

# Spring plungers

with slot and thrust pin, steel



## Material:

Sleeve steel grade 5.8.

Thrust pin steel.

Spring steel wire grade D.

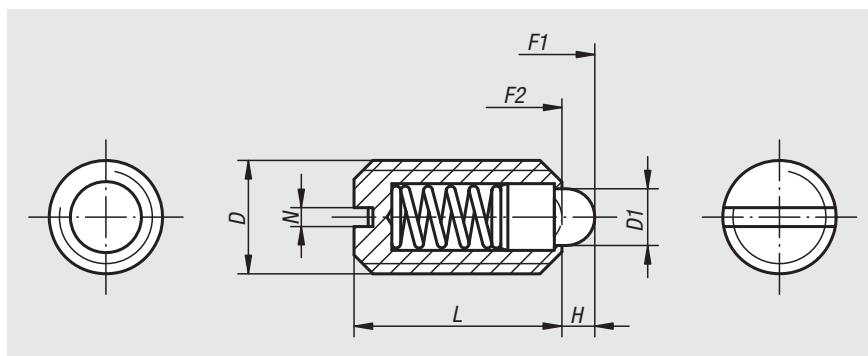
## Version:

Black oxidised.

Thrust pin hardened.

## Sample order:

nIm 03020-10



## Spring plungers with slot and thrust pin, standard spring force

Order No.	D	D1	H	L	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
03020-04	M4	1,8	1,5	9	0,6	6	20
03020-05	M5	2,4	2	12	0,8	6	20
03020-06	M6	2,7	2	14	1	7	20
03020-08	M8	4	2	16	1,2	15	30
03020-10	M10	4,5	2,5	19	1,6	20	35
03020-12	M12	6	3,5	22	2	30	55
03020-16	M16	8,5	4,5	24	2,5	45	100
03020-20	M20	10	6,5	30	2,5	60	120

## Spring plungers with slot and thrust pin, light spring force

Order No.	D	D1	H	L	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
03020-104	M4	1,8	1,5	9	0,6	3	10
03020-105	M5	2,4	2	12	0,8	3	10
03020-106	M6	2,7	2	14	1	4	10
03020-108	M8	4	2	16	1,2	7	15
03020-110	M10	4,5	2,5	19	1,6	9	16
03020-112	M12	6	3,5	22	2	14	26
03020-116	M16	8,5	4,5	24	2,5	22	50
03020-120	M20	10	6,5	30	2,5	30	60

## Spring plungers with slot and thrust pin, reinforced spring force

Order No.	D	D1	H	L	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
03020-205	M5	2,4	2	12	0,8	9	25
03020-206	M6	2,7	2	14	1	11	25
03020-208	M8	4	2	16	1,2	22	43
03020-210	M10	4,5	2,5	19	1,6	20	54
03020-212	M12	6	3,5	22	2	36	94
03020-216	M16	8,5	4,5	24	2,5	60	110

## Spring plungers

with status sensor



**Material:**

Sleeve, thrust pin and spring steel.  
Inductive proximity switch.

**Version:**

Black oxidised.  
Thrust pin hardened.

**Sample order:**

nIm 03020-5081

**Note:**

An electrical control signal can be sent via the built-in end switch.

Voltage:  $U = 10 - 30 \text{ V DC}$

Current:  $I_{\text{max.}} = 200 \text{ mA}$

Temperature range:  $-25 \text{ °C} - +70 \text{ °C}$

Protection class: IP 67

**Safety:**

Spring plungers with status sensor are not suitable for personal protection.

**Drawing reference:**

3) cable  $\varnothing 3.5 \text{ mm}$ ; length ca. 2 m

4) LED-indicator

BN = brown

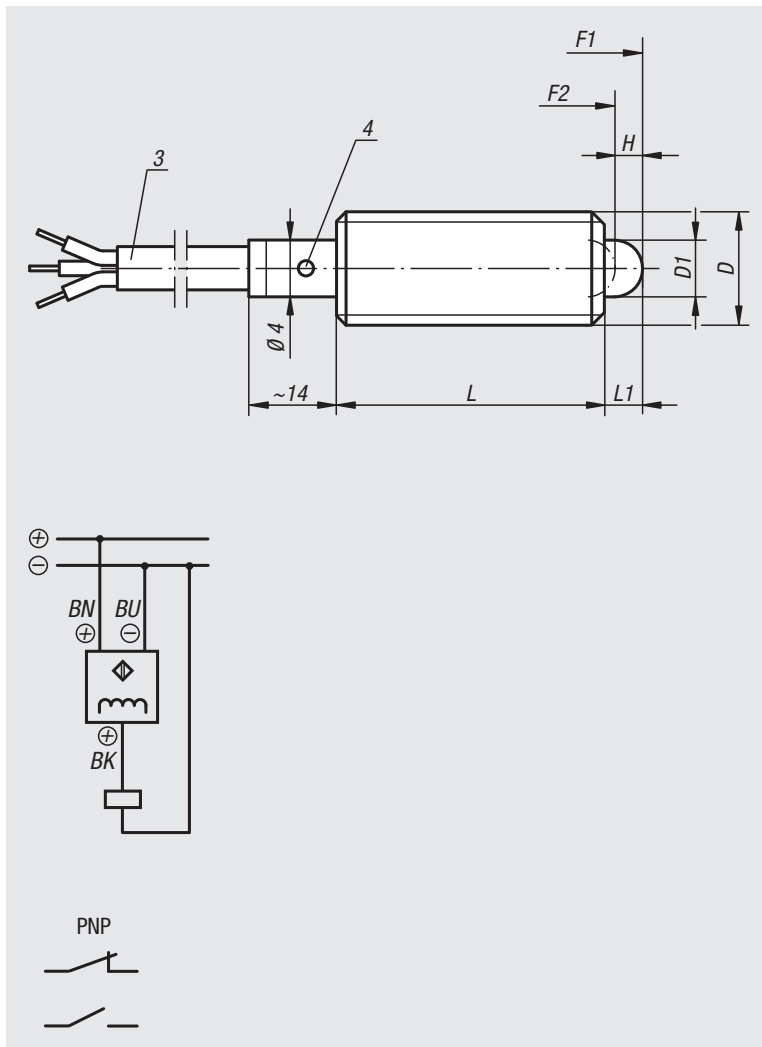
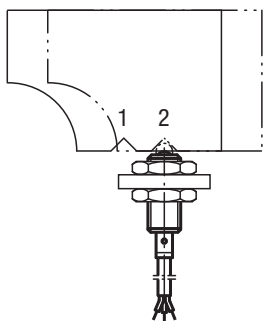
BK = black

BU = blue

Example of position feedback:

Pos. 1: slide engaged

Pos. 2: slide disengaged



Order No.	Version 2	D	D1	H	L	L1	Switching contact from stroke H1	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
03020-5061	normally closed	M6	2,7	2	27	3	1,2 - 1,6	7	20
03020-5081	normally closed	M8	4	2	29	3	1,2 - 1,8	15	30
03020-5101	normally closed	M10	4,5	3	36	4	2,2 - 2,8	26	44
03020-5062	normally open	M6	2,7	2	27	3	1,2 - 1,6	7	20
03020-5082	normally open	M8	4	2	29	3	1,2 - 1,8	15	30
03020-5102	normally open	M10	4,5	3	36	4	2,2 - 2,8	26	44