

**Schematic View of Ink and Water Rollers**

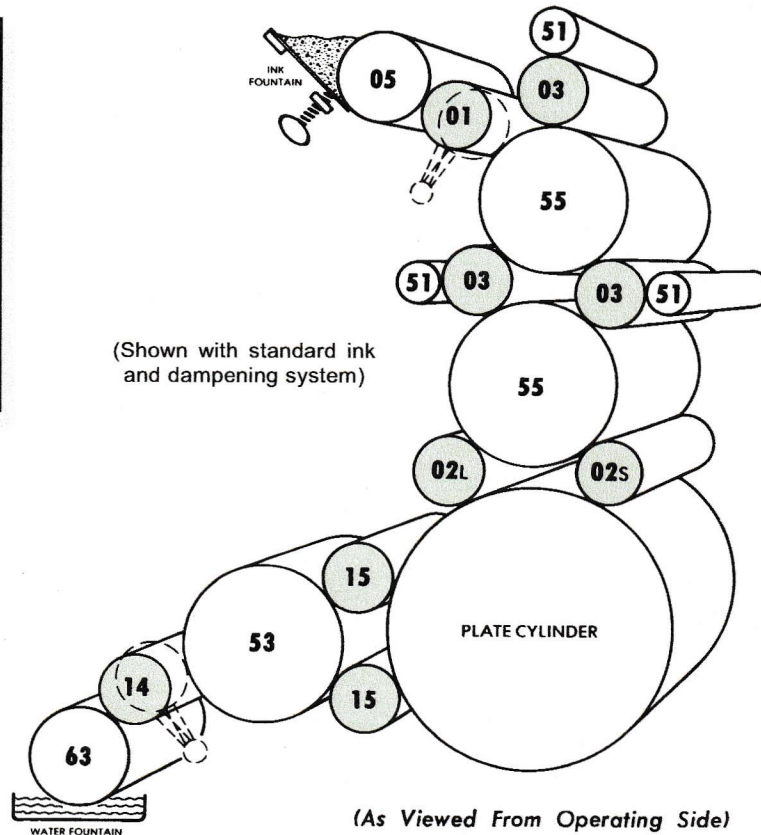
**for
DIDDE GRAPHICS
MODELS**

**APOLLO 8-1/2" or 17"
IBM 9370
TANDEM 8-1/2"**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Ink Rider Roller (copper)
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller
 - 63. Water Fountain Roller

**MODELS: APOLLO 8-1/2" or 17" (Schematic view- this page)**

Including IBM MODEL 9370, TANDEM 8-1/2"

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-1301	Ink Ductor Roller	1-5/16	14	16	221-128	-
02 L	DG-1302-L	Ink Form Roller (large)	1-5/16	13-11/32	15-3/8	221-337	B.B.
02 L	DG-1302-LC	Osc. Ink Form (Linear Control Series...lead pg. i)	1-5/16	13-11/32	15-3/8	164-771	B.B.
02 S	DG-1302-S	Ink Form Roller (small)	1-3/16	13-11/32	15-3/8	221-338	B.B.
03	DG-1303	Ink Intermediate Rider Roller	1-1/4	14-1/8	17	221-788	B.B.
14	DG-1314	Water Ductor Roll (for Jomac cover # GS-212)	1-1/8	14	15-5/8	221-131	-
15	DG-1315	Water Form Roll (for Jomac cover # GS-212)	1-1/8	13-1/2	15-3/8	221-340	B.B.
15	DG-1315-3M	Water Form Roll (for Jomac #WS-118x13-5/8)	1-5/16	13-5/8	15-3/8	221-438	B.B.
-	DG-1300	Water Fountain Bottle (quart size)	-	-	-	722-755	-
-	DG-1309	L-O-R Compressible Blanket	(9-1/2 x 13-1/2 wide; plain edge; 2 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

for
**DIDDE GRAPHICS
MODELS**

**TANDEMER 17"
MODEL OP1713A
MODEL OP1713B**

(Roller listing- this page)

Schematic Key

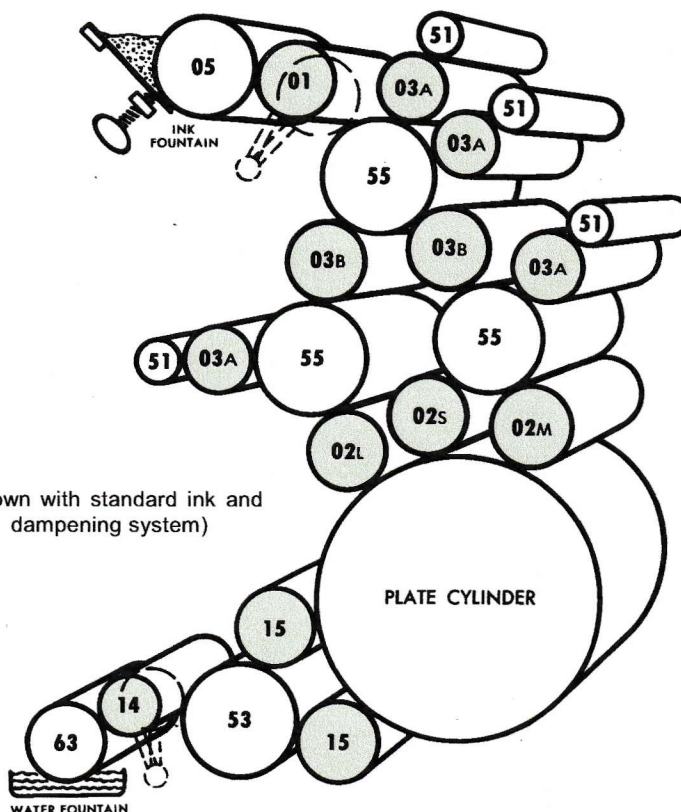
○ **Metal or Hard Rubber Rollers**
available from L-O-R

● **Soft Rubber Rollers**
available from L-O-R

○ **Rollers NOT Available**
from L-O-R

05. Ink Fountain Roller
51. Ink Rider Roller (copper)
53. Water Oscillator Roller
55. Geared Ink Oscillator Roller
63. Water Fountain Roller

(Shown with standard ink and
dampening system)



DIDDE GRAPHICS TANDEMER MODEL 17, with 17" cutoff *(Schematic view- this page)* OP1713A and OP1713B

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-1701	Ink Ductor Roller	1-5/8	14-1/16	15-7/8	223-517	-
02 L	DG-1702-L	Ink Form Roller (large)	2	13-3/8	15-3/8	223-585	B.B.
02 M	DG-1702-M	Ink Form Roller (medium)	1-15/16	13-3/8	15-3/8	223-583	B.B.
02 M	DG-1702-M-LC	Osc. Ink Form (Linear Control Series... lead pg. i)	1-15/16	13-3/8	15-3/8	(special option)	B.B.
02 S	DG-1702-S	Ink Form Roller (small)	1-3/4	13-3/8	15-3/8	223-549	B.B.
03 A	DG-1303	Ink Intermediate Rider Roller	1-1/4	14-1/8	17	221-788	B.B.
03 B	DG-1703	Ink Distributor Roller	1-15/16	13-5/8	15-3/8	223-547	B.B.
14	DG-1714	Water Ductor Roll (for Jomac cover # GS-613)	1-1/2	14-1/16	15-7/8	223-518	-
15	DG-1715	Water Form Roll (for Jomac cover # GS-623)	1-3/4	13-9/16	15-3/8	223-581	B.B.
15	DG-1715-3M	Water Form Roll (for Jomac #WS-193x13-9/16)	1-31/32	13-9/16	15-3/8	223-533	B.B.
-	DG-1709	L-O-R Compressible Blanket	(18-3/8 x 13-1/2 wide; plain edge; 3 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

LITH - O - ROLL

**Schematic View of Ink and Water Rollers**

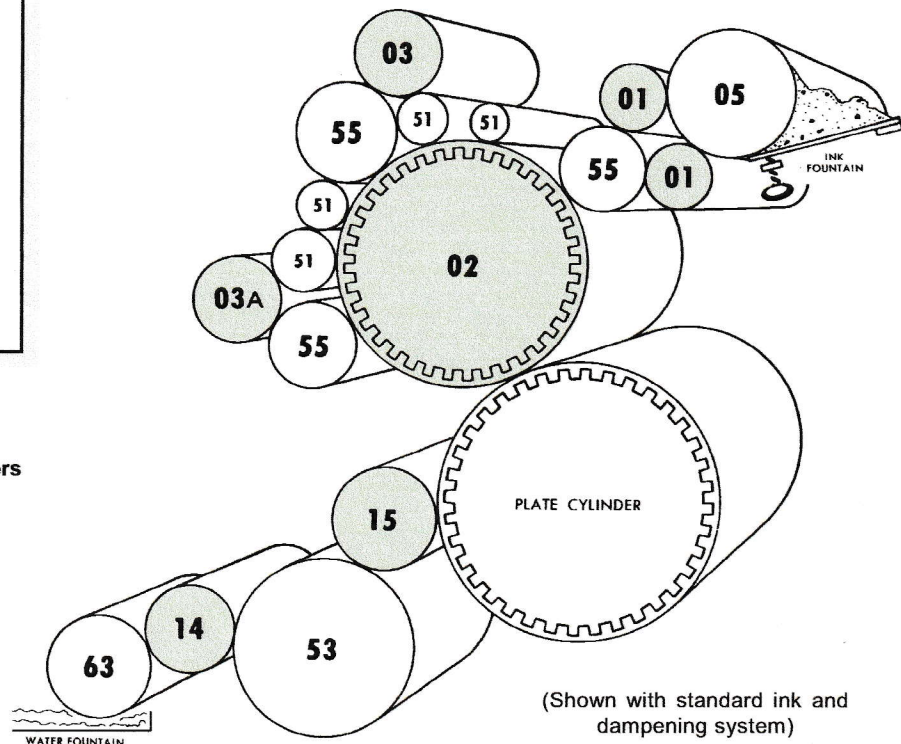
**for
DIDDE GRAPHICS
MODELS**

**CONSERVER
MINICOM 17"**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Ink Rider Roller (copper)
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller
 - 63. Water Fountain Roller

**DIDDEGRAPHICSMODELS:CONSERVERandMINICOM17" (Schematic view-this page)**

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-1701-A	Ink Ductor Roller	1-5/16	13-13/16	15-5/16	175-543	-
03 A	DG-1703-A	Ink Rider Roller	1-5/8	13-3/4	16-7/16	175-517	B.B.
03 B	DG-1703-B	Ink Rider Roller	1-1/2	13-3/4	16-7/16	175-518	B.B.
02	DG-1702-J-A	Ink Form Roller (see page 4.25)	4-9/16	13-3/8	25-3/16	175-934	-
02	DG-1702-J-B	Ink Form Roller (see page 4.25)	4-9/16	13-3/8	24-23/32	176-658	-
14	DG-1714	Water Ductor Roll (for Jomac cover # GS-613)	1-1/2	14-1/16	15-7/8	223-518	-
15	DG-1715	Water Form Roll (for Jomac cover # GS-623)	1-3/4	13-9/16	15-3/8	223-581	B.B.
15	DG-1715-3M	Water Form Roll (for Jomac #WS-193x13-9/16)	1-31/32	13-9/16	15-3/8	223-533	B.B.
-	DG-1709	L-O-R Compressible Blanket	(18-3/8 x 13-1/2 wide; plain edge; 3 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

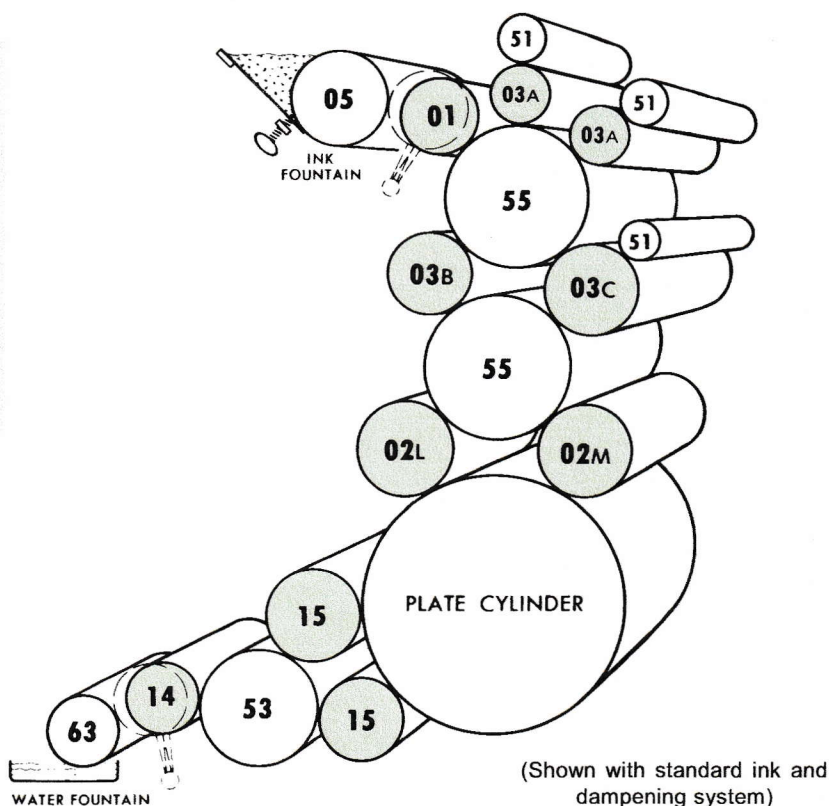
**for
DIDDE GRAPHICS
MODELS**

175
(with 11", 12", or 14" cutoff)
(with 22", 24", or 28" cutoff)

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
 -  **Soft Rubber Rollers**
available from L-O-R
 -  **Rollers NOT Available**
from L-O-R
05. Ink Fountain Roller
51. Ink Rider Roller (copper)
53. Water Oscillator Roller
55. Geared Ink Oscillator Roller
63. Water Fountain Roller



DIDDE GRAPHICS MODEL 175, with 11", 12" or 14" cutoff *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller	1-5/8	18-1/16	19-7/8	225-618	-
02 L	DG-175-02-L	Ink Form Roller (large)	2-1/16	17-11/32	19-3/8	225-590	B.B.
02 M	DG-175-02-M	Ink Form Roller (medium)	1-15/16	17-11/32	19-3/8	225-589	B.B.
02 M	DG-175-02-M-L-C	Osc. Ink Form (Linear Control Series...lead pg. i)	1-15/16	17-11/32	19-3/8	(special option)	B.B.
03 A	DG-175-03-A	Ink Rider Roller (with 11/16 dia. bearings)	1-1/4	18-1/8	21	225-577	B.B.
03 A	DG-175-03-AHD	Ink Rider Roller (with 7/8 dia. bearings)	1-1/4	18-1/8	20-7/8	225-972	B.B.
03 B	DG-175-03-B	Ink Distributor Roller	1-3/4	17-5/8	19-3/8	225-680	B.B.
03 C	DG-175-03-C	Ink Distributor Roller	1-15/16	17-5/8	19-3/8	225-586	B.B.
14	DG-175-14	Water Ductor Roll (for Jomac cover # GS-613)	1-1/2	18-1/16	19-7/8	225-581	-
15	DG-175-15	Water Form Roll (for Jomac cover # GS-623)	1-3/4	17-9/16	19-3/8	225-588	B.B.
15	DG-175-15-3M	Water Form Roll (for Jomac #WS-193x17-9/16)	2	17-9/16	19-3/8	225-584	B.B.
-	DG-175-09	L-O-R Compressible Blanket	(12 x 17-1/2 wide; plain edge; 2 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

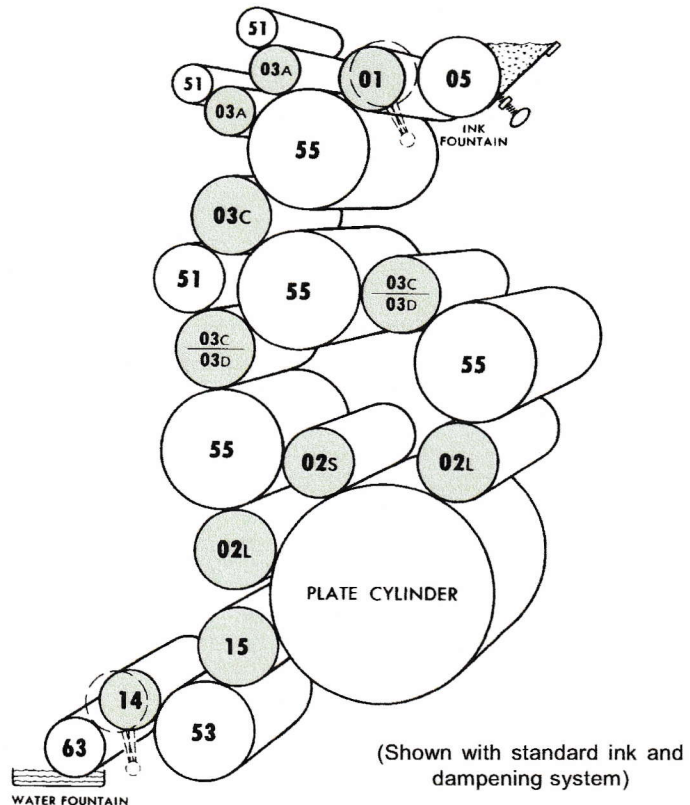
**for
DIDDE GRAPHICS
MODELS**

**175
(with 17" cutoff)**

(Roller listing- this page)

SchematicKey

-  **Metal or Hard Rubber Rollers**
available from L-O-R
 -  **Soft Rubber Rollers**
available from L-O-R
 -  **Rollers NOT Available**
from L-O-R
05. Ink Fountain Roller
51. Ink Rider Roller (copper)
53. Water Oscillator Roller
55. Geared Ink Oscillator Roller
63. Water Fountain Roller



(Shown with standard ink and dampening system)

DIDDE GRAPHICS MODEL 175, with 17" cutoff *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller	1-5/8	18-1/16	19-7/8	225-618	-
02 L	DG-175-02-L	Ink Form Roller (large)	2-1/16	17-11/32	19-3/8	225-590	B.B.
02 L	DG-175-02-LC	Osc. Ink Form (Linear Control Series...lead pg. i)	2-1/16	17-11/32	19-3/8	(special option)	B.B.
02 S	DG-175-02-S	Ink Form Roller (small)	1-3/4	17-11/32	19-3/8	223-665	B.B.
03 A	DG-175-03-A	Ink Rider Roller (with 11/16 dia. bearings)	1-1/4	18-1/8	21	225-577	B.B.
03 A	DG-175-03-AHD	Ink Rider Roller (with 7/8 dia. bearings)	1-1/4	18-1/8	20-7/8	225-972	B.B.
03 C	DG-175-03-C	Ink Distributor Roller (soft rubber)	1-15/16	17-5/8	19-3/8	225-586	B.B.
03 D	DG-175-03-D	Ink Distributor Roller (hard rubber)	1-15/16	17-5/8	19-3/8	223-819	B.B.
14	DG-175-14	Water Ductor Roll (for Jomac cover # GS-613)	1-1/2	18-1/16	19-7/8	225-581	-
15	DG-175-15	Water Form Roll (for Jomac cover # GS-623)	1-3/4	17-9/16	19-3/8	225-588	B.B.
15	DG-175-15-3M	Water Form Roll (for Jomac #WS-193x17-9/16)	2	17-9/16	19-3/8	225-584	B.B.
-	DG-1709-W	L-O-R Compressible Blanket	(18-3/8 x 17-1/2 wide; plain edge; 3 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

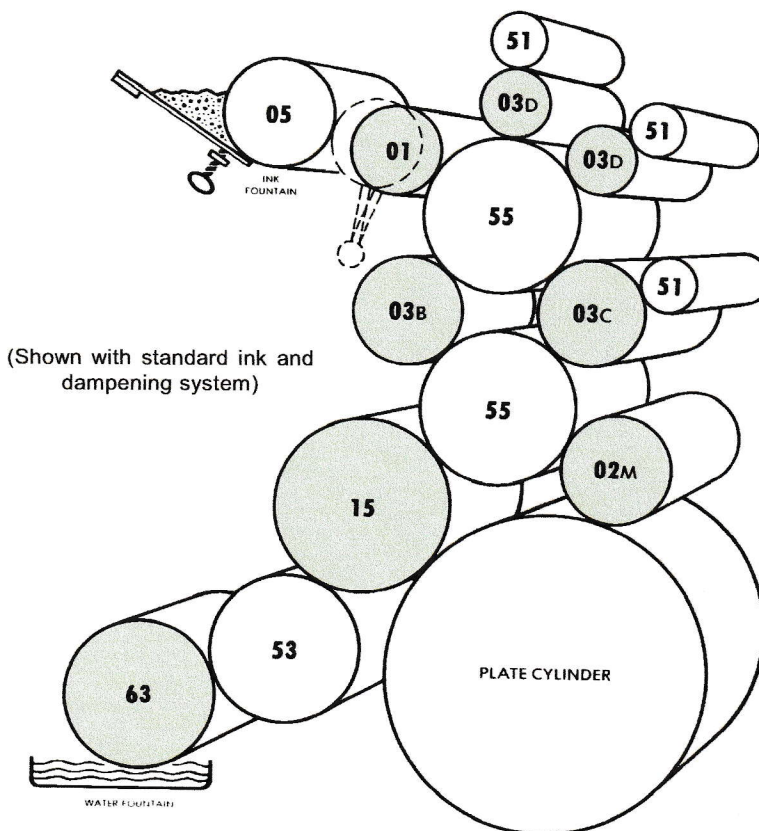


Schematic View of Ink and Water Rollers

for
**DIDDE GRAPHICS
MODEL**

COMPU-PRESS 11"

(Roller listing- this page)



Schematic Key

- Metal or Hard Rubber Rollers**
available from L-O-R
- Soft Rubber Rollers**
available from L-O-R
- Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Ink Rider Roller (copper)
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

DIDDE GRAPHICS MODEL COMPU-PRESS 11" *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	D E S C R I P T I O N	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller	1-5/8	18-1/16	19-7/8	225-618	-
02 M	DG-175-02-M	Ink Form Roller (medium)	1-15/16	17-11/32	19-3/8	225-589	B.B.
02 M	DG-175-02-M-LC	Osc. Ink Form (Linear Control Series...lead pg. i)	1-15/16	17-11/16	19-3/8	(special option)	B.B.
03 B	DG-175-03-B	Ink Distributor Roller	1-3/4	17-5/8	19-3/8	225-680	B.B.
03 C	DG-175-03-C	Ink Distributor Roller	1-15/16	17-5/8	19-3/8	225-586	B.B.
03 D	DG-329-03-D	Ink Rider Roller	1-1/4	18-1/8	20-1/16	329-808	B.B.
15	DG-326-15	Water Form Roller	3-1/2	17-9/16	19-3/4	326-501	B.B.
63	DG-860-63	Water Pan Roller	2-3/4	18-9/16	21-7/16	230-587	-
-	DG-175-09	L-O-R Compressible Blanket	(12 X 17-1/2 wide; plain edge; 2 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

**Schematic View of Ink and Water Rollers**

**for
DIDDE GRAPHICS
MODEL**

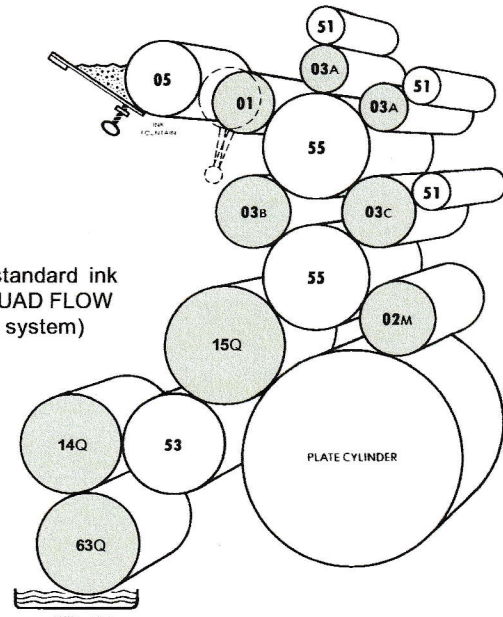
**860
(with 14" cutoff)**

(Roller listing- this page)

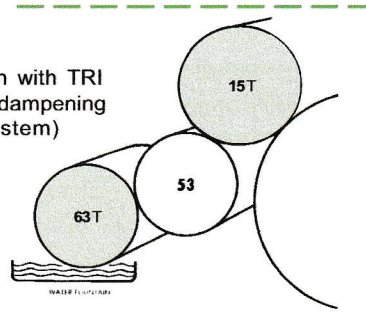
Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Ink Rider Roller (copper)
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

(Shown with standard ink
system and QUAD FLOW
dampening system)



(Shown with TRI
FLOW dampening
system)

**DIDDE GRAPHICS MODEL 860, with 14" cutoff** *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller	1-5/8	18-1/16	19-7/8	225-618	-
02 M	DG-175-02-M	Ink Form Roller (medium)	1-15/16	17-11/32	19-3/8	225-589	B.B.
02 M	DG-175-02-M-LC	Osc. Ink Form (Linear Control Series...lead pg. i)	1-15/16	17-11/32	19-3/8	(special option)	B.B.
03 A	DG-175-03-AHD	Ink Rider Roller (with 7/8 dia. bearings)	1-1/4	18-1/8	20-7/8	225-972	B.B.
03 B	DG-175-03-B	Ink Distributor Roller	1-3/4	17-5/8	19-3/8	225-680	B.B.
03 C	DG-175-03-C	Ink Distributor Roller	1-15/16	17-5/8	19-3/8	225-586	B.B.
14 Q	DG-860-14-A	Metering Roller (Quad Flow sys.) pg. 4.25	2-3/4	18-9/16	21-5/8	227-808	-
14 Q	DG-860-14-B	Metering Roll (1/4-20 tap, both ends; Quad Flow)	2-3/4	18-9/16	21-7/16	230-582	-
15 Q	DG-860-15-A	Water Form Roller (Quad Flow sys.) pg. 4.25	3-1/2	17-9/16	21-1/8	227-708	-
15 Q	DG-860-15-B	Water Form Roll (1/4-20 tap, both ends; Quad Flow)	3-1/2	17-9/16	22-3/8	230-589	-
63 Q	DG-860-63	Water Pan Roll (replaces P/N 227-806; Quad Flow)	2-3/4	18-9/16	21-7/16	230-587	-
15 T	DG-326-15	Water Form Roller (Tri Flow sys.)	3-1/2	17-9/16	19-3/4	326-501	-
63 T	DG-643-63	Water Pan Roller (Tri Flow sys.)	2-27/32	18-9/16	20-31/32	326-643	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



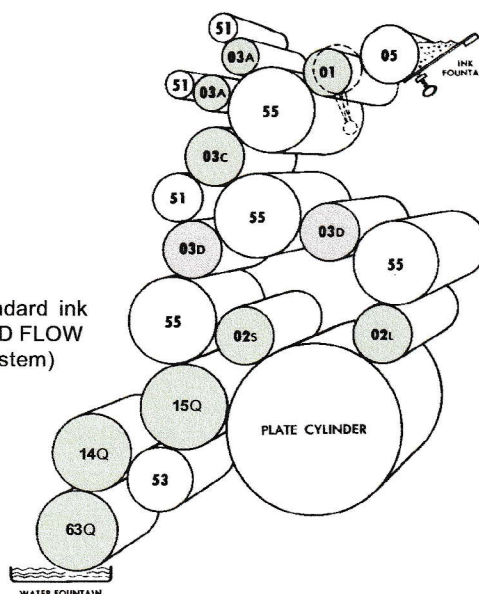
Schematic View of Ink and Water Rollers

**for
DIDDE GRAPHICS
MODEL**

860 or WEBCOM
(with 17", 22", or 24" cutoff)

(Roller listing- this page)

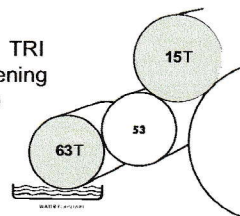
(Shown with standard ink
system and QUAD FLOW
dampening system)



Schematic Key

- Metal or Hard Rubber Rollers**
available from L-O-R
- Soft Rubber Rollers**
available from L-O-R
- Rollers NOT Available**
from L-O-R
 - 04. Geared Ink Distributor Roller
 - 05. Ink Fountain Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

(Shown with TRI
FLOW dampening
system)



DIDDE GRAPHICS MODEL 860, with 17", 22" or 24" cutoff (*Schematic view- this page*)
including WEBCOM (with 17" 22" or 24" cutoff), and 22" MLC press

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller	1-5/8	18-1/16	19-7/8	225-618	-
02 L	DG-175-02-L	Ink Form Roller (large)	2-1/16	17-11/32	19-3/8	225-590	B.B.
02 L	DG-175-02-LC	Osc. Ink Form (Linear Control Series... lead pg. i)	2-1/16	17-11/32	19-3/8	(special option)	B.B.
02 S	DG-175-02-S	Ink Form Roller (small)	1-3/4	17-11/32	19-3/8	223-665	B.B.
03 A	DG-175-03-AHD	Ink Rider Roller (with 7/8 dia. bearings)	1-1/4	18-1/8	20-7/8	225-972	B.B.
03 A	DG-329-03-D	Ink Rider Roller	1-1/4	18-1/8	20-1/16	329-808	B.B.
03 C	DG-175-03-C	Ink Distributor Roller (soft rubber)	1-15/16	17-5/8	19-3/8	225-586	B.B.
03 D	DG-175-03-D	Ink Distributor Roller (hard rubber)	1-15/16	17-5/8	19-3/8	223-819	B.B.
14 Q	DG-860-14-A	Metering Roller (Quad Flow sys.) pg. 4.25	2-3/4	18-9/16	21-5/8	227-808	-
14 Q	DG-860-14-B	Metering Roll (1/4-20 tap, both ends; Quad Flow)	2-3/4	18-9/16	21-7/16	230-582	-
15 Q	DG-860-15-A	Water Form Roller (Quad Flow sys.) pg. 4.25	3-1/2	17-9/16	21-1/8	227-708	-
15 Q	DG-860-15-B	Water Form (1/4-20 tap, both ends; Quad Flow)	3-1/2	17-9/16	22-3/8	230-589	-
63 Q	DG-860-63	Water Pan Roll (replaces P/N 227-806; Quad Flow)	2-3/4	18-9/16	21-7/16	230-587	-
15 T	DG-326-15	Water Form Roller (Tri Flow sys.)	3-1/2	17-9/16	19-3/4	326-501	-
63 T	DG-643-63	Water Pan Roll (Tri Flow sys.)	2-27/32	18-9/16	20-31/32	326-643	-
-	DG-8609-B	L-O-R Compressible Blanket (25-3/8 x 17-1/2 wide; plain edge; 3 ply)					-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

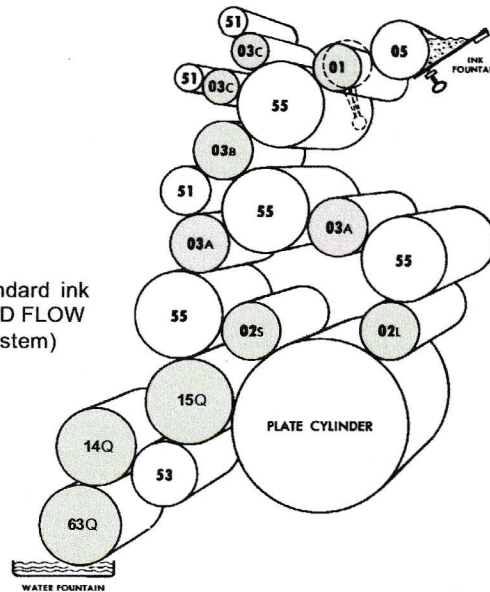
**Schematic View of Ink and Water Rollers**

**for
DIDDE GRAPHICS
MODEL**

**20.5 WIDE
MAKEREADY SYSTEM PRESS
(14" OFFSET UNIT)**

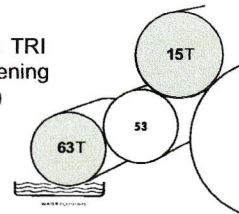
(Roller listing- this page)

(Shown with standard ink
system and QUAD FLOW
dampening system)

**Schematic Key**

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 04. Geared Ink Distributor Roller
 - 05. Ink Fountain Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

(Shown with TRI
FLOW dampening
system)

**DIDDE GRAPHICS MODEL 20.5" (*Schematic view- this page*)**

20.5 WIDE MAKEREADY SYSTEM PRESS; 14" OFFSET UNIT

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-329-01	Ink Ductor Roller	1-5/8	21-1/16	22-7/8	329-734	-
02	DG-327-02	Ink Form Roller	1-15/16	20-11/32	22-3/8	327-501	B.B.
03 A	DG-529-03	Ink Distributor Roller	1-3/4	20-5/8	22-3/8	327-529	B.B.
03 B	DG-329-03-B	Ink Distributor Roller	1-15/16	20-5/8	22-3/8	329-708	B.B.
03 C	DG-329-03-C	Ink Distributor Roller	1-1/4	21-1/8	23-1/16	329-717	B.B.
14 Q	DG-329-14	Metering Roller (Quad Flow sys.)	2-3/4	21-9/16	24-7/16	329-726	-
15 Q	DG-329-15-A	Water Form Roller (Quad Flow sys.)	3-1/2	20-9/16	25-3/8	329-710	-
63 Q	DG-329-63-A	Water Pan Roller (Quad Flow sys.)	2-3/4	21-9/16	24-13/32	329-723	-
15 T	DG-329-15-B	Water Form Roller (Tri Flow sys.)	3-1/2	20-9/16	22-3/4	327-555	-
63 T	DG-329-63-B	Water Pan Roller (Tri Flow sys.)	2-7/8	21-9/16	24	339-638	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

(see page 4.10 for alternate press layout)



Schematic View of Ink and Water Rollers

**for
DIDDE GRAPHICS
MODEL**

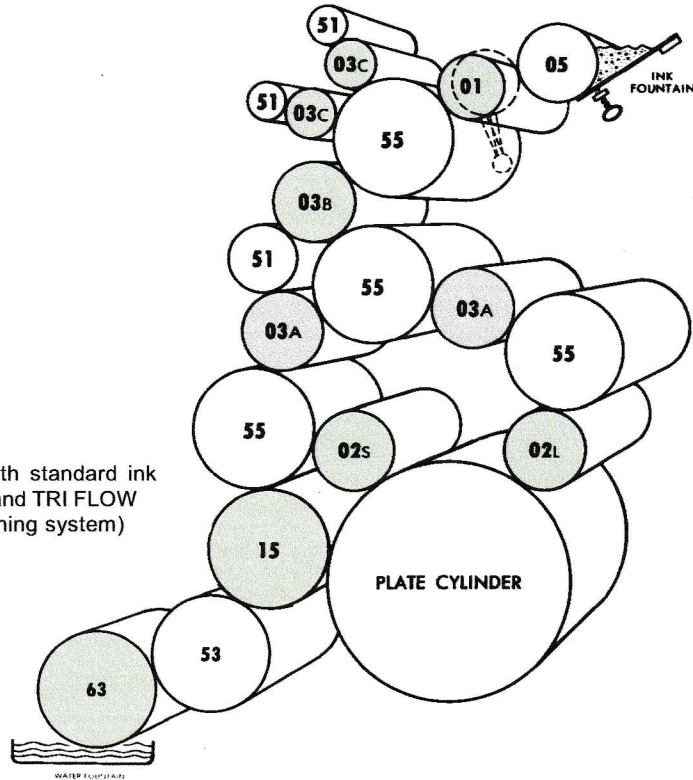
**20.5 WIDE
MAKEREADY SYSTEM PRESS
14" OFFSET UNIT
(with Tri Flow Dampening Sys.)**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
 -  **Soft Rubber Rollers**
available from L-O-R
 -  **Rollers NOT Available**
from L-O-R
04. Geared Ink Distributor Roller
05. Ink Fountain Roller
53. Water Oscillator Roller
55. Geared Ink Oscillator Roller

(Shown with standard ink
system and TRI FLOW
dampening system)



DIDDE GRAPHICS *(Schematic view- this page)* 20.5 WIDE MAKEREADY SYSTEM PRESS, 14" OFFSET UNIT

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-329-01	Ink Ductor Roller	1-5/8	21-1/16	22-7/8	329-734	-
02 S	DG-652-02	Ink Form Roller (small)	1-7/8	20-11/32	22-3/8	327-652	B.B.
02 L	DG-658-02	Ink Form Roller (large)	2-1/8	20-11/32	22-3/8	327-658	B.B.
03 A	DG-329-03-A	Ink Distributor Roller (hard rubber)	1-15/16	20-5/8	22-3/8	329-702	B.B.
03 B	DG-329-03-B	Ink Distributor Roller	1-15/16	20-5/8	22-3/8	329-708	B.B.
03 C	DG-329-03-C	Ink Distributor Roller	1-1/4	21-1/8	23-1/16	329-717	B.B.
15	DG-651-15	Water Form Roller	2-29/32	20-9/16	22-3/4	327-651	B.B.
63	DG-329-63-A	Water Form Roller	2-3/4	21-9/16	24-13/32	329-723	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

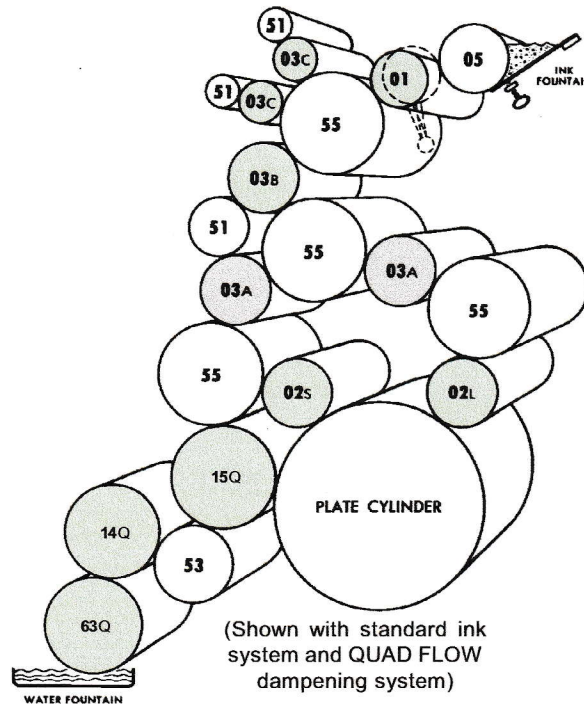


Schematic View of Ink and Water Rollers

for
**DIDDE GRAPHICS
MODEL**

860
(17 x 20.5)
(22 x 20.5)
(24 x 20.5)

(Roller listing- this page)

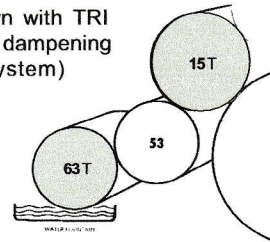


(Shown with standard ink
system and QUAD FLOW
dampening system)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 04. Geared Ink Distributor Roller
 - 05. Ink Fountain Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

(Shown with TRI
FLOW dampening
system)

**DIDDE GRAPHICS MODELS 860 (Schematic view- this page)**

(17" x 20.5"), (22" x 20.5"), (24" x 20.5")

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-329-01	Ink Ductor Roller	1-5/8	21-1/16	22-7/8	329-734	-
02 L	DG-329-02-L	Ink Form Roller (large)	2-1/16	20-11/32	22-3/8	329-706	B.B.
02 L	DG-329-02-LC	Osc. Ink Form (Linear Control series...lead pg. i)	2-1/16	20-11/32	22-3/8	(special option)	B.B.
02 S	DG-329-02-S	Ink Form Roller (small)	1-3/4	20-11/32	22-3/8	329-714	B.B.
03 A	DG-329-03-A	Ink Distributor Roller (hard rubber)	1-15/16	20-5/8	22-3/8	329-702	B.B.
03 B	DG-329-03-B	Ink Distributor Roller	1-15/16	20-5/8	22-3/8	329-708	B.B.
03 C	DG-329-03-C	Ink Rider Roller	1-1/4	21-1/8	23-1/16	329-717	B.B.
14 Q	DG-329-14	Metering Roller (Quad Flow sys.)	2-3/4	21-9/16	24-7/16	329-726	-
15 Q	DG-329-15-A	Water Form Roller (Quad Flow sys.)	3-1/2	20-9/16	25-3/8	329-710	-
63 Q	DG-329-63-A	Water Pan Roller (Quad Flow sys.)	2-3/4	21-9/16	24-13/32	329-723	-
15 T	DG-329-15-B	Water Form Roller (Tri Flow sys.)	3-1/2	20-7/8	22-3/4	327-555	-
63 T	DG-329-63-B	Water Pan Roller (Tri Flow sys.)	2-7/8	21-9/16	24	339-638	-
-	DG-8609-C	L-O-R Compressible Blanket (17x20.5)	(18-3/8 x 20-1/2 wide; plain edge; 3 ply)				-
-	DG-8609-D	L-O-R Compressible Blanket (22x20.5)	(23-3/8 x 20-1/2 wide; plain edge; 3 ply)				-
-	DG-8609-E	L-O-R Compressible Blanket (24x20.5)	(25-3/8 x 20-1/2 wide; plain edge; 3 ply)				-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

**for
DIDDE GRAPHICS
MODEL**

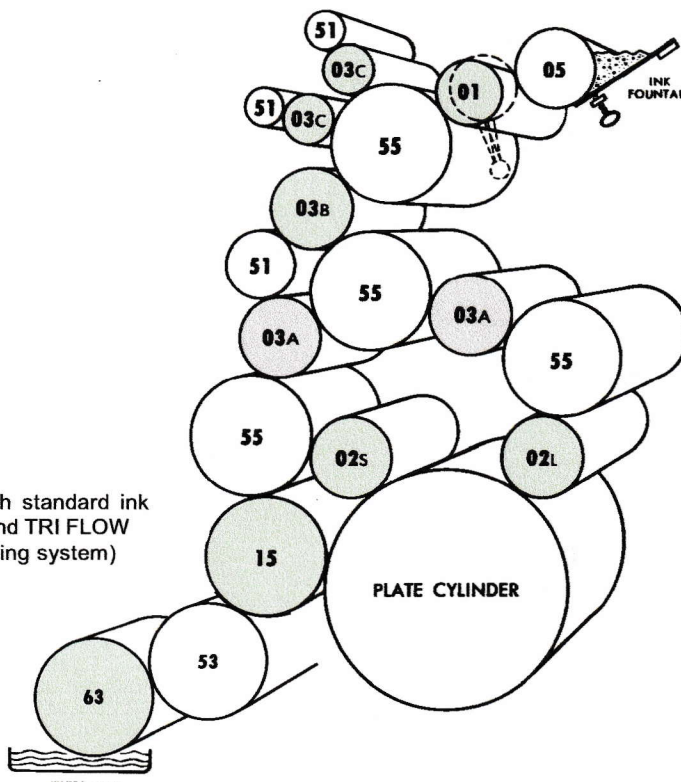
**COLORFORM
22" OFFSET UNIT**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
 -  **Soft Rubber Rollers**
available from L-O-R
 -  **Rollers NOT Available**
from L-O-R
04. Geared Ink Distributor Roller
05. Ink Fountain Roller
53. Water Oscillator Roller
55. Geared Ink Oscillator Roller

(Shown with standard ink
system and TRI FLOW
dampening system)



DIDDE GRAPHICS COLORFORM 22" OFFSET UNIT *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-799-01	Ink Ductor Roller	1-5/8	21	22-3/8	339-799	B.B.
02 S	DG-618-02	Ink Form Roller	1-7/8	20-11/32	22-3/8	339-618	B.B.
02 L	DG-617-02	Ink Form Roller	2-1/16	20-11/32	22-3/8	339-617	B.B.
03 A	DG-620-03	Ink Distributor Roller (hard rubber)	1-15/16	20-5/8	22-3/8	339-620	B.B.
03 B	DG-619-03	Ink Distributor Roller	1-15/16	20-5/8	22-3/8	339-619	B.B.
03 C	DG-616-03	Ink Distributor Roller	1-5/8	21-1/8	22-13/16	339-616	B.B.
15	DG-329-15-B	Water Form Roller (Tri Flow sys.)	3-1/2	20-7/8	22-3/4	327-555	-
63	DG-329-63-B	Water Pan Roller (Tri Flow sys.)	2-7/8	21-9/16	24	339-638	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.

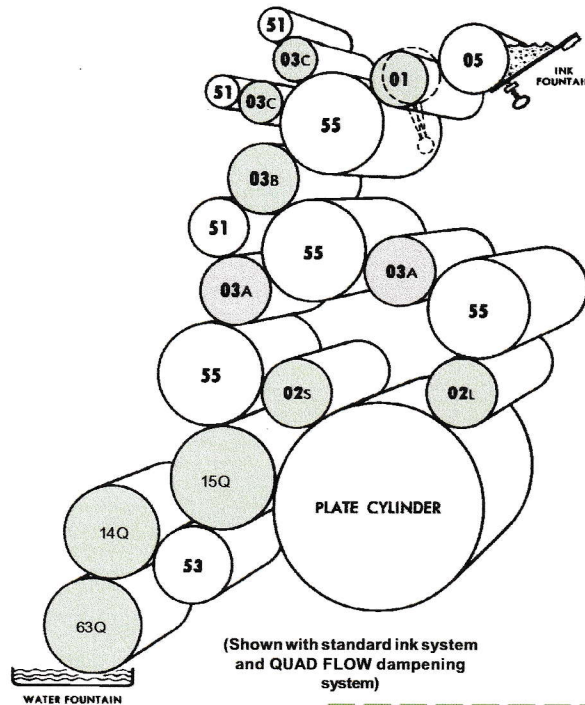


Schematic View of Ink and Water Rollers

**for
DIDDEGRAPHICS
MODEL**

**ML 1000
OFFSET UNIT**

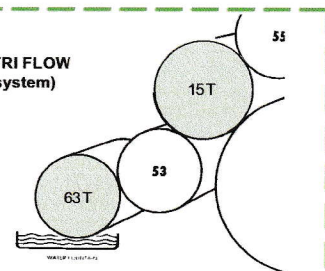
(Roller listing- this page)



Schematic Key

- Metal or Hard Rubber Rollers**
available from L-O-R
- Soft Rubber Rollers**
available from L-O-R
- Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Transfer Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

(Shown with TRI FLOW dampening system)



DIDDE GRAPHICS ML 1000 OFFSET UNIT *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-799-01	Ink Ductor Roller	1-5/8	21-1/16	22-3/8	339-799	B.B.
02 S	DG-618-02	Ink Form Roller	1-7/8	20-11/32	22-3/8	339-618	B.B.
02 L	DG-617-02	Ink Form Roller	2-1/16	20-11/32	22-3/8	339-617	B.B.
03 A	DG-620-03	Ink Distributor Roller (hard rubber)	1-15/16	20-5/8	22-3/8	339-620	B.B.
03 B	DG-619-03	Ink Distributor Roller	1-15/16	20-5/8	22-3/8	339-619	B.B.
03 C	DG-616-03	Ink Distributor Roller	1-5/8	21-1/8	22-13/16	339-616	B.B.
14 Q	DG-329-14	Water Metering Roller (Quad Flow sys.)	2-3/4	21-9/16	24-7/16	329-726	-
15 Q	DG-329-15-B	Water Form Roller (Quad Flow sys.)	3-1/2	20-7/8	22-3/4	327-555	-
63 Q	DG-329-63-A	Water Pan Roller (Quad Flow sys.)	2-3/4	21-9/16	24-13/32	329-723	-
15 T	DG-329-15-B	Water Form Roller (Tri Flow sys.)	3-1/2	20-7/8	22-3/4	327-555	-
63 T	DG-329-63-B	Water Pan Roller (Tri Flow sys.)	2-7/8	21-9/16	24	339-638	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

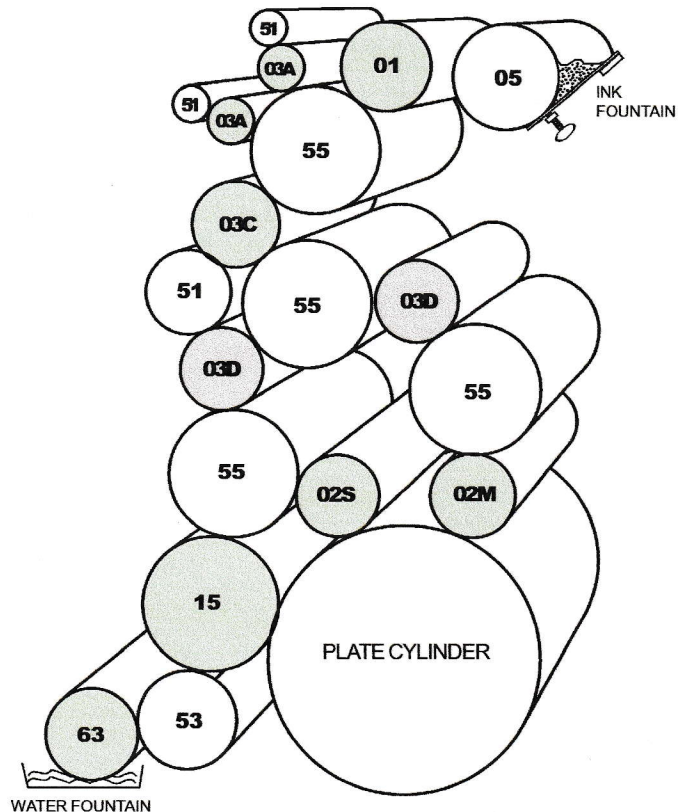
for
**DIDDE GRAPHICS
MODEL**

**ML 2000
OFFSET UNIT**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Transfer Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

**DIDDE GRAPHICS ML 2000 OFFSET UNIT** *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller	1-5/8	18-1/16	19-7/8	225-618	--
02 S	DG-175-02-S	Ink Form Roller	1-3/4	17-11/32	19-3/8	223-665	B.B.
02 M	DG-175-02-M	Ink Form Roller	1-15/16	17-11/32	19-3/8	225-589	B.B.
03 A	DG-329-03-D	Ink Distributor Roller	1-1/4	18-1/8	20-1/16	329-808	B.B.
03 C	DG-175-03-C	Ink Distributor Roller	1-15/16	17-5/8	19-3/8	225-586	B.B.
03 D	DG-175-03-D	Ink Distributor Roller (hard rubber)	1-15/16	17-5/8	19-3/8	223-819	B.B.
15	DG-326-15	Water Form Roller (Tri Flow sys.)	3-1/2	17-9/16	19-3/4	326-501	B.B.
63	DG-643-63	Water Pan Roller (Tri Flow sys.)	2-27/32	18-9/16	20-31/32	326-643	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

**for
DIDDE GRAPHICS
MODEL**

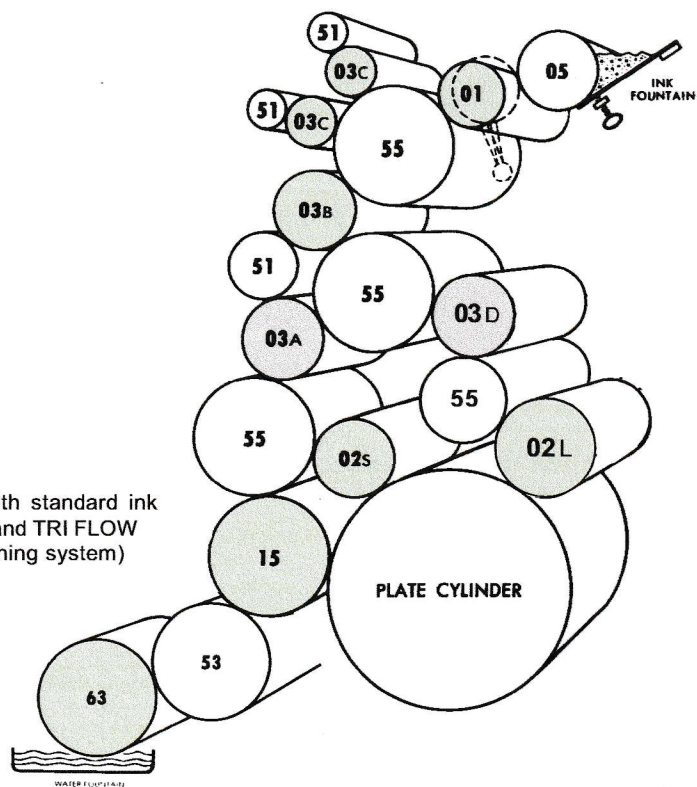
**VIP
OFFSET UNIT**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 04. Geared Ink Distributor Roller
 - 05. Ink Fountain Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller

(Shown with standard ink
system and TRI FLOW
dampening system)



DIDDEGRAPHICS VIP OFFSET UNIT *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-329-01	Ink Ductor Roller	1-5/8	21-1/16	22-7/8	329-734	-
02 S	DG-534-02	Ink Form Roller	1-15/16	20-9/16	22-5/16	411-534	B.B.
02 L	DG-669-02	Ink Form Roller	3-3/8	20-9/16	22-3/4	411-669	B.B.
03 A	DG-667-03	Ink Distributor Roller	3-1/16	20-5/8	22-5/16	411-667	B.B.
03 B	DG-524-03	Ink Distributor Roller	2-5/8	20-5/8	22-5/16	411-524	B.B.
03 C	DG-616-03	Ink Distributor Roller	1-5/8	21-1/8	22-13/16	339-616	B.B.
03 D	DG-671-03	Ink Distributor Roller	2-1/8	20-5/8	22-5/16	411-671	B.B.
15	DG-673-15	Water Form Roller (Tri Flow sys.)	3-19/32	20-9/16	22-3/4	411-673	B.B.
63	DG-329-63-B	Water Pan Roller (Tri Flow sys.)	2-7/8	21-9/16	24	339-638	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

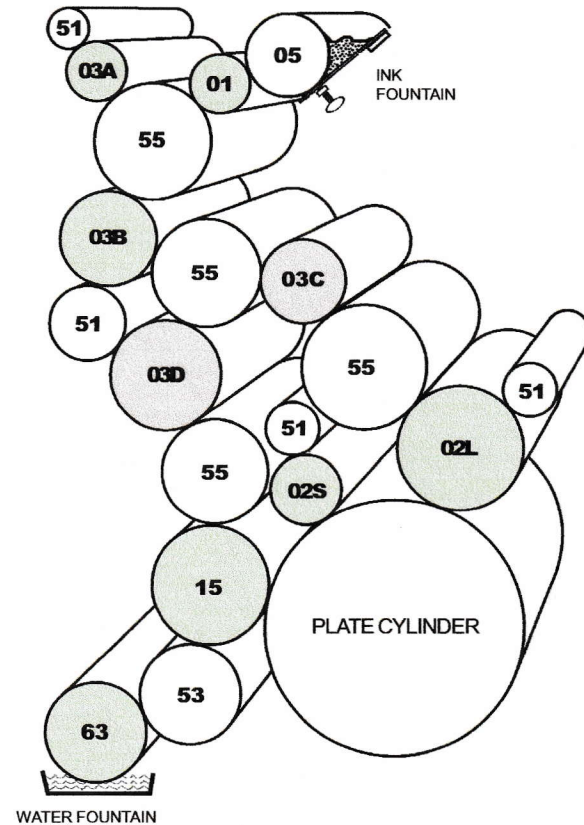
for
**DIDDE GRAPHICS
MODEL**

**"VIPER"
OFFSET UNIT**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Transfer Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller



DIDDE GRAPHICS "VIPER" OFFSET UNIT *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-345-623-01	Ink Ductor Roller	1-5/8	20-5/16	22-7/8	345-623	--
02 S	DG-534-02	Ink Form Roller	1-15/16	20-9/16	22-5/16	411-534	B.B.
02 L	DG-669-02	Ink Form Roller	3-3/8	20-9/16	22-3/4	411-669	B.B.
02 L	DG-669-02-LC	Ink Form Roller (Linear Control, see lead pg i)	3-3/8	20-9/16	22-3/4	(spec. option)	B.B.
03 A	DG-345-540-03	Ink Distributor Roller	1-5/8	20-9/16	22-13/16	345-540	B.B.
03 B	DG-524-03	Ink Distributor Roller	2-5/8	20-5/8	22-5/16	411-524	B.B.
03 C	DG-671-03	Ink Distributor Roller (hard rubber)	21/8	20-5/8	22-5/16	411-671	B.B.
03 D	DG-667-03	Ink Distributor Roller (hard rubber)	3-1/16	20-5/8	22-3/8	411-667	B.B.
15	DG-673-15	Water Form Roller (Tri Flow sys.)	3-19/32	20-9/16	22-3/4	411-673	B.B.
63	DG-395-592-63	Water Pan Roller (Tri Flow sys.)	2-13/16	21-9/16	23-31/32	395-592	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED. 



Schematic View of Ink and Water Rollers

**for
DIDDE GRAPHICS
MODEL**

**XL-900
OFFSET UNIT**

(Roller listing- this page)

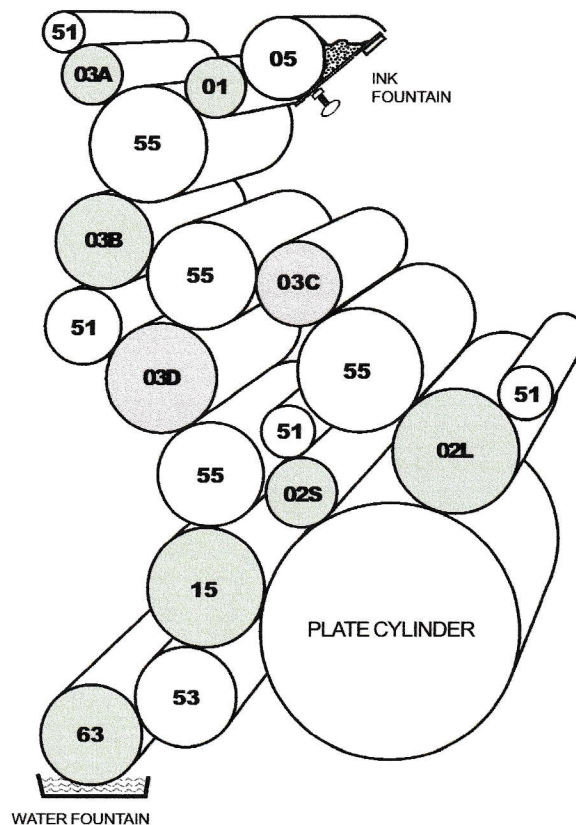
Schematic Key

● **Metal or Hard Rubber Rollers**
available from L-O-R

● **Soft Rubber Rollers**
available from L-O-R

○ **Rollers NOT Available**
from L-O-R

05. Ink Fountain Roller
51. Transfer Roller
53. Water Oscillator Roller
55. Geared Ink Oscillator Roller



DIDDE GRAPHICS "XL-900 OFFSET UNIT" *(Schematic view- this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-345-623-01	Ink Ductor Roller	1-5/8	20-5/16	22-7/8	345-623	--
02 S	DG-534-02	Ink Form Roller	1-15/16	20-9/16	22-5/16	411-534	B.B.
02 L	DG-669-02	Ink Form Roller	3-3/8	20-9/16	22-3/4	411-669	B.B.
02 L	DG-669-02-LC	Ink Form Roller (Linear Control, lead pg. ...i)	3-3/8	20-9/16	22-3/4	736-311	B.B.
03 A	DG-345-540-03	Ink Distributor Roller	1-5/8	20-9/16	22-13/16	345-540	B.B.
03 B	DG-524-03	Ink Distributor Roller	2-5/8	20-5/8	22-5/16	411-524	B.B.
03 C	DG-671-03	Ink Distributor Roller (hard rubber)	2-1/8	20-5/8	22-5/16	411-671	B.B.
03 D	DG-667-03	Ink Distributor Roller (hard rubber)	3-1/16	20-5/8	22-3/8	411-667	B.B.
15	DG-673-15	Water Form Roller (Tri Flow sys.)	3-19/32	20-9/16	22-3/4	411-673	B.B.
63	DG-329-63-B	Water Pan Roller (Tri Flow sys.)	2-7/8	21-9/16	24	339-638	-

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



Schematic View of Ink and Water Rollers

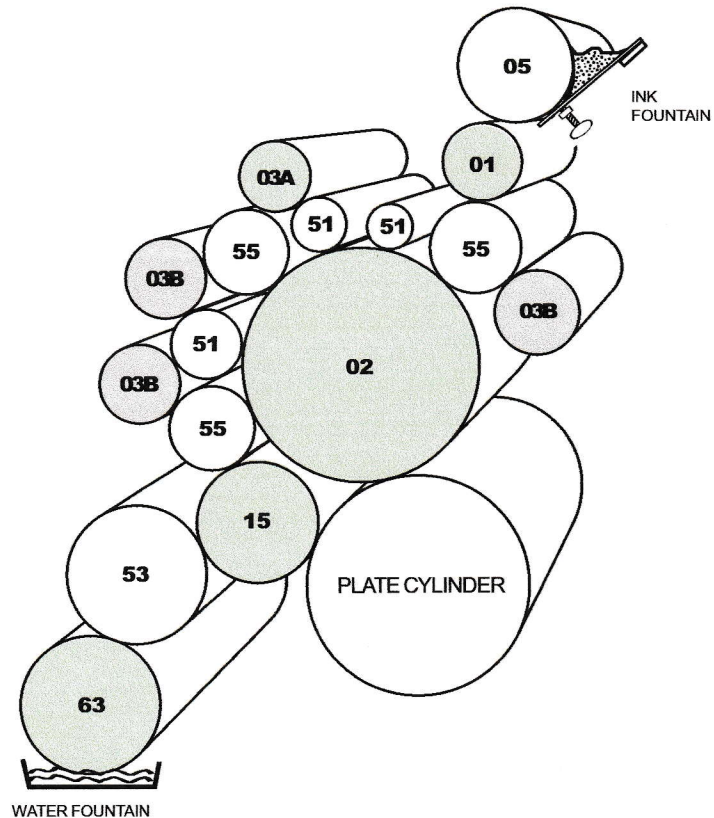
for
**DIDDE GRAPHICS
MODEL**

**MVP
OFFSET UNIT**

(Roller listing- this page)

Schematic Key

-  **Metal or Hard Rubber Rollers**
available from L-O-R
-  **Soft Rubber Rollers**
available from L-O-R
-  **Rollers NOT Available**
from L-O-R
 - 05. Ink Fountain Roller
 - 51. Transfer Roller
 - 53. Water Oscillator Roller
 - 55. Geared Ink Oscillator Roller



DIDDEGRAPHICSMVPOFFSETUNIT *(Schematic view-this page)*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01	Ink Ductor Roller (long shaft)	1-5/8	18-1/16	19-7/8	225-618	--
01	DG-683-914-01	Ink Ductor Roller (short shaft)	1-5/8	18-1/16	19-3/8	683-914	--
02 L	DG-518-02	Ink Form Roller	4-5/8	17-11/16	29-7/16	683-518	--
03 A	DG-508-03	Ink Distributor Roller	1-1/2	17-13/16	20-13/32	683-524	B.B.
03 B	DG-507-03	Ink Distributor Roller (hard rubber)	1-5/8	17-13/16	20-13/32	683-525	B.B.
15	DG-683-540-15	Water Form Roller (Tri Flow sys.)	2-3/8	17-11/16	19-3/8	683-540	B.B.
63	DG-643-63	Water Pan Roller (Tri Flow sys.)	2-27/32	18-9/16	20-31/32	326-643	--

ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED. 

**NUMBERING UNITS**

MODEL NO1713A- *Schematic "A"*
 CONSERVER PRESS, MINICOM 17" and NO1713B - *Schematic "C"*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-1301	Ink Ductor Roller	1-5/16	14	16	221-128	-
02 L	DG-1302-L	Ink Form Roller (large)	1-5/16	13-11/32	15-3/8	221-337	B.B.
02 S	DG-1302-S	Ink Form Roller (small)	1-3/16	13-11/32	15-3/8	221-338	B.B.
02 A	DG-1302-A	Ink Form Roller (large)	1-15/16	13-1/2	15-1/2	232-030	B.B.
02 B	DG-1302-B	Ink Form Roller (small)	1-3/4	13-1/2	15-1/2	232-031	B.B.
03	DG-1303	Ink Intermediate Rider Roller	1-1/4	14-1/8	17	221-788	-

MODEL 175 (12" or 24" 14" or 28" cutoff) - *Schematic "B"*
 MODEL 175 (11" or 22" cutoff), and MODEL 175 (17" cutoff) - *Schematic "D"*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01-A	Ink Ductor Roller	1-5/16	18	20	234-574	-
03	DG-175-03-A	Ink Rider Roller	1-1/4	18-1/8	21	225-577	B.B.
02 L	DG-175-02-L	Ink Form Roller (large)	2-1/16	17-11/32	19-3/8	225-590	B.B.
02 M	DG-175-02-M	Ink Form Roller (medium)	1-15/16	17-11/32	19-3/8	225-589	B.B.

MODEL 860 (14" or 24" cutoff) and the WEBCOM (24" cutoff) - *Schematic "B"*
 COMPU-PRESS 11", MODEL 860 (17" or 22" cutoff) and WEBCOM (17" or 22" cutoff) - *Schematic "D"*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01-A	Ink Ductor Roller	1-5/16	18	20	234-574	-
03	DG-329-03-D	Ink Rider Roller	1-1/4	18-1/8	20-1/16	329-808	B.B.
02 L	DG-175-02-L	Ink Form Roller (large)	2-1/16	17-11/32	19-3/8	225-590	B.B.
02 M	DG-175-02-M	Ink Form Roller (medium)	1-15/16	17-11/32	19-3/8	225-589	B.B.

MODEL 860 (14"x20.5") - *Schematic "B"*

SCHEMATIC NUMBER	LITH-O-ROLL PART NUMBER	DESCRIPTION	OUTSIDE DIAMETER	SURFACE LENGTH	OVERALL LENGTH	PRESS MFG PART NUMBER	ROLLER INCLUDES
01	DG-175-01-B	Ink Ductor Roller	1-5/16	21	23	234-889	-
03	DG-329-03-C	Ink Distributor Roller	1-1/4	21-1/8	23-1/16	329-717	B.B.
02 M	DG-327-02	Ink Form Roller	1-15/16	20-11/32	22-3/8	327-501	B.B.
02 L	DG-329-02-L	Ink Form Roller (large)	2-1/16	20-11/32	22-3/8	329-706	B.B.

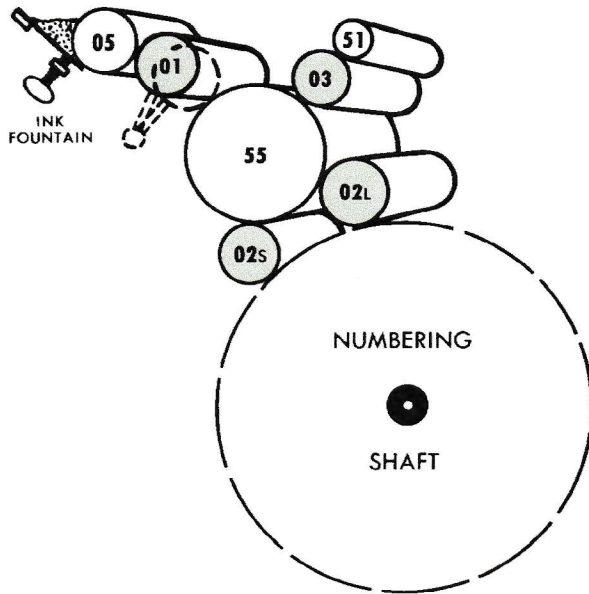
ROLLERS ALSO INCLUDE BALL BEARINGS (B.B.), BUSHINGS (bshgs.), OR GEARS WHERE INDICATED.



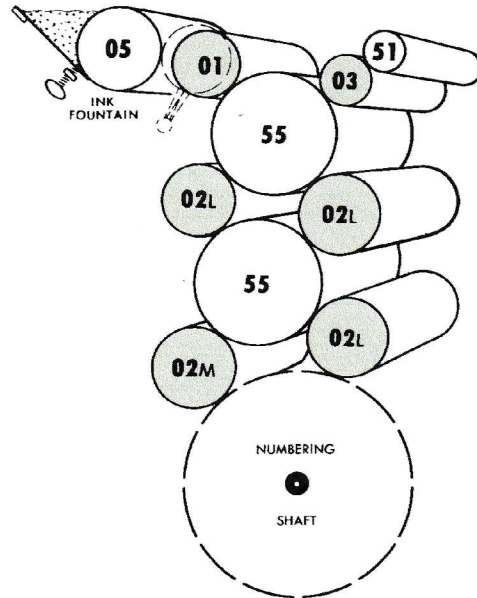


NUMBERING UNITS

Schematic "A"
"SINGLE" IMPRINT SHAFT

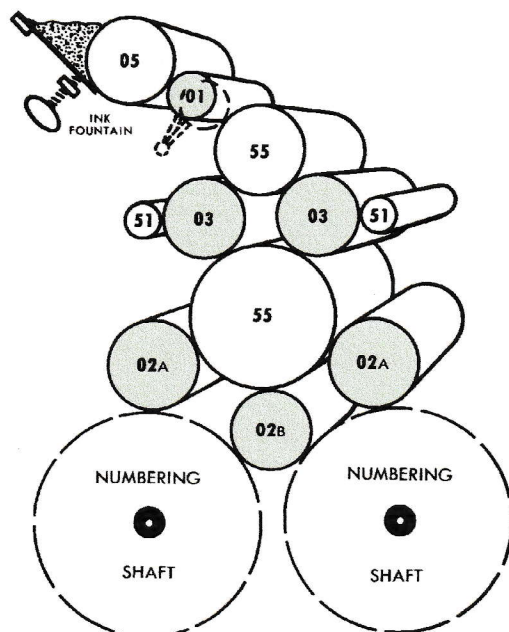


Schematic "B"
"SINGLE" IMPRINT SHAFT



(see Roller listing page 4.22)

Schematic "C"
"DOUBLE" IMPRINT SHAFT



Schematic "D"
"DOUBLE" IMPRINT SHAFT

