

DV(C)M Built-in Fitting Manifold Option



1. Specifications



Model	Ľ	OVM	DVCM			
Image						
Series	DV (basic type)	DVC (compact type)			
Piping option	Thread piping	One-touch fitting	Thread piping	One-touch fitting		
Fittings replacement	Loc	k-pin type	Lock-pin type			
	DV10	000 : ø4, ø6	DVC1000 : Ø3, Ø4			
Fitting size	DV3(000 : ø6, ø8				
	DV4	4000 : ø10				

Solution Innovation









3. Modeling – DV(C)M built-in fitting manifold



Use Lock Pin to replace fittings





	ТРС				Competito	r (S brand)	Expected effect	Note
Additional options	Built-in fitting option for DV(C) series		F T4 Fitting size T4 94(0 T6 96(0VM) T8 98(0) T0 910(0 Data 900(0 T0 910(0 Data 900(0 T0 910(0 Data 900(0 Data 900(VM1) 1, DVM3) VVM3) VVM4) d piping in fitting test for base	Fittings are not compatible for basic SY series	A. BFE 配価合子者 Living 101 注意合子者 Living 101 注意合子者 101 注意合子	extension of cust omer choice	S brand's new model JSY (compact) series has built-in fitting option
expand compatibility within existing model	No differences between manifold sizes for all fitting sizing (the existing manifold is also applicable)	Manifold	Valve width length (fitting size) (for 2 stations) (pitch) width height	10 39 (11) 33 21.5	Necessary changes between manifold sizes for different fitting sizing (the existing manifold also needs to replaced if fitting changes. JSY1000 series)		Reduce the customer's burden when changing fitting sizes	DVCM (mass produced manifold material) DVM (mass produced external pilot type material)

5. Test result



- Flow rate comparison with thread piping type manifold
- Leakage test under high pressure

<Flow rate test>

구분	sample	누설 측정(cc/min) (0.7MPa)			유량 측정 (L/min) (0.1MPa)				유랴 평규		
			통전		A PORT	B PORT	A PORT	B PORT	(L/min)	비고	
		미종신	A SOL	B SOL	1	1	2	2			
DVC1000	피팅 <mark>내</mark> 장형	Х	х	х	39.0	41.0	40.0	41.0	40.3	출력포트 Ø3	
		х	х	x	46.0	48.0	46.0	49.0	47.3	ANTE OF	
	나사배관형	х	х	х	47.0	48.0	47.0	48.0	47.5	펄떡 <u>포드</u> 104	
DV1000	피팅 <mark>내</mark> 장형	X	х	х	55.0	54.0	54.0	55.0	54.5	출력포트 Ø4	
		х	х	x	68.0	67.0	68.0	65.0	67.0	추려고 두 아이	
	나사배관형	х	х	х	70.0	65.0	72.0	68.0	68.8	줄덕포트 106	
DV3000	피팅내장형	x	х	х	125.0	130.0	125.0	125.0	126.3	출력포트 Ø6	
		х	Х	x	145.0	140.0	145.0	145.0	143.8	★ ₽!π = .00	
	나사배관형	х	х	х	145.0	150.0	140.0	155.0	147.5	동 <i>너</i> 포트 108	
DV4000 -	피팅 <mark>내</mark> 장형	х	х	x	160.0	170.0	165.0	165.0	165.0	출력포트 Ø10	
	나사배관형	х	х	x	170.0	170.0	170.0	170.0	170.0		

Test result: No leakage detected on the manifold and the fittings @ the highest possible operating pressure. Flow rate is the same with thread piping type manifold.

<High pressure leakage test>



Supply pressure: 0.7MPa Once air is supplied, apply lateral pressure on the tube that is connected the fittings and detect leakage on the connection between the manifold and the fitting.

Test result: no leakage detected

6. DVCM1 dimensions







<u>NOTE</u>

1.표기 치수 외 DVC1*40 내부 Pilot 사양과 동일하며, 1연조는 Sub Plate 임.

7. DVM1 dimensions





8. DVM3 dimensions





9. DVM4 dimensions



