

M SERIES

"FUKUHARA"
CONVERTIBLE DOUBLE-KNIT

M-7IR

M-7E

M-7MI



Model: M-7IR

*The photo may include optional items.

FUKUHARA

"M-7" SERIES

Family of 3 different models developed to cover a wide range of quality basic rib, eightlock and interlock fabrics. Standardized main components realize easy and quick conversion between these models and significantly reduce maintenance costs.

MODEL "M-7IR" INTER-RIB

STANDARD SPECIFICATION

- | | | | | | |
|-----------------|---|-----|-----|-----|-----|
| • Diameters | : 30" | 33" | 34" | 36" | 38" |
| • No. of Feeds | : 54F | 54F | 57F | 60F | 63F |
| • No. of Ends | : 54E | 54E | 57E | 60E | 63E |
| • Gauges | : 12G to 28G | | | | |
| • Cylinder cams | : 5 positions (Tuck, Welt, support and two knit positions for delayed timing and synchronized timing), RDS cams for 2 races | | | | |
| • Dial cams | : 4 positions (Knit, Tuck, Welt and support positions), RDS cams for 2 races | | | | |
| • Yarn carriers | : Corner-hole type on yarn carrier ring | | | | |
| • Cam timing | : Synchronized or delayed timing can be selected by moving the dial cap | | | | |

OPTIONAL EXTRAS

- Conversion parts to convert into Model M-7E (Eightlock), and/or Model M-7MI (Multi-feed Interlock)
- 2 hole yarn carriers (corner + horizontal)
- Parts for elastomeric yarn
- Parts for knitting quilted fabrics
- Parts for knitting spacer fabrics

FABRIC POTENTIAL

- | | |
|------------------------|---|
| • Inter-rib structures | : 1x1, 2x1, Rib structures Thermal cloth, Milano rib, Honey combs Half cardigan, Full cardigan and etc. |
| • Eightlock structures | : Interlock, Ponte de roma, Single pique Mock rodier and etc. |

MODEL "M-7E20" EIGHTLOCK & MULTI

DOUBLE-KNIT STRUCTRES

STANDARD SPECIFICATION

- | | | | | | |
|-----------------|--|-----|-----|-----|-----|
| • Diameters | : 30" | 33" | 34" | 36" | 38" |
| • No. of Feeds | : 72F | 72F | 76F | 80F | 84F |
| • No. of Ends | : 72E | 72E | 76E | 80E | 84E |
| • Gauges | : 18G to 28G | | | | |
| • Cylinder cams | : 3 positions (Knit, Tuck and Welt) exchange closed cams for 2 races | | | | |
| • Dial cams | : 4 positions (Knit, Tuck, Welt and support positions) RDS cams for 2 race | | | | |
| • Yarn carriers | : Corner-hole + horizontal hole type on yarn carrier ring | | | | |
| • Cam timing | : Delayed timing | | | | |

OPTIONAL EXTRAS

- Conversion parts to convert into Model M-7IR (Inter-Rib), and/or Model M-7MI (Multi-feed Interlock).
- Extra two races of cams for cylinder.
- Cylinder cams, yarn carriers, and support cams for synchronized timing.
- Closed cams for dial with dial cap assembly
- Parts for elastomeric yarn
- Parts for knitting spacer fabrics

FABRIC POTENTIAL

- | | |
|------------------------|---|
| • Eightlock structures | : Interlock, Single pique, Ponte de roma, Mock rodier, Reversible, Honey combs and etc. |
|------------------------|---|

M-7E00 Divergent Model

- | | |
|-----------------|--|
| • Cylinder cams | : 5 positions (tuck, welt, support and two knit positions for delayed timing and synchronized timing), RDS cams for 2 races. |
| • Dial cams | : 4 positions (knit, tuck, welt, and support position), RDS cams for 2 races. |
| • Cam timing | : Synchronized timing or delayed timing can be selected by moving the dial cap. |

All other specification — Same as "M-7E" Standard Series

M-7E400 Divergent Model

- | | |
|-----------------|---|
| • Cylinder cams | : 3 positions (knit, tuck, welt), RDS cams for 4 races. |
| • Dial cams | : 4 positions (knit, tuck, welt and support position), RDS cams for 2 races. |
| • Cam timing | : Synchronized timing or delayed timing can be selected by moving the dial cap. |

All other specification — Same as "M-7E" Standard Series

NO. OF NEEDLES IN DIAL / CYLINDER

Gauge Dia.	12G	14G	16G	18G	20G	22G	24G	26G	28G
30"	1128	1320	1512	1680	1872	2064	2256	2448	2640
33"	1248	1440	1656	1872	2064	2256	2496	2688	2880
34"	1284	1488	1704	1920	2136	2352	2556	2772	2988
36"	1356	1585	1812	2028	2256	2484	2712	2940	3168
38"	1440	1680	1920	2136	2376	2640	2880	3120	3360

MODEL "M-7MI" MULTI-FEED INTERLOCK

STANDARD SPECIFICATION

- Diameters : 30" 33" 34" 36" 38"
- No. of Feeds : 108F 108F 114F 120F 126F
- No. of Ends : 108E 108E 114E 120E 126E
- Gauges : 18G to 42G
- Cylinder cams : Closed cams for interlock specification for 2 races
- Dial cams : Closed cams for interlock specification for 2 races
- Yarn carriers : Horizontal-hole type on yarn carrier ring
- Cam timing : Synchronized timing (18 to 22G)
Delayed timing (24 to 42G)

OPTIONAL EXTRAS

- Conversion parts to convert into Model M-7IR (Inter-rib), and/or Model M-7E (Eightlock)
- Additional cams and yarn carriers for eightlock structure fabrics (Single pique, Ponte de roma, and Mock rodier)

FABRIC POTENTIAL

- Interlock

CAM SPECIFICATIONS "M-7" SERIES

	Cylinder			Dial		
	No. of cam races	Cam position	Type	No. of cam races	Cam position	Type
M-7IR	2	5	RDS	2	4	RDS
M-7E00	2	5	RDS	2	4	RDS
M-7E400	4	3	RDS	2	4	RDS
M-7E20	2	3	Solid	2	4	RDS
M-7E40	4	3	Solid	2	4	RDS
M-7E22	2	3	Solid	2	3	Solid
M-7E42	4	3	Solid	2	2	Solid
M-7E44	4	3	Solid	4	3	Solid
M-7MI	2	2	Solid	2	2	Solid

"M-7" SERIES

STANDARD COMMON SPECIFICATION

- Frame : "M" type high speed, single frame, quick change dial/cylinder facility
- Drive : AC inverter with 3.7KW motor for 30", 33"; with 5.5KW motor for 34"-38"
- Yarn feeding device : MPF-20L1 on four tapes
- Take-up : ACT-7 servo-motor controlled friction roll system (Max.fabric roll dia. 580mm)
- Size ring : Light weight CADRATEX
- Creel : Side creel provision without creel
- Oiler : Projectile 419 lubricator/LF lubricator
- Auxiliary equipment : FCP-60 (4.3 inch colour LCD touch panel)
Double handle specification

OPTIONAL EXTRAS

- Overhead bobbin rack or side standing creel
- High legs and large take-up. Max fabric roll dia, 850mm
- 3-split roll type
- MEMMINGER-IRO pulsonic oiler
- CADRATEX fabric spreader
- Flutter blower and timer unit
- Auto-oiler
- LMW fabric scanner
- Lint fans
- Two door specification
- Top stop-motions
- Yarn length meter
- Tool for cylinder/dial change
- ATSS (auto tape speed-control system)

SPECIAL FEATURES

- RDS (Rotary Drop cam System) on dial and/or cylinder :
 - No yarn re-threading is required when changing fabric construction
 - All cam changes are made externally without the need to remove needles or cam sections, thus allowing more than one technician to work on the machine simultaneously. Positive needle control even at the highest machine speed.
- Quick change dial / cylinder facility
- Quick and easy convertibility between each of the three models in this "M-7" series
- Dials and cylinders in this "M-7" series machines are common with the one for "M-8" series. Users can exchange dials / cylinders freely between the two series.

* The above specification may be changed without notice.

* Conditions of sales may vary from country to country.

All information in this brochure is given in good faith but without warranty.

Fukuhara Industrial & Trading Co., Ltd.

6-14, KITAHAMA-HIGASHI, CHUO-KU,

OSAKA 540-0031, JAPAN

TEL NO. OSAKA (06) 6943-0691 FAX NO. (06) 6941-1703 • (06) 6941-1683

PRECISION FUKUHARA WORKS, LTD.

3-5, 7-CHOME, IBUKIDAI-HIGASHIMACHI, NISHI-KU,

KOBE 651-2242, JAPAN

TEL NO. KOBE (078) 997-8800 FAX NO. (078) 997-8806

FUKUHARA NEEDLE CO., LTD.

2753-1, KATADA, SHIRAHAMA-CHO, NISHIMURO-GUN,

WAKAYAMA 649-2201, JAPAN

TEL NO. WAKAYAMA (0739) 45-0032 FAX NO. (0739) 45-1788