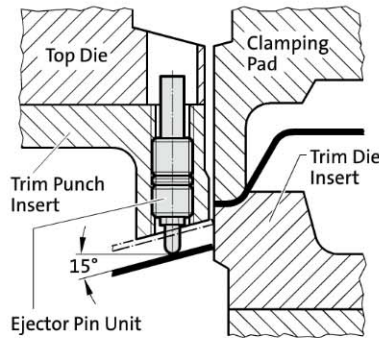
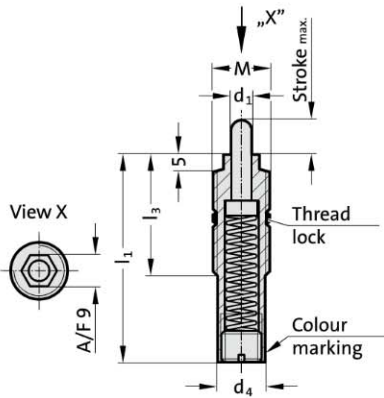


# Spring plunger, low maintenance, standard spring force, VDI 3004, Colour marking: yellow



2470.20. .1

## Mounting example



### Description:

Spring plungers are used as ejectors, damper pins, fixing and retaining pins in many sectors of the tool-, jig- and fixture-making industries. Assembly requires the use of special FIBRO insertion tool (2470.10.11). A low maintenance guide achieves an admissible lateral load-bearing capacity up to 15°.

### Note:

Working temperature: 0°C to +80°C  
 Max. recommended extensions per minute: approx. 120 (at 20°C)  
 Max. piston speed: 1.6 m/s

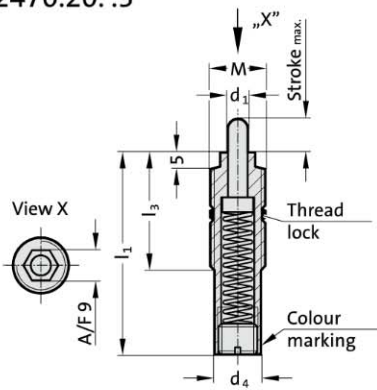
## 2470.20. .1 Spring plunger, low maintenance, standard spring force, VDI 3004, Colour marking: yellow

Order No	d <sub>1</sub>	d <sub>4</sub>	M	l <sub>1</sub>	l <sub>3</sub>	Stroke max.	Spring rate [N/mm]	Spring force [N] initial	Spring force [N] final
2470.20.010.060.1	6	13.4	16x2	60	35	10	0.95	3.8	13.3
2470.20.010.016.060.1	6	13.4	16x1.5	60	35	10	0.95	3.8	13.3
2470.20.015.060.1	6	13.4	16x2	60	35	15	2	10	40
2470.20.015.016.060.1	6	13.4	16x1.5	60	35	15	2	10	40
2470.20.020.080.1	6	13.4	16x2	80	35	20	1.38	6.9	34.5
2470.20.020.016.080.1	6	13.4	16x1.5	80	35	20	1.38	6.9	34.5
2470.20.030.080.1	6	13.4	16x2	80	35	30	1.3	6.5	45.5
2470.20.030.016.080.1	6	13.4	16x1.5	80	35	30	1.3	6.5	45.5
2470.20.030.120.1	6	13.4	16x2	120	35	30	0.73	18	40
2470.20.030.016.120.1	6	13.4	16x1.5	120	35	30	0.73	18	40
2470.20.040.150.1	6	13.4	16x2	150	35	40	0.6	13.2	37.2
2470.20.040.016.150.1	6	13.4	16x1.5	150	35	40	0.6	13.2	37.2
2470.20.050.150.1	6	13.4	16x2	150	35	50	0.6	13.2	43.2
2470.20.050.016.150.1	6	13.4	16x1.5	150	35	50	0.6	13.2	43.2

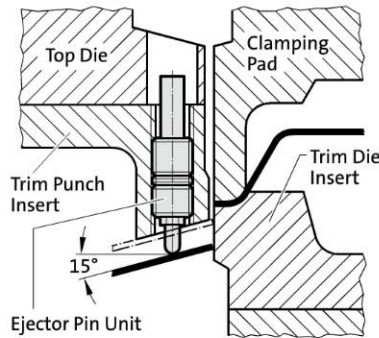
# Spring plunger, low maintenance, medium spring force, VDI 3004, Colour marking: white



2470.20. .3



## Mounting example



### Description:

Spring plungers are used as ejectors, damper pins, fixing and retaining pins in many sectors of the tool-, jig- and fixture-making industries. Assembly requires the use of special FIBRO insertion tool (2470.10.11). A low maintenance guide achieves an admissible lateral load-bearing capacity up to 15°.

### Note:

Working temperature: 0°C to +80°C  
Max. recommended extensions per minute: approx. 120 (at 20°C)  
Max. piston speed: 1.6 m/s

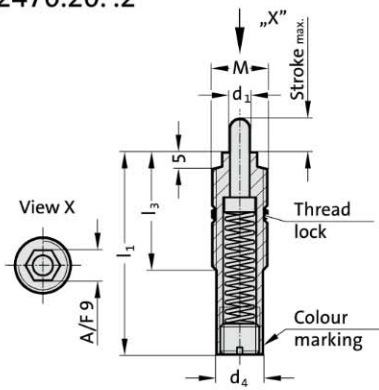
## 2470.20. .3 Spring plunger, low maintenance, medium spring force, VDI 3004, Colour marking: white

Order No	d <sub>1</sub>	d <sub>4</sub>	M	l <sub>1</sub>	l <sub>3</sub>	Stroke max.	Spring rate [N/mm]	Spring force [N] initial	Spring force [N] final
2470.20.020.080.3	6	13.4	16x2	80	35	20	3.02	15.1	75.6
2470.20.020.016.080.3	6	13.4	16x1.5	80	35	20	3.02	15.1	75.6

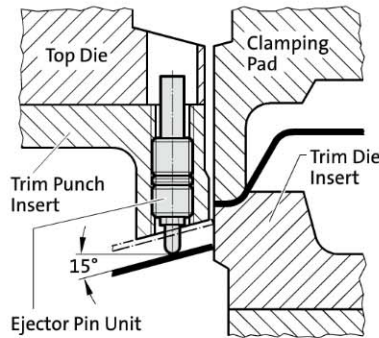
# Spring plunger, low maintenance, increased spring force, VDI 3004, Colour marking: red



2470.20. .2



## Mounting example



### Description:

Spring plungers are used as ejectors, damper pins, fixing and retaining pins in many sectors of the tool-, jig- and fixture-making industries. Assembly requires the use of special FIBRO insertion tool (2470.10.11). A low maintenance guide achieves an admissible lateral load-bearing capacity up to 15°.

### Note:

Working temperature: 0°C to +80°C  
 Max. recommended extensions per minute: approx. 120 (at 20°C)  
 Max. piston speed: 1.6 m/s

## 2470.20. .2 Spring plunger, low maintenance, increased spring force, VDI 3004, Colour marking: red

Order No	d <sub>1</sub>	d <sub>4</sub>	M	l <sub>1</sub>	l <sub>3</sub>	Stroke max.	Spring rate [N/mm]	Spring force [N] initial	Spring force [N] final
2470.20.010.060.2	6	13.4	16x2	60	35	10	3.25	13	45.5
2470.20.010.016.060.2	6	13.4	16x1.5	60	35	10	3.25	13	45.5
2470.20.015.060.2	6	13.4	16x2	60	35	15	2.6	15	56
2470.20.015.016.060.2	6	13.4	16x1.5	60	35	15	2.6	15	56
2470.20.020.080.2	6	13.4	16x2	80	35	20	6.9	34.5	172.5
2470.20.020.016.080.2	6	13.4	16x1.5	80	35	20	6.9	34.5	172.5
2470.20.030.120.2	6	13.4	16x2	120	35	30	2	20	80
2470.20.030.016.120.2	6	13.4	16x1.5	120	35	30	2	20	80
2470.20.030.150.2	6	13.4	16x2	150	35	30	2.55	56.1	132.6
2470.20.030.016.150.2	6	13.4	16x1.5	150	35	30	2.55	56.1	132.6
2470.20.040.150.2	6	13.4	16x2	150	35	40	2.55	56.1	158.1
2470.20.040.016.150.2	6	13.4	16x1.5	150	35	40	2.55	56.1	158.1
2470.20.050.200.2	6	13.4	16x2	200	35	50	1.61	19.3	99.9
2470.20.050.016.200.2	6	13.4	16x1.5	200	35	50	1.61	19.3	99.9