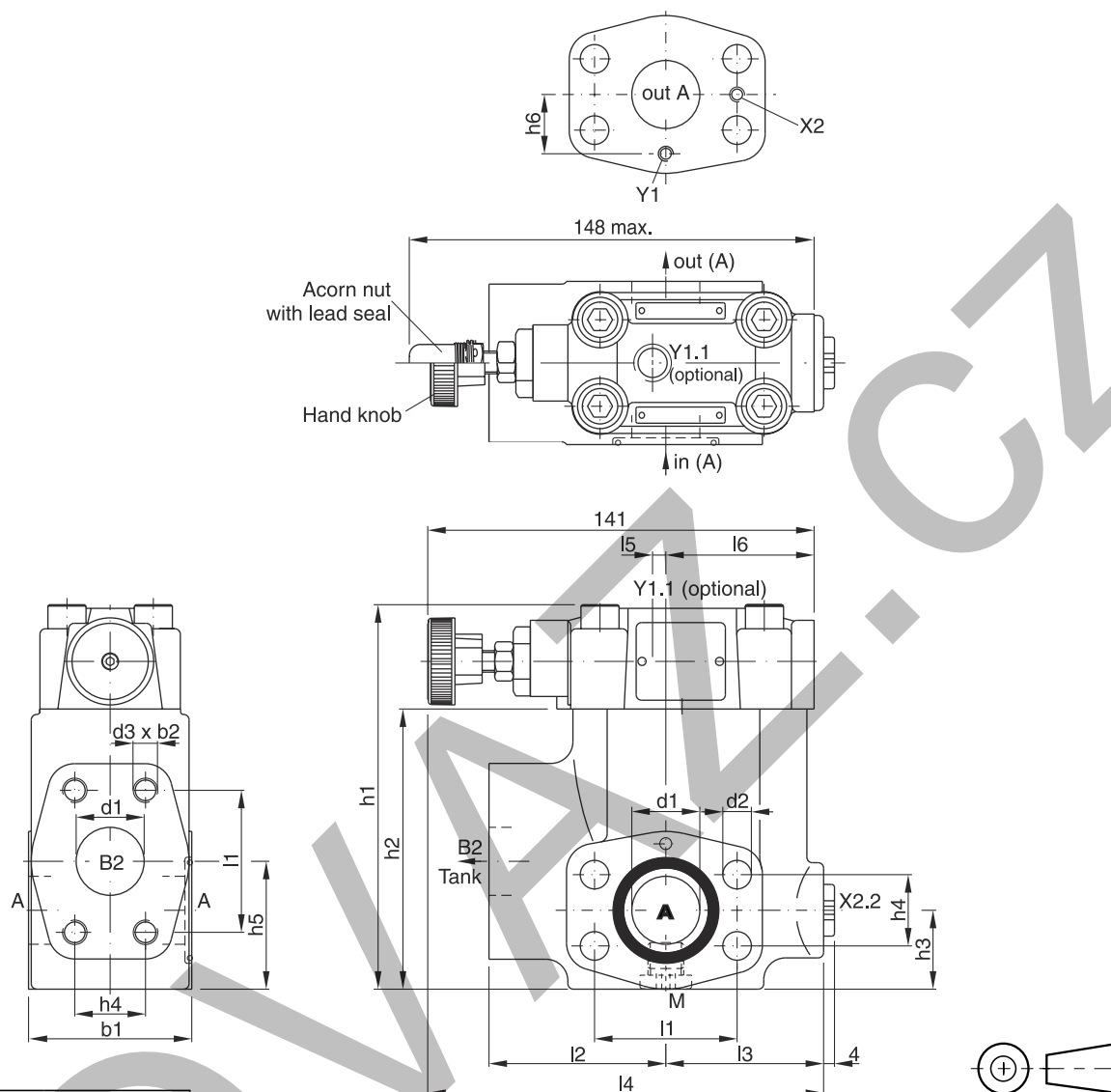
¹⁾ Y1 port is used in combination with F5C, when the F5C should be drained through the R5P (internal or external drain).

²⁾ R5P10-4*5 up to 280 bar.

³⁾ Through port Y1.1.

⁴⁾ PP through port X1 in outlet flange.

⁵⁾ Further seals on request.

Dimensions**3-Port Pressure Compensator
Series R5P****R5P****Seal kits**

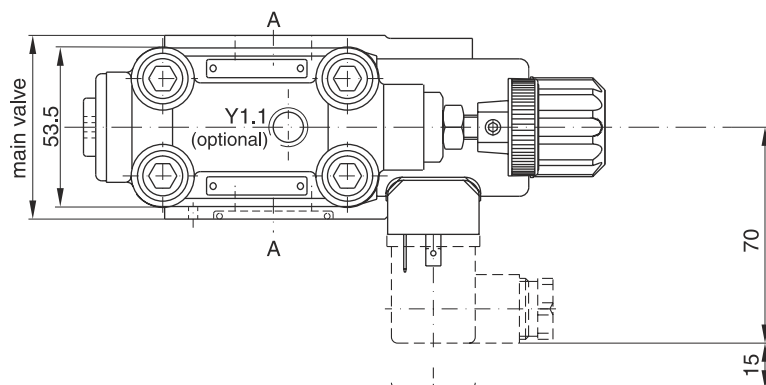
NG	NBR	FPM
06	S16-91461-0	S16-91461-5
08	S16-91460-0	S16-91460-5
10	S16-91459-0	S16-91459-5

	I1	I2	I3	I4	I5	I6	b1	b2	h1	h2	h3	h4	h5	h6	d1	d2	d3
R5P06	47.6	63	56	148	1	49	60	20	119	81.6	29.5	22.2	41.6	20.8	19	10.5	3/8" UNC
R5P08	52.4	65	58	144.6	5	54.5	60	23	142	103	30.5	26.2	48.6	24.3	25	10.5	3/8" UNC
R5P10	58.7	61	64	146.6	3	56.5	75	22	149	113	37.5	30.2	64.1	29.3	32	12.5	7/16" UNC

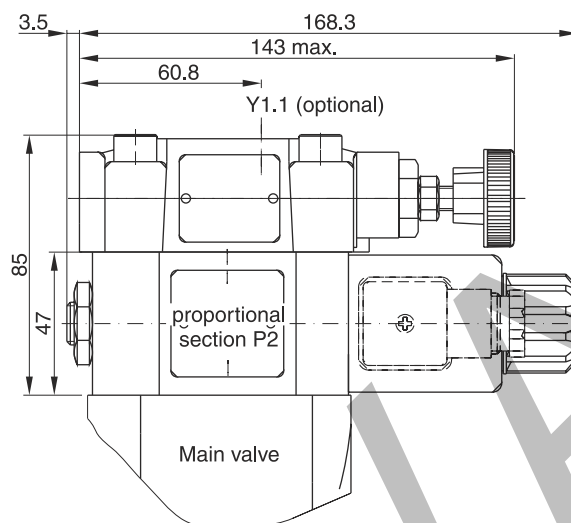
Ports

Port	Function	Port size		
		R5P06	R5P08	R5P10
A	Inlet/outlet	3/4"	1"	1 1/4"
B2	Tank	3/4"	1"	1 1/4"
X2	Internal pilot pressure	M3	M3	M3
X2.2	External pilot pressure	G 1/4"	G 1/4"	G 1/4"
Y1	Internal pilot drain	M3	M3	M3
Y1.1	External pilot drain	G 1/4"	G 1/4"	G 1/4"
M	Pressure gauge	G 1/4"	G 1/4"	G 1/4"

R5P*P2

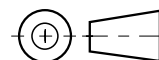


Drain line only external from the pilot head (Y1.1).
 The pilot drain port must be connected to a stable low pressure tank line. Pressure variations in the drain port should be avoided.

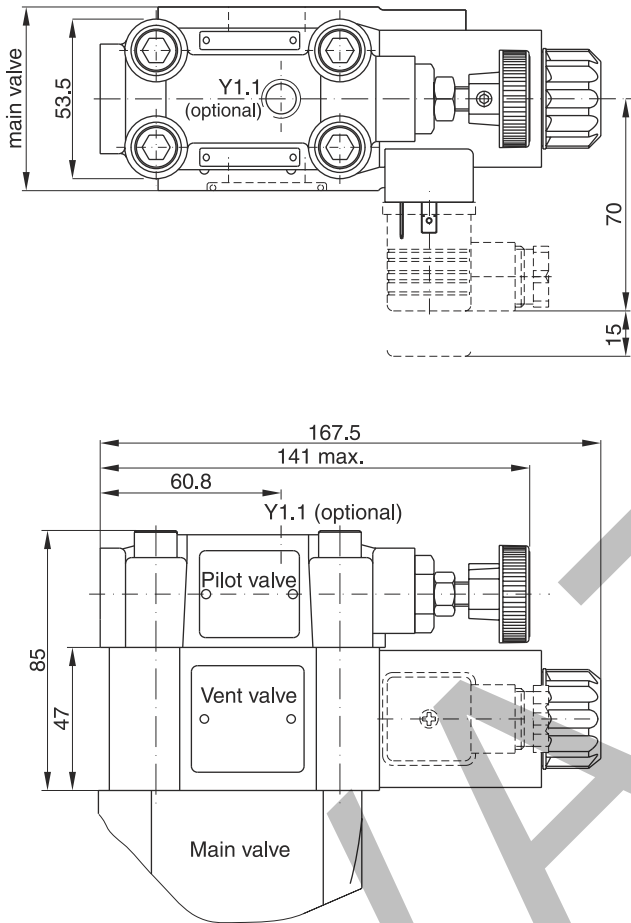


	Kit	
	NBR	FPM
Prop. section P2	S26-58473-0	S26-58473-5

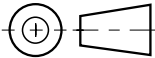
Note:
 On initial start up and after long shut down periods bleed air from this plug.



R5P with vent function



Seal kits	
NBR	FPM
DC solenoid	
S56-40609-0	S56-40609-5
AC solenoid	
S26-35237-0	S26-35237-5



9

Code	Internal drain	External drain
11		
09		