

# DOUBLE ACTING PNEUMATIC CYLINDERS VDMA 24562, NF E 49003.1 WITH PLASTIC END CAPS



The dimensions of these cylinders comply with the international standards ISO 6431, VDMA 24562 and NF E 49003.1 and are therefore easily interchangeable. The cylinders can have adjustable cushioning at end positions and are equipped with a magnet in the piston for the possibility of sensing end positions. The smooth design facilitates rinsing of dirt, the construction minimizes gaps and places with poor accessibility for cleaning the cylinder surface. The end caps are made of plastics that are chemically resistant to mild alkalis and acids used in cleaning equipment in the food industry. This type of cylinder is not a replacement for a stainless steel cylinder, but it is an affordable alternative.



|                  |                         |
|------------------|-------------------------|
| Working pressure | 0,6 MPa                 |
| Min. pressure    | 0,15 MPa                |
| Max. pressure    | 1,0 MPa                 |
| Temp. range      | -30°C to +60°C *        |
| Working medium   | modified compressed air |

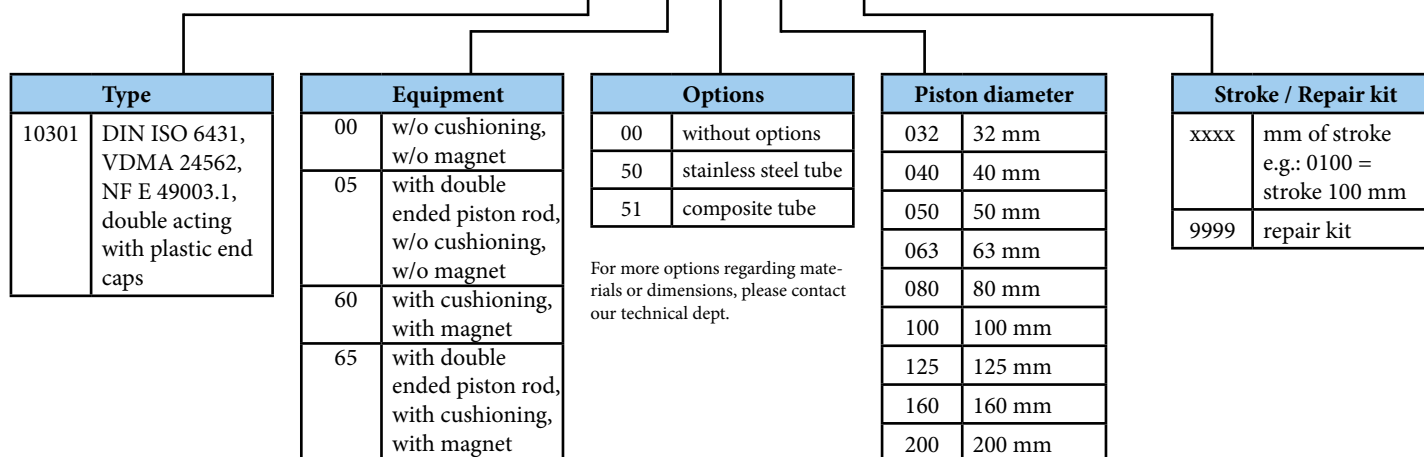
\*) values are valid for standard gaskets

| Piston diameter [mm]  | 32     | 40     | 50     | 63     | 80     | 100    | 125    | 160    | 200    |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Thrust at 0,6 MPa [N]   | 482    | 754    | 1178   | 1870   | 3015   | 4713   | 7363   | 12064  | 18849  |
| Thrust at 0,6 MPa [N] with double ended piston rod            | 415    | 633    | 990    | 1682   | 2720   | 4418   | 6880   | 11581  | 18096  |
| Return force at 0,6 MPa [N]                                   | 415    | 633    | 990    | 1682   | 2720   | 4418   | 6880   | 11581  | 18096  |
| Connection  | G1/8"  | G1/4"  | G1/4"  | G3/8"  | G3/8"  | G1/2"  | G1/2"  | G3/4"  | G3/4"  |
| Length of adjustable cushioning [mm]                          | 13     | 13     | 11     | 16     | 16     | 20     | 25     | 27     | 32     |
| Max. stroke [mm] *  | 1000*  | 1000*  | 1000*  | 1000*  | 1500*  | 1500*  | 2000*  | 2000*  | 2000*  |
| Weight 0 mm stroke [kg]                                       | 0,37   | 0,55   | 0,81   | 1,21   | 1,97   | 3,40   | 6,50   | 11,20  | 18,00  |
| Weight add. per 1 mm stroke [kg]                              | 0,0028 | 0,0037 | 0,0060 | 0,0062 | 0,0100 | 0,0110 | 0,0160 | 0,0280 | 0,0300 |
| Weight 0 mm stroke [kg] with double ended piston rod          | 0,46   | 0,65   | 1,00   | 1,39   | 2,60   | 4,15   | 8,20   | 14,10  | 19,50  |
| Weight add. per 1 mm stroke [kg] with double ended piston rod | 0,0038 | 0,0047 | 0,0080 | 0,0082 | 0,0140 | 0,0150 | 0,0220 | 0,0400 | 0,0420 |

\*) Stroke of cylinder may be longer after agreement with our technical dept.

## Order codes

10301 60 00 050 0100



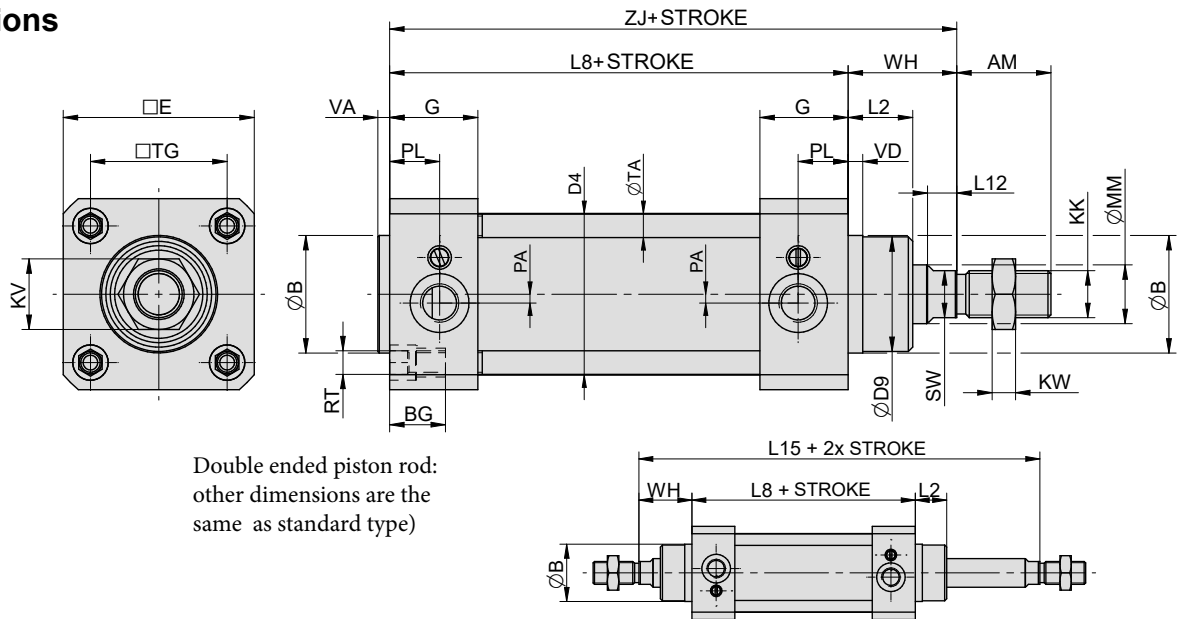
## Construction / materials

- caps: POM plastic
- body: drawn aluminium tube, anodized
- piston rod: ground stainless steel rod 1.4301, surface chrome-plated
- piston rod seal: E8 (PEE+NBR)
- other seals: NBR or PU
- steel parts: stainless steel 1.4301



The plastic material of the end caps has significantly better resistance than most Al alloys, and is cheaper than stainless steel materials. The cylinders are suitable for environments with moderate exposure to chemically aggressive substances, which some Al alloys cannot withstand.

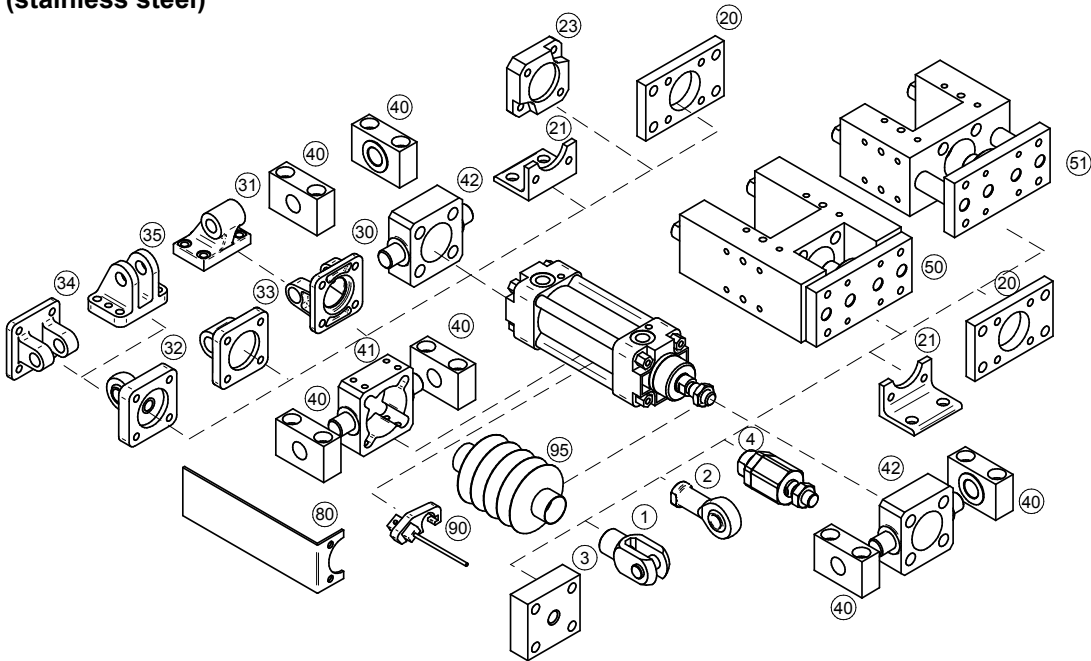
**Dimensions**



Double ended piston rod:  
other dimensions are the  
same as standard type)

| Ø   | AM | B  | BG | D4  | D9 | E   | EE    | G    | KK       | KV | KW | L2 | L8  | L12 | L15 | MM | PA | PL   | RT  | SW | TA   | TG   | VA | VD | WH | ZJ  |
|-----|----|----|----|-----|----|-----|-------|------|----------|----|----|----|-----|-----|-----|----|----|------|-----|----|------|------|----|----|----|-----|
| 32  | 22 | 30 | 16 | 36  | 28 | 48  | G1/8" | 31,5 | M10x1,25 | 17 | 6  | 18 | 94  | 8   | 146 | 12 | 5  | 22,5 | M6  | 10 | 5,25 | 32,5 | 4  | 4  | 26 | 120 |
| 40  | 24 | 35 | 16 | 45  | 34 | 55  | G1/4" | 32   | M12x1,25 | 19 | 10 | 20 | 105 | 9   | 165 | 16 | 5  | 20   | M6  | 13 | 5,25 | 38   | 4  | 4  | 30 | 135 |
| 50  | 32 | 40 | 19 | 55  | 39 | 65  | G1/4" | 30   | M16x1,5  | 24 | 8  | 22 | 106 | 10  | 180 | 20 | 3  | 17   | M8  | 16 | 7,1  | 46,5 | 4  | 5  | 37 | 143 |
| 63  | 32 | 45 | 19 | 68  | 44 | 75  | G3/8" | 30   | M16x1,5  | 24 | 8  | 23 | 121 | 10  | 195 | 20 | 6  | 16   | M8  | 16 | 7,1  | 56,5 | 4  | 5  | 37 | 158 |
| 80  | 40 | 45 | 19 | 86  | 44 | 94  | G3/8" | 30   | M20x1,5  | 30 | 9  | 31 | 128 | 10  | 220 | 25 | 10 | 16   | M10 | 21 | 8,85 | 72   | 4  | 5  | 46 | 174 |
| 100 | 40 | 55 | 19 | 106 | 54 | 115 | G1/2" | 36   | M20x1,5  | 30 | 9  | 34 | 138 | 10  | 240 | 25 | 11 | 18   | M10 | 21 | 8,85 | 89   | 4  | 17 | 51 | 189 |
| 125 | 54 | 60 | 20 | 132 | 58 | 140 | G1/2" | 40   | M27x2    | 41 | 12 | 50 | 160 | 14  | 290 | 32 | 11 | 22   | M12 | 27 | 10,7 | 110  | 6  | 6  | 65 | 225 |
| 160 | 72 | 65 | 24 | 168 | 64 | 185 | G3/4" | 50   | M36x2    | 55 | 18 | 50 | 180 | 20  | 340 | 40 | 10 | 25   | M16 | 36 | 16   | 140  | 6  | 10 | 80 | 260 |
| 200 | 72 | 75 | 24 | 212 | 74 | 235 | G3/4" | 50   | M36x2    | 55 | 18 | 55 | 180 | 20  | 370 | 40 | 12 | 25   | M16 | 36 | 16   | 175  | 6  | 20 | 95 | 275 |

**Mounting accessories (stainless steel)**



| Mounting accessories                    | ... see page      |
|---|-------------------|
| 1 Piston rod clevis                     | ... 4-26          |
| 2 Piston rod eye                        | ... 4-26          |
| 3 Flanged piston rod coupl.             | ☞                 |
| 4 Self-align. piston rod coupl.         | ☞                 |
| 20 Flange mounting                      | ☞                 |
| 21 Foot mounting                        | ☞                 |
| 23 Boxer flange mounting                | ☞                 |
| 30 Swivel flange                        | ☞                 |
| 31 Clevis foot mounting                 | ☞                 |
| 32 Swivel flange with spherical bearing | ☞                 |
| 33 Swivel flange                        | ☞                 |
| 34 Narrow swivel flange                 | ☞                 |
| 35 Rectangular swivel flange            | ☞                 |
| 40 Trunnion mounting                    | ☞                 |
| 41 Pivot pin**                          | ☞                 |
| 42 Pivot pin to front/end cap           | ☞                 |
| 50 Guide unit H with ball bearings*     | ☞                 |
| 51 Guide unit with slide bearings*      | ☞                 |
| 80 Valve bracket                        | ☞                 |
| 90 Prox. switch                         | ... 3-2, 3-4, 3-7 |
| 95 Piston rod protective cover          | ... 4-4           |