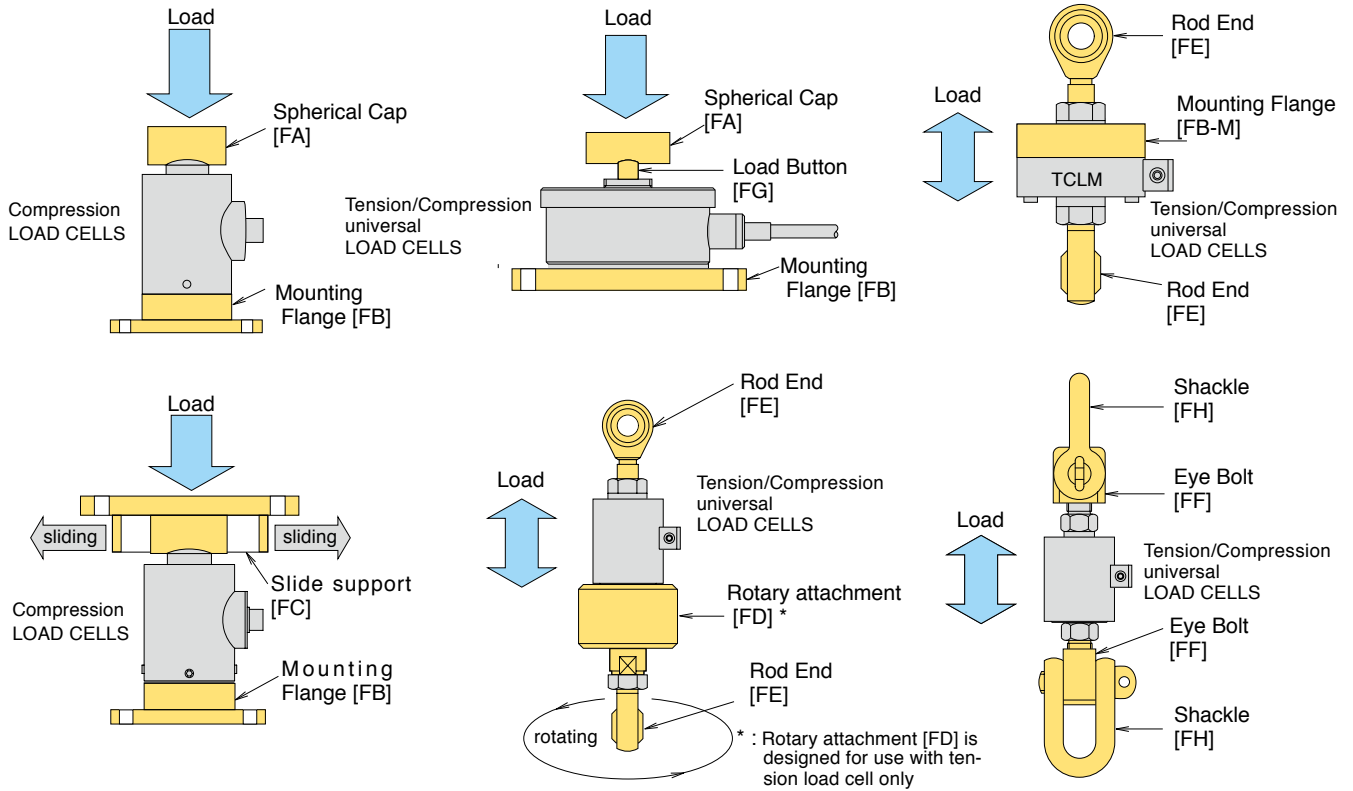


LOAD CELLS

LOAD CELL FITTING ACCESSORY



Compression Load Cells	Fitting accessory		
	Spherical Cap FA	Mounting Flange FB	Slide Support FC
CLB-50NA ~ 200NA	FA-20	FB-002-65	-
CLA-500NA ~ 20KNA	FA-20	FB-2-44	FC-2-20
CLP-10, -20KNB	FA-60	FB-10-30	FC-5-60
-30, -50KNB (-D)**	FA-60	FB-10-30	FC-5-60
-100KNB (-D)**	FA-80	FB-10-30	FC-20-80
-200KNB (-D)**	FA-100	FB-20-40	FC-20-100
-300, -500KNB (-D)**	FA-140	FB-50-60	FC-50-140
-1MNB (-D)**	FA-160	FB-100-80	-
-2MNB (-D)**	FA-250	FB-200-100	-
-3MNB (-D)**	FA-360	FB-300-120	-
-5MNB (-D)**	FA-360B	FB-500-140	-
-10MNB	FA-720	FB-1000-200	-
CLG-10, -20KNB	FA-60	FB-2-70	FC-5-60
-50KNB	FA-60	FB-5-82	FC-5-60
-100KNB	FA-80	FB-10-90	FC-20-80
-200KNB	FA-100	FB-20-100	FC-20-100
CLM-10KNB ~ 50KNB	FA-60	FB-5-80	FC-5-60
-100KNB	FA-80	FB-10-90	FC-20-80
-200KNB	FA-100	FB-20-120	FC-20-100
-500KNB	FA-140	FB-50-150	FC-50-140
CLU-10KNA ~ 50KNA	FA-60	FB-5-54	FC-5-60
-100KNA (-D)**	FA-80	FB-10-60	FC-20-80
-200KNA (-D)**	FA-100	FB-20-70	FC-20-100
-500KNA (-D)**	FA-140	FB-50-100	FC-50-140
-1MNA (-D)**	FA-160	FB-100-104	-
CLR-500NAH ~ 200KNAH	FA-20	FB-2-44	FC-2-20
-50KNAH	FA-60	FB-5-82	FC-5-60
-100KNAH	FA-80	FB-10-90	FC-20-80
-200KNAH	FA-100	FB-20-100	FC-20-100

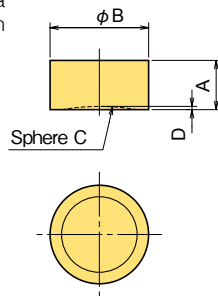
** : -D in the parenthesis is a suffix code for two isolated I/O ports type load cell at option

Tension/Compression Universal Load Cells	Fitting accessory							
	Spherical Cap FA	Mounting Flange FB	Slide Support FC	Rotary Attach- ment FD	Rod End FE	Eye Bolt FF	Load Button FG	Shackle FH
TCLN-500NA ~ 2KNA	-	-	-	-	FE-002C/002D	-	-	-
-5KNA	-	-	-	-	FE-05C/05D	-	-	-
TCLB-50NA ~ 200NA	FA-20	FB-002-65	-	FD-002	FE-002A	-	FG-002	-
TCLA-500NB ~ 5KNB	-	-	-	FD-05B	FE-05A/-05B	-	-	-
TCLA-10KNB	-	-	-	FD-1B	FE-1A/-1B	-	-	-
TCLA-20KNB	-	-	-	FD-2B	FE-2A/-2B	-	-	-
TCLP-10KNB	FA-60	-	-	FD-1A	FE-1A	FF-1	FG-1	FH-1B
-20KNB (-D)**	FA-80	-	-	FD-2A	FE-2A	FF-2	FG-2	FH-2B
-30, -50KNB (-D)**	FA-100	-	-	FD-5	FE-5A	FF-5	FG-5	FH-5B
-100KNB (-D)**	FA-140	-	-	FD-10	FE-10A	FF-10	FG-10	FH-10B
-200KNB (-D)**	FA-140	-	-	FD-20	FE-20A	FF-20B	FG-20	FH-20B
TCLK-5KNA	FA-20	-	-	-	FE-05C	-	FG-05B	-
-10KNA	FA-60	-	-	-	FE-1A	-	FG-1	-
-20KNA	FA-80	-	-	-	FE-2A	-	FG-2	-
-50KNA	FA-100	-	-	-	FE-5A	-	FG-5	-
TCLZ-10NA ~ 200NA	FA-20	-	-	FD-002	FE-002A	-	FG-002	-
-500NA ~ 5KNA	FA-20	-	-	FD-05A	FE-05A	FF-1	FG-05	FH-1B
-10KNA	FA-20	-	-	FD-1A	FE-1A	FF-1	FG-05	FH-1B
TCLU-10KNA	FA-60	-	-	FD-1A	FE-1A	FF-1	FG-1	FH-1B
-20KNA	FA-80	-	-	FD-2A	FE-2A	FF-2	FG-2	FH-2B
-50KNA	FA-100	-	-	FD-5	FE-5A	FF-5	FG-5	FH-5B
-100KNA (-D)**	FA-140	-	-	FD-10	FE-10A	FF-10	FG-10	FH-10B
-200KNA (-D)**	FA-140	-	-	FD-20	FE-20A	FF-20B	FG-20	FH-20B
TCLM-10KNB	FA-60	FB-1M	-	FD-1A	FE-1A	FF-1	FG-1	FH-1B
-20KNB	FA-80	FB-2M	-	FD-2A	FE-2A	FF-2	FG-2	FH-2B
-50KNB	FA-100	FB-5M	-	FD-5	FE-5A	FF-5	FG-5	FH-5B
-100KNB	FA-140	FB-10M	-	FD-10	FE-10A	FF-10	FG-10	FH-10B
-200KNB	FA-140	FB-20M	-	FD-20	FE-20A	FF-20B	FG-20	FH-20B
Tension Load Cell	Spherical Cap FA	Mounting Flange FB	Slide Support FC	Rotary Attach- ment FD	Rod End FE	Eye Bolt FF	Load Button FG	Shackle FH
TLP-10KNB	-	-	-	-	-	-	-	FH-1B
-20KNB (-D)**	-	-	-	-	-	-	-	FH-2B
-30KNB (-D)**	-	-	-	-	-	-	-	FH-3B
-50KNB (-D)**	-	-	-	-	-	-	-	FH-5B
-100KNB (-D)**	-	-	-	-	-	-	-	FH-10B
-200KNB (-D)**	-	-	-	-	-	-	-	FH-20B
-300KNB (-D)**	-	-	-	-	-	-	-	FH-30B
-500KNB (-D)**	-	-	-	-	-	-	-	FH-50B
-1MNB (-D)**	-	-	-	-	-	-	-	FH-100B
TLJ-10KNA ~ 50KNA	-	-	-	-	FE-5C/-5D	-	-	-
-100KNA	-	-	-	-	FE-5A/-5B	-	-	-

** : -D in the parenthesis is a suffix code for two I/O ports type load cell at option

FA SPHERICAL CAP

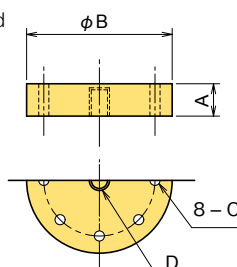
The FA Spherical Cap is mounted to the top of a compression load cell for accurate transmission of compression loads.



	A	φB	C	D	Weight
FA-20	15	38	20	2	0.15kg
FA-60	25	58	60	1	0.5kg
FA-80	25	58	80	1	0.5kg
FA-100	30	58	100	1.5	0.6kg
FA-140	40	78	140	3.5	1.5kg
FA-160	40	98	160	4	2.5kg
FA-250	45	128	250	5	4kg
FA-360	50	148	360	6	6kg
FA-360B	60	196	360	10	13kg
FA-720	110	280	720	10	54kg

FB-M MOUNTING FLANGE

The FB-M Mounting Flange is used to mount Rod End and Eye Bolt to TCLM-NB type load cell.



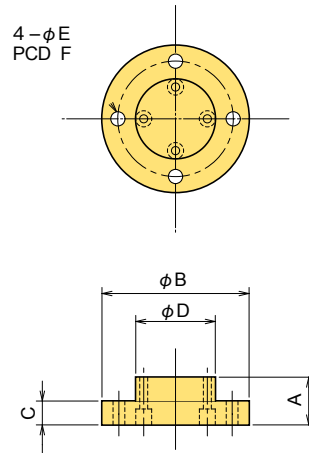
	A	φB	C	D	Weight
FB-1M	20	118	M8 PCD90	M12 x 1.75 DP15	1.5kg
FB-2M	25	118	M8 PCD90	M18 x 1.5 DP20	2kg
FB-5M	35	127	M8 PCD100	M24 x 2 DP30	3kg
FB-10M	50	187	M12 DP15 PCD150	M39 x 2 DP45	10kg
FB-20M	70	226	M16 DP25 PCD185	M50 x 2 DP60	21kg

LOAD CELLS

LOAD CELL FITTING ACCESSORY

FB MOUNTING FLANGE

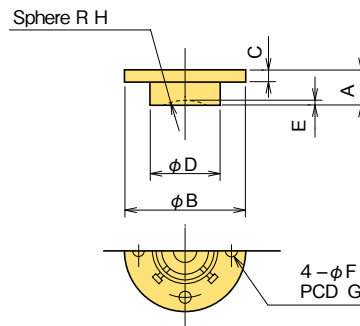
The FB Mounting Flange is used when mounting area for a compression load cell is unstable or when load cell can not be secured from the bottom.



	A	ϕB	C	ϕD	ϕE	F	Weight
FB-002-65	12	108	9	75	7	94	0.7kg
FB-2-44	20	98	10	54	9	76	0.7kg
FB-2-70	12	124	9	84	9	108	0.95kg
FB-5-54	25	138	10	92	11	114	2kg
FB-5-80	25	148	13	98	11	124	2.5kg
FB-5-82	20	150	14	102	11	130	2kg
FB-10-30	25	108	10	60	11	84	0.9kg
FB-10-60	30	158	10	108	11	134	3kg
FB-10-90	25	168	13	118	11	144	3kg
FB-20-40	30	118	10	70	11	94	1.5kg
FB-20-70	30	168	10	118	11	142	3kg
FB-20-100	30	178	15	127	11	158	4kg
FB-20-120	35	208	13	158	11	184	7kg
FB-50-60	40	138	15	90	11	114	3kg
FB-50-100	40	218	15	160	14	190	8kg
FB-50-150	40	248	15	187	14	220	11kg
FB-100-80	50	158	20	110	14	134	5kg
FB-100-104	50	228	20	170	14	200	11kg
FB-200-100	60	208	25	140	18	172	10kg
FB-300-120	60	228	25	160	18	192	13kg
FB-500-140	70	277	30	200	22	236	22kg
FB-1000-200	100	400	40	295	26	350	73kg

FC SLIDE SUPPORT

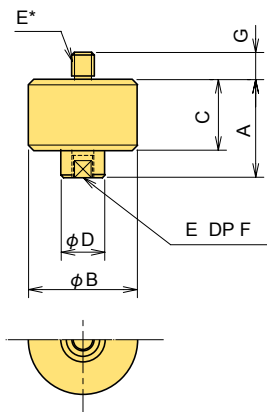
The FC Slide Support can be used to eliminate lateral load from compression load cell for high precision measurements.



	A	ϕB	C	ϕD	E	ϕF	G	H	Sliding area	Weight
FC-2-20	27	98	10	56	2	9	76	20	$\pm 6\text{mm}$	0.75kg
FC-5-60	40	128	13	84	1	11	106	60	$\pm 8\text{mm}$	2kg
FC-20-80	45	168	13	118	1	11	140	80	$\pm 10\text{mm}$	4kg
FC-20-100	45	168	13	118	1.5	11	140	100	$\pm 10\text{mm}$	4kg
FC-50-140	55	218	18	164	3.5	13	190	140	$\pm 15\text{mm}$	10kg

FD ROTARY ATTACHMENT

The FD Rotary Attachment ensures smooth load transmission by eliminating torsion during tension load measurements.

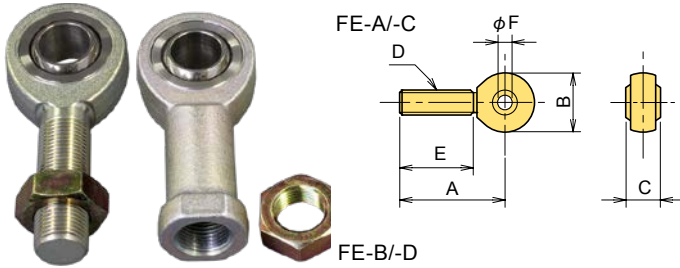


	A	ϕB	C	ϕD	E^*	F	G	Weight
FD-002	54	58	39	20	M 6x1	12	7	0.8kg
FD-05A	54	58	39	20	M12x1.75	15	13	0.8kg
FD-05B	54	58	39	20	M12x1.75	15	15	0.8kg
FD-1A	54	88	39	20	M12x1.75	15	13	2kg
FD-1B	54	88	39	20	M12x1.75	15	15	2kg
FD-2A	67	100	50	26	M18x1.5	20	18	3kg
FD-2B	67	100	50	26	M18x1.5	20	20	3kg
FD-5	87	100	71	32	M24x2	30	28	4kg
FD-10	112	138	93	50	M39x2	45	43	11kg
FD-20	150	176	122	65	M50x2	65	60	23kg

E^* : FD-05B M12xP1.75 DP15 internal thread
 FD-1B M12xP1.75 DP15 internal thread
 FD-2B M18xP1.5 DP20 internal thread

FE ROD END

The FE Rod End is ideal when a tension/compression universal load cell is used to measure tension loads on machinery and structures.

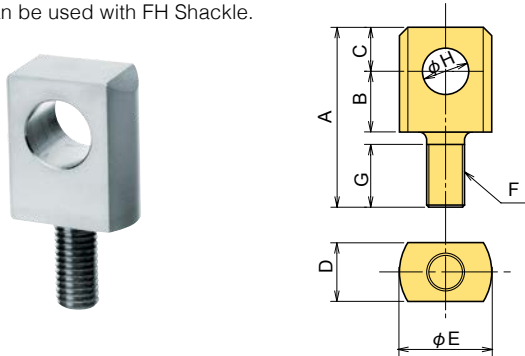


Please note that a combination use is not available with the FH Shackle below.

	A	B	C	D	E	ϕF	Weight
FE-002A	36	18	9	M 6x1	22	6	0.02kg
FE-002C	39.5	20.5	11	M 5x0.8	22	5	0.035kg
FE-002D	35	20.5	11	M 5x0.8	19	5	0.04kg
FE-05A	54	30	16	M12x1.75	33	12	0.1kg
FE-05B	50	30	16	M12x1.75	24	12	0.1kg
FE-05C	46	23	11	M 8x1.25	29	8	0.04kg
FE-05D	41	23	11	M 8x1.25	22	8	0.05kg
FE-1A	62	34	16	M12x1.75	37	12	0.15kg
FE-1B	57	34	16	M12x1.75	32	12	0.15kg
FE-2A	79.5	43	20	M18x1.5	46	18	0.3kg
FE-2B	74	43	20	M18x1.5	40	18	0.3kg
FE-5A	105	70	35	M24x2	59	25	1kg
FE-5B	105	70	35	M24x2	54	25	1.2kg
FE-5C	83	45	22	M20x1.5	50	20	0.3kg
FE-5D	76	45	22	M20x1.5	41	20	0.33kg
FE-10A	173	100	43	M39x2	80	40	4kg
FE-20A	231	120	53	M50x2	105	50	7kg

FF EYE BOLT

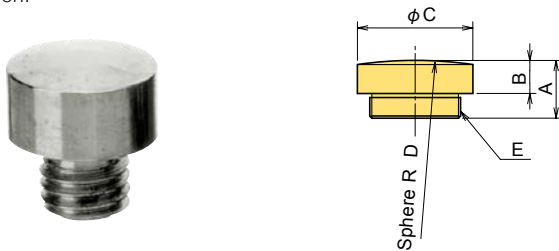
The FF Eye Bolt is used when a tension/compression universal load cell is used to measure tension. It can be used with FH Shackle.



	A	B	C	D	ϕE	F	G	ϕH	Weight
FF-1	65	25	15	22	35	M12x1.75	21	18	0.2kg
FF-2	86	30	21	27	45	M18x1.5	30	22	0.5kg
FF-5	128	45	33	43	70	M24x2	44	37	1.5kg
FF-10	166	55	46	58	95	M39x2	57	49	4kg
FF-20B	207	53	57	68	100	M50x2	85	54	6kg

FG LOAD BUTTON

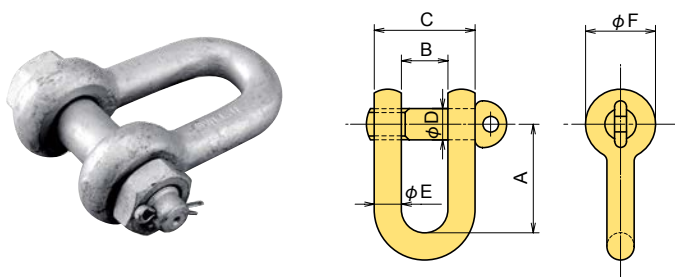
The FG Load Button is used when a tension/compression universal load cell is used to measure compression.



	A	B	ϕC	D	E	Weight
FG-002	10	6	9	20	M 6x1	4g
FG-05B	15	8	14	20	M 8x1.25	12g
FG-05	18	10	16	20	M12x1.75	20g
FG-1	20	10	20	60	M12x1.75	30g
FG-2	20	10	26	80	M18x1.5	55g
FG-5	22	12	32	100	M24x2	100g
FG-10	25	15	50	140	M39x2	300g
FG-20	30	20	64	140	M50x2	600g

FH SHACKLE

The FH Shackle is used with a tension load cell in instances such as measuring wire tension.



	A	B	C	ϕD	ϕE	ϕF	Weight
FH-1B	56	24	52	17	14	36	0.4kg
FH-2B	72	29	65	21	18	45	0.85kg
FH-3B	88	34	78	26	22	55	1.5kg
FH-5B	120	45	105	36	20	75	5kg
FH-10B	160	60	140	48	40	100	11kg
FH-20B	171	73	165	50	46	110	13kg
FH-30B	201	83	183	58	50	127	20kg
FH-50B	239	105	236	70	65	153	40kg
FH-100B	314	134	314	96	90	203	100kg