

General

- » 90° single acting pneumatic actuator with spring return.
- » For on/off and controlling in 10 different sizes, type 002-380.
- » High level of corrosion protection
- » Blow-out proof design.
- » Permanently lubricated.
- » Bottom mounting according to ISO 5211.
- » Top mounting and connection block according to Namur VDI/VDE 3845.
- » Solenoid valve connection according to Namur.
- » Each actuator is individually tested and provided with a serial number for easy identification.



Options

- » O-rings in EPDM or Viton®.
- » Double acting actuator, VM9410.
- » Control block with Namur connection for adjustable stroke time.
- » Low temperature design, -40°C to + 80°C.
- » High temperature design, -20°C to + 140°C.
- » Mounted solenoid valve (bistable, monostable, Ex-design).
- » Mounted pneumatic positioner, 20-100 kPa/3-15 Psi.
- » Mounted electropneumatic/digital positioner, 4-20 mA.
- » Mounted limit switches; mechanical, inductive, Ex.

Materials and Technical Data

Materials	body in anodized aluminum shaft in body in anodized aluminum O-rings in perbunan screws in steel
Feeding pressure type 002-006	1,5-7 bar
Feeding pressure type 012-380	2-8 bar
Open/close	0-90°
Operating temperature	-20°C to +80°C
Mounting	optional
Travel stops	end position tolerance $\pm 1,5^\circ$ type 002-006 has one adjustable travel stop as standard and end position 90° can be adjusted -8° adjustment is option for type 012-380
Air pressure	filtered pressurized air, non aggressive gas, water

Single-Acting Pneumatic Actuator VM9411

quarter turn (90°) actuator



Torque¹ Nm at Feeding Pressure 6 bar [e]

Type	Spring		Air		No of springs
	0°	90°	0°	90°	
002	4,5	8	11,7	8,2	10
006	10,3	20,6	26,9	16,6	10
012	16,4	32,8	57,6	41,2	8
025	32	64	112	80	8
050	59	117	207	149	8
090	107	214	399	292	8
130	162	325	608	445	8
180	214	427	798	585	8
205	337	674	1180	843	8
380	506	1011	1770	1265	8

1. Started valve torque should be increased by 30% for satisfactory safety margin.

Air Consumption and Weight

Type	Air consumption NL/travel norm liter at 1 bar per travel 0-90°	Weight [kg]
002	0,12	0,5
006	0,28	1
012	0,53	2,3
025	1,02	3,8
050	1,9	6,65
090	3,6	12
130	5,49	21
180	7,21	25,3
205	9	33
380	13	41,5

Dimensions [mm]

Type	ISO 5211	A	B	C	D	E	F	G	H	I	J	K	L	M	N
002	F04/V11	170	Ø42	(4x) M8x12,5/14	11H11x12	14	27,5±2	29±1	-	25,5±0,5	33±0,5	20±1	-	-	50
006	F04/V11	205	Ø42	(4x) M5x7,5/11	11H11x17	14	37,5±2	39±1	-	34,7±0,5	41,5±0,5	20±1	-	-	80
012	F05/V14	215	Ø50	(4x) M6x8,8/9,8	14H11x17+1	14	44,5±1,5	46,5±1	25,05±1	41±1	55,5±1	20±1	Ø35	3	80
025	F05/V14	220	Ø50	(4x) M6x8,8/9,8	14H11x17+1	14	59,5±1,5	61±1	25,15±1	55±0,5	69±1	20±1	Ø35	3	80
050	F07/V17	280	Ø70	(4x) M8x12,5/14	17H11x21+1	17	71,5±1,5	74,5±1,5	32,25±1	67±1	81±1	20±1	Ø55	3	80(130)
090	F10/V22	365	Ø102	(4x) M10x16/18,5	22H11x25+1	22	81,5±2,5	84,5±1,5	46,85±1	78±1	96±1,5	30±1	Ø70	4	80(130)
130	F10/V22	430	Ø102	(4x) M10x16/18,5	22H11x25+1	27	94±3	98±2	54,5±1	90±1,5	102±1,5	30±1	Ø70	4	130
180	F12/V27	440	Ø125	(4x) M12x18/22	27H11x30+1	27	106,5±3	111,5±1,5	54,5±1	102±1,5	116±1,5	30±1	Ø85	4	130
205	F14/V36	500	Ø140	(4x) M16x26/27,5	36H11x40+1	Ø53	137±3	137±3	67,1±1	136±2,5	140±3	30±1	Ø100	4	130
380	F16/V46	610	Ø140	(4x) M16x26/27,5	36H11x40+1	Ø53	137±3	147±3	96,5±1	136±2,5	140±3	30±1	Ø100	4	130

Markings, Mounting, and Maintenance

The actuator is marked with producer, art no, date, Pmax, CE, Ex, and number of springs.

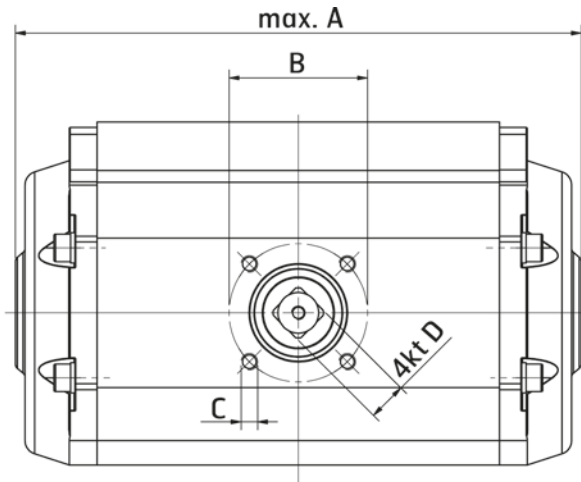
Optional mounting. Maintenance free design.

Order Information

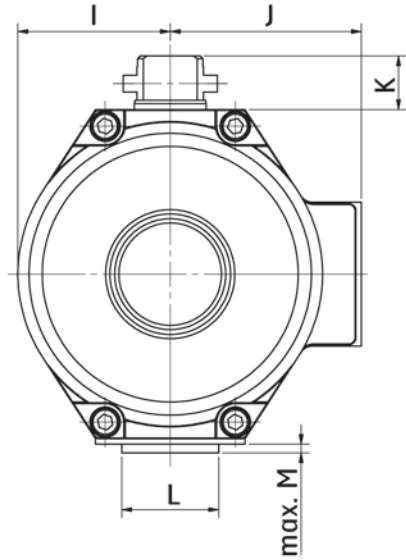
Single-acting pneumatic actuator VM9411, type..... ISO 5211.....

Single-Acting Pneumatic Actuator VM9411

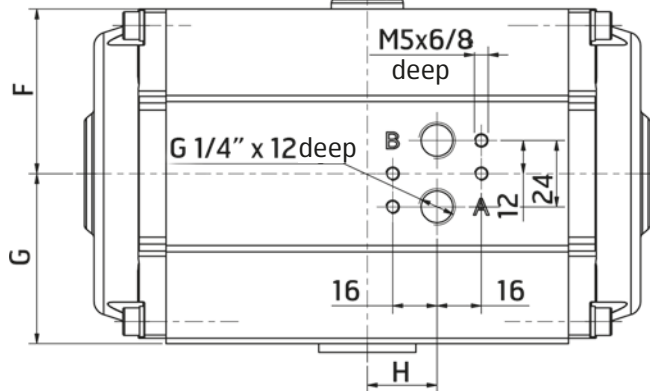
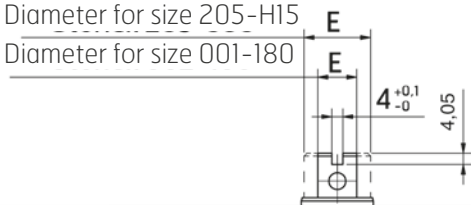
quarter turn (90°) actuator



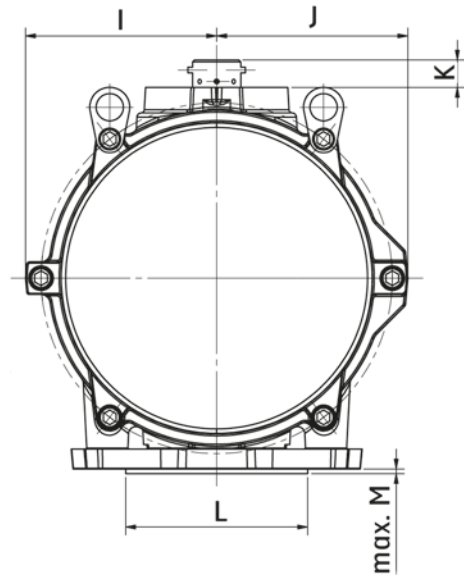
Size 001-180



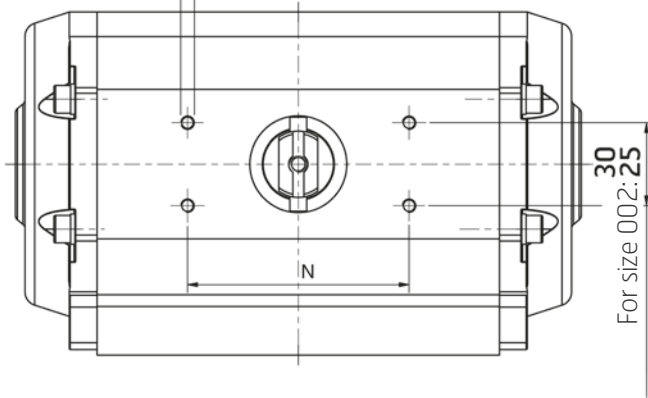
Diameter for size 205-H15
Diameter for size 001-180



Size 205-380



M5x8/9,5 deep



The technical design of the specified product here may be subject to change without notice — datasheet updated March 13, 2018