Compressed-air springs as per VW standard

03/2008

Order No. 2.2504.00.1107.01000

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Compressed-air springs as per VW standard

2491.12.

The compressed-air springs 2491.12. can be used as an alternative to gas springs, spiral compression springs and polyurethane springs as well as for the lower pressure on the press side.

Advantages of the FIBRO compressed-air springs:

- High initial force (compared to polyurethane springs) with low pressure increase
- Short, compact design
- Long service life
- No settling behaviour (fatigue)
- Long stroke lengths
- Low maintenance

The compressed-air springs are connected to the operating compressed air system (filtered compressed air) via a regulator valve.

Due to the connection to the continuous compressed air supply, any leaks will be compensated automatically. In this way, the compressed-air springs always operate at an optimum output and at minimal maintenance and cost.

Operating principle

When the piston rod is activated, the compressed air in the spring will be compressed. Due to the regulator valve, it is not pushed back into the compressed air system. During the downward stroke, the pressure in the spring increases and a force increase occurs. When the compressed-air spring is disconnected from the compressed air system, the regulator valve opens and the compressed air escapes from the spring.

Caution:

Compressed-air springs must only be put into operation in combination with a regulator valve!

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2491.12.00400.□□□.110 Compressed-air springs as per VW standard

NEW PRODUCTS

2491.12.00400.□□□.110

Initial spring force at max. 8 bar is 400 daN

Order no.	Stroke max.	$l_{min.}$	l
2491.12.00400.013.110	13	99	132
025.	25	111	156
038.	38	124	182
050.	50	136	206
063.	63	149	232
080.	80	166	266
100.	100	186	306
125.	125	211	356
160.	160	246	426

Note:

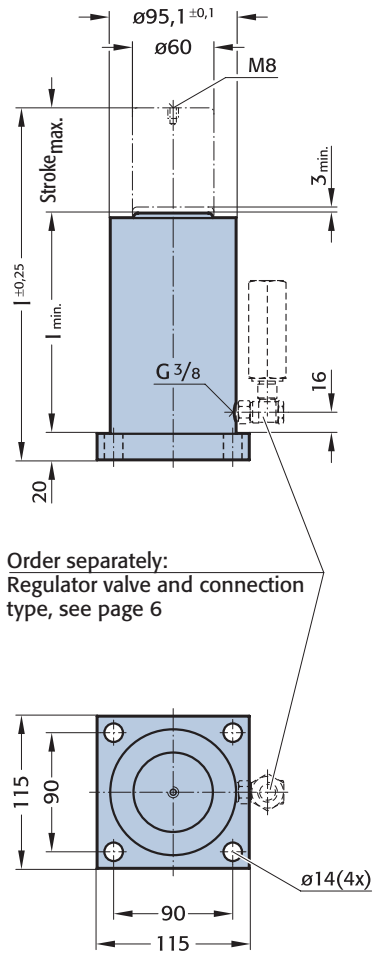
Order no. for spare parts kit:
2491.12.00400

Caution:

Compressed-air springs must only be put into operation in combination with a regulator valve!

Pressure medium:	Air
Max. filling pressure:	8 bar
Min. filling pressure:	2 bar
Working temperature:	0°C to +80°C
Temperature related force increase:	±0.3%/°C
Recommended max. strokes/min.:	40 (at 20°C)
Max. stroke speed:	1.5 m/s (at a max. filling pressure of 5.5 bar)

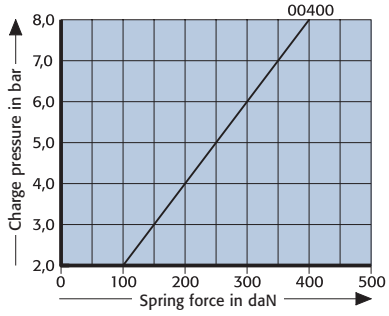
2491.12.00400.□□□.110



Order separately:
Regulator valve and connection type, see page 6

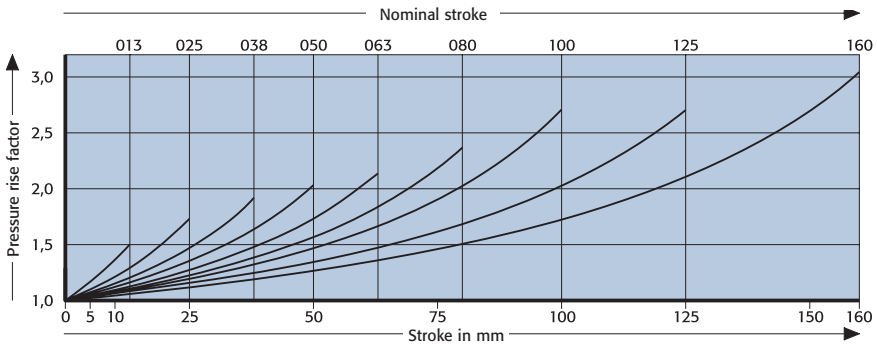
2491.12.00400.□□□.110.

Initial spring force depending on the charge pressure



2491.12.00400.□□□.110

Stroke related pressure rise graph



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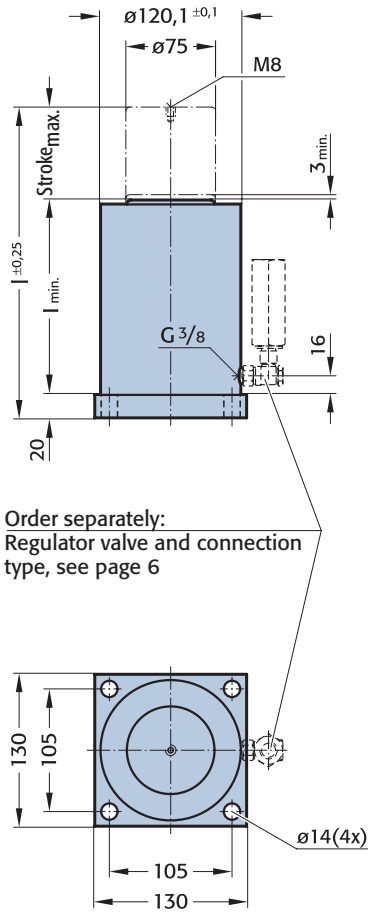
Compressed-air springs as per VW standard

2491.12.00650.□□□.110

2491.12.00650.□□□.110



Order separately:
Regulator valve and connection type, see page 6

2491.12.00650.□□□.110

Initial spring force at max. 8 bar is 650 daN

Order no.	Stroke max.	$l_{min.}$	l
2491.12.00650.013.110	13	99	132
025.	25	111	156
038.	38	124	182
050.	50	136	206
063.	63	149	232
080.	80	166	266
100.	100	186	306
125.	125	211	356
160.	160	246	426

Note:

Order no. for spare parts kit:
2491.12.00650

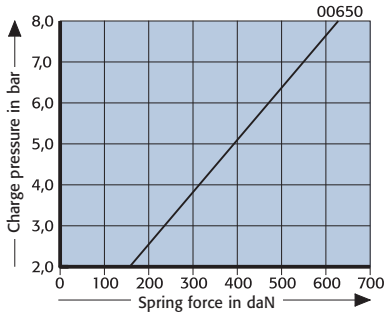
Caution:

Compressed-air springs must only be put into operation in combination with a regulator valve!

Pressure medium:	air
Max. filling pressure:	8 bar
Min. filling pressure:	2 bar
Working temperature:	0°C to +80°C
Temperature related force increase:	±0.3%/°C
Recommended max. strokes/min.:	40 (at 20°C)
Max. stroke speed:	1.5 m/s (at a max. filling pressure of 5.5 bar)

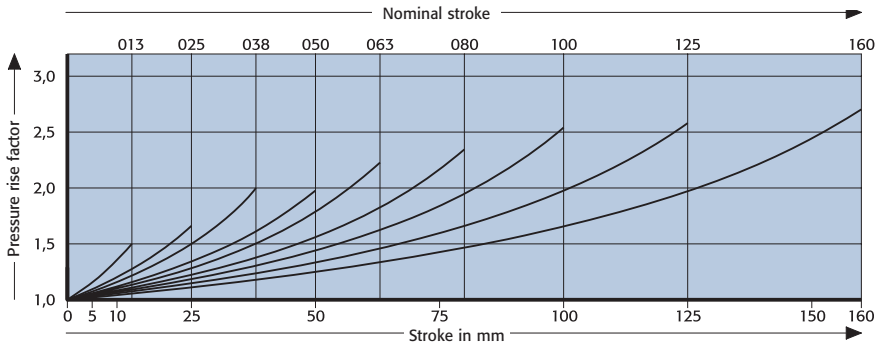
2491.12.00650.□□□.110.

Initial spring force depending on the charge pressure



2491.12.00650.□□□.110

Stroke related pressure rise graph



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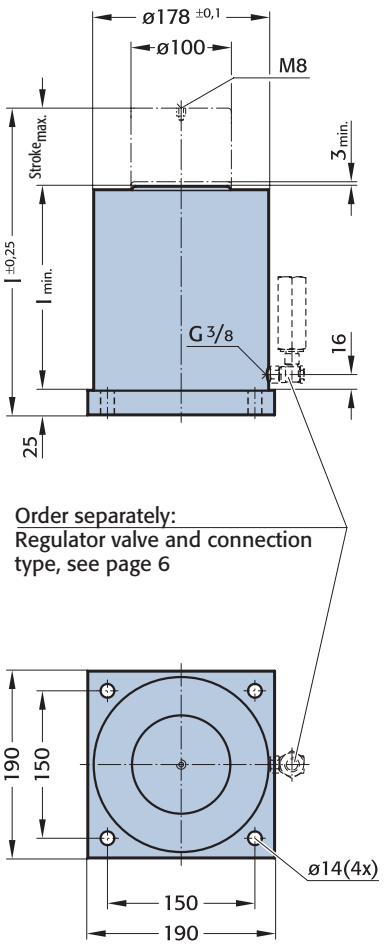
2491.12.01400.□□□.110 Compressed-air springs as per VW standard

2491.12.01400.□□□.110

Initial spring force at max. 8 bar is 1400 daN

Order no.	Stroke max.	$l_{min.}$	l
2491.12.01400.013.110	13	140	178
025.	25	152	202
038.	38	165	228
050.	50	177	252
063.	63	190	278
080.	80	207	312
100.	100	227	352
125.	125	252	402
160.	160	287	472

2491.12.01400.□□□.110



Note:

Order no. for spare parts kit:
2491.12.01400

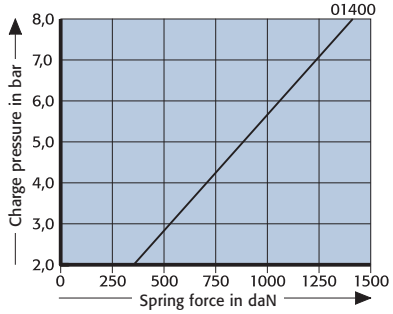
Caution:

Compressed-air springs must only be put into operation in combination with a regulator valve!

Pressure medium:	Air
Max. filling pressure:	8 bar
Min. filling pressure:	2 bar
Working temperature:	0°C to +80°C
Temperature related force increase:	±0.3%/°C
Recommended max. strokes/min.:	40 (at 20°C)
Max. stroke speed:	1.5 m/s (at a max. filling pressure of 5.5 bar)

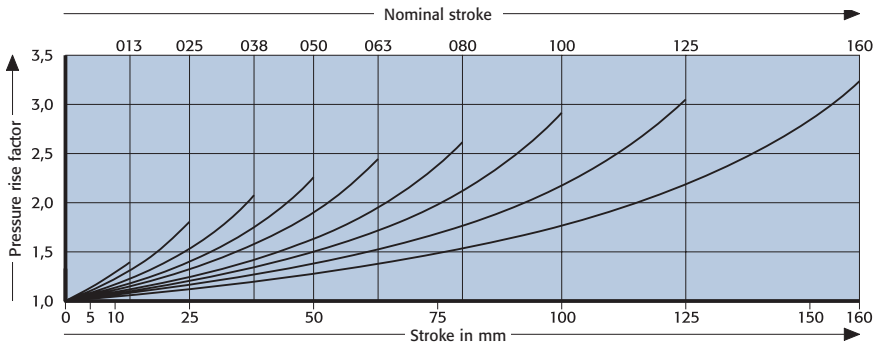
2491.12.01400.□□□.110.

Initial spring force depending on the charge pressure



2491.12.01400.□□□.110

Stroke related pressure rise graph



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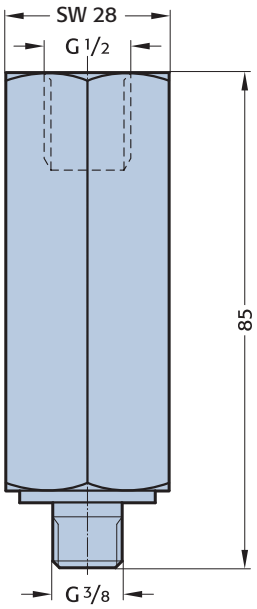
2491.12.1001

Regulator valve



Description:

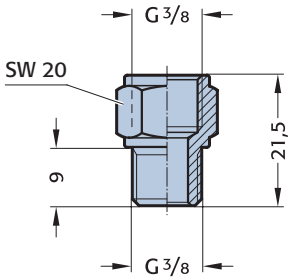
The regulator valve has two functions: filling and releasing of compressed air. The valve operates as a filling valve as soon as the compressed-air spring is connected to the compressed air system.

I.e., the regulator valve releases compressed air into the spring until the internal pressure of the spring is equal to the supply pressure. Once the continuous compressed air supply is disconnected, the regulator valve opens and releases the compressed air.

If the interior pressure increases considerably, (approx. 28 bar), an overpressure function in the regulator valve will be activated. The regulator valve opens and the excess pressure is released into the open. An inadmissible increase can be caused, for example, by the accumulation of condensation water in the spring.

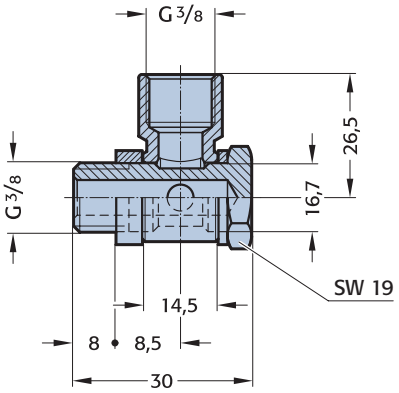
2491.00.43.01.01

Straight connection G 3/8 for regulator valve



2491.00.43.02.02

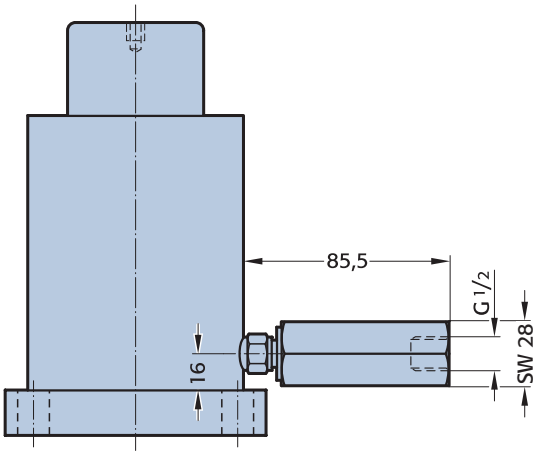
Angle connection G 3/8 for regulator valve, rotating



Application option:

Order separately:

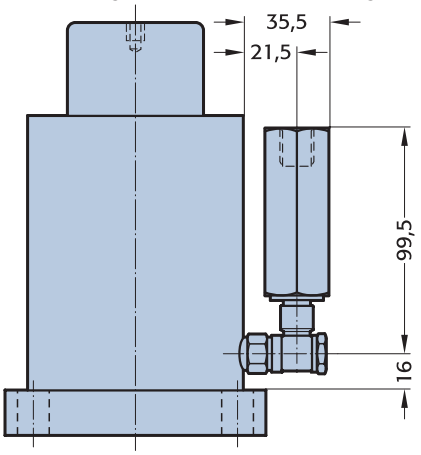
2491.12.1001	Regulator valve
2491.00.43.01.01	Straight connection G 3/8 for regulator valve



Application option:

Order separately:

2491.12.1001	Regulator valve
2491.00.43.02.02	Angle connection G 3/8
2491.00.43.01.01	Straight connection G 3/8 for regulator valve



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