

Mounting accessories for piezoelectric force sensors

Types 95x3, 95x5, 95x7, 95x9

Standardized mounting accessories for special cases when installing piezoelectric force sensors of Type 9001 ... 9091 and Type 9101 ... 9107

Mounting accessories for 1-component force sensors

Kistler offers an extensive range of standard accessories for special cases when installing 1-component force sensors. The products described here are compatible with the sensor families 90x1 and 910x.

Compatibilities¹⁾

Sensor type		9001C	9011C	9021C	9031C	9041C	9051C	9061C	9071C	9081B	9091B
			9101C	9102C	9103C	9104C	9105C	9106C	9107C		
Accessories Type	Force distributing ring	9505	9515	9525	9535	9545	9555	9565	9575		
	Force distributing cap	9509	9519	9529	9539	9549	9559	9569	9579		
	Spherical washer		9513	9523	9533	9543	9553	9563	9573		
	Insulating washer		9517	9527	9537	9547	9557	9567	9577	9455A1	9456A1

Force distributing ring 95x5

The contact surfaces must be just as flat and stiff as the contact surfaces of the sensor itself. If they cannot be finished, local overstressing and damage to the sensor surface must be prevented through the use of a force distributing ring.

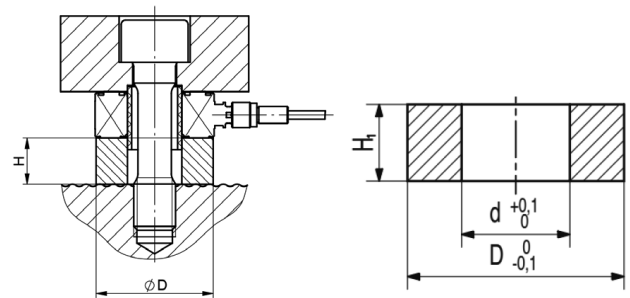
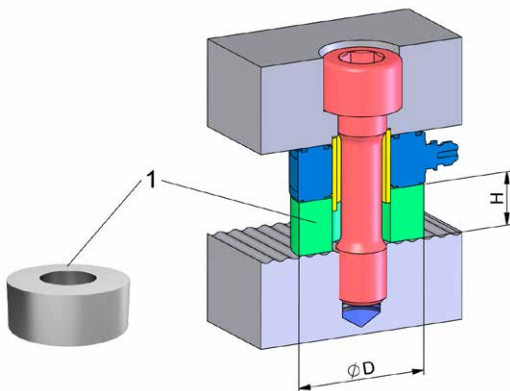


Fig. 1: Installation of force distributing ring 95x5

Sensor type	9001C	9011C	9021C	9031C	9041C	9051C	9061C	9071C
		9101C	9102C	9103C	9104C	9105C	9106C	9107C
Force distributing ring	9505	9515	9525	9535	9545	9555	9565	9575
d	4.1	6.5	10.5	13	17	21	26.5	40.5
D	10	14	22	28	34	40	52	75
H1	6	8	10	11	12	13	15	17

¹⁾ These specifications apply without restriction to the previous versions Type 90x1A and Type 910xA.

Force distributing cap 95x9

The force to be measured must be distributed evenly on the contact surface of the sensor. If a concentrated application of force cannot be avoided, a force distributing cap ensures an ideal distribution of force.

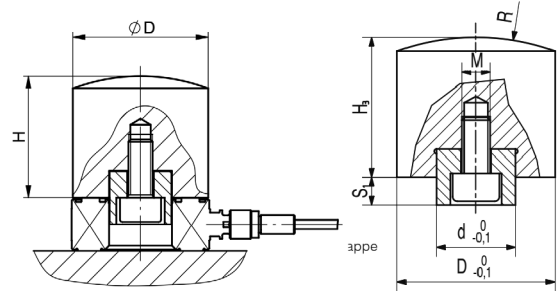
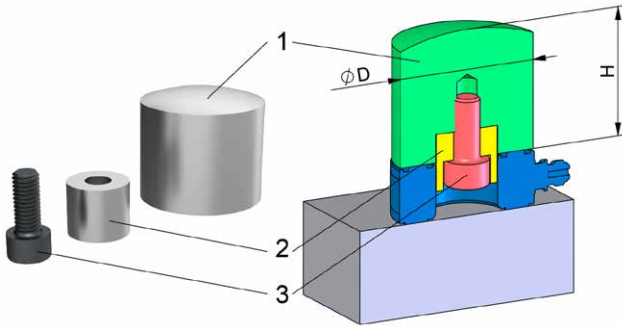


Fig. 2: Installation of force distributing cap 95x9

Sensor type	9001C	9011C	9021C	9031C	9041C	9051C	9061C	9071C
		9101C	9102C	9103C	9104C	9105C	9106C	9107C
Force distributing cap	9509	9519	9529	9539	9549	9559	9569	9579
H3	10	15	20	25	30	40	50	60
S1	3.5	4	5	5.5	6	6.5	7.5	8.5
M	M2.5	M2.5	M4	M5	M6	M8	M10	M12
R	13	20	30	40	50	60	75	110

Spherical washer 95x3

Surfaces have to be made perfectly parallel. A spherical washer must be used to compensate for this. A finished, even contact surface is still required, however.

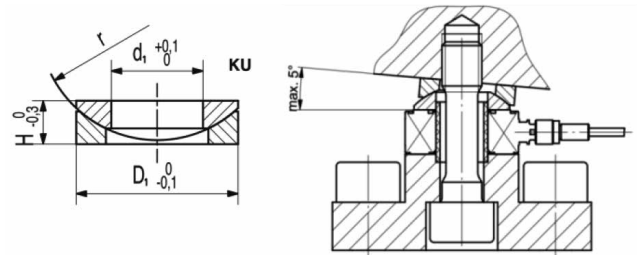
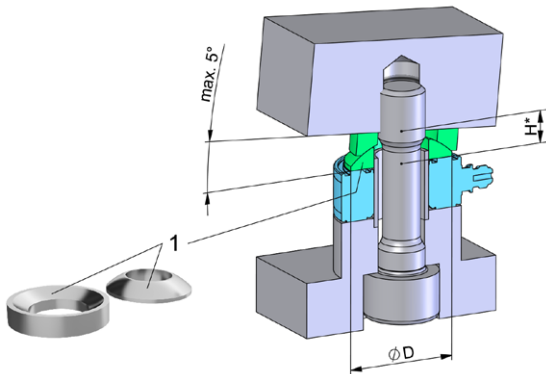


Fig. 3: Installation of spherical washer 95x3 with maximum angle

Sensor type	9001C	9011C	9021C	9031C	9041C	9051C	9061C	9071C
		9101C	9102C	9103C	9104C	9105C	9106C	9107C
Spherical washer		9513	9523	9533	9543	9553	9563	9573
d1	-	6.4	10.5	13	17	21	26.5	40.5
D1	-	12	21	24	30	36	52	75
H	-	4	6	7	8	10	14	20
r	-	9	15	17	22	27	45	65

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Insulating washers 95x7

In case of interferences due to ground loops or differing electrical potentials between the measurement object and the amplifier, these insulating washer sets ensure clean electrical isolation. Insulating washers should only be used once, and only on finished contact surfaces in order to function correctly.



Caution

These insulating washers with collar can only be used where there are no built-in, continuous centering bushes.

Two insulating washers are required for each sensor.

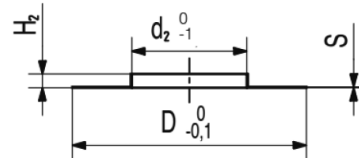


Fig. 4: Insulating washer with collar

Sensor type	9001C	9011C	9021C	9031C	9041C	9051C	9061C	9071C
		9101C	9102C	9103C	9104C	9105C	9106C	9107C
Insulating washer		9517	9527	9537	9547	9557	9567	9577
d2	–	6.4	10.3	12.8	16.7	20.7	26.2	40.2
H2	–	1	1	1	2	2	2	2
S	–	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Quantity/Set	–	1	1	1	1	1	1	1

Sensor type	9081B	9091B
Insulating washer	9455A1	9456A1
D	88	129.9
d2	41	72
H2	0	0
S	1.25	1.25
Quantity/Set	2	2