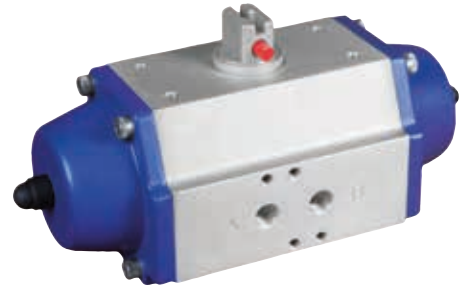


General

- » 90° double acting pneumatic rack and pinion actuator with bearing supported pistons and a patented balanced shaft.
- » For on/off and controlling in 14 different sizes, type 001-H15.
- » 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®.
- » Single acting with spring return, VM9411.
- » 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 001-006	1,5-7 bar
Feeding pressure type 012-H15	2-8 bar
Open/close	0-90°
Operating temperature	-20°C to +80°C
Mounting	optional
Travel stops	end position tolerance ±1,5° type 001-006 has one adjustable travel stop as standard and end position 90° can be adjusted -8° adjustment of +4°/-8° is option for type 012-H15
Air pressure	filtered pressurized air, non aggressive gas, water

Double-Acting Pneumatic Actuator VM9410

quarter turn (90°) actuator



Torque¹ Nm at Feeding Pressure bar [e] and Stroke Time

Type	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar	Stroke time at 6 bar [sek]
001	-	3,7	5	6,2	7,4	8,7	-	0,25
002	-	8,1	10,8	13,5	16,2	18,9	-	0,35
006	12,4	18,6	24,8	31	37,2	43,4	-	0,4
012	24,7	37	49,3	61,7	74	86,3	98,6	0,5
025	48	72	96	120	144	168	192	0,7
050	89	133	177	222	266	310	355	0,9
090	169	253	337	422	506	590	675	1,1
130	257	385	513	642	770	898	1027	1,3
180	337	506	675	843	1012	1181	1349	1,4
205	506	758	1011	1264	1517	1769	2022	1,6
380	759	1138	1517	1897	2276	2655	3035	2
630	1264	1896	2528	3160	3792	4424	5056	2,5
960	1919	2879	3839	4798	5758	6718	7677	2,8
H15	2938	4407	5876	7345	8814	10283	11752	3,5

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]
001	0,06	0,35
002	0,12	0,5
006	0,28	0,95
012	0,53	2,15
025	1,02	3,5
050	1,9	5,85
090	3,6	10,4
130	5,49	19
180	7,21	22,5
205	9	30
380	13	37
630	22	54
960	32,5	77,3
H15	52	92

Dimensions [mm]

Type	ISO 5211	A	B	C	D	E	F	G	H	I	J	K	L	M	N
001	F03/V09	120	Ø36	(4x) M5x8/10	9H11x10	14	22±1	24±1	-	20,5±0,5	30,5±0,5	20±1	-	-	50
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	F05/V14	205	Ø50	(4x) M6x10/11	14H11x17	14	37,5±1	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	390	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	500	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
630	F16/V46	520	Ø165	(4x) M20x22/27	46H11x50+1	Ø53	172±3,5	172±3,5	99±1	175±3,5	177±3,5	30±1	Ø130	5	130
960	F25/V55	540	Ø165	(4x) M20x25	46H11x50+1	Ø53	210±4	210±4	96,41±1	210±4	210±4	30±1	Ø130	5	150
H15	F30/V75	700	Ø254	(8x) M16x25	55H11x59+1	Ø53	225±4,5	225±4,5	136±1	223,5±4,5	223,5±4,5	30±1	Ø230	5	175

Markings, Mounting, and Maintenance

The actuator is marked with producer, art no, date, Pmax, CE, Ex.

Optional mounting. Maintenance free design.

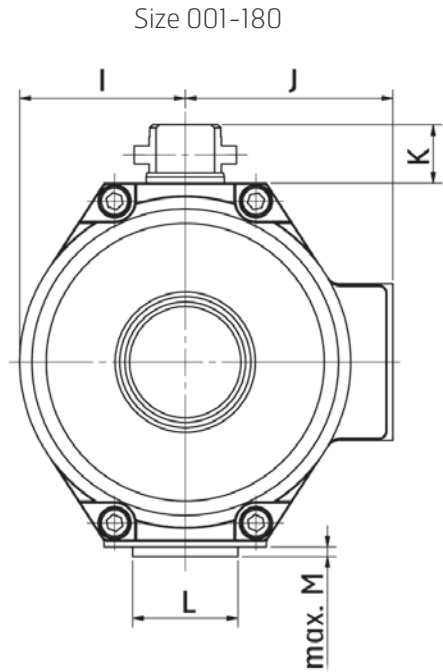
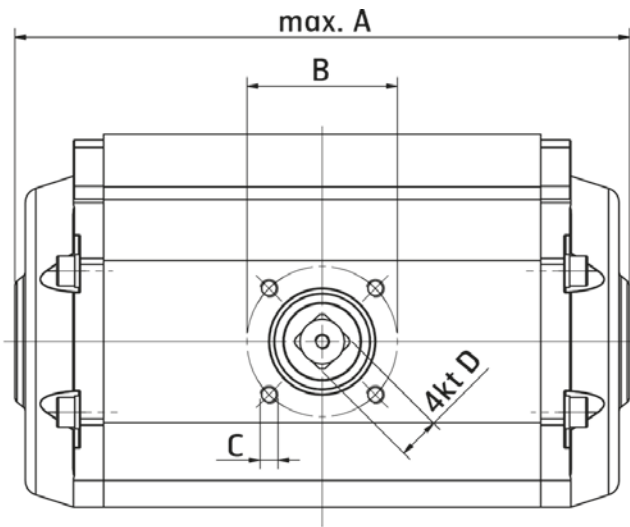
Order Information

Double-acting pneumatic actuator VM9410, type..... ISO 5211.....

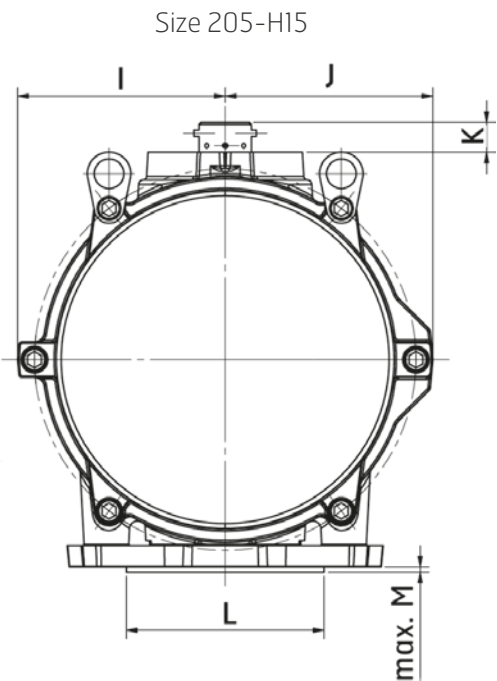
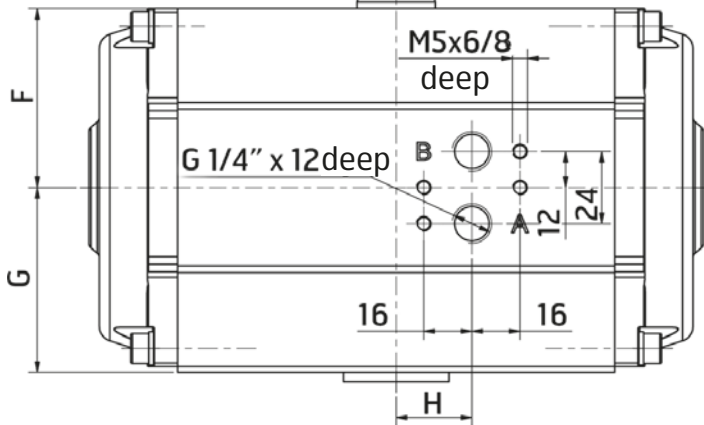
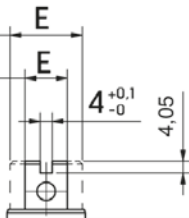
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Double-Acting Pneumatic Actuator VM9410

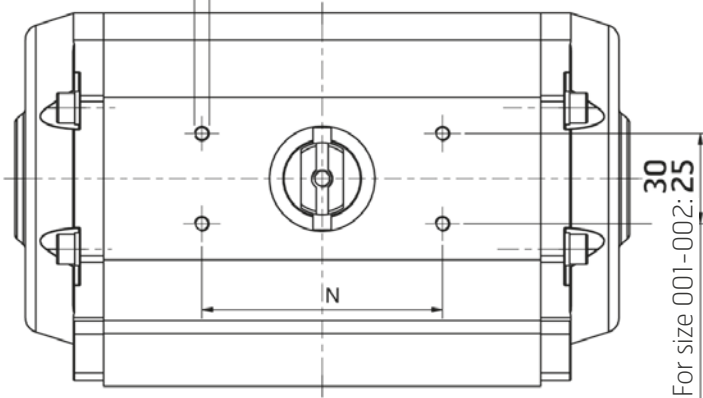
quarter turn (90°) actuator



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



M5x8/9,5 deep



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