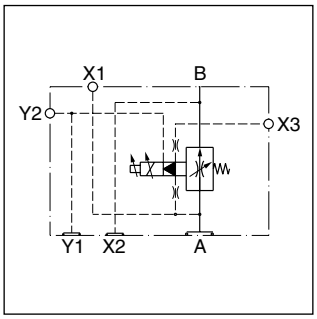
Proportional throttle valves series F5C allow to adjust the flow in proportion to the input signal. The combination of the F5C with pressure compensators R5A or R5P serves as a flow control valve - providing load compensated flow.

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

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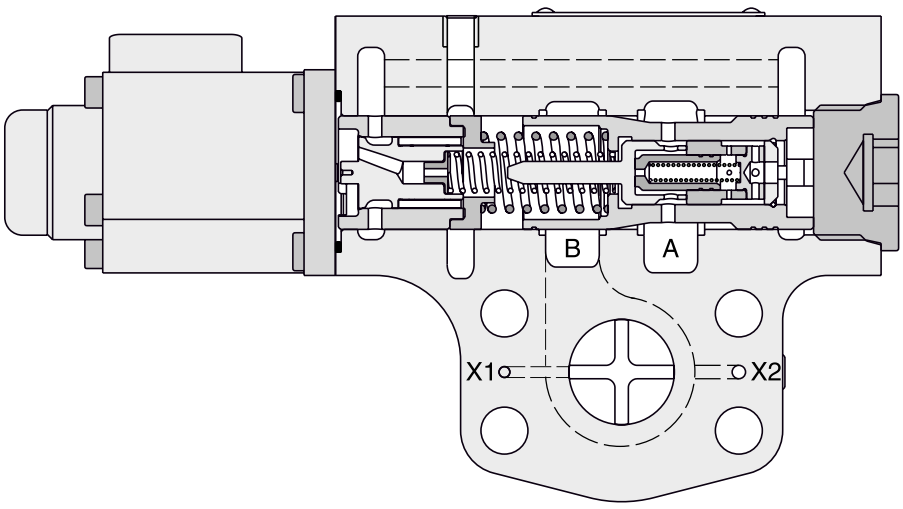

Ordering Code

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**	**Accessories**	**Design**	**Seals**	**Design series** (not required for ordering)	**Options**

Code	Nominal size
06	SAE ¾"
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	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 ●
	internal PP (X)			X2, Y1 ○
				X2, Y1 ○
3	external PD (Y)	—	X1, X3, Y2 ○	—
	external PP (X)		X2, Y1 ⊗	
4	external PD (Y)	X3, Y2 ○	—	X2, X3, Y1, Y2 ○
	external PP (X)	X1 ● X2, Y1 ⊗		X1 ●
5	external PD (Y)	—	X1, Y2 ○	—
	internal PP (X)		X3 ● X2, Y1 ⊗	
6	external PD (Y)	X1, X3 ●	—	X1, X3 ●
	internal PP (X)	X2, Y1 ⊗ Y2 ○		X2, Y1, Y2 ○

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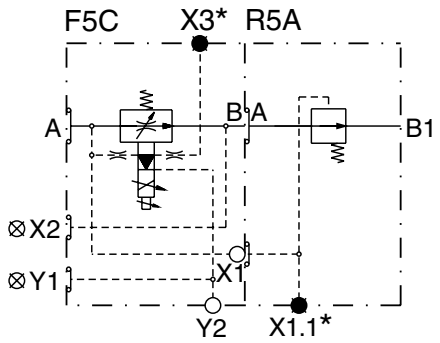
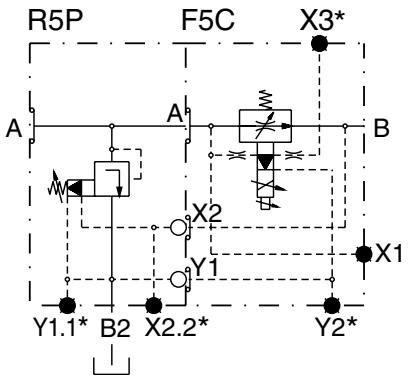
Pilot connection explanation

F5C mit R5A



F5C mit R5P



○ open ● closed ⊗ closed by counterpart

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

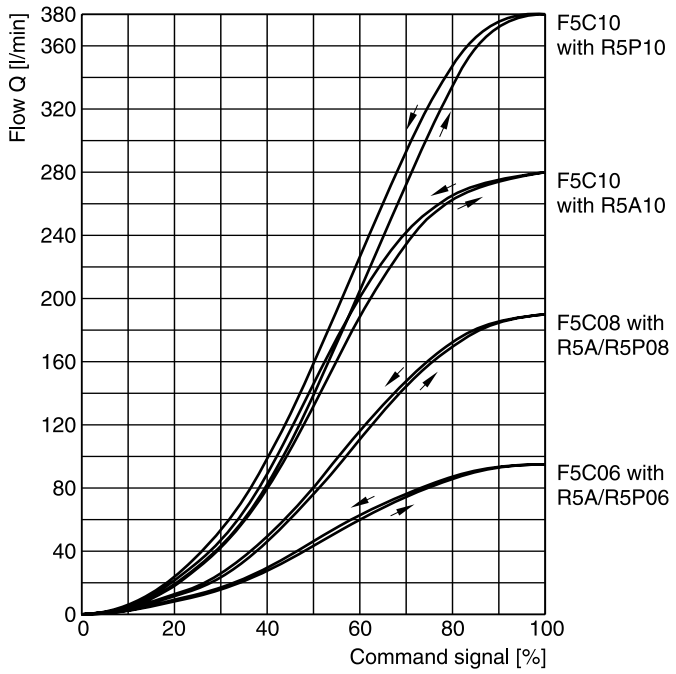
* optional

F5C UK.INDD 08.02.21

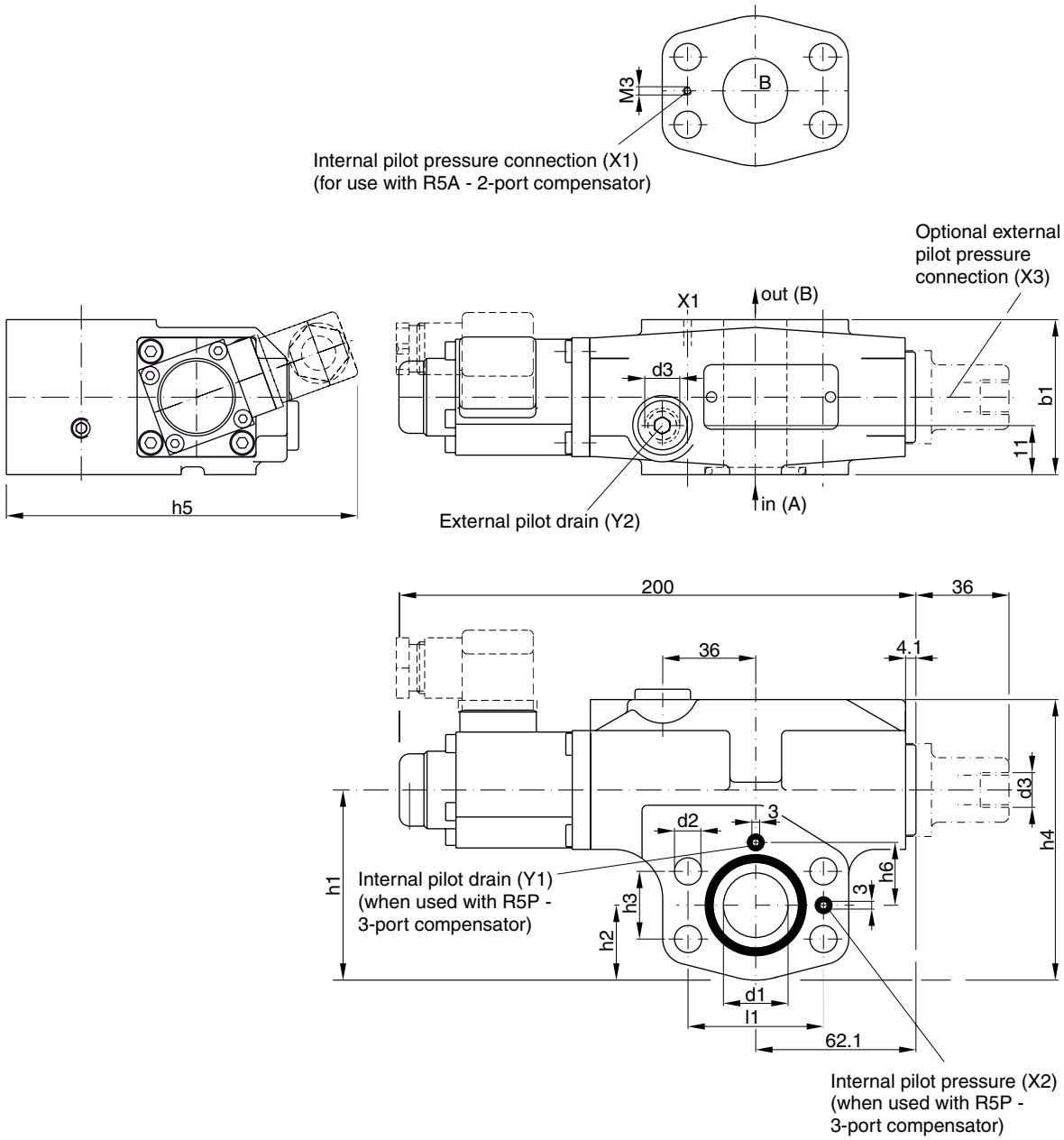
Technical data

General				
Size		**06 (¾")**	**08 (1")**	**10 (1¼")**
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] / [mm²/s]	20...400		
Viscosity 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.



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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"