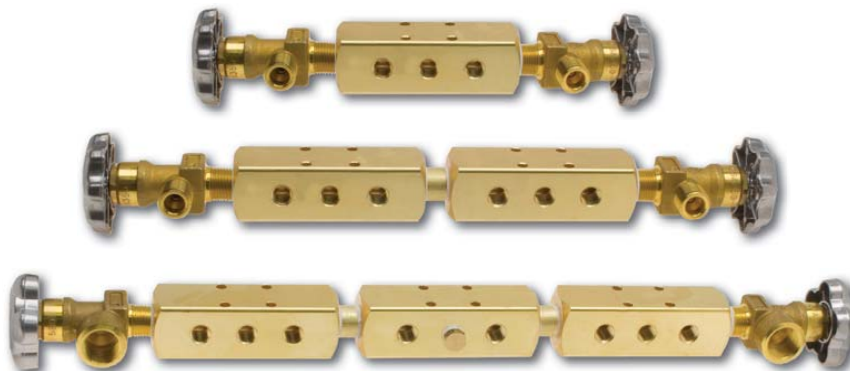


CRADLE PACK MANIFOLDS FOR 6, 12 & 16 CYLINDER

SCMB Series

Superior's SCMB series is the ideal, low cost replacement header to fit most commercially available cylinder cradles. The body is machined from 1 1/2" yellow brass bar stock. Includes proper CGA valves or RPV valves* and 24" flexible, stainless steel pigtails PTFE lined for standard gas service or ETFE lined for high purity and lighter than air gases (hydrogen and helium) or 3,600 PSI Post Sintered PTFE. Also available with armor guarded flex pigtails for heavy duty service. The modular design and removable flexible pigtails allow for quick, easy repairs.



Available to order	
6 pack, stainless steel PTFE lined pigtails	GMA-SCMB-XXX-06
6 pack, stainless steel ETFE lined pigtails	GMA-SCMB-XXXTZ-06
6 pack, single loop copper pigtails	GMA-SCMB-XXX-06-RGD
6 pack, stainless steel 3,600 PSIG PTFE Lined Pigtail	GMA-SCMB-XXX-36-06
12 pack, stainless steel PTFE lined pigtails	GMA-SCMB-XXX-12
12 pack, stainless steel ETFE lined pigtails	GMA-SCMB-XXXTZ-12
12 pack, single loop copper pigtails	GMA-SCMB-XXX-12-RGD
12 pack, stainless steel 3,600 PSIG PTFE Lined Pigtail	GMA-SCMB-XXX-36-12
16 pack, stainless steel PTFE lined pigtails	GMA-SCMB-XXX-16
16 pack, stainless steel ETFE lined pigtails	GMA-SCMB-XXXTZ-16
16 pack, single loop copper pigtails	GMA-SCMB-XXX-16-RGD
16 pack, stainless steel 3,600 PSIG PTFE Lined Pigtail	GMA-SCMB-XXX-36-16

* For **ArmorGuard** Option add "**AG**" to part number
 Example: GMA-SCMB-XXXAG-06-PTFE
 GMA-SCMB-XXXTZAG-06-ETFE
 GMA-SCMB-XXX36AG-06-PTFE 3,600 PSI

* For **Residual Pressure Valve** add "**RPV**" to part number
 Example: GMA-SCMB-XXXRPV-06
 Please Note 3,600 PSIG PTFE is Post Sintered

- Other CGA's available upon request
- Optional Tee with gauge available between valve and block

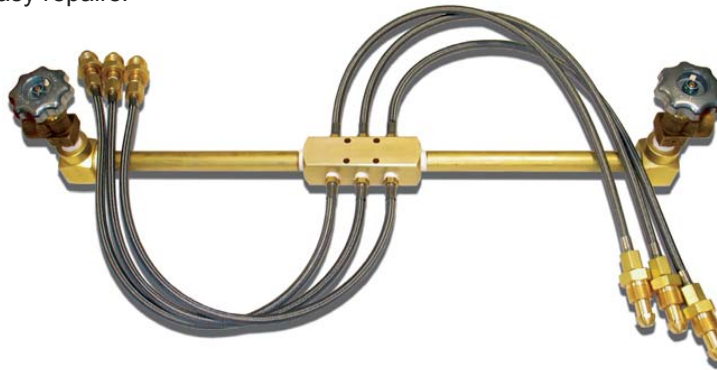
Available for the following gases,
 replace **XXX** in part number with **CGA#**

Carbon Dioxide	CGA 320
Nitrous Oxide	CGA 326
Air	CGA 346
Hydrogen	CGA 350
Propane/Acetylene	CGA 510
Oxygen	CGA 540
Inert Gases	CGA 580

CRADLE PACK MANIFOLDS FOR 6, 12 & 16 CYLINDER

CPR Series

Superior's CPR series is a cradle pack replacement header to fit most common size cylinder cradles. The body is machined from 1 1/2" yellow brass bar stock. Includes proper CGA valves or RPV valves, 24" flexible, stainless steel pigtails PTFE lined for standard gas service, ETFE lined for high purity and lighter than air gases (hydrogen and helium) or 3,600 PSIG Post Sintered PTFE. Also available with armor guarded flexible pigtails for heavy duty service. The modular design and removable flexible pigtails allow for quick, easy repairs.



Available to order	
6 pack, stainless steel PTFE lined pigtails	GMA-CPR-XXX-06
6 pack, stainless steel ETFE lined pigtails	GMA-CPR-XXXTZ-06
6 pack, stainless steel 3,600 PSIG PTFE lined pigtails	GMA-CPR-XXX-36-06
6 pack, single loop copper pigtails	GMA-CPR-XXX-06-RGD
12 pack, stainless steel PTFE lined pigtails	GMA-CPR-XXX-12
12 pack, stainless steel ETFE lined pigtails	GMA-CPR-XXXTZ-12
12 pack, stainless steel 3,600 PSIG PTFE lined pigtails	GMA-CPR-XXX-36-12
12 pack, single loop copper pigtails	GMA-CPR-XXX-12-RGD
16 pack, stainless steel PTFE lined pigtails	GMA-CPR-XXX-16
16 pack, stainless steel ETFE lined pigtails	GMA-CPR-XXXTZ-16
16 pack, stainless steel 3,600 PSIG PTFE lined pigtails	GMA-CPR-XXX-36-16
16 pack, single loop copper pigtails	GMA-CPR-XXX-16-RGD

* For **ArmorGuard** Option add "**AG**" to part number
 Example: GMA-CPR-XXXAG-06-PTFE
 GMA-CPR-XXXTZAG-06-ETFE
 GMA-CPR-XXX36AG-06-PTFE 3,600 PSI

* For **Residual Pressure Valve** add "**RPV**" to part number
 Example: GMA-CPR-XXXRPV-06

*Please Note 3,600 PSIG PTFE is Post Sintered

• Other CGA's available upon request

Available for the following gases,
 replace **XXX** in part number with **CGA**

Carbon Dioxide	CGA 320
Nitrous Oxide	CGA 326
Air	CGA 346
Hydrogen	CGA 350
Propane/Acetylene	CGA 510
Oxygen	CGA 540
Inert Gases	CGA 580

HEADERS & OPEN STYLE MANIFOLDS

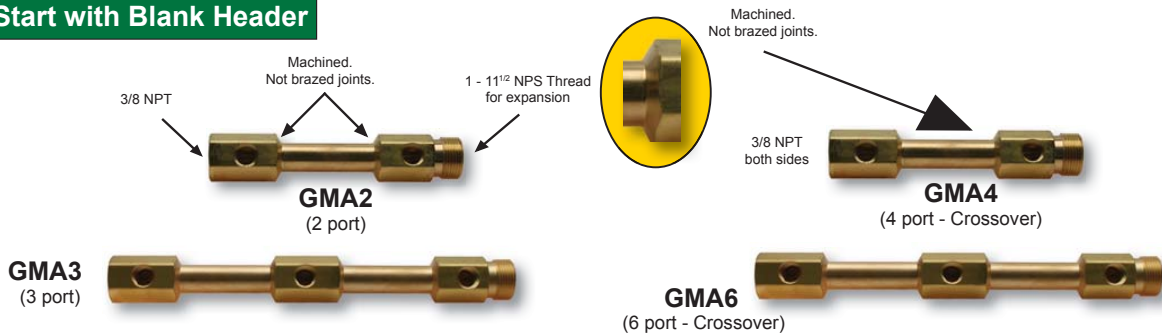
MODULAR NON-BRAZED SIMPLEX HEADERS FOR INDUSTRIAL, SPECIALTY GAS & HOSPITAL MANIFOLD SYSTEMS

Modular simplex manifold headers are a single unit design manufactured from free cutting brass bar stock. This design eliminates all brazed joints. Each unit is tested to full operating pressure and cleaned for oxygen service per CGA-G4.1. Manifold headers can be shipped complete with master valve, individual check valve inlets, flexible stainless steel or rigid copper pigtails, mounting hardware, and CGA inlet connections. Systems available include simplex, MHV series with flexible stainless pigtails, CMHV with rigid copper pigtails, MHE and CMHE series header extensions. Headers are ordered in 2 or 3 cylinder configurations to arrive at the desired number of cylinders. Custom configurations are also available for U-shaped and L-shaped to meet your space requirements. Headers are available with an optional manifold regulator. To order, add an R to the type of manifold ex. GMA-MHVR-540-02.

Configuration: Systems are available in three different basic configurations, for 2 or 3 cylinder sections. Five inch center to center spacing is standard. To order 90 degree elbow sections separately, specify GMF-3710. See page 70.

HOW TO ORDER

1 Start with Blank Header



2 Choose Inlet

MHV = Master Header Valve

MHE = Master Header Extension



3 Choose Gas

Male Outlets

CGA 300 - Ethyl Chlorides (formerly Acetylene)
CGA 320 - Carbon Dioxide
CGA 326 - Nitrous Oxide
CGA 346 - Air
CGA 350 - Hydrogen
CGA 540 - Oxygen
CGA 555 - Propane
CGA 577 - Oxygen



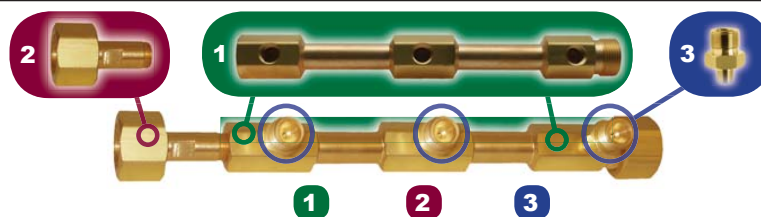
Female Outlets

CGA 500 - Medical Mixtures
CGA 510 - Acetylene
CGA 580 - Inert Gases
CGA 590 - Sulfur HexaFluoride (formerly Industrial Air)



*** Pigtails sold separately**
For check valve outlets add "CV" after CGA number

CONFIGURED MANIFOLD EXAMPLE



3 Cylinder CGA 540 with Header Extension and check valve outlets

HEADERS & OPEN STYLE MANIFOLDS

GAS MANIFOLD ASSEMBLIES

ORDERING INFORMATION:

Each manifold part number consists of four sections. The first section denotes a Gas Manifold Assembly (GMA). The second section denotes the type of manifold and its configuration (only for duplex manifolds) otherwise do not use configuration number. The third section denotes the CGA number or type of gas, and the last section denotes the number of outlets or cylinders. The example below is for a twelve cylinder Oxygen duplex manifold in a standard configuration with outlet adaptor with check valves instead of header valves.

GMA - **DM** - **540CV** - **12**
 Gas Manifold Assembly Type of Manifold & Configuration CGA Number Number of Cylinder Outlets

Type of Manifold	Type of Configuration	Type of Gases
SD-Simple Duplex(Manual) SM-Simplex(Manual) DM-Duplex(Manual) HEL-Header Extension, left side HER-Header Extension, right side	Standard Configuration 2-Crossover Configuration 3-"L" Shaped Configuration 4-"U" Shaped Configuration 5-Staggered Configuration	300-Commercial Acetylene 320-Carbon Dioxide 326-Nitrous Oxide 346-Air 350-Hydrogen 510-Acetylene & Propane 540-Oxygen 580-Nitrogen, Helium & Argon 590-Industrial Air

SIMPLE DUPLEX MANIFOLDS

The simple duplex manifold is an economical system with a two cylinder capacity, one per side. The unit is furnished with two header valves and two pigtails with check valves or two outlet adaptors with check valves and two regular pigtails, 1/2" NPT tee, a union and a mounting bracket. Manifolds for Acetylene gas will include pigtails with dry type flashback arrestors.



GMA-SD-320-02

SIMPLEX MANIFOLDS WITH MANUAL CONTROLS

The simplex manifold has a master shut off valve with a single row of cylinder modules. Each module consists of 1/2" piping, 1/2" tees, header valves and pigtails with check valves or outlet adaptors with check valve and regular pigtails, a union, a CGA end plug and mounting brackets. The last module will have a plug and chain connected to an adaptor that allows for future expansion. Proper CGA fittings will be furnished for the specified gas. Manifolds for Acetylene gas will include a Hydraulic Flash Arrestor and pigtails with dry type arrestors.



GMA-SM-346-02

MANIFOLD HEADER EXTENSION ASSEMBLIES

Header extensions are shipped ready for addition to existing manifolds. Unit includes CGA inlet, CGA end plug, 1/2" piping, 1/2" tees, header valves and pigtails with check valves or outlet adaptors with check valves and flexible pigtails and a mounting bracket. The last module will have a plug and chain connected to an adaptor that allows for future expansion. Specify right side extension (HER) or left side extension (HEL).



GMA-HER-540-02

HEADERS & OPEN STYLE MANIFOLDS

DUPLEX MANIFOLDS WITH MANUAL CONTROLS

The duplex manifold has two master shut off valves allowing replacement of the exhausted bank of cylinders while the full bank of cylinders is in operation. The center section accommodates a single regulator. The manifold is shipped with 1/2" piping, 1/2" tees, header valves and pigtails with check valves or adaptor outlets with check valve and regular pigtails, a union, a CGA end plug and mounting brackets are included with each module. Modules are furnished with a plug and chain on the last module that allows for future expansion. Proper CGA fittings will be furnished for specified gas. Manifolds for Acetylene gas will include a Hydraulic Flash Arrestor and pigtails with dry type arrestors.



GMA-DM-580-04

BRASS MANIFOLD PIPE AND PIPE FITTINGS

Fittings Are Machined From CDA-360 Brass, Stress Relieved and Cleaned For Oxygen Service

PIPE ELBOWS					PIPE CROSSES				
3,000 PSI					3,000 PSI				
<p>GMF-3011</p> <p>GMF-3012</p> <p>GMF-3013</p>					<p>GMF-3041</p> <p>GMF-3042</p> <p>GMF-3043</p>				
Part No.	Ref. A	Ref. B	Ref. F	Ref. G	Part No.	Ref. A	Ref. B	Ref. C & D	Ref. E
GMF-3011	1/2"-14 NPT	1/2"-14 NPT	1-5/16"	3/4"	GMF-3041	1/2"-14 NPT	1/2"-14 NPT	1/2"-14 NPT	1-1/2"
GMF-3012	1/2"-14 NPT	.843"-.847"	1-5/16"	3/4"	GMF-3042	.843"-.847"	1/2"-14 NPT	1/2"-14 NPT	1-1/2"
GMF-3013	.843"-.847"	.843"-.847"	1-5/16"	3/4"	GMF-3043	.843"-.847"	Slip Thru	1/2"-14 NPT	1-1/2"

PIPE TEES					3,000 PSI				
<p>GMF-3021</p> <p>GMF-3022</p> <p>GMF-3023</p> <p>GMF-3033</p> <p>GMF-3034</p>									
Part No.	Ref. A	Ref. B	Ref. C	Ref. E	Part No.	Ref. A	Ref. B	Ref. C	Ref. E
GMF-3021	1/2"-14 NPT	1/2"-14 NPT	1/2"-14 NPT	1-1/2"	GMF-3033	.843"-.847"	Slip Thru	1/2"-14 NPT	1-1/2"
GMF-3022	1/2"-14 NPT	1/2"-14 NPT	.843"-.847"	1-1/2"	GMF-3034	.843"-.847"	Slip Thru	.843"-.847"	1-1/2"
GMF-3023	.843"-.847"	1/2"-14 NPT	1/2"-14 NPT	1-1/2"					

MANIFOLD FITTINGS & PIPING

3,000 PSI

PIPE NIPPLES, THREADED ENDS

- Cleaned For Oxygen Service
- Suitable For Acetylene
- Machined From CDA 360 Brass



GMF-3214

Part No.	Thread Size	Length
GMF-3211	1/2"-14 NPT	1-1/2"
GMF-3212	1/2"-14 NPT	2"
GMF-3213	1/2"-14 NPT	4"
GMF-3214	1/2"-14 NPT	6"
GMF-3215	1/2"-14 NPT	9-3/4"
GMF-3216	1/2"-14 NPT	12-3/4"

PIPE LENGTHS, PLAIN ENDS

- Cleaned For Oxygen Service
- Suitable For Acetylene
- Made From CDA 360 Brass
- Special Lengths Available Upon Request



GMF-3224

Part No.	Pipe Size	Length
GMF-3222	1/2" Nom.	2"
GMF-3223	1/2" Nom.	4"
GMF-3224	1/2" Nom.	6"
GMF-3225	1/2" Nom.	9-3/4"
GMF-3226	1/2" Nom.	12-3/4"

UNION 90°



GMF-3710

UNION PLUG

Part No.	Thread
GMA-RH-PLUG	1"-11-1/2 NPS RH-INT.
GMA-LH-PLUG	1"-11-1/2 NPS LH-INT.



PIPE LENGTHS, PLAIN ENDS

- NOT CLEANED** For Oxygen Service
- Suitable For Acetylene
- Made From CDA 360 Brass

Part No.	Pipe Size	Length
	1/2" Nom.	6 FT.
	1/2" Nom.	12 FT.

NOTE: GMF-3237 Must ship via Common Carrier



UNION NUTS

Part No.	Thread
GMF-3311	1"-11-1/2 NPS RH-INT.
GMF-3312	1"-11-1/2 NPS LH-INT.



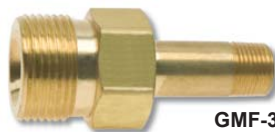
GMF-3311

UNION NIPPLES

GMF-3326



Part No.	Thread	Length
GMF-3321	3/8"-18 NPT	2.40"
GMF-3326	1/2"-14 NPT	2.94"



GMF-3333

UNION BUSHINGS



GMF-3332

UNION BUSHINGS WITH FILTER 3,000 PSI

UNION BUSHINGS WITHOUT FILTER 3,000 PSI

Part No.	Thread	Pipe Thread	Length	Part No.	Thread	Pipe Thread	Length
GMF-3333	1"-11-1/2 NPS RH	3/8"-18 NPT	3.125"	GMF-3331	1"-11-1/2 NPS RH	3/8"-18 NPT	3.125"
GMF-3334	1"-11-1/2 NPS RH	1/2"-14 NPT	2.187"	GMF-3332	1"-11-1/2 NPS RH	1/2"-14 NPT	2.187"
GMF-3337	1"-11-1/2 NPS LH	3/8"-18 NPT	3.125"	GMF-3335	1"-11-1/2 NPS LH	3/8"-18 NPT	3.125"
GMF-3338	1"-11-1/2 NPS LH	1/2"-14 NPT	2.187"	GMF-3336	1"-11-1/2 NPS LH	1/2"-14 NPT	2.187"
GMF-3341	Replacement Filter						
GMF-3342	Replacement Snap-Ring						