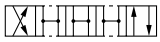
Ordering Code

Series D1VW Explosion Proof

D	1	V	W					E	E	
Directional control valve	Size DIN NG06 CETOP 03 NFPA D03	3-chamber valve	Wet pin solenoid	Spool type	Spool position	Seal	Solenoid voltage	Connection: Explosion proof with cable glands	Solenoid options: Explosionproof Ex e mb IIC T4 Gb + IECEx conformity	Design series (not required for ordering)

3 position spools	
Code	Spool type
	a 0 b
001	
002	
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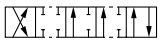
004	
005	
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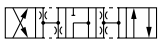
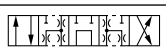
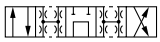
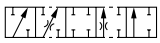
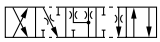
007	
008 [1]	
009 [1]	
010	
011	
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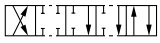
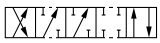
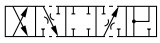
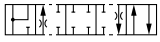
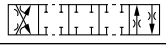
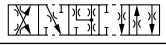
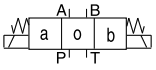
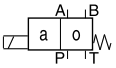
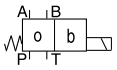
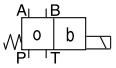
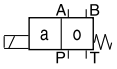
015	
016	
021	
022	
081	
082	
102	

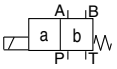
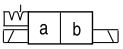
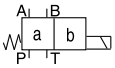
2 position spools	
Code	Spool type
	a b
020	
026	
030	
101	

[1] Consider specific spool position.

Code	Voltage
J	24 V=
P	110 V / 50 Hz
N	230 V / 50 Hz

Code	Seal
N	NBR
V	FPM

3 position spools			
Code	all 3 position spools		
C			3 positions. Spring offset in position “0“. Operated in position “a“ or “b“.
	Standard	Spool type 008, 009	
E	 Operated in position “a“.	 Operated in position “b“.	2 positions. Spring offset in position “0“.
K	 Operated in position “b“.	 Operated in position “a“.	2 positions. Spring offset in position “0“.

2 position spools		
Code	Spool position	
B		2 positions. Spring offset in position “b“. Operated in position “a“.
D		2 positions. Operated in position “a“ or “b“. No center or offset position.
H		2 positions. Spring offset in position “a“. Operated in position “b“.

Further spool types, styles and combinations on request.

Flow Curves

Series D1VW Explosion Proof

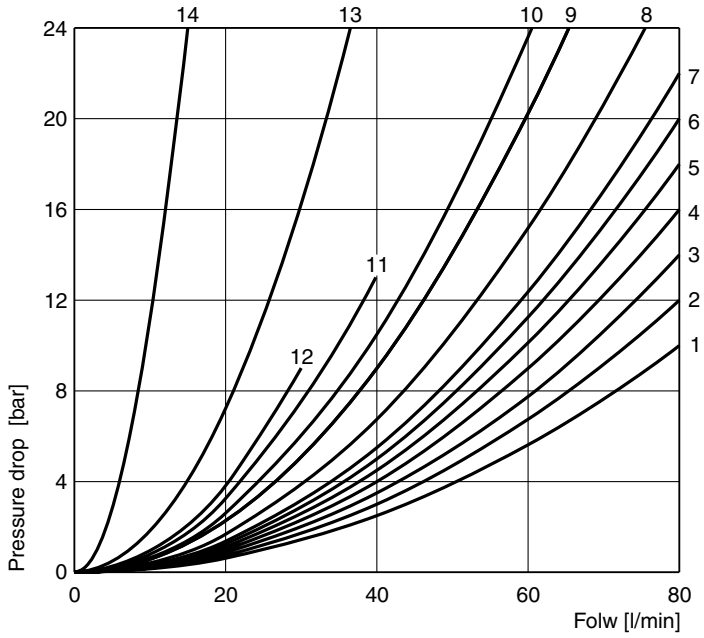
The flow curve diagram shows the flow versus pressure drop curves for all spool types. The relevant curve number for each spool type, operating position and flow direction is given in the table below.

Spool	Position "b"			Position "a"			Position "0"				
	P-A	B-T	P-B	P-B	A-T	P-A	P-A	P-B	A-T	B-T	P-T
001	2	2		2	2						
002	1	4		1	4		1	1	5	5	2
003	3	4		3	6				7		
004	2	3		2	3				7	7	
005	2	2		2	2		12				
006	1	4		1	4		7	7			
007	3	2		2	2			3		2	7
010	3			3							
011	2	2		2	2				14	14	
014	3	2		2	2		3		2		7
015	3	6		3	4					7	
016	2	2		2	2			12			
020B	4	4		2	3						
026B	4			4							
030B	2	3		1	2						
081	13	13		13	13						
082	13	13		13	13				1)	1)	
101B	11	10		10	9						
102	1	4		1	4		5	5	8	8	6
	P-B	A-T		P-A	B-T		P-A	P-B	A-T	B-T	P-T
008	4	5		4	5						9
009	5	5		6	7						7

Spool	Position "b"			Position "a"		
	P-A	P-B	A-B	P-B	A-T	
021	2	4		4	2	
	P-A	B-T		P-A	P-B	A-B
022	6	2		5	2	

1) Only for pressure compensation, no high flow possible.

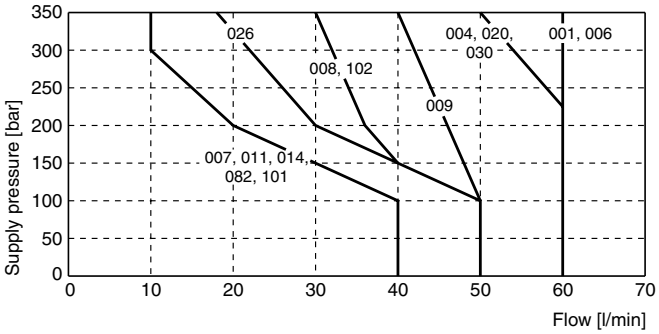
Flow curve

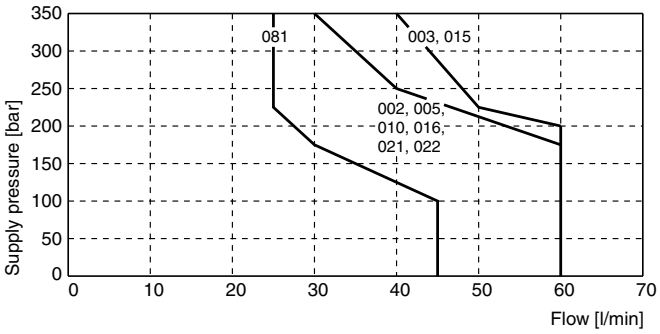


All characteristic curves measured with HLP46 at 50 °C.

The diagram below specifies the shift limits for valves with AC and DC solenoids. The specifications apply to a viscosity of 40 mm²/s and balanced flow conditions. The shift limits can be considerably lower at unbalanced flow conditions. To avoid flow rates beyond the shift limits, a plug-in orifice can be inserted in the P port.

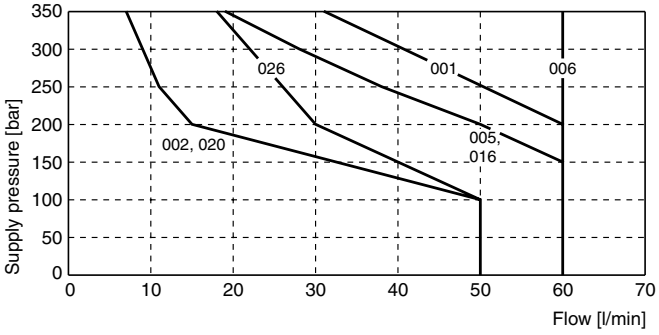
Shift limit diagram with DC solenoid

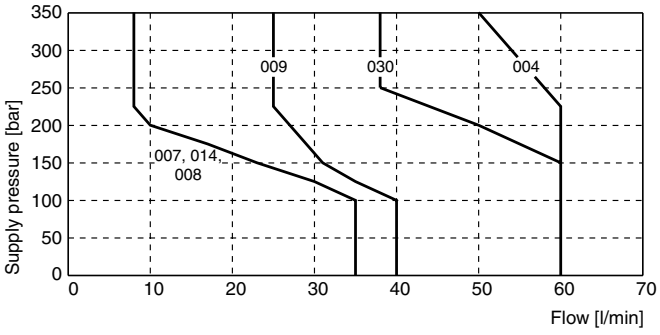




Measured with HLP46 at 50 °C, 90 % U_{nom} and warm solenoids

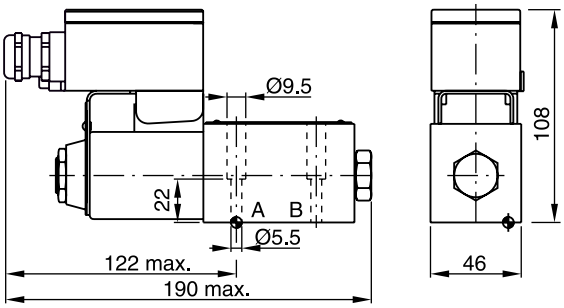
Shift limit diagram with AC solenoid



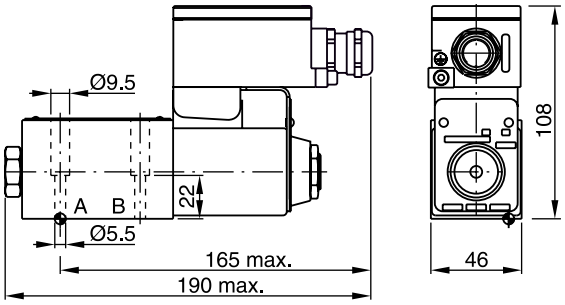


Measured with HLP46 at 50 °C, 95 % U_{nom} and warm solenoids

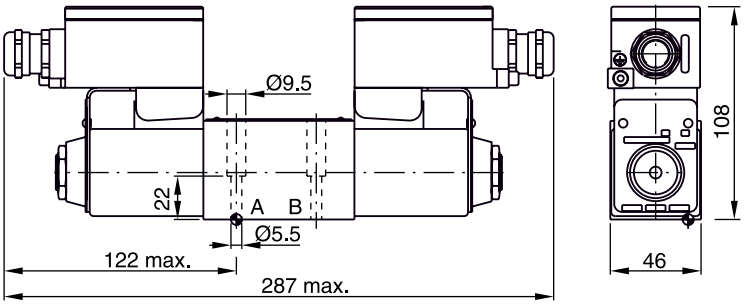
B, E -style

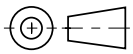


H, K -style



C, D -style





Surface finish	Kit			Kit
R_{max}6.3 ▱ 0.01/100	BK375	4x M5x30 ISO 4762-12.9	7.6 Nm ±15 %	NBR: SK-D1VW-N-91 FPM: SK-D1VW-V-91