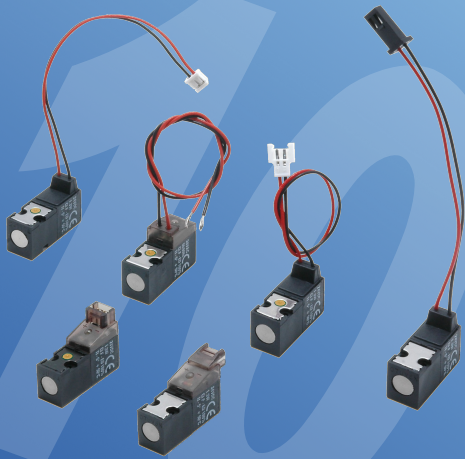
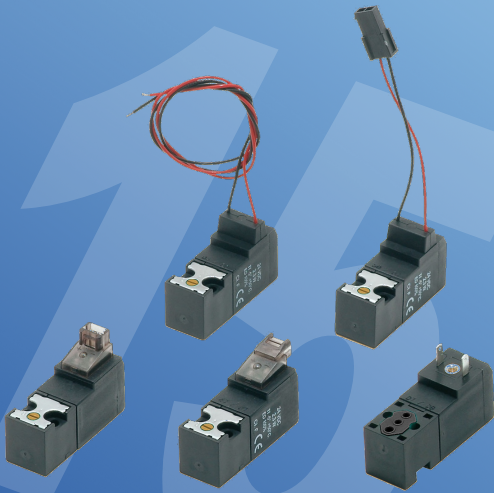


SOLENOID VALVES 10 and 15 mm



SERIES DM



SERIES UM



Power and precision in the air



SERIES DM

Direct acting solenoid valves 10 mm

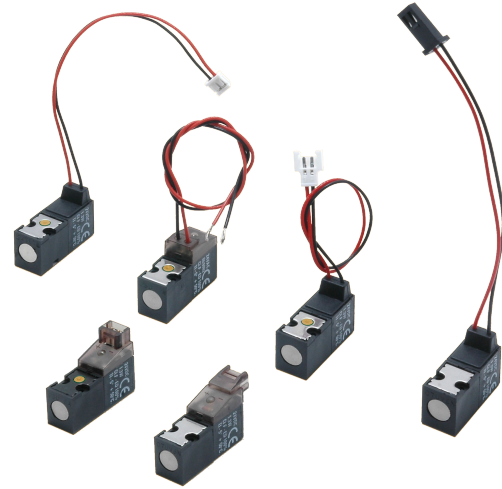
series DM

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. and 2/2 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

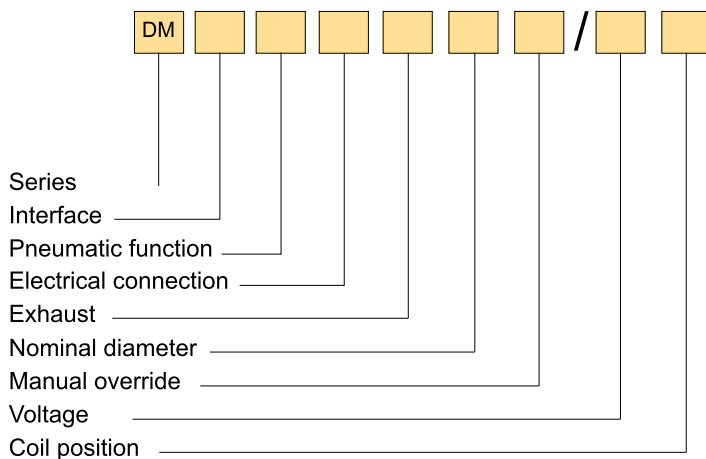
Interface	to ISO 15218 or not standardized	
Nominal diameter	Ø 0.7 mm (standard coil)	Ø 1.1 mm (coil with "CRP")
Operating pressure	0 ÷ 7 bar	
Flow rate 1-2 at 6 bar Δp=1	14 NI/min	24 NI/min
Flow rate 2-3 at 6 bar Δp=1	22 NI/min	30 NI/min
Working temperature	-10 ÷ +50 °C	
Fluid	Filtered, unlubricated or continuous lubricated compressed air and other compatibles fluids	
Max. operating frequency	≤ 40 Hz	
Coil	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 8	



MATERIALS

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

ORDER KEY



INTERFACE

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

PNEUMATIC FUNCTION

2C 2/2 N.C. | **C** 3/2 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

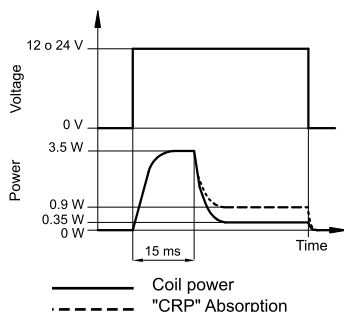
Standard | **180** Rotated 180°

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

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.



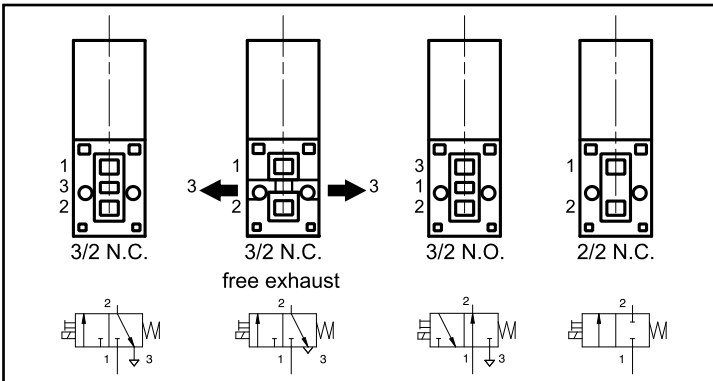
ORDER EXAMPLE

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**

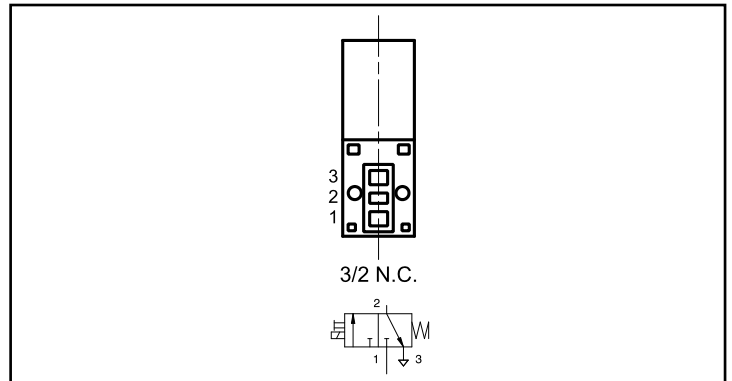
series DM

Direct acting solenoid valves 10 mm

PNEUMATIC FUNCTIONS WITH NOT STANDARDIZED INTERFACE

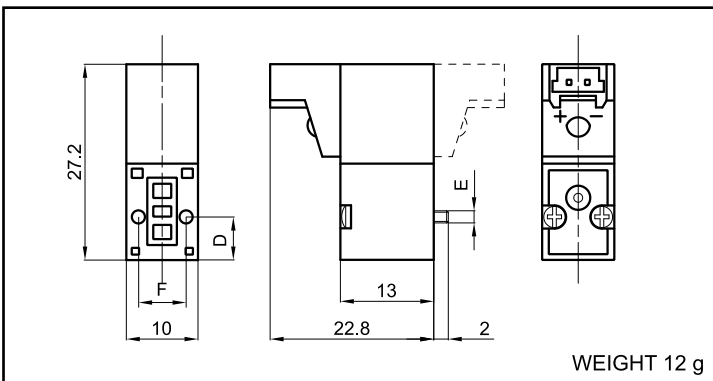


PNEUMATIC FUNCTION WITH INTERFACE TO ISO 15218

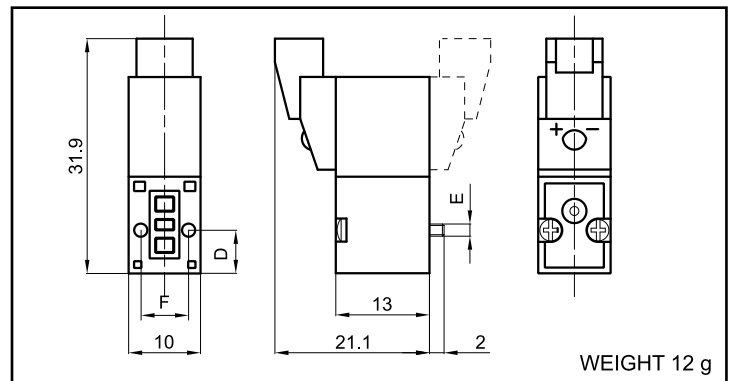


DIMENSIONS

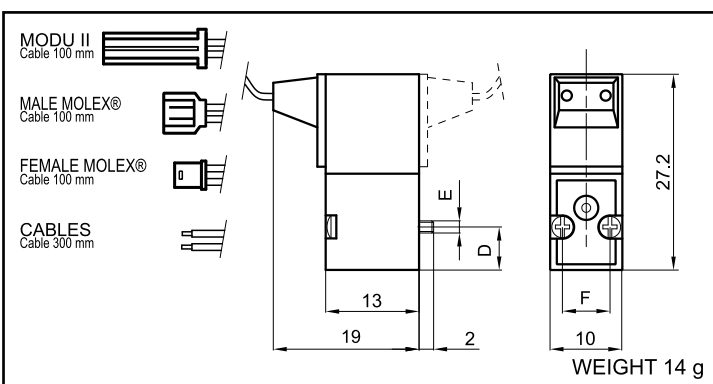
WITH 90° CONNECTOR



WITH IN-LINE CONNECTOR

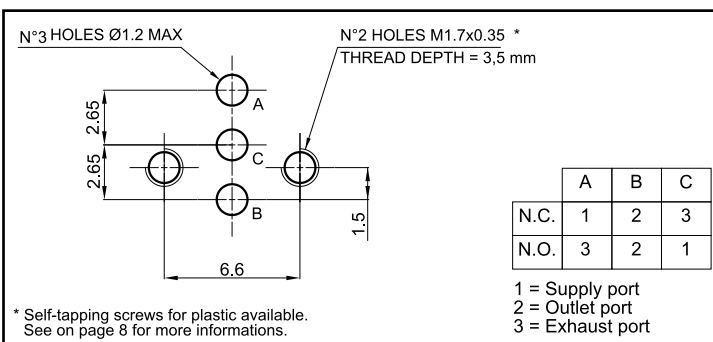


WITH CABLES

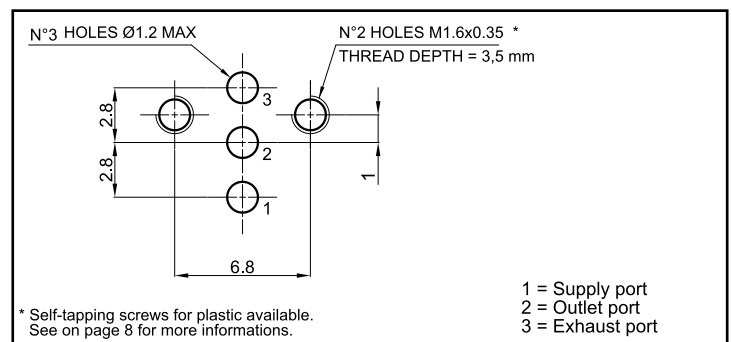


DIMENSION	NOT STANDARDIZED INTERFACE	TO ISO 15218 INTERFACE
D	6	6.2
E	M1.7x0.35	M1.6x0.35
F	6.6	6.8

DIMENSIONS OF THE NOT STANDARDIZED INTERFACE



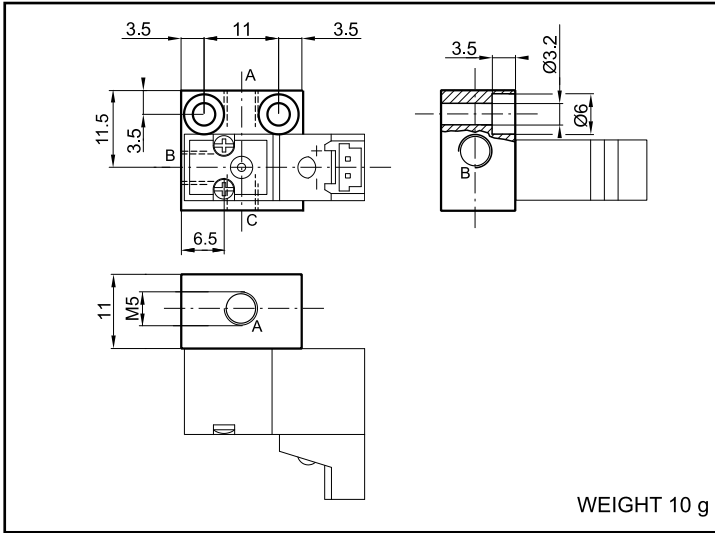
DIMENSIONS OF THE INTERFACE TO ISO 15218



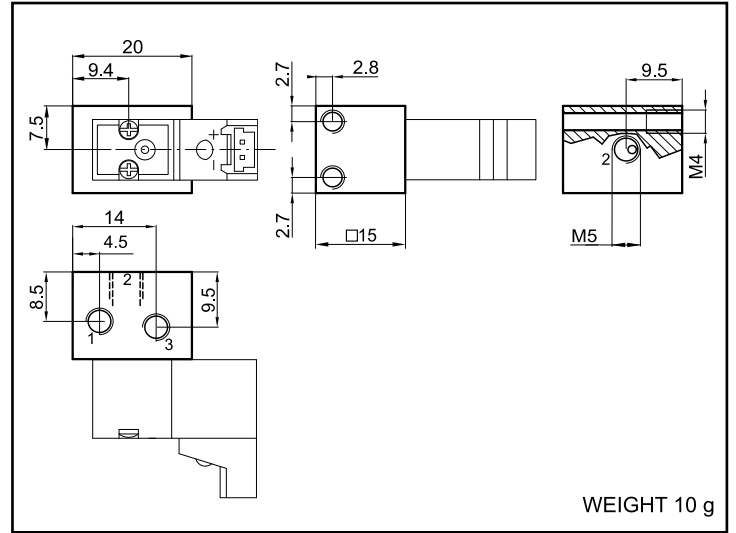
Direct acting solenoid valves 10 mm

series DM

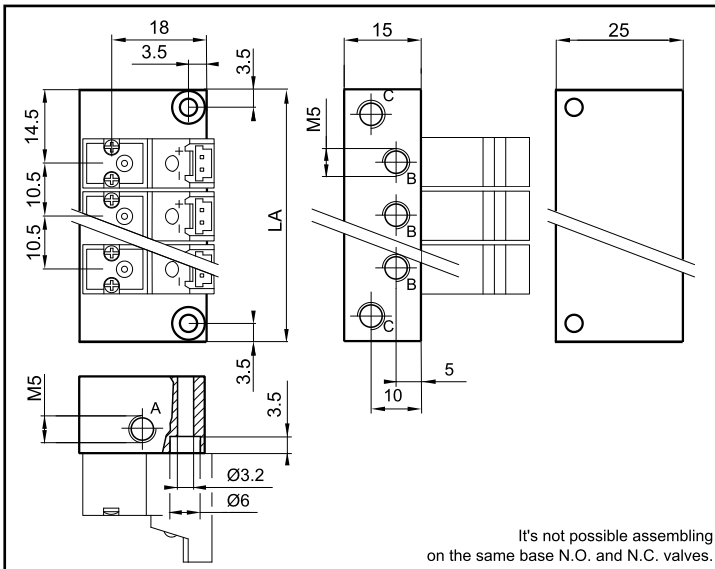
SINGLE BASE WITH NOT STANDARDIZED INTERFACE - DMP5/1



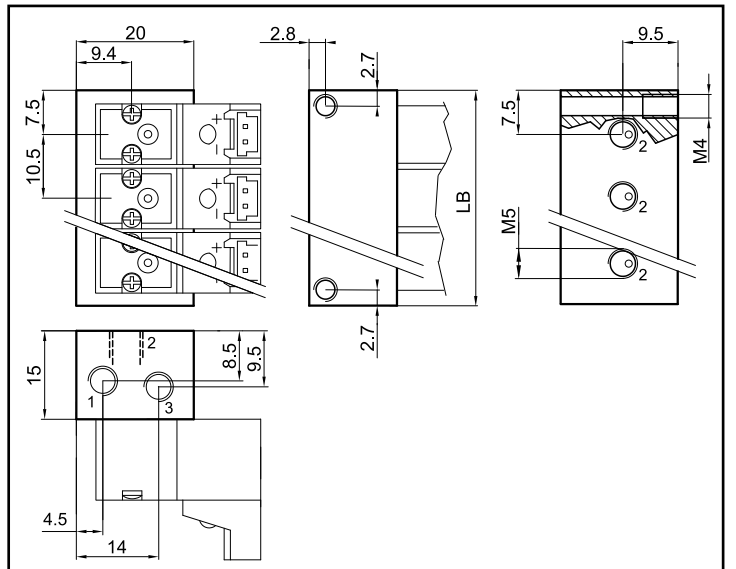
SINGLE BASE WITH INTERFACE TO ISO 15218 - DMIP5/1



MULTI-STATION BASE WITH NOT STANDARDIZED INTERFACE - DMPM5

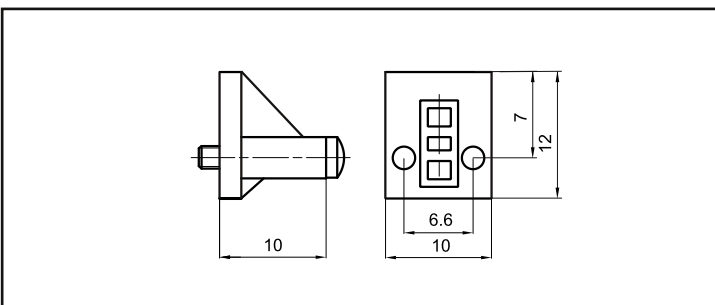


MULTI-STATION BASE WITH INTERFACE TO ISO 15218 - DMIPM5

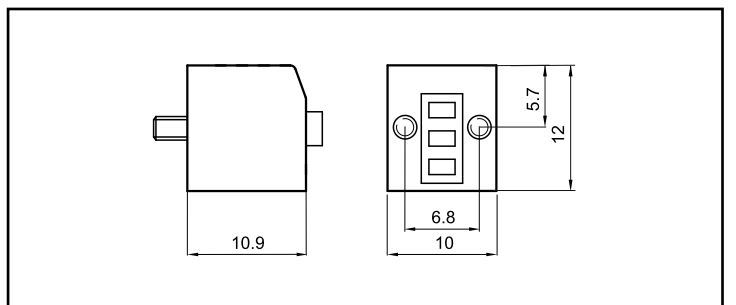


No. of stations	2	3	4	5	6	7	8	9	10
LA	39.5	50	60.5	71	81.5	92	102.5	113	123.5
LB	25.5	36	46.5	57	67.5	78	88.5	99	109.5
Weight (g)	43	54	65	76	87	98	109	120	131
TYPE	DMPM5/2	DMPM5/3	DMPM5/4	DMPM5/5	DMPM5/6	DMPM5/7	DMPM5/8	DMPM5/9	DMPM5/10
Weight (g)	22	30	38	46	54	62	70	78	86
TYPE	DMIPM5/2	DMIPM5/3	DMIPM5/4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





SERIES UM

Direct acting solenoid valves 15 mm

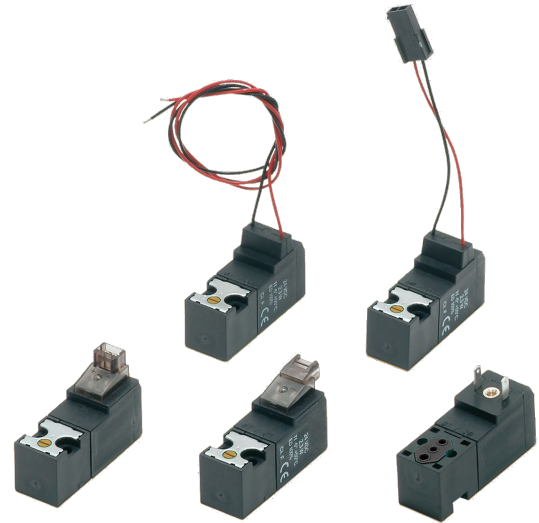
series UM

DESCRIPTION

The direct acting solenoid valves series "UM" are produced in the 3/2 and 2/2 N.C./N.O. pneumatic functions. They are used as power valves if mounted on single and multi-station base, or as control valves if mounted, in the 3/2 pneumatic function, on body valves series "MEV", "MEK", or "UK". These valves can be used with all the fluids that can match the constructive materials. The multi-station bases support both the 3/2 N.O. than the 3/2 N.C. pneumatic functions.

TECHNICAL DATA

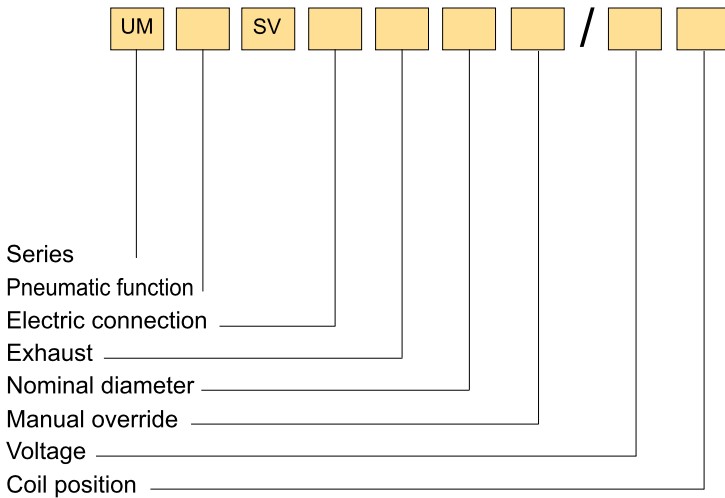
Nominal diameter	0.8 mm	1.1 mm (standard)	1.6 mm
Operating pressure	0÷10 bar N.C. Not available for N.O.	0÷10 bar N.C. 0÷7 bar N.O.	0÷7 bar N.C. DC only 0÷5 bar N.O. and/or AC
Flow rate 1-2 at 6 bar Δp=1	20 NI/min	30 NI/min	50 NI/min
Flow rate 2-3 at 6 bar Δp=1	30 NI/min	30 NI/min	50 NI/min
Working temperature	-10 ÷ +50 °C		
Fluid	Filtered, unlubricated or continuous lubricated compressed air and other compatibles fluids		
Max. operating frequency	≤ 30 Hz		
Coil	Adjustable		
Voltages	DC: 24 V	DC: 12 - 24 V AC: 24 - 110 - 220 V	
Power consumption	DC: 1 W	DC: 2.5 W AC: 2.8 VA (inrush) - 2.5 VA (holding)	
Voltage tolerance	-5% ÷ +10%		
Protection class	IP 51 - IP 65 (versions: with embedded cables or standard + connector MEK192/N)		
Insulation class	F (155°C)		
Duty cycle	Continuous rating (ED 100%)		
Energized	Solenoid with response time = 5 ms		
De-energized	Mechanical spring with response time = 6 ms		
Electric connectors	With faston: series MEK192/N - see chapter Connectors on page 8 With 90° and in-line connectors: series CN - see chapter Connectors on page 8		



MATERIALS

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

ORDER KEY



ORDER EXAMPLE

15 mm 3/2 N.C. valve with faston, channeled exhaust, nominal diameter 1.1 mm, monostable push button, 24 V DC with standard coil position: **UMCSV02400**

PNEUMATIC FUNCTION

2A 2/2 N.O.	2C 2/2 N.C.
A 3/2 N.O.	C 3/2 N.C.

ELECTRIC CONNECTION

With faston (standard)

Options:

- 1** 90° connector + bipolar LED and diode
- 2** Cable length 300 mm
- 3** Line connector + bipolar LED and diode
- 4** 90° Connector
- 5** Line connector
- 7** Cable length 100 mm + Tyco® MODU II connector code 280358-0

EXHAUST

Channeled (standard)	L Free (only 3/2 N.C.)
----------------------	-------------------------------

NOMINAL DIAMETER

1.1 mm (standard)	B 1.6 mm
D 0.8 mm exhaust 1.1 mm (only N.C.)	

MANUAL OVERRIDE

Monostable push button (standard)	E Without manual override and M3 insert*
F Without manual override	G Without M3 insert*
H Bistable screw driver slot	* Only with Faston

VOLTAGE

01200 12V DC	02400 24V DC
02450-60 24V AC	11050-60 110V AC
22050-60 220V AC	

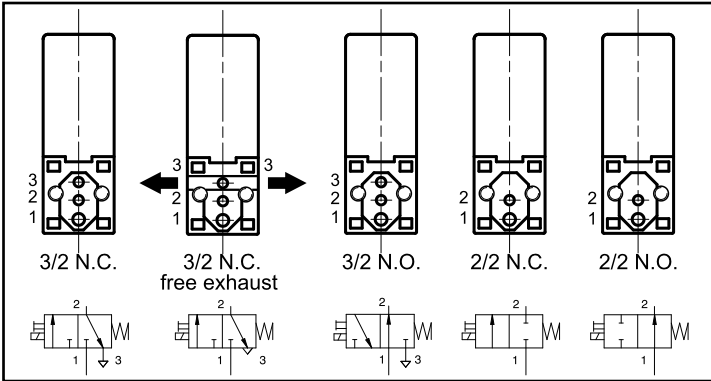
COIL POSITION

Standard	180 Rotated 180°
----------	-------------------------

series UM

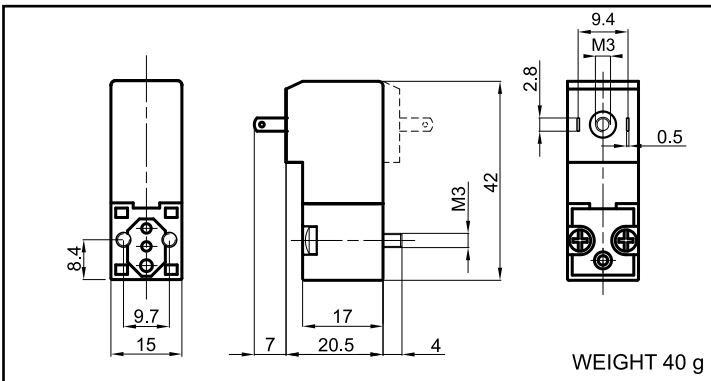
Direct acting solenoid valves 15 mm

PNEUMATIC FUNCTIONS

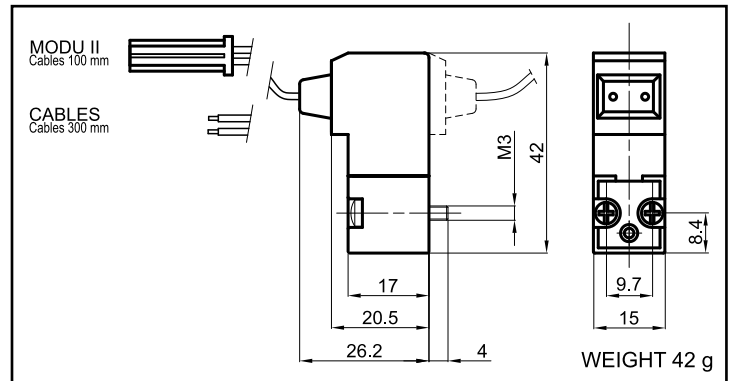


DIMENSIONS

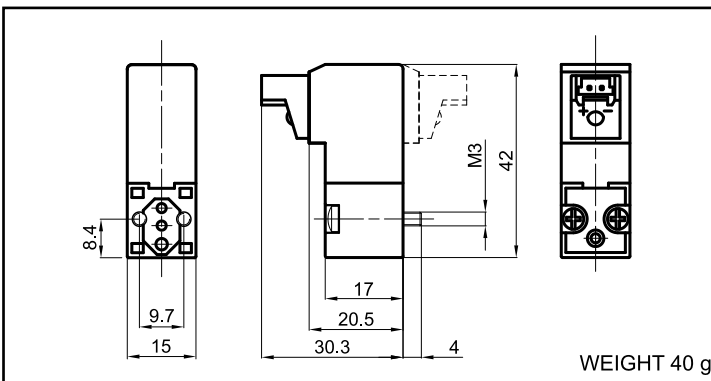
WITH FASTON FOR MEK192/N CONNECTOR



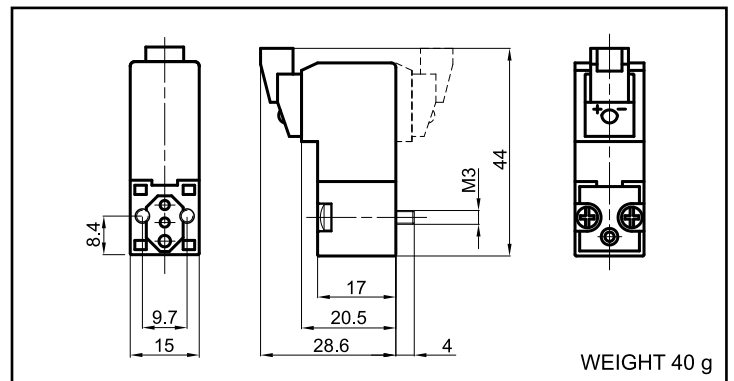
WITH CABLES



WITH 90° CONNECTOR



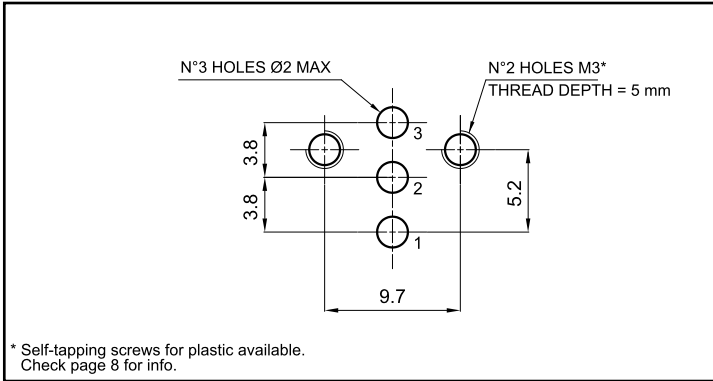
WITH IN-LINE CONNECTOR



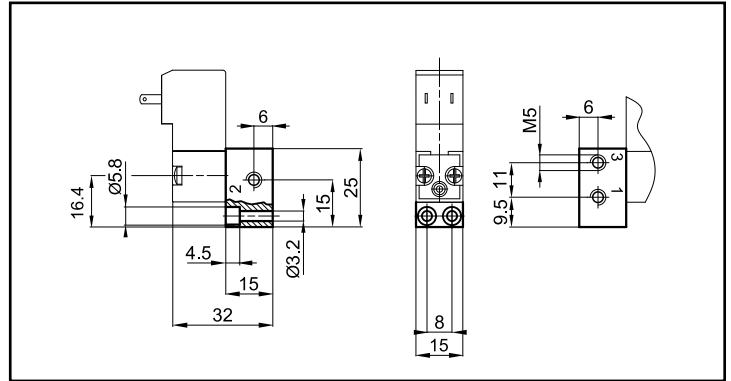
Direct acting solenoid valves 15 mm

series **UM**

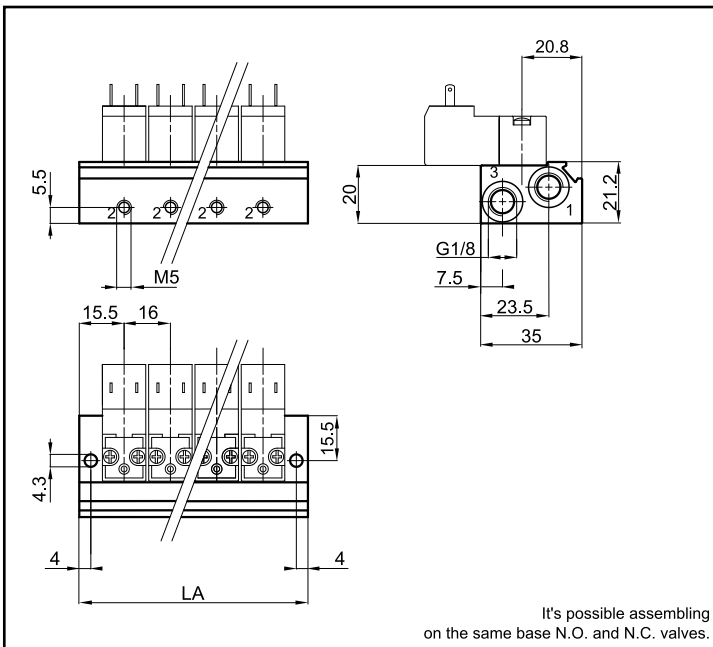
INTERFACE DIMENSIONS



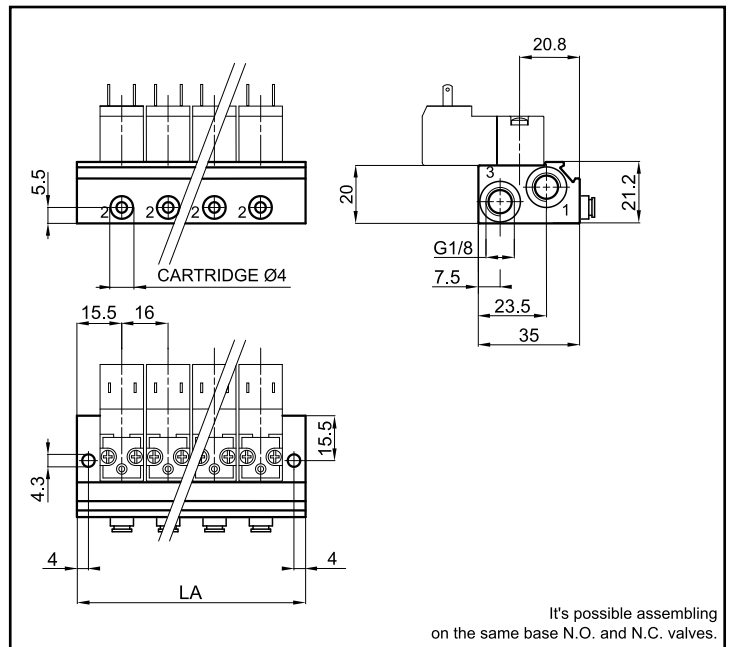
SINGLE BASE M5 - UMP5/1



MULTI-STATION BASE M5 - UMPM5

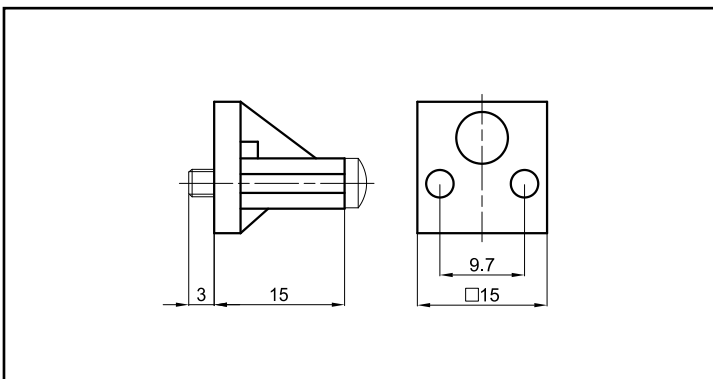


MULTI-STATION BASE WITH CARTRIDGE Ø4 mm UMP4-2



No. of stations	2	3	4	5	6	7	8	9	10
LA	47	63	79	95	111	127	143	159	175
Weight (g)	70	95	120	145	170	195	220	245	270
TYPE	UMPM5/2	UMPM5/3	UMPM5/4	UMPM5/5	UMPM5/6	UMPM5/7	UMPM5/8	UMPM5/9	UMPM5/10
Weight (g)	75	100	125	150	175	200	225	250	275
TYPE	UMP4-2/2	UMP4-2/3	UMP4-2/4	UMP4-2/5	UMP4-2/6	UMP4-2/7	UMP4-2/8	UMP4-2/9	UMP4-2/10

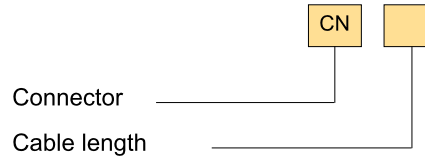
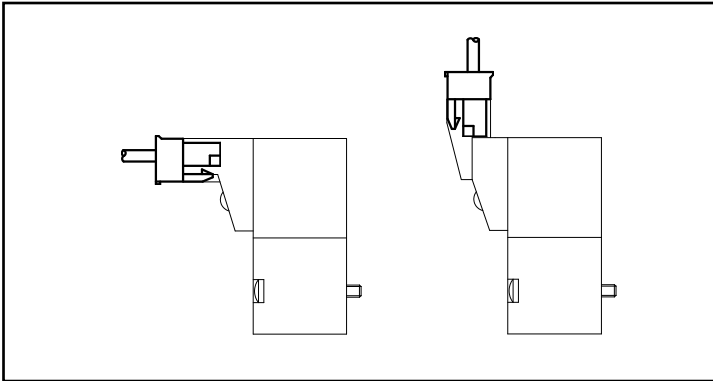
CLOSING PLATE - KIT/PC/UM



series CN

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

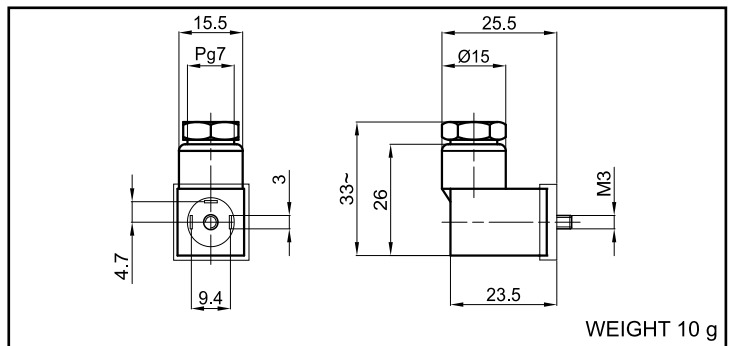
series MEK192/N

Connectors for solenoid valves 15 mm series UM

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

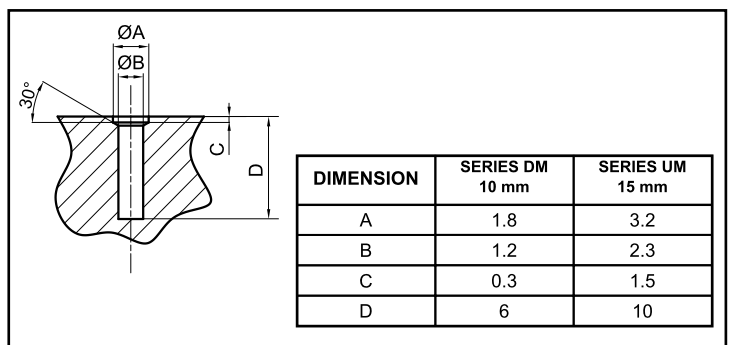
DESCRIPTION

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: **UMCSV/02400/P**

DRILLING DIMENSIONS



SERIES **DM**

A white crosshair graphic consisting of a vertical line and a horizontal line intersecting at the center. The vertical line is positioned to the right of the text 'SERIES DM', and the horizontal line is positioned above the text.

SERIES **UM**

A white crosshair graphic consisting of a vertical line and a horizontal line intersecting at the center. The vertical line is positioned to the right of the text 'SERIES UM', and the horizontal line is positioned above the text.



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