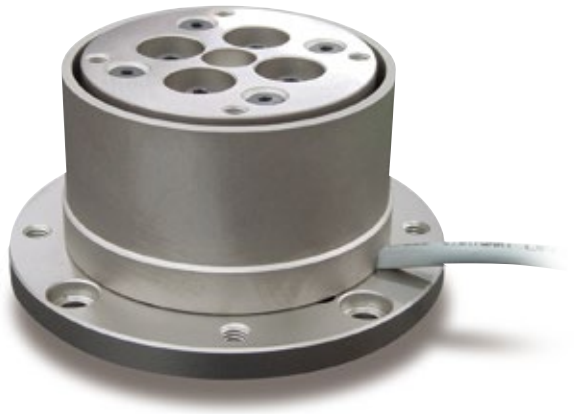
Center Master™



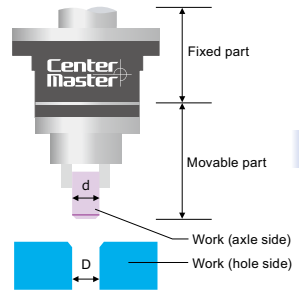
Automatic compensation of position errors in assembling process!

Center Master is a unique device that enables the automatic compensation of position and angle errors in component assembly errors using multiple elastomer shear pads (ESPs) on the principle of Remote Center Compliance (RCC) developed and tested at the Massachusetts Institute of Technology (MIT) in the U.S. It can be used for a broad range of applications from precision component insertion operation by robots or dedicated machines to press fitting operation applying a load of 100 kN or more.

- **Reduce assembly failures caused by centering errors**
- **Reduce man-hours at initial installation and simplify maintenance process**
- **Improve assembly quality by automatically compensating position errors**
- **Reduce the risk of machine failure caused by unbalanced load**

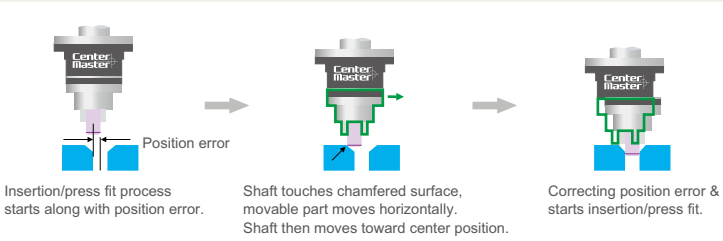
Misalignment correction mechanism

Misalignment correction process



For insertion: d<D
For press fitting: d>D

Automatic compensation of position error (Insertion /Press fit)

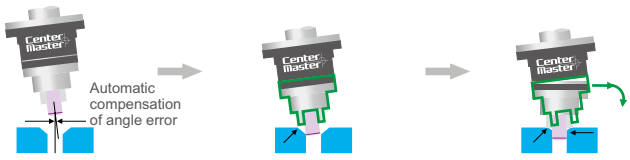


Insertion/press fit process starts along with position error.

Shaft touches chamfered surface, movable part moves horizontally. Shaft then moves toward center position.

Correcting position error & starts insertion/press fit.

Automatic compensation of angle error (Insertion only)



Insertion starts along with angle error.

Shaft reaches chamfered surface, touched 2 points.

Angle error is corrected after physical contact, followed by insertion.

A Series
(insertion)

Model	Rated capacity *1 [N]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range			Elastic coefficient *2				Product weight [kg]
				Position error [mm]	Angular error [deg]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]	
							Compression	Tension			
A6-030-040	186	30	14.7	±2	±2	—	625.9	100.1	9.8	2.2	0.1
A6-040-048	255	40	14.7	±2	±2	±7.7	625.9	143.2	9.8	2.4	0.1
A6-050-054	353	50	19.6	±2	±2	±7.3	1182.1	143.2	11.8	3.0	0.2
A6-060-060	353	60	19.6	±2	±2	±6.0	1182.1	143.2	11.8	3.0	0.2
A6-070-065	471	70	26.5	±2	±2	±6.6	1575.5	191.3	11.8	4.2	0.2
A6-080-070	471	80	26.5	±2	±2	±6.2	1575.5	191.3	11.8	4.2	0.3
A6-090-078	363	90	37.3	±2	±2	±5.5	1218.4	225.6	12.8	6.1	0.4
A6-100-084	363	100	37.3	±2	±2	±5.0	1218.4	225.6	12.8	6.1	0.4
A6-110-088	363	110	38.3	±2	±2	±4.6	1218.4	225.6	12.8	7.0	0.4
A6-120-095	363	120	38.3	±2	±2	±5.1	1218.4	225.6	12.8	7.0	0.5
A6-130-099	363	130	38.3	±2	±2	±5.1	1218.4	225.6	12.8	7.0	0.5
A6-140-108	549	140	78.5	±2	±2	±4.8	1842.3	408.1	14.7	7.7	0.7
A6-150-130	824	150	78.5	±2	±2	±4.2	1842.3	408.1	14.7	7.7	1.0

LA Series
(insertion, airlock type)

Model	Rated capacity *1 [N]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range			Elastic coefficient *2				Air pressure*3 [MPa]	Tube ext. diameter [mm]	Product weight [kg]
				Position error [mm]	Angular error [deg]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]			
							Compression	Tension					
LA6-060-060	353	60	19.6	±2	±2	±6.0	1182.1	143.2	11.8	3.0	0.5	ϕ4	0.2
LA6-070-065	471	70	26.5	±2	±2	±6.6	1575.5	191.3	11.8	4.2			0.3
LA6-080-070	471	80	26.5	±2	±2	±6.2	1575.5	191.3	11.8	4.2			0.3
LA6-090-078	363	90	37.3	±2	±2	±5.5	1218.4	225.6	12.8	6.1			0.4
LA6-100-084	363	100	37.3	±2	±2	±5.0	1218.4	225.6	12.8	6.1			0.5
LA6-110-088	363	110	38.3	±2	±2	±4.6	1218.4	225.6	12.8	7.0			0.5
LA6-120-095	363	120	38.3	±2	±2	±5.1	1218.4	225.6	12.8	7.0			0.6
LA6-130-099	363	130	38.3	±2	±2	±5.1	1218.4	225.6	12.8	7.0			0.6
LA6-140-108	549	140	78.5	±2	±2	±4.8	1842.3	408.1	14.7	7.7			0.8
LA6-150-130	824	150	78.5	±2	±2	±4.2	1842.3	408.1	14.7	7.7			1.6

S Series
(press-fitting, load cell, flange)

Model	Rated capacity *1 [N]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2				Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]	
						Compression	Tension			
S4D-070-065-02	19.6	70	29.4	±2	±6.6	1575.5	191.3	11.8	4.2	1.4
S4D-070-065-04	39.2									
S4D-070-065-06	58.9									
S4D-090-078-02	19.6	90	40.2	±2	±5.5	1218.4	225.6	12.8	6.1	2.1
S4D-090-078-04	39.2									
S4D-090-078-06	58.9									
S4D-110-088-03	29.4	110	40.2	±2	±4.6	1218.4	225.6	12.8	7.0	2.7
S4D-110-088-06	58.9									
S4D-110-088-10	98.1									
S4D-140-108-03	29.4	140	80.4	±2	±4.8	1842.3	408.1	14.7	7.7	4.1
S4D-140-108-06	58.9									
S4D-140-108-10	98.1									
S4D-150-130-04	39.2	150	80.4	±2	±4.2	1842.3	408.1	14.7	7.7	6.0
S4D-150-130-07	68.7									
S4D-150-130-12	117.7									

SS Series
(press fit, integrated load cell, flangeless type)

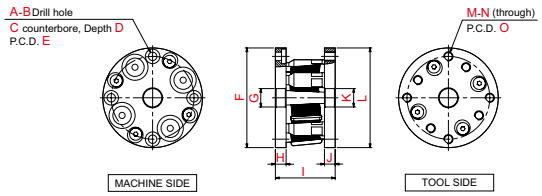
Model	Rated capacity *1 [N]	Elastic center distance P[mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2				Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]	
						Compression	Tension			
SS4D-070-065-02	19.6	70	29.4	±2	±6.6	1575.5	191.3	11.8	4.2	1.2
SS4D-070-065-04	39.2									
SS4D-070-065-06	58.9									
SS4D-090-078-02	19.6	90	40.2	±2	±5.5	1218.4	225.6	12.8	6.1	1.7
SS4D-090-078-04	39.2									
SS4D-090-078-06	58.9									
SS4D-110-088-03	29.4	110	40.2	±2	±4.6	1218.4	225.6	12.8	7.0	2.3
SS4D-110-088-06	58.9									
SS4D-110-088-10	98.1									
SS4D-140-108-03	29.4	140	80.4	±2	±4.8	1842.3	408.1	14.7	7.7	3.5
SS4D-140-108-06	58.9									
SS4D-140-108-10	98.1									
SS4D-150-130-04	39.2	150	80.4	±2	±4.2	1842.3	408.1	14.7	7.7	5.4
SS4D-150-130-07	68.7									
SS4D-150-130-12	117.7									

*1 Rated capacity & allowance load: Do contact us if it exceeds the value written in specifications.
*2 Elastic coefficient: Elasticity at Elastic center (P). It is the average value until stopper inside Center Master is activated.
*3 Air pressure: Recommended pressure so that end effector does not vibrate when robot arm moves.
* Center Master corrects max. ±2 mm position error. This value varies depending on size of chamfered surface.

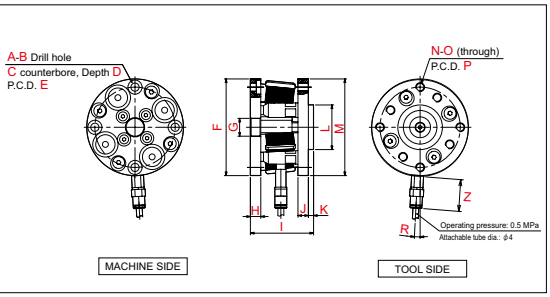
Please avoid using in an environment that will corrode the interior of this product.

Line-up is as of Apr 2024. Contact us for custom orders.

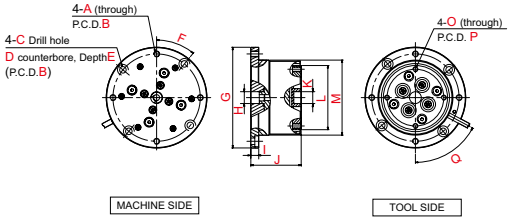
Model	Dimensions [mm]														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A6-030-040	3	ϕ4.5	ϕ8	2	30	ϕ40	–	5	30	5	–	ϕ40	3	M5	30
A6-040-048	3	ϕ5.5	ϕ9.5	2	36	ϕ48	$\phi12^{+0.02}_{-0}$	6	30	6	$\phi12^{+0.02}_{-0}$	ϕ48	3	M6	36
A6-050-054	3	ϕ5.5	ϕ9.5	3	43	ϕ54	$\phi12^{+0.02}_{-0}$	7	38	7	$\phi12^{+0.02}_{-0}$	ϕ54	3	M6	43
A6-060-060	3	ϕ5.5	ϕ9.5	3	48	ϕ60	$\phi12^{+0.02}_{-0}$	7	39	7	$\phi12^{+0.02}_{-0}$	ϕ60	3	M6	48
A6-070-065	4	ϕ5.5	ϕ9.5	3	54	ϕ65	$\phi12^{+0.02}_{-0}$	7	39	7	$\phi12^{+0.02}_{-0}$	ϕ65	4	M6	54
A6-080-070	4	ϕ5.5	ϕ9.5	3	58	ϕ70	$\phi12^{+0.02}_{-0}$	7	39	7	$\phi12^{+0.02}_{-0}$	ϕ70	4	M6	58
A6-090-078	4	ϕ6.6	ϕ11	4	65	ϕ78	$\phi16^{+0.02}_{-0}$	8	43	8	$\phi16^{+0.02}_{-0}$	ϕ78	4	M8	65
A6-100-084	4	ϕ6.6	ϕ11	4	70	ϕ84	$\phi16^{+0.02}_{-0}$	8	43	8	$\phi16^{+0.02}_{-0}$	ϕ84	4	M8	70
A6-110-088	4	ϕ6.6	ϕ11	4	75	ϕ88	$\phi16^{+0.02}_{-0}$	8	43	8	$\phi16^{+0.02}_{-0}$	ϕ88	4	M8	75
A6-120-095	4	ϕ6.6	ϕ11	4	80	ϕ95	$\phi16^{+0.02}_{-0}$	8	43	8	$\phi16^{+0.02}_{-0}$	ϕ95	4	M8	80
A6-130-099	4	ϕ6.6	ϕ11	4	85	ϕ99	$\phi16^{+0.02}_{-0}$	8	43	8	$\phi16^{+0.02}_{-0}$	ϕ99	4	M8	85
A6-140-108	4	ϕ9	ϕ14	5	88	ϕ108	$\phi16^{+0.02}_{-0}$	10	47	10	$\phi16^{+0.02}_{-0}$	ϕ108	4	M10	88
A6-150-130	6	ϕ9	ϕ14	5	114	ϕ130	$\phi16^{+0.02}_{-0}$	11	46	11	$\phi16^{+0.02}_{-0}$	ϕ130	6	M10	114



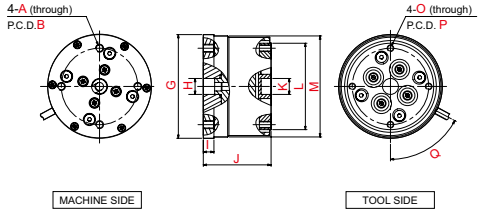
Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	Z
LA6-060-060	3	ϕ5.5	ϕ9.5	3	48	ϕ60	$\phi12^{+0.02}_{-0}$	7	43	7	4	$\phi26^{+0}_{-0.02}$	ϕ60	3	M6	48	70°	16
LA6-070-065	4	ϕ5.5	ϕ9.5	3	54	ϕ65	$\phi12^{+0.02}_{-0}$	7	42.5	7	3.5	$\phi30^{+0}_{-0.02}$	ϕ65	4	M6	54	4°	13
LA6-080-070	4	ϕ5.5	ϕ9.5	3	58	ϕ70	$\phi12^{+0.02}_{-0}$	7	42.5	7	3.5	$\phi30^{+0}_{-0.02}$	ϕ70	4	M6	58	2°	-
LA6-090-078	4	ϕ6.6	ϕ11	4	65	ϕ78	$\phi16^{+0.02}_{-0}$	8	46.5	8	3.5	$\phi35^{+0}_{-0.02}$	ϕ78	4	M8	65	3°	-
LA6-100-084	4	ϕ6.6	ϕ11	4	70	ϕ84	$\phi16^{+0.02}_{-0}$	8	46.5	8	3.5	$\phi35^{+0}_{-0.02}$	ϕ84	4	M8	70	3°	-
LA6-110-088	4	ϕ6.6	ϕ11	4	75	ϕ88	$\phi16^{+0.02}_{-0}$	8	48	8	5	$\phi38^{+0}_{-0.02}$	ϕ88	4	M8	75	12°	-
LA6-120-095	4	ϕ6.6	ϕ11	4	80	ϕ95	$\phi16^{+0.02}_{-0}$	8	48	8	5	$\phi45^{+0}_{-0.02}$	ϕ95	4	M8	80	5°	-
LA6-130-099	4	ϕ6.6	ϕ11	4	85	ϕ99	$\phi16^{+0.02}_{-0}$	8	48	8	5	$\phi45^{+0}_{-0.02}$	ϕ99	4	M8	85	5°	-
LA6-140-108	4	ϕ9	ϕ14	5	88	ϕ108	$\phi16^{+0.02}_{-0}$	10	52	10	5	$\phi45^{+0}_{-0.02}$	ϕ108	4	M10	88	-5°	-
LA6-150-130	6	ϕ9	ϕ14	5	114	ϕ130	$\phi16^{+0.02}_{-0}$	18	67	18	14	$\phi55^{+0}_{-0.02}$	ϕ130	6	M10	114	57.5°	-



Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
S4D-070-065-02																	
S4D-070-065-04	M6	88.5	ϕ6.6	ϕ11	4	39.5°	ϕ102	$\phi12^{+0.02}_{-0}$	8	51	$\phi12^{+0.02}_{-0}$	ϕ65	ϕ76	–	M5	57.5	62°
S4D-070-065-06																	
S4D-090-078-02																	
S4D-090-078-04	M8	104.5	ϕ9	ϕ14	5	40.5°	ϕ121	$\phi12^{+0.02}_{-0}$	10	53	$\phi12^{+0.02}_{-0}$	ϕ78	ϕ89	–	M6	68	-27°
S4D-090-078-06																	
S4D-110-088-03																	
S4D-110-088-06	M8	114.5	ϕ9	ϕ14	5	40.5°	ϕ131	$\phi12^{+0.02}_{-0}$	11	54.2	$\phi12^{+0.02}_{-0}$	ϕ88	ϕ99	–	M8	74	-27°
S4D-110-088-10																	
S4D-140-108-03																	
S4D-140-108-06	M8	134.5	ϕ9	ϕ14	5	40.5°	ϕ151	$\phi16^{+0.02}_{-0}$	11	57.55	$\phi16^{+0.02}_{-0}$	ϕ108	ϕ119	–	M8	91	-27°
S4D-140-108-10																	
S4D-150-130-04																	
S4D-150-130-07	M8	155	ϕ9	ϕ14	6	22.5°	ϕ171	$\phi16^{+0.02}_{-0}$	12	59.7	$\phi16^{+0.02}_{-0}$	ϕ130	ϕ141	–	M8	112	-22.5°
S4D-150-130-12																	



Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
SS4D-070-065-02																	
SS4D-070-065-04	M6	57.5	–	–	–	–	ϕ78	$\phi12^{+0.02}_{-0}$	8	51	$\phi12^{+0.02}_{-0}$	ϕ65	ϕ76	–	M5	57.5	62°
SS4D-070-065-06																	
SS4D-090-078-02																	
SS4D-090-078-04	M8	68	–	–	–	–	ϕ91	$\phi12^{+0.02}_{-0}$	10	53	$\phi12^{+0.02}_{-0}$	ϕ78	ϕ89	–	M6	68	-27°
SS4D-090-078-06																	
SS4D-110-088-03																	
SS4D-110-088-06	M8	74	–	–	–	–	ϕ101	$\phi12^{+0.02}_{-0}$	11	54.2	$\phi12^{+0.02}_{-0}$	ϕ88	ϕ99	–	M8	74	-27°
SS4D-110-088-10																	
SS4D-140-108-03																	
SS4D-140-108-06	M8	91	–	–	–	–	ϕ121	$\phi16^{+0.02}_{-0}$	11	57.55	$\phi16^{+0.02}_{-0}$	ϕ108	ϕ119	–	M8	91	-27°
SS4D-140-108-10																	
SS4D-150-130-04																	
SS4D-150-130-07	M8	112	–	–	–	–	ϕ143	$\phi16^{+0.02}_{-0}$	12	59.7	$\phi16^{+0.02}_{-0}$	ϕ130	ϕ141	–	M8	112	-22.5°
SS4D-150-130-12																	



B Series
(press-fitting, flange)

Model	Rated capacity *1 [N]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2				Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]	
						Compression	Tension			
B6-040-048	6.0	40	14.7	±2	±7.7	625.9	143.2	9.8	2.4	0.6
B6-050-054	7.6	50	19.6	±2	±7.3	1182.1	143.2	11.8	3.0	0.9
B6-060-060	8.5	60	19.6	±2	±6.0	1182.1	143.2	11.8	3.0	1.0
B6-070-065	15.0	70	26.5	±2	±6.6	1575.5	191.3	11.8	4.2	1.1
B6-080-070	25.0	80	26.5	±2	±6.2	1575.5	191.3	11.8	4.2	1.2
B6-090-078	25.0	90	37.3	±2	±5.5	1218.4	225.6	12.8	6.1	1.8
B6-100-084	40.0	100	37.3	±2	±5.0	1218.4	225.6	12.8	6.1	2.0
B6-110-088	40.0	110	38.3	±2	±4.6	1218.4	225.6	12.8	7.0	2.2
B6-120-095	45.0	120	38.3	±2	±5.1	1218.4	225.6	12.8	7.0	2.4
B6-130-099	50.0	130	38.3	±2	±5.1	1218.4	225.6	12.8	7.0	2.6
B6-140-108	55.0	140	78.5	±2	±4.8	1842.3	408.1	14.7	7.7	3.2
B6-150-130	60.0	150	78.5	±2	±4.2	1842.3	408.1	14.7	7.7	4.7

BS Series
(press fit, flangeless type)

Model	Rated capacity *1 [N]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2				Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]	
						Compression	Tension			
BS6-040-048	6.0	40	14.7	±2	±7.7	625.9	143.2	9.8	2.4	0.5
BS6-050-054	7.6	50	19.6	±2	±7.3	1182.1	143.2	11.8	3.0	0.7
BS6-060-060	8.5	60	19.6	±2	±6.0	1182.1	143.2	11.8	3.0	0.8
BS6-070-065	15.0	70	26.5	±2	±6.6	1575.5	191.3	11.8	4.2	0.9
BS6-080-070	25.0	80	26.5	±2	±6.2	1575.5	191.3	11.8	4.2	1.0
BS6-090-078	25.0	90	37.3	±2	±5.5	1218.4	225.6	12.8	6.1	1.5
BS6-100-084	40.0	100	37.3	±2	±5.0	1218.4	225.6	12.8	6.1	1.6
BS6-110-088	40.0	110	38.3	±2	±4.6	1218.4	225.6	12.8	7.0	1.8
BS6-120-095	45.0	120	38.3	±2	±5.1	1218.4	225.6	12.8	7.0	2.0
BS6-130-099	50.0	130	38.3	±2	±5.1	1218.4	225.6	12.8	7.0	2.1
BS6-140-108	55.0	140	78.5	±2	±4.8	1842.3	408.1	14.7	7.7	2.7
BS6-150-130	60.0	150	78.5	±2	±4.2	1842.3	408.1	14.7	7.7	4.2

T Series
(press fit (rotation prevention), flange type)

Model	Rated capacity *1 [kN]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2			Max. allowable torque [N m]	Torque reaction [deg]	Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]			
						Compression	Tension				
T6-040-048	6.0	40	14.7	±2	0	625.9	143.2	9.8	58.9	±0.3	0.7
T6-050-054	7.6	50	19.6	±2	0	1182.1	143.2	11.8	70.6	±0.3	0.9
T6-060-060	8.5	60	19.6	±2	0	1182.1	143.2	11.8	78.5	±0.2	1.1
T6-070-065	15.0	70	26.5	±2	0	1575.5	191.3	11.8	117.7	±0.2	1.2
T6-080-070	25.0	80	26.5	±2	0	1575.5	191.3	11.8	126.5	±0.2	1.4
T6-090-078	25.0	90	37.3	±2	0	1218.4	225.6	12.8	201.1	±0.2	2.0
T6-100-084	40.0	100	37.3	±2	0	1218.4	225.6	12.8	216.8	±0.15	2.3
T6-110-088	40.0	110	37.8	±2	0	1218.4	225.6	12.8	231.5	±0.15	2.4
T6-120-095	45.0	120	37.8	±2	0	1218.4	225.6	12.8	247.2	±0.1	2.6
T6-130-099	50.0	130	37.8	±2	0	1218.4	225.6	12.8	265.9	±0.1	2.7
T6-140-108	55.0	140	78.0	±2	0	1842.3	408.1	14.7	495.4	±0.1	3.8
T6-150-130	60.0	150	78.0	±2	0	1842.3	408.1	14.7	962.4	±0.1	5.2

TS Series
(press fit (rotation prevention), flangeless type)

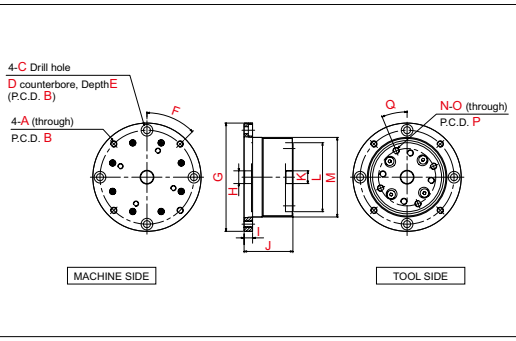
Model	Rated capacity *1 [kN]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2			Max. allowable torque [N m]	Torque reaction [deg]	Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]			
						Compression	Tension				
TS6-040-048	6.0	40	14.7	±2	0	625.9	143.2	9.8	58.8	±0.3	0.5
TS6-050-054	7.6	50	19.6	±2	0	1182.1	143.2	11.8	70.6	±0.3	0.7
TS6-060-060	8.5	60	19.6	±2	0	1182.1	143.2	11.8	78.5	±0.2	0.9
TS6-070-065	15.0	70	26.5	±2	0	1575.5	191.3	11.8	117.7	±0.2	1.0
TS6-080-070	25.0	80	26.5	±2	0	1575.5	191.3	11.8	126.5	±0.2	1.1
TS6-090-078	25.0	90	37.3	±2	0	1218.4	225.6	12.8	201.1	±0.2	1.6
TS6-100-084	40.0	100	37.3	±2	0	1218.4	225.6	12.8	216.8	±0.15	1.9
TS6-110-088	40.0	110	37.8	±2	0	1218.4	225.6	12.8	231.5	±0.15	2.0
TS6-120-095	45.0	120	37.8	±2	0	1218.4	225.6	12.8	247.2	±0.1	2.1
TS6-130-099	50.0	130	37.8	±2	0	1218.4	225.6	12.8	265.9	±0.1	2.3
TS6-140-108	55.0	140	78.0	±2	0	1842.3	408.1	14.7	495.4	±0.1	3.3
TS6-150-130	60.0	150	78.0	±2	0	1842.3	408.1	14.7	962.4	±0.1	4.7

*1 Rated capacity & allowance load: Do contact us if it exceeds the value written in specifications.
*2 Elastic coefficient: Elasticity at Elastic center (P). It is the average value until stopper inside Center Master is activated.
* Center Master corrects max. ±2 mm position error. This value varies depending on size of chamfered surface.

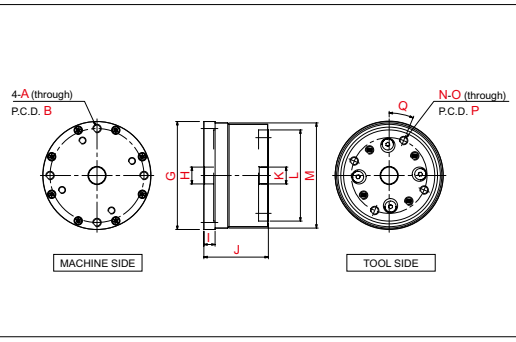
Please avoid using in an environment that will corrode the interior of this product.

Line-up is as of Apr 2024. Contact us for custom orders.

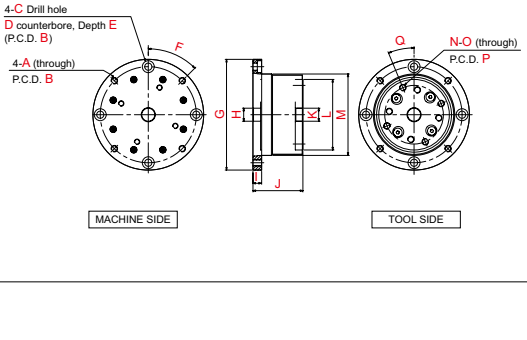
Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
B6-040-048	M6	71.5	ϕ6.6	ϕ11	3	45°	ϕ85	$\phi12^{+0.02}_{-0}$	7	37	$\phi12^{+0.02}_{-0}$	ϕ48	ϕ58	3	M6	36	22.5°
B6-050-054	M6	77.5	ϕ6.6	ϕ11	3	45°	ϕ91	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ54	ϕ64	3	M6	43	22.5°
B6-060-060	M6	83.5	ϕ6.6	ϕ11	3	45°	ϕ97	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ60	ϕ70	3	M6	48	22.5°
B6-070-065	M6	88.5	ϕ6.6	ϕ11	3	45°	ϕ102	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ65	ϕ75	4	M6	54	22.5°
B6-080-070	M6	93.5	ϕ6.6	ϕ11	3	45°	ϕ107	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ70	ϕ80	4	M6	58	22.5°
B6-090-078	M8	104.5	ϕ9.0	ϕ14	4	45°	ϕ121	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ78	ϕ88	4	M8	65	22.5°
B6-100-084	M8	110.5	ϕ9.0	ϕ14	4	45°	ϕ127	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ84	ϕ94	4	M8	70	22.5°
B6-110-088	M8	114.5	ϕ9.0	ϕ14	4	45°	ϕ131	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ88	ϕ98	4	M8	75	22.5°
B6-120-095	M8	121.5	ϕ9.0	ϕ14	4	45°	ϕ138	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ95	ϕ105	4	M8	80	22.5°
B6-130-099	M8	125.5	ϕ9.0	ϕ14	4	45°	ϕ142	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ99	ϕ109	4	M8	86	22.5°
B6-140-108	M8	134.5	ϕ9.0	ϕ14	4	45°	ϕ151	$\phi16^{+0.02}_{-0}$	9	56	$\phi16^{+0.02}_{-0}$	ϕ108	ϕ118	4	M10	88	22.5°
B6-150-130	M8	155.0	ϕ9.0	ϕ14	5	45°	ϕ171	$\phi16^{+0.02}_{-0}$	10	56	$\phi16^{+0.02}_{-0}$	ϕ130	ϕ141	6	M10	114	17.5°



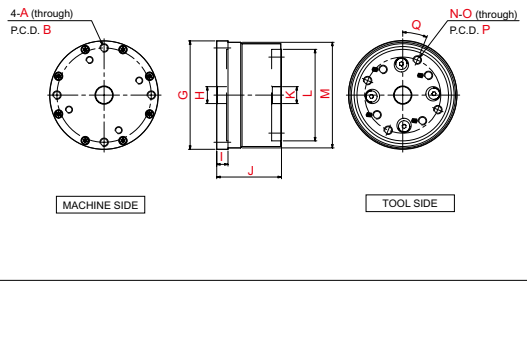
Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
BS6-040-048	M6	50	—	—	—	—	ϕ60	$\phi12^{+0.02}_{-0}$	7	37	$\phi12^{+0.02}_{-0}$	ϕ48	ϕ58	3	M6	36	0°
BS6-050-054	M6	58	—	—	—	—	ϕ66	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ54	ϕ64	3	M6	43	22.5°
BS6-060-060	M6	62	—	—	—	—	ϕ72	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ60	ϕ70	3	M6	48	22.5°
BS6-070-065	M6	67	—	—	—	—	ϕ77	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ65	ϕ75	4	M6	54	22.5°
BS6-080-070	M6	72	—	—	—	—	ϕ82	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ70	ϕ80	4	M6	58	22.5°
BS6-090-078	M8	78	—	—	—	—	ϕ90	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ78	ϕ88	4	M8	65	22.5°
BS6-100-084	M8	84	—	—	—	—	ϕ96	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ84	ϕ94	4	M8	70	22.5°
BS6-110-088	M8	88	—	—	—	—	ϕ100	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ88	ϕ98	4	M8	75	22.5°
BS6-120-095	M8	95	—	—	—	—	ϕ107	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ95	ϕ105	4	M8	80	22.5°
BS6-130-099	M8	99	—	—	—	—	ϕ111	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ99	ϕ109	4	M8	86	22.5°
BS6-140-108	M8	108	—	—	—	—	ϕ120	$\phi16^{+0.02}_{-0}$	9	56	$\phi16^{+0.02}_{-0}$	ϕ108	ϕ118	4	M10	88	22.5°
BS6-150-130	M8	130	—	—	—	—	ϕ143	$\phi16^{+0.02}_{-0}$	10	56	$\phi16^{+0.02}_{-0}$	ϕ130	ϕ141	6	M10	114	-7.5°



Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
T6-040-048	M6	71.5	ϕ6.6	ϕ11	3	45°	ϕ85	$\phi12^{+0.02}_{-0}$	7	37	$\phi12^{+0.02}_{-0}$	ϕ48	ϕ58	3	M6	36	22.5°
T6-050-054	M6	77.5	ϕ6.6	ϕ11	3	45°	ϕ91	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ54	ϕ64	3	M6	43	22.5°
T6-060-060	M6	83.5	ϕ6.6	ϕ11	3	45°	ϕ97	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ60	ϕ70	3	M6	48	22.5°
T6-070-065	M6	88.5	ϕ6.6	ϕ11	3	45°	ϕ102	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ65	ϕ75	4	M6	54	22.5°
T6-080-070	M6	93.5	ϕ6.6	ϕ11	3	45°	ϕ107	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ70	ϕ80	4	M6	58	22.5°
T6-090-078	M8	104.5	ϕ9.0	ϕ14	4	45°	ϕ121	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ78	ϕ88	4	M8	65	22.5°
T6-100-084	M8	110.5	ϕ9.0	ϕ14	4	45°	ϕ127	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ84	ϕ94	4	M8	70	22.5°
T6-110-088	M8	114.5	ϕ9.0	ϕ14	4	45°	ϕ131	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ88	ϕ98	4	M8	75	22.5°
T6-120-095	M8	121.5	ϕ9.0	ϕ14	4	45°	ϕ138	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ95	ϕ105	4	M8	80	22.5°
T6-130-099	M8	125.5	ϕ9.0	ϕ14	4	45°	ϕ142	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ99	ϕ109	4	M8	86	22.5°
T6-140-108	M8	134.5	ϕ9.0	ϕ14	4	45°	ϕ151	$\phi16^{+0.02}_{-0}$	9	56	$\phi16^{+0.02}_{-0}$	ϕ108	ϕ118	4	M10	88	22.5°
T6-150-130	M8	155.0	ϕ9.0	ϕ14	5	45°	ϕ171	$\phi16^{+0.02}_{-0}$	10	56	$\phi16^{+0.02}_{-0}$	ϕ130	ϕ141	6	M10	114	17.5°



Model	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
TS6-040-048	M6	50	—	—	—	—	ϕ60	$\phi12^{+0.02}_{-0}$	7	37	$\phi12^{+0.02}_{-0}$	ϕ48	ϕ58	3	M6	36	0°
TS6-050-054	M6	58	—	—	—	—	ϕ66	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ54	ϕ64	3	M6	43	22.5°
TS6-060-060	M6	62	—	—	—	—	ϕ72	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ60	ϕ70	3	M6	48	22.5°
TS6-070-065	M6	67	—	—	—	—	ϕ77	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ65	ϕ75	4	M6	54	22.5°
TS6-080-070	M6	72	—	—	—	—	ϕ82	$\phi12^{+0.02}_{-0}$	7	46	$\phi12^{+0.02}_{-0}$	ϕ70	ϕ80	4	M6	58	22.5°
TS6-090-078	M8	78	—	—	—	—	ϕ90	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ78	ϕ88	4	M8	65	22.5°
TS6-100-084	M8	84	—	—	—	—	ϕ96	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ84	ϕ94	4	M8	70	22.5°
TS6-110-088	M8	88	—	—	—	—	ϕ100	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ88	ϕ98	4	M8	75	22.5°
TS6-120-095	M8	95	—	—	—	—	ϕ107	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ95	ϕ105	4	M8	80	22.5°
TS6-130-099	M8	99	—	—	—	—	ϕ111	$\phi16^{+0.02}_{-0}$	9	52	$\phi16^{+0.02}_{-0}$	ϕ99	ϕ109	4	M8	86	22.5°
TS6-140-108	M8	108	—	—	—	—	ϕ120	$\phi16^{+0.02}_{-0}$	9	56	$\phi16^{+0.02}_{-0}$	ϕ108	ϕ118	4	M10	88	22.5°
TS6-150-130	M8	130	—	—	—	—	ϕ143	$\phi16^{+0.02}_{-0}$	10	56	$\phi16^{+0.02}_{-0}$	ϕ130	ϕ141	6	M10	114	-7.5°



BH Series
(press fit horizontally, flange type)

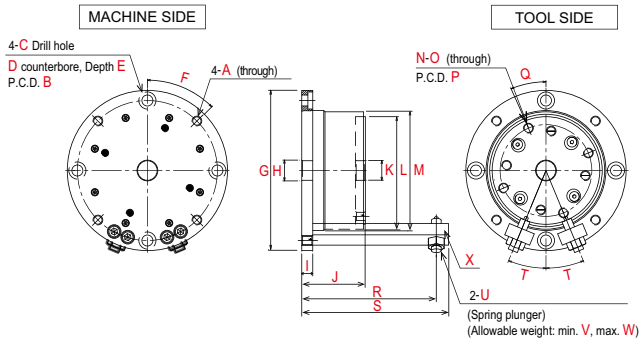
Model	Rated capacity *1 [N]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2				Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]	Torsion error [N m/rad]	
						Compression	Tension			
BH6-040-048	6.0	40	14.7	±2	±7.7	625.9	143.2	9.8	2.4	1.0
BH6-050-054	7.6	50	19.6	±2	±7.3	1182.1	143.2	11.8	3.0	1.3
BH6-060-060	8.5	60	19.6	±2	±6.0	1182.1	143.2	11.8	3.0	1.5
BH6-070-065	15.0	70	26.5	±2	±6.6	1575.5	191.3	11.8	4.2	1.8
BH6-080-070	25.0	80	26.5	±2	±6.2	1575.5	191.3	11.8	4.2	2.0
BH6-090-078	25.0	90	37.3	±2	±5.5	1218.4	225.6	12.8	6.1	2.5
BH6-100-084	40.0	100	37.3	±2	±5.0	1218.4	225.6	12.8	6.1	2.8
BH6-110-088	40.0	110	38.3	±2	±4.6	1218.4	225.6	12.8	7.0	3.5
BH6-120-095	45.0	120	38.3	±2	±5.1	1218.4	225.6	12.8	7.0	3.8
BH6-130-099	50.0	130	38.3	±2	±5.1	1218.4	225.6	12.8	7.0	4.0
BH6-140-108	55.0	140	78.5	±2	±4.8	1842.3	408.1	14.7	7.7	5.0
BH6-150-130	60.0	150	78.5	±2	±4.2	1842.3	408.1	14.7	7.7	6.5

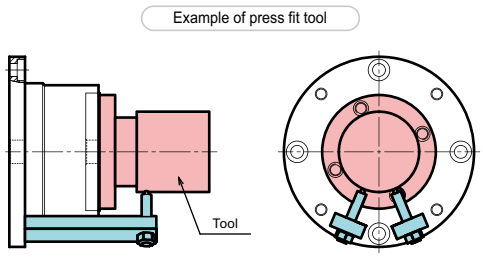
Model	Dimensions [mm]																							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
BH6-040-048	M6	71.5	ϕ6.6	ϕ11	3	45°	ϕ85	$\phi 12^{+0.02}_{-0}$	7	37	$\phi 12^{+0.02}_{-0}$	ϕ48	ϕ58	3	M6	36	22.5°	45	50	22.5°	M5	0.5	2.0	15x43x6
BH6-050-054	M6	77.5	ϕ6.6	ϕ11	3	45°	ϕ91	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ54	ϕ64	3	M6	43	22.5°	55	60	22.5°	M5	0.5	2.0	15x53x6
BH6-060-060	M6	83.5	ϕ6.6	ϕ11	3	45°	ϕ97	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ60	ϕ70	3	M6	48	22.5°	60	65	22.5°	M5	0.5	2.0	17x58x7
BH6-070-065	M6	88.5	ϕ6.6	ϕ11	3	45°	ϕ102	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ65	ϕ75	4	M6	54	22.5°	70	75	22.5°	M6	0.8	3.0	17x68x7
BH6-080-070	M6	93.5	ϕ6.6	ϕ11	3	45°	ϕ107	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ70	ϕ80	4	M6	58	22.5°	80	85	22.5°	M6	0.8	3.0	17x78x7
BH6-090-078	M8	104.5	ϕ9.0	ϕ14	4	45°	ϕ121	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ78	ϕ88	4	M8	65	22.5°	90	95	22.5°	M6	0.8	3.0	20x86x8
BH6-100-084	M8	110.5	ϕ9.0	ϕ14	4	45°	ϕ127	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ84	ϕ94	4	M8	70	22.5°	100	105	22.5°	M6	0.8	3.0	22x96x8
BH6-110-088	M8	114.5	ϕ9.0	ϕ14	4	45°	ϕ131	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ88	ϕ98	4	M8	75	22.5°	110	120	22.5°	M8	3.6	4.2	22x111x10
BH6-120-095	M8	121.5	ϕ9.0	ϕ14	4	45°	ϕ138	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ95	ϕ105	4	M8	80	22.5°	120	130	22.5°	M8	3.6	4.2	25x121x10
BH6-130-099	M8	125.5	ϕ9.0	ϕ14	4	45°	ϕ142	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ99	ϕ109	4	M8	86	22.5°	130	140	22.5°	M8	3.6	4.2	25x131x10
BH6-140-108	M8	134.5	ϕ9.0	ϕ14	4	45°	ϕ151	$\phi 16^{+0.02}_{-0}$	9	56	$\phi 16^{+0.02}_{-0}$	ϕ108	ϕ118	4	M10	88	22.5°	140	150	22.5°	M10	1.6	6.3	28x141x14
BH6-150-130	M8	155.0	ϕ9.0	ϕ14	5	45°	ϕ171	$\phi 16^{+0.02}_{-0}$	10	56	$\phi 16^{+0.02}_{-0}$	ϕ130	ϕ141	6	M10	114	17.5°	150	160	22.5°	M10	1.6	6.3	28x150x12

TH Series
(press fit horizontally
(rotation prevention), flange type)

Model	Rated capacity *1 [kN]	Elastic center distance P [mm]	Allowable payload *1 [N]	Error correction range		Elastic coefficient *2			Max. allowable torque [N m]	Torque reaction [deg]	Product weight [kg]
				Position error [mm]	Torsion error [deg]	Axial direction [N/mm]		Horizontal direction [N/mm]			
						Compression	Tension				
TH6-040-048	6.0	40	14.7	±2	0	625.9	143.2	9.8	58.9	±0.3	1.1
TH6-050-054	7.6	50	19.6	±2	0	1182.1	143.2	11.8	70.6	±0.3	1.3
TH6-060-060	8.5	60	19.6	±2	0	1182.1	143.2	11.8	78.5	±0.2	1.6
TH6-070-065	15.0	70	26.5	±2	0	1575.5	191.3	11.8	117.7	±0.2	1.9
TH6-080-070	25.0	80	26.5	±2	0	1575.5	191.3	11.8	126.5	±0.2	2.2
TH6-090-078	25.0	90	37.3	±2	0	1218.4	225.6	12.8	201.1	±0.2	2.7
TH6-100-084	40.0	100	37.3	±2	0	1218.4	225.6	12.8	216.8	±0.15	3.1
TH6-110-088	40.0	110	38.3	±2	0	1218.4	225.6	12.8	231.5	±0.15	3.7
TH6-120-095	45.0	120	38.3	±2	0	1218.4	225.6	12.8	247.2	±0.1	4.0
TH6-130-099	50.0	130	38.3	±2	0	1218.4	225.6	12.8	265.9	±0.1	4.1
TH6-140-108	55.0	140	78.5	±2	0	1842.3	408.1	14.7	495.4	±0.1	5.6
TH6-150-130	60.0	150	78.5	±2	0	1842.3	408.1	14.7	962.4	±0.1	7.0

Model	Dimensions [mm]																							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
TH6-040-048	M6	71.5	ϕ6.6	ϕ11	3	45°	ϕ85	$\phi 12^{+0.02}_{-0}$	7	37	$\phi 12^{+0.02}_{-0}$	ϕ48	ϕ58	3	M6	36	22.5°	45	50	22.5°	M5	0.5	2.0	15x43x6
TH6-050-054	M6	77.5	ϕ6.6	ϕ11	3	45°	ϕ91	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ54	ϕ64	3	M6	43	22.5°	55	60	22.5°	M5	0.5	2.0	15x53x6
TH6-060-060	M6	83.5	ϕ6.6	ϕ11	3	45°	ϕ97	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ60	ϕ70	3	M6	48	22.5°	60	65	22.5°	M5	0.5	2.0	17x58x7
TH6-070-065	M6	88.5	ϕ6.6	ϕ11	3	45°	ϕ102	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ65	ϕ75	4	M6	54	22.5°	70	75	22.5°	M6	0.8	3.0	17x68x7
TH6-080-070	M6	93.5	ϕ6.6	ϕ11	3	45°	ϕ107	$\phi 12^{+0.02}_{-0}$	7	46	$\phi 12^{+0.02}_{-0}$	ϕ70	ϕ80	4	M6	58	22.5°	80	85	22.5°	M6	0.8	3.0	17x78x7
TH6-090-078	M8	104.5	ϕ9.0	ϕ14	4	45°	ϕ121	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ78	ϕ88	4	M8	65	22.5°	90	95	22.5°	M6	0.8	3.0	20x86x8
TH6-100-084	M8	110.5	ϕ9.0	ϕ14	4	45°	ϕ127	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ84	ϕ94	4	M8	70	22.5°	100	105	22.5°	M6	0.8	3.0	22x96x8
TH6-110-088	M8	114.5	ϕ9.0	ϕ14	4	45°	ϕ131	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ88	ϕ98	4	M8	75	22.5°	110	120	22.5°	M8	3.6	4.2	22x111x10
TH6-120-095	M8	121.5	ϕ9.0	ϕ14	4	45°	ϕ138	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ95	ϕ105	4	M8	80	22.5°	120	130	22.5°	M8	3.6	4.2	25x121x10
TH6-130-099	M8	125.5	ϕ9.0	ϕ14	4	45°	ϕ142	$\phi 16^{+0.02}_{-0}$	9	52	$\phi 16^{+0.02}_{-0}$	ϕ99	ϕ109	4	M8	86	22.5°	130	140	22.5°	M8	3.6	4.2	25x131x10
TH6-140-108	M8	134.5	ϕ9.0	ϕ14	4	45°	ϕ151	$\phi 16^{+0.02}_{-0}$	9	56	$\phi 16^{+0.02}_{-0}$	ϕ108	ϕ118	4	M10	88	22.5°	140	150	22.5°	M10	1.6	6.3	28x141x14
TH6-150-130	M8	155.0	ϕ9.0	ϕ14	5	45°	ϕ171	$\phi 16^{+0.02}_{-0}$	10	56	$\phi 16^{+0.02}_{-0}$	ϕ130	ϕ141	6	M10	114	17.5°	150	160	22.5°	M10	1.6	6.3	28x150x12





*1 Rated capacity & allowance load: Do contact us if it exceeds the value written in specifications.
*2 Elastic coefficient: Elasticity at Elastic center (P). It is the average value until stopper inside Center Master is activated.
* Center Master corrects max. ±2 mm position error. This value varies depending on size of chamfered surface.

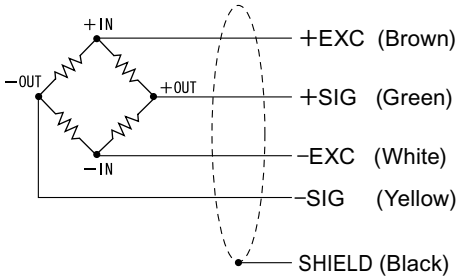
Please avoid using in an environment that will corrode the interior of this product.

Line-up is as of Apr 2024. Contact us for custom orders.

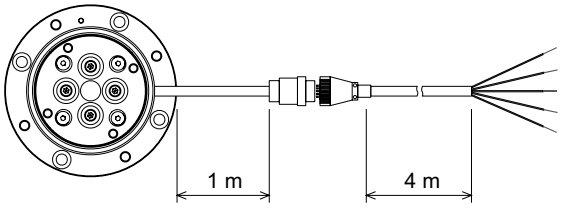
S and SS series - Load cell specifications

Rated capacity	Refer to mechanical specifications on the data sheet enclosed with the product
Rated output	Refer to electrical specifications on the data sheet enclosed with the product
Non-linearity	1% R.O.
Hysteresis	0.5% R.O.
Repeatability	0.5% R.O.
Creep	0.5% R.O./min.
Zero balance	±1% R.O.
Compensated temperature	0 to +40℃
Operation temperature	0 to +70℃
Temperature effect on zero	±0.1% R.O./10℃
Temperature effect on span	±0.1% R.O./10℃
Input resistance	700±10 Ω
Output resistance	700±10 Ω
Insulation resistance	10 V
Excitation voltage capacity	15 V
Insulation resistance (DC 50 V)	2000 MΩ or more
Maximum safe overload	150% R.C.
Maximum marginal overload	200% R.C.
Cable length (4-conductor color shield)	Approx. 5 m

● Wiring diagram



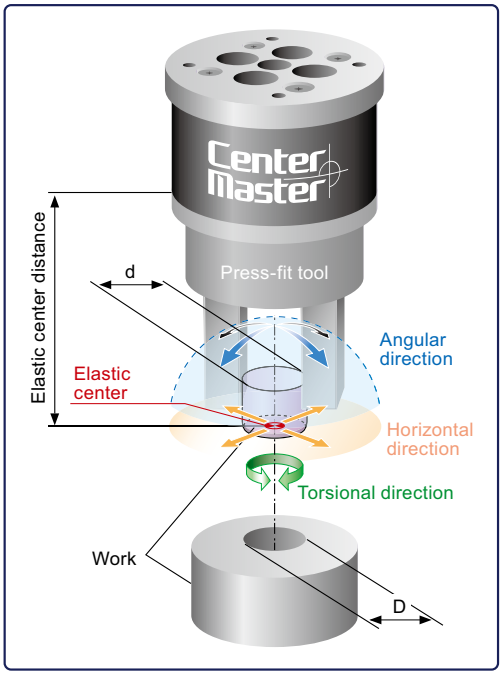
● 4 conductor shield cable Approx. 5 m



Structure of product code

Model: XXXX - YYY - ZZZ - WW

- WW: Rated capacity (S and SS series only)
- ZZZ: Outer diameter of tool mounting plate
- YYY: Elastic center distance
- XXXX:
  - A*--: For insertion
  - LA*-: For insertion (Airlock type)
  - S**-: For press-fitting (Integrated load cell, with flange)
  - SS**: For press-fitting (Integrated load cell, without flange)
  - B*--: For press-fitting (with flange)
  - BS*-: For press-fitting (without flange)
  - T*--: For press-fitting (Rotation prevention, with flange)
  - TS*-: For press-fitting (Rotation prevention, without flange)
  - BH*-: For press fit horizontally (with flange)
  - TH*-: For press fit horizontally (Rotation prevention, with flange)



- Determine (d<D) for insertion and (d>D) for press-fitting
- Check the allowable weight of assembly (press-fit) tool
- Check the maximum applied pressure, in case of press-fitting
- Check the elastic center distance
- Check the error correction range

Elastic center distance	In general, an error range within ±5 mm for the elastic center distance is recommended. The correction function of the center error may weaken if the error range is large.
Allowable weight for assembly (press-fit) tool	The maximum value that can be used by mounting to the center master with the combined value of weights of the press-fit tool and the work. When exceeded, the correction function of center error may not operate and the life may be significantly reduced.
Outer diameter of tool mounting plate	Set the outer diameter of the work at 90% or less than the outer diameter of the mounting plate. The correction function of the center error may weaken if the outer diameter of the work is large.