V81 Zawory kulowe (uniwersalne)

Ciśnienie robocze do 137 bar (2000 psig)

Opis

Uniwersalny zawór kulowy do aplikacji niskiego i średniego ciśnienia o kompaktowej budowie

Cechy zaworu

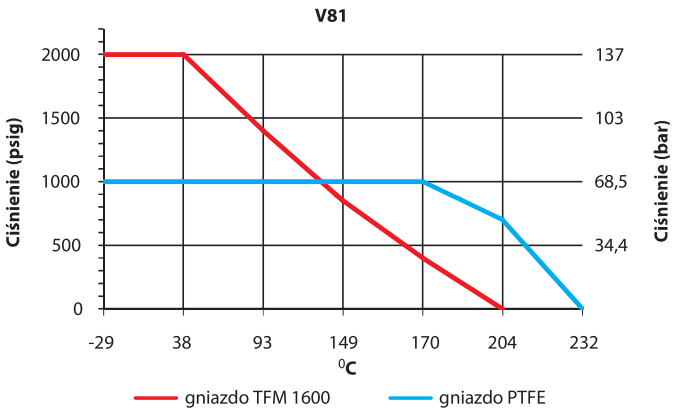
- dwa rodzaje rączek (rączka i motylek jako opcja)
- dwa rodzaje gniazda zaworu (PTFE oraz TF1600 jako opcja)
- przyłącza z portami Dk-Lok 6 mm do 1" oraz gwinty od 1/4" do 1"
- dostępne w dwóch wersjach materiałowych: AISI316 oraz mosiądz

Informacje techniczne

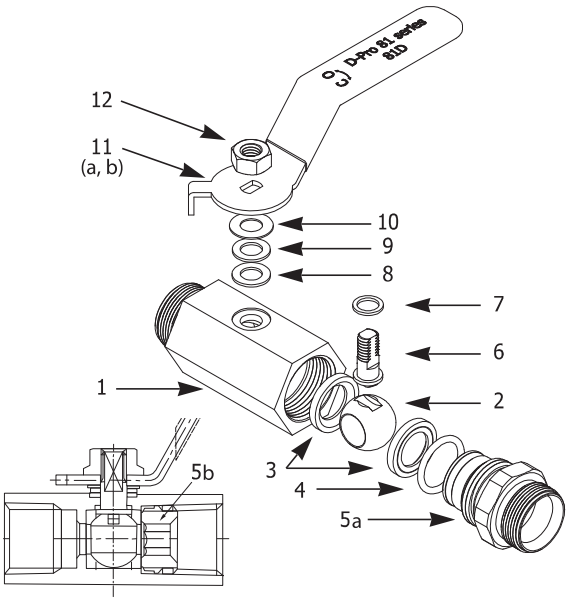
Ciśnienie robocze

Wersja zaworu	Ciśnienie dla gniazda PTFE w temp. 170°C	Ciśnienie dla gniazda TFM1600 w temp. 37°C
	bar (psig)	bar (psig)
V81A	68,9 (1000)	137 (2000)
V81B	68,9 (1000)	137 (2000)
V81C	68,9 (1000)	137 (2000)
V81D	68,9 (1000)	137 (2000)
V81E	68,9 (1000)	137 (2000)

Wykresy zależności ciśnienia od temperatury



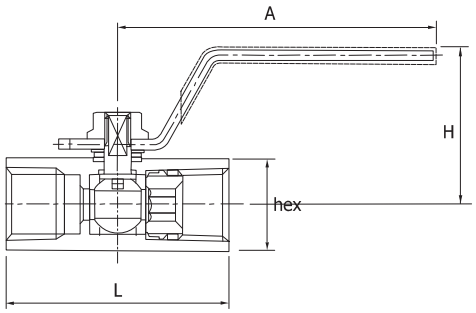
Konstrukcja zaworu (materiały)

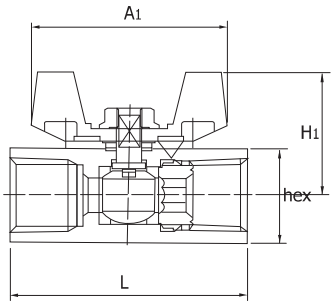


Element	Wersja AISI316	Wersja mosiądz
1. Korpus	AISI316	mosiądz
2. Kula	AISI316	AISI316
3. Gniazda	PTFE TFM 1600 (opcjonalnie)	PTFE TFM 1600 (opcjonalnie)
4. Uszczelnienie*	FKM (Viton)	NBR (Perbunan)
5a. Element przyłączeniowy portu Dk-Lok	AISI316	mosiądz
5b. Wkładka dla połączeń gwintowanych	AISI316	mosiądz
6. Trzpień kuli zaworu	AISI316	AISI316
7. Uszczelka dolna	PTFE	PTFE
8. Uszczelka górna	PTFE	PTFE
9. Podkładka	AISI316	AISI316
10. Podkładka sprężynująca	Stal nierdzewna	Stal nierdzewna
11a. Rączka	AISI304 z winylową osłoną	AISI304 z winylową osłoną
11b. Rączka motylkowa	stal niklowana	stal niklowana
12. Nakrętka	AISI304	AISI304

* uszczelnienie występuje tylko w zaworach z portem Dk-Lok

Parametry techniczne - zawory dwudrogowe V81





Podstawowy kod zamówieniowy		Przyłącza wej. / wyj.	Cv	DN mm (cal)	Wymiary mm (cal)					
					L	H	hex	A	A1	H1
V81A-	D-6M	6mm Port Dk-Lok	1.25	5 (0.20)	79 (3.11)	31 (1.22)	17 (11/16)	59.5 (2.34)	30.50 (1.20)	23.50 (0.93)
	D-4T	1/4" Port Dk-Lok	1.25		79 (3.11)					
	F-4N	1/4" wew. NPT	1.35		41.9 (1.65)					
V81B-	D-10M	10mm Port Dk-Lok	2.6	7.50 (0.30)	90 (3.54)	40 (1.57)	20.64 (13/16)	81 (3.19)	42.00 (1.65)	30.00 (1.18)
	D-6T	3/8" Port Dk-Lok	2.5		90 (3.54)					
	F-6N	3/8" wew. NPT	2.6		45 (1.77)					
V81C-	D-12M	12mm Port Dk-Lok	9.25	9.00 (0.35)	98 (3.86)	42 (1.65)	27 (1-1/16)	81 (3.19)	46.00 (1.81)	35.70 (1.41)
	D-8T	1/2" Port Dk-Lok	9.25		98 (3.86)					
	F-8N	1/2" wew. NPT	9.25		56.15 (2.21)					
V81D-	D-16M	16mm Port Dk-Lok	10.6	12.50 (0.49)	108 (4.25)	51 (2.00)	32 (1-1/4)	102.5 (4.04)	49.50 (1.95)	38.10 (1.50)
	D-10T	5/8" Port Dk-Lok	10.6		108 (4.25)					
	F-12N	3/4" wew. NPT	12.65		60 (2.36)					
	D-12T	3/4" Port Dk-Lok	12.65		109 (4.29)					
V81E-	D-16T	1" Port Dk-Lok	17.35	16.00 (0.63)	133 (5.23)	55 (2.16)	38 (1-1/2)	102.5 (4.04)	68.00 (2.68)	45.00 (1.77)
	F-16N	1" wew. NPT	17.35		78.1 (3.07)					

Powyższe wymiary podane w tabeli mają charakter orientacyjny, a producent zastrzega sobie możliwość wprowadzenia zmian.
Wymiary dotyczące długości zaworu z portem Dk-Lok podane są dla nakrętek dokręconych ręcznie.
O inne konfiguracje przyłączy zapytaj producenta.

Opcje zamówienia

Pełny kod zaworu, tworzy się dodając do podstawowego kodu zaworu zawartego w tabeli powyżej opcje opisane w tabeli poniżej.

Przykład **V81A-D-6M-VT-TF-BF-S**: Zawór V81A, port Dk-Lok 6 mm z obu stron, uszczelnienie viton, gniazdo TFM1600, rączka motylkowa, korpus S316.

Kod:	Część główna	Opcje dodatkowe			Materiał
	V81A – D – 6M	– VT	– TF	– BF	– S

1. Seria zaworu

2. Rodzaj przyłącza (wej. / wyj.)
- D: port Dk-Lok
- F: gwint wewnętrzny
- M: gwint zewnętrzny
- MF: gwint zewnętrzny / wewnętrzny
- MD: gwint zewnętrzny / port Dk-Lok
- FD: gwint wewnętrzny / port Dk-Lok

3. Rozmiar przyłącza
- ...T - port Dk-Lok pod rurki calowe TUBE
- ...M - port Dk-Lok pod rurki metryczne TUBE
- ...N - gwint NPT
- ...R - gwint rurowy stożkowy (BSPT)
- ...G - gwint rurowy równoległy (BSPP)

4. Uszczelnienie
- Nic: FKM (viton) standard dla zaworów z korpusem S316
- Nic: NBR (perbunan) standard dla zaworów z korpusem mosiężnym
- VT: FKM (viton) opcja dla zaworów z korpusem mosiężnym
- BN: NBR (perbunan) opcja dla zaworów z korpusem S316

* uszczelnienie występuje tylko w zaworach z portem Dk-Lok

5. Gniazdo
- Nic: PTFE standard: ciśnienie 68,9 Bar (1000 psi)
- TF: TFM1600 opcja: ciśnienie 137 Bar (2000 psi)

* Gniazdo TFM1600 nie występuje w zaworach z korpusem mosiężnym (opcja - B)

6. Rączka
- Nic: standard: rączka
- BF: opcja: rączka motylkowa

* Opcja BF nie występuje w zaworach z gniazdem TFM1600 (opcja -TF)

7. Korpus
- S: S316
- B: mosiądz

DK-LOK Valves

V81 Series Ball Valve

No.V81-7
March 2015

Pressures rating of 68.9 bar (1000 psig) and 137 bar (2000 psig)

Valve with lever handle
Working pressure
- PTFE seats : 68.9 bar (1000 psig)
- TFM seats : 137 bar (2000 psig)

Valve with butterfly handle
Working pressure
- PTFE seats : 68.9 bar (1000 psig)
- TFM seats not applicable

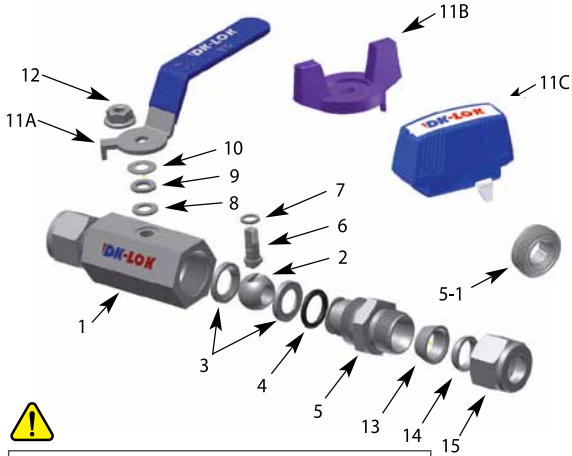
Valve with dielectric handle
Working pressure
- PTFE seats : 68.9 bar (1000 psig)
- TFM seats : 137 bar (2000 psig)

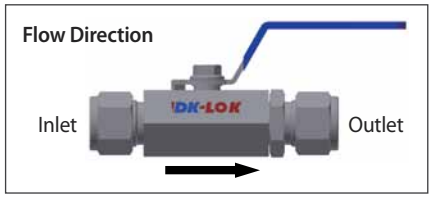
Design Features

- Compact barstock construction for high integrity
- Blow-out proof design with internally loaded stem
- Floating Ball design providing seat wear compensation
- Micro-finished ball ensures a leak-tight shut-off on pressure
- Standard lever handle, optional butterfly and dielectric handle.

Applications

V81 series ball valve offers a safe and reliable performance for a wide range of onshore and offshore applications: water, oil, gas, petrochemical and general duty applications.



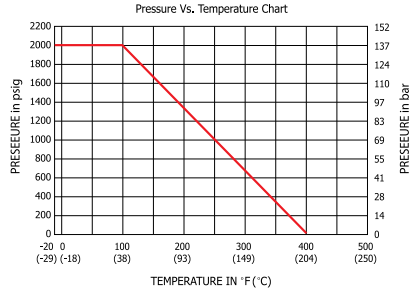


Materials of Construction

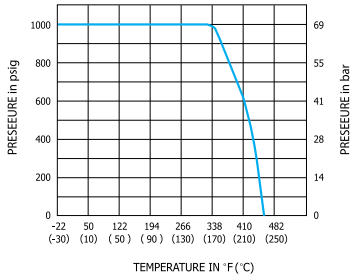
Component	Valve Body Materials	
	Stainless Steel	Brass
1. Body	ASTM A276 / A479 TYPE316	ASTM B16 or JIS H3250
2. Ball	ASTM A276 TYPE316	
3. Seat (2)	PTFE / D1710 for pressure 68.9 bar (1000 psig) TFM 1600 for pressure 137 bar (2000 psig)	
4. O-Ring	FKM	NBR
5. End Connector	ASTM A276/A479 TYPE316	ASTM B16 or JIS H3250
5-1. Insert		
6. Stem	ASTM A276/A479 TYPE316	
7. Lower Packing	PTFE / D1710	
8. Upper Packing	PTFE / D1710	
9. Gland	ASTM A276/A479 TYPE316	
10. Washer	Stainless Steel	
11A. Handle	Stainless Steel Lever handle with vinyle sleeve	
11B. Handle	ZINC / ASTM B240 Butterfly handle, Nickel-plated	
11C. Handle	Dielectric Handle with Nylon(Black, Red, Blue)	
12. Lock Nut	Stainless Steel	Stainless Steel
13. Front Ferrule	ASTM A276/A479 TYPE316	ASTM B16 or JIS H3250
14. Backing Ferrule	ASTM A276/A479 TYPE316	ASTM B16 or JIS H3250
15. Nut	ASTM A276/A479 TYPE316	ASTM B16 or JIS H3250

1. V81D, V81E Locking device lever handle Type : Body Material is ASTM A351 CF8M
4. O-Ring is applicable to end connector type.
5. End Connector is for DK-Lok end connection standard, male pipe thread available.
5-1. Insert is for female pipe thread end connection.
* TFM 1600 seat is usable only with body in stainless steel.
* Wetted parts are listed in Blue.

Pressure -Temperature Curves



TFM 1600 Seat Body Material: Stainless

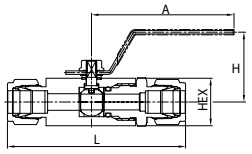


PTFE Seat Body Material: Stainless and Brass

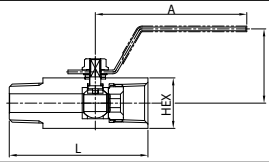
Factory Test

Every valve is factory tested with nitrogen gas @41 bar (600 psig) for leakage at the seat to a maximum allowable leak rate of 0.1 SCCM.
The packing is tested with nitrogen for no detectable leakage.

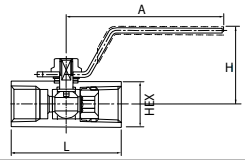
DK-Lok to DK-Lok
Lever Handle



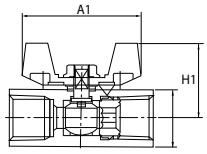
Male Pipe Thread to
Female Pipe Thread
Lever Handle



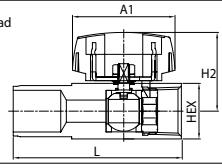
Female Pipe Thread to
Female Pipe Thread
Lever Handle



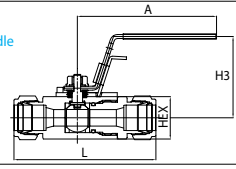
Female Pipe Thread to
Female Pipe Thread
Butterfly Handle



Weld End to Female Pipe Thread
Dielectric Handle



DK-Lok to DK-Lok
Locking device Lever Handle



Ordering Information and Table of Dimensions

Basic Ordering Number		End Connections Inlet / Outlet	Orifice mm (in.)	Cv	Dimensions, mm (in.)								
					L	H	HEX	A	A1	A2	H1	H2	H3
V81A-	D-6M-	6mm DK-Lok	5 (0.2)	1.25	79 (3.11)	27.6 (1.09)	17 (11/16)	59.5 (2.34)	30.5 (1.20)	41.8 (1.65)	23.5 (0.93)	33.8 (1.33)	35.6 (1.4)
	D-4T-	1/4 in. DK-Lok		1.25	79 (3.11)								
	F-4N-	1/4 in. Female NPT		1.35	41.9 (1.65)								
	MF-4N-	1/4 in. M/F NPT		1.35	52.4 (2.06)								
V81B-	D-10M-	10mm DK-Lok	7.5 (0.3)	2.6	91.7 (3.61)	36.5 (1.44)	20.64 (13/16)	81 (3.19)	42 (1.65)	44.5 (1.75)	30 (1.18)	38.3 (1.5)	39.5 (1.56)
	D-6T-	3/8 in. DK-Lok		2.5	91.3 (3.59)								
	F-6N-	3/8 in. Female NPT		2.6	47 (1.85)								
	MF-6N-	3/8 in. M/F NPT		2.6	53.5 (2.1)								
V81C-	D-12M-	12mm DK-Lok	9 (0.35)	9.25	99.2 (3.9)	39.7 (1.56)	27 (1-1/16)	81 (3.19)	46 (1.81)	46.5 (1.83)	35.7 (1.41)	43.5 (1.71)	44.7 (1.76)
	D-8T-	1/2 in. DK-Lok		9.25	101 (3.98)								
	F-8N-	1/2 in. Female NPT		9.25	56.15 (2.21)								
	MF-8N-	1/2 in. M/F-NPT		9.25	66.6 (2.62)								
	WF-15A8N-	1/2 in. Welding/F-NPT		9.25	95.0 (3.74)								
V81D-	D-16M-	16mm DK-Lok	12.5 (0.49)	10.6	107 (4.24)	44.85 (1.76)	32 (1-1/4)	102.5 (4.04)	49.5 (1.95)	56 (2.2)	38.1 (1.50)	47.2 (1.86)	-
	D-10T-	5/8 in. DK-Lok		10.6	108 (4.25)								
	F-12N-	3/4 in. Female NPT		12.65	63 (2.48)								
	D-12T-	3/4 in. DK-Lok		12.65	107 (4.22)								
	MF-12N-	3/4 in. M/F-NPT		12.65	75.9 (2.99)								
	WF-20A12N-	3/4 in. Welding/F-NPT		12.65	100 (3.93)								
V81E-	D-16T-	1 in. DK-Lok	16 (0.63)	17.35	133 (5.23)	49.75 (1.95)	38 (1-1/2)	102.5 (4.04)	68 (2.68)	70.1 (2.76)	45 (1.77)	53.7 (2.11)	-
	F-16N-	1 in. Female NPT		17.35	78.1 (3.07)								
	WF-25A16N-	1 in. Welding/F-NPT		17.35	115 (4.53)								
V81F-	F-20N-	1 1/4 in. Female NPT	21 (0.83)	-	89 (3.50)	65 (2.56)	50 (2)	141 (5.55)					
V81G-	F-24N-	1 1/2 in. Female NPT	24 (0.94)	-	95 (3.74)	68 (2.68)	55 (2-3/16)	148 (5.83)					
V81H-	F-32N-	2 in. Female NPT	32 (1.26)	-	110 (4.33)	80 (3.15)	69.8 (2-3/4)	154 (6.06)	-	-	-	-	-

Dimensions shown are for reference only, subject to change. Dimensions with DK-Lok nuts are in finger-tight position

How to Order

Select valve ordering number, applicable option(s) from designator tables listed below.

Examples

V81A-D-6M- VT- | **TF-** | **BF-** | **BK** | **S**

O-ring	Seat Material	Handle	Handle Color	Body material
Nil : FKM O-ring is standard for SS316 body. **Nil** : NBR O-ring is standard for Brass body. **VT** : FKM O-ring for Brass body **BN** : NBR O-ring for Stainless Steel **NOTE** : O-ring is required for DK-Lok end connection.	**Nil** : Standard PTFE seats for 68.9 bar (1000 psig) working pressure. **TF** : Optional TFM1600 for 137 bar (2000 psig) working pressure. **NOTE** : TFM1600 seat is not applicable to Brass valve.	**Nil** : Standard lever handle **BF** : Optional butterfly handle **DH** : Dielectric handle **LD** : Locking device lever handle **NOTE** : BF option is not applicable to the valve with TF seat	**BK** : Black **BL** : Blue **RD** : Red	**S** : SS316 **B** : Brass **M** : Monel **L20** : Alloy 20 **HC** : Hastelloy C276

Safe Valve Selection

The selection of a valve for any application or system design must be considered to ensure safe performance. Valve function, valve rating, material compatibility, proper installation, operation and maintenance remain the sole responsibillty of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.

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DK-LOK
UHP Fittings & Valves

V81 Series Ball Valve Option Key Lock Type Handle

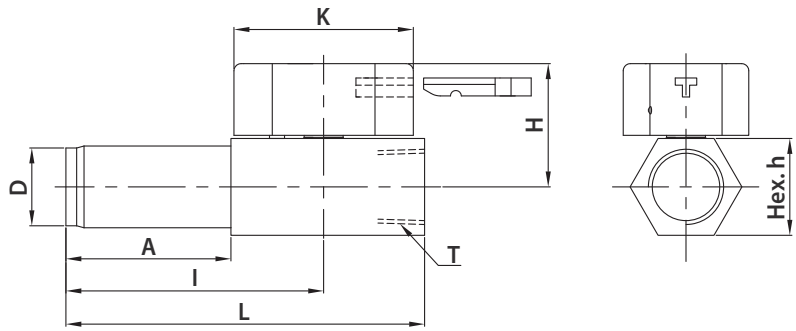
No. V81-K-1
September 2017

Pressure Rating up to 68.9 bar (1,000 psig)

Features

- Compact barstock construction for high integrity.
- Blow-out proof design with internally loaded stem.
- Floating Ball design providing seat wear compensation.
- Micro-finished ball ensures a leak-tight shut-off on pressure.
- Standard PTFE seat material.

Ordering Information and Dimensions



Valve Ordering Number		End Connection		Dimensions, mm (in.)							
		Inlet, D	Outlet, T	Orifice	Cv	L	H	Hex. h	A	I	K
V81C WF	15A8R	Pipe 15A	1/2" Female PT	9.0(0.35)	9.25	100.0(3.94)	34.4(1.35)	27.0	46.0(1.81)	71.9(2.83)	50.0(19.7)
V81D WF	20A12R	Pipe 20A	3/4" Female PT	12.5(0.49)	12.65	105.0(4.13)	39.0(1.54)	32.0	46.0(1.81)	73.4(2.89)	60.0(2.36)
V81E WF	25A16R	Pipe 25A	1" Female PT	16.0(0.63)	17.35	120.0(4.72)	42.0(1.65)	38.0	45.0(1.77)	80.6(3.17)	60.0(2.36)

All dimensions shown are for reference only and are subject to change.

Factory Test

- Every valve is factory tested with nitrogen gas @41 bar (600 psig) for leakage at the seat to maximum allowable leak rate of 0.1 SCCM.
- The packing is tested with nitrogen for no detectable leakage.

How to order

Select desired valve basic ordering number, and options from designators listed below.

Example: V81CWF

- 15A8R	- KB	- S
Connection, Thread PT	**Seat**	**Handle Type**	**Body Material**
Pipe 15A to Female 1/2 PT : **15A8R** Pipe 20A to Female 3/4 PT : **20A12R**	**Nil** : PTFE	**KB** : Key lock handle Blue **KR** : Key lock handle Red	**S** : ASTM A276 TYPE 316

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Fittings & Valves

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