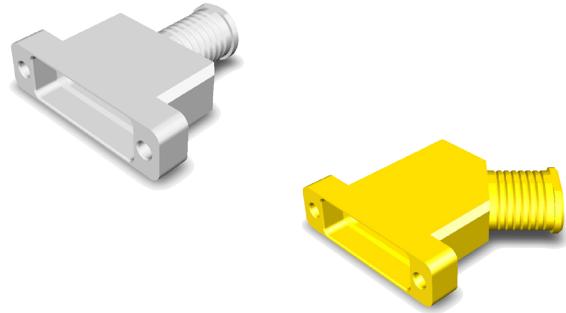


### Features and Benefits

- Ultra-light weight
- Solid fully machined aluminium alloy material

### Typical Applications

- Space equipment (engineering model)
- Satellites harnesses
- Avionics / Military



### Specification

- High performance Micro-D Lightweight Backshells meet stringent tests and are suitable for use in Space Engineering Model, and high performance military/aerospace applications: Board to Cable or Cable to Cable applications.
- Compliant to CS FR022 C&K Specification. The Backshells are totally compatible, interchangeable and intermateable with ESA quality level ESCC 3401/029 (MDM connectors), 3401/032 (accessories) and 3401/087 (backshells).
- Sizes available: 9, 15, 21, 25, 31, 37 and 51 ways.
- Outlets:
  - Top circular
  - Top elliptical
  - 45° circular
  - 45° elliptical

### Electrical & Mechanical Characteristics

CHARACTERISTIC	SPECIFICATION
Operating Temperature range	-55 / + 125°C
Storage temperature range	-55 / + 125°C

### Quality

- “Commercial Space Grade”
- C&K Specification CS FR022, for low cost products manufactured:
  - In the same ESA qualified site
  - Through the same piece parts
  - With lighter controls, documentation and traceability

### Option

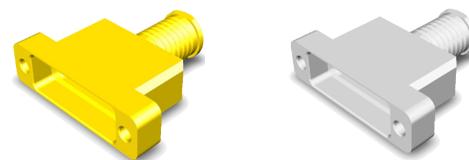
- Male screwlock with clip (be ordered separately).

### Packaging

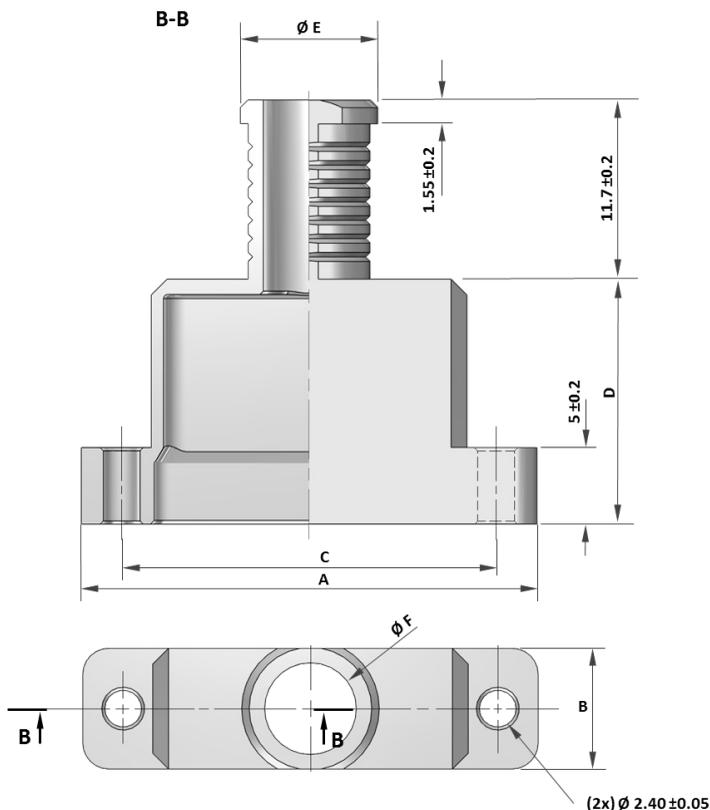
- Individual packaging.

COMPONENT	MATERIAL	FINISH
Backshell FR022 Variant A174	Aluminium Alloy 6061-T6	25.4µm min. electroless Nickel
Backshell FR022 Variant FR172	Aluminium Alloy 6061-T6	0.7µm min. Gold over 25.4µm min. electroless Nickel
Male Screwlock	Passivated Stainless Steel	None
Clip	Passivated Stainless Steel	None

# MDM LIGHTWEIGHT BACKSHELL TOP CIRCULAR ENTRY



## DIMENSIONS AND WEIGHT



SIZE	A ±0.2	B ±0.2	C ±0.1	D ±0.2	ØE ±0.2	ØF ±0.2	WEIGHT (GRAMS)
9	19.65	7.90	14.35	10.00	9.00	6.00	3
15	23.45	7.90	18.16	12.00	9.00	6.00	3
21	27.25	7.90	21.97	14.00	9.00	6.00	4
25	29.80	7.90	24.51	16.00	9.00	6.00	4
31	33.60	7.90	28.32	17.00	9.00	6.00	5
37	37.40	7.90	32.13	18.00	9.00	6.00	5
51	36.15	8.90	30.86	19.00	10.00	7.00	6

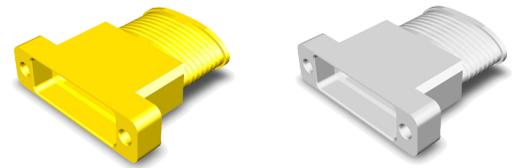
## DESCRIPTION AND PART NUMBERS

SHELL FINISH	CONTACT SIZE	C&K DESCRIPTION	C&K PN
 Electroless Nickel	9	MDM-BCKS 9-01-A174-FR022	CI15288-6417
	15	MDM-BCKS 15-01-A174-FR022	CI15288-6418
	21	MDM-BCKS 21-01-A174-FR022	CI15288-6419
	25	MDM-BCKS 25-01-A174-FR022	CI15288-6420
	31	MDM-BCKS 31-01-A174-FR022	CI15288-6421
	37	MDM-BCKS 37-01-A174-FR022	CI15288-6422
	51	MDM-BCKS 51-01-A174-FR022	CI15288-6423
 Gold	9	MDM-BCKS 9-01-FR172-FR022	CI15288-6424
	15	MDM-BCKS 15-01-FR172-FR022	CI15288-6425
	21	MDM-BCKS 21-01-FR172-FR022	CI15288-6426
	25	MDM-BCKS 25-01-FR172-FR022	CI15288-6427
	31	MDM-BCKS 31-01-FR172-FR022	CI15288-6428
	37	MDM-BCKS 37-01-FR172-FR022	CI15288-6429
	51	MDM-BCKS 51-01-FR172-FR022	CI15288-6430

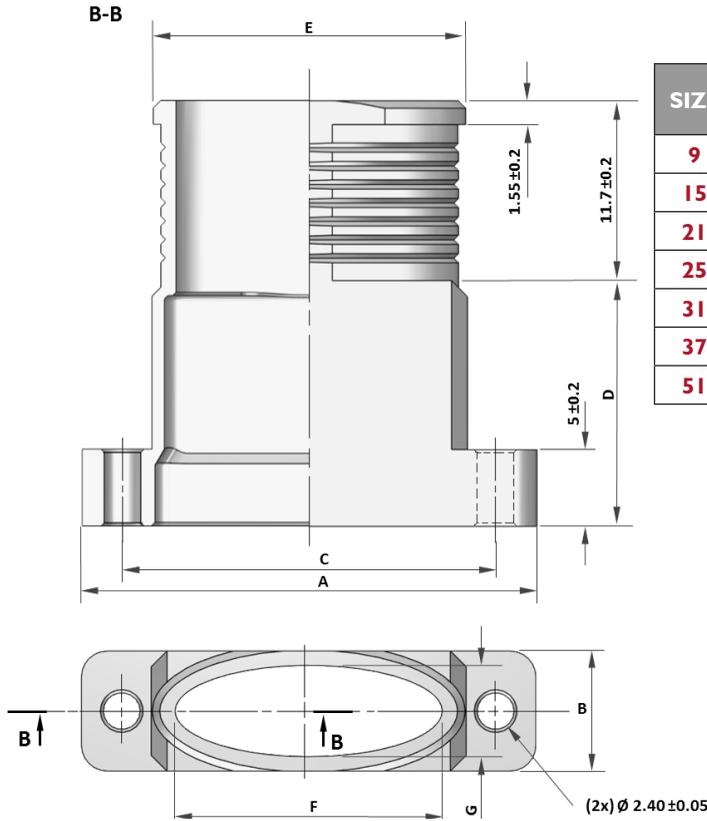


Dimensions shown in: mm  
Specifications and dimensions subject to change

# MDM LIGHTWEIGHT BACKSHELL TOP ELLIPTICAL ENTRY

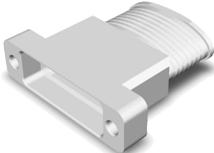
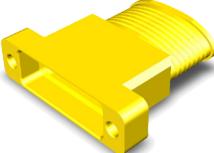


## DIMENSIONS AND WEIGHT



SIZE	A ±0.2	B ±0.2	C ±0.1	D ±0.2	E ±0.2	F ±0.2	G ±0.2	WEIGHT (GRAMS)
9	19.65	7.90	14.35	10.00	10.90	7.90	6.00	3
15	23.45	7.90	18.16	12.00	13.70	10.70	6.00	4
21	27.25	7.90	21.97	14.00	18.00	15.00	6.00	4
25	29.80	7.90	24.51	16.00	20.50	17.50	6.00	4
31	33.60	7.90	28.32	17.00	23.80	20.80	6.00	5
37	37.40	7.90	32.13	18.00	27.60	24.60	6.00	6
51	36.15	8.90	30.86	19.00	26.40	23.40	7.00	6

## DESCRIPTION AND PART NUMBERS

SHELL FINISH	CONTACT SIZE	C&K DESCRIPTION	C&K PN
 Electroless Nickel	9	MDM-BCKS 9-02-A174-FR022	CI15288-6431
	15	MDM-BCKS 15-02-A174-FR022	CI15288-6432
	21	MDM-BCKS 21-02-A174-FR022	CI15288-6433
	25	MDM-BCKS 25-02-A174-FR022	CI15288-6434
	31	MDM-BCKS 31-02-A174-FR022	CI15288-6435
	37	MDM-BCKS 37-02-A174-FR022	CI15288-6436
	51	MDM-BCKS 51-02-A174-FR022	CI15288-6437
 Gold	9	MDM-BCKS 9-02-FR172-FR022	CI15288-6438
	15	MDM-BCKS 15-02-FR172-FR022	CI15288-6439
	21	MDM-BCKS 21-02-FR172-FR022	CI15288-6440
	25	MDM-BCKS 25-02-FR172-FR022	CI15288-6441
	31	MDM-BCKS 31-02-FR172-FR022	CI15288-6442
	37	MDM-BCKS 37-02-FR172-FR022	CI15288-6443
	51	MDM-BCKS 51-02-FR172-FR022	CI15288-6444

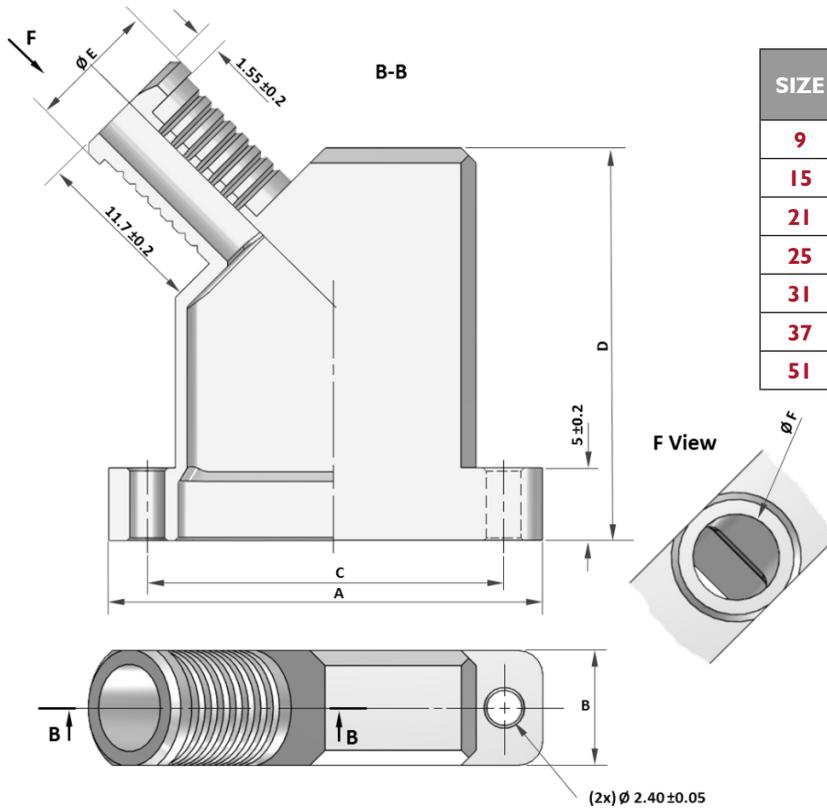


Dimensions shown in: mm  
Specifications and dimensions subject to change

**MDM LIGHTWEIGHT BACKSHELL**  
**45° CIRCULAR ENTRY**  
*(Our design accepts right or left mounting)*



**DIMENSIONS AND WEIGHT**



SIZE	A ±0.2	B ±0.2	C ±0.1	D ±0.2	ØE ±0.2	ØF ±0.2	WEIGHT (GRAMS)
9	19.65	7.90	14.35	21.00	8.30	5.30	3
15	23.45	7.90	18.16	23.00	9.00	6.00	4
21	27.25	7.90	21.97	24.00	9.00	6.00	4
25	29.80	7.90	24.51	27.00	9.00	6.00	5
31	33.60	7.90	28.32	28.00	9.00	6.00	5
37	37.40	7.90	32.13	29.00	9.00	6.00	6
51	36.15	8.90	30.86	30.00	10.00	7.00	6

**DESCRIPTION AND PART NUMBERS**

SHELL FINISH	CONTACT SIZE	C&K DESCRIPTION	C&K PN
 Electroless Nickel	9	MDM-BCKS 9-03-A174-FR022	CI15288-6448
	15	MDM-BCKS 15-03-A174-FR022	CI15288-6449
	21	MDM-BCKS 21-03-A174-FR022	CI15288-6450
	25	MDM-BCKS 25-03-A174-FR022	CI15288-6451
	31	MDM-BCKS 31-03-A174-FR022	CI15288-6452
	37	MDM-BCKS 37-03-A174-FR022	CI15288-6453
	51	MDM-BCKS 51-03-A174-FR022	CI15288-6454
 Gold	9	MDM-BCKS 9-03-FR172-FR022	CI15288-6455
	15	MDM-BCKS 15-03-FR172-FR022	CI15288-6456
	21	MDM-BCKS 21-03-FR172-FR022	CI15288-6457
	25	MDM-BCKS 25-03-FR172-FR022	CI15288-6458
	31	MDM-BCKS 31-03-FR172-FR022	CI15288-6459
	37	MDM-BCKS 37-03-FR172-FR022	CI15288-6460
	51	MDM-BCKS 51-03-FR172-FR022	CI15288-6461

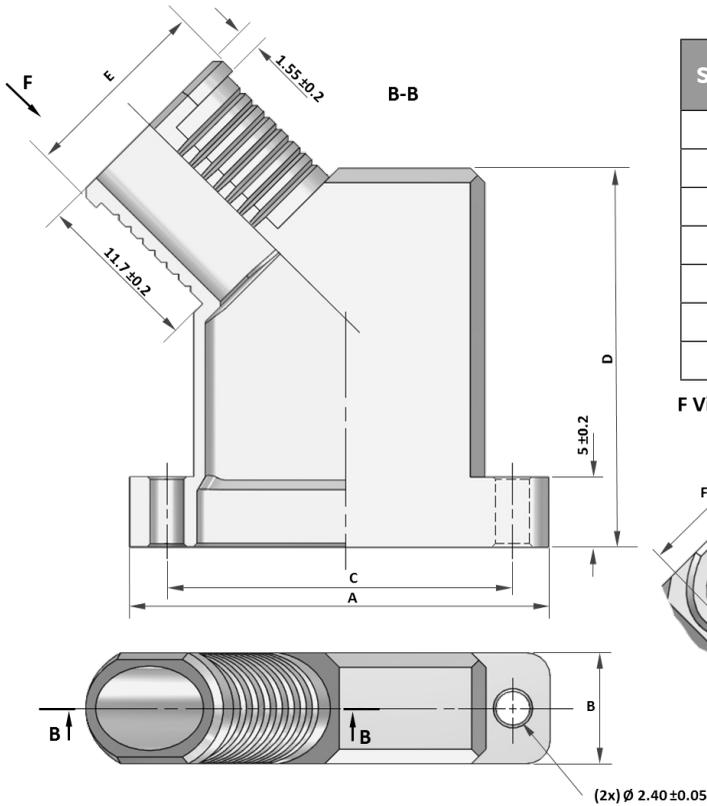


Dimensions shown in: mm  
 Specifications and dimensions subject to change

**MDM LIGHTWEIGHT BACKSHELL**  
**45° ELLIPTICAL ENTRY**  
*(Our design accepts right or left mounting)*

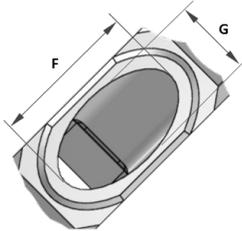


**DIMENSIONS AND WEIGHT**

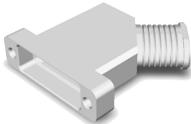


SIZE	A ±0.2	B ±0.2	C ±0.1	D ±0.2	E ±0.2	F ±0.2	G ±0.2	WEIGHT (GRAMS)
9	19.65	7.90	14.35	21.00	8.00	5.00	6.00	3
15	23.45	7.90	18.16	23.00	10.50	7.50	6.00	4
21	27.25	7.90	21.97	24.00	12.50	9.50	6.00	5
25	29.80	7.90	24.51	27.00	13.80	10.80	6.00	5
31	33.60	7.90	28.32	28.00	15.50	12.50	6.00	6
37	37.40	7.90	32.13	29.00	18.00	15.00	6.00	6
51	36.15	8.90	30.86	30.00	20.00	17.00	7.00	7

F View



**DESCRIPTION AND PART NUMBERS**

SHELL FINISH	CONTACT SIZE	C&K DESCRIPTION	C&K PN
 Electroless Nickel	9	MDM-BCKS 9-04-A174-FR022	CI15288-6462
	15	MDM-BCKS 15-04-A174-FR022	CI15288-6463
	21	MDM-BCKS 21-04-A174-FR022	CI15288-6464
	25	MDM-BCKS 25-04-A174-FR022	CI15288-6465
	31	MDM-BCKS 31-04-A174-FR022	CI15288-6466
	37	MDM-BCKS 37-04-A174-FR022	CI15288-6467
	51	MDM-BCKS 51-04-A174-FR022	CI15288-6468
 Gold	9	MDM-BCKS 9-0-4FR172-FR022	CI15288-6469
	15	MDM-BCKS 15-04-FR172-FR022	CI15288-6470
	21	MDM-BCKS 21-04-FR172-FR022	CI15288-6471
	25	MDM-BCKS 25-04-FR172-FR022	CI15288-6472
	31	MDM-BCKS 31-04-FR172-FR022	CI15288-6473
	37	MDM-BCKS 37-04-FR172-FR022	CI15288-6474
	51	MDM-BCKS 51-04-FR172-FR022	CI15288-6475



Dimensions shown in: mm  
 Specifications and dimensions subject to change

## ACCESSORIES

MALE SCREWLOCK	C&K DESCRIPTION	C&K P/N
	SCREWLOCK FOR BACKSHELL MDM	CI15288-6511

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