Direct acting solenoid valves 10 mm

series DM

DESCRIPTION

The direct acting solenoid valves series "DM" are produced in the 3/2 N.C. pneumatic function with the interface to ISO 15218 and in the 3/2 N.O. - 3/2 N.C. pneumatic functions with not standardized interface. These valves can be used with all the fluids that can match the constructive materials. The versions with nominal diameter of 1.1 mm are equipped with "CRP" (Power Reduction Circuit, see below).

TECHNICAL DATA

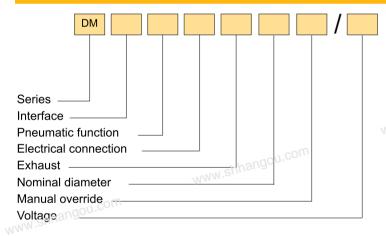
Interface	to ISO 15218 or not standardized				
Nominal diameter	Ø 0.7 mm (standard coil)	d coil) Ø 1.1 mm (coil with "CRP")			
Operating pressure	0 ÷ 7 bar				
Flow rate 1-2 at 6 bar ∆p=1	14 NI/min				
Flow rate 2-3 at 6 bar ∆p=1	22 NI/min	30 NI/min			
Working temperature	√√√ -5 ÷ +50 °C				
Fluid	Filtered, unlubricated or continuous lubricated compressed air and other compatibles fluids				
Max. operating frequency	≤ 40 Hz				
Coilshhama	Adjustable				
Voltages	DC: 6 - 12 - 24 V AC: 24 V	DC: 12 - 24 V			
Power consumption	1.3 W	3.5 W - 0.9 W			
Voltage tolerance	-5 ÷ +10%				
Protection class	IP 51 - IP 65 (only versions with embedded cables)				
Insulation class	F (155°C)				
Duty cycle	Continuous rating (ED 100%)				
Energized	Solenoid with response time = 8 ms				
De-energized	Mechanical spring with response time = 10 ms				
Electric connector	With 90° and in-line connectors: series CN - see chapter Connectors on page 7				



MATERIALS

Core	Stainless steel
Body and manual override	PA and POM
Springs	Stainless steel
Seals	NBR and FKM rubber

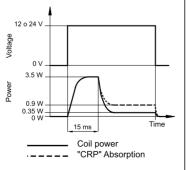
ORDER KEY



POWER REDUCTION CIRCUIT ("CRP")

The small size and the high power required to switch the solenoid valves with a nominal diameter of 1.1 mm, would not allow the coil to dissipate the heat it generates.

The power reduction circuit ("CRP") prevents this effect. When energized, the coil produces an output of 3.5 W for the short period of 15 ms needed to switch the valve. Subsequently, the "CRP" acts by reducing the coil power to 0.35 W while maintaining the solenoid valve switched to the end of insertion. At full capacity the entire circuit, including LED indicators, absorbs 0.9 W.



ORDER EXAMPLE

10 mm valve with not standardized interface, 3/2 N.C., with 90° connector, without LED, free exhaust, nominal diameter 0.7mm, monostable push button and 24 V DC coil: **DMC4L/02400**

INTERFACE

Not standardized I to ISO 15218 (Only 3/2 N.C.)

C 3/2 N.C.

PNEUMATIC FUNCTION

2C 2/2 N.C.

A 3/2 N.O.

ELECTRICAL CONNECTION

- 1 90° connector + bipolar LED and diode
- 2 Cable 300 mm length
- 3 In-line connector + bipolar LED and diode
- 4 90° connector
- 5 in-line connector

Options:

- **6** Cable 100 mm length + Molex® male connector code 51006-0200
- 7 Cable 100 mm length + Tyco® MODU II connector code 280358-0
- 8 Cable 100 mm length + Molex® female connector code 51065-0200
- **88** Pair of solenoid valves with cables 100 mm length + Molex® single female connector code 51065-0400

EXHAUST

Channeled (standard)

L Free (with not standardized interface 3/2 N.C.)

NOMINAL DIAMETER

0.7 mm (standard)

B 1.1mm (Only 12 or 24V DC + "CRP")

MANUAL OVERRIDE

Monostable push-button (standard) 2 Without manual override

VOLTAGE

 00600
 6V DC
 01200
 12V DC

 02400
 24V DC
 02450-60
 24V AC

 01200CRP*
 12V DC
 02400CRP*
 24V DC

COIL POSITION

Standard

180 Rotated 180°

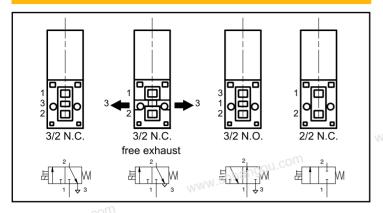


Only with: in-line connector + LED, or 90° connector + LED

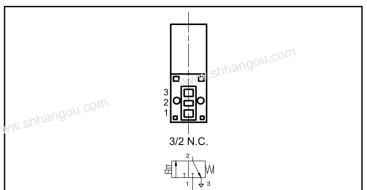
series DM

Direct acting solenoid valves 10 mm

PNEUMATIC FUNCTIONS WITH NOT STANDARDIZED INTERFACE

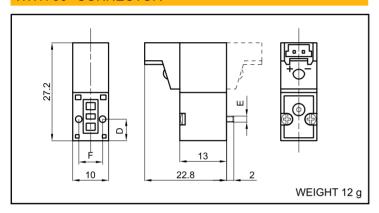


PNEUMATIC FUNCTION WITH INTERFACE TO ISO 15218

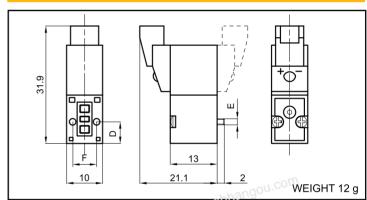


DIMENGIONS

WITH 90° CONNECTOR

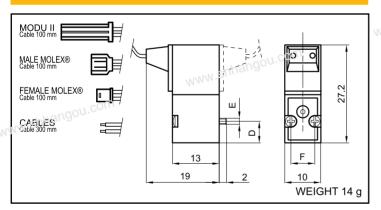


WITH IN-LINE CONNECTOR

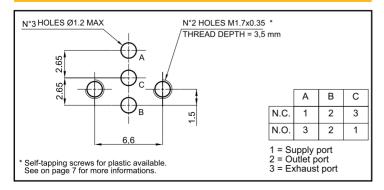


	DIMENSION	NOT STANDARDIZED INTERFACE	TO ISO 15218 INTERFACE		
	shRango	6	6.2		
V	F E	M1.7x0.35	M1.6x0.35		
	F	6.6	6.8		

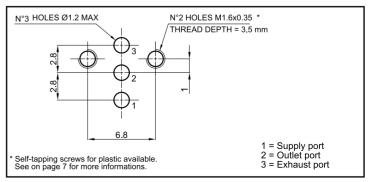
WITH CABLES



DIMENSIONS OF THE NOT STANDARDIZED INTERFACE



DIMENSIONS OF THE INTERFACE TO ISO 15218

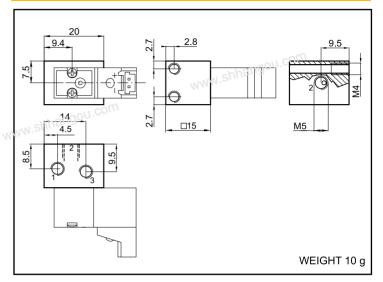


Direct acting solenoid valves 10 mm

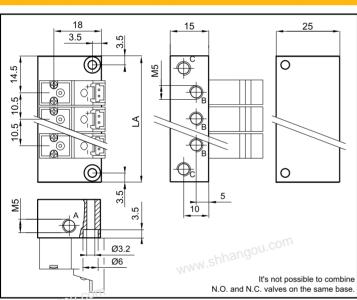
series DM

SINGLE BASE WITH NOT STANDARDIZED INTERFACE - DMP5/1

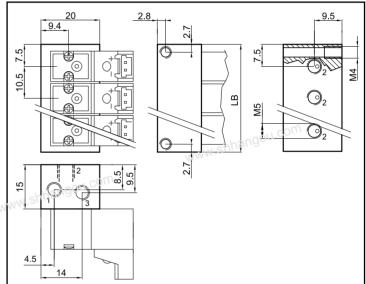
SINGLE BASE WITH INTERFACE TO ISO 15218 - DMIP5/1



MULTI-STATION BASE WITH NOT STANDARDIZED INTERFACE - DMPM5

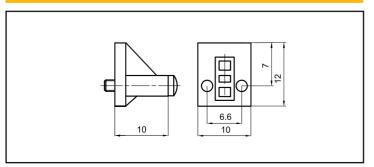


MULTI-STATION BASE WITH INTERFACE TO ISO 15218 - DMIPM5

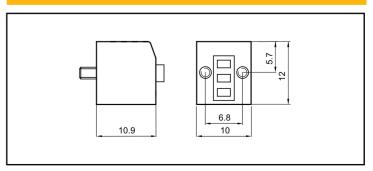


No. of stations	2	3	4	5	6	7	8	9	10
LA	39.5	50	60.5	71	81.5	92	102.5	113	123.5
LB	25.5	36	46.5	57	67.5	78	88.5	99	109.5
Weight (g)	43	54	65	76	87	98	109	120	131
TYPE	DMPM5/2	DMPM5/3	DMPM5/4	DMPM5/5	DMPM5/6	DMPM5/7	DMPM5/8	DMPM5/9	DMPM5/10
Weight (g)	22	30	38	46	54	62	70	78	86
TYPE	DMIPM5/2	DMIPM5/3	DMIPM5/4	DMIPM5/5	DMIPM5/6	DMIPM5/7	DMIPM5/8	DMIPM5/9	DMIPM5/10

CLOSING PLATE FOR NOT STANDARDIZED INTERFACE - KIT/PC/DM



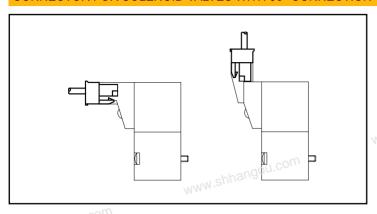
CLOSING PLATE FOR INTERFACE TO ISO 15218 - KIT/PC/DMI

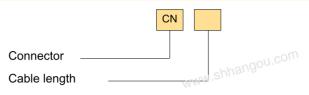


Connectors for solenoid valves 10 mm series DM and 15 mm series UM



CONNECTOR FOR SOLENOID VALVES WITH 90° CONNECTION OR IN-LINE CONNECTION





CABLE LENGTH 300 mm CABLE LENGTH 500 mm CABLE LENGTH 1000 mm

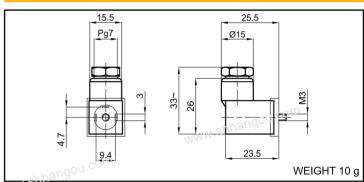
Connectors for solenoid valves 15 mm series UM

series MEK_{192/N}

TECHNICAL DATA

Voltages	DC: MAX 300 V
	AC: MAX 250 V
Working temperature	-40°C ÷ +90°C
Versions	Basic With light indicator (LED) With light indicator + and varistat (VDR) as electric protection
Number of pins	2 + earthed
Nominal current	6 A
Maximum current	10 A
Contacts resistance	≤ 4 mOhm
Protection class	IP 65 EN 60529
Connector insulation class	IEC 664 / VDE 0110-1/89

MEK192/N



DESCRIPTION	TYPE
Basic connector	MEK192/N
Connector with LED + VDR as protection 24 V DC/AC	MEK192/NVD 24CC/CA
Connector with LED + VDR as protection 110 V DC/AC	MEK192/NVD 110 V CC/CA
Connector with LED + VDR as protection 220 V DC/AC	MEK192/NVD 220 V CC/CA
Connector with LED 24 V DC/AC	MEK192/NLED 24 V CC/CA
Connector with LED 110/220 V DC/AC	MEK192/NLED 110/220 V CC/CA



Self-tappings screws for plastic

DESCRIPTION

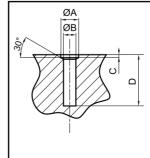
_{www.shhangou.com}

It's possible to order the solenoid valves with self-tapping screws for plastic instead of the standard screws (metric). Drilling fixing dimensions are approximate and we always recommend to run some assembly test. To order valves with self-tapping screws, specify it when ordering by adding the suffix "/P" to the order key of the DM and UM series.

ORDER EXAMPLE

15 mm solenoid valve 3/2 N.C. with faston, channeled exhaust, nominal diameter 1.1 mm, monostable push button, 24 V DC with standard coil position and self-tappings screws for plastic: ${\bf UMCSV/02400/P}$

DRILLING DIMENSIONS



DIMENSION	SERIES DM 10 mm	SERIES UM 15 mm
А	1.8	3.2
В	1.2	2.3
С	0.3	1.5
D	6	10