

2.2 Low voltage ring actuators with internally prestressed casings



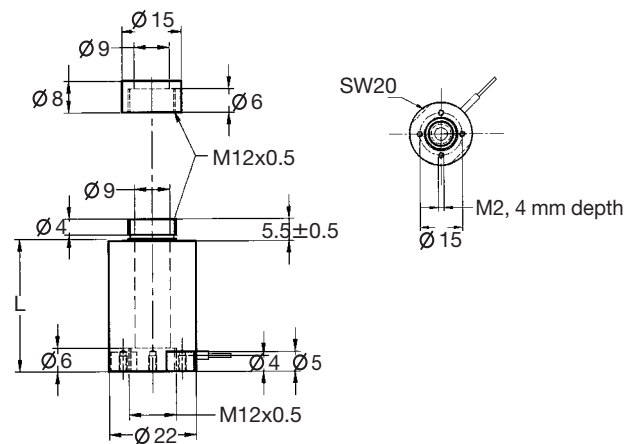
HPSt 150/14-10/... VS22

Prestress force = max. tensile force = 400 N

Maximum load: 6000 N

Maximum force generation: 4500 N

Open loop sensitivity for 1 mV amplifier noise for actuator HPSt 150/14-10/12 VS22: approx. 0.1 Nanometer



Type	max. stroke μm	length mm	el. capacitance μF	stiffness $\text{N}/\mu\text{m}$	resonance frequency kHz
HPSt 150/14-10/12 VS22	16/12	31	2.6	250	30
HPSt 150/14-10/25 VS22	32/25	44	5.2	120	20
HPSt 150/14-10/40 VS22	50/40	58	7.8	70	14
HPSt 150/14-10/55 VS22	70/50	71	11	50	9

Standard configuration:

Coaxial cable RG 178 length 1 m with BNC connector

Options:

Coaxial cable RG 178 length 1 m with LEMO 00250 or OS250 connector

UHV compatibility

Low temperature application

Thermostable modification

Position sensor

Optics adaptor 0A 1/2": see section 3

Adaptor rings AR: see section 3

Stroke A/B: A: for -30 V thru +150 V

B: for 0 V thru +150 V

Max. force generation: for -30 V thru +150 V



HPSt 150/20-15/... VS35

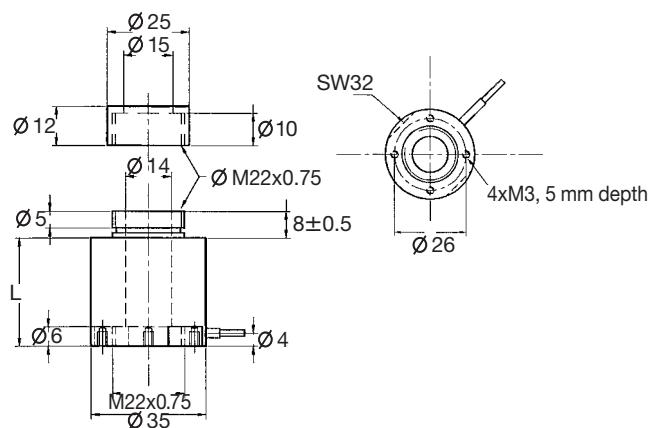
General data: see brochure: "First Steps towards Piezoaction"

Prestress force = max. tensile force = 700 N

Maximum load: 11000 N

Maximum force generation: 8000 N

Open loop sensitivity for 1 mV amplifier noise for actuator HPSt 150/20-15/12 VS35: approx. 0.1 Nanometer



Type	max. stroke μm	length mm	el. capacitance μF	stiffness $\text{N}/\mu\text{m}$	resonance frequency kHz
HPSt 150/20-15/12 VS35	16/12	31	5	450	30
HPSt 150/20-15/25 VS35	32/25	44	10	230	20
HPSt 150/20-15/40 VS35	50/40	58	15	150	17
HPSt 150/20-15/55 VS35	70/50	71	20	100	15

Standard configuration:

Coaxial cable RG 178 length 1 m with BNC connector

Options:

Coaxial cable RG 178 length 1m with LEMO 00250 or 0S250 connector

UHV compatibility

Low temperature application

Thermostable modification

Position detector

Optics adaptor 0A 1": see section 3

Adaptor rings AR: see section 3

Stroke A/B: A: for -30 V thru +150 V

B: for 0 V thru +150 V

Max. force generation: for -30 V thru +150 V