- **Sub-base mounted, ISO 5599-1 sizes 1 or 3**
- **Specially coated glandless spool and sleeve for long trouble-free life**
- **Integrated inductive proximity switch for monotoring to realize high diagnostic coverage according to DIN EN ISO 13849**

Technical features

Medium:
Compressed air, 40 µm filtered, lubricated or non-lubricated
Operation:
Glandless spool valve, solenoid actuatedand spool position sensing

Mounting:
On sub-bases
Sizes:
ISO 1 and 3
Operating pressure:
-0,9 ... 16 bar max.
(-13,1 ... 232 psi max.)

Ambient/Media temperature:
-15 ... +50°C (+5 ... 122°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:
Body: die-cast aluminium
Spool & sleeve: hard anodised aluminium with special PTFE coating
Seals: NBR
Locking plate: die-cast zinc or steel blue zinc coated
Screws: steel, blue zinc coated
Plastic parts: POM

Electrical details for solenoid operators

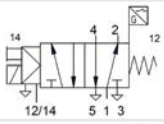
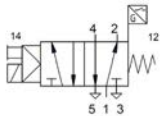
Voltage tolerance	± 10%
Rating	100% continuous duty
Inlet orifice	1,0 mm
Electrical connection	EN 175301-803 - Form A, 30 mm
Solenoid coil mounting	3 positions x 90°, not in place of sensor
Manual override	Push only (brass)
Protection class	IP65 (with sealed plug)

Electrical details for proximity switches

Supply voltage		10 ... 30 V d.c.
Output current		≤ 200 mA
Switching output		PNP
Output function		NO
Electrical connection	ISO 1	M8 x 1 - 3-pin
	ISO 3	M12 x 1 - 4-pin

Note: The proximity switches must not be altered or replaced.
Improper installation could lead to malfunction.
Please contact IMI Precision Engineering.

5/2 Solenoid pilot actuated valves

Symbol	ISO size	Actuation	Pilot supply	Flow (l/min)	Operating pressure (bar)	Operating pressure (psi)	Pilot pressure (bar)	Pilot pressure (psi)	Weight (kg)	Model
	1	Solenoid/spring	External	1230	-0,9 ... 16	-13,1 ... 232	1,8 ... 16	26 ... 232	0,26	VSP550055 *1)
	3	Solenoid/spring	External	4400	-0,9 ... 16	-13,1 ... 232	1,8 ... 16	26 ... 232	0,85	VSP550045 *1)
	1	Solenoid/spring	Internal	1230	1,8 ... 16	26 ... 232	—	—	0,26	VSP550054
	3	Solenoid/spring	Internal	4400	1,8 ... 16	26 ... 232	—	—	0,85	VSP550046

*1) External control air to port 12 or 14 (unused ports 12 or 14 must be closed).

Spare coilsoid operator - ordered separately

30 mm coil for connector interface acc. EN 175 301-803, form A

Voltage	Power Inrush/Hold	Model
12 V d.c.	4 W	V10633-A32N
24 V d.c.	4 W	V10633-A33N
110 V d.c.	4 W	V10633-A37N
24 V 50/60 Hz	10/8 VA	V10633-A84N
110/120 V 50/60 Hz	10/8 VA	V10633-A88N
220/240 V 50/60 Hz	10/8 VA	V10633-A89N

Connector plugs - ordered separately

30 mm, EN 175301-803 (DIN 43650 A) form A 2-pole + PE

0570275

Sub-bases, end plates and blanking disc - VDMA 24345 sub-base options

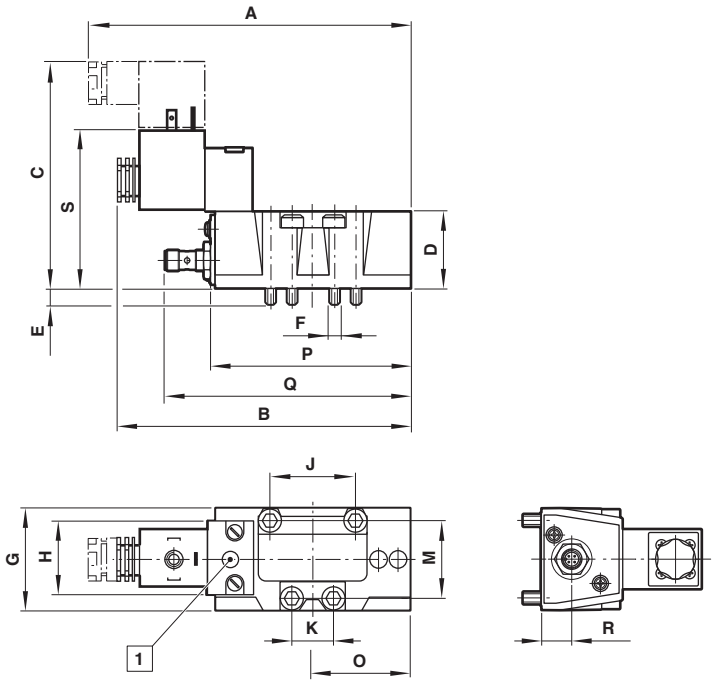
	Single station sub-base, Form A side ported		Single station sub-base Form B bottom ported		Modular sub-base Form C		Form D End plates		Blanking disc for VDMA sub-bases	
										
ISO size	Page 3 ISO G thread	NPT thread	Page 3 ISO G thread	NPT thread	Page 3 ISO G thread	NPT thread	Page 3 ISO G thread	NPT thread	Page 3 ISO G thread	NPT thread
1	M/P19126 (1/4)	C/P19126 (1/4)	M/P19126 (1/4)		CQM/22152/3/21	239-238B	CQM/22152/3/22	239-289B	FP8382	239-251
3	M/P19138 (1/2)	C/P19138 (1/2)	M/P19137 (1/2)		CQM/22354/3/21	239-246B	CQM/22354/3/22	239-293B	FP 8582	239-253

Accessories

	Blanking plate for VDMA and universal sub-bases	Transition plate for VDMA sub-bases	Sandwich plate with check valves	Flow regulator plate, ports 3 and 5 regulated
				
ISO size	Page 4	Page 4	Page 5	Page 5
1	CQM/22152/3/23	CQM/22152/3/24 (1 » 2)	FP7050	–
3	CQM/22354/3/23	FP8570 (1 » 3)	FP7070	CQM/22354/3/26

Drawings

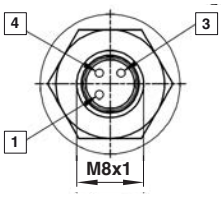
Dimensions in mm
Projection/First angle



1 Manual override

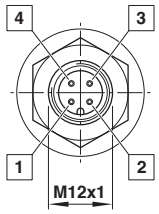
ISO size	A	B	C	D	E	F	G	H	J	K	M	O	P	Q	R	S	kg
1	137,5	128	98	33	7,5	M5	42	32	36	18	28	42	88	118,5	13,5	62	0,26
3	181	167	108	43	11,5	M8	62,5	32	64	32	48	65,5	135,5	158	15,5	78,5	0.70

Pin assignment ISO 1



Pin Nr.	Function
1	L + (brown)
3	M - (blue) Ground
4	Q - (black) Closer

Pin assignment ISO 3

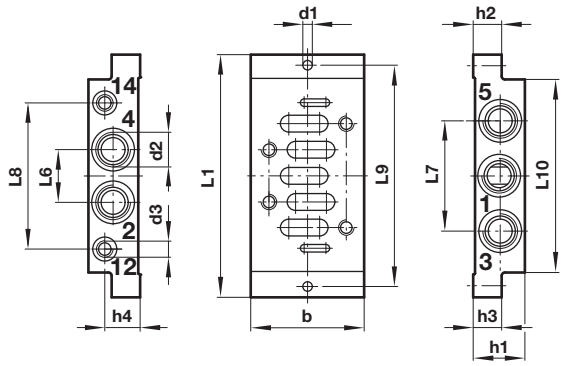


Pin Nr.	Function
1	L + (brown)
2	Not connected
3	M - (blue) Ground
4	Q (black) Closer

Sub-bases and end plates

Dimensions in mm
Projection/First angle

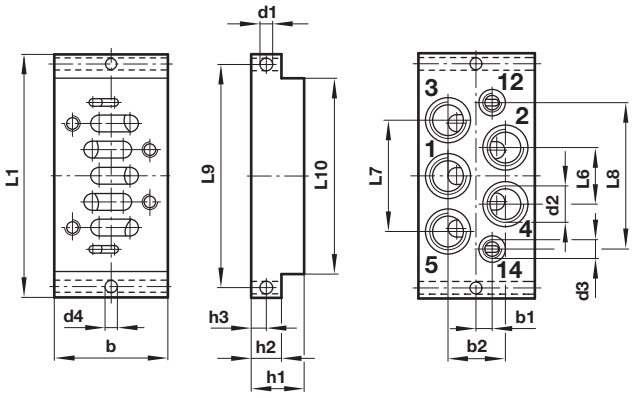
VDMA 24345 sub-base options
Single station sub-base side ported (Form A)
for ISO G and NPT threads



ISO size	b	d1	d2	d3	h1	h2	h3	Model
1	48	5,5	1/4"	1/8"	32	10	10,5 (21,5)	#/P19126
3	71	6,6	1/2"	1/8"	32	18	179	#/P19138

ISO size	h4	L1	L6	L7	L8	L9	L10	kg	Model
1	23,5	110	24	43	58	98	84	0,16	#/P19126
3	22	149	32	68	90	136	119	0,36	#/P19138

Single station sub-base
bottom ported (Form B)
for ISO G and NPT threads

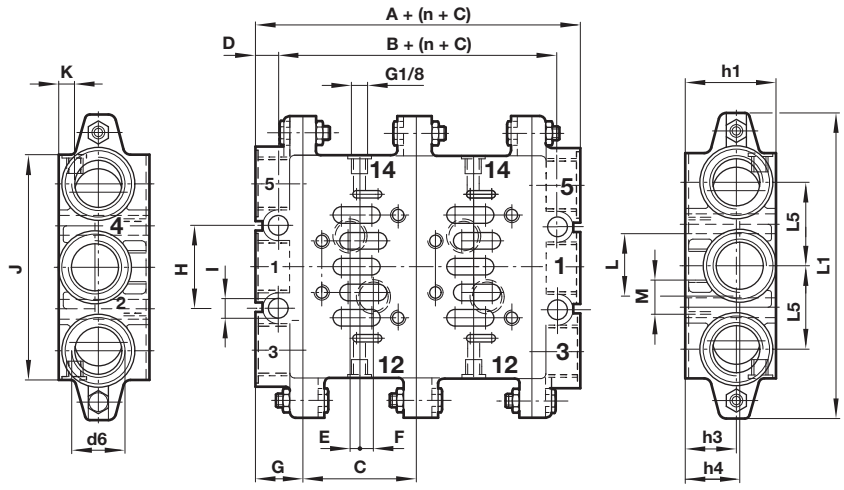


ISO size	b	b1	b2	d1	d2	d3	d4	h1	Model
1	46	7	23	5,5	1/4"	1/8"	5,5	30	#/P19125
3	71	10	34	6,6	1/2"	1/8"	6,69	32	#/P19137

ISO size	h2	h3	L1	L6	L7	L8	L9	L10	kg	Model
1	10	5	110	23	46	62	98	84	0,19	#/P19125
3	18	9	149	34	68	90	136	119	0,40	#/P19137

( ) Dimension for ports 3 and 5.
Insert 'M' for ISO G parallel or 'C' for NPT threads

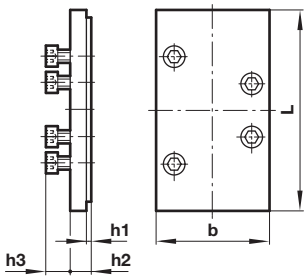
Modular sub-bases (Form C) and end plates (Form D)
for ISO G and NPT threads



ISO size	A	B	C	D	E	F	G	H	I	kg	Model ISO G thread	Model NPT thread
1	44	22	43	11	1,5	7,5	22	28	7	0,24	CQM/22152/3/21	239-238B
3	60	30	71	15	6	8	30	52	12	0,72	CQM/22354/3/21	239-246B

ISO size	J	K	L	M	h1	h3	h4	L1	L5	d6	kg	Model ISO G thread	Model NPT thread
1	85	8,5	26	G1/4	46	21	24	110	28	3/8"	0,22	CQM/22152/3/22	239-289B
3	140	10	38	G1/2	56	31	34	190	52	1"	0,66	CQM/22354/3/22	239-293B

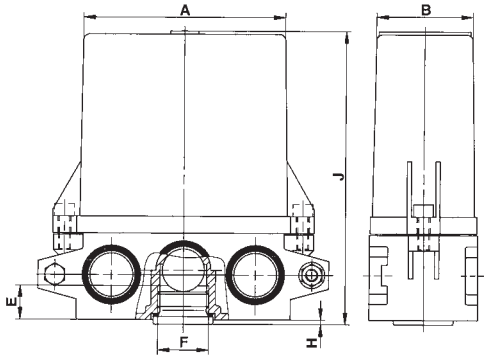
Blanking plate for VDMA & universal sub-bases with ISO G and NPT threads



ISO size	b	L	h1	h2	h3	kg	Model
1	42	80	2	14	11	0,05	CQM/22152/3/23
3	70	106	2,5	12,5	15,5	0,26	CQM/22354/3/23

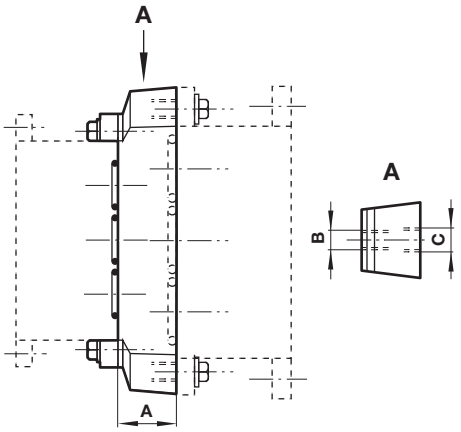
Silencer for VDMA & universal sub-bases with ISO G and NPT threads

Dimensions in mm
Projection/First angle



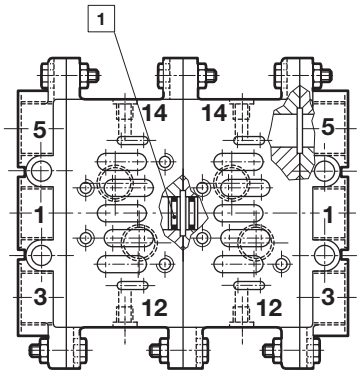
ISO size	A	B	E	F	H	J	Model
1	77	38	15	G3/8	2	122	0015510

Transition plate from ISO 1 » ISO 2, ISO 2 » ISO 3 and ISO1 » ISO 3 for VDMA sub-bases for ISO G



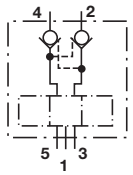
ISO size	A	B	C	kg	Model
1 » 2	25	M5	M6	0,35	CQM/22152/3/24
2 » 3	40	M6	M8	0,65	CQM/22253/3/24
1 » 3	34	M5	M8	0,90	FP8570

Blanking disc FP8582 for ISO G thread



1 Blanking disc; FP8*82

Sandwich plate with check valves

Symbol	ISO size	Design	Flow (l/min)	(Cv)	Operating pressure (bar)	(psi)	Weight (kg)	Model
	1	Poppet valves	500		3 ... 8		0,45	FP7050
	3	Poppet valves	3400	3,4	3 ... 8	43,5 ... 116	2,05	FP7070

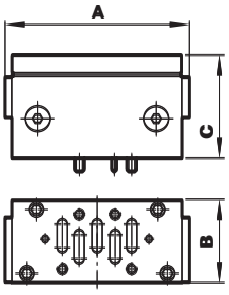
Application:
With this type of intermediate plate together with a 5/3-way valve, center position open, a piston movment can be stopped in any desired position. This position will kept during a long period.

Note:
Metal to metal sealed spool and sleeve valves have always a small amount of leak because of its design. Therefore 5/3-way valves, center position closed, are only applicable for short stops.

Caution: Not suitable for safety applications!

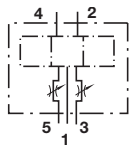
Dimensions

Dimensions in mm
Projection/First angle



ISO	A	B	C	Model
1	96	42	52	FP7050
3	165	62	95	FP7070

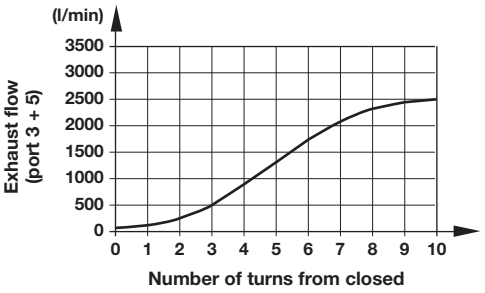
Flow regulator plate

Symbol	ISO size	Regulated port	Operation	Inlet pressure max. (bar)	Inlet pressure max. (psi)	Weight (kg)	Model
	3	3 and 5	Piston regulator	-0,9 ... 16	-13,1 ... 232	0,86	CQM/22354/3/26

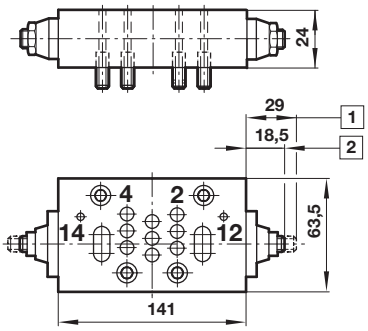
Application:
Regulation of exhaust ports 3 and 5 allows easy cylinder speed control

Note:
The regulator screw can be locked with the lock nut.

Flow characteristics (inlet pressure: 8 bar)



Dimensions



1 Fully open
2 Fully closed

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«.
Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult
IMI Precision Engineering, IMI International s.r.o.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.