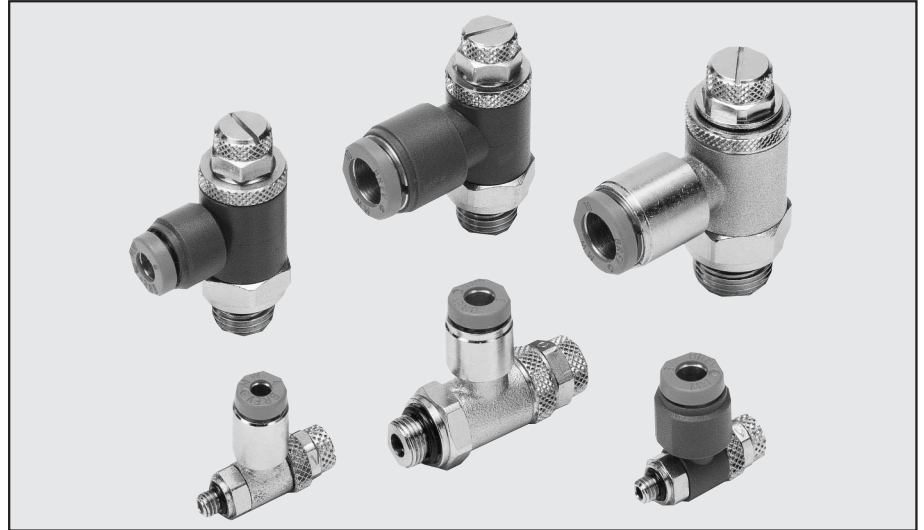


FLOW MICRO-REGULATOR Series MRF N

FLOW MICRO-REGULATOR

The flow micro-regulator regulates the speed of the piston rod in the pneumatic cylinders.

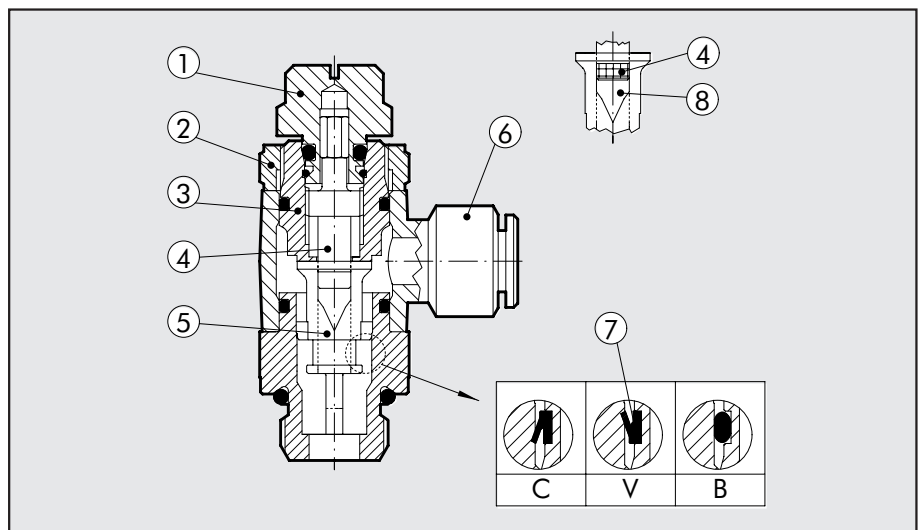
The configuration of micro-regulators type C (to mount on the cylinder inlet) and type V (to mount on the valve ports) gives full flow during supply and regulated flow during exhaust. With type B (bidirectional) both the supply and exhaust flow rates can be adjusted. The adjusting knobs on Metal Work MFRs allows triple adjustment: manual operation on the milled section, screwdriver inserted in the relevant slot, and using a hex. spanner. The MRF ring can be orientated even when mounted.



TECHNICAL DATA	M5			1/8"				1/4"				3/8"		1/2"
	Pipe	Ø 4	Ø 5	Ø 6	Ø 4	Ø 5	Ø 6	Ø 8	Ø 6	Ø 8	Ø 10	Ø 12	Ø 10	Ø 12
Threaded ring	M5			1/8"				1/4"				3/8"		1/2"
Max. inlet pressure	MPa			1										
	bar			10										
	psi			145										
Max. flow rate during regulation at 6 bar	NI/min			95	340				600				870	1400
Fluid	Compressed air, filtered, lubricated or unlubricated													
Temperature range: technopolymer ring	°C			-10° to +50°										
	°F			+14° to +122°										
brass ring	°C			-10° to +70°										
	°F			+14° to +158°										

COMPONENTS

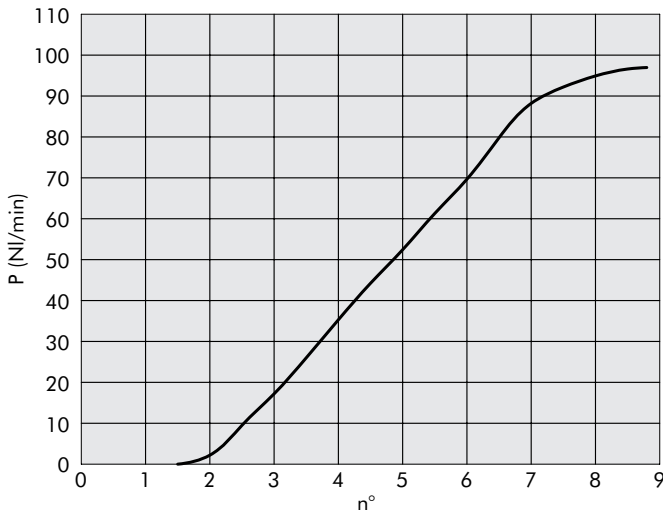
- ① Brass knob
- ② Ring nut for securing knob or ring (brass)
- ③ Brass body
- ④ Brass plunger
- ⑤ Technopolymer insert with progressive flow window
- ⑥ Brass or technopolymer rotary ring.
- ⑦ NBR gasket





FLOW CHARTS

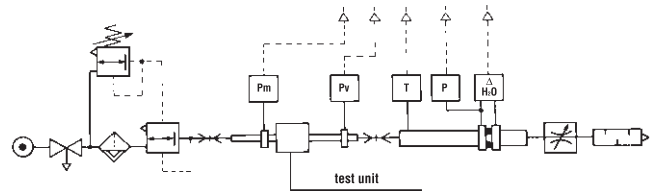
MRF M5



FLOW RATE FOR Ø6 PIPE

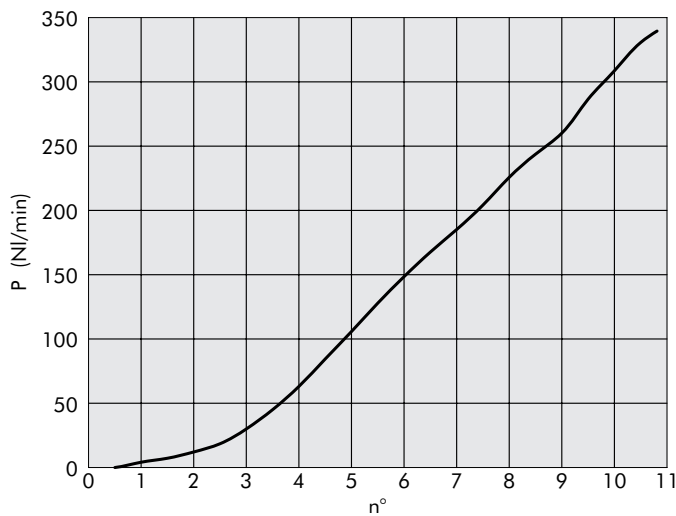


**Department
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Turin Polytechnic



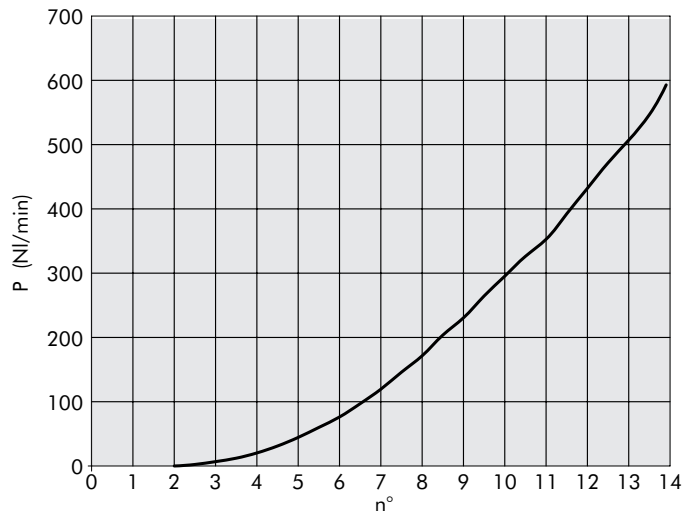
- Flow rate tests carried out by the Department of Mechanics at the Turin Polytechnic using a computerized test station and in compliance with CETOP RP50R recommendations (approved by ISO DIS 6358-2) with ISO 5167 diaphragm gauge.

MRF G 1/8"



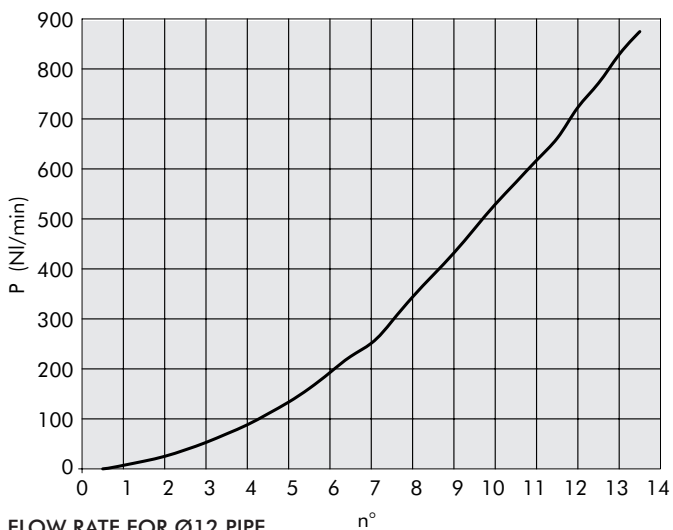
FLOW RATE FOR Ø6 PIPE

MRF G 1/4"



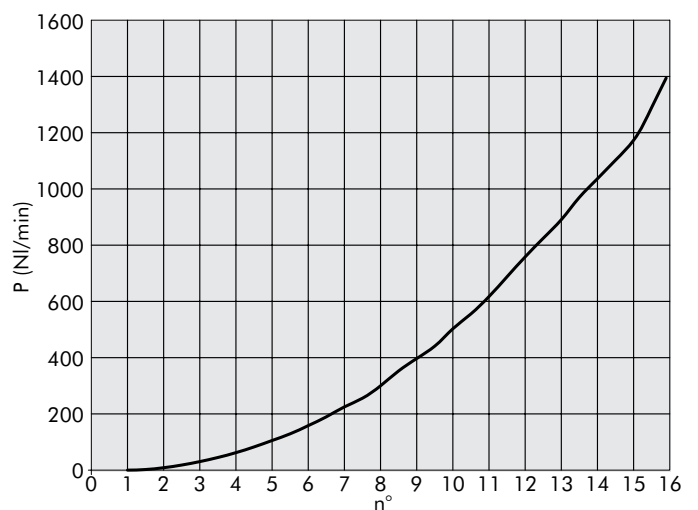
FLOW RATE FOR Ø10 PIPE

MRF G 3/8"



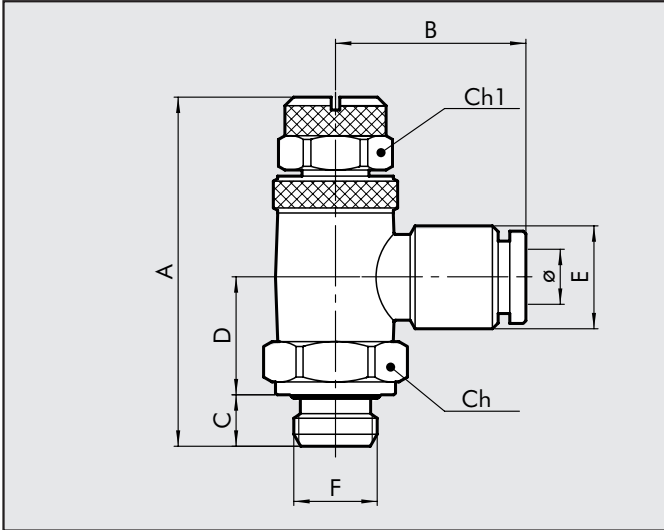
FLOW RATE FOR Ø12 PIPE

MRF G 1/2"



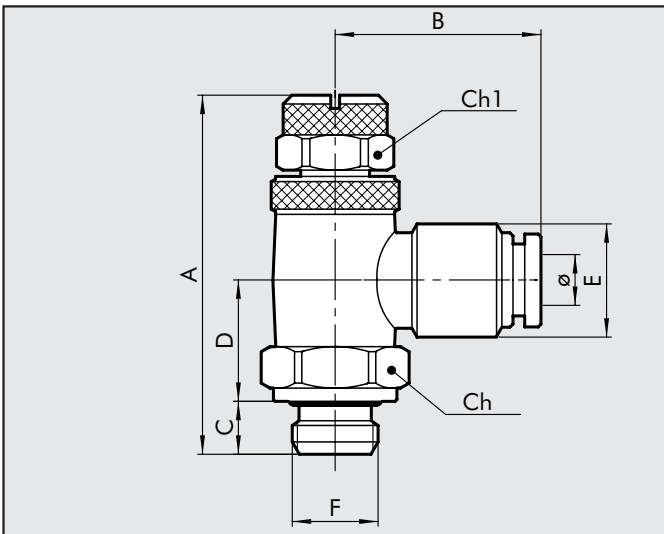
FLOW RATE FOR Ø12 PIPE

OVERALL DIMENSIONS: BRASS RING



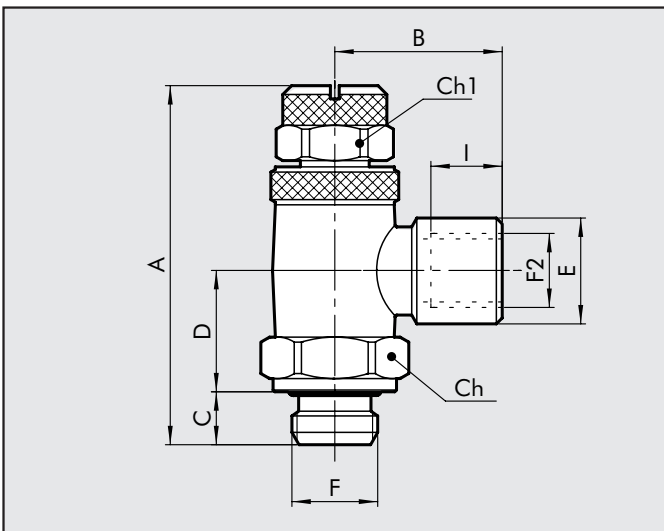
	F	∅	Ch	Ch1	E	B	A	D	C
M5	4		9	9	10.9	23.5	28.2	9.3	4
M5	5		9	9	12	24.5	28.2	9.3	4
M5	6		9	9	13.5	24.5	28.2	9.3	4
G 1/8	4		15	12	11.5	25	42	13.7	6
G 1/8	5		15	12	12.0	25	42	13.7	6
G 1/8	6		15	12	13.5	25	42	13.7	6
G 1/8	8		15	12	15.5	30	42	13.7	6
G 1/4	6		18	12	13.5	27.5	48	16	8
G 1/4	8		18	12	15.5	32	48	16	8
G 1/4	10		18	12	18	34.3	48	16	8
G 1/4	12		18	12	20.2	37.5	48	16	8
G 3/8	10		21	14	18	36.3	53	19	9
G 3/8	12		21	14	20.2	40.5	53	19	9
G 1/2	12		26	17	20.2	40.5	60.5	22	11

OVERALL DIMENSIONS: TECHNOPOLYMER RING



	F	∅	Ch	Ch1	E	B	A	D	C
M5	4		9	9	10.9	20	28.2	9.3	4
M5	5		9	9	13.5	21.5	28.2	9.3	4
M5	6		9	9	15	22	28.2	9.3	4
G 1/8	4		15	12	12.5	22.5	42	14.7	6
G 1/8	5		15	12	13.5	23	42	14.7	6
G 1/8	6		15	12	15	22.5	42	14.7	6
G 1/8	8		15	12	16.3	25.5	42	14.7	6
G 1/4	6		18	12	15	24	48	17	8
G 1/4	8		18	12	16.3	27	48	17	8
G 1/4	10		18	12	18.5	31	48	17	8
G 1/4	12		18	12	21	32	48	17	8
G 3/8	10		21	14	18.5	31	53	20	9
G 3/8	12		21	14	21	33	53	20	9
G 1/2	12		26	17	21	35	60.5	22	11

OVERALL DIMENSIONS: THREADED RING

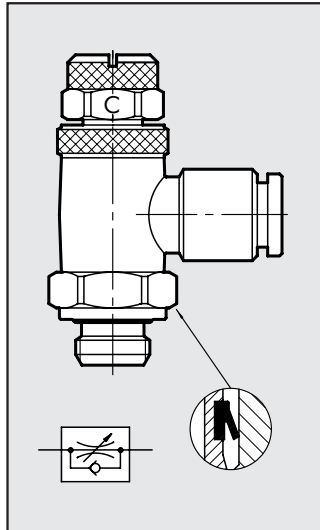


	F	F ₂	Ch	Ch1	E	B	A	D	C	I
G 1/8	G 1/8		15	12	13.3	21.4	42	13.7	6	6.7
G 1/4	G 1/4		18	12	16.7	25.5	48	16	8	8
G 3/8	G 3/8		21	14	20.2	31.5	53	19	9	10



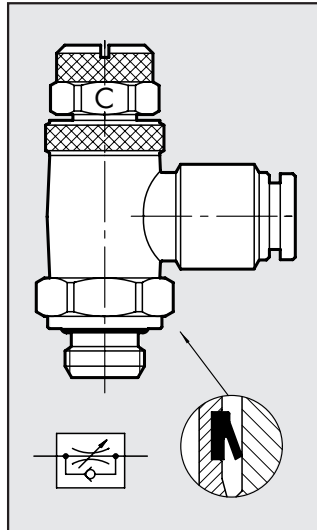
ORDERING CODES

MRF/C (BRASS RING)



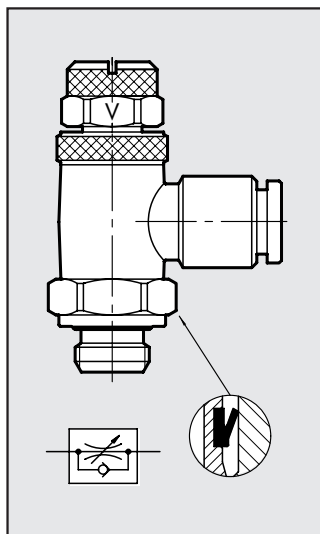
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9031001	MRF/C 4 M5
9031002	MRF/C 4 1/8
9031003	MRF/C 5 M5
9031004	MRF/C 5 1/8
9031005	MRF/C 6 M5
9031006	MRF/C 6 1/8
9031007	MRF/C 6 1/4
9031008	MRF/C 8 1/8
9031009	MRF/C 8 1/4
9031011	MRF/C 10 1/4
9031012	MRF/C 10 3/8
9031014	MRF/C 12 1/4
9031015	MRF/C 12 3/8
9031016	MRF/C 12 1/2

MRFT/C (TECHNOPOLYMER RING)



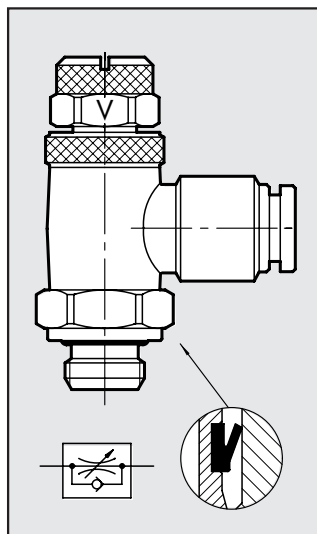
Code	Ref.
9021001	MRFT/C 4 M5
9021002	MRFT/C 4 1/8
9021003	MRFT/C 5 M5
9021004	MRFT/C 5 1/8
9021005	MRFT/C 6 M5
9021006	MRFT/C 6 1/8
9021007	MRFT/C 6 1/4
9021008	MRFT/C 8 1/8
9021009	MRFT/C 8 1/4
9021011	MRFT/C 10 1/4
9021012	MRFT/C 10 3/8
9021014	MRFT/C 12 1/4
9021015	MRFT/C 12 3/8
9021016	MRFT/C 12 1/2

MRF/V (BRASS RING)



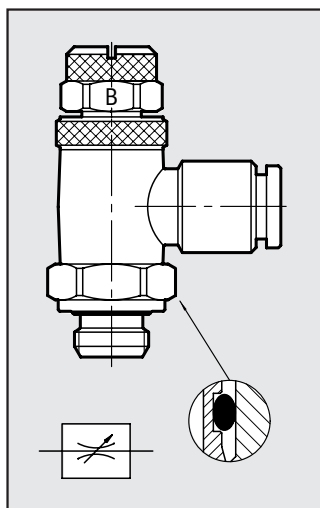
Code	Ref.
9031101	MRF/V 4 M5
9031102	MRF/V 4 1/8
9031103	MRF/V 5 M5
9031104	MRF/V 5 1/8
9031105	MRF/V 6 M5
9031106	MRF/V 6 1/8
9031107	MRF/V 6 1/4
9031108	MRF/V 8 1/8
9031109	MRF/V 8 1/4
9031111	MRF/V 10 1/4
9031112	MRF/V 10 3/8
9031114	MRF/V 12 1/4
9031115	MRF/V 12 3/8
9031116	MRF/V 12 1/2

MRFT/V (TECHNOPOLYMER RING)



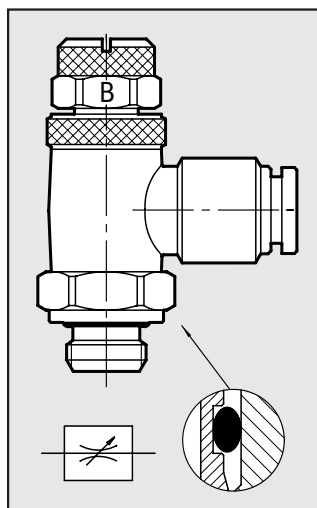
Code	Ref.
9021101	MRFT/V 4 M5
9021102	MRFT/V 4 1/8
9021103	MRFT/V 5 M5
9021104	MRFT/V 5 1/8
9021105	MRFT/V 6 M5
9021106	MRFT/V 6 1/8
9021107	MRFT/V 6 1/4
9021108	MRFT/V 8 1/8
9021109	MRFT/V 8 1/4
9021111	MRFT/V 10 1/4
9021112	MRFT/V 10 3/8
9021114	MRFT/V 12 1/4
9021115	MRFT/V 12 3/8
9021116	MRFT/V 12 1/2

MRF/B (BRASS RING)



Code	Ref.
9031201	MRF/B 4 M5
9031202	MRF/B 4 1/8
9031203	MRF/B 5 M5
9031204	MRF/B 5 1/8
9031205	MRF/B 6 M5
9031206	MRF/B 6 1/8
9031207	MRF/B 6 1/4
9031208	MRF/B 8 1/8
9031209	MRF/B 8 1/4
9031211	MRF/B 10 1/4
9031212	MRF/B 10 3/8
9031214	MRF/B 12 1/4
9031215	MRF/B 12 3/8
9031216	MRF/B 12 1/2

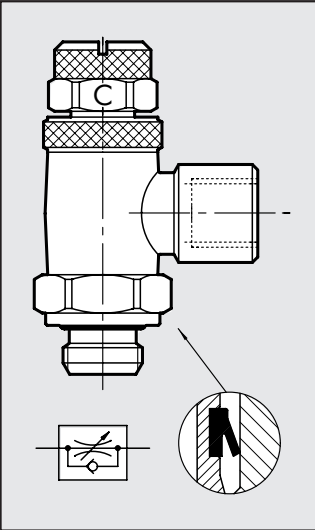
MRFT/B (TECHNOPOLYMER RING)



Code	Ref.
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9021202	MRFT/B 4 1/8
9021203	MRFT/B 5 M5
9021204	MRFT/B 5 1/8
9021205	MRFT/B 6 M5
9021206	MRFT/B 6 1/8
9021207	MRFT/B 6 1/4
9021208	MRFT/B 8 1/8
9021209	MRFT/B 8 1/4
9021211	MRFT/B 10 1/4
9021212	MRFT/B 10 3/8
9021214	MRFT/B 12 1/4
9021215	MRFT/B 12 3/8
9021216	MRFT/B 12 1/2

MRF/CF
(BRASS RING)

Code Ref.

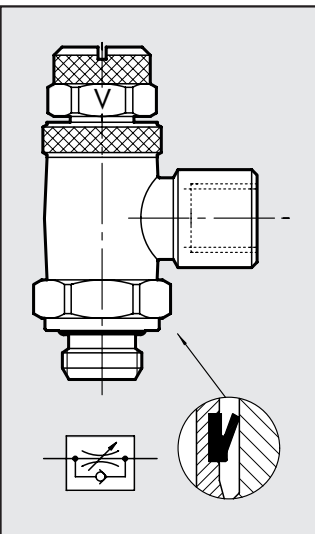


- 9031301 MRF/CF 1/8 1/8
- 9031302 MRF/CF 1/4 1/4
- 9031303 MRF/CF 3/8 3/8

NOTES

MRF/VF
(BRASS RING)

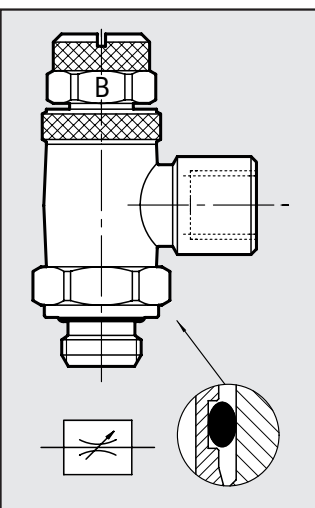
Code Ref.



- 9031401 MRF/VF 1/8 1/8
- 9031402 MRF/VF 1/4 1/4
- 9031403 MRF/VF 3/8 3/8

MRF/BF
(BRASS RING)

Code Ref.



- 9031501 MRF/BF 1/8 1/8
- 9031502 MRF/BF 1/4 1/4
- 9031503 MRF/BF 3/8 3/8