Proportional throttle valves series F5C allow to adjust the flow in proportion to the input signal. The combination of the F5C with pressure compensator R5P serves as a flow control valve - providing load compensated flow.

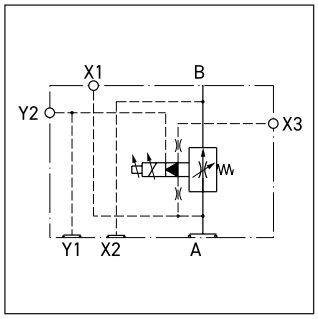
The F5C is offered with two types of response time:

standard 350 ms at 1 l/min pilot flow

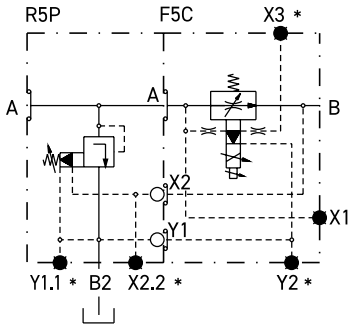
code A 250 ms at 2 l/min pilot flow

Features

- Spool type proportional throttle valve
- SAE61 flange
- Maximum flow 380 l/min
- 2 sizes, SAE 1“, 1 1/4“
- Load compensated flow in combination with R5P

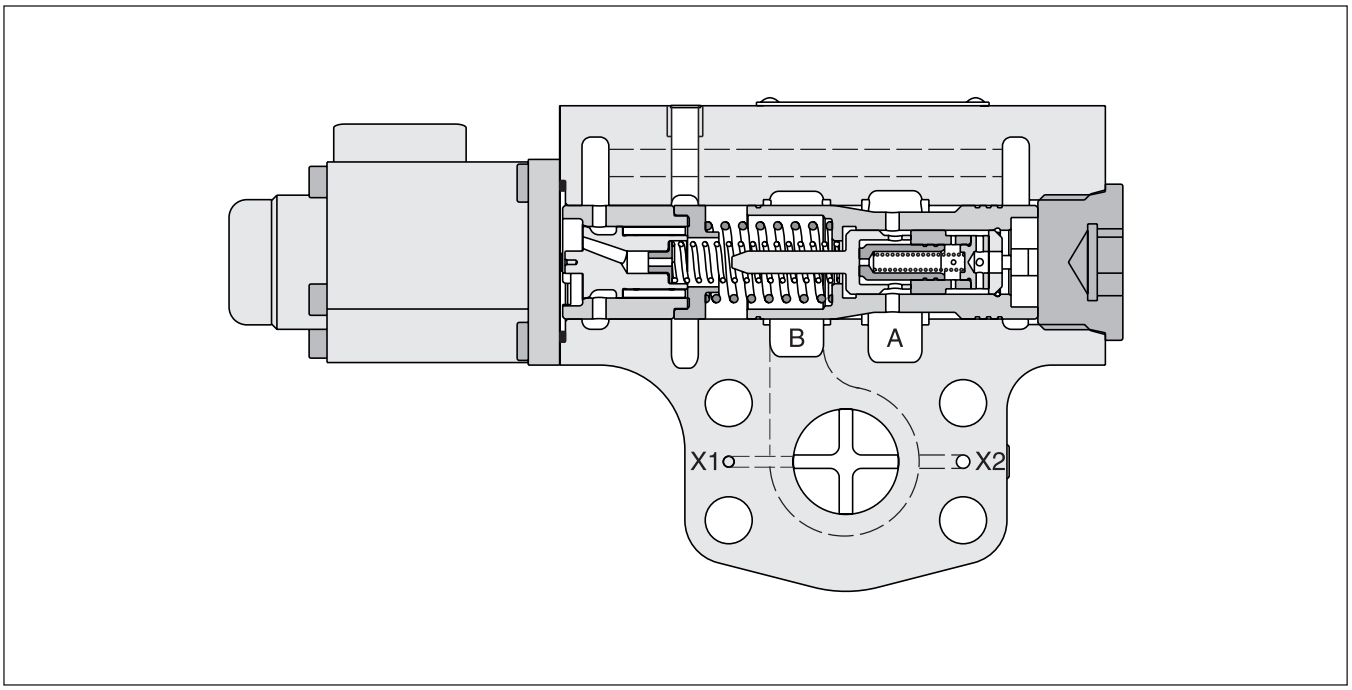


Pilot connection explanation F5C with R5P



○ open ● closed ⊗ closed by counterpart

* optional



Ordering Code

F5C			4	3		X		0	C			
Proportional throttle valve	**Nominal size**	**Pilot flow and response**	**SAE61 interface**	**Pilot ports G¼"**	**Spool type**	**Proportional solenoid 16 V/1.05 A**	**Pilot connection**	**Accesso-ries**	**Design**	**Seals**	**Design series** (not required for ordering)	**Options**

Code	Nominal size
08	SAE 1"
10	SAE 1¼"

Code	Pilot flow	Max. response
–	1 l/min	350 ms
A	2 l/min	250 ms

Spool type		
Code	Size	Max. flow [1]
1	08/10	95 l/min
2	08/10	190 l/min
3	10	380 l/min

Code	Seals
1	NBR
5	FPM

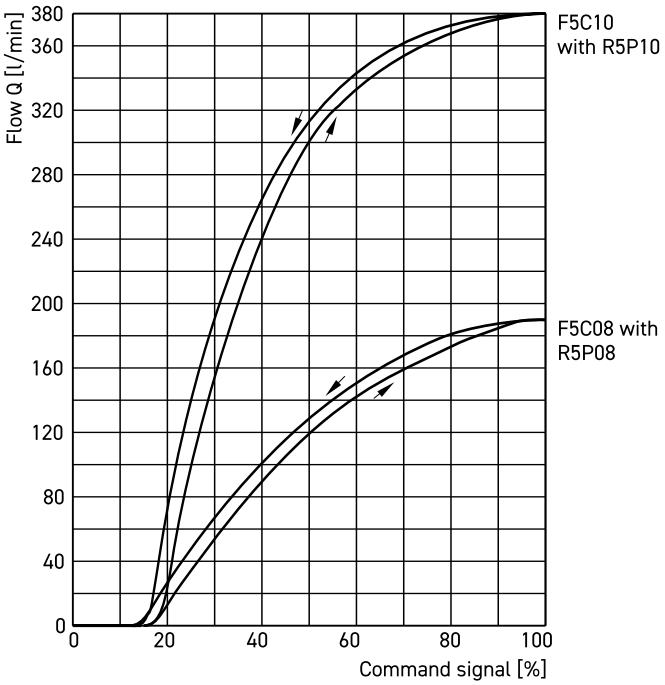
Code	Pilot connections	F5C without compensators R5P	F5C for combination with R5P
2	internal PD (Y)	–	X1, X3, Y2 ●
	internal PP (X)		X2, Y1 ○
			X2, Y1 ○
3	external PD (Y) external PP (X)	–	–
4	external PD (Y)	X3, Y2 ○	X2, X3, Y1, Y2 ○
	external PP (X)	X1 ● X2, Y1 ⊗	X1 ●
5	external PD (Y) internal PP (X)	–	–
6	external PD (Y)	X1, X3 ●	X1, X3 ●
	internal PP (X)	X2, Y1 ⊗	X2, Y1, Y2 ○
		Y2 ○	

[1] At nominal pressure drop (Δp = 8.4 bar).

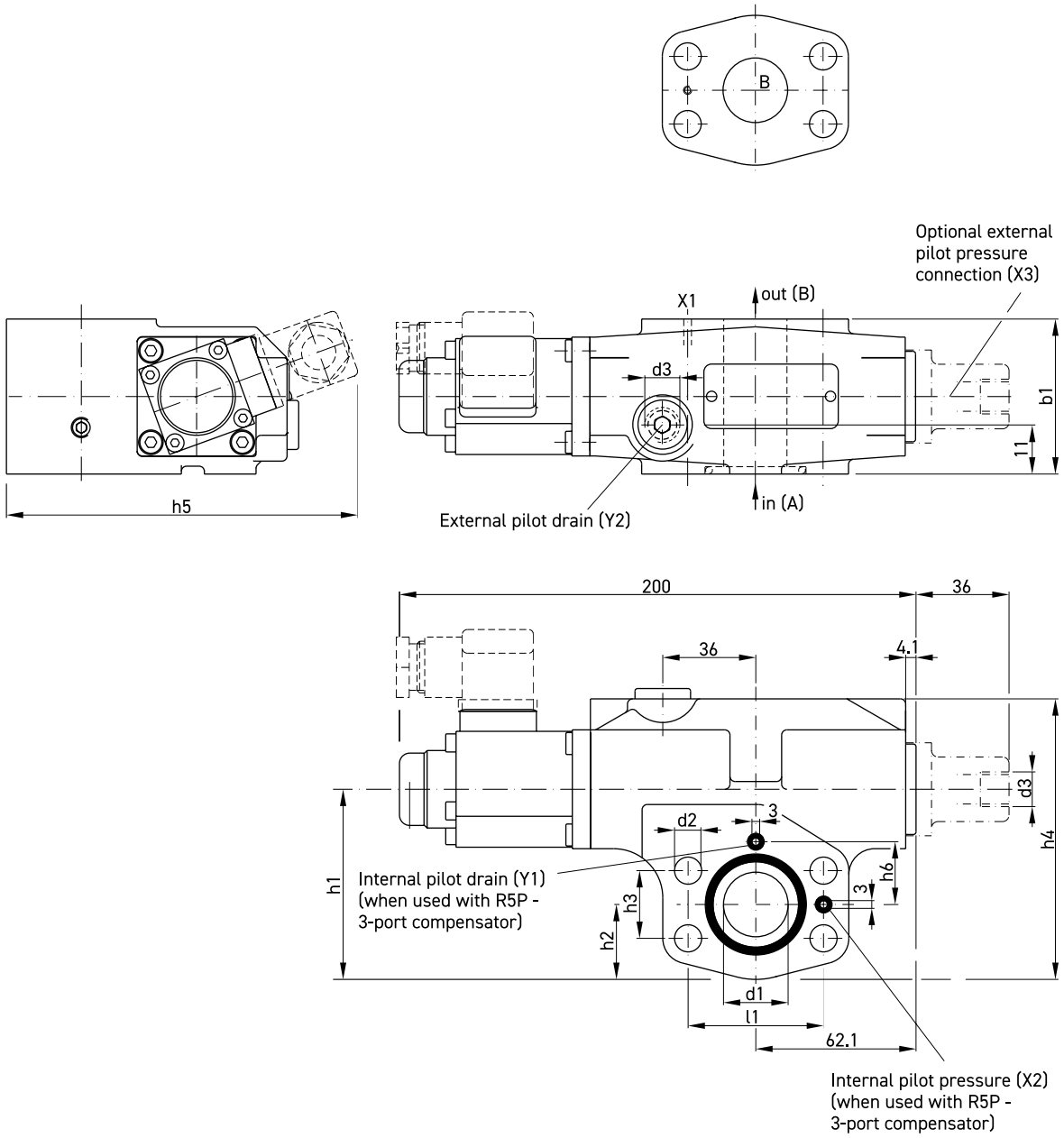
Technical data

General				
Size			**08 (1")**	**10 (1¼")**
Mounting			Flanged according to SAE61	
Mounting position			unrestricted	
Ambient temperature		[°C]	-20...+60	
Weight		[kg]	4.1	5.8
Hydraulic				
Max. operating pressure				
	Ports A, B, X1, X2, X3	[bar]	300	280
	Ports Y1, Y2	[bar]	70	
Max. pressure drop (from A to B)		[bar]	21	
Nominal flow		[l/min]	190	380
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 characteristics				
Duty ratio			100 % ED; CAUTION: coil temperature up to 150 °C possible	
Solenoid connection			Connector as per EN175301-803, solenoid identification as per ISO 9461	
Protection class			IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)	
Supply voltage		[V]	16	
Current consumption		[A]	1.05	
Resistance		[Ohm]	11.3	
Response time		[ms]	see ordering code	

Characteristic curves



All characteristic curves measured with HLP46 at 50 °C.



Seal kits		
NG	**NBR**	**FPM**
08 / 10	S26-58484-0	S26-58484-5

	l1	b1	h1	h2	h3	h4	h5	h6	d1	d2	d3
F5C08	52.4	60	73.6	29	26.2	108.6	187	24.3	25	10.5	G¼"
F5C10	58.7	75	83.5	36.5	30.2	118.5	198	29.3	32	12.5	G¼"