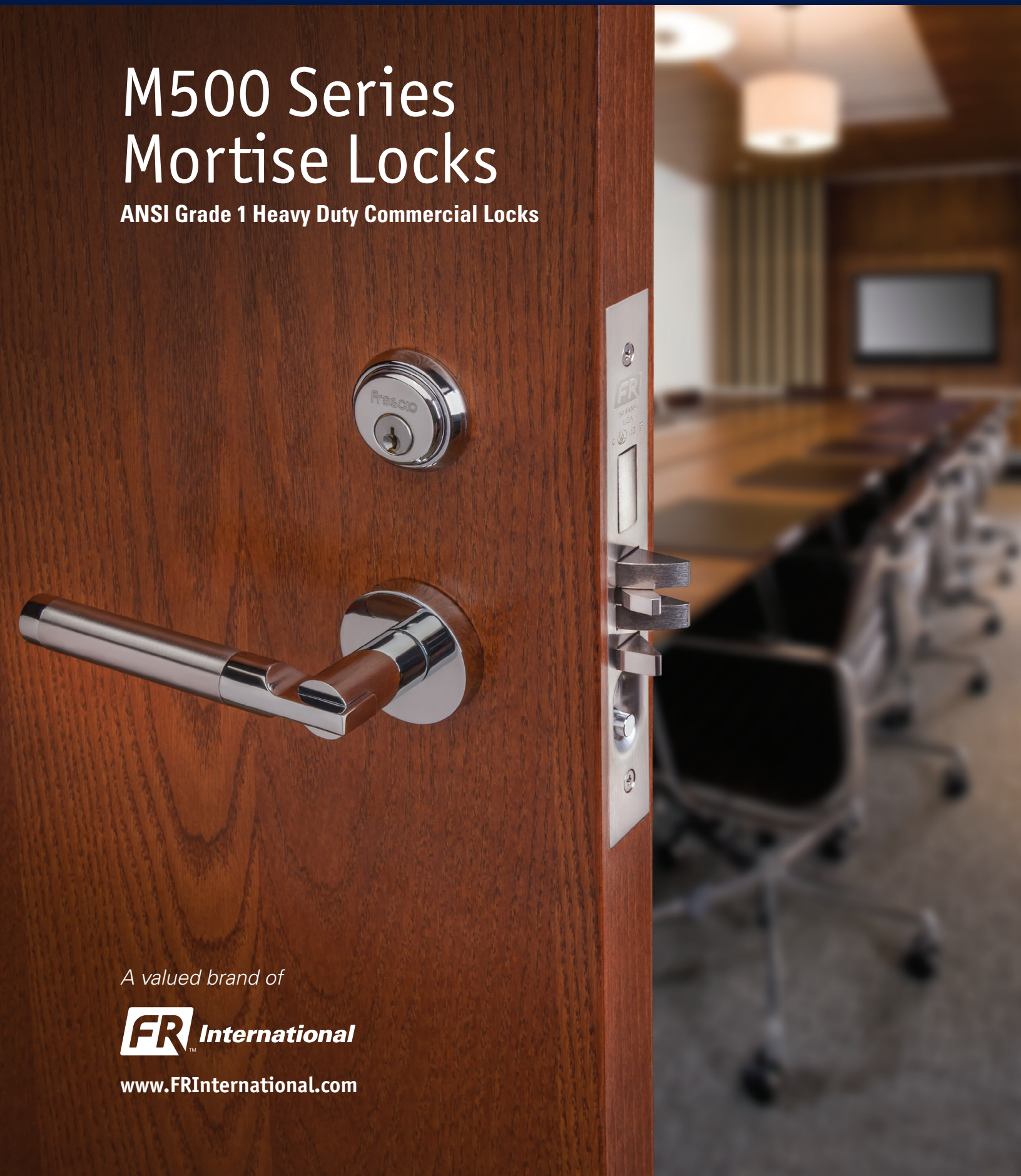
Frascio®

M500 Series Mortise Locks

ANSI Grade 1 Heavy Duty Commercial Locks



A valued brand of

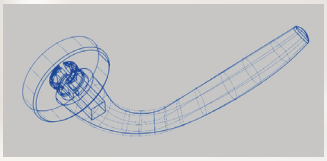
FR International

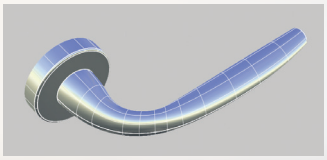
www.FRInternational.com

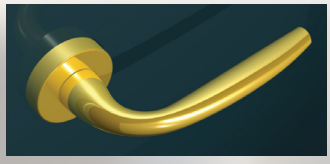
About Us

From our earliest beginnings in 1945 as a workshop in northern Italy, Frascio has grown to become a globally recognized decorative door hardware brand specified by premier architects and designers worldwide.

We remain true to our original manufacturing philosophy: to use only the highest quality materials, to continuously research emerging designs and technology, and to uphold careful attention to production detail.







We utilize the latest CAD engineering tools to create designs and ensure reliable system operation. And, for those projects that require additional shapes and configurations, we are pleased to offer our **custom design services** and rapid prototype capability.

FR International, based in Carmel, Indiana, provides the commercial marketplace with all the advantages of a high-end decorative hardware brand combined with strong mechanical engineering and commercial hardware industry experience. Our designs are available on rugged commercial quality mechanical platforms that conform to market requirements.

Find our full downloadable Frascio Design Catalog online at FRInternational.com or contact us for physical electronic media version.

Environmentally-friendly manufacturing

Frascio products are manufactured primarily from brass, zinc, stainless steel, and steel. Much of the raw material used to produce these parts comes from recycled metal. The percentage of postconsumer and post-industrial recycled content is estimated as follows:

- The brass and zinc materials that are used to make many Frascio products typically contain 80-100% recycled material, a combination of melted scrap metal and reclaimed by-products.
- The post-industrial recycled content of steel used to make Frascio products is approximately 30–40% (Approximately 30%–40% of the metal used to produce Frascio products is either scrap metal or other recycled material that is melted in the furnace).
- Stainless steel that is used in Frascio products has a post-industrial recycled content of approximately 70%, and a post-consumer recycled content of approximately 8%.
- Approximately 40% of the packaging that is used by Frascio is comprised of recycled material.

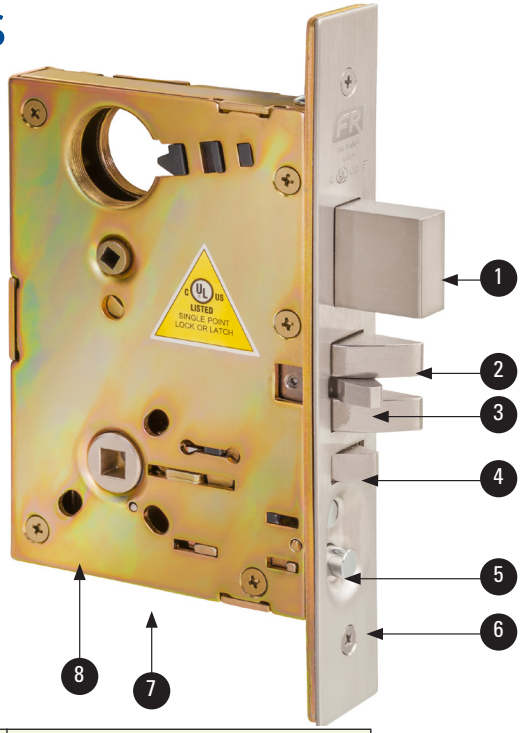
The above percentages show an average of Frascio's overall production. Actual percentages on any order will vary based on the specific products that comprise that order as well as the mill source.

When no longer needed, Frascio brass, stainless, and zinc parts are 100% recyclable to support sustainable design practices.

Frascio is committed to responsible business and manufacturing practices that help conserve resources and protect our environment.

M500 Series Features and Specifications

1. **Deadbolt**
   1" (25mm) throw stainless steel deadbolt provides rugged security
2. **Latchbolt**
   Full 3/4" (19mm) throw standard
3. **Anti-Friction Tongue**
   Reduces wear and tear and ensures smooth engagement with strike
4. **Deadlocking Auxiliary Latch**
   Non-handed deadlocking bar prevents latch tampering by blocking latch retraction when depressed
5. **Stop Buttons**
   For flexible entrance function configuration
6. **Armor Front**
   Adjustable for door bevel. Available in brass and stainless steel material
7. **Backset Options**
   2-3/4" (70mm) standard, also available in 2-1/2" (63.5mm) for narrow backset applications, available in certain functions
8. **Steel Components**
   Steel case and internal parts corrosion protected for longevity and smooth operation



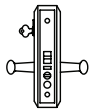
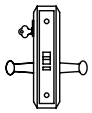
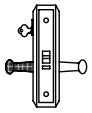
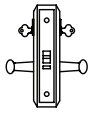
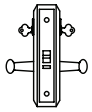
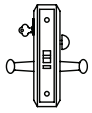
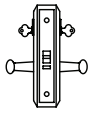
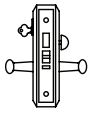
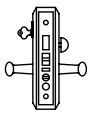
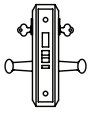
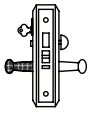
Specifications	
Applications	For commercial buildings where the finest mortise locks are required
Certifications	ANSI A156.13 Series 1000, Grade 1 operational. UL Listed for 3-Hour fire rating
Case Size	4-5/16" x 6" x 1" (110 mm x 152 mm x 25 mm)
Armor Front	1-1/4" x 8" x 7/32" (32 mm x 203 mm x 5 mm)
Backset	2-3/4" (70 mm) and 2-1/2" (63.5 mm)
Door Preparation	Conforms to ANSI A115.1
Door Range	1-3/8" (35mm) to 2-1/2" (64 mm) steel door, 1-3/4" (45mm) to 2-1/2" (64mm) wood door
Beveled Doors	Self-adjusting case
Case Handing	Field reversible without removing cover
Strike	Curved lip non-handed. Custom lip lengths at 1/8" (3 mm) increments available
Spindles	Breakable to prevent the lock case from unlocking or being damaged

Finish Code (Reference BHMA)	Finish Description
605	Polished Brass
606	Satin Brass
606M	Satin Brass – Matte
609	Antique Brass
609M	Antique Brass – Matte
613	Dark Bronze
618	Polished Nickel
619	Satin Nickel
620	Antique Nickel
620M	Antique Nickel – Matte
622	Matte Black Powder Coat
625	Polished Chrome
626	Satin Chrome
629	Polished Stainless Steel
630	Satin Stainless Steel
695	Dark Bronze Powder Coat
IXATC	Anthracite PVD Charcoal
IXABP	Absolute Black Polished PVD
IXB	InoxBrass PVD Polished Brass
IXBB	Brushed Bronze PVD
IXBLK	Black PVD
IXBSB	Brushed Satin Black PVD
IXC	InoxChrome PVD Stainless
IXCPN	Champagne PVD
IXPCPN	Polished Champagne PVD
IXS	Satin Brass PVD
IXSLN	Satin London Night PVD
IXSRC	Satin Red Copper PVD
BBN	Brushed Blackened Nickel
BREZO	Brezo Bronze

Scan here to learn more about Our Finishes.

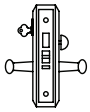
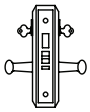
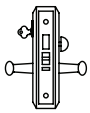
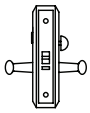
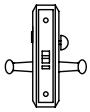
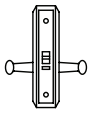
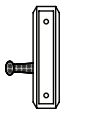
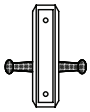
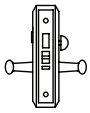
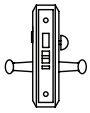
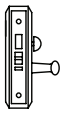
Cover photo features M520 Entrance Function with Frascio 900 Stella/SM decorative trim in 625/630 finish.

M500 Series Function Chart

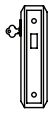
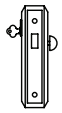
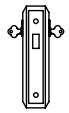
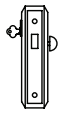
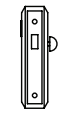
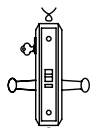
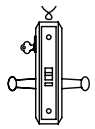
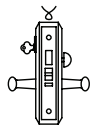
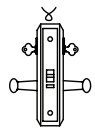
Function Code Number	Illustration Outside ◂ | ▸ Inside	Function/Description	ANSI Number
Keyed Functions Without Deadbolt			
M504		**Office and Inner Entry Lock** Latchbolt retracted by lever from either side unless outside is made inoperative by key outside or by pushing button on edge of door. When outside is locked, latchbolt is retracted by key outside or by lever inside. Outside lever remains locked until other button on edge of door is pushed or unlocked by key. Auxiliary latch deadlocks latchbolt when door is closed.	**F04**
M505		**Classroom Lock** Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.	**F05**
M507		**Storeroom Lock** Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.	**F07**
M509		**Apartment Entrance Lock*** Latchbolt retracted by lever from either side unless outside is locked by key from inside. When locked, latchbolt retracted by key outside or lever inside. Auxiliary latch deadlocks latchbolt when door is closed.	**F09**
M555		**Store Lock*** Latchbolt retracted by lever from either side. Both levers are made inoperative by key from either side. Key use on either side unlocks both levers and retracts Latchbolt.	
M556		**Office Lock with Unlocking** Latchbolt retracted by lever from either side unless outside is made rigid by key outside or turnknob inside. Outside lever unlocked by key outside or turnknob. Rotating inside lever simultaneously retracts lactchbolt and unlocks outside lever. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always unlocked.	
M571		**Classroom Security Lock*** Latchbolt retracted by lever from either side unless outside is locked by key from either side. When in locked state, latchbolt retracted by key outside or lever inside. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always unlocked.	
Keyed Functions With Deadbolt			
M521		**Bedroom/Dormitory Lock** Latchbolt retracted by lever from either side. Deadbolt extended or retracted by key outside or turnknob inside.	**F21**
M520 (Standard)		**Entrance Lock** Latchbolt retracted by lever from either side unless outside is locked by pushing button on edge of door. Deadbolt thrown or retracted by 90 rotation of thumbturn. When locked, key outside or lever inside retracts deadbolt and latchbolt simultaneously. Outside lever remains locked until other button on edge of door is pushed. Throwing deadbolt automatically locks outside lever. Auxiliary latch deadlocks latchbolt when door is closed.	**F20**
M514		**Store/Utility Room Lock*** Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key from either side.	**F14**
M515		**Storeroom Lock with Deadbolt** Latchbolt retracted by outside key or inside lever. Outside lever always fixed. Deadbolt operated by outside key or inside thumbturn. Operating inside lever retracts both deadbolt and latchbolt simultaneously. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for egress.	

***Caution:** Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

M500 Series Function Chart (continued)

Function Code Number	Illustration Outside ◂ | ▸ Inside	Function/Description	ANSI Number
Keyed Functions With Deadbolt (continued)			
M513		**Corridor Lock** Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key outside or inside thumbturn. Throwing deadbolt locks outside lever. Turning inside lever simultaneously retracts deadbolt and latchbolt and unlocks outside lever.	**F13**
M557		**Classroom Security Lock with Deadbolt*** Latchbolt retracted by lever from either side. Deadbolt extended or retracted by key from either side. Extending deadbolt locks outside lever. Rotating inside lever simultaneously retracts deadbolt and latchbolt, and unlocks outside lever. Inside lever is always unlocked.	
M527		**Privacy with Occupied Indicator, Cylinder, and Deadbolt** Latchbolt retracted by lever from either side. Deadbolt extended or retracted by inside turnknob or cylinder outside. Extending deadbolt locks outside lever and displays locked red indicator. Rotating inside lever simultaneously retracts deadbolt and latchbolt and unlocks outside lever.	
Non-Keyed Functions Without Deadbolt			
M522		**Bath/Bedroom Privacy Lock** Latchbolt retracted by lever from either side unless outside is locked by inside thumbturn. Turning inside lever or closing door unlocks outside lever. To unlock from outside, insert emergency turn (furnished) in access hole and rotate.	**F22**
M523		**Privacy with Coin Turn Outside** Latchbolt operated by lever from either side unless outside is locked by turnknob inside or outside coin turn. Operting inside lever, closing door, or rotating turnknob unlocks outside lever.	
M501		**Passage Latch** Latchbolt retracted by lever from either side at all times.	**F01**
M524		**Single Dummy** Fixed lever on one side.	
M525		**Full Dummy** Fixed lever on both sides.	
Non-Keyed Functions With Deadbolt			
M519		**Privacy with Deadbolt** Latchbolt retracted by lever from either side. Deadbolt extended or retracted by turnknob inside. Extending deadbolt locks outside lever. Rotating inside lever simultaneously retracts deadbolt and lachbolt and unlocks outside lever. To unlock from outside, insert emergency key into outside privacy hole and rotate.	**F19**
M526		**Privacy with Deadbolt and Coin Turn Outside** Latchbolt retracted by lever from either side. Deadbolt extended or retracted by inside turnknob or outside coin turn. Extending deadbolt locks outside lever. Rotating inside lever simultaneously retracts deadbolt and latchbolt and unlocks outside lever.	
M573		**Communicating Passage with Blank Prep Outside** No prepped holes or trim on outside of door. Latchbolt retracted by inside lever. Deadbolt thrown or retracted by turnknob inside. Turning inside lever simultaneously retracts deadbolt and latchbolt.	

M500 Series Function Chart (continued)

Function Code Number	Illustration Outside ◂ | ▸ Inside	Function/Description	ANSI Number
Keyed and Non-Keyed Function Deadlocks			
M518		**Cylinder Lock** Deadbolt operated by key from one side. No trim on opposing side.	**F18**
M517		**Cylinder and Thumbturn Lock** Deadbolt operated by key outside or turnknob inside.	**F17**
M516		**Double Cylinder Lock*** Deadbolt operated by key from either side.	**F16**
M529		**Classroom Deadlock** Deadbolt extended or retracted by key from outside. Inside turnknob cylinder retracts deadbolt but can not extend it.	**F29**
M530		**Privacy Deadlock** Deadbolt operated by coin release outside or turnknob inside.	
Electrified Functions			
M507EU		**Electrically Unlocked (Fail Secure)** Outside lever unlocked by either 12 or 24 VDC (Specified) Latchbolt retracted by key outside or lever inside. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always unlocked.	
M507EL		**Electrically Locked (Fail Safe)** Outside lever continuously locked by either 12 or 24 VDC (Specified) Latchbolt retracted by key outside or lever inside. Switch or power failure allows outside lever to retract latchbolt. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always unlocked.	
M513EU		**Electrically Unlocked (Fail Secure)** Outside lever unlocked by 12 or 24 VDC (Specified). Deadbolt actuation by key or thumbturn from inside. Operating inside lever simultaneously retracts latchbolt and deadbolt. Inside lever is always unlocked.	
M587EU		**Double Cylinder Electrically Unlocked (Fail Secure)*** Both levers unlocked by 12 or 24 VDC (Specified). Latchbolt retracted by either key. Auxiliary latch deadlocks Latchbolt when door is closed.	

***Caution:** Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

Levers

Choose from hundreds of high-end decorative lever designs engineered using the highest quality materials and crafted with careful attention to detail.

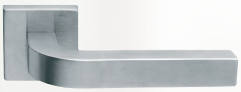
Many more designs are available in our product catalog at www.FRInternational.com.

110 Apollo

146 Star

200 Easy

220 Alpha



230 Beta

260 Cosmos

270 Metro

280 Straight

290 Kube

300 Laguna

400 Soft

401 Soft Plus

500 Ibis

610 Pinax

620 Tuke

630 Eidos

639 Theta

640 Kuma

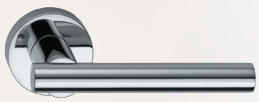
650 Kalé

660 Inlay

700 Flow

710 Aria

720 Sweep

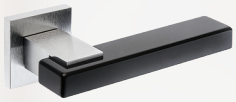


745 Modulo L

785 Bambu

900 Stella

903 Trevi



925 Join

937 Corina

939 Allegra

1023 Ursa

1200 Bump

1210 Filoo

1220 Anatra

1230 Solaris

1500 Edge

1520 Leaf

1540 Chill

1550 Chill+

1580 Rise

2250 Halley

5000 Alessia

5013 Urbano

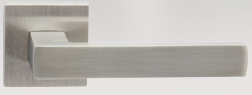
5019 Band

5100 Lucia

5130 Delta

5150 Gamma

5200 Loft



5219 Misano

5300 Omega

5350 Raffaella

5550 Laura

5700 Loredana

5702 Stefano

View more lever designs in our product catalog at **www.FRInternational.com**

5750 Adina

5800 Antonella

5804 Maretto

5820 Forino

5850 Christina

5855 Sophia

6118 Lorenzo

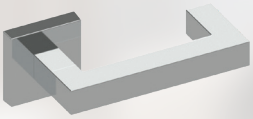
6202 Decora

6208 Esago

6210 Base

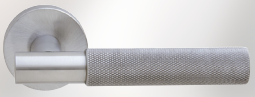
6215 Valenza

6218 Simpla



6220 Kappa

6280 Vienna



6587 Tacta

6592 Cutlass

6594 Modulo B

6612 Marco

6774 Scala

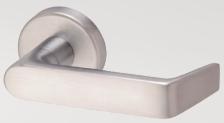
6716 Arno

Commercial Trim Options

In addition to a full range of decorative trim available from FR International, the following Commercial Trim Options are offered in standard rose and plate mounting, suitable for commercial/institutional applications.

PSR

LSR



DSR

FSR

Rose Options

SM
Small Rose
52 mm (2″)

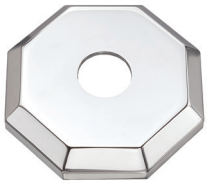
SM-58
Small Retrofit Rose
58 mm (2-1/4″)

SMT
Small Traditional Rose
58 mm (2-1/4″)

SMG
Small Deco Rose
52 mm (2″)

SMQ
Small Square Rose
54 mm (2″)

SMQR
Small Radiused Square Rose
54 mm (2″)



SMO
Small Octagonal Rose
60 mm (2-5/16″)

SMQC
Small Square Chamfered Rose
54 mm (2″)

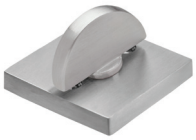
SMQE
Small Rectangular Rose
65 mm (2-1/2″) x 102 mm (4″)

Turnknob Design Options

M61 Round
Smooth Rose

M61-T Round
Traditional Rose

M61-O Round
Octagonal Rose



M61-Q Round
Square Rose

RM61-Q Rectangular
Square Rose

A51 Oval

H41 Accessibility

R71 Accessibility

R71-Q Accessibility
Square Rose

* CF Concealed Fastener option available on round roses

Emergency Release/Indicator Options

EMT

EMTI
with color indicator window

EMTI-VO
with VAC/OCC indicator window

EMT-Q

EMTI-Q
with color indicator window

EMTI-Q-VO
with VAC/OCC indicator window

GVRO
occupancy indicator

GVRO-Q
Square occupancy indicator

Plate Options

11010
Fairfaix
248 x 58 mm
(9-3/4 x 2-1/4")

12010
Pallas
248 x 58 mm
(9-3/4 x 2-1/4")

18010
Riviera
239 x 45 mm
(9-3/8 x1-3/4")

Custom plate options also available.

M500 Series Option Designations

Optional Roses/Escutcheon Plates	**Code**
Small Rose (Default Rose)	SM
Small Traditional Rose	SMT
Small Square Rose	SMQ
Small Square Radiused Rose	SMQR
Fairfax Plate	11010
Pallas Plate	12010
Riviera Plate	18010
Optional Thumbturns	**Code**
Round Smooth Rose (Default Thumbturn)	M61
Round Smooth Rose, Concealed Fasteners	M61-CF
Round Traditional Rose	M61-T
Square Rose Thumbturn	M61-Q
Square Rose, Rectangular Thumbturn	RM61-Q
Octagonal Rose	M61-O
Round Rose Small Thumbturn	C81
H41 Large ADA Thumbturn	H41
Oval Thumbturn	A51
R71 ADA Thumbturn	R71
Emergency Release/Indicator Options *Available as an option on the following functions: M523, M526	**Code**
Emergency Release	EMT
Emergency Release with Indicator Window	EMTI
Square Rose Type	SQR
Emergency Release with VAC/OCC indicator window	EMTI-VO
Occupied Indicator *Occupied Indicator available as an option on the following functions: M513, M520, M521, M556	**Code**
GVRO Indicator	GVRO
GVRO-Q Square Indicator	GVRO-Q
GVRO-E (Escutcheon Indicator for Fairfax, Pallas, Riviera plates)	GVRO-E
Misc Options	**Code**
Tactile Option for Lever Trim	T
CPACP (cover plate for M573)	CPACP
Request to Exit	RX
Latchbolt Monitor	LX

All locks are sold Less Cylinder (L/C). Order required cylinders on a separate line item. Cylinder Options are available upon request.

Ordering Example

745 Modulo L lever on a small rose, in polished brass, privacy lock function with deadbolt and coin turn outside with ADA thumbturn and emergency release with indicator window options

Lever	Rose/Esc	Function	Finish	Handing	Option	Option
745	SM	M526	605	RHR	R71	EMTI

Frascio

Pair M500 Mortise Series locks with Frascio T700 Series tubular latchsets to achieve design continuity throughout your project.

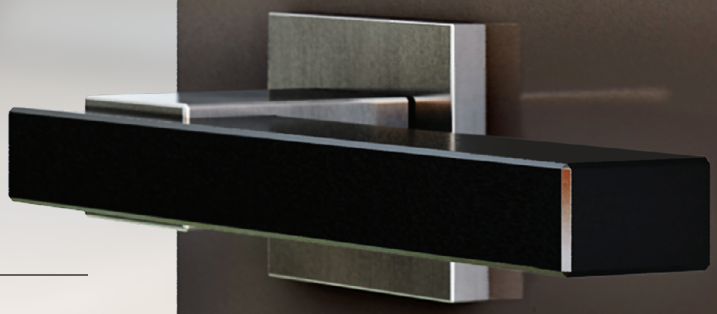
BOTH M500 LOCKS AND T700 LATCHSETS OFFER:

- The same wide variety of fully interchangeable lever designs and rose options from our world-renowned studio
- Contemporary style that flows seamlessly throughout any project.
- Fast, easy installation
- Concealed trim fasteners
- Full interchangeability of rose design options.
- Field-reversible handing
- Matching levers available for electronic access control trim and exit device adaptation
- Matching accessories available include door stops, sliding door locks and trim, door pulls, and more

Design updates have never been easier

When it's time to update or redesign, our exclusive modular product platform is designed to make it easy to update to new trim styles or finishes. Simply remove the lever and rose trim and replace them with a new style without the need to remove or replace the mechanical operating system.

This environmentally-friendly system is easy and saves you time and money.



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