

2712-ISO

STANDARD REFERENCE FORCE TRANSDUCERS IN TENSION AND COMPRESSION

Standard reference force transducers specially designed according to the ISO 376 standard (classes 1, 0,5 and 00).



Model 2712 - 250 N



Features

- o Wide range of capacities
- o Tension and / or compression (universal)
- o Compact design
- o Overload protection: see drawing table
- o Complete range of load accessories
- o Material: anodised aluminium alloy
- o Cable length: 3 m (other lengths available on request)

Most popular options



Application(s) SENSY's load cells 2712-ISO are perfectly designed for the following applications:

- Calibration of testing machines according to ISO 7500.

Note: this standard reference force transducer covers the calibration of standard force measurement instruments used for static verification of uniaxial testing machines.

Capacities

2712-ISO: 0.2 - 0.3 - 0.5 - 0.75 - 1 - 1.5 - 2 - 3 - 5 - 7.5 - 10 kN

Specifications	1	05	00	
Relative reversibility error	<± 0.3	<± 0.15	<± 0.07	% M.V.**
Relative repeatability error with rotation	<± 0.2	<± 0.1	<± 0.05	% M.V.**
Relative repeatability error without rotation	<± 0.1	<± 0.05	<± 0.025	% M.V.**
Stabilization time after power excitation supply	200...600	200...600	200...600	s
Creep error over 30 min.	<± 0.1	<± 0.05	<± 0.025	% F.S.*
Zero shift after loading	<± 0.05	<± 0.025	<± 0.012	% F.S.*
Reference temperature	20	20	20	°C
Compensated temperature range	-10...+45	-10...+45	-10...+45	°C
Service temperature range	-30...+70	-30...+70	-30...+70	°C
Storage temperature range	-50...+85	-50...+85	-50...+85	°C
Temperature coefficient of the sensitivity	<± 0.035	<± 0.035	<± 0.015	% F.S.*10°C
Temperature coefficient of zero signal	<± 0.03	<± 0.03	<± 0.023	% F.S.*10°C
Zero balance	± 0.02	± 0.02	± 0.02	mVV
Nominal sensitivity	2	2	2	mVV
Input resistance	350 ± 2	350 ± 2	350 ± 2	ohm(s)
Output resistance	350 ± 2	350 ± 2	350 ± 2	ohm(s)
Insulation resistance (50 V)	> 5000	> 5000	> 5000	Mohm(s)
Reference excitation voltage	10	10	10	VDC
Permissible nominal range of excitation voltage	3...12	3...12	3...12	VDC
Safe load limit	110	110	110	% F.S.*
Breaking load	>300	>300	>300	% F.S.*

* : Full Scale of the force transducer.

** : M.V. is the measured value. The mentioned values are only valid if M.V. >= 10 % of full scale.

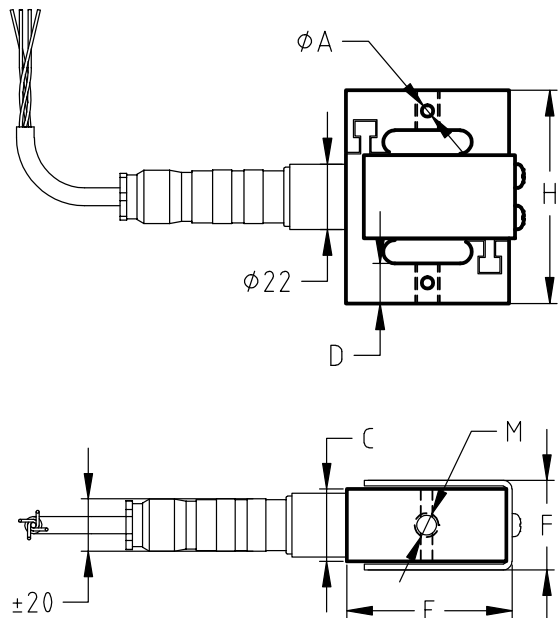
Specifications subject to change without notice.



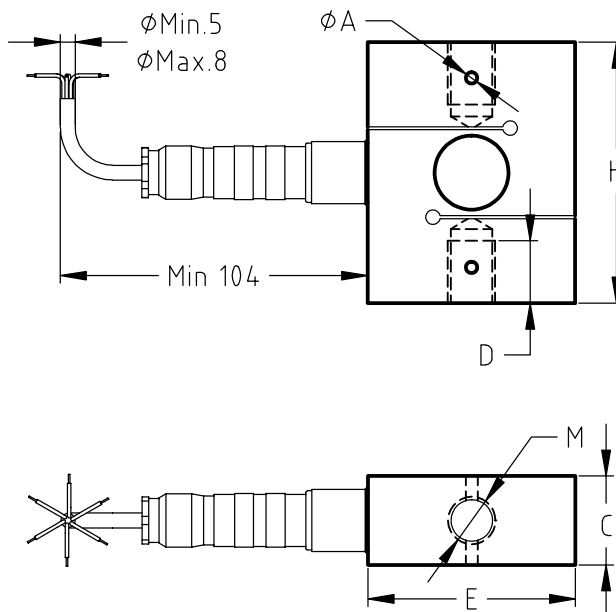
ISO 9001 certified

2712-ISO > STANDARD DIMENSIONS

2712-ISO-A / 2712-ISO-B



2712-ISO-D

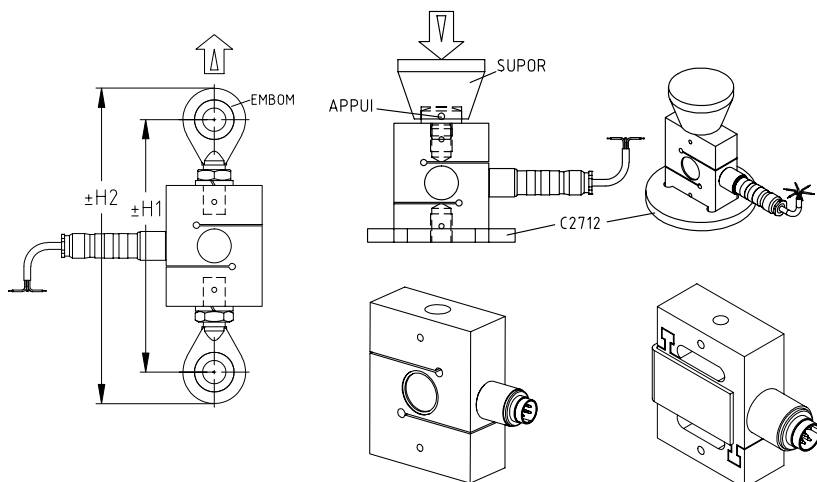


Ref. Item	Capacities	ϕA	H	C	D	E	F	M	H1	H2	Breaking Load	Max. Deflexion (mm)	IP	Weight (kg)	ACCESSORIES
2712-ISO-A	200 - 1000 N	4	72	25	13.5	55	± 32	M8	132	167	1000 %	0.40	IP54	0.42	C2712-ABC
2712-ISO-B	1500 - 3000 N	4	72	25	13.5	55	± 32	M12	132	167	600 %	0.40	IP54	0.42	C2712-ABC
2712-ISO-D	5 - 10 kN	4	88	30	21	70	/	M16	188	233	> 300 %	0.30	IP65	0.6	C2712-D

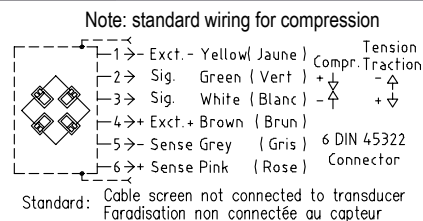
→ Other capacities and dimensions available on request

Dimensions in mm

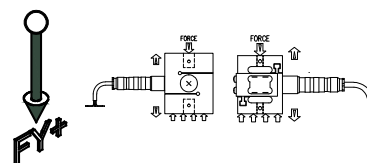
Accessories



Wiring

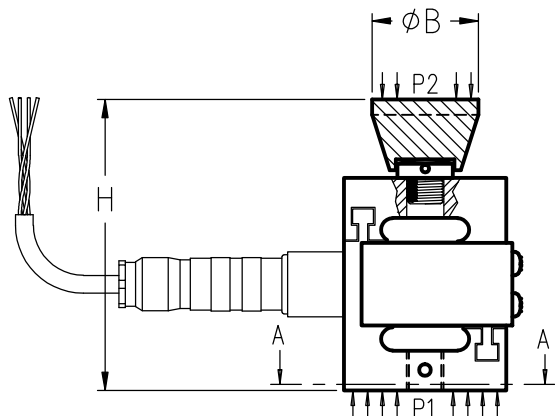


Load direction

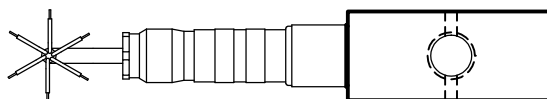
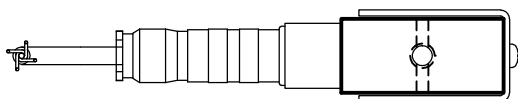
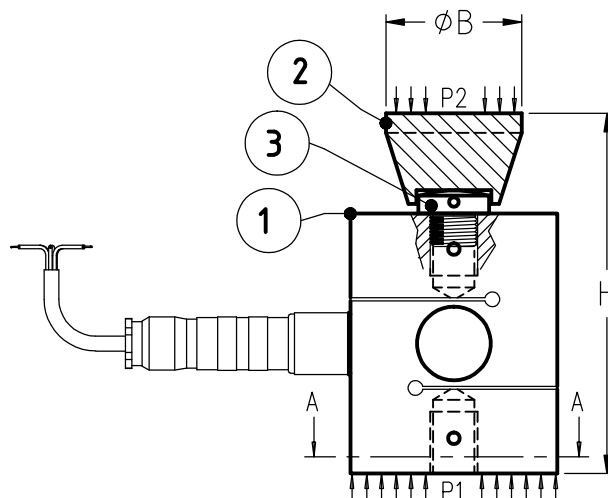


2712-ISO > CHOICE OF LOADING PADS

2712-ISO-A / 2712-ISO-B



2712-ISO-D

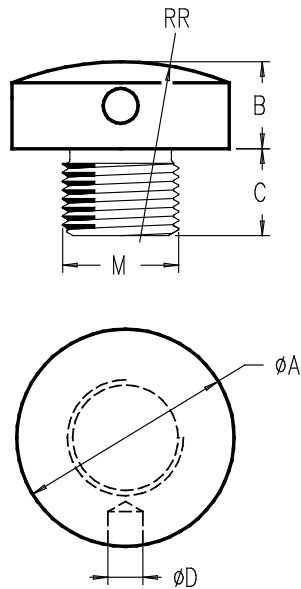


Ref. Item	Capacities ①	Section A-A mm ²	Pressure		Section ØB mm ²	Pressure		Total weight (kg)	ACCESSORIES	
			P1 N/mm ²	ØB		P2 N/mm ²	H		SUPOR ②	APPUI ③
2712-ISO-A	200 N	1325	0.2	49	1886	0.1	105	0.77	SUPOR-20	APPUI-8
2712-ISO-A	300 N	1325	0.2	49	1886	0.2	105	0.77	SUPOR-20	APPUI-8
2712-ISO-A	500 N	1325	0.4	49	1886	0.3	105	0.77	SUPOR-20	APPUI-8
2712-ISO-A	750 N	1325	0.6	49	1886	0.4	105	0.77	SUPOR-20	APPUI-8
2712-ISO-A	1000 N	1325	0.8	49	1886	0.5	105	0.77	SUPOR-20	APPUI-8
2712-ISO-B	1.5 kN	1262	1.1	49	1886	0.8	108	0.78	SUPOR-20	APPUI-12
2712-ISO-B	2.0 kN	1262	1.6	49	1886	1.1	108	0.78	SUPOR-20	APPUI-12
2712-ISO-B	3.0 kN	1262	2.4	49	1886	1.6	108	0.78	SUPOR-20	APPUI-12
2712-ISO-D	5.0 kN	1703	3	64	3217	1.6	135	1.46	SUPOR-30	APPUI-16
2712-ISO-D	7.5 kN	1703	4.4	64	3217	2.3	135	1.46	SUPOR-30	APPUI-16
2712-ISO-D	10 kN	1703	5.9	64	3217	3.1	135	1.46	SUPOR-30	APPUI-16

→ Other capacities and dimensions available on request

Dimensions in mm

APPUI > STANDARD DIMENSIONS

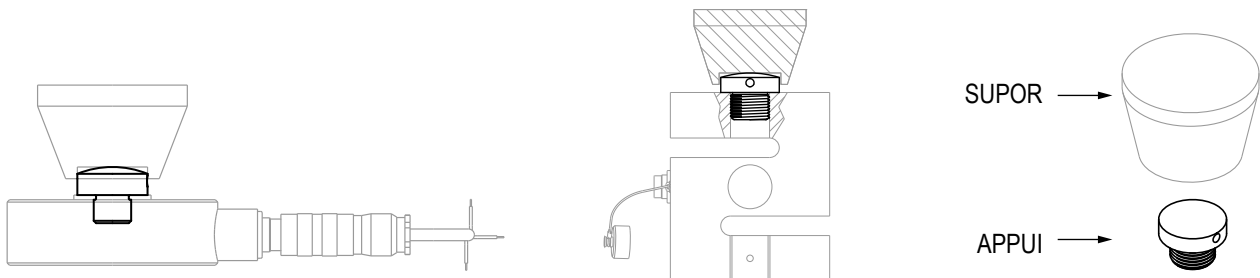


Ref. Item*	M	ØA	B	C	ØD	RR	Weight (kg)
APPUI-6	M 6	12	7	8	3 (1x)	16	0.02
APPUI-8	M 8	20	7	8	3 (1x)	25	0.02
APPUI-10	M 10	20	7	10	3 (1x)	25	0.02
APPUI-12	M 12	20	10	10	3 (1x)	35	0.03
APPUI-16	M 16	30	12	12	4 (1x)	50	0.08
APPUI-16B	M 16	36	12	12	5 (1x)	100	0.11
APPUI-20x1.5	M 20 x 1.5	36	12	15	5 (1x)	70	0.12
APPUI-24x2	M 24 x 2	36	12	18	5 (1x)	60	0.15
APPUI-30x2	M 30 x 2	45	15	20	6 (2x)	100	0.28
APPUI-36x3	M 36 x 3	56	20	24	6 (2x)	150	0.55
APPUI-36Bx3	M 36 x 3	69	20	35	6 (2x)	250	0.84
APPUI-45x3	M 45 x 3	64	20	30	6 (2x)	200	0.84
APPUI-56x4	M 56 x 4	90	24	35	8 (2x)	300	1.8
APPUI-60x4	M 60 x 4	90	27	40	10 (2x)	350	2.14
APPUI-90x4	M 90 x 4	125	33	50	12 (2x)	450	5.46

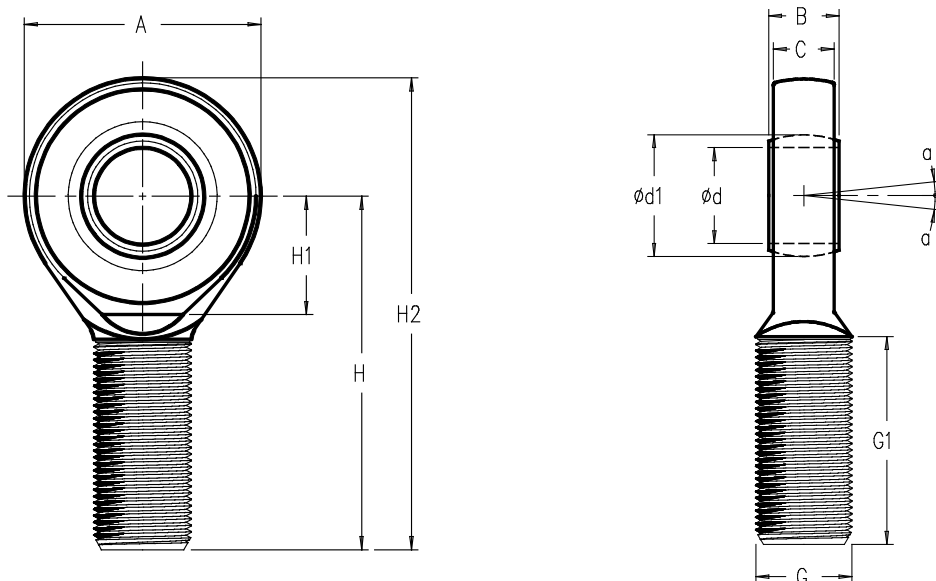
* Material: stainless steel

Dimensions in mm

Other views



EMBOM > STANDARD DIMENSIONS



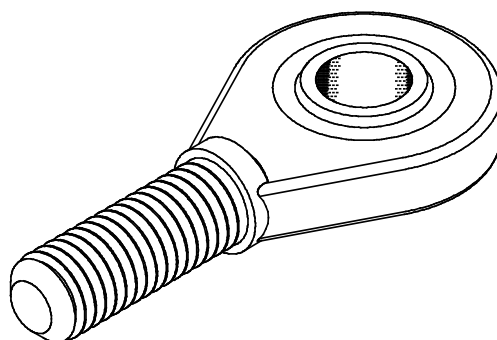
Ref. Item*	Dimension G	Capacities (N)		Ød	A	B	C	H	a (degree)	Ød1	G1	H1	H2	Weight (kg)
		Dynamic	Static											
EMBOM-M6-BA	M6	3600	9000	6	21	6	4.3	36	13	10	16	14	46.5	0.013
EMBOM-M8-BA	M8	5850	14600	8	24	8	6	42	15	13	21	14	54	0.025
EMBOM-M10-BA	M10	8560	21600	10	29	9	7	48	12	16	26	17	62.5	0.043
EMBOM-M12-BA	M12	11400	28500	12	34	10	8	54	10	18	28	18	71	0.065
EMBOM-M16-BA	M16	22400	52000	17	46	14	11	69	10	25	36	23	92	0.17
EMBOM-M20x1.5-BA	M20x1.5	31500	70000	20	53	16	13	78	9	29	43	25	104.5	0.28
EMBOM-M24x2-BA	M24x2	51000	102000	25	64	20	17	94	7	35.5	53	32	126	0.5
EMBOM-M30x2-BA	M30x2	65500	134000	30	73	22	19	110	6	40.7	65	33	146.5	0.83
EMBOM-M36x3-PTFE	M36x3	112000	143000	35	82	25	21	140	6	47	82	42	181	1.4
EMBOM-M45x3-PTFE	M45x3	220000	280000	50	112	35	30	185	6	66	104	60	241	3.55
EMBOM-M56x4-PTFE	M56x4	440000	630000	70	160	49	42	235	6	92	125	87	315	7.9
EMBOM-M60x4-PTFE	M60x4	345000	440000	60	135	44	38	225	6	80	120	70	292.5	6.25
EMBOM-M64x4-PTFE	M64x4	570000	780000	80	180	55	47	270	6	105	140	100	360	12

* Material: BA - bronze-auto lubricated ; PTFE - polytetrafluoroethylene

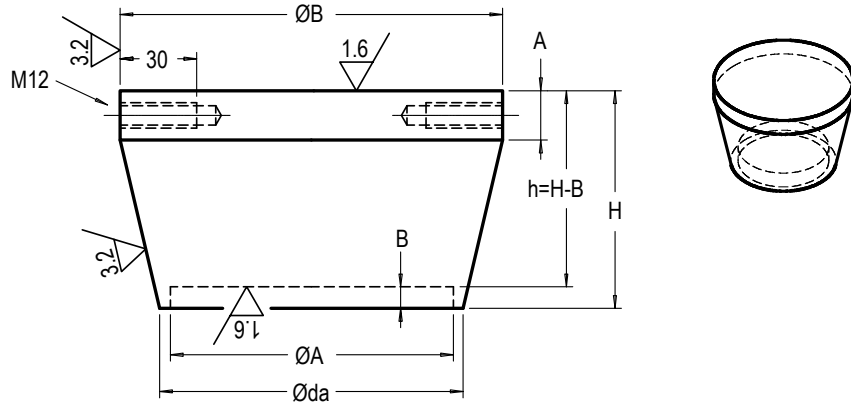
→ Other capacities and dimensions available on request

Dimensions in mm

Other view



↳ SUPOR > STANDARD DIMENSIONS

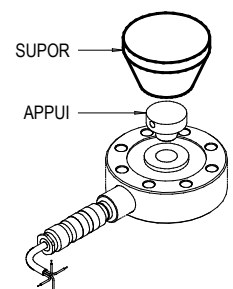
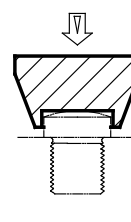
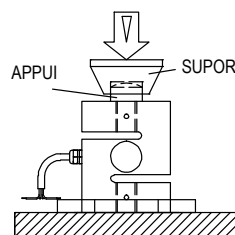
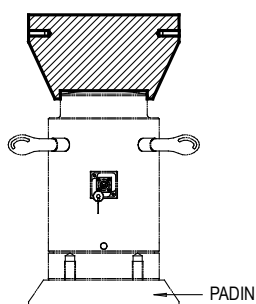
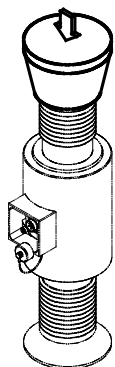


Ref. Item	Types	ØA	ØB	Øda	A	B	H	h	M12 L=30 (degree)	Weight (kg)
SUPOR-12	12	12	34	20	7	4	23	19	NO	0.12
SUPOR-20	20	20	49	30	8	5	31	26	NO	0.33
SUPOR-24	24	24	59	35	9	6	36	30	NO	0.55
SUPOR-30	30	30	64	40	9	6	41	35	NO	0.74
SUPOR-36	36	36	69	46	10	7	46	39	NO	0.98
SUPOR-45	45	45	79	56	11	12	53	41	NO	1.5
SUPOR-56	56	56	79	66	12	8	48	40	NO	1.5
SUPOR-64	64	64	99	75	12	17	64	47	NO	2.8
SUPOR-64E	64E	64	114	75	12	17	75	58	NO	4.14
SUPOR-69	69	69	79	75	12	12	52	40	NO	1.6
SUPOR-90	90	90	129	100	15	17	79	62	NO	6
SUPOR-90B	90B	90	164	100	15	17	109	92	NO	12.2
SUPOR-110	110	110	195	135	20	19	109	90	2x to 180	18.7
SUPOR-125A	125A	125	158	135	20	19	94	75	2x to 180	11.3
SUPOR-125B	125B	125	195	135	20	19	109	90	2x to 180	18.3
SUPOR-160	160	160	248	±170	30	20	146	126	2x to 180	40
SUPOR-200A	200A	200	308	±210	30	20	175	155	2x to 180	73
SUPOR-200B	200B	200	353	±210	30	20	200	180	4x to 90	103
SUPOR-230	230	230	353	±270	50	35	211.5	176.5	4x to 90	125
SUPOR-250A	250A	250	438	±290	40	30	250	220	6x to 60	209
SUPOR-250B	250B	250	503	±290	40	30	285	255	6x to 60	294
SUPOR-300A	300A	300	594	±340	50	40	337	297	6x to 60	481
SUPOR-330A	330A	330	503	±370	50	50	301.5	251.5	6x to 60	341
SUPOR-360A	360A	360	694	±401	100	50	397	347	6x M24 / 360	818
SUPOR-400A	400A	400	594	±440	50	55	352	297	6x to 60	555
SUPOR-430A	430A	430	795	±470	±100	50	448	398	6x M30 / 360	1209

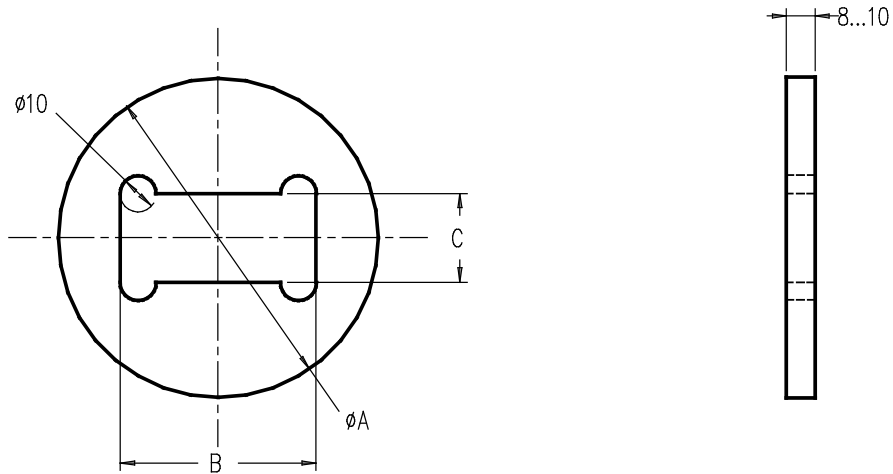
→ Other capacities and dimensions available on request

Dimensions in mm

Other views



C2712 > STANDARD DIMENSIONS



Ref. Item*	ϕA	B	C
C2712-ABC	89	55	25
C2712-D	109	70	30
C2712-G	139	98	38
C2712-H	179	118	56

* Material: aluminium

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Dimensions in mm

Other views

