

Characteristics

Proportional throttle valves series F5C allow to adjust the flow in proportion to the input signal. The combination of the F5C with pressure compensators R5A or R5P serves as a flow control valve - providing load compensated flow.

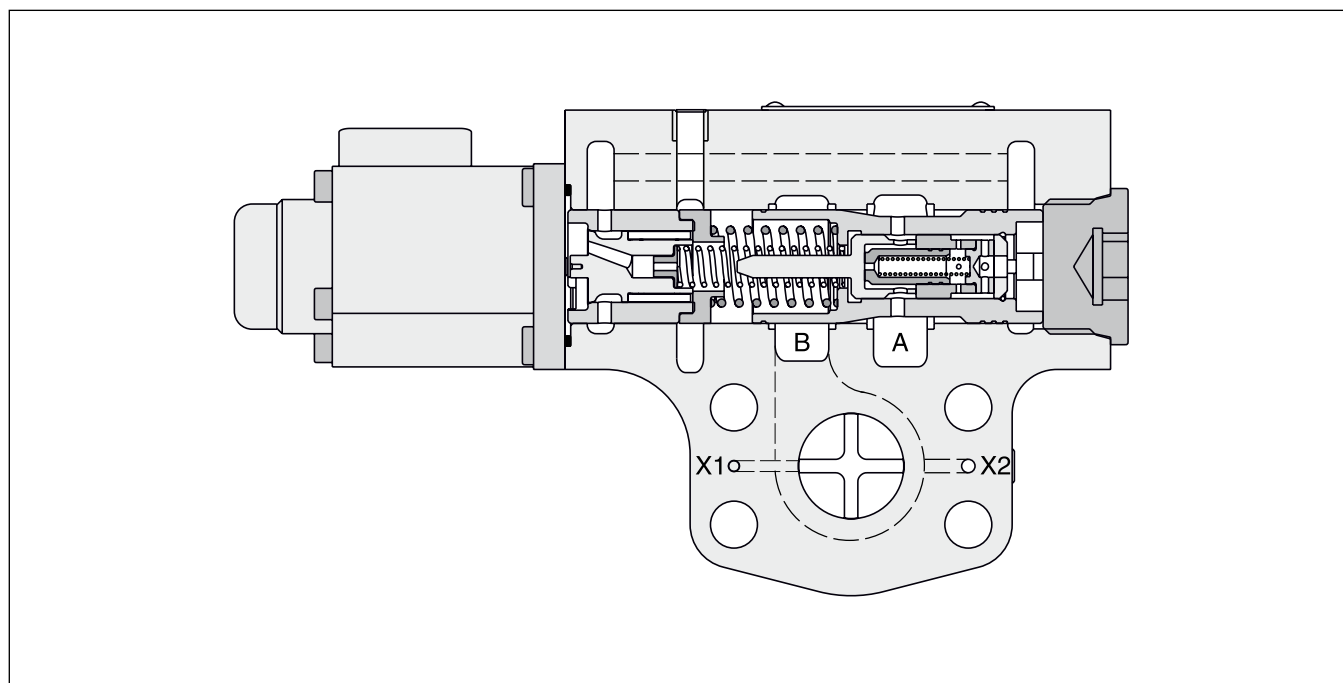
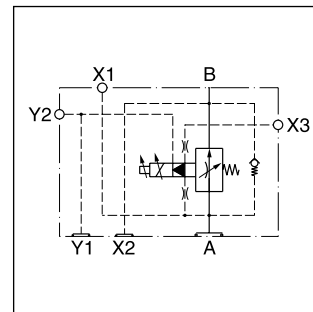
The F5C is offered with two types of response time:

standard 350 ms at 1 l/min pilot flow

code A 250 ms at 2 l/min pilot flow

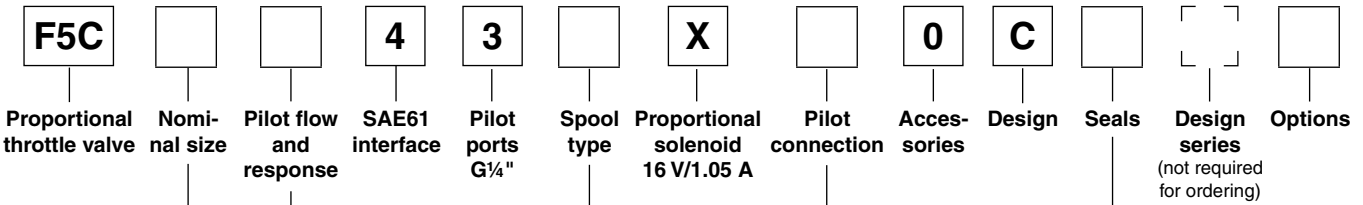
Features

- Spool type proportional throttle valve
- SAE61 flange
- Maximum flow 380 l/min
- 3 sizes, SAE 3/4", 1", 1 1/4"
- Load compensated flow in combination with R5A/R5P



Ordering Code / Pilot Connection

Ordering Code



Code	Nominal size
06	SAE 3/4"
08	SAE 1"
10	SAE 1 1/4"

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

Spool type		
Code	Size	Max. flow ¹⁾
A	06	23 l/min
B	06/08	45 l/min
1	06/08/10	95 l/min
2	08/10	190 l/min
3	10	380 l/min

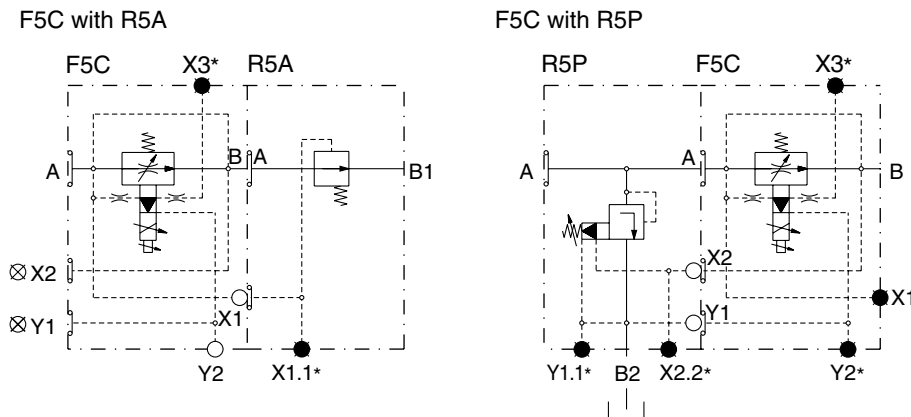
Code	Seals
1	NBR
5	FPM

Code	Pilot connections	F5C without compensators R5A, R5P	F5C for combination with R5A	F5C for combination with R5P
2	internal PD (Y)	—	—	X1, X3, Y2 ● X2, Y1 ○ X2, Y1 ○
	internal PP (X)	—	—	
3	external PD (Y)	—	X1, X3, Y2 ○ X2, Y1 ⊗	—
	external PP (X)	—		
4	external PD (Y)	X3, Y2 ○	—	X2, X3, Y1, Y2 ○
	external PP (X)	X1 ● X2, Y1 ⊗	—	X1 ●
5	external PD (Y)	—	X1, Y2 ○ X3 ● X2, Y1 ⊗	—
	internal PP (X)	—		
6	external PD (Y)	X1, X3 ● X2, Y1 ⊗ Y2 ○	—	X1, X3 ●
	internal PP (X)	—	—	X2, Y1, Y2 ○

¹⁾ At nominal pressure drop ($\Delta p = 8.4$ bar).

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Pilot connection explanation



* optional

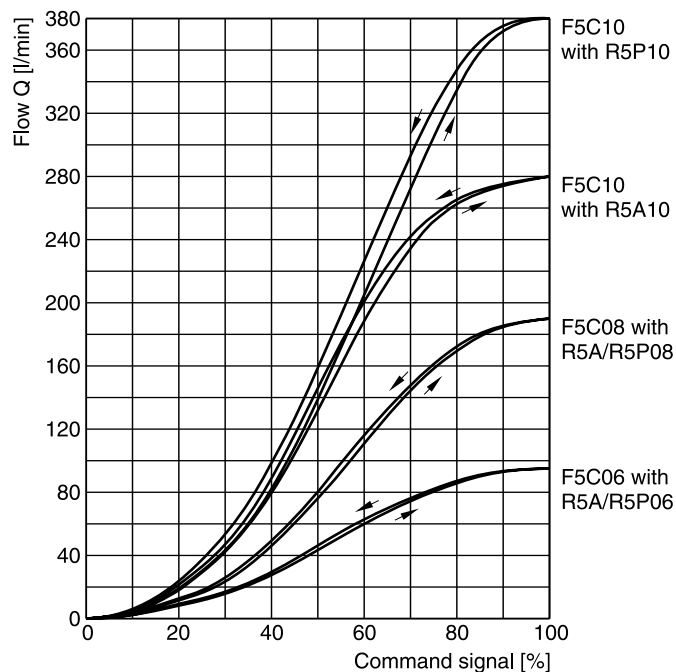
○ open ● closed ⊗ closed by counterpart

Technical Data / Characteristic Curves

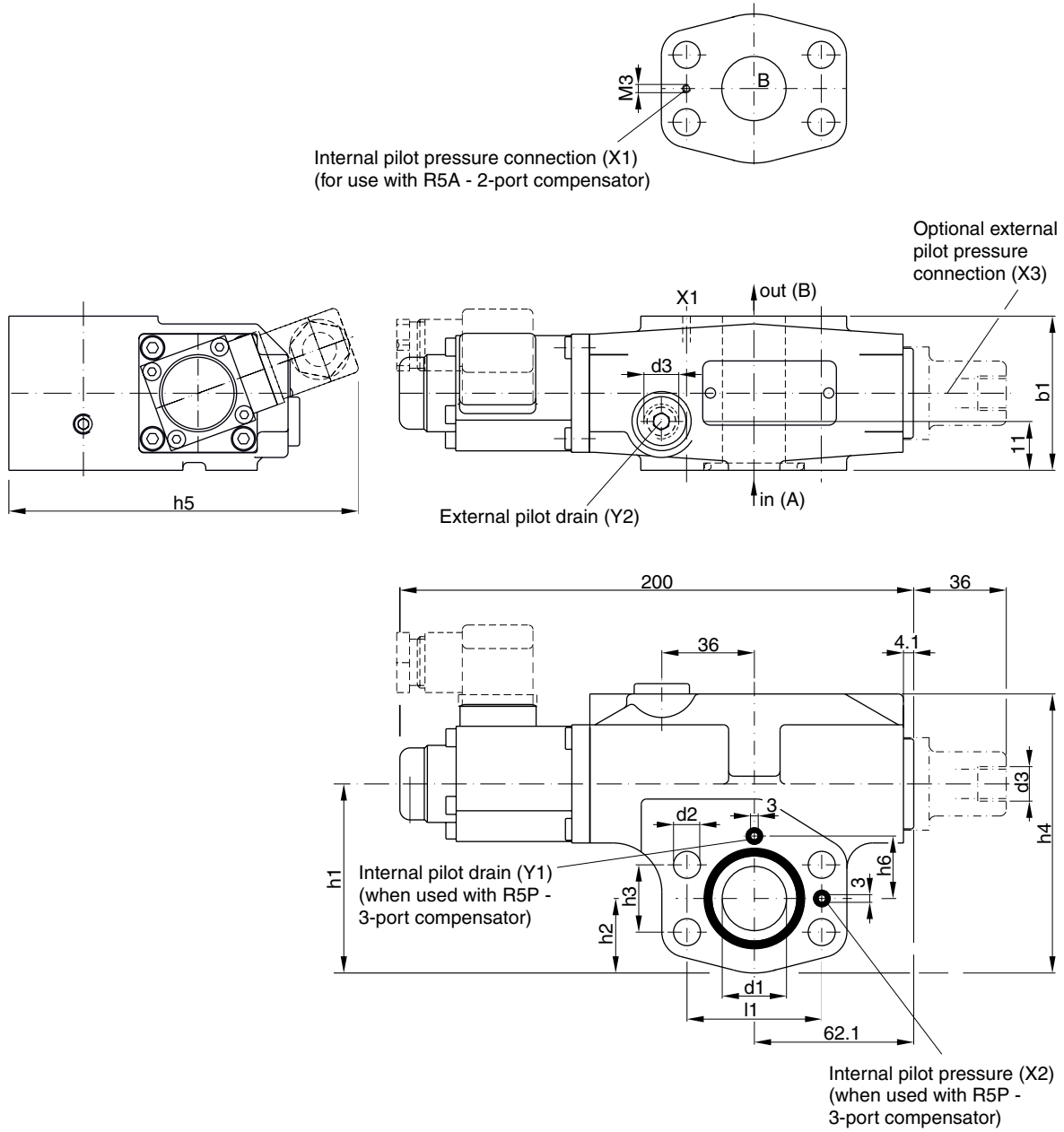
Technical data

General				
Size		06 (3/4")	08 (1")	10 (1 1/4")
Mounting	Flanged according to SAE61			
Mounting position	unrestricted			
Ambient temperature	[°C]	-20...+60		
Weight	[kg]	3.9	4.1	5.8
Hydraulic				
Max. operating pressure				
Ports A, B, X1, X2, X3	[bar]	350	300	280
Ports Y1, Y2	[bar]	70		
Max. pressure drop (from A to B)	[bar]	21		
Nominal flow	[l/min]	95	190	380
Fluid	Hydraulic oil according to DIN 51524			
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)		
Viscosity permitted	[cSt] / [mm ² /s]	20...400		
Viscosity recommended	[cSt] / [mm ² /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.



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Seal kits		
NG	NBR	FPM
06 / 08 / 10	S26-58484-0	S26-58484-5

	l1	b1	h1	h2	h3	h4	h5	h6	d1	d2	d3
F5C06	47.6	60	68.2	26	22.2	103.2	183	20.8	19	10.5	G¼"
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"