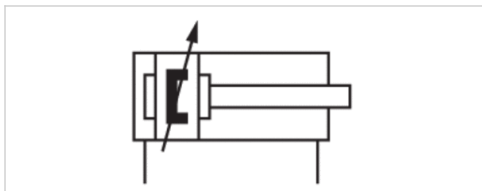


Profile cylinder ISO 15552, PRA series

- ISO 15552
- Ø 32-125 mm
- Ports G 1/8 G 1/4 G 3/8 G 1/2
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- Piston rod External thread
- ATEX optional



| | |
|--|---------------------------|
| Standards | ISO 15552 |
| Certificates | ATEX optional |
| Compressed air connection | Internal thread |
| Working pressure min./max. | 1,5 ... 10 bar |
| Ambient temperature min./max. | -20 ... 80 °C |
| Medium temperature min./max. | -20 ... 80 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m ³ |
| Pressure for determining piston forces | 6.3 bar |



Technical data

| Piston Ø Piston rod thread Ports Piston rod Ø | 32 mm M10x1,25 G 1/8 12 mm | 40 mm M12x1,25 G 1/4 16 mm | 50 mm M16x1,5 G 1/4 20 mm | 63 mm M16x1,5 G 3/8 20 mm | 80 mm M20x1,5 G 3/8 25 mm | 100 mm M20x1,5 G 1/2 25 mm |
|--|-------------------------------------|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|
| Stroke 25 | 0822120001 | 0822121001 | 0822122001 | 0822123001 | 0822124001 | 0822125001 |
| 50 | 0822120002 | 0822121002 | 0822122002 | 0822123002 | 0822124002 | 0822125002 |
| 80 | 0822120003 | 0822121003 | 0822122003 | 0822123003 | 0822124003 | 0822125003 |
| 100 | 0822120004 | 0822121004 | 0822122004 | 0822123004 | 0822124004 | 0822125004 |
| 125 | 0822120005 | 0822121005 | 0822122005 | 0822123005 | 0822124005 | 0822125005 |
| 160 | 0822120006 | 0822121006 | 0822122006 | 0822123006 | 0822124006 | 0822125006 |
| 200 | 0822120007 | 0822121007 | 0822122007 | 0822123007 | 0822124007 | 0822125007 |
| 250 | 0822120008 | 0822121008 | 0822122008 | 0822123008 | 0822124008 | 0822125008 |
| 320 | 0822120009 | 0822121009 | 0822122009 | 0822123009 | 0822124009 | 0822125009 |
| 400 | 0822120010 | 0822121010 | 0822122010 | 0822123010 | 0822124010 | 0822125010 |
| 500 | 0822120011 | 0822121011 | 0822122011 | 0822123011 | 0822124011 | 0822125011 |

| | |
|--|-----------------------------------|
| Piston Ø Piston rod thread Ports Piston rod Ø | 125 mm M27x2 G 1/2 32 mm |
| Stroke 25 | R480140491 |
| 50 | R480140455 |
| 80 | R480141371 |
| 100 | R480079499 |
| 125 | R480140083 |
| 160 | R480079809 |
| 200 | R480140833 |
| 250 | R480141106 |
| 320 | R480140759 |
| 400 | R480141373 |
| 500 | R480141666 |

Technical data

| Piston Ø | 32 mm | 40 mm | 50 mm | 63 mm | 80 mm | 100 mm | 125 mm |
|-------------------------|----------|----------|----------|----------|----------|---------|---------|
| Retracting piston force | 435 N | 660 N | 1035 N | 1765 N | 2855 N | 4635 N | 7220 N |
| Extracting piston force | 505 N | 790 N | 1235 N | 1960 N | 3165 N | 4945 N | 7725 N |
| Cushioning length | 16,5 mm | 19 mm | 17 mm | 16,5 mm | 19,5 mm | 19,5 mm | 22 mm |
| Cushioning energy | 4,8 J | 9 J | 15 J | 27 J | 54 J | 88 J | 140 J |
| Weight 0 mm stroke | 0,5 kg | 0,65 kg | 1,06 kg | 1,42 kg | 2,37 kg | 3,51 kg | 6,72 kg |
| Weight +10 mm stroke | 0,022 kg | 0,032 kg | 0,047 kg | 0,054 kg | 0,085 kg | 0,1 kg | 0,15 kg |
| Stroke max. | 1600 mm | 1900 mm | 2100 mm | 2500 mm | 2800 mm | 2800 mm | 2750 mm |

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

ATEX-certified cylinders with identification II 2G Ex h IIC T4 Gb / II 2D Ex h IIIC T135°C Db_X can be generated in the Internet configurator.

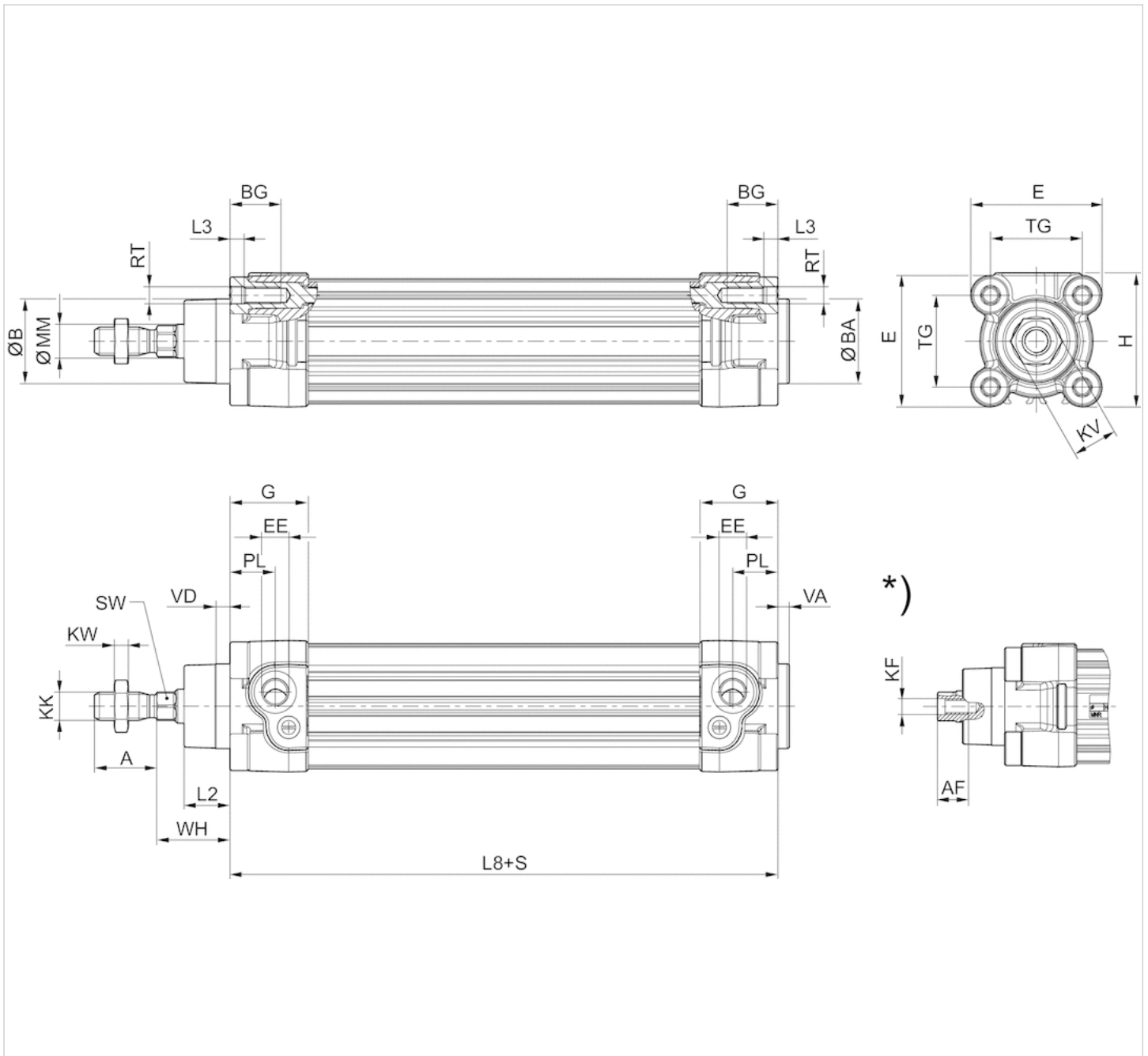
The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

Technical information

| Material | |
|--------------------|--------------------|
| Cylinder tube | Aluminum, anodized |
| Piston rod | Stainless steel |
| Front cover | Die-cast aluminum |
| End cover | Die-cast aluminum |
| Seal | Polyurethane |
| Nut for piston rod | Steel, galvanized |
| Scraper | Polyurethane |

Dimensions

Dimensions



S = stroke

*) For cylinders with optional piston rod with internal thread

Dimensions

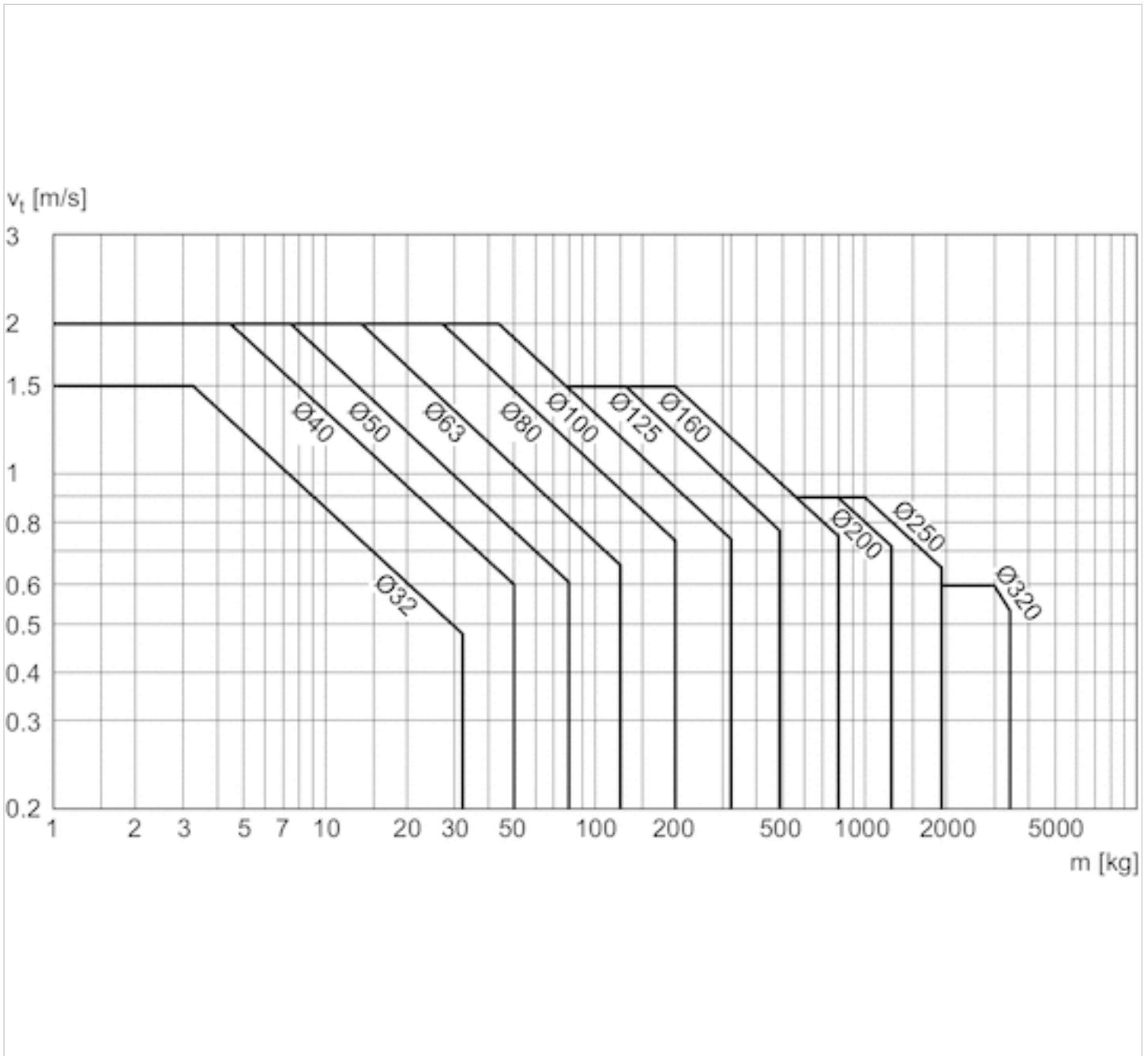
| Piston \varnothing | A -2 | AF+1 | $\varnothing B$ d11 | $\varnothing BA$ d11 | BG min. | E | EE | G | H | KF | KK | KV | KW |
|----------------------|------|------|---------------------|----------------------|---------|------|-------|-------|------|-----|----------|----|----|
| 32 mm | 22 | 12 | 30 | 30 | 16 | 46.5 | G 1/8 | 27.75 | 47.5 | M6 | M10x1,25 | 16 | 5 |
| 40 mm | 24 | 13.5 | 35 | 35 | 16 | 53 | G 1/4 | 33.25 | 53 | M8 | M12x1,25 | 18 | 6 |
| 50 mm | 32 | 17 | 40 | 40 | 16 | 65 | G 1/4 | 31 | 65 | M10 | M16x1,5 | 24 | 8 |
| 63 mm | 32 | 17 | 45 | 45 | 16 | 75 | G 3/8 | 38.25 | 75 | M10 | M16x1,5 | 24 | 8 |
| 80 mm | 40 | 21 | 45 | 45 | 17 | 95 | G 3/8 | 38.25 | 95 | M12 | M20x1,5 | 30 | 10 |

| Piston Ø | A -2 | AF+1 | ØB d11 | ØBA d11 | BG min. | E | EE | G | H | KF | KK | KV | KW |
|----------|------|------|--------|---------|---------|-----|-------|-------|-----|-----|---------|----|------|
| 100 mm | 40 | 21 | 55 | 55 | 17 | 115 | G 1/2 | 42.25 | 115 | M12 | M20x1,5 | 30 | 10 |
| 125 mm | 54 | 28 | 60 | 60 | 20 | 140 | G 1/2 | 53.85 | 140 | M16 | M27x2 | 41 | 13.5 |

| Piston Ø | ØMM f8 | PL | L2 | L3 ±0,5 | L8 | RT | SW | TG | VA -1 | VD | WH |
|----------|--------|------|-------|---------|---------|-----|----|----------|-------|----|--------|
| 32 mm | 12 | 16 | 16.25 | 4.5 | 94±0,4 | M6 | 10 | 32,5±0,5 | 4 | 5 | 26±1,4 |
| 40 mm | 16 | 20 | 18.25 | 4.5 | 105±0,7 | M6 | 13 | 38±0,5 | 4 | 5 | 30±1,4 |
| 50 mm | 20 | 19 | 25 | 4.5 | 106±0,7 | M8 | 17 | 46,5±0,6 | 4 | 5 | 37±1,4 |
| 63 mm | 20 | 24 | 25 | 4.5 | 121±0,8 | M8 | 17 | 56,5±0,7 | 4 | 5 | 37±1,8 |
| 80 mm | 25 | 23.5 | 33 | 0 | 128±0,8 | M10 | 22 | 72±0,7 | 4 | 5 | 46±1,8 |
| 100 mm | 25 | 25 | 36 | 0 | 138±1 | M10 | 22 | 89±0,7 | 4 | 5 | 51±1,8 |
| 125 mm | 32 | 33 | 45 | 0 | 160±1 | M12 | 27 | 110±1,1 | 6 | 7 | 65±2,2 |

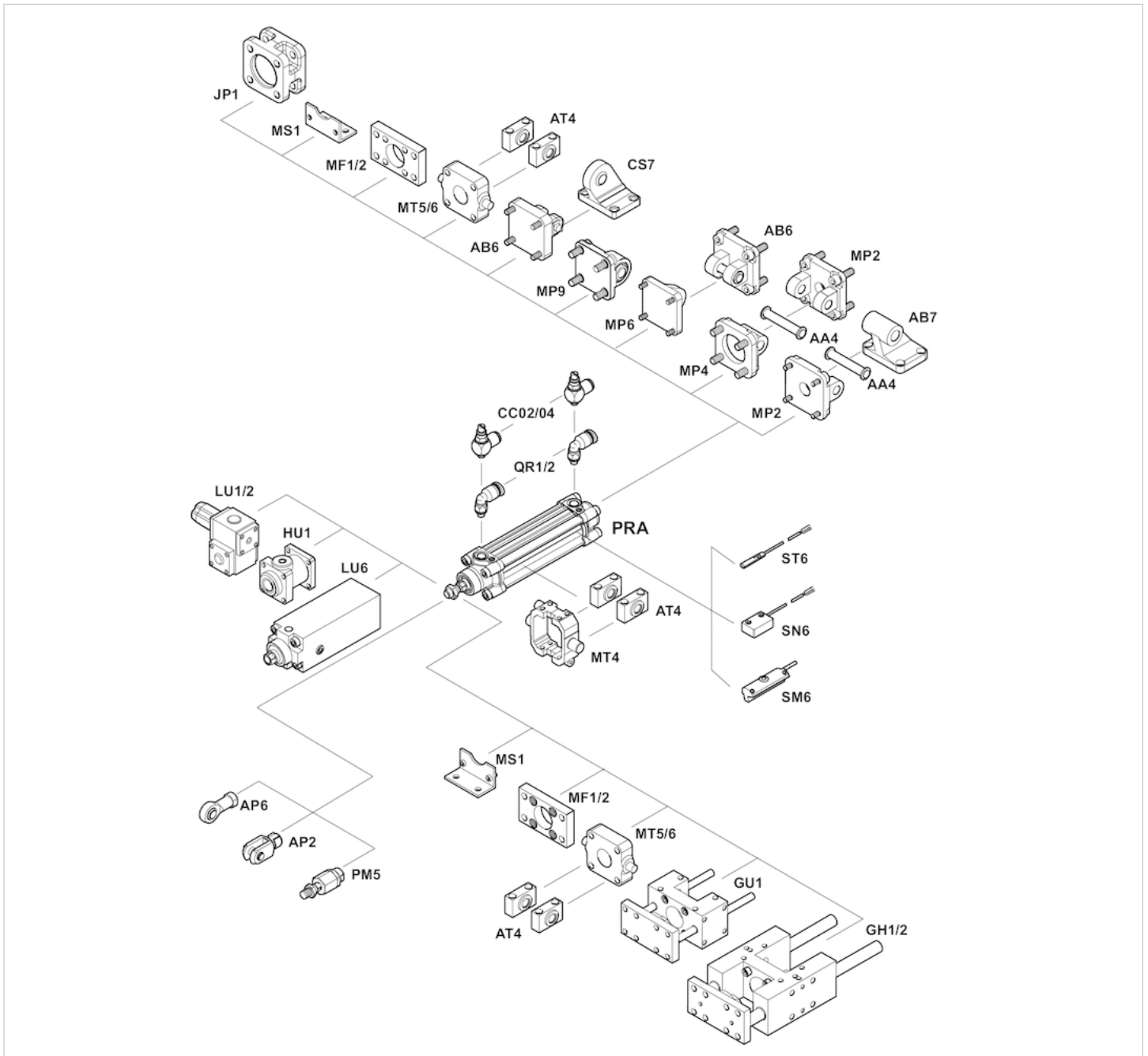
Diagrams

Cushioning diagram



v = Piston velocity [m/s]
 m = Cushionable mass [kg]

Accessories overview



Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



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