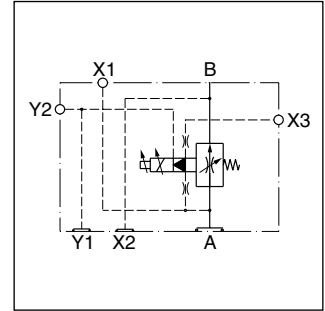


Parker Series F5C Proportional Throttle Valve Service Manual

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:

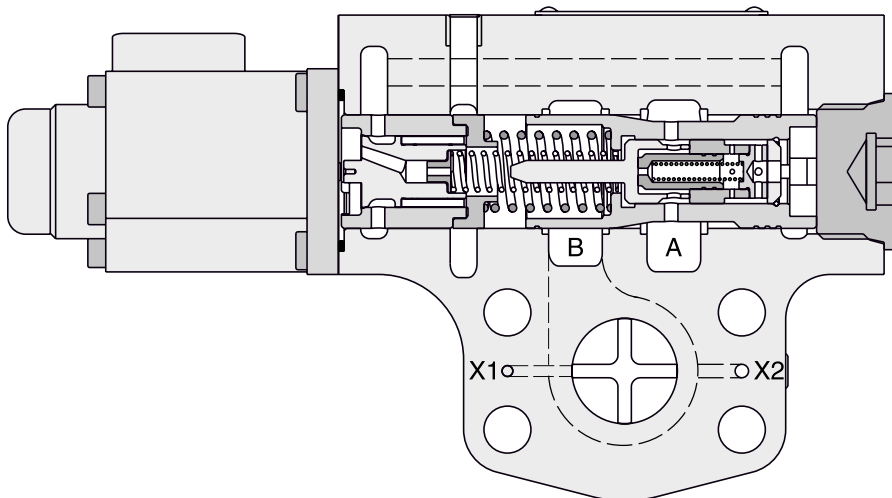
standard 350 ms at 1 l/min pilot flow
code A 250 ms at 2 l/min pilot flow



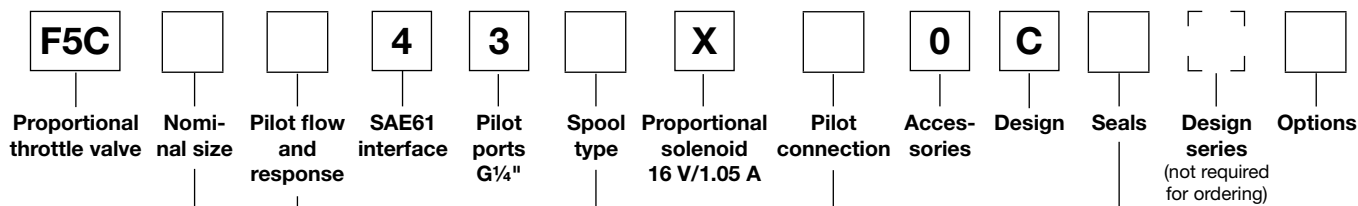
Features

- 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

9



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

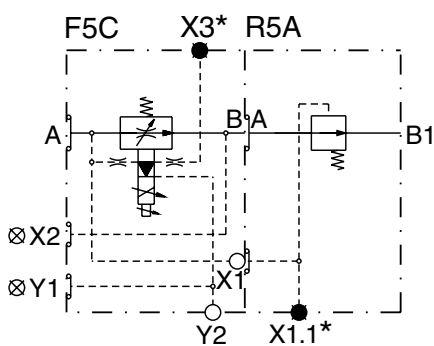
Spool type		
Code	Size	Max. flow ¹⁾
1	06/08/10	95 l/min
2	08/10	190 l/min
3	10	380 l/min

Code	Seals
1	NBR
5	FPM

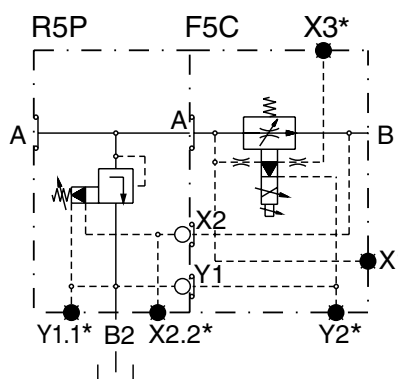
Code	Pilot connections	F5C without compensators R5A, R5P	F5C for combination with R5A	F5C for combination with R5P
2	internal PD (Y)	—	—	X1, X3, Y2 ● X2, Y1 ○
	internal PP (X)	—	—	X2, Y1 ○
3	external PD (Y)	—	X1, X3, Y2 ○ X2, Y1 ⊗	—
	external PP (X)	—	—	—
4	external PD (Y)	X3, Y2 ○	—	X2, X3, Y1, Y2 ○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

Pilot connection explanation

F5C mit R5A



F5C mit R5P



○ open ● closed ⊗ closed by counterpart

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

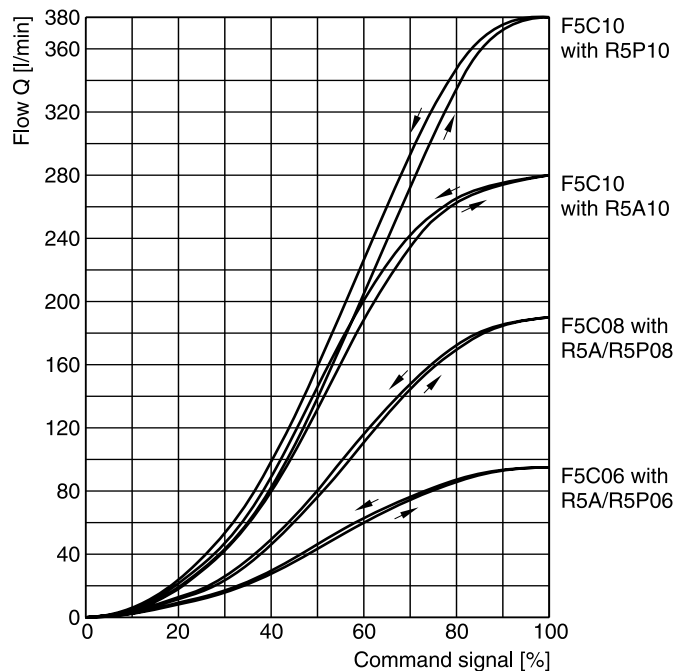
* optional

Technical Data / Characteristic Curves

Technical data

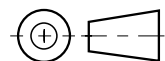
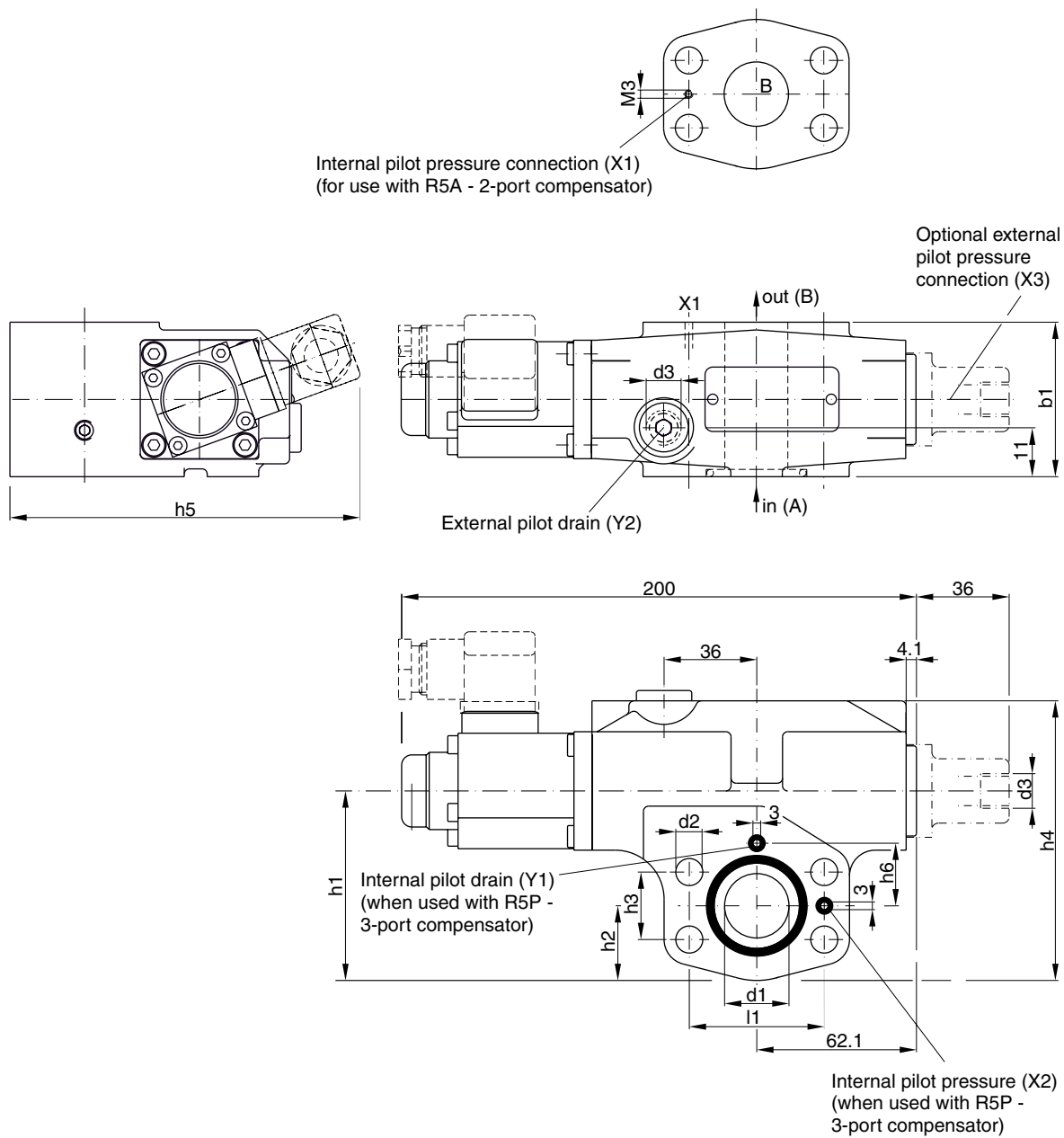
General					
Size		06 (3/4")	08 (1")	10 (1 1/4")	
Mounting	Flanged according to SAE61				
Mounting position	unrestricted				
Ambient temperature	[°C]	-20...+60			
Weight	[kg]	3.9	4.1	5.8	
Hydraulic					
Max. operating pressure					
	Ports A, B, X1, X2, X3	[bar]	350	300	280
	Ports Y1, Y2	[bar]	70		
Max. 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		
	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.

F5C UK.INDD 08.02.21



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"