PYPLOK® Catalogue



PYPLOK®
FITTINGS
A Tube-Mac® Manufactured Product

Non-Welded Mechanically Attached Fittings

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Introduction

Notice

The information and data presented in this catalogue is intended as reference for use of PYPLOK® equipment by designers and users for proper application and installation of the product. It is not intended to be used as a substitute for competent, professional assistance for any specific application.

While every effort has been made to ensure its accuracy, Tube-Mac®, its subsidiaries and affiliated companies, make no express or implied warranty of any kind regarding the information contained in this catalogue or the material referred within.

The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® is always striving for continual product improvement and developments and therefore reserves the right to change product designs, specifications and limitations without notice.

Anyone making use of the information or material contained herein does so at their own risk and assumes any and all liability resulting from such use.

All technical data presented should always be used to design a system along with good piping practices. The pressure, temperature and other limiting factors of the PYPLOK® product must never be exceeded. For any additional technical information, it is recommended to contact Tube-Mac®.

PYPLOK® FITTINGS

A Tube-Mac® Manufactured Product

Introduction

What is PYPLOK®

PYPLOK® is a 360° radial swage mechanically attached fitting which permanently connects pipe and tube for a leak free, cold connection. The system is fast, reliable and tamper proof ideal for use in new build and maintenance works where fire hazards exist and a clean piping connection is required. A hydraulically powered compression tool swages the fitting over pipe/tube plastically deforming the fitting in seconds. The fitting can be used in a wide variety of low to high pressure piping applications in industries such as Marine & Offshore, Navy, Oil & Gas, Petrochemical, Steel, Mining and other Industrial uses.





This technology was originally developed in 1968 by McDonnell Aircraft as a replacement to threaded and brazed joints on the F-4 Fighter Jet. Threaded and brazed joints were less reliable in applications of high stresses and loads so they developed the 360° Radial Swage technology. McDonnell Aircraft licensed a company, Deutsch Metal Components (DMC) to manufacture this new fitting technology specifically for aerospace tubing application. In 1978, DMC expanded the range of the product to Nominal Bore Pipe, OD Tube and Metric Tube for industrial applications in the Oil & Gas, Marine & Offshore, Navy and Industrial Process and Power Piping industries. As an equal or better equivalent to welding and threading it was accepted as a new alternative to connecting pipes and tubes.

In 2007, DMC decided to divest in the industrial line of Mechanically Attached Fittings and sell the product line to one of its largest users which was Tube-Mac®. Since then Tube-Mac® has integrated PYPLOK® into their large offering of non-welded piping solutions and has expanded the range to additional materials, configurations and sizes.

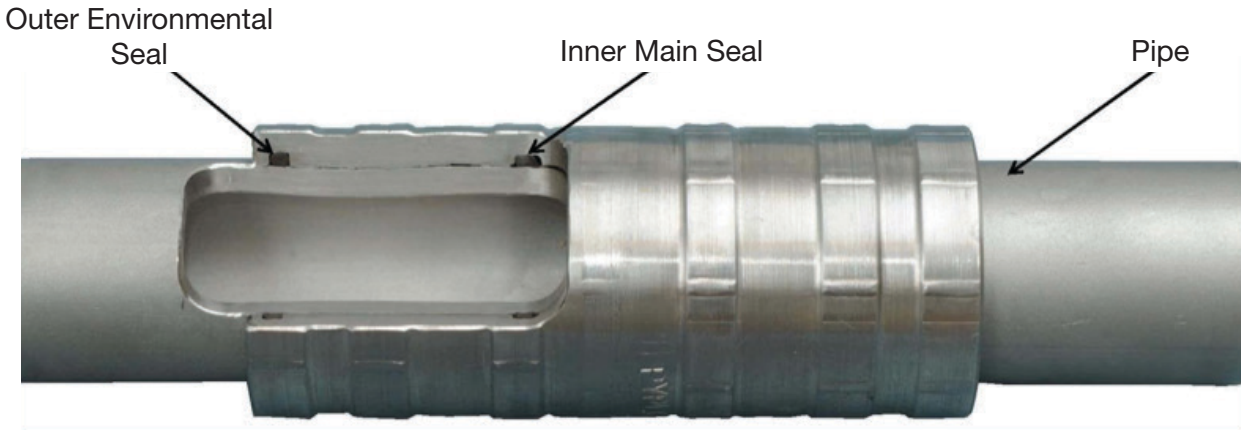
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Technology

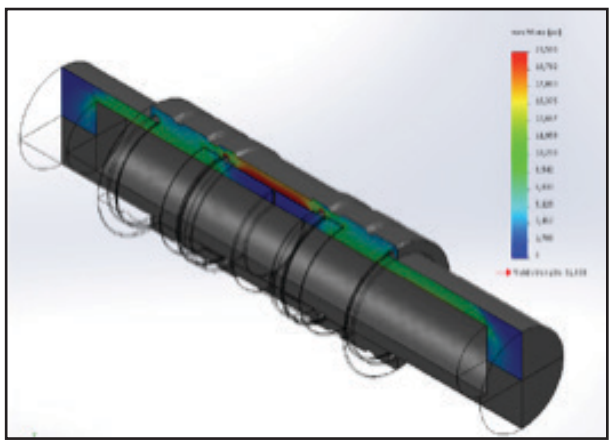
PYPLOK® Fittings incorporates a unique sealing capability by using four non-metallic O-Rings which compress against the pipe surface which produces a leak tight, permanent seal. Due to the use of O-Rings, the fitting is able to be installed on normal pipe and tube tolerances and surface conditions.

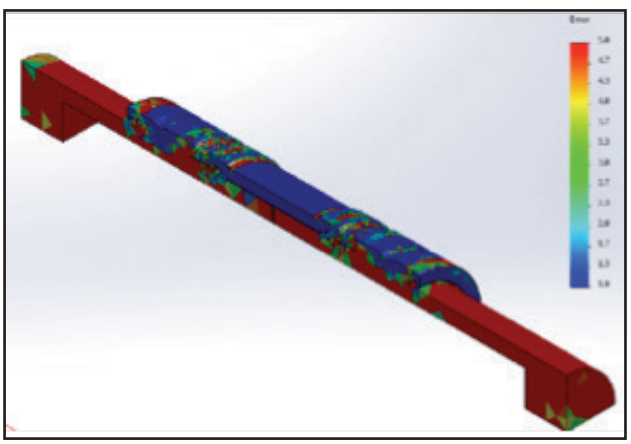
The PYPLOK® connector is a metal sleeve which slides over the pipe or tube. The outer diameter at each end of the connector is then swaged against the pipe or tube using a hand held portable hydraulic tool. The tool transfers a linear force of 360° radial force which results in a permanent leak free connection. At each swaged end there is an internal helical ridge which, when swaged, penetrates the outer surface of the pipe or tube. Axial grooves separate the ridge into teeth which resist torsional loads.

There are two O-Ring seals. The “Inner Main Seal” is the high pressure seal. The O-Ring groove which houses this main seal has an annular ridge directly beside the groove which provides additional support upon swaging assuring a fluid tight connection. At the outer end of the fitting is the second O-Ring groove which houses the “Outer Environmental Seal”. This seal prevents the ingress of fluids and/or contaminants from entering between the fitting and the tube thereby preventing internal corrosion.



PYPLOK® has been mechanically and environmentally tested according to many standards and procedures over the years. PYPLOK® has passed combined impulse and vibration tests as well as shock and fire tests. PYPLOK® was analyzed using FEA (Finite Element Analysis) to ensure compliance under ASME B31.1, 31.3, 31.4 & 31.8. Below are some of the type approvals and standards to which PYPLOK® complies:





Introduction



ASME B31.1, 31.3, 31.4 & 31.8 Qualified

CRN – Canadian Registration No. 0A12153.5

API 6FB and ISO 19921/15540 Fire Test

NAVSEA and USCG Approved

ABS, DNV, Lloyd's, CCS, RMRS & BV Type Approved

The installation and subsequent inspection of fittings is the most expensive part of joining and maintaining any piping system. Regardless of the type of piping system, there may be numerous threaded, welded and brazed fittings. These traditional types of fittings are costly to install as they are more labour intensive.

Expensive and laborious procedures may include the following:

- Obtaining permits
- Preparation time
- Fit-up time
- Inspection of joint
- Hydrostatic testing
- Purging the system
- Rework of joints that do not pass inspection
- Time for welding or brazing
- Need for a fire watch

PYPLOK® Mechanically Attached Fitting System is the best alternative to threaded, welded, or brazed joints.

Some of the many advantages of using PYPLOK® over traditional methods are:

- There is no need to purge or flush the piping system of gas or liquid because the application of PYPLOK® requires no hot work. In other words, PYPLOK® is installed cold.
- The time required to join the pipe ends together is significantly shorter because of the portable tools used to compress the fitting onto the pipe.
- Reduced inspection time through an inspection gauge, which checks for proper swaged diameter to determine satisfactory compression of the fitting. This eliminates the need for conventional NDT requirements such as X-rays etc.
- There is no need for fire watch or any special fire permit which are needed for welding or brazing, as there are no fumes or fire hazards when installing PYPLOK®.
- PYPLOK® is a safe cold work technology.

With all the advantages listed above, PYPLOK® is certainly the most economical and efficient way of joining pipes. It dramatically reduces costs, greatly enhances quality and significantly improves safety conditions and reliability of the completed joint.

Introduction

PYPLOK® fittings come in all standard configurations (straights, 45° & 90° elbows, adapter, tees, reducers and flanged ends).

PYPLOK® configurations provide permanent ends or a combination of permanent and separable ends. Separable ends include ANSI, SAE and ISO Flanged as well as JIC 37°, ORFS, NPT, BSPP and DIN 24° fittings.

PYPLOK® fittings are available in Carbon Steel, Stainless Steel and Copper Nickel (CuNi), Duplex and Super Duplex.

PYPLOK® is suitable for NPS pipes, OD tubes and Metric tubes.

PYPLOK® System Benefits

PYPLOK® system assists you and your team with safe and cost effective work practices

Most cost effective on-site pipe work fabrication and repairs

- Reduces on-site time and labour; PYPLOK® fittings are swaged on cold, hot work permits are no longer required. PYPLOK® tooling is hydraulically actuated removing the need for special site services.
- PYPLOK® system prevents the need for Gas Freeing, System Flushing, NDT, and Fire Watch; designed as a one person operation.
- Swaged fittings are verified with an inspection gauge - much quicker than NDT.

Provides an improved safety environment

- The PYPLOK® system, developed to reduce hot work, is in itself a safe system. There are no torches, open flames or sparks are associated with the installation or maintenance.

PYPLOK® system on EVERY installation achieves

- Improved productivity; many tasks carried out in only one-shift with minimum disruption to production.
- Installed cost reduction of up to 60%.

PYPLOK® system on EVERY installation offers

- High tensile and high torque hold.
- Minimum pipe preparation.

Requires very little specialized skill and training

- PYPLOK® system provides a range of fittings and hand-held tooling that requires a minimum of specialized skills to install - easy and user friendly.
- Training takes less than 30-minutes to complete.
- Fully detailed, simple to follow documentation (Installation and Preventative Maintenance Manuals including Inspection Criteria Instructions) are provided with each purchased kit.

How much does it cost - rent or buy?

- Clients have recuperated tooling and fitting costs in one system installation.
- Tooling Rental Program and or Purchase Programs Available.

Introduction

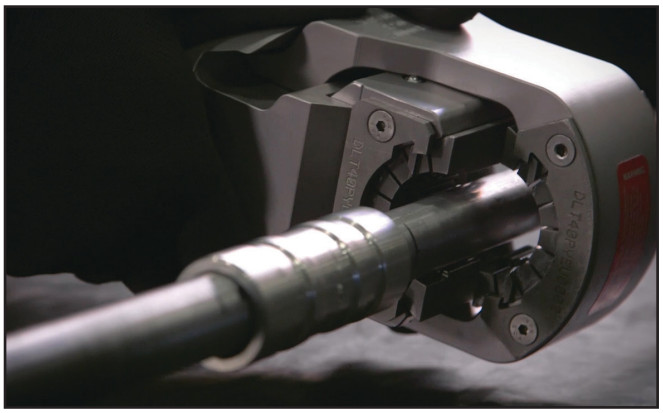
Industries and Applications

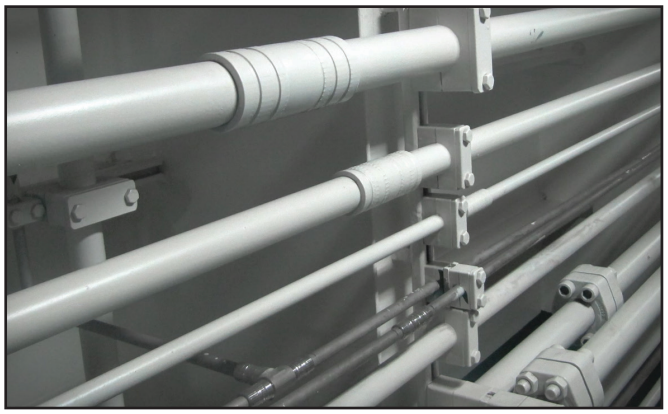
PYPLOK® has been used in numerous industries worldwide including but not limited to:

- Ship Building and Repair (Commercial and Navy)
- Refinery, Chemical, Pharmaceuticals, Food/Beverage
- Marine, Offshore and Sub Sea
- Land Based Drilling Rigs, Mobile Equipment
- Sugar, Steel/Metal Production, Testing Equipment, Fire Suppression
- Mining, Pulp and Paper, Nuclear/Power Generation, Automotive

PYPLOK® Applications Include:

- CNG – Compressed Natural Gas
- CO2 Cofferdam Inerting
- Condensate Piping
- Deluge Systems
- Down Well Coiled Tubing
- Drains and Plumbing Vent
- Ethylene Glycol/Water
- Fuel and Fuel Heating Lines
- Heating Coils
- Utility Piping Systems
- High Pressure Fire Suppression Systems
- Mobile Equipment Tubing/Piping
- High Pressure Hydraulics Systems
- Low Temperature Steam (<200°C)
- LPG – Liquefied Petroleum Gas
- Lubrication & Grease
- Natural Gas Distribution
- Plant, Instrumentation and Utility Air
- Waste Systems
- Solvents and Water Based Paints
- Subsea/BOP Piping
- Steam Tracer Lines
- Waste Water
- Paint, Brake Fluid and Sealer Lines





Notes

Notes

Tube and Pipe Qualification

DM 20 Series - NPS Pipe

Size	Min. Wall	Max. Wall
1/4"	Sch.10	Sch.80
3/8"	Sch.10	Sch.80
1/2"	Sch.10	Sch.80
3/4"	Sch.10	Sch.80
1"	Sch.10	Sch.160
1-1/4"	Sch.10	Sch.160
1-1/2"	Sch.10	Sch.160
2"	Sch.10	Sch.160
3"	Sch.80	Sch.160

DM 80 Series - JIS Metric Tube

Size	OD	Min. Wall	Max. Wall
06A	10.50mm	1.00mm	3.00mm
08A	13.80mm	1.00mm	3.00mm
10A	17.30mm	1.00mm	3.20mm
15A	21.70mm	1.00mm	4.00mm
20A	27.20mm	2.00mm	4.00mm
25A	34.00mm	2.00mm	6.40mm
32A	42.70mm	3.00mm	6.40mm
40A	48.60mm	3.00mm	7.14mm
50A	60.50mm	3.00mm	8.71mm

DM 60 Series - OD Tube

Size	Min. Wall	Max. Wall
1/4"	0.028"	0.083"
3/8"	0.028"	0.095"
1/2"	0.035"	0.120"
5/8"	0.035"	0.120"
3/4"	0.049"	0.180"
1"	0.049"	0.180"
1-1/4"	0.065"	0.220"
1-1/2"	0.065"	0.220"
2"	0.065"	0.220"

DP 40N Series - NPS Low Pressure

Size	Min. Wall	Max. Wall
2-1/2"	Sch.10	Sch.80
3"	Sch.10	Sch.80
4"	Sch.10	Sch.80

DP 40M Series - Metric Pipe CuNi Tube

Size	Min. Wall	Max. Wall
44.5mm	1mm	3mm
57mm	1mm	3mm
76mm	1mm	3mm

DM 80 Series - Metric Tube

Size	Min. Wall	Max. Wall
6mm	1mm	2mm
8mm	1mm	2mm
10mm	1mm	3mm
12mm	1mm	3mm
15mm	1mm	3mm
16mm	1mm	3mm
18mm	1mm	3mm
20mm	1mm	4mm
22mm	1mm	4mm
25mm	2mm	4mm
28mm	2mm	4mm
30mm	2mm	4mm
35mm	2mm	4mm
38mm	3mm	5mm
42mm	3mm	5mm
50mm	3mm	5mm
60mm	3mm	8mm

Allowable Outside Pipe/Tube Diameter Tolerances for PYPLOK®

NPS Pipe	1/4" to 1-1/2"	+/- 0.015" (0.381mm)
	2"- 4"	+/- 0.030" (0.762mm)
OD Tube	1/4" to 3/8"	+/- 0.005" (0.127mm)
	1/2" to 1-1/2"	+/- 0.010" (0.254mm)
	2"	+/- 0.015" (0.381mm)
Metric Tube	6mm to 38mm	+/- 0.254mm (0.010")
	42mm to 60mm	+/- 0.381mm (0.015")
JIS Metric Tube	06A - 25A	+/- 0.254mm (0.010")
	32A - 50A	+/- 0.381mm (0.015")

*Qualified Pipe/Tube

Stainless Steel PYPLOK®	Carbon Steel PYPLOK®	Copper Nickel PYPLOK®
ASTM A312/A269 (304/304L/316/316L) EN 10216-5 (304/304L/316/316L) EN10305-4 (E355N/ST52.4)	ASTM A106 Gr. A/B/C A53 ERW Gr. A/B EN10305-4 (E355N/E235N/ST52.4/ST37.4) API 5L Seamless/ERW ASTM A333 Gr.6	MIL-T-16420 (70/30 & 90/10)

*As there are numerous pipe/tube specs, not every spec has been listed. If you do not see your spec please consult the factory to confirm pipe/tube qualification.

2" NPS DM 20 Series Carbon Steel PYPLOK® cannot be used on EN 10305-4 (E355N/ST52.4) pipe/tube but as replacement 2" NPS DM 20 Series Stainless Steel PYPLOK® or 60mm DM 80 Series Carbon Steel PYPLOK® can be used.

PYPLOK® Standard Pressure Ratings DM 20 Series – NPS Pipe

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Stainless Steel Pressure Ratings

Size NPS	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
1/4"	6000	415	8000	552
3/8"	6000	415	8000	552
1/2"	5900	407	7866	543
3/4"	5800	400	7733	533
1"	5700	393	7600	524
1-1/4"	5650	390	7533	520
1-1/2"	5650	390	7533	520
2"	4800	330	6400	441
3"	2625	180	3500	240

Carbon Steel Pressure Ratings

Size NPS	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
1/4"	5000	345	6667	460
3/8"	5000	345	6667	460
1/2"	4917	339	6555	452
3/4"	4833	333	6444	444
1"	4750	328	6333	437
1-1/4"	4710	325	6278	433
1-1/2"	4710	325	6278	433
2"	4000	276	5333	368
3"	2625	180	3500	240

Copper Nickel Pressure Ratings

Size NPS	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
1/4"	3896	269	5195	358
3/8"	3896	269	5195	358
1/2"	3831	264	5108	352
3/4"	3766	260	5022	346
1"	3701	255	4935	340
1-1/4"	3669	253	4892	337
1-1/2"	3669	253	4892	337
2"	3117	215	4156	287

PYPLOK® Pressure Ratings According to ASME B31.1 & ASME B31.3 DM 20 Series – NPS Pipe

Pressure Ratings are based on system temperatures that are listed below and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Stainless Steel Pressure Ratings

Size NPS	ASME B31.1 (PSI)			
	-20°F to 100°F	200°F	300°F	400°F
1/4”	5800	5800	5800	5600
3/8”	5600	5600	5600	5400
1/2”	5400	5400	5400	5200
3/4”	5100	5100	5100	5000
1”	4800	4800	4800	4700
1-1/4”	4400	4400	4400	4200
1-1/2”	4200	4200	4200	4000
2”	3700	3700	3700	3600

Carbon Steel Pressure Ratings

Size NPS	ASME B31.1 (PSI)			
	-20°F to 100°F	200°F	300°F	400°F
1/4”	5200	5200	5200	5200
3/8”	5000	5000	5000	5000
1/2”	4900	4900	4900	4900
3/4”	4700	4700	4700	4700
1”	4400	4400	4400	4400
1-1/4”	4100	4100	4100	4100
1-1/2”	3900	3900	3900	3900
2”	3500	3500	3500	3500

Stainless Steel Pressure Ratings

Size NPS	ASME B31.3 (PSI)			
	-20°F to 100°F	200°F	300°F	400°F
1/4”	5800	5800	5800	5600
3/8”	5600	5600	5600	5400
1/2”	5400	5400	5400	5200
3/4”	5100	5100	5100	5000
1”	4800	4800	4800	4700
1-1/4”	4400	4400	4400	4200
1-1/2”	4200	4200	4200	4000
2”	3700	3700	3700	3600

Carbon Steel Pressure Ratings

Size NPS	ASME B31.3 (PSI)			
	-20°F to 100°F	200°F	300°F	400°F
1/4”	5200	4900	4700	4500
3/8”	5000	4800	4600	4400
1/2”	4900	4600	4400	4300
3/4”	4700	4400	4200	4100
1”	4400	4200	4000	3900
1-1/4”	4100	3900	3700	3600
1-1/2”	3900	3700	3500	3400
2”	3500	3300	3100	3000

PYPLOK® Standard Pressure Ratings DM 60 Series – OD Tube

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Stainless Steel Pressure Ratings

Size OD	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
1/4"	7000	483	9333	644
3/8"	5800	400	7733	533
1/2"	6100	420	8133	561
5/8"	6100	420	8133	561
3/4"	6000	414	8000	552
1"	5800	400	7733	533
1-1/4"	5800	400	7733	533
1-1/2"	5650	390	7533	520
2"	4800	330	6400	441

Carbon Steel Pressure Ratings

Size OD	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
1/4"	5833	402	7778	536
3/8"	4833	333	6444	444
1/2"	5100	350	6778	467
5/8"	5100	350	6778	467
3/4"	5000	345	6667	460
1"	4833	333	6444	444
1-1/4"	4833	333	6444	444
1-1/2"	4710	325	6278	433
2"	4000	275	5333	368

Copper Nickel Pressure Ratings

Size OD	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
1/4"	4545	313	6060	418
3/8"	3766	260	5022	346
1/2"	3961	273	5281	364
5/8"	3961	273	5281	364
3/4"	3896	269	5195	358
1"	3766	260	5022	346
1-1/4"	3766	260	5022	346
1-1/2"	3669	253	4892	337
2"	3117	215	4156	287

PYPLOK® Standard Pressure Ratings DM 80 Series – Metric Tube

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Stainless Steel Pressure Ratings

Size OD (mm)	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
6	6500	450	8665	600
8	6200	430	8265	570
10	6000	415	8000	550
12	5800	400	7735	535
15	5800	400	7735	535
16	5800	400	7735	535
18	4500	310	6000	415
20	5650	390	7535	520
22	4425	305	5900	405
25	5650	390	7535	520
28	4350	300	5800	400
30	5650	390	7535	520
35	4275	295	5700	395
38	5650	390	7535	520
42	5650	390	7535	520
50	5100	350	6800	470
60	4800	330	6400	440

Carbon Steel Pressure Ratings

Size OD (mm)	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
6	5420	375	7225	500
8	5170	355	6890	475
10	5000	345	6670	460
12	4835	335	6445	445
15	4835	335	6445	445
16	4835	335	6445	445
18	3750	260	5000	345
20	4710	325	6280	435
22	3690	255	4920	340
25	4710	325	6280	435
28	3625	250	4835	335
30	4710	325	6280	435
35	3560	245	4750	325
38	4710	325	6280	435
42	4710	325	6280	435
50	4250	295	5670	390
60	4000	275	5335	370

PYPLOK® Standard Pressure Ratings DM 80 Series – Metric Tube

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Copper Nickel Pressure Ratings				
Size OD (mm)	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
6	4220	290	5630	390
8	4025	280	5370	370
10	3895	270	5195	360
12	3765	260	5025	345
16	3765	260	5025	345
20	3670	255	4895	335
25	3670	255	4895	335
30	3670	255	4895	335
38	3670	255	4895	335
42	3670	255	4895	335
50	3315	230	4415	305
60	3120	215	4155	285

PYPLOK® Standard Pressure Ratings DM 80 Series – JIS Metric Tube

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Stainless Steel Pressure Ratings

JIS Size	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
06A	3750	260	5000	347
08A	3750	260	5000	347
10A	3750	260	5000	347
15A	3690	255	4920	340
20A	3625	250	4833	333
25A	3560	245	4747	327
32A	3750	260	5000	347
40A	3750	260	5000	347
50A	3750	260	5000	347

Carbon Steel Pressure Ratings

JIS Size	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
06A	3750	260	5000	347
08A	3750	260	5000	347
10A	3750	260	5000	347
15A	3690	255	4920	340
20A	3625	250	4833	333
25A	3560	245	4747	327
32A	3750	260	5000	347
40A	3750	260	5000	347
50A	3750	260	5000	347

Copper Nickel Pressure Ratings

JIS Size	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
06A	3750	260	5000	347
08A	3750	260	5000	347
10A	3750	260	5000	347
15A	3670	253	4893	337
20A	3625	250	4833	333
25A	3670	253	4893	337
32A	3315	230	4420	307
40A	3315	230	4420	307
50A	3120	215	4160	287

PYPLOK® Standard Pressure Ratings DP 40N Series – NPS Low Pressure

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Stainless Steel Pressure Ratings

Size NPS	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
2-1/2"	500	35	665	45
3"	500	35	665	45
4"	500	35	665	45

Carbon Steel Pressure Ratings

Size NPS	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
2-1/2"	500	35	665	45
3"	500	35	665	45
4"	500	35	665	45

Copper Nickel Pressure Ratings

Size NPS	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
2-1/2"	365	25	495	34
3"	365	25	495	34

DP 40M Series – Metric Pipe Low Pressure

Pressure Ratings are based on system temperatures of -15°F to 400°F (-26°C to 205°C) and are limited to the maximum rating of the adjoining tube and/or end connection. Consideration must be taken on PYPLOK® Pressure Ratings and adjoining connection with the lower rated end being the limiting factor.

Copper Nickel Pressure Ratings

Size OD (mm)	4:1 Safety Factor		3:1 Safety Factor	
	PSI	bar	PSI	bar
44.5	450	31	600	42
57	450	31	600	42

Seal Selection

PYPLOK® Fittings are offered with two types of standard seal materials which cover a very broad range of temperatures and compatibility with numerous fluids and gases. The standard seals are VITON and EPDM, both having large application range but many other seal material grades are available to meet specific application requirements. It is the responsibility of the end user to ensure that the seals in the fittings are compatible with the piping system medium and temperature limits. Consult the factory for confirmation of seal compatibility for each system intending to use PYPLOK®. The table below is intended as a reference only for basic guidance to the typical mediums each seal material is appropriate for.

VITON	
Recommended For	**Not Recommended For**
Petroleum, Mineral and Vegetable Oils	Hot Water and Steam
Silicone Oils and Grease	Auto and Brake Fluids
Aromatic Hydrocarbons (Benzene, Toluene)	Amines
Chlorinated Hydrocarbons	Ketones
Hydraulic Fluids	Low Molecular Weight Esters and Ethers
Solvents and Chemicals	

EPDM	
Recommended For	**Not Recommended For**
Hot Water and Steam	Mineral Oil Products
Glycol Based Brake Fluids	Hydrocarbons
Organic and Inorganic Acids	Greases and Oils
Cleaning Agents, Soda and Potassium Alkalis	
Phosphate – Ester Hydraulic Fluids	
Polar Solvents (Alcohols, Ketones, Esters)	

Thread Size Charts

Dash Thread Size								
Size	**4**	**6**	**8**	**12**	**16**	**20**	**24**	**32**
JIC	7/16-20	9/16-18	3/4-16	1 1/16-12	1 5/16-12	1 5/8-12	1 7/8-12	2 1/2-12
NPT	1/4-18	3/8-18	1/2-14	3/4-14	1-11 1/2	1 1/4-11 1/2	1 1/2-11 1/2	2-11 1/2
SAE	7/16-20	9/16-18	3/4-16	1 1/16-12	1 5/16-12	1 5/8-12	1 7/8-12	2 1/2-12
BSPP	1/4-19	3/8-19	1/2-14	3/4-14	1-11	1 1/4-11	1 1/2-11	2-11
ORFS	9/16-18	11/16-16	13/16-16	1 3/16-12	1 7/16-12	1 11/16-12	2-12	N/A

Metric Thread Size “S”									
Size	**6S**	**8S**	**10S**	**12S**	**16S**	**20S**	**25S**	**30S**	**38S**
DIN 2353	M14 x 1.5	M16 x 1.5	M18 x 1.5	M20 x 1.5	M24 x 1.5	M30 x 2.0	M36 x 2.0	M42 x 2.0	M52 x 2.0

Metric Thread Size “L”										
Size	**6L**	**8L**	**10L**	**12L**	**15L**	**18L**	**22L**	**28L**	**35L**	**42L**
ISO 8434-1	M12 x 1.5	M14 x 1.5	M16 x 1.5	M18 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 2.0	M36 x 2.0	M45 x 2.0	M52 x 2.0

Notes

Notes

General Characteristics
DM 20 Series - NPS Pipe

Fitting Material Specifications	Material Specification
K = Stainless Steel	ASTM-A479/A182-316
G = Carbon Steel	ASTM-A105/A350 LF2
B = Copper Nickel 70/30	MIL-C71500
C = Copper Nickel 90/10	MIL-C70600
D = Duplex	ASTM-A479/A182-UNS31803
Z = Super Duplex	ASTM-A479/A182-UNS32750

2” NPS DM 20 Series Carbon Steel PYPLOK® cannot be used on EN 10305-4 (E355N/ST52.4) pipe/ tube but as replacement 2” NPS DM 20 Series Stainless Steel PYPLOK® or 60mm DM 80 Series Carbon Steel PYPLOK® can be used.

O-Ring Material Specifications	O-Ring Temperature Limits
VITON (Brown Colour)	-15°F to 400°F (-26°C to 205°C)
EPDM (Black Colour)	-60°F to 400°F (-51°C to 205°C)

For seal compatibility and selection for each system consult factory. Other seal materials for specific applications of compatibility and temperature are available upon request.

Ordering Information

DM 20 001 K 04 ___ ___

Seal Material:
No Designation = Viton
E = EPDM

Reducer/Thread/Flange Size

04 = 1/4”	(13.70mm)
06 = 3/8”	(17.10mm)
08 = 1/2”	(21.30mm)
12 = 3/4”	(26.67mm)
16 = 1”	(33.40mm)
20 = 1-1/4”	(42.16mm)
24 = 1-1/2”	(48.26mm)
32 = 2”	(60.30mm)
48 = 3”	(88.90mm)

Fitting Material:
K = Stainless Steel
G = Carbon Steel
B = Copper Nickel 70/30
C = Copper Nickel 90/10
D = Duplex
Z = Super Duplex

Fitting Configuration

20 = NPS Pipe

Series Designation

System design and safe application is the responsibility of the end-user. Consideration must be taken to confirm proper fitting selection is made to ensure proper compatibility, function and operation of the fitting within the piping system. The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® reserves the right to change technical data and product dimension, ratings and other aspects without notice.

Standard Fitting Configuration Guide
DM 20 Series - NPS Pipe

1/4” to 3”



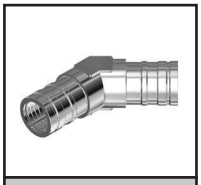
Coupling
DM20001
Page C3



Coupling with Inner Stop
DM20002
Page C3



90° Elbow
DM20003
Page C4



45° Elbow
DM20017
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Tee
DM20004
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Reducing Tee
DM20104
Page C5



Reducer
DM20101
Page C6



End Cap
DM20085
Page C6



Flange - ANSI 150#
DM200018
Page C7



Flange - ANSI 300#
DM20019
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Flange - ANSI 600#
DM20027
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SAE Flange Body
DM20090
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SAE Code 61 Flange
DM20091
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SAE Code 62 Flange
DM20092
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SAE Code 61 Tapped Flange
DM20095
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SAE Code 62 Tapped Flange
DM20096
Page C10



JIC 37° Male
DM20055
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JIC 37° Female Swivel
DM20054
Page C11



NPT Male
DM20056
Page C12



NPT Female
DM20060
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SAE Male
DM20088
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SAE Female
DM20087
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BSPP Male
DM20153
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BSPP Female
DM20086
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ORFS Male
DM20010
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ORFS Female Swivel
DM20020
Page C15



Weldable Bulkhead
DM60089
Page C16



SAE Female Branch Tee
DM20171
Page C16

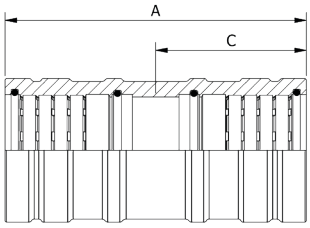


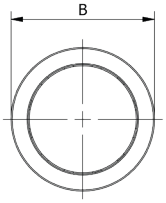
BSPP Female Branch Tee
DM20172
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NPT Female Branch Tee
DM20173
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DM 20 Series - NPS Pipe





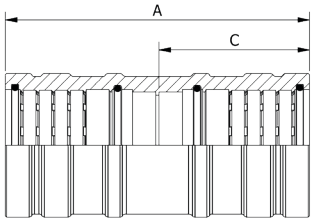


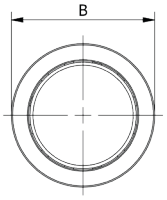
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM20001G04

Coupling, NPS - DM20001

Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM20001*04**	2.25 (57.15)	0.80 (20.32)	1.13 (28.70)	0.12 (0.05)
3/8"	**DM20001*06**	2.75 (69.85)	0.99 (25.15)	1.38 (35.05)	0.25 (0.11)
1/2"	**DM20001*08**	3.00 (76.20)	1.20 (30.48)	1.50 (38.10)	0.44 (0.20)
3/4"	**DM20001*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	0.61 (0.28)
1"	**DM20001*16**	4.00 (101.60)	1.82 (46.23)	2.00 (50.80)	1.07 (0.49)
1-1/4"	**DM20001*20**	4.75 (120.65)	2.26 (57.40)	2.38 (60.45)	2.00 (0.91)
1-1/2"	**DM20001*24**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	2.78 (1.26)
2"	**DM20001*32**	7.00 (177.80)	3.04 (77.22)	3.50 (88.90)	4.40 (2.00)
3"	**DM20001*48**	10.00 (254.00)	4.38 (111.25)	5.00 (127.00)	14.06 (6.38)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

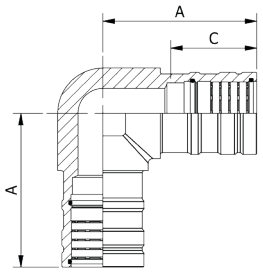
ORDER EXAMPLE:
DM20002G04

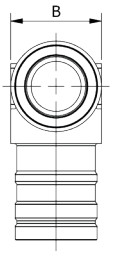
Coupling with Inner Stop, NPS - DM20002

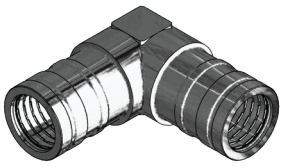
Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM20002*04**	2.30 (58.42)	0.80 (20.32)	1.13 (28.70)	0.12 (0.05)
3/8"	**DM20002*06**	2.80 (71.12)	0.99 (25.15)	1.38 (35.05)	0.25 (0.11)
1/2"	**DM20002*08**	3.05 (77.47)	1.20 (30.48)	1.50 (38.10)	0.35 (0.16)
3/4"	**DM20002*12**	3.55 (90.17)	1.48 (37.59)	1.75 (44.45)	0.61 (0.28)
1"	**DM20002*16**	4.05 (102.87)	1.82 (46.23)	2.00 (50.80)	1.07 (0.49)
1-1/4"	**DM20002*20**	4.80 (121.92)	2.26 (57.40)	2.38 (60.45)	1.96 (0.89)
1-1/2"	**DM20002*24**	5.05 (128.27)	2.58 (65.53)	2.50 (63.50)	2.78 (1.26)
2"	**DM20002*32**	7.05 (179.07)	3.04 (77.22)	3.50 (88.90)	4.40 (2.00)
3"	**DM20002*48**	10.05 (255.27)	4.38 (111.25)	5.00 (127.00)	12.21 (5.54)

3D step models available upon request

DM 20 Series - NPS Pipe







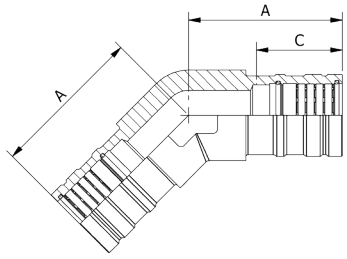
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G = CARBON STEEL
B = COPPER NICKEL 70/30

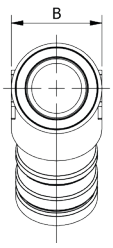
ORDER EXAMPLE:
DM20003G04

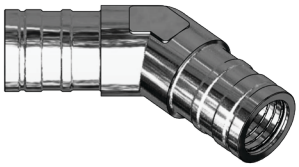
90° Elbow, NPS - DM20003

Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM20003*04**	1.75 (44.45)	0.86 (21.84)	1.13 (28.70)	0.29 (0.13)
3/8"	**DM20003*06**	2.00 (50.80)	1.06 (26.92)	1.38 (35.05)	0.56 (0.25)
1/2"	**DM20003*08**	2.68 (68.07)	1.30 (33.02)	1.50 (38.10)	1.00 (0.45)
3/4"	**DM20003*12**	3.03 (76.96)	1.58 (40.13)	1.75 (44.45)	1.50 (0.68)
1"	**DM20003*16**	3.37 (85.60)	1.97 (50.04)	2.00 (50.80)	2.65 (1.20)
1-1/4"	**DM20003*20**	4.25 (107.95)	2.50 (63.50)	2.38 (60.45)	5.95 (2.70)
1-1/2"	**DM20003*24**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	7.10 (3.22)
2”	**DM20003*32**	5.45 (138.43)	3.25 (82.55)	3.50 (88.90)	9.60 (4.35)
**3”	**DM20003*48**	11.09 (281.69)	4.38 (111.25)	5.00 (127.00)	25.23 (11.44)

**3” PYPLOK® DM 20 Series shapes such as Tees and Elbows are made as welded assemblies using ASME B16.9 SCH.160 Butt Weld Fittings. All other sizes are made from forged material.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM20017G04

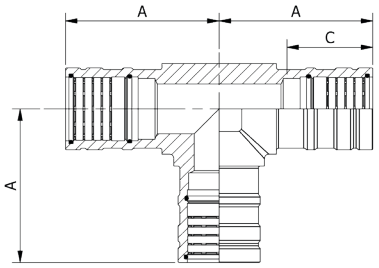
45° Elbow, NPS - DM20017

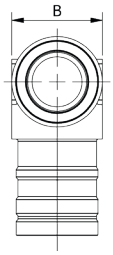
Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM20017*04**	1.75 (44.45)	0.86 (21.84)	1.13 (28.70)	0.40 (0.18)
3/8"	**DM20017*06**	2.00 (50.80)	1.06 (26.92)	1.38 (35.05)	0.50 (0.23)
1/2"	**DM20017*08**	2.68 (68.07)	1.30 (33.02)	1.50 (38.10)	1.00 (0.45)
3/4"	**DM20017*12**	3.03 (76.96)	1.58 (40.13)	1.75 (44.45)	1.50 (0.68)
1"	**DM20017*16**	3.37 (85.60)	1.97 (50.04)	2.00 (50.80)	3.10 (1.41)
1-1/4"	**DM20017*20**	4.25 (107.95)	2.50 (63.50)	2.38 (60.45)	5.60 (2.54)
1-1/2"	**DM20017*24**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	7.40 (3.36)
2”	**DM20017*32**	5.45 (138.43)	3.25 (82.55)	3.50 (88.90)	9.60 (4.35)
**3”	**DM20017*48**	8.59 (218.19)	4.38 (111.25)	5.00 (127.00)	21.26 (9.64)

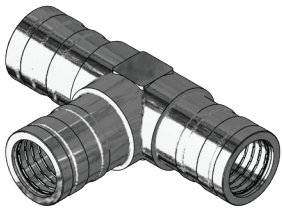
**3” PYPLOK® DM 20 Series shapes such as Tees and Elbows are made as welded assemblies using ASME B16.9 SCH.160 Butt Weld Fittings. All other sizes are made from forged material.

3D step models available upon request

DM 20 Series - NPS Pipe







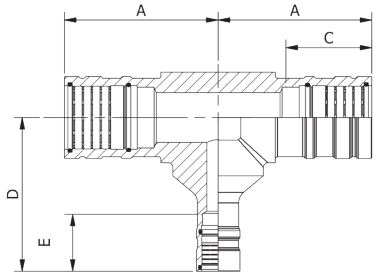
**MATERIAL CODE:*
K = STAINLESS STEEL
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B = COPPER NICKEL 70/30

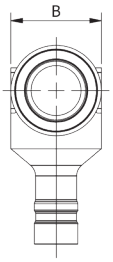
ORDER EXAMPLE:
DM20004G04

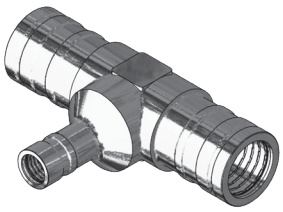
Tee, NPS - DM20004

Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM20004*04**	1.75 (44.45)	0.86 (21.84)	1.13 (28.70)	0.38 (0.17)
3/8"	**DM20004*06**	2.00 (50.80)	1.06 (26.92)	1.38 (35.05)	0.65 (0.29)
1/2"	**DM20004*08**	2.68 (68.07)	1.30 (33.02)	1.50 (38.10)	1.30 (0.59)
3/4"	**DM20004*12**	3.03 (76.96)	1.58 (40.13)	1.75 (44.45)	2.00 (0.91)
1"	**DM20004*16**	3.37 (85.60)	1.97 (50.04)	2.00 (50.80)	3.40 (1.54)
1-1/4"	**DM20004*20**	4.25 (107.95)	2.50 (63.50)	2.38 (60.45)	7.10 (3.22)
1-1/2"	**DM20004*24**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	9.20 (4.17)
2"	**DM20004*32**	5.45 (138.43)	3.25 (82.55)	3.50 (88.90)	12.80 (5.81)
**3"	**DM20004*48**	9.97 (253.24)	4.38 (111.25)	5.00 (127.00)	34.95 (15.85)

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**MATERIAL CODE:*
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ORDER EXAMPLE:
DM20104G0604

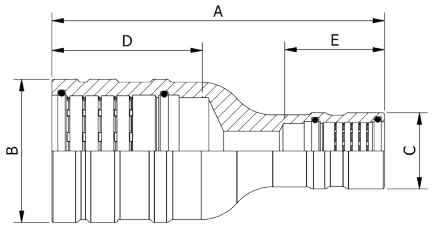
Other configurations available. Contact factory for details.

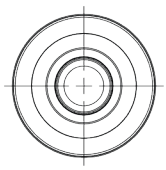
Reducing Tee, NPS - DM20104

Run Size NPS	Branch Size NPS	Part Number	Dimensions - Inch (mm)					*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E Insertion Depth	
3/8"	1/4"	**DM20104*0604**	2.00 (50.80)	1.06 (26.92)	1.38 (35.05)	2.00 (50.80)	1.13 (28.70)	0.62 (0.28)
1/2"	3/8"	**DM20104*0806**	2.68 (68.07)	1.30 (33.02)	1.50 (38.10)	2.50 (63.50)	1.38 (35.05)	1.30 (0.59)
3/4"	1/2"	**DM20104*1208**	3.03 (76.96)	1.58 (40.13)	1.75 (44.45)	3.13 (79.50)	1.50 (38.10)	2.00 (0.91)
1"	1/2"	**DM20104*1608**	3.37 (85.60)	1.97 (50.04)	2.00 (50.80)	3.27 (83.06)	1.50 (38.10)	3.20 (1.45)
1"	3/4"	**DM20104*1612**	3.37 (85.60)	1.97 (50.04)	2.00 (50.80)	3.37 (85.60)	1.75 (44.45)	3.20 (1.45)
1 1/4"	1/2"	**DM20104*2008**	4.25 (107.95)	2.50 (63.50)	2.38 (60.45)	4.25 (107.95)	1.50 (38.10)	6.80 (3.08)
1-1/4"	3/4"	**DM20104*2012**	4.25 (107.95)	2.50 (63.50)	2.38 (60.45)	4.25 (107.95)	1.75 (44.45)	6.80 (3.08)
1-1/4"	1"	**DM20104*2016**	4.25 (107.95)	2.50 (63.50)	2.38 (60.45)	4.25 (107.95)	2.00 (50.80)	6.80 (3.08)
1 1/2"	3/4"	**DM20104*2412**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	4.54 (115.32)	1.75 (44.45)	8.80 (3.99)
1-1/2"	1"	**DM20104*2416**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	4.54 (115.32)	2.00 (50.80)	8.80 (3.99)
1-1/2"	1-1/4"	**DM20104*2420**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	4.54 (115.32)	2.38 (60.45)	8.80 (3.99)
2"	1"	**DM20104*3216**	5.45 (138.43)	3.25 (82.55)	3.50 (88.90)	5.38 (136.65)	2.00 (50.80)	12.40 (5.62)
2"	1-1/4"	**DM20104*3220**	5.45 (138.43)	3.25 (82.55)	3.50 (88.90)	5.38 (136.65)	2.38 (60.45)	13.10 (5.94)
2"	1-1/2"	**DM20104*3224**	5.45 (138.43)	3.25 (82.55)	3.50 (88.90)	5.38 (136.65)	2.50 (63.50)	13.40 (6.08)

3D step models available upon request

DM 20 Series - NPS Pipe







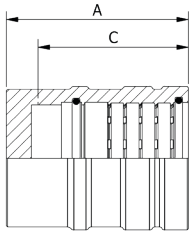
MATERIAL CODE:
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

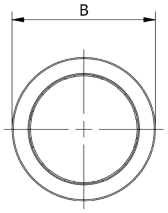
ORDER EXAMPLE:
DM20101G0604

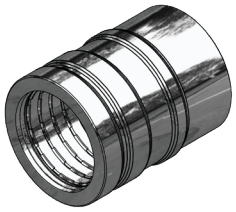
Other configurations available. Contact factory for details.

Reducer, NPS - DM20101

End 1 Size NPS	End 2 Size NPS	Part Number	Dimensions - Inch (mm)					*Weight K & G lbs (kg)
			A	B	C	D Insertion Depth	E Insertion Depth	
3/8"	1/4"	**DM20101*0604**	3.00 (76.20)	0.99 (25.15)	0.80 (20.32)	1.38 (35.05)	1.13 (28.70)	0.26 (0.12)
1/2"	3/8"	**DM20101*0806**	3.75 (95.25)	1.20 (30.48)	0.99 (25.15)	1.50 (38.10)	1.38 (35.05)	0.40 (0.18)
3/4"	1/2"	**DM20101*1208**	4.38 (111.25)	1.48 (37.59)	1.20 (30.48)	1.75 (44.45)	1.50 (38.10)	0.70 (0.32)
1"	1/2"	**DM20101*1608**	5.00 (127.00)	1.82 (46.23)	1.20 (30.48)	2.00 (50.80)	1.50 (38.10)	1.25 (0.57)
1"	3/4"	**DM20101*1612**	5.00 (127.00)	1.82 (46.23)	1.48 (37.59)	2.00 (50.80)	1.75 (44.45)	1.30 (0.59)
1-1/4"	3/4"	**DM20101*2012**	5.38 (136.65)	2.26 (57.40)	1.48 (37.59)	2.38 (60.45)	1.75 (44.45)	1.80 (0.82)
1-1/4"	1"	**DM20101*2016**	5.38 (136.65)	2.26 (57.40)	1.82 (46.23)	2.38 (60.45)	2.00 (50.80)	2.04 (0.93)
1-1/2"	3/4"	**DM20101*2412**	5.88 (149.35)	2.58 (65.53)	1.48 (37.59)	2.50 (63.50)	1.75 (44.45)	2.82 (1.28)
1-1/2"	1"	**DM20101*2416**	5.88 (149.35)	2.58 (65.53)	1.82 (46.23)	2.50 (63.50)	2.00 (50.80)	2.85 (1.29)
1-1/2"	1-1/4"	**DM20101*2420**	6.00 (154.43)	2.58 (65.53)	2.26 (57.40)	2.50 (63.50)	2.38 (60.45)	3.17 (1.44)
2"	1"	**DM20101*3216**	7.00 (177.80)	3.04 (77.22)	1.82 (46.23)	3.50 (88.90)	2.00 (50.80)	3.69 (1.67)
2"	1-1/4"	**DM20101*3220**	7.25 (184.15)	3.04 (77.22)	2.26 (57.40)	3.50 (88.90)	2.38 (60.45)	4.20 (1.90)
2"	1-1/2"	**DM20101*3224**	7.50 (190.05)	3.04 (77.22)	2.58 (65.53)	3.50 (88.90)	2.50 (63.50)	4.67 (2.12)







MATERIAL CODE:
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

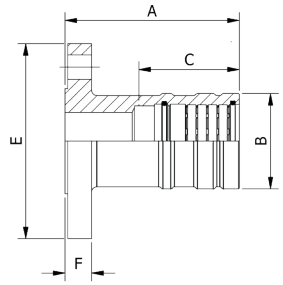
ORDER EXAMPLE:
DM20085G04

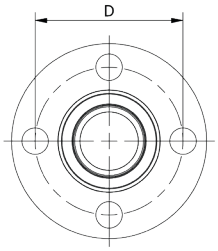
End Cap, NPS - DM20085

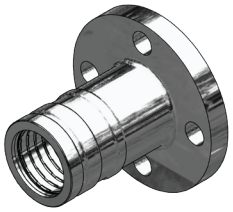
Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM20085*04**	1.38 (35.05)	0.80 (20.32)	1.13 (28.70)	0.10 (0.05)
3/8"	**DM20085*06**	1.88 (47.75)	0.99 (25.15)	1.38 (35.05)	0.20 (0.09)
1/2"	**DM20085*08**	2.00 (50.80)	1.20 (30.48)	1.50 (38.10)	0.30 (0.14)
3/4"	**DM20085*12**	2.25 (57.15)	1.48 (37.59)	1.75 (44.45)	0.50 (0.23)
1"	**DM20085*16**	2.50 (63.50)	1.82 (46.23)	2.00 (50.80)	0.84 (0.38)
1-1/4"	**DM20085*20**	2.88 (73.15)	2.26 (57.40)	2.38 (60.45)	1.44 (0.65)
1-1/2"	**DM20085*24**	3.00 (76.20)	2.58 (65.53)	2.50 (63.50)	1.98 (0.90)
2"	**DM20085*32**	4.13 (104.90)	3.04 (77.22)	3.50 (88.90)	3.13 (1.42)
3"	**DM20085*48**	5.63 (143.00)	4.38 (111.25)	5.00 (127.00)	8.56 (3.88)

3D step models available upon request

DM 20 Series - NPS Pipe







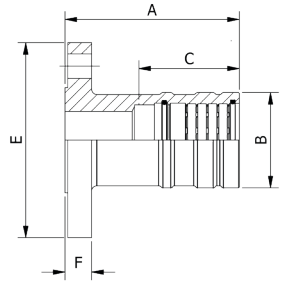
**MATERIAL CODE:*
K = STAINLESS STEEL
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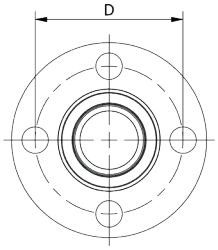
ORDER EXAMPLE:
DM20018G08

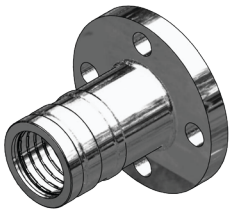
Flange – ANSI 150#, NPS - DM20018

Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
1/2"	1/2"	**DM20018*08**	3.00 (76.20)	1.20 (30.48)	1.50 (38.10)	2.38 (60.45)	3.50 (88.90)	0.44 (11.18)	1/2" UNC	1.30 (0.59)
3/4"	3/4"	**DM20018*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	2.75 (69.85)	3.88 (98.55)	0.50 (12.70)	1/2" UNC	1.90 (0.86)
1"	1"	**DM20018*16**	3.63 (92.20)	1.82 (46.23)	2.00 (50.80)	3.12 (79.25)	4.25 (107.95)	0.62 (15.82)	1/2" UNC	3.00 (1.36)
1-1/4"	1-1/4"	**DM20018*20**	4.13 (104.90)	2.26 (57.40)	2.38 (60.45)	3.50 (88.90)	4.62 (117.35)	0.63 (16.00)	1/2" UNC	4.09 (1.86)
1-1/2"	1-1/2"	**DM20018*24**	4.25 (107.95)	2.58 (65.53)	2.50 (63.50)	3.88 (98.55)	5.00 (127.00)	0.75 (19.10)	1/2" UNC	5.20 (2.40)
2"	2"	**DM20018*32**	5.73 (145.54)	3.04 (77.22)	3.50 (88.90)	4.75 (120.65)	6.00 (152.40)	0.69 (17.53)	5/8" UNC	8.50 (3.86)
**3"	3"	**DM20018*48**	9.34 (237.24)	4.38 (111.25)	5.00 (127.00)	6.00 (152.40)	7.50 (190.50)	1.31 (33.27)	5/8" UNC	24.83 (11.26)

**3" PYPLOK® DM 20 Series shapes such as Tees and Elbows are made as welded assemblies using ASME B16.9 SCH.160 Butt Weld Fittings. All other sizes are made from forged material.







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ORDER EXAMPLE:
DM20019G08

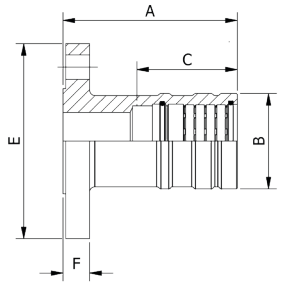
Flange – ANSI 300#, NPS - DM20019

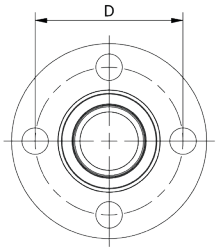
Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
1/2"	1/2"	**DM20019*08**	3.13 (79.50)	1.20 (30.48)	1.50 (38.10)	2.62 (66.55)	3.75 (95.25)	0.56 (14.22)	1/2" UNC	1.84 (0.83)
3/4"	3/4"	**DM20019*12**	3.63 (92.20)	1.48 (37.59)	1.75 (44.45)	3.25 (82.55)	4.63 (117.60)	0.63 (16.00)	5/8" UNC	3.10 (1.41)
1"	1"	**DM20019*16**	3.88 (98.55)	1.82 (46.23)	2.00 (50.80)	3.50 (88.90)	4.88 (123.95)	0.75 (19.05)	5/8" UNC	4.34 (1.97)
1-1/4"	1-1/4"	**DM20019*20**	4.25 (107.95)	2.26 (57.40)	2.38 (60.45)	3.88 (98.55)	5.25 (133.35)	0.75 (19.05)	5/8" UNC	5.40 (2.45)
1-1/2"	1-1/2"	**DM20019*24**	4.31 (109.47)	2.58 (65.53)	2.50 (63.50)	4.50 (114.30)	6.12 (155.45)	0.81 (20.57)	3/4" UNC	9.70 (4.40)
**2"	2"	**DM20019*32**	5.80 (147.32)	3.04 (77.72)	3.50 (88.90)	5.00 (127.00)	6.50 (165.10)	0.88 (22.35)	5/8" UNC	9.77 (4.43)
**3"	3"	**DM20019*48**	9.72 (246.89)	4.38 (111.25)	5.00 (127.00)	6.63 (168.40)	8.25 (209.55)	1.13 (28.70)	3/4" UNC	26.15 (11.86)

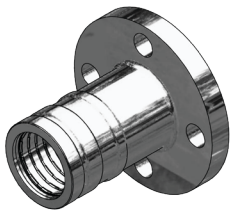
**2" ANSI 300# Flange has 8 Bolts.
**3" PYPLOK® DM 20 Series shapes such as Tees and Elbows are made as welded assemblies using ASME B16.9 SCH.160 Butt Weld Fittings. All other sizes are made from forged material.

3D step models available upon request

DM 20 Series - NPS Pipe







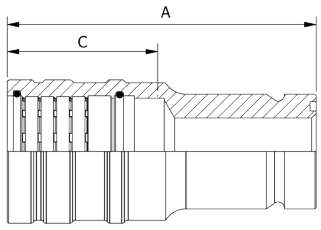
**MATERIAL CODE:*
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G = CARBON STEEL
B = COPPER NICKEL 70/30

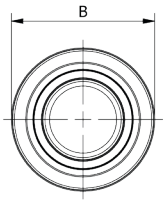
ORDER EXAMPLE:
DM20027G08

Flange – ANSI 600#, NPS - DM20027

Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
1/2"	1/2"	**DM20027*08**	3.31 (84.07)	1.20 (30.48)	1.50 (38.10)	2.63 (66.80)	3.75 (95.25)	0.81 (20.57)	1/2 UNC	2.07 (0.94)
3/4"	3/4"	**DM20027*12**	3.81 (96.77)	1.48 (37.59)	1.75 (44.45)	3.25 (82.55)	4.63 (117.60)	0.88 (22.35)	5/8 UNC	3.53 (1.60)
1"	1"	**DM20027*16**	4.00 (101.60)	1.82 (46.23)	2.00 (50.80)	3.50 (88.90)	4.88 (123.95)	0.94 (23.88)	5/8 UNC	4.51 (2.05)
1-1/4"	1-1/4"	**DM20027*20**	4.50 (114.30)	2.26 (57.40)	2.38 (60.45)	3.88 (98.55)	5.25 (133.35)	1.06 (26.92)	5/8 UNC	6.48 (2.94)
1-1/2"	1-1/2"	**DM20027*24**	4.63 (117.60)	2.58 (65.53)	2.50 (63.50)	4.50 (114.30)	6.13 (155.70)	1.13 (28.70)	3/4 UNC	9.13 (4.14)
2"	2"	**DM20027*32**	5.73 (145.54)	3.04 (77.22)	3.50 (88.90)	5.00 (127.00)	6.50 (165.10)	1.25 (31.75)	5/8 UNC	10.92 (4.95)
**3"	3"	**DM20027*48**	9.97 (253.24)	4.38 (111.25)	5.00 (127.00)	6.63 (168.40)	8.13 (206.50)	1.38 (35.05)	3/4 UNC	25.76 (11.68)

**3" PYPLOK® DM 20 Series shapes such as Tees and Elbows are made as welded assemblies using ASME B16.9 SCH.160 Butt Weld Fittings. All other sizes are made from forged material.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

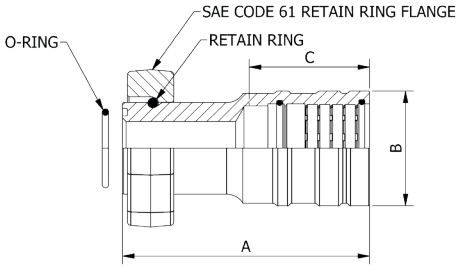
ORDER EXAMPLE:
DM20090G08

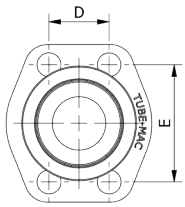
SAE Flange Body, NPS - DM20090

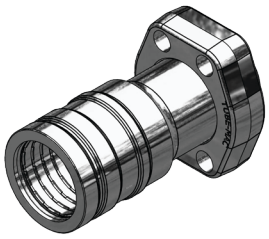
Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
			A	B	C Insertion Depth	
1/2"	1/2"	**DM20090*08**	3.38 (85.85)	1.20 (30.48)	1.50 (38.10)	0.51 (0.23)
3/4"	3/4"	**DM20090*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	0.87 (0.39)
1"	1"	**DM20090*16**	4.50 (114.30)	1.82 (46.23)	2.00 (50.80)	1.49 (0.68)
1-1/4"	1-1/4"	**DM20090*20**	4.88 (123.95)	2.26 (57.40)	2.38 (60.45)	2.13 (0.97)
1-1/2"	1-1/2"	**DM20090*24**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	3.00 (1.36)
2"	2"	**DM20090*32**	6.50 (165.10)	3.04 (77.22)	3.50 (88.90)	4.43 (2.01)
3"	3"	**DM20090*48**	9.50 (241.30)	4.38 (111.25)	5.00 (127.00)	13.41 (6.08)

3D step models available upon request

DM 20 Series - NPS Pipe





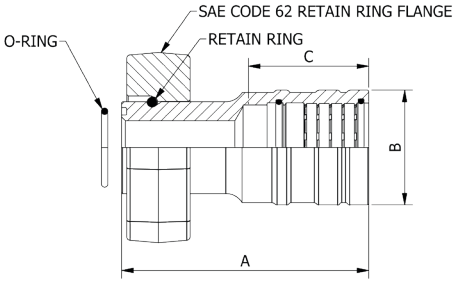


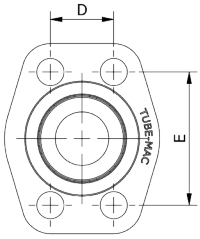
MATERIAL CODE:
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

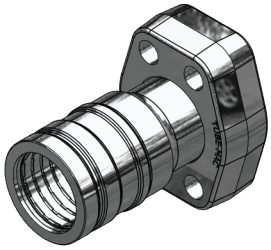
ORDER EXAMPLE:
DM20091G08

SAE Code 61 Flange, NPS - DM20091

Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)					Bolt Minimum Grade 8	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM20091*08**	3.38 (85.85)	1.20 (30.48)	1.50 (38.10)	0.69 (17.53)	1.50 (38.10)	5/16” UNC	0.97 (0.44)
3/4"	3/4"	**DM20091*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	0.88 (22.35)	1.88 (47.75)	3/8” UNC	1.35 (0.61)
1"	1"	**DM20091*16**	4.50 (114.30)	1.82 (46.23)	2.00 (50.80)	1.03 (26.16)	2.06 (52.32)	3/8” UNC	2.12 (0.96)
1-1/4"	1-1/4"	**DM20091*20**	4.88 (123.95)	2.26 (57.40)	2.38 (60.45)	1.19 (30.23)	2.31 (58.67)	7/16” UNC	3.03 (1.37)
1-1/2"	1-1/2"	**DM20091*24**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	1.41 (35.81)	2.75 (69.85)	1/2” UNC	4.35 (1.97)
2"	2"	**DM20091*32**	6.50 (165.10)	3.04 (77.22)	3.50 (88.90)	1.69 (42.93)	3.06 (77.72)	1/2” UNC	6.45 (2.93)
3”	3”	**DM20091*48**	9.50 (241.30)	4.38 (111.25)	5.00 (127.00)	2.44 (61.98)	4.19 (106.43)	5/8” UNC	17.51 (7.90)







MATERIAL CODE:
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM20092G08

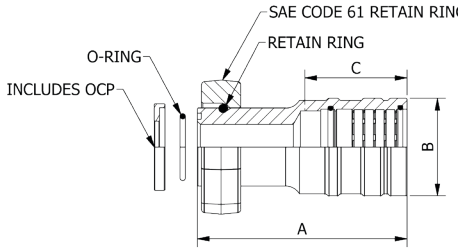
SAE Code 62 Flange, NPS - DM20092

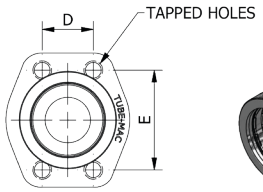
Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)					Bolt Minimum Grade 8	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM20092*08**	3.38 (85.85)	1.20 (30.48)	1.50 (38.10)	0.72 (18.29)	1.59 (40.39)	5/16” UNC	0.97 (0.44)
3/4"	3/4"	**DM20092*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	0.94 (23.88)	2.00 (50.80)	3/8” UNC	1.68 (0.76)
1"	1"	**DM20092*16**	4.50 (114.30)	1.82 (46.23)	2.00 (50.80)	1.09 (27.69)	2.25 (57.15)	7/16” UNC	2.75 (1.25)
1-1/4"	1-1/4"	**DM20092*20**	4.88 (123.95)	2.26 (57.40)	2.38 (60.45)	1.25 (31.75)	2.63 (66.80)	1/2” UNC	4.08 (1.85)
1-1/2"	1-1/2"	**DM20092*24**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	1.44 (36.58)	3.13 (79.50)	5/8” UNC	5.88 (2.67)
2”	2"	**DM20092*32**	6.50 (165.10)	3.04 (77.22)	3.50 (88.90)	1.75 (44.45)	3.81 (96.77)	3/4” UNC	9.83 (4.46)
**3”	3”	**DM20092*48**	9.50 (241.30)	4.38 (111.25)	5.00 (127.00)	2.44 (61.98)	4.19 (106.43)	5/8” UNC	22.51 (10.21)

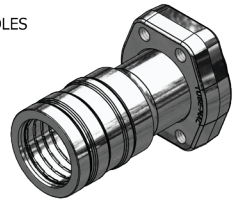
**3” uses ISO 6164 Flange.

3D step models available upon request

DM 20 Series - NPS Pipe





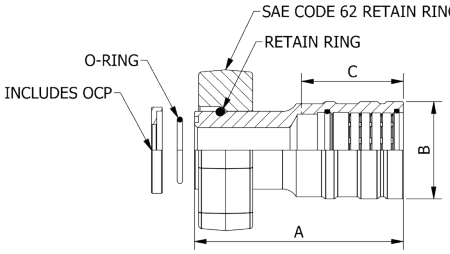


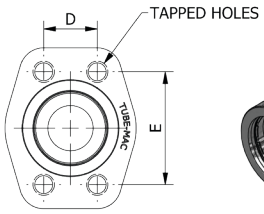
MATERIAL CODE:
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

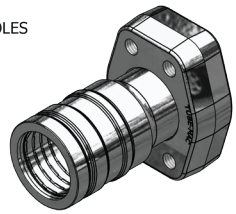
ORDER EXAMPLE:
DM20095G08

SAE Code 61 Tapped Flange, NPS - DM20095

Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)					Tap UNC-2B	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM20095*08**	3.38 (85.85)	1.20 (30.48)	1.50 (38.10)	0.69 (17.53)	1.50 (38.10)	5/16”-18	1.01 (0.46)
3/4"	3/4"	**DM20095*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	0.88 (22.35)	1.88 (47.75)	3/8”-16	1.42 (0.64)
1"	1"	**DM20095*16**	4.50 (114.30)	1.82 (46.23)	2.00 (50.80)	1.03 (26.16)	2.06 (52.32)	3/8”-16	2.20 (1.00)
1-1/4"	1-1/4"	**DM20095*20**	4.88 (123.95)	2.26 (57.40)	2.38 (60.45)	1.19 (30.23)	2.31 (58.67)	7/16”-14	3.12 (1.42)
1-1/2"	1-1/2"	**DM20095*24**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	1.41 (35.81)	2.75 (69.85)	1/2”-13	4.52 (2.05)
2"	2"	**DM20095*32**	6.50 (165.10)	3.04 (77.22)	3.50 (88.90)	1.69 (42.93)	3.06 (77.72)	1/2”-13	6.60 (2.99)
3”	3”	**DM20095*48**	9.50 (241.30)	4.38 (111.25)	5.00 (127.00)	2.44 (61.98)	4.19 (106.43)	5/8”-11	17.51 (7.90)







MATERIAL CODE:
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM20096G08

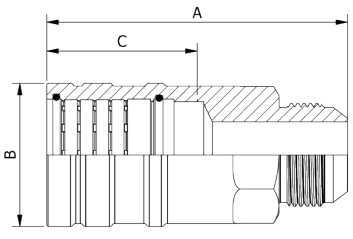
SAE Code 62 Tapped Flange, NPS - DM20096

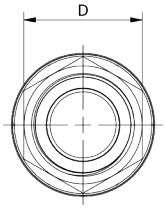
Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)					Tap UNC-2B	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM20096*08**	3.38 (85.85)	1.20 (30.48)	1.50 (38.10)	0.72 (18.29)	1.59 (40.39)	5/16”-18	1.01 (0.46)
3/4"	3/4"	**DM20096*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	0.94 (23.88)	2.00 (50.80)	3/8”-16	1.84 (0.83)
1"	1"	**DM20096*16**	4.50 (114.30)	1.82 (46.23)	2.00 (50.80)	1.09 (27.69)	2.25 (57.15)	7/16”-14	2.83 (1.28)
1-1/4"	1-1/4"	**DM20096*20**	4.88 (123.95)	2.26 (57.40)	2.38 (60.45)	1.25 (31.75)	2.63 (66.80)	1/2”-13	4.42 (2.00)
1-1/2"	1-1/2"	**DM20096*24**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	1.44 (36.58)	3.13 (79.50)	5/8”-11	6.47 (2.93)
2”	2"	**DM20096*32**	6.50 (165.10)	3.04 (77.22)	3.50 (88.90)	1.75 (44.45)	3.81 (96.77)	3/4”-10	10.17 (4.61)
**3”	3”	**DM20096*48**	9.50 (241.30)	4.38 (111.25)	5.00 (127.00)	2.44 (61.89)	4.19 (106.43)	1”-8	22.51 (10.21)

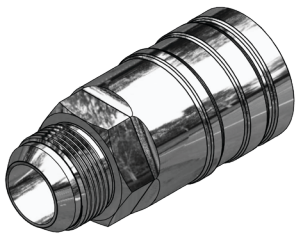
**3” uses ISO 6164 Flange.

3D step models available upon request

DM 20 Series - NPS Pipe





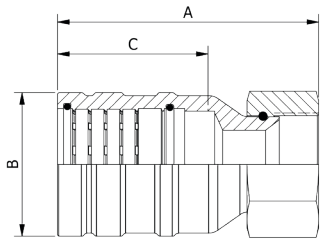


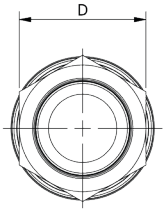
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

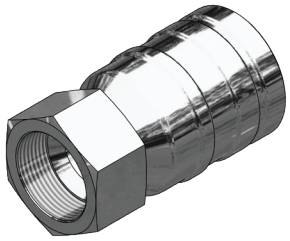
ORDER EXAMPLE:
DM20055G04

JIC 37° Male, NPS - DM20055

Size NPS	JIC Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20055*04**	2.25 (57.15)	0.80 (20.32)	1.13 (28.70)	0.50 (12.70)	0.10 (0.05)
3/8"	06	**DM20055*06**	2.63 (66.80)	0.99 (25.15)	1.38 (35.05)	0.63 (16.00)	0.21 (0.10)
1/2"	08	**DM20055*08**	3.25 (82.55)	1.20 (30.48)	1.50 (38.10)	0.81 (20.57)	0.37 (0.17)
3/4"	12	**DM20055*12**	3.69 (93.73)	1.48 (37.59)	1.75 (44.45)	1.13 (28.70)	0.63 (0.29)
1"	16	**DM20055*16**	4.00 (101.60)	1.82 (46.23)	2.00 (50.80)	1.38 (35.05)	1.06 (0.48)
1-1/4"	20	**DM20055*20**	4.75 (120.65)	2.26 (57.40)	2.38 (60.45)	1.88 (47.75)	2.11 (0.96)
1-1/2"	24	**DM20055*24**	4.75 (120.65)	2.58 (65.53)	2.50 (63.50)	2.25 (57.15)	2.66 (1.21)
2”	32	**DM20055*32**	6.00 (152.40)	3.04 (77.22)	3.50 (88.90)	2.63 (66.80)	4.08 (1.85)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

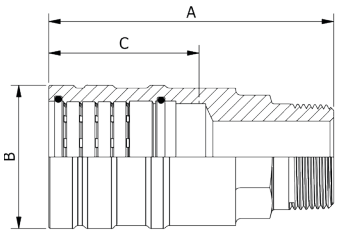
ORDER EXAMPLE:
DM20054G04

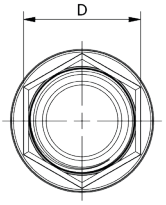
JIC 37° Female Swivel, NPS - DM20054

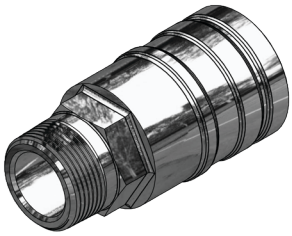
Size NPS	JIC Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20054*04**	2.23 (56.64)	0.80 (20.32)	1.13 (28.70)	0.56 (14.22)	0.12 (0.05)
3/8"	06	**DM20054*06**	2.67 (67.82)	0.99 (25.15)	1.38 (35.05)	0.69 (17.53)	0.21 (0.10)
1/2"	08	**DM20054*08**	3.07 (77.98)	1.20 (30.48)	1.50 (38.10)	0.88 (22.35)	0.37 (0.17)
3/4"	12	**DM20054*12**	3.40 (86.36)	1.48 (37.59)	1.75 (44.45)	1.25 (31.75)	0.74 (0.34)
1"	16	**DM20054*16**	4.05 (102.87)	1.82 (46.23)	2.00 (50.80)	1.50 (38.10)	1.19 (0.54)
1-1/4"	20	**DM20054*20**	4.40 (111.76)	2.26 (57.40)	2.38 (60.45)	2.00 (50.80)	2.15 (0.98)
1-1/2"	24	**DM20054*24**	4.77 (121.16)	2.58 (65.53)	2.50 (63.50)	2.25 (57.15)	3.00 (1.36)
2”	32	**DM20054*32**	5.99 (152.15)	3.04 (77.22)	3.50 (88.90)	2.88 (73.15)	4.53 (2.05)

3D step models available upon request

DM 20 Series - NPS Pipe





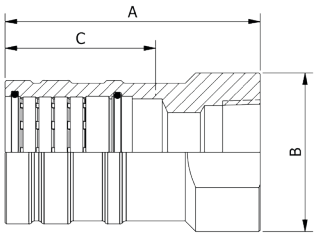


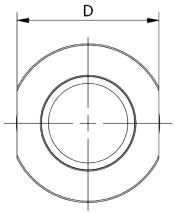
**MATERIAL CODE:*
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G = CARBON STEEL
B = COPPER NICKEL 70/30

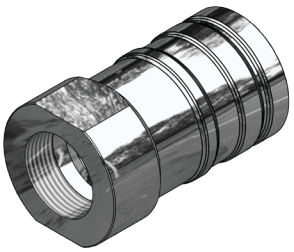
ORDER EXAMPLE:
DM20056G04

NPT Male, NPS - DM20056

Size NPS	NPT Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM20056*04**	2.25 (57.15)	0.80 (20.32)	1.13 (28.70)	0.56 (14.22)	0.12 (0.05)
3/8"	3/8"	**DM20056*06**	2.63 (66.80)	0.99 (25.15)	1.38 (35.05)	0.75 (19.05)	0.21 (0.10)
1/2"	1/2"	**DM20056*08**	3.25 (82.55)	1.20 (30.48)	1.50 (38.10)	0.88 (22.35)	0.40 (0.18)
3/4"	3/4"	**DM20056*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	1.25 (31.75)	0.76 (0.34)
1"	1"	**DM20056*16**	4.00 (101.6)	1.82 (46.23)	2.00 (50.80)	1.50 (38.10)	1.20 (0.54)
1-1/4"	1-1/4"	**DM20056*20**	4.50 (63.50)	2.26 (57.40)	2.38 (60.45)	2.39 (60.71)	2.07 (0.94)
1-1/2"	1-1/2"	**DM20056*24**	4.75 (120.65)	2.58 (65.53)	2.50 (63.50)	2.13 (54.10)	2.50 (1.13)
2"	2"	**DM20056*32**	6.00 (152.40)	3.04 (77.22)	3.50 (88.90)	2.63 (66.80)	4.41 (2.00)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

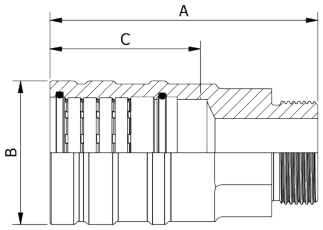
ORDER EXAMPLE:
DM20060G04

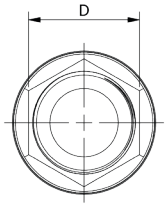
NPT Female, NPS - DM20060

Size NPS	NPT Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM20060*04**	2.00 (50.80)	1.00 (25.40)	1.13 (28.70)	0.88 (22.35)	0.20 (0.09)
3/8"	3/8"	**DM20060*06**	2.25 (57.15)	1.25 (31.75)	1.38 (35.05)	1.00 (25.40)	0.32 (0.15)
1/2"	1/2"	**DM20060*08**	2.75 (69.85)	1.38 (35.05)	1.50 (38.10)	1.25 (31.75)	0.48 (0.22)
3/4"	3/4"	**DM20060*12**	3.25 (82.55)	1.75 (44.45)	1.75 (44.45)	1.50 (38.10)	0.90 (0.41)
1"	1"	**DM20060*16**	3.63 (92.20)	1.98 (50.29)	2.00 (50.80)	1.88 (47.75)	1.40 (0.63)
1-1/4"	1-1/4"	**DM20060*20**	4.03 (102.36)	2.50 (63.50)	2.38 (60.45)	2.25 (57.15)	2.20 (1.00)
1-1/2"	1-1/2"	**DM20060*24**	4.38 (111.25)	3.00 (76.20)	2.50 (63.50)	2.74 (69.60)	3.53 (1.60)
2"	2"	**DM20060*32**	5.50 (139.70)	3.50 (88.90)	3.50 (88.90)	3.00 (76.20)	4.80 (2.17)

3D step models available upon request

DM 20 Series - NPS Pipe





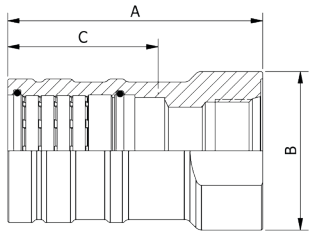


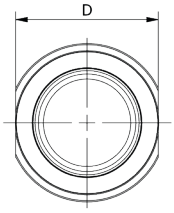
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

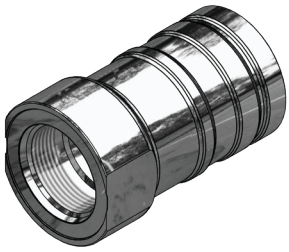
ORDER EXAMPLE:
DM20088G04

SAE Male, NPS - DM20088

Size NPS	SAE Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20088*04**	2.18 (55.37)	0.80 (20.32)	1.13 (28.70)	0.50 (12.70)	0.12 (0.05)
3/8"	06	**DM20088*06**	2.47 (62.74)	0.99 (25.15)	1.38 (35.05)	0.69 (17.53)	0.20 (0.09)
1/2"	08	**DM20088*08**	2.74 (69.60)	1.20 (30.48)	1.50 (38.10)	0.88 (22.35)	0.33 (0.15)
3/4"	12	**DM20088*12**	3.35 (85.09)	1.48 (37.59)	1.75 (44.45)	1.13 (28.70)	0.61 (0.28)
1"	16	**DM20088*16**	3.73 (94.74)	1.82 (46.23)	2.00 (50.80)	1.50 (38.10)	1.09 (0.49)
1-1/4"	20	**DM20088*20**	4.23 (107.44)	2.26 (57.40)	2.38 (60.45)	1.88 (47.75)	1.87 (0.85)
1-1/2"	24	**DM20088*24**	4.48 (113.79)	2.58 (65.53)	2.50 (63.50)	2.13 (54.10)	2.56 (1.16)
2"	32	**DM20088*32**	5.35 (135.89)	3.04 (77.22)	3.50 (88.90)	2.75 (69.85)	3.84 (1.74)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

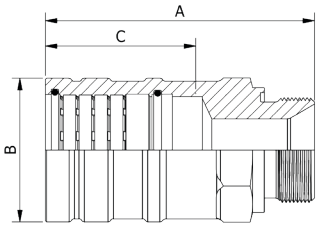
ORDER EXAMPLE:
DM20087G04

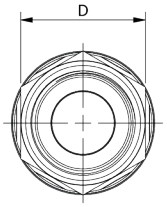
SAE Female, NPS - DM20087

Size NPS	SAE Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20087*04**	2.00 (50.80)	0.88 (22.35)	1.13 (28.70)	0.75 (19.05)	0.16 (0.07)
3/8"	06	**DM20087*06**	2.38 (60.45)	1.00 (25.40)	1.38 (35.05)	0.88 (22.35)	0.26 (0.12)
1/2"	08	**DM20087*08**	2.63 (66.80)	1.25 (31.75)	1.50 (38.10)	1.13 (28.70)	0.42 (0.19)
3/4"	12	**DM20087*12**	3.25 (82.55)	1.75 (44.45)	1.75 (44.45)	1.50 (38.10)	0.90 (0.41)
1"	16	**DM20087*16**	3.60 (91.44)	1.98 (50.29)	2.00 (50.80)	1.75 (44.45)	1.27 (0.58)
1-1/4"	20	**DM20087*20**	4.03 (102.36)	2.50 (63.50)	2.38 (60.45)	2.25 (57.15)	1.96 (0.89)
1-1/2"	24	**DM20087*24**	4.35 (110.49)	2.75 (69.85)	2.50 (63.50)	2.50 (63.50)	2.80 (1.27)
2"	32	**DM20087*32**	5.75 (146.05)	3.50 (88.90)	3.50 (88.90)	3.25 (82.55)	5.09 (2.31)

3D step models available upon request

DM 20 Series - NPS Pipe





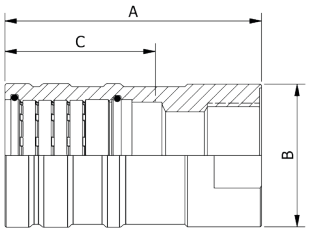


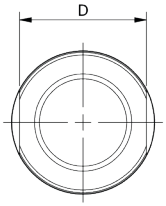
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM20153G04

BSPP Male, NPS - DM20153

Size NPS	BSPP Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM20153*04**	2.13 (54.10)	0.80 (20.32)	1.13 (28.70)	0.75 (19.05)	0.14 (0.06)
3/8"	3/8"	**DM20153*06**	2.38 (60.45)	0.99 (25.15)	1.38 (35.05)	0.87 (22.10)	0.22 (0.10)
1/2"	1/2"	**DM20153*08**	3.00 (76.20)	1.20 (30.48)	1.50 (38.10)	1.18 (29.97)	0.46 (0.21)
3/4"	3/4"	**DM20153*12**	3.38 (85.85)	1.48 (37.59)	1.75 (44.45)	1.42 (36.07)	0.71 (0.32)
1"	1"	**DM20153*16**	3.63 (92.20)	1.82 (46.23)	2.00 (50.80)	1.81 (45.97)	1.14 (0.52)
1-1/4"	1-1/4"	**DM20153*20**	4.25 (107.95)	2.26 (57.40)	2.38 (60.45)	1.97 (50.04)	1.95 (0.88)
1-1/2"	1-1/2"	**DM20153*24**	4.63 (117.60)	2.58 (65.53)	2.50 (63.50)	2.17 (55.12)	2.67 (1.21)
2"	2"	**DM20153*32**	5.38 (136.65)	3.04 (77.22)	3.50 (88.90)	2.95 (74.93)	3.49 (1.58)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

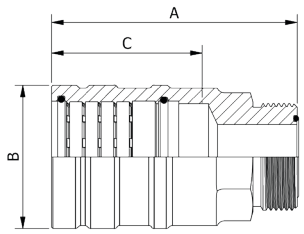
ORDER EXAMPLE:
DM20086G04

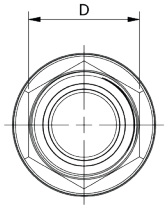
BSPP Female, NPS - DM20086

Size NPS	BSPP Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM20086*04**	2.00 (50.80)	0.88 (22.35)	1.13 (28.70)	0.75 (19.05)	0.15 (0.07)
3/8"	3/8"	**DM20086*06**	2.38 (60.45)	1.06 (26.92)	1.38 (35.05)	0.94 (23.88)	0.25 (0.11)
1/2"	1/2"	**DM20086*08**	2.63 (66.80)	1.25 (31.75)	1.50 (38.10)	1.06 (26.92)	0.40 (0.18)
3/4"	3/4"	**DM20086*12**	3.25 (82.55)	1.75 (44.45)	1.75 (44.45)	1.50 (38.10)	0.91 (0.41)
1"	1"	**DM20086*16**	3.50 (88.90)	2.00 (50.80)	2.00 (50.80)	1.75 (44.45)	1.28 (0.58)
1-1/4"	1-1/4"	**DM20086*20**	4.05 (102.87)	2.25 (57.15)	2.38 (60.45)	2.00 (50.80)	1.91 (0.87)
1-1/2"	1-1/2"	**DM20086*24**	4.38 (111.25)	2.75 (69.85)	2.50 (63.50)	2.50 (63.50)	2.88 (1.31)
2"	2"	**DM20086*32**	5.75 (146.05)	3.50 (88.90)	3.50 (88.90)	3.00 (76.20)	5.14 (2.33)

3D step models available upon request

DM 20 Series - NPS Pipe





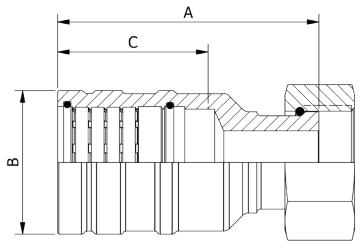


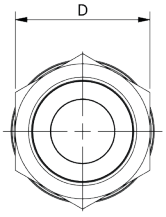
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

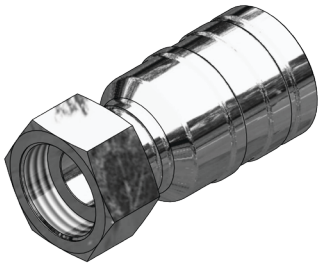
ORDER EXAMPLE:
DM20010G04

ORFS Male, NPS - DM20010

Size NPS	ORFS Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20010*04**	2.13 (54.10)	0.80 (20.32)	1.13 (28.70)	0.63 (16.00)	0.13 (0.06)
3/8"	06	**DM20010*06**	2.50 (63.50)	0.99 (25.15)	1.38 (35.05)	0.75 (19.05)	0.23 (0.10)
1/2"	08	**DM20010*08**	2.75 (69.85)	1.20 (30.48)	1.50 (38.10)	0.88 (22.35)	0.34 (0.15)
3/4"	12	**DM20010*12**	3.25 (82.55)	1.48 (37.59)	1.75 (44.45)	1.25 (31.75)	0.69 (0.31)
1"	16	**DM20010*16**	3.50 (88.90)	1.82 (46.23)	2.00 (50.80)	1.50 (38.10)	1.18 (0.54)
1-1/4"	20	**DM20010*20**	4.08 (103.63)	2.26 (57.40)	2.38 (60.45)	1.75 (44.45)	1.80 (0.82)
1-1/2"	24	**DM20010*24**	4.38 (111.25)	2.58 (65.53)	2.50 (63.50)	2.13 (54.10)	2.53 (1.15)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

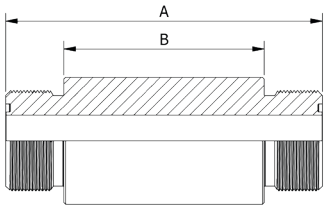
ORDER EXAMPLE:
DM20020G04

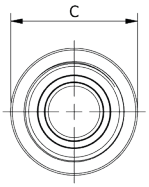
ORFS Female Swivel, NPS - DM20020

Size NPS	ORFS Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20020*04**	2.25 (57.15)	0.80 (20.32)	1.13 (28.70)	0.67 (17.02)	0.14 (0.06)
3/8"	06	**DM20020*06**	2.50 (63.50)	0.99 (25.15)	1.38 (35.05)	0.86 (21.84)	0.26 (0.12)
1/2"	08	**DM20020*08**	2.75 (69.85)	1.20 (30.48)	1.50 (38.10)	0.94 (23.88)	0.33 (0.15)
3/4"	12	**DM20020*12**	3.50 (88.90)	1.48 (37.59)	1.75 (44.45)	1.63 (41.40)	1.04 (0.47)
1"	16	**DM20020*16**	3.63 (92.20)	1.82 (46.23)	2.00 (50.80)	1.75 (44.45)	1.31 (0.59)
1-1/4"	20	**DM20020*20**	4.13 (104.90)	2.26 (57.40)	2.38 (60.45)	2.13 (54.10)	2.21 (1.00)
1-1/2"	24	**DM20020*24**	4.38 (111.25)	2.58 (65.53)	2.50 (63.50)	2.38 (60.45)	2.95 (1.34)

3D step models available upon request

DM 20 Series - NPS Pipe





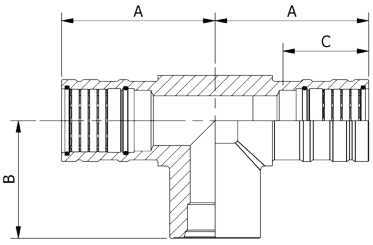


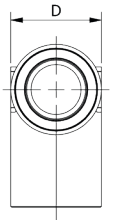
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

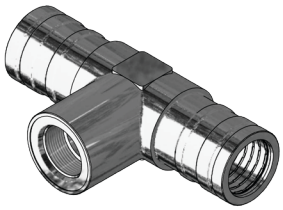
ORDER EXAMPLE:
DM60089G08

Weldable Bulkhead, OD Tube - DM60089

Size NPS	ORFS Size	Part Number	Dimensions - Inch (mm)			Thread Details	*Weight K & G lbs (kg)
			A	B	C		
1/2”	08	**DM60089*08**	3.00 (76.20)	1.99 (50.55)	1.00 (25.40)	13/16”-16UNF-2A	0.49 (0.22)
3/4"	12	**DM60089*12**	3.75 (95.25)	2.37 (60.20)	1.50 (38.10)	1-3/16”-12UNF-2A	1.31 (0.59)
1"	16	**DM60089*16**	3.75 (95.25)	2.37 (60.20)	1.75 (44.45)	1-7/16”-12UNF-2A	1.70 (0.77)
1-1/4"	20	**DM60089*20**	4.00 (101.60)	2.62 (66.55)	2.00 (50.80)	1-11/16”-12UNF-2A	2.28 (1.03)
1-1/2"	24	**DM60089*24**	4.25 (107.95)	2.87 (72.90)	2.38 (60.45)	2”-12UNF-2A	2.89 (1.31)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

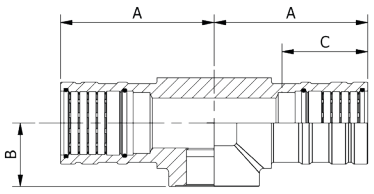
ORDER EXAMPLE:
DM20171G04

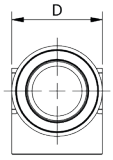
SAE Female Branch Tee, NPS - DM20171

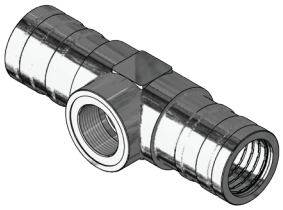
Size NPS	SAE Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM20171*04**	1.75 (44.45)	1.38 (35.05)	1.13 (28.70)	0.86 (21.84)	0.41 (0.19)
3/8"	06	**DM20171*06**	2.00 (50.80)	1.63 (41.40)	1.38 (35.05)	1.06 (26.92)	0.71 (0.32)
1/2"	08	**DM20171*08**	2.68 (68.07)	2.25 (57.15)	1.50 (38.10)	1.30 (33.02)	1.44 (0.65)
3/4"	12	**DM20171*12**	3.03 (76.96)	2.50 (63.50)	1.75 (44.45)	1.58 (40.13)	2.26 (1.03)
1"	16	**DM20171*16**	3.37 (85.60)	2.88 (73.15)	2.00 (50.80)	1.97 (50.04)	3.83 (1.74)
1-1/4"	20	**DM20171*20**	4.25 (107.95)	3.25 (82.55)	2.38 (60.45)	2.50 (63.50)	7.40 (3.36)
1-1/2"	24	**DM20171*24**	4.54 (115.32)	3.50 (88.90)	2.50 (63.50)	2.81 (71.37)	10.06 (4.56)
2"	32	**DM20171*32**	5.45 (138.43)	4.00 (101.60)	3.50 (88.90)	3.25 (82.55)	14.11 (6.40)

3D step models available upon request

DM 20 Series - NPS Pipe





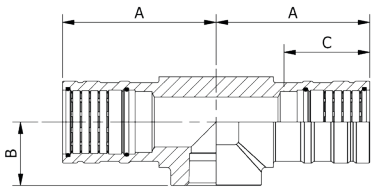


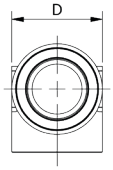
**MATERIAL CODE:*
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G = CARBON STEEL
B = COPPER NICKEL 70/30

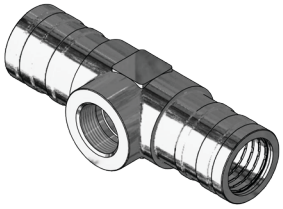
ORDER EXAMPLE:
DM20172G04

BSPP Female Branch Tee, NPS - DM20172

Size NPS	BSPP Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM20172*04**	1.75 (44.45)	1.00 (25.40)	1.13 (28.70)	0.86 (21.84)	0.33 (0.15)
3/8"	3/8"	**DM20172*06**	2.00 (50.80)	1.00 (25.40)	1.38 (35.05)	1.06 (26.92)	0.54 (0.24)
1/2"	1/2"	**DM20172*08**	2.68 (68.07)	1.25 (31.75)	1.50 (38.10)	1.30 (33.02)	1.06 (0.48)
3/4"	3/4"	**DM20172*12**	3.03 (76.96)	1.25 (31.75)	1.75 (44.45)	1.58 (40.13)	1.60 (0.73)
1"	1"	**DM20172*16**	3.37 (85.60)	1.50 (38.10)	2.00 (50.80)	1.97 (50.04)	2.80 (1.27)
1-1/4"	1-1/4"	**DM20172*20**	4.25 (107.95)	1.75 (44.45)	2.38 (60.45)	2.50 (63.50)	5.89 (2.67)
1-1/2"	1-1/2"	**DM20172*24**	4.54 (115.32)	2.00 (50.80)	2.50 (63.50)	2.69 (68.33)	7.11 (3.23)
2"	2"	**DM20172*32**	5.45 (138.43)	2.38 (60.45)	3.50 (88.90)	3.25 (82.55)	10.48 (4.75)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM20173G04

NPT Female Branch Tee, NPS - DM20173

Size NPS	NPT Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM20173*04**	1.75 (44.45)	0.75 (19.05)	1.13 (28.70)	0.86 (21.84)	0.31 (0.14)
3/8"	3/8"	**DM20173*06**	2.00 (50.80)	1.00 (25.40)	1.38 (35.05)	1.06 (26.92)	0.56 (0.25)
1/2"	1/2"	**DM20173*08**	2.68 (68.07)	1.13 (28.70)	1.50 (38.10)	1.30 (33.02)	1.10 (0.50)
3/4"	3/4"	**DM20173*12**	3.03 (76.96)	1.25 (31.75)	1.75 (44.45)	1.58 (40.13)	1.70 (0.77)
1"	1"	**DM20173*16**	3.37 (85.60)	1.38 (35.05)	2.00 (50.80)	1.97 (50.04)	2.80 (1.27)
1-1/4"	1-1/4"	**DM20173*20**	4.25 (107.95)	1.75 (44.45)	2.38 (60.45)	2.50 (63.50)	5.70 (2.59)
1-1/2”	1-1/2”	**DM20173*24**	4.54 (115.32)	2.00 (50.80)	2.50 (63.50)	2.81 (71.37)	7.85 (3.56)
2”	2”	**DM20173*32**	5.45 (138.43)	2.00 (50.80)	3.50 (88.90)	3.25 (82.55)	13.60 (6.17)

3D step models available upon request

Specialty Fitting Configuration Guide
DM 20 Series - NPS Pipe

1/4” to 3”



JIC 37° 90° Elbow Male
DM20355



JIC 37° Branch Tee Male
DM20177



JIC 37° Run Tee Male
DM20178



JIC 37° 90° Elbow Female Swivel
DM20354



JIC 37° Branch Tee Female Swivel
DM20170



NPT 90° Elbow Male
DM20057



NPT Branch Tee Male
DM20176



NPT Run Tee Male
DM20181



NPT 90° Elbow Female
DM20061



ORFS 90° Elbow Male
DM20011



ORFS Branch Tee Male
DM20013



ORFS Run Tee Male
DM20014



ORFS 90° Elbow Female Swivel
DM20021



ORFS Branch Tee Female Swivel
DM20023



SAE 90° Elbow Male
DM20105



SAE Branch Tee Male
DM20174



SAE Run Tee Male
DM20179



SAE 90° Elbow Female
DM20387



BSPP 90° Elbow Male
DM20168



BSPP Branch Tee Male
DM20175



BSPP Run Tee Male
DM20180



BSPP 90° Elbow Female
DM20169



BSPP Cross Fitting with 2 Ports
DM20221



BSPP Cross Fitting with 4 Ports
DM20241



Flange - ANSI #900
DM20025



Flange - ANSI #1500
DM20026



Compact Elbow x Code 61 Flange
DM20231



Compact Elbow x Code 62 Flange
DM20232



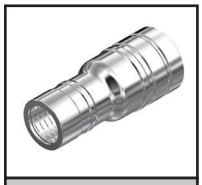
90° PYPLOK® x SAE Code 61 Flange
DM20391



90° PYPLOK® x SAE Code 62 Flange
DM20392

Specialty Fitting Configuration Guide
DM 20 Series - NPS Pipe

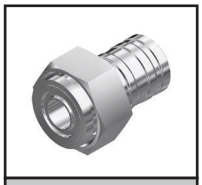
1/4” to 3”



NPS to OD Tube Reducer
DM20501



NPS to Metric Tube Reducer
DM20801



CPV Female
DM20040



CPV Male Union
DM20041



Extra Long Coupling
DM20301

Notes

General Characteristics
DM 60 Series – OD Tube

Fitting Material Specifications	Material Specification
K = Stainless Steel	ASTM-A479/A182-316
G = Carbon Steel	ASTM-A105/A350 LF2
B = Copper Nickel 70/30	MIL-C71500
C = Copper Nickel 90/10	MIL-C70600
D = Duplex	ASTM-A479/A182-UNS31803
Z = Super Duplex	ASTM-A479/A182-UNS32750

O-Ring Material Specifications	O-Ring Temperature Limits
VITON (Brown Colour)	-15°F to 400°F (-26°C to 205°C)
EPDM (Black Colour)	-60°F to 400°F (-51°C to 205°C)

For seal compatibility and selection for each system consult factory. Other seal materials for specific applications of compatibility and temperature are available upon request.

Ordering Information

DM 60 001 K 04 ___ ___

Seal Material
No Designation = Viton
E = EPDM

Reducer/Thread/Flange Size

04 = 1/4” (6.35mm)
06 = 3/8” (9.53mm)
08 = 1/2” (12.70mm)
10 = 5/8” (15.88mm)
12 = 3/4” (19.05mm)
16 = 1” (25.40mm)
20 = 1-1/4” (31.75mm)
24 = 1-1/2” (38.10mm)
32 = 2” (50.80mm)

Fitting Material:
K = Stainless Steel
G = Carbon Steel
B = Copper Nickel 70/30
C = Copper Nickel 90/10
D = Duplex
Z = Super Duplex

Fitting Configuration

60 = OD Tube

Series Designation

System design and safe application is the responsibility of the end-user. Consideration must be taken to confirm proper fitting selection is made to ensure proper compatibility, function and operation of the fitting within the piping system. The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® reserves the right to change technical data and product dimension, ratings and other aspects without notice.

Standard Fitting Configuration Guide
DM 60 Series - OD Tube

1/4" to 2"



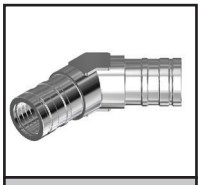
Coupling
DM60001
Page D3



Coupling with Inner Stop
DM60002
Page D3



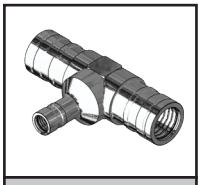
90° Elbow
DM60003
Page D4



45° Elbow
DM60017
Page D4



Tee
DM60004
Page D5



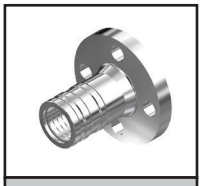
Reducing Tee
DM60104
Page D6



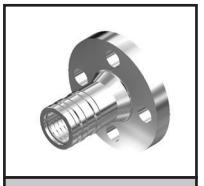
Reducer
DM60101
Page D7



End Cap
DM60085
Page D8



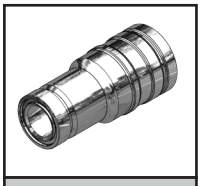
Flange - ANSI 150#
DM60018
Page D9



Flange - ANSI 300#
DM60019
Page D9



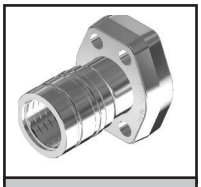
Flange - ANSI 600#
DM60027
Page D10



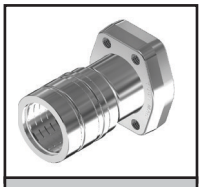
SAE Flange Body
DM60090
Page D10



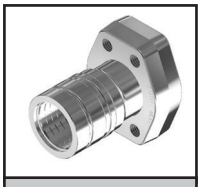
SAE Code 61 Flange
DM60091
Page D11



SAE Code 62 Flange
DM60092
Page D11



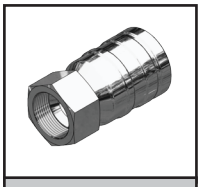
SAE Code 61 Tapped Flange
DM60095
Page D12



SAE Code 62 Tapped Flange
DM60096
Page D12



JIC 37° Male
DM60055
Page D13



JIC 37° Female Swivel
DM60054
Page D13



NPT Male
DM60056
Page D14



NPT Female
DM60060
Page D14



SAE Male
DM60088
Page D15



SAE Female
DM60087
Page D15



BSPP Male
DM60153
Page D16



BSPP Female
DM60086
Page D16



ORFS Male
DM60010
Page D17



ORFS Female Swivel
DM60020
Page D17



Weldable Bulkhead
DM60089
Page D18



SAE Female Branch Tee
DM60171
Page D18

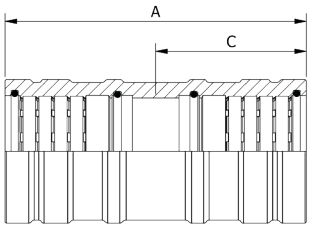


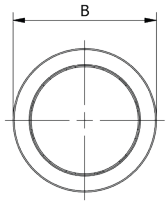
BSPP Female Branch Tee
DM60172
Page D19



NPT Female Branch Tee
DM60173
Page D19

DM 60 Series – OD Tube





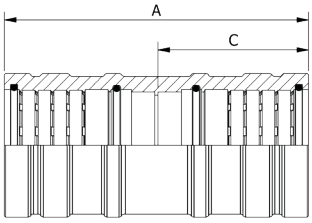


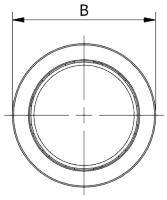
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60001G04

Coupling, OD Tube - DM60001

Size OD	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM60001*04**	1.51 (38.35)	0.39 (9.91)	0.75 (19.05)	0.02 (0.01)
3/8"	**DM60001*06**	1.84 (46.74)	0.55 (13.97)	0.92 (23.37)	0.05 (0.02)
1/2"	**DM60001*08**	2.18 (55.37)	0.75 (19.05)	1.09 (27.69)	0.11 (0.05)
5/8"	**DM60001*10**	2.52 (64.01)	0.93 (23.62)	1.26 (32.00)	0.21 (0.10)
3/4"	**DM60001*12**	2.85 (72.39)	1.09 (27.69)	1.42 (36.07)	0.30 (0.14)
1"	**DM60001*16**	3.41 (86.61)	1.41 (35.81)	1.70 (43.18)	0.61 (0.28)
1-1/4"	**DM60001*20**	3.88 (98.55)	1.73 (43.94)	1.94 (49.28)	1.04 (0.47)
1-1/2"	**DM80001*38**	4.29 (108.97)	2.05 (52.07)	2.15 (54.61)	1.57 (0.71)
2"	**DM60001*32**	5.00 (127.00)	2.58 (65.53)	2.50 (63.50)	2.49 (1.13)







**MATERIAL CODE:*
K = STAINLESS STEEL
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B = COPPER NICKEL 70/30

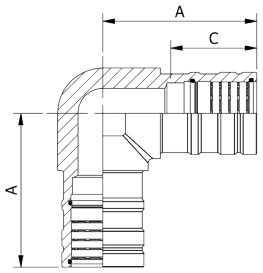
ORDER EXAMPLE:
DM60002G04

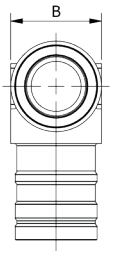
Coupling with Inner Stop, OD Tube - DM60002

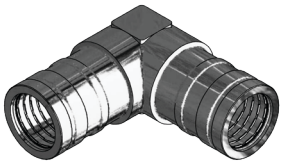
Size OD	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM60002*04**	1.56 (39.52)	0.39 (9.91)	0.75 (19.05)	0.02 (0.01)
3/8"	**DM60002*06**	1.89 (47.96)	0.55 (13.97)	0.92 (23.37)	0.05 (0.02)
1/2"	**DM60002*08**	2.23 (56.59)	0.75 (19.05)	1.09 (27.69)	0.11 (0.05)
5/8"	**DM60002*10**	2.57 (65.28)	0.93 (23.62)	1.26 (32.00)	0.21 (0.10)
3/4"	**DM60002*12**	2.90 (73.56)	1.09 (27.69)	1.42 (36.07)	0.30 (0.14)
1"	**DM60002*16**	3.46 (87.78)	1.41 (35.81)	1.70 (43.18)	0.61 (0.28)
1-1/4"	**DM60002*20**	3.93 (99.85)	1.73 (43.94)	1.94 (49.28)	1.04 (0.47)
1-1/2"	**DM80002*38**	4.34 (110.24)	2.05 (52.07)	2.15 (54.61)	1.57 (0.71)
2"	**DM60002*32**	5.05 (128.27)	2.58 (65.53)	2.50 (63.50)	2.49 (1.13)

3D step models available upon request

DM 60 Series – OD Tube





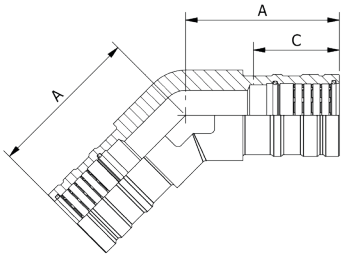


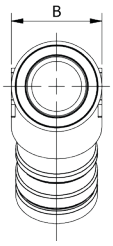
**MATERIAL CODE:*
K = STAINLESS STEEL
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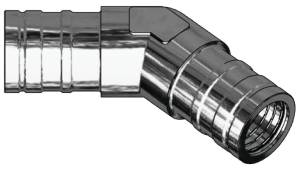
ORDER EXAMPLE:
DM60003G04

90° Elbow, OD Tube - DM60003

Size OD	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM60003*04**	1.20 (30.43)	0.47 (11.94)	0.75 (19.05)	0.05 (0.02)
3/8"	**DM60003*06**	1.50 (38.10)	0.63 (16.00)	0.92 (23.37)	0.12 (0.05)
1/2"	**DM60003*08**	1.75 (44.45)	0.86 (21.84)	1.09 (27.69)	0.26 (0.12)
5/8"	**DM60003*10**	2.00 (50.80)	1.06 (26.92)	1.26 (32.00)	0.47 (0.21)
3/4"	**DM60003*12**	2.68 (68.07)	1.30 (33.02)	1.42 (36.07)	0.91 (0.41)
1"	**DM60003*16**	3.03 (76.96)	1.58 (40.13)	1.70 (43.18)	1.54 (0.70)
1-1/4"	**DM60003*20**	3.40 (86.36)	1.97 (50.04)	1.94 (49.28)	2.70 (1.22)
1-1/2"	**DM80003*38**	4.25 (107.95)	2.50 (63.50)	2.15 (54.61)	5.42 (2.46)
2"	**DM60003*32**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	6.85 (3.11)







**MATERIAL CODE:*
K = STAINLESS STEEL
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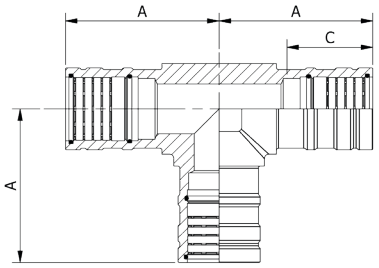
ORDER EXAMPLE:
DM60017G04

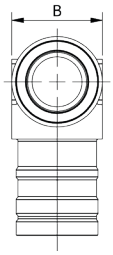
45° Elbow, OD Tube - DM60017

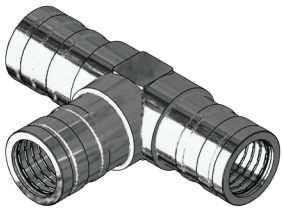
Size OD	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM60017*04**	1.20 (30.43)	0.47 (11.94)	0.75 (19.05)	0.05 (0.02)
3/8"	**DM60017*06**	1.50 (38.10)	0.63 (16.00)	0.92 (23.37)	0.12 (0.05)
1/2"	**DM60017*08**	1.75 (44.45)	0.86 (21.84)	1.09 (27.69)	0.27 (0.12)
5/8"	**DM60017*10**	2.00 (50.80)	1.06 (26.92)	1.26 (32.00)	0.48 (0.22)
3/4"	**DM60017*12**	2.68 (68.07)	1.30 (33.02)	1.42 (36.07)	0.92 (0.42)
1"	**DM60017*16**	3.03 (76.96)	1.58 (40.13)	1.70 (43.18)	1.57 (0.71)
1-1/4"	**DM60017*20**	3.40 (86.36)	1.97 (50.04)	1.94 (49.28)	2.76 (1.25)
1-1/2"	**DM80017*38**	4.25 (107.95)	2.50 (63.50)	2.15 (54.61)	5.08 (2.30)
2"	**DM60017*32**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	7.17 (3.25)

3D step models available upon request

DM 60 Series – OD Tube







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K = STAINLESS STEEL
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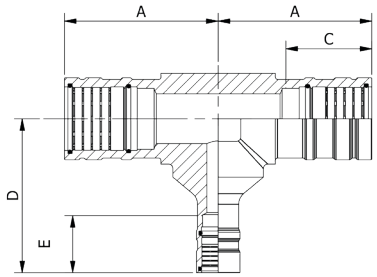
ORDER EXAMPLE:
DM60004G04

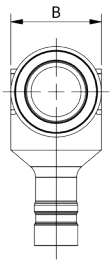
Tee, OD Tube - DM60004

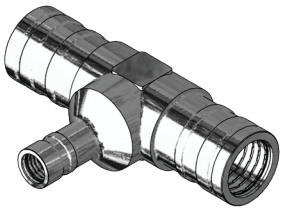
Size OD	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM60004*04**	1.20 (30.43)	0.47 (11.94)	0.75 (19.05)	0.07 (0.03)
3/8"	**DM60004*06**	1.50 (38.10)	0.63 (16.00)	0.92 (23.37)	0.16 (0.07)
1/2"	**DM60004*08**	1.75 (44.45)	0.86 (21.84)	1.09 (27.69)	0.35 (0.16)
5/8"	**DM60004*10**	2.00 (50.80)	1.06 (26.92)	1.26 (32.00)	0.63 (0.29)
3/4"	**DM60004*12**	2.68 (68.07)	1.30 (33.02)	1.42 (36.07)	1.22 (0.55)
1"	**DM60004*16**	3.03 (76.96)	1.58 (40.13)	1.70 (43.18)	2.08 (0.94)
1-1/4"	**DM60004*20**	3.40 (86.36)	1.97 (50.04)	1.94 (49.28)	3.48 (1.58)
1-1/2"	**DM80004*38**	4.25 (107.95)	2.50 (63.50)	2.15 (54.61)	6.61 (3.00)
2"	**DM60004*32**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	9.19 (4.17)

3D step models available upon request

DM 60 Series – OD Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60104G0604

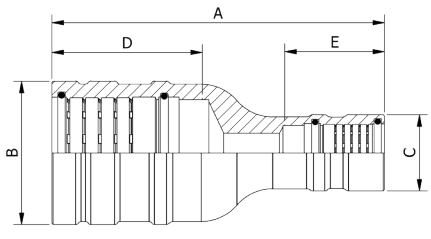
Other configurations available. Contact factory for details.

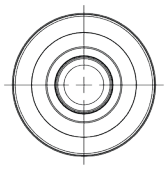
Reducing Tee, OD Tube - DM60104

Run Size OD	Branch Size OD	Part Number	Dimensions - Inch (mm)					*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E Insertion Depth	
3/8"	1/4"	**DM60104*0604**	1.50 (38.10)	0.63 (16.00)	0.92 (23.37)	1.50 (38.10)	0.75 (19.05)	0.16 (0.07)
1/2"	1/4"	**DM60104*0804**	1.75 (44.45)	0.86 (21.84)	1.09 (27.69)	1.75 (44.45)	0.75 (19.05)	0.34 (0.15)
1/2"	3/8"	**DM60104*0806**	1.75 (44.45)	0.86 (21.84)	1.09 (27.69)	1.75 (44.45)	0.92 (23.37)	0.33 (0.15)
5/8”	3/8”	**DM60104*1006**	2.00 (50.80)	1.06 (26.92)	1.26 (32.00)	1.75 (44.45)	0.92 (23.37)	0.55 (0.25)
5/8"	1/2”	**DM60104*1008**	2.00 (50.80)	1.06 (26.92)	1.26 (32.00)	2.00 (50.80)	1.09 (27.69)	0.59 (0.27)
3/4"	5/8"	**DM60104*1210**	2.68 (68.07)	1.30 (33.02)	1.42 (36.07)	2.68 (68.07)	1.26 (32.00)	1.16 (0.53)
1”	1/2"	**DM60104*1608**	3.03 (76.96)	1.58 (40.13)	1.70 (43.18)	3.03 (76.96)	1.09 (27.69)	2.05 (0.93)
1”	5/8”	**DM60104*1610**	3.03 (76.96)	1.58 (40.13)	1.70 (43.18)	3.03 (76.96)	1.26 (32.00)	2.03 (0.92)
1"	3/4"	**DM60104*1612**	3.03 (76.96)	1.58 (40.13)	1.70 (43.18)	3.03 (76.96)	1.42 (36.07)	1.92 (0.87)
1-1/4"	1/2"	**DM60104*2008**	3.40 (86.36)	1.97 (50.04)	1.94 (49.28)	3.03 (76.95)	1.09 (27.69)	3.46 (1.57)
1-1/4"	3/4”	**DM60104*2012**	3.40 (86.36)	1.97 (50.04)	1.94 (49.28)	3.37 (85.60)	1.42 (36.07)	3.27 (1.48)
1-1/4"	1"	**DM60104*2016**	3.40 (86.36)	1.97 (50.04)	1.94 (49.28)	3.37 (85.60)	1.70 (43.18)	3.42 (1.55)
1-1/2"	3/4"	**DM60104*2412**	4.25 (107.95)	2.50 (63.50)	2.15 (54.61)	3.75 (95.25)	1.42 (36.07)	6.77 (3.07)
1-1/2”	1”	**DM60104*2416**	4.25 (107.95)	2.50 (63.50)	2.15 (54.61)	4.25 (107.95)	1.70 (43.18)	6.84 (3.10)
1-1/2"	1-1/4"	**DM60104*2420**	4.25 (107.95)	2.50 (63.50)	2.15 (54.61)	4.25 (107.95)	1.94 (49.28)	6.85 (3.11)
2”	1”	**DM60104*3216**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	4.54 (115.32)	1.70 (43.18)	8.90 (4.04)
2”	1-1/4”	**DM60104*3220**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	4.54 (115.32)	1.94 (49.28)	9.02 (4.09)
2"	1-1/2"	**DM60104*3224**	4.54 (115.32)	2.81 (71.37)	2.50 (63.50)	4.54 (115.32)	2.20 (55.88)	8.95 (4.06)

3D step models available upon request

DM 60 Series – OD Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60101G0604

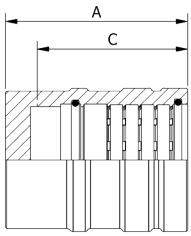
Other configurations available. Contact factory for details.

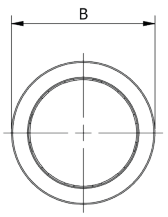
Reducer, OD Tube - DM60101

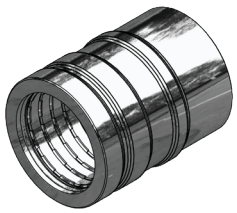
End 1 Size OD	End 2 Size OD	Part Number	Dimensions - Inch (mm)					*Weight K & G lbs (kg)
			A	B	C	D Insertion Depth	E Insertion Depth	
3/8”	1/4”	**DM60101*0604**	2.00 (50.80)	0.55 (13.97)	0.39 (9.91)	0.92 (23.37)	0.75 (19.05)	0.04 (0.02)
1/2"	1/4"	**DM60101*0804**	2.25 (57.15)	0.75 (19.05)	0.39 (9.91)	1.09 (27.69)	0.75 (19.05)	0.08 (0.04)
1/2”	3/8”	**DM60101*0806**	2.38 (60.45)	0.75 (19.05)	0.55 (13.97)	1.09 (27.69)	0.92 (23.37)	0.09 (0.04)
5/8”	3/8”	**DM60101*1006**	2.88 (73.15)	0.93 (23.62)	0.55 (13.97)	1.26 (32.00)	0.92 (23.37)	0.15 (0.07)
5/8”	1/2”	**DM60101*1008**	2.88 (73.15)	0.93 (23.62)	0.75 (19.05)	1.26 (32.00)	1.09 (27.69)	0.16 (0.07)
3/4"	1/2"	**DM60101*1208**	3.50 (88.90)	1.09 (27.69)	0.75 (19.05)	1.42 (36.07)	1.09 (27.69)	0.28 (0.13)
3/4”	5/8”	**DM60101*1210**	3.50 (88.90)	1.09 (27.69)	0.93 (23.62)	1.42 (36.07)	1.26 (32.00)	0.33 (0.15)
1”	5/8”	**DM60101*1610**	3.63 (92.20)	1.41 (35.81)	0.93 (23.62)	1.70 (43.18)	1.26 (32.00)	0.53 (0.24)
1”	3/4”	**DM60101*1612**	4.25 (107.95)	1.41 (35.81)	1.09 (27.69)	1.70 (43.18)	1.42 (36.07)	0.62 (0.28)
1-1/4”	3/4”	**DM60101*2012**	4.50 (114.30)	1.73 (43.94)	1.09 (27.69)	1.94 (49.28)	1.42 (36.07)	0.87 (0.39)
1-1/4”	1”	**DM60101*2016**	4.50 (114.30)	1.73 (43.94)	1.41 (35.81)	1.94 (49.28)	1.70 (43.18)	1.05 (0.48)
1-1/2"	1”	**DM60101*2416**	5.00 (127.00)	2.05 (52.07)	1.41 (35.81)	2.15 (45.61)	1.70 (43.18)	1.55 (0.70)
1-1/2”	1-1/4”	**DM60101*2420**	5.00 (127.00)	2.05 (52.07)	1.73 (43.94)	2.15 (45.61)	1.94 (49.28)	1.65 (0.75)
2”	1-1/4"	**DM60101*3220**	5.75 (146.05)	2.58 (65.53)	1.73 (43.94)	2.50 (63.50)	1.94 (49.28)	2.59 (1.17)
2”	1-1/2”	**DM60101*3224**	6.00 (152.40)	2.58 (65.53)	2.06 (52.32)	2.50 (63.50)	2.20 (55.88)	2.90 (1.32)

3D step models available upon request

DM 60 Series – OD Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

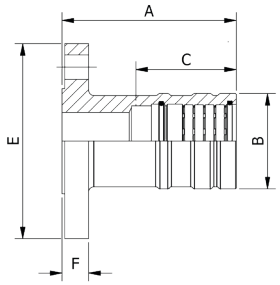
ORDER EXAMPLE:
DM60085G04

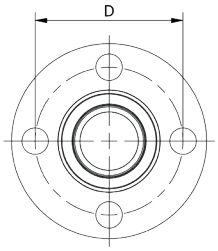
End Cap, OD Tube - DM60085

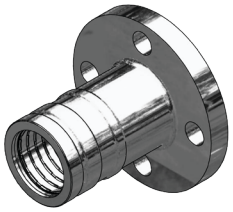
Size OD	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
1/4"	**DM60085*04**	1.00 (25.40)	0.39 (9.91)	0.75 (19.05)	0.02 (0.01)
3/8"	**DM60085*06**	1.25 (31.75)	0.55 (13.97)	0.92 (23.37)	0.04 (0.02)
1/2"	**DM60085*08**	1.38 (35.05)	0.75 (19.05)	1.09 (27.69)	0.08 (0.04)
5/8"	**DM60085*10**	1.50 (38.10)	0.93 (23.62)	1.26 (32.00)	0.13 (0.06)
3/4"	**DM60085*12**	1.75 (44.45)	1.09 (27.69)	1.42 (36.07)	0.21 (0.10)
1"	**DM60085*16**	2.25 (57.15)	1.41 (35.81)	1.70 (43.18)	0.50 (0.23)
1-1/4"	**DM60085*20**	2.38 (60.45)	1.73 (43.94)	1.94 (49.28)	0.75 (0.34)
1-1/2"	**DM80085*38**	2.63 (66.80)	2.05 (52.07)	2.15 (54.61)	1.36 (0.62)
2"	**DM60085*32**	3.00 (76.20)	2.58 (65.53)	2.50 (63.50)	1.80 (0.82)

3D step models available upon request

DM 60 Series – OD Tube





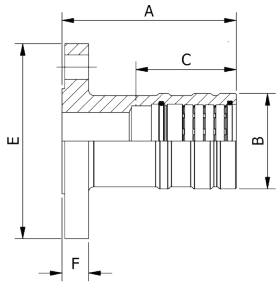


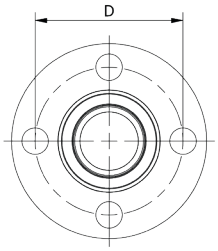
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

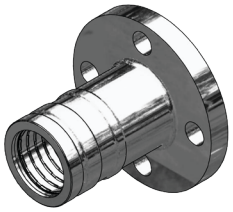
ORDER EXAMPLE:
DM60018G08

Flange – ANSI 150#, OD Tube - DM60018

Size OD	Flange Size	Part Number	Dimensions - Inch (mm)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
1/2"	1/2"	**DM60018*08**	2.38 (60.45)	0.75 (19.05)	1.09 (27.69)	2.38 (60.45)	3.50 (88.90)	0.44 (11.18)	1/2" UNC	1.06 (0.48)
3/4"	3/4"	**DM60018*12**	3.13 (79.50)	1.09 (27.69)	1.42 (36.07)	2.75 (69.85)	3.88 (98.55)	0.50 (12.70)	1/2" UNC	1.69 (0.77)
1"	1"	**DM60018*16**	3.63 (92.20)	1.41 (35.81)	1.70 (43.18)	3.12 (79.25)	4.25 (107.95)	0.56 (14.22)	1/2" UNC	2.73 (1.24)
1-1/4"	1-1/4"	**DM60018*20**	4.00 (101.60)	1.73 (43.94)	1.94 (49.28)	3.50 (88.90)	4.62 (117.35)	0.63 (16.00)	1/2" UNC	3.51 (1.59)
1-1/2"	1-1/2"	**DM60018*24**	4.25 (107.95)	2.05 (52.07)	2.15 (54.61)	3.88 (98.55)	5.00 (127.00)	0.75 (19.05)	1/2" UNC	4.98 (2.26)
2"	2"	**DM60018*32**	5.50 (139.70)	2.58 (65.53)	2.50 (63.50)	4.75 (120.65)	6.00 (152.40)	0.75 (19.05)	5/8" UNC	7.66 (3.47)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60019G08

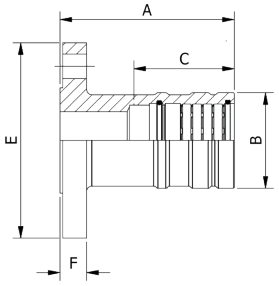
Flange – ANSI 300#, OD Tube - DM60019

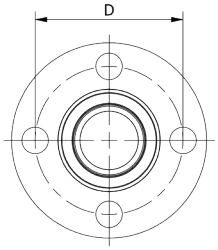
Size OD	Flange Size	Part Number	Dimensions - Inch (mm)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
1/2"	1/2"	**DM60019*08**	2.88 (73.15)	0.75 (19.05)	1.09 (27.69)	2.63 (66.80)	3.75 (95.25)	0.56 (14.22)	1/2" UNC	1.67 (0.76)
3/4"	3/4"	**DM60019*12**	3.75 (95.25)	1.09 (27.69)	1.42 (36.07)	3.25 (82.55)	4.62 (117.35)	0.63 (16.00)	5/8" UNC	3.00 (1.36)
1"	1"	**DM60019*16**	3.88 (98.55)	1.41 (35.81)	1.70 (43.18)	3.50 (88.90)	4.88 (123.95)	0.69 (17.53)	5/8" UNC	3.79 (1.72)
1-1/4"	1-1/4"	**DM60019*20**	4.25 (107.95)	1.73 (43.94)	1.94 (49.28)	3.88 (98.55)	5.25 (133.35)	0.75 (19.05)	5/8" UNC	5.07 (2.30)
1-1/2"	1-1/2"	**DM60019*24**	4.50 (114.30)	2.05 (52.07)	2.20 (55.88)	4.50 (114.30)	6.12 (155.45)	0.81 (20.57)	3/4" UNC	7.37 (3.34)
**2"	2"	**DM60019*32**	5.13 (130.30)	2.58 (65.53)	2.50 (63.50)	5.00 (127.00)	6.50 (165.10)	0.88 (22.35)	5/8" UNC	9.09 (4.12)

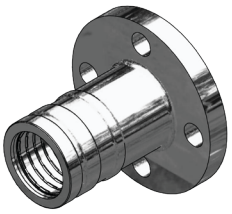
**2" ANSI 300# Flange has 8 Bolts.

3D step models available upon request

DM 60 Series – OD Tube





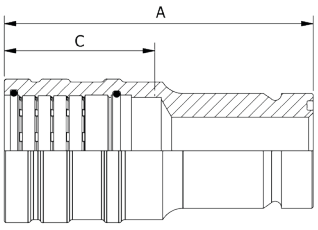


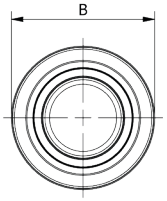
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60027G08

Flange – ANSI 600#, OD Tube - DM60027

Size OD	Flange Size	Part Number	Dimensions - Inch (mm)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
1/2"	1/2"	**DM60027*08**	3.13 (79.50)	0.75 (19.05)	1.09 (27.69)	2.63 (66.80)	3.75 (95.25)	0.81 (20.57)	1/2" UNC	1.92 (0.87)
3/4"	3/4"	**DM60027*12**	3.75 (95.25)	1.09 (27.69)	1.42 (36.07)	3.25 (82.55)	4.63 (117.60)	0.88 (22.35)	5/8" UNC	3.31 (1.51)
1"	1"	**DM60027*16**	3.88 (98.55)	1.41 (35.81)	1.70 (43.18)	3.50 (88.90)	4.88 (123.95)	0.94 (23.88)	5/8" UNC	4.31 (1.51
1-1/4"	1-1/4"	**DM60027*20**	4.50 (114.30)	1.73 (43.94)	1.94 (49.28)	3.88 (98.55)	5.25 (133.35)	1.06 (26.92)	5/8" UNC	6.04 (2.74)
1-1/2"	1-1/2"	**DM60027*24**	4.63 (117.60)	2.05 (52.07)	2.15 (54.61)	4.50 (98.55)	6.13 (155.70)	1.13 (28.70)	3/4" UNC	8.45 (3.83)
2"	2"	**DM60027*32**	5.75 (146.05)	2.58 (65.53)	2.50 (63.50)	5.00 (127.00)	6.50 (165.10)	1.25 (31.75)	5/8" UNC	10.41 (4.72)







**MATERIAL CODE:*
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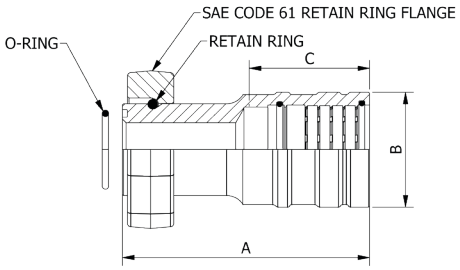
ORDER EXAMPLE:
DM60090G08

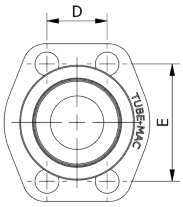
SAE Flange Body, OD Tube - DM60090

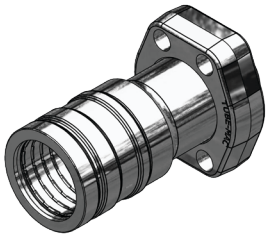
Size OD	Flange Size	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
			A	B	C Insertion Depth	
1/2"	1/2"	**DM60090*08**	2.50 (63.50)	0.75 (19.05)	1.09 (27.69)	0.28 (0.13)
3/4"	3/4"	**DM60090*12**	3.38 (85.85)	1.09 (27.69)	1.42 (36.07)	0.66 (0.30)
1"	1"	**DM60090*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	0.87 (0.39)
1-1/4"	1-1/4"	**DM60090*20**	4.00 (101.60)	1.73 (43.94)	1.94 (49.28)	2.23 (1.01)
1-1/2"	1-1/2"	**DM80090*3824**	4.43 (112.52)	2.05 (52.07)	2.15 (54.61)	2.13 (0.97)
2"	2"	**DM60090*32**	5.63 (143.00)	2.58 (65.53)	2.50 (63.50)	3.49 (1.58)

3D step models available upon request

DM 60 Series – OD Tube





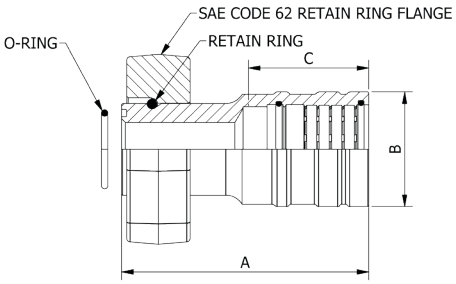


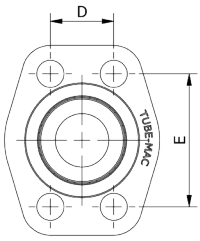
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

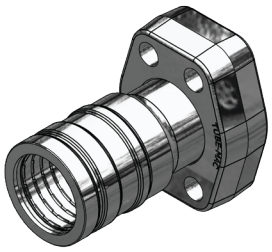
ORDER EXAMPLE:
DM60091G08

SAE Code 61 Flange, OD Tube - DM60091

Size OD	Flange Size	Part Number	Dimensions - Inch (mm)					Bolt Minimum Grade 8	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM60091*08**	2.50 (63.50)	0.75 (19.05)	1.09 (27.69)	0.69 (17.53)	1.50 (38.10)	5/16” UNC	0.74 (0.34)
3/4"	3/4"	**DM60091*12**	3.38 (85.85)	1.09 (27.69)	1.42 (36.07)	0.88 (22.35)	1.88 (47.75)	3/8” UNC	1.16 (0.53)
1"	1"	**DM60091*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.03 (26.16)	2.06 (52.32)	3/8” UNC	1.50 (0.68)
1-1/4"	1-1/4"	**DM60091*20**	4.00 (101.60)	1.73 (43.94)	1.94 (49.28)	1.19 (30.23)	2.31 (58.67)	7/16” UNC	3.13 (1.42)
1-1/2"	1-1/2"	**DM80091*3824**	4.50 (114.30)	2.05 (52.07)	2.15 (54.61)	1.41 (35.81)	2.75 (69.85)	1/2” UNC	3.48 (1.58)
2"	2"	**DM60091*32**	5.63 (143.00)	2.58 (65.53)	2.50 (63.50)	1.69 (42.93)	3.06 (77.72)	1/2” UNC	5.51 (2.50)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

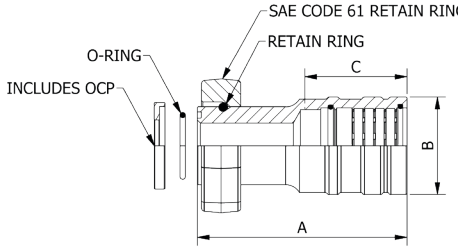
ORDER EXAMPLE:
DM60092G08

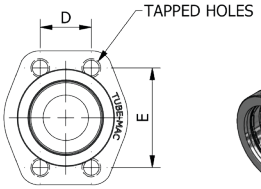
SAE Code 62 Flange, OD Tube - DM60092

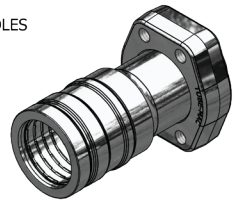
Size OD	Flange Size	Part Number	Dimensions - Inch (mm)					Bolt Minimum Grade 8	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM60092*08**	2.50 (63.50)	0.75 (19.05)	1.09 (27.69)	0.72 (18.29)	1.59 (40.39)	5/16” UNC	0.74 (0.34)
3/4"	3/4"	**DM60092*12**	3.38 (85.85)	1.09 (27.69)	1.42 (36.07)	0.94 (23.88)	2.00 (50.80)	3/8” UNC	1.47 (0.67)
1"	1"	**DM60092*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.09 (27.69)	2.25 (57.15)	7/16” UNC	2.13 (0.97)
1-1/4"	1-1/4"	**DM60092*20**	4.00 (101.60)	1.73 (43.94)	1.94 (49.28)	1.25 (31.75)	2.62 (66.50)	1/2” UNC	4.18 (1.90)
1-1/2"	1-1/2"	**DM80092*3824**	4.50 (114.30)	2.05 (52.07)	2.15 (54.61)	1.44 (36.58)	3.13 (79.50)	5/8” UNC	5.01 (2.27)
2”	2"	**DM60092*32**	5.63 (143.00)	2.58 (65.53)	2.50 (63.50)	1.75 (44.45)	3.81 (96.77)	3/4” UNC	8.89 (4.03)

3D step models available upon request

DM 60 Series – OD Tube





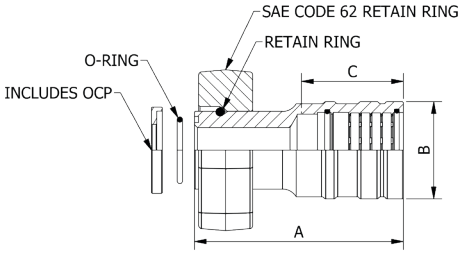


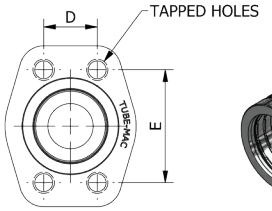
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

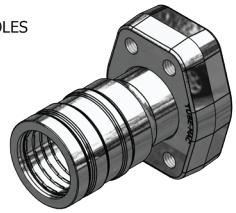
ORDER EXAMPLE:
DM60095G08

SAE Code 61 Tapped Flange, OD Tube - DM60095

Size OD	Flange Size	Part Number	Dimensions - Inch (mm)					Tap UNC-2B	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM60095*08**	2.50 (63.50)	0.75 (19.05)	1.09 (27.69)	0.69 (17.53)	1.50 (38.10)	5/16”-18	0.74 (0.34)
3/4"	3/4"	**DM60095*12**	3.38 (85.85)	1.09 (27.69)	1.42 (36.07)	0.88 (22.35)	1.88 (47.75)	3/8”-16	1.16 (0.53)
1"	1"	**DM60095*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.03 (26.16)	2.06 (52.32)	3/8”-16	1.50 (0.68)
1-1/4"	1-1/4"	**DM60095*20**	4.00 (101.60)	1.73 (43.94)	1.94 (49.28)	1.19 (30.23)	2.31 (58.67)	7/16”-14	3.13 (1.42)
1-1/2"	1-1/2"	**DM60095*24**	4.50 (114.30)	2.05 (52.07)	2.15 (54.61)	1.41 (35.81)	2.75 (69.85)	1/2”-13	3.48 (1.58)
2"	2"	**DM60095*32**	5.63 (143.00)	2.58 (65.53)	2.50 (63.50)	1.69 (42.93)	3.06 (77.72)	1/2”-13	5.51 (2.50)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

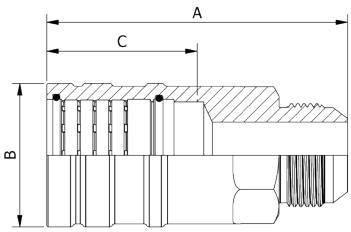
ORDER EXAMPLE:
DM60096G08

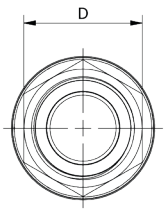
SAE Code 62 Tapped Flange, OD Tube - DM60096

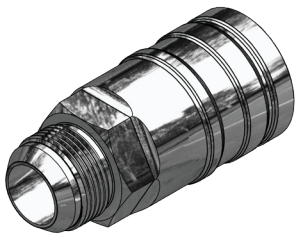
Size OD	Flange Size	Part Number	Dimensions - Inch (mm)					Tap UNC-2B	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
1/2”	1/2”	**DM60096*08**	2.50 (63.50)	0.75 (19.05)	1.09 (27.69)	0.72 (18.29)	1.59 (40.39)	5/16”-18	0.74 (0.34)
3/4"	3/4"	**DM60096*12**	3.38 (85.85)	1.09 (27.69)	1.42 (36.07)	0.94 (23.88)	2.00 (50.80)	3/8”-16	1.47 (0.67)
1"	1"	**DM60096*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.09 (27.69)	2.25 (57.15)	7/16”-14	2.13 (0.97)
1-1/4"	1-1/4"	**DM60096*20**	4.00 (101.60)	1.73 (43.94)	1.94 (49.28)	1.25 (31.75)	2.62 (66.50)	1/2”-13	4.18 (1.90)
1-1/2"	1-1/2"	**DM60096*24**	4.50 (114.30)	2.05 (52.07)	2.15 (54.61)	1.44 (36.58)	3.13 (79.50)	5/8”-11	5.01 (2.27)
2”	2"	**DM60096*32**	5.63 (143.00)	2.58 (65.53)	2.50 (63.50)	1.75 (44.45)	3.81 (96.77)	3/4”-10	8.89 (4.03)

3D step models available upon request

DM 60 Series – OD Tube





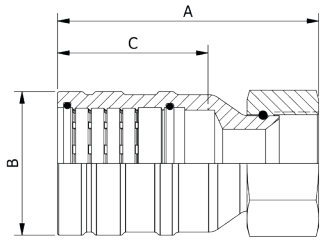


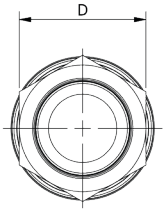
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60055G04

JIC 37° Male, OD Tube - DM60055

Size OD	JIC Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM60055*04**	1.75 (44.45)	0.39 (9.91)	0.75 (19.05)	0.50 (12.70)	0.04 (0.02)
3/8"	06	**DM60055*06**	2.06 (52.32)	0.55 (13.97)	0.92 (23.37)	0.63 (16.00)	0.08 (0.04)
1/2"	08	**DM60055*08**	2.44 (61.98)	0.75 (19.05)	1.09 (27.69)	0.81 (20.57)	0.18 (0.08)
5/8”	10	**DM60055*10**	2.75 (69.85)	0.93 (23.62)	1.26 (32.00)	0.94 (23.88)	0.28 (0.13)
3/4"	12	**DM60055*12**	3.38 (85.73)	1.09 (27.69)	1.42 (36.07)	1.13 (28.70)	0.46 (0.21)
1"	16	**DM60055*16**	3.81 (96.77)	1.41 (35.81)	1.70 (43.18)	1.38 (35.05)	0.79 (0.36)
1-1/4"	20	**DM60055*20**	4.04 (102.62)	1.73 (43.94)	1.94 (49.28)	1.88 (47.75)	1.31 (0.59)
1-1/2"	24	**DM80055*3824**	4.63 (168.40)	2.05 (52.07)	2.15 (54.61)	2.00 (50.80)	1.81 (0.82)
2"	32	**DM60055*32**	5.10 (129.54)	2.58 (65.53)	2.50 (63.50)	3.03 (76.99)	3.31 (1.50)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

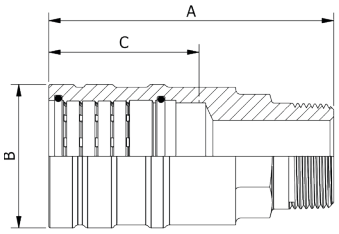
ORDER EXAMPLE:
DM60054G04

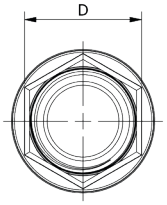
JIC 37° Female Swivel, OD Tube - DM60054

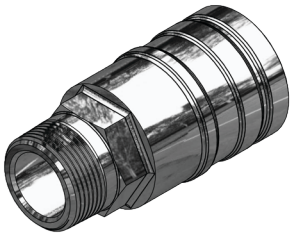
Size OD	JIC Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM60054*04**	1.66 (42.16)	0.39 (9.91)	0.75 (19.05)	0.56 (14.22)	0.05 (0.02)
3/8"	06	**DM60054*06**	2.12 (53.85)	0.55 (13.97)	0.92 (23.37)	0.69 (17.53)	0.09 (0.04)
1/2"	08	**DM60054*08**	2.55 (64.77)	0.75 (19.05)	1.09 (27.69)	0.88 (22.35)	0.19 (0.09)
5/8”	10	**DM60054*10**	2.60 (66.04)	0.93 (23.62)	1.26 (32.00)	1.00 (25.40)	0.27 (0.12)
3/4"	12	**DM60054*12**	2.73 (69.34)	1.09 (27.69)	1.42 (36.07)	1.25 (31.75)	0.40 (0.18)
1"	16	**DM60054*16**	3.17 (80.52)	1.41 (35.81)	1.70 (43.18)	1.50 (38.10)	0.66 (0.30)
1-1/4"	20	**DM60054*20**	3.61 (91.69)	1.73 (43.94)	1.94 (49.28)	2.00 (50.80)	1.29 (0.59)
1-1/2"	24	**DM80054*3824**	4.50 (114.30)	2.05 (52.07)	2.15 (54.61)	2.25 (57.15)	2.10 (0.95)
2"	32	**DM60054*32**	4.95 (125.73)	2.58 (65.53)	2.50 (63.50)	2.88 (73.15)	3.33 (1.51)

3D step models available upon request

DM 60 Series – OD Tube





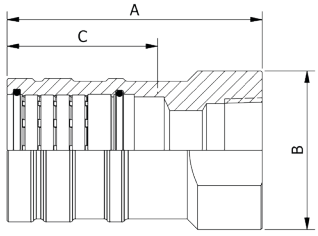


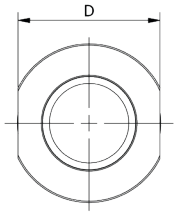
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

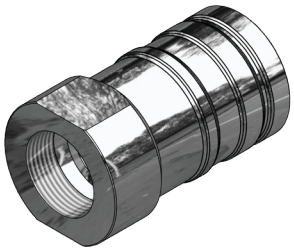
ORDER EXAMPLE:
DM60056G04

NPT Male, OD Tube - DM60056

Size OD	NPT Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM60056*04**	1.75 (44.45)	0.39 (9.91)	0.75 (19.05)	0.56 (14.22)	0.06 (0.03)
3/8”	3/8”	**DM60056*06**	2.06 (52.32)	0.55 (13.97)	0.92 (23.37)	0.75 (19.05)	0.12 (0.05)
1/2"	1/2"	**DM60056*08**	2.59 (65.79)	0.75 (19.05)	1.09 (27.69)	0.88 (22.35)	0.23 (0.10)
5/8”	1/2”	**DM60056*1008**	2.75 (69.85)	0.93 (23.62)	1.26 (32.00)	0.75 (19.05)	0.28 (0.13)
3/4"	3/4"	**DM60056*12**	3.25 (82.55)	1.09 (27.69)	1.42 (36.07)	1.25 (31.75)	0.52 (0.24)
1"	1"	**DM60056*16**	3.75 (95.25)	1.41 (35.81)	1.70 (43.18)	1.50 (38.10)	0.91 (0.41)
1-1/4"	1-1/4"	**DM60056*20**	3.88 (98.55)	1.73 (43.94)	1.94 (49.28)	1.75 (44.45)	1.31 (0.59)
1-1/2"	1-1/2"	**DM60056*24**	4.63 (117.60)	2.05 (52.07)	2.15 (54.61)	2.13 (54.10)	2.00 (0.91)
2"	2"	**DM60056*32**	4.63 (117.60)	2.58 (65.53)	2.50 (63.50)	2.63 (66.80)	2.62 (1.19)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

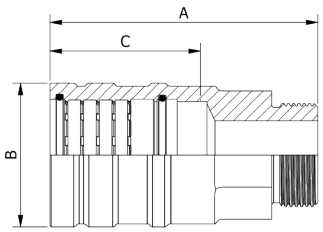
ORDER EXAMPLE:
DM60060G04

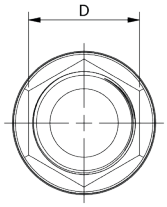
NPT Female, OD Tube - DM60060

Size OD	NPT Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM60060*04**	1.63 (41.40)	0.39 (9.91)	0.75 (19.05)	0.75 (19.05)	0.09 (0.04)
3/8"	3/8"	**DM60060*06**	2.00 (50.80)	0.55 (13.97)	0.92 (23.37)	0.88 (22.35)	0.14 (0.06)
1/2"	1/2"	**DM60060*08**	2.25 (57.15)	0.75 (19.05)	1.09 (27.69)	1.00 (25.40)	0.24 (0.11)
5/8”	1/2”	**DM60060*1008**	2.50 (63.50)	0.93 (23.62)	1.26 (32.00)	1.00 (25.40)	0.28 (0.13)
3/4"	3/4"	**DM60060*12**	3.00 (76.20)	1.09 (27.69)	1.42 (36.07)	1.38 (34.93)	0.46 (0.21)
1"	1"	**DM60060*16**	3.37 (85.60)	1.41 (35.81)	1.70 (43.18)	1.50 (38.10)	0.75 (0.35)
1-1/4"	1-1/4"	**DM60060*20**	3.63 (92.20)	1.73 (43.94)	1.94 (49.28)	2.00 (50.80)	1.22 (0.55)
1-1/2"	1-1/2"	**DM60060*24**	3.88 (98.55)	2.05 (52.07)	2.15 (54.61)	2.25 (57.15)	1.74 (0.79)
2"	2"	**DM60060*32**	4.13 (104.90)	2.58 (65.53)	2.50 (63.50)	2.75 (69.85)	2.34 (1.06)

3D step models available upon request

DM 60 Series – OD Tube





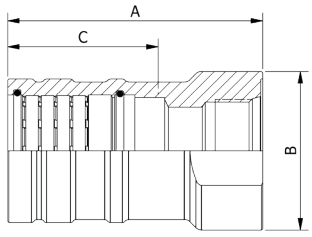


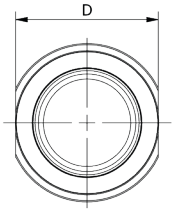
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

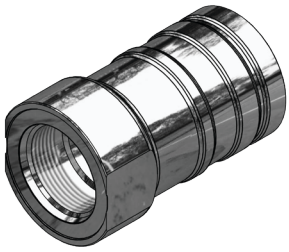
ORDER EXAMPLE:
DM60088G04

SAE Male, OD Tube - DM60088

Size OD	SAE Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM60088*04**	1.50 (38.10)	0.39 (9.91)	0.75 (19.05)	0.56 (14.22)	0.04 (0.02)
3/8"	06	**DM60088*06**	2.00 (50.80)	0.55 (13.97)	0.92 (23.37)	0.69 (17.53)	0.09 (0.04)
1/2"	08	**DM60088*08**	2.25 (57.15)	0.75 (19.05)	1.09 (27.69)	0.88 (22.35)	0.17 (0.08)
5/8”	10	**DM60088*10**	2.50 (63.50)	0.93 (23.62)	1.26 (32.00)	1.00 (25.40)	0.26 (0.12)
3/4"	12	**DM60088*12**	3.25 (82.55)	1.09 (27.69)	1.42 (36.07)	1.25 (31.75)	0.50 (0.23)
1"	16	**DM60088*16**	3.38 (85.85)	1.41 (35.81)	1.70 (43.18)	1.50 (38.10)	0.76 (0.34)
1-1/4"	20	**DM60088*20**	3.88 (98.55)	1.73 (43.94)	1.94 (49.28)	1.88 (47.75)	1.31 (0.59)
1-1/2"	24	**DM60088*24**	4.25 (107.95)	2.06 (52.32)	2.15 (54.61)	2.13 (54.10)	1.90 (0.86)
2"	32	**DM60088*32**	4.38 (111.25)	2.58 (65.53)	2.50 (63.50)	2.75 (69.85)	2.64 (1.20)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

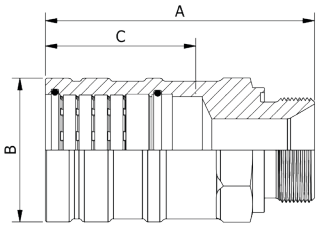
ORDER EXAMPLE:
DM60087G04

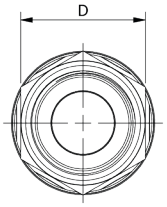
SAE Female, OD Tube - DM60087

Size OD	SAE Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM60087*04**	1.75 (44.45)	0.88 (22.35)	0.75 (19.05)	0.75 (19.05)	0.11 (0.05)
3/8"	06	**DM60087*06**	2.00 (50.80)	1.25 (31.75)	0.92 (23.37)	0.88 (22.35)	0.16 (0.07)
1/2"	08	**DM60087*08**	2.50 (63.50)	1.25 (31.75)	1.09 (27.69)	1.13 (28.70)	0.26 (0.12)
5/8”	10	**DM60087*10**	2.75 (69.85)	1.50 (38.10)	1.26 (32.00)	1.13 (28.70)	0.45 (0.20)
3/4"	12	**DM60087*12**	3.38 (85.85)	1.75 (44.45)	1.42 (36.07)	1.50 (38.10)	0.70 (0.32)
1"	16	**DM60087*16**	3.50 (88.90)	1.98 (50.29)	1.70 (43.18)	1.75 (44.45)	1.00 (0.45)
1-1/4"	20	**DM60087*20**	3.88 (98.55)	2.50 (63.50)	1.94 (49.28)	2.25 (57.15)	1.73 (0.78)
1-1/2"	24	**DM60087*24**	4.75 (120.65)	2.75 (69.85)	2.15 (54.61)	2.50 (63.50)	2.83 (1.28)
2"	32	**DM60087*32**	5.00 (127.00)	3.63 (92.20)	2.50 (63.50)	3.25 (82.55)	4.35 (1.97)

3D step models available upon request

DM 60 Series – OD Tube





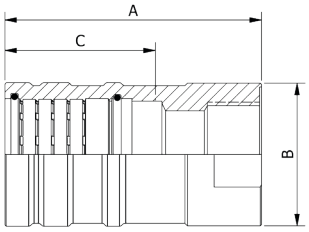


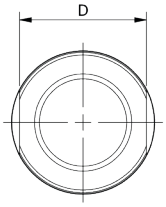
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60153G04

BSPP Male, OD Tube - DM60153

Size OD	BSPP Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM60153*04**	1.63 (41.40)	0.39 (9.91)	0.75 (19.05)	0.75 (19.05)	0.07 (0.03)
3/8"	3/8"	**DM60153*06**	2.00 (50.80)	0.55 (13.97)	0.92 (23.37)	0.87 (22.10)	0.11 (0.05)
1/2"	1/2"	**DM60153*08**	2.38 (60.45)	0.75 (19.05)	1.09 (27.69)	1.18 (29.97)	0.24 (0.11)
3/4"	3/4"	**DM60153*12**	3.25 (82.55)	1.09 (27.69)	1.42 (36.07)	1.42 (36.07)	0.53 (0.24)
1"	1"	**DM60153*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.81 (45.97)	0.91 (0.41)
1-1/4"	1-1/4"	**DM60153*20**	3.88 (98.55)	1.73 (43.94)	1.94 (49.28)	1.97 (50.04)	1.41 (0.64)
1-1/2"	1-1/2"	**DM80153*3824**	4.59 (116.59)	2.05 (52.07)	2.15 (54.61)	2.17 (55.12)	2.14 (0.97)
2"	2"	**DM60153*32**	4.88 (123.95)	2.58 (65.53)	2.50 (63.50)	2.92 (74.17)	3.16 (1.43)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

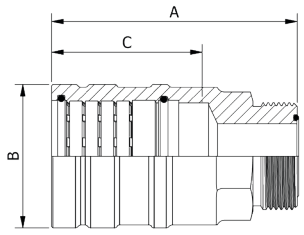
ORDER EXAMPLE:
DM60086G04

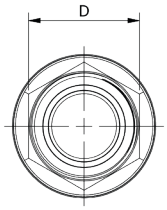
BSPP Female, OD Tube - DM60086

Size OD	BSPP Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	1/4"	**DM60086*04**	1.69 (42.86)	0.94 (23.03)	0.75 (19.05)	0.79 (20.00)	0.10 (0.05)
3/8"	3/8"	**DM60086*06**	2.13 (54.10)	1.06 (27.00)	0.92 (23.37)	0.95 (24.00)	0.16 (0.07)
1/2"	1/2"	**DM60086*08**	2.38 (60.33)	1.25 (31.75)	1.09 (27.69)	1.02 (26.00)	0.25 (0.11)
3/4"	3/4"	**DM60086*12**	3.13 (79.38)	1.50 (38.10)	1.42 (36.07)	1.26 (32.00)	0.53 (0.24)
1"	1"	**DM60086*16**	3.50 (88.90)	1.88 (47.63)	1.70 (43.18)	1.65 (42.00)	0.94 (0.43)
1-1/4"	1-1/4"	**DM60086*20**	3.88 (98.43)	2.25 (57.15)	1.94 (49.28)	2.05 (52.00)	1.49 (0.68)
1-1/2"	1-1/2"	**DM80086*3824**	4.40 (111.66)	2.75 (69.85)	2.15 (54.61)	2.52 (64.00)	2.60 (1.18)
2"	2"	**DM60086*32**	4.88 (123.83)	3.50 (88.90)	2.50 (63.50)	2.99 (76.00)	4.22 (1.91)

3D step models available upon request

DM 60 Series – OD Tube





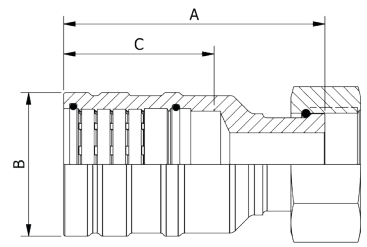


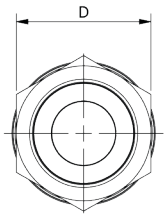
**MATERIAL CODE:*
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G = CARBON STEEL
B = COPPER NICKEL 70/30

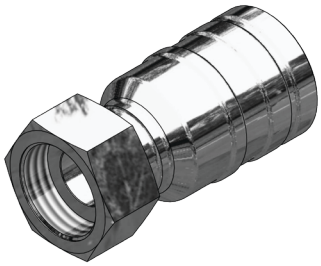
ORDER EXAMPLE:
DM60010G04

ORFS Male, OD Tube - DM60010

Size OD	ORFS Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM60010*04**	1.63 (41.40)	0.39 (9.91)	0.75 (19.05)	0.63 (16.00)	0.07 (0.03)
3/8"	06	**DM60010*06**	2.00 (50.80)	0.55 (13.97)	0.92 (23.37)	0.75 (19.05)	0.12 (0.05)
1/2"	08	**DM60010*08**	2.38 (60.45)	0.75 (19.05)	1.09 (27.69)	0.88 (22.35)	0.25 (0.13)
5/8”	10	**DM60010*10**	2.63 (66.80)	0.93 (23.62)	1.26 (32.00)	1.13 (28.70)	0.34 (0.15)
3/4"	12	**DM60010*12**	3.25 (82.55)	1.09 (27.69)	1.42 (36.07)	1.25 (31.75)	0.48 (0.22)
1"	16	**DM60010*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.50 (38.10)	0.82 (0.37)
1-1/4"	20	**DM60010*20**	3.75 (95.25)	1.73 (43.94)	1.94 (49.28)	1.75 (44.45)	1.20 (0.54)
1-1/2"	24	**DM60010*24**	4.13 (104.90)	2.05 (52.07)	2.15 (54.61)	2.13 (54.10)	1.80 (0.82)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

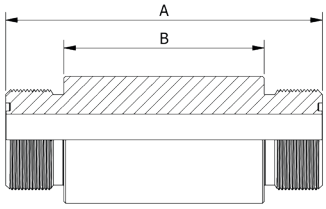
ORDER EXAMPLE:
DM60020G04

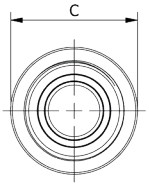
ORFS Female Swivel, OD Tube - DM60020

Size OD	ORFS Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/4"	04	**DM60020*04**	1.75 (44.45)	0.39 (9.91)	0.75 (19.05)	0.67 (17.02)	0.05 (0.02)
3/8"	06	**DM60020*06**	2.13 (54.10)	0.55 (13.97)	0.92 (23.37)	0.86 (21.84)	0.15 (0.07)
1/2"	08	**DM60020*08**	2.25 (57.15)	0.75 (19.05)	1.09 (27.69)	0.94 (23.88)	0.20 (0.09)
5/8”	10	**DM60020*10**	2.50 (63.50)	0.93 (23.62)	1.26 (32.00)	1.17 (29.72)	0.33 (0.15)
3/4"	12	**DM60020*12**	3.25 (82.55)	1.09 (27.69)	1.42 (36.07)	1.63 (41.40)	0.79 (0.36)
1"	16	**DM60020*16**	3.50 (88.90)	1.41 (35.81)	1.70 (43.18)	1.75 (44.45)	1.04 (0.47)
1-1/4"	20	**DM60020*20**	3.63 (92.20)	1.73 (43.94)	1.94 (49.28)	2.13 (54.10)	1.63 (0.74)
1-1/2"	24	**DM60020*24**	4.00 (101.60)	2.05 (52.07)	2.15 (54.61)	2.38 (60.45)	2.25 (1.02)

3D step models available upon request

DM 60 Series – OD Tube





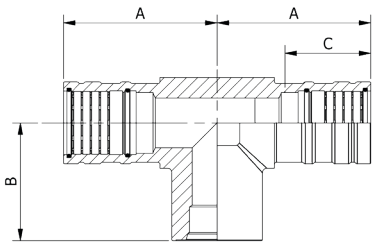


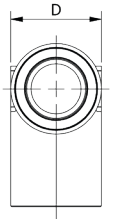
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

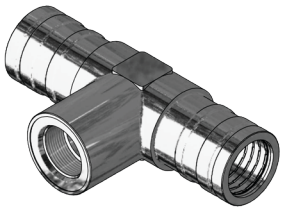
ORDER EXAMPLE:
DM60089G08

Weldable Bulkhead, OD Tube - DM60089

Size OD	ORFS Size	Part Number	Dimensions - Inch (mm)			Thread Details	*Weight K & G lbs (kg)
			A	B	C		
1/2"	08	**DM60089*08**	3.00 (76.20)	1.99 (50.55)	1.00 (25.40)	13/16"-16UNF-2A	0.49 (0.22)
3/4"	12	**DM60089*12**	3.75 (95.25)	2.37 (60.20)	1.50 (38.10)	1-3/16"-12UNF-2A	1.31 (0.59)
1"	16	**DM60089*16**	3.75 (95.25)	2.37 (60.20)	1.75 (44.45)	1-7/16"-12UNF-2A	1.70 (0.77)
1-1/4"	20	**DM60089*20**	4.00 (101.60)	2.62 (66.55)	2.00 (50.80)	1-11/16"-12UNF-2A	2.28 (1.03)
1-1/2"	24	**DM60089*24**	4.25 (107.95)	2.87 (72.90)	2.38 (60.45)	2"-12UNF-2A	2.89 (1.31)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60171G0804

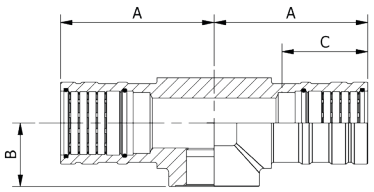
Other configurations available. Contact factory for details.

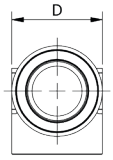
SAE Female Branch Tee, OD Tube - DM60171

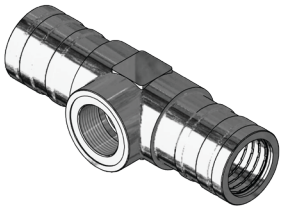
Size OD	SAE Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/2"	04	**DM60171*0804**	1.75 (44.45)	0.75 (19.05)	1.09 (27.69)	0.86 (21.84)	0.31 (0.14)
5/8"	06	**DM60171*1006**	2.00 (50.80)	1.00 (25.40)	1.26 (32.00)	1.06 (26.92)	0.57 (0.26)
3/4"	08	**DM60171*1208**	2.68 (68.07)	1.25 (31.75)	1.42 (36.07)	1.30 (33.02)	1.04 (0.47)
1"	10	**DM60171*1610**	3.03 (76.96)	1.50 (38.10)	1.70 (43.18)	1.58 (40.13)	1.86 (0.84)
1-1/4"	12	**DM60171*2012**	3.40 (86.36)	1.75 (44.45)	1.94 (49.28)	1.97 (50.04)	3.20 (1.46)
1-1/2"	16	**DM60171*2416**	4.25 (107.95)	2.00 (50.80)	2.20 (55.88)	2.50 (63.50)	6.23 (2.83)
2"	20	**DM60171*3220**	4.54 (115.32)	2.25 (57.15)	2.50 (63.50)	2.81 (71.37)	8.06 (3.66)

3D step models available upon request

DM 60 Series – OD Tube







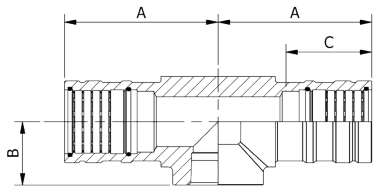
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

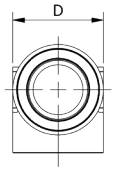
ORDER EXAMPLE:
DM60172G0804

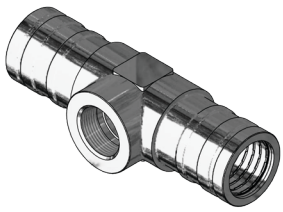
Other configurations available. Contact factory for details.

BSPP Female Branch Tee, OD Tube - DM60172

Size OD	BSPP Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/2"	1/4"	**DM60172*0804**	1.75 (44.45)	0.75 (19.05)	1.09 (27.69)	0.86 (21.84)	0.30 (0.14)
3/4"	1/2"	**DM60172*1208**	2.68 (68.07)	1.25 (31.75)	1.42 (36.07)	1.30 (33.02)	1.06 (0.48)
1"	3/4"	**DM60172*1612**	3.03 (76.96)	1.50 (38.10)	1.70 (43.18)	1.58 (40.13)	1.78 (0.81)
1-1/4"	1"	**DM60172*2016**	3.37 (85.60)	1.75 (44.45)	1.94 (49.28)	1.97 (50.04)	3.09 (1.40)
1-1/2"	1-1/4"	**DM80172*3820**	4.25 (107.95)	1.63 (41.28)	2.15 (54.61)	2.50 (63.50)	5.53 (2.51)
2"	1-1/2"	**DM60172*3224**	4.54 (115.32)	2.25 (57.15)	2.50 (63.50)	2.69 (68.33)	7.78 (3.53)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM60173G0806

Other configurations available. Contact factory for details.

NPT Female Branch Tee, OD Tube - DM60173

Size OD	NPT Size	Part Number	Dimensions - Inch (mm)				*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	
1/2"	3/8"	**DM60173*0806**	1.75 (44.45)	0.75 (19.05)	1.09 (27.69)	0.86 (21.84)	0.29 (0.13)
5/8"	1/2"	**DM60173*1008**	2.00 (50.80)	1.00 (25.40)	1.26 (32.00)	1.06 (26.92)	0.53 (0.24)
3/4"	1/2"	**DM60173*1208**	2.68 (68.07)	1.25 (31.75)	1.42 (36.07)	1.30 (33.02)	1.05 (0.48)
1"	3/4"	**DM60173*1612**	3.03 (76.96)	1.50 (38.10)	1.70 (43.18)	1.58 (40.13)	1.82 (0.83)
1-1/4"	1"	**DM60173*2016**	3.40 (86.36)	1.75 (44.45)	1.94 (49.28)	1.97 (50.04)	3.19 (1.45)
1-1/2"	1-1/4"	**DM60173*2420**	4.25 (107.95)	2.00 (50.80)	2.20 (55.88)	2.50 (63.50)	6.12 (2.76)
2"	1-1/2"	**DM60173*3224**	4.54 (115.32)	2.25 (57.15)	2.50 (63.50)	2.81 (71.37)	7.93 (3.60)

3D step models available upon request

Specialty Fitting Configuration Guide
DM 60 Series - OD Tube

1/4” to 2”



JIC 37° 90° Elbow Male
DM60355



JIC 37° Branch Tee Male
DM60177



JIC 37° Run Tee Male
DM60178



JIC 37° 90° Elbow Female Swivel
DM60354



JIC 37° Branch Tee Female Swivel
DM60170



NPT 90° Elbow Male
DM60057



NPT Branch Tee Male
DM60176



NPT Run Tee Male
DM60181



NPT 90° Elbow Female
DM60061



ORFS 90° Elbow Male
DM60011



ORFS Branch Tee Male
DM60013



ORFS Run Tee Male
DM60014



ORFS 90° Elbow Female Swivel
DM60021



ORFS Branch Tee Female Swivel
DM60023



SAE 90° Elbow Male
DM60105



SAE Branch Tee Male
DM60174



SAE Run Tee Male
DM60179



SAE 90° Elbow Female
DM60387



BSPP 90° Elbow Male
DM60168



BSPP Branch Tee Male
DM60175



BSPP Run Tee Male
DM60180



BSPP 90° Elbow Female
DM60169



BSPP Cross Fitting with 2 Ports
DM60221



BSPP Cross Fitting with 4 Ports
DM60241



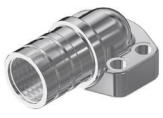
Flange - ANSI #900
DM60025



Flange - ANSI #1500
DM60026



Compact Elbow x Code 61 Flange
DM60231



Compact Elbow x Code 62 Flange
DM60232



90° PYPLOK® x SAE Code 61 Flange
DM60391



90° PYPLOK® x SAE Code 62 Flange
DM60392

Specialty Fitting Configuration Guide
DM 60 Series - OD Tube

1/4” to 2”



NPS to OD Tube Reducer
DM20501



CPV Female
DM60040



CPV Male Union
DM60041



Extra Long Coupling
DM60301



Tailpiece Gaugeline Adapter
DM60050

Notes

General Characteristics
DM 80 Series - Metric Tube

Fitting Material Specifications	Material Specification
K = Stainless Steel	ASTM-A479/A182-316
*G = Carbon Steel	ASTM-A105/A350 LF2
B = Copper Nickel 70/30	MIL-C71500
C = Copper Nickel 90/10	MIL-C70600
D = Duplex	ASTM-A479/A182-UNS31803
Z = Super Duplex	ASTM-A479/A182-UNS32750

*60mm Carbon Steel PYPLOK® material specification is AISI/SAE-4140 unless otherwise noted.

O-Ring Material Specifications	O-Ring Temperature Limits
VITON (Brown Colour)	-15°F to 400°F (-26°C to 205°C)
EPDM (Black Colour)	-60°F to 400°F (-51°C to 205°C)

For seal compatibility and selection for each system consult factory. Other seal materials for specific applications of compatibility and temperature are available upon request.

Ordering Information

DM 80 001 K 04 ___ ___

Seal Material:
No Designation = Viton
E = EPDM

Reducer/Thread/Flange Size

06 = 6mm
08 = 8mm
10 = 10mm
12 = 12mm
15 = 15mm
16 = 16mm
18 = 18mm
20 = 20mm
22 = 22mm
25 = 25mm
28 = 28mm
30 = 30mm
35 = 35mm
38 = 38mm
42 = 42mm
50 = 50mm
60 = 60mm

Fitting Material:
K = Stainless Steel
G = Carbon Steel
B = Copper Nickel 70/30
C = Copper Nickel 90/10
D = Duplex
Z = Super Duplex

Fitting Configuration

80 = Metric Tube

Series Designation

System design and safe application is the responsibility of the end-user. Consideration must be taken to confirm proper fitting selection is made to ensure proper compatibility, function and operation of the fitting within the piping system. The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® reserves the right to change technical data and product dimension, ratings and other aspects without notice.

Standard Fitting Configuration Guide
DM 80 Series - Metric Tube

6mm to 60mm



Coupling
DM80001
Page E3



Coupling with Inner Stop
DM80002
Page E4



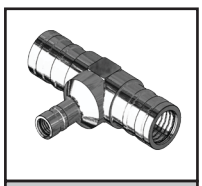
90° Elbow
DM80003
Page E5



45° Elbow
DM80017
Page E6



Tee
DM80004
Page E7



Reducing Tee
DM80104
Page E8



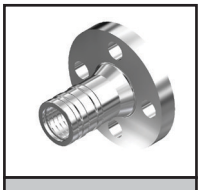
Reducer
DM80101
Page E9



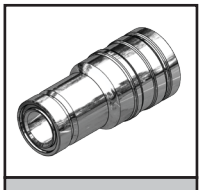
End Cap
DM80085
Page E10



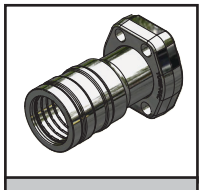
Flange - PN16
DM80028
Page E11



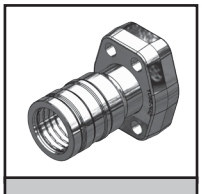
Flange - PN40
DM80029
Page E11



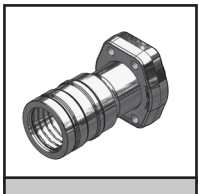
SAE Flange Body
DM80090
Page E12



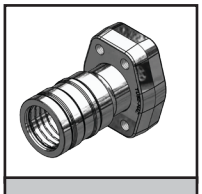
ISO 6162-1 Flange
DM80091
Page E13



ISO 6162-2 Flange
DM80092
Page E13



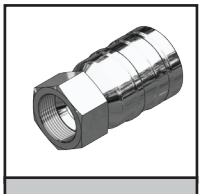
ISO 6162-1 Tapped Flange
DM80095
Page E14



ISO 6162-2 Tapped Flange
DM80096
Page E14



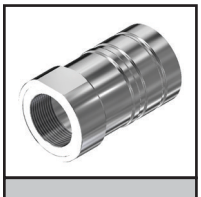
JIC 37° Male
DM80055
Page E15



JIC 37° Female Swivel
DM80054
Page E15



BSPP Male
DM80153
Page E16



BSPP Female
DM80086
Page E17



DIN 24° Male
DM80066
Page E18



DIN 24° Female Swivel
DM80068
Page E19



Weldable Bulkhead
DM80089
Page E20



BSPP Female Branch Tee
DM80172
Page E21



Tee with BSPP Branch
DM80211
Page E22

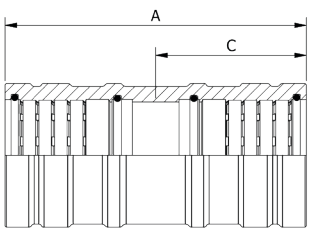


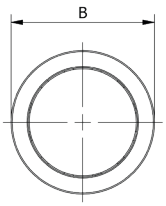
BSPP Cross Fitting with 2 Ports
DM80221
Page E23



BSPP Cross Fitting with 4 Ports
DM80241
Page E24

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80001G06

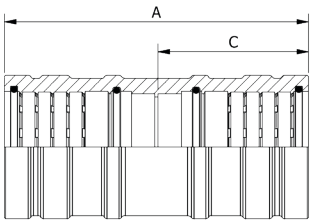
Coupling, Metric - DM80001

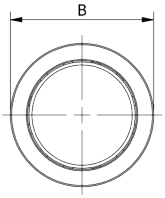
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
6	**DM80001*06**	33.00 (1.30)	9.80 (0.39)	16.51 (0.65)	0.01 (0.02)
8	**DM80001*08**	38.61 (1.52)	12.19 (0.48)	19.30 (0.76)	0.02 (0.03)
10	**DM80001*10**	48.30 (1.90)	15.09 (0.59)	24.13 (0.95)	0.03 (0.06)
12	**DM80001*12**	54.00 (2.13)	18.59 (0.73)	27.00 (1.06)	0.05 (0.10)
15	**DM80001*15**	64.01 (2.52)	23.70 (0.93)	32.00 (1.26)	0.10 (0.23)
16	**DM80001*16**	64.01 (2.52)	23.70 (0.93)	32.00 (1.26)	0.09 (0.19)
18	**DM80001*18**	69.85 (2.75)	25.15 (0.99)	35.05 (1.38)	0.09 (0.20)
20	**DM80001*20**	74.17 (2.91)	28.70 (1.13)	37.08 (1.46)	0.15 (0.32)
22	**DM80001*22**	76.20 (3.00)	30.48 (1.20)	38.10 (1.50)	0.15 (0.33)
25	**DM80001*25**	84.07 (3.31)	35.31 (1.39)	41.91 (1.65)	0.24 (0.53)
28	**DM80001*28**	88.90 (3.50)	37.59 (1.48)	44.45 (1.75)	0.24 (0.54)
30	**DM80001*30**	93.98 (3.70)	41.91 (1.65)	46.99 (1.85)	0.39 (0.85)
35	**DM80001*35**	101.60 (4.00)	46.23 (1.82)	50.80 (2.00)	0.41 (0.91)
38	**DM80001*38**	108.97 (4.29)	52.07 (2.05)	54.61 (2.15)	0.71 (1.57)
42	**DM20001*20**	120.65 (4.75)	57.40 (2.26)	60.45 (2.38)	0.89 (1.96)
50	**DM80001*50**	127.00 (5.00)	65.53 (2.58)	63.50 (2.50)	1.12 (2.46)
**60K	**DM20001K32**	177.80 (7.00)	77.22 (3.04)	88.90 (3.50)	2.00 (4.40)
60G	**DM80001G60**	177.80 (7.00)	77.22 (3.04)	88.90 (3.50)	2.00 (4.40)

**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80002G06

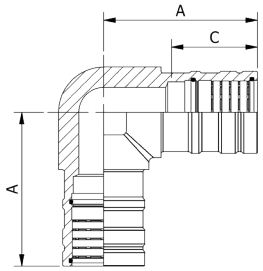
Coupling with Inner Stop, Metric - DM80002

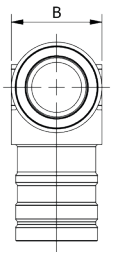
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
6	**DM80002*06**	34.29 (1.35)	9.80 (0.39)	16.51 (0.65)	0.01 (0.02)
8	**DM80002*08**	39.88 (1.57)	12.19 (0.48)	19.30 (0.76)	0.01 (0.03)
10	**DM80002*10**	49.53 (1.95)	15.09 (0.59)	24.13 (0.95)	0.06 (0.03)
12	**DM80002*12**	55.37 (2.18)	18.59 (0.73)	26.92 (1.06)	0.05 (0.10)
15	**DM80002*15**	65.28 (2.57)	23.70 (0.93)	32.00 (1.26)	0.10 (0.23)
16	**DM80002*16**	65.28 (2.57)	23.70 (0.93)	32.00 (1.26)	0.09 (0.20)
18	**DM80002*18**	71.12 (2.80)	25.15 (0.99)	35.05 (1.38)	0.10 (0.22)
20	**DM80002*20**	75.44 (2.97)	28.70 (1.13)	37.08 (1.46)	0.15 (0.32)
22	**DM80002*22**	77.47 (3.05)	30.48 (1.20)	38.10 (1.50)	0.15 (0.33)
25	**DM80002*25**	85.34 (3.36)	35.31 (1.39)	41.91 (1.65)	0.24 (0.54)
28	**DM80002*28**	90.17 (3.55)	37.59 (1.48)	44.45 (1.75)	0.25 (0.55)
30	**DM80002*30**	95.25 (3.75)	41.91 (1.65)	46.99 (1.85)	0.39 (0.85)
35	**DM80002*35**	102.87 (4.05)	46.23 (1.82)	50.80 (2.00)	0.41 (0.91)
38	**DM80002*38**	110.24 (4.34)	52.07 (2.05)	54.61 (2.15)	0.71 (1.57)
42	**DM20002*20**	121.92 (4.80)	57.40 (2.26)	60.45 (2.38)	0.89 (1.96)
50	**DM80002*50**	128.27 (5.05)	65.53 (2.58)	63.50 (2.50)	0.89 (1.96)
**60K	**DM20002K32**	179.07 (7.05)	77.22 (3.04)	88.90 (3.50)	2.00 (4.40)
60G	**DM80002G60**	179.07 (7.05)	77.22 (3.04)	88.90 (3.50)	2.00 (4.40)

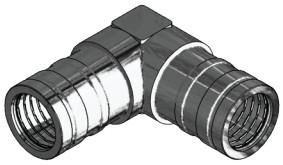
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80003G06

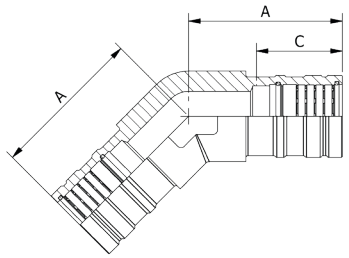
90° Elbow, Metric - DM80003

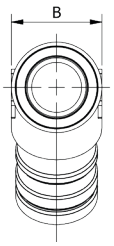
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
6	**DM80003*06**	27.94 (1.10)	11.81 (0.47)	16.51 (0.65)	0.02 (0.04)
8	**DM80003*08**	35.31 (1.39)	16.00 (0.63)	19.30 (0.76)	0.04 (0.08)
10	**DM80003*10**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	0.08 (0.18)
12	**DM80003*12**	45.29 (1.78)	21.84 (0.86)	26.92 (1.06)	0.09 (0.20)
15	**DM80003*15**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.18 (0.40)
16	**DM80003*16**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.20 (0.43)
18	**DM80003*18**	52.07 (2.05)	26.92 (1.06)	35.05 (1.38)	0.21 (0.46)
20	**DM80003*20**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	0.36 (0.80)
22	**DM80003*22**	73.15 (2.88)	33.02 (1.30)	38.10 (1.50)	0.47 (1.04)
25	**DM80003*25**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	0.58 (1.27)
28	**DM80003*28**	76.96 (3.03)	40.13 (1.58)	44.45 (1.75)	0.66 (1.45)
30	**DM80003*30**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	1.13 (2.50)
35	**DM80003*35**	85.60 (3.37)	50.04 (1.97)	50.80 (2.00)	1.18 (2.60)
38	**DM80003*38**	107.95 (4.25)	63.50 (2.50)	54.61 (2.15)	2.46 (5.42)
42	**DM20003*20**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	2.70 (5.95)
50	**DM80003*50**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	3.18 (7.00)
**60K	**DM20003K32**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	4.40 (9.70)
60G	**DM80003G60**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	4.40 (9.70)

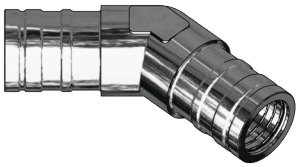
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80017G06

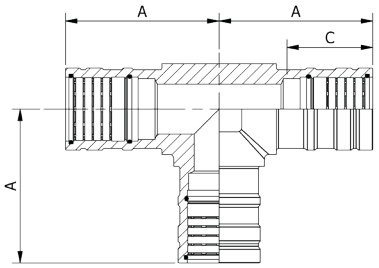
45° Elbow, Metric - DM80017

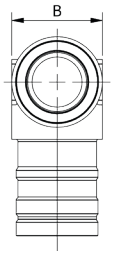
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
6	**DM80017*06**	27.94 (1.10)	11.81 (0.47)	16.51 (0.65)	0.02 (0.05)
8	**DM80017*08**	35.31 (1.39)	16.00 (0.63)	19.30 (0.76)	0.05 (0.10)
10	**DM80017*10**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	0.09 (0.19)
12	**DM80017*12**	45.21 (1.78)	21.84 (0.86)	26.92 (1.06)	0.13 (0.29)
15	**DM80017*15**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.23 (0.50)
16	**DM80017*16**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.23 (0.50)
18	**DM80017*18**	52.07 (2.05)	26.92 (1.06)	35.05 (1.38)	0.21 (0.47)
20	**DM80017*20**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	0.46 (1.02)
22	**DM80017*22**	73.15 (2.88)	33.02 (1.30)	38.10 (1.50)	0.48 (1.05)
25	**DM80017*25**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	0.72 (1.59)
28	**DM80017*28**	76.96 (3.03)	40.13 (1.58)	44.45 (1.75)	0.68 (1.50)
30	**DM80017*30**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	1.22 (2.68)
35	**DM80017*35**	85.60 (3.37)	50.04 (1.97)	50.80 (2.00)	1.16 (2.55)
38	**DM80017*38**	107.95 (4.25)	63.50 (2.50)	54.61 (2.15)	2.30 (5.08)
42	**DM20017*20**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	2.54 (5.60)
50	**DM80017*50**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	3.30 (7.27)
**60	**DM20017K32**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	4.35 (9.60)

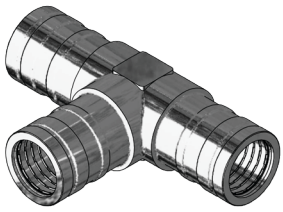
**Only available in Stainless Steel.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80004G06

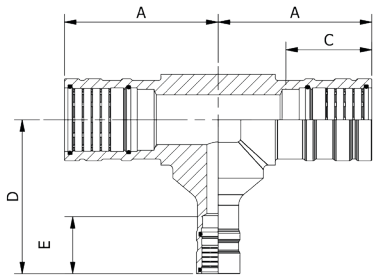
Tee, Metric - DM80004

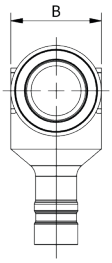
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
6	**DM80004*06**	27.94 (1.10)	11.81 (0.47)	16.51 (0.65)	0.03 (0.06)
8	**DM80004*08**	35.31 (1.39)	16.00 (0.63)	19.30 (0.76)	0.06 (0.13)
10	**DM80004*10**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	0.09 (0.20)
12	**DM80004*12**	45.21 (1.78)	21.84 (0.86)	26.92 (1.06)	0.15 (0.34)
15	**DM80004*15**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.27 (0.59)
16	**DM80004*16**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.29 (0.65)
18	**DM80004*18**	52.07 (2.05)	26.92 (1.06)	35.05 (1.38)	0.27 (0.60)
20	**DM80004*20**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	0.59 (1.30)
22	**DM80004*22**	73.15 (2.88)	33.02 (1.30)	38.10 (1.50)	0.64 (1.42)
25	**DM80004*25**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	0.91 (2.01)
28	**DM80004*28**	76.96 (3.03)	40.13 (1.58)	44.45 (1.75)	0.89 (1.96)
30	**DM80004*30**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	1.46 (3.22)
35	**DM80004*35**	85.60 (3.37)	50.04 (1.97)	50.80 (2.00)	1.46 (3.22)
38	**DM80004*38**	107.95 (4.25)	63.50 (2.50)	54.61 (2.15)	3.00 (6.61)
42	**DM20004*20**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	3.22 (7.10)
50	**DM80004*50**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	4.09 (9.02)
**60K	**DM20004K32**	138.43 (5.45)	71.37 (2.81)	88.90 (3.50)	5.55 (12.20)
60G	**DM80004G60**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	5.55 (12.20)

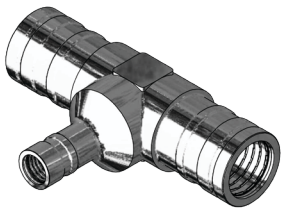
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80104G0806

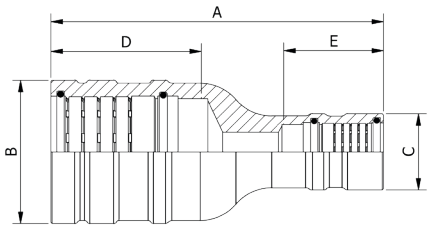
Other configurations available. Contact factory for details.

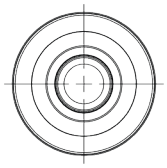
Reducing Tee, Metric - DM80104

Run Size OD (mm)	Branch Size OD (mm)	Part Number	Dimensions - mm (Inch)					*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E Insertion Depth	
8	6	**DM80104*0806**	35.31 (1.39)	16.00 (0.63)	19.30 (0.76)	31.75 (1.25)	16.51 (0.65)	0.06 (0.13)
10	8	**DM80104*1008**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	41.91 (1.65)	19.30 (0.76)	0.11 (0.24)
12	10	**DM80104*1210**	42.21 (1.78)	21.84 (0.86)	26.92 (1.06)	46.23 (0.82)	24.13 (0.95)	0.17 (0.37)
15	10	**DM80104*1510**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	47.50 (1.87)	24.13 (0.95)	0.28 (0.61)
15	12	**DM80104*1512**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	49.53 (1.95)	26.92 (1.06)	0.29 (0.63)
16	10	**DM80104*1610**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	47.50 (1.87)	24.13 (0.95)	0.27 (0.59)
16	12	**DM80104*1612**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	49.28 (1.94)	26.92 (1.06)	0.26 (0.57)
18	12	**DM80104*1812**	52.07 (2.05)	26.92 (1.06)	35.05 (1.38)	46.48 (1.83)	26.92 (1.06)	0.25 (0.56)
18	15	**DM80104*1815**	52.07 (2.05)	26.92 (1.06)	35.05 (1.38)	50.80 (2.00)	32.00 (1.26)	0.29 (0.63)
20	12	**DM80104*2012**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	52.83 (2.08)	26.92 (1.06)	0.54 (1.19)
20	16	**DM80104*2016**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	65.28 (2.57)	32.00 (1.26)	0.56 (1.24)
22	15	**DM80104*2215**	73.15 (2.88)	33.02 (1.30)	38.10 (1.50)	57.40 (2.26)	32.00 (1.26)	0.54 (1.19)
22	18	**DM80104*2218**	73.15 (2.88)	33.02 (1.30)	38.10 (1.50)	63.50 (2.50)	38.10 (1.50)	0.54 (1.20)
25	16	**DM80104*2516**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	72.14 (2.84)	32.00 (1.26)	0.91 (2.00)
25	20	**DM80104*2520**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	79.76 (3.14)	37.08 (1.46)	1.09 (2.40)
28	18	**DM80104*2818**	76.96 (3.03)	40.13 (1.58)	44.45 (1.75)	76.20 (3.00)	35.05 (1.38)	0.86 (1.90)
28	22	**DM80104*2822**	76.96 (3.03)	40.13 (1.58)	44.45 (1.75)	79.76 (3.14)	38.10 (1.50)	0.87 (1.91)
30	20	**DM80104*3020**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	79.76 (3.14)	37.08 (1.46)	1.44 (3.18)
30	25	**DM80104*3025**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	85.60 (3.37)	41.91 (1.65)	1.51 (3.22)
35	20	**DM80104*3520**	85.60 (3.37)	50.04 (1.97)	50.80 (2.00)	85.60 (3.37)	37.08 (1.46)	1.41 (3.10)
35	22	**DM80104*3522**	85.60 (3.37)	50.04 (1.97)	50.80 (2.00)	85.60 (3.37)	38.10 (1.50)	1.49 (3.28)
35	28	**DM80104*3528**	85.60 (3.37)	50.04 (1.97)	50.80 (2.00)	85.60 (3.37)	44.45 (1.75)	1.56 (3.43)
38	25	**DM80104*3825**	107.95 (4.25)	63.50 (2.50)	54.61 (2.15)	107.95 (4.25)	41.91 (1.65)	3.06 (6.75)
38	30	**DM80104*3830**	107.95 (4.25)	63.50 (2.50)	54.61 (2.15)	107.95 (4.25)	46.99 (1.85)	3.04 (6.70)
42	35	**DM80104*4235**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	107.95 (4.25)	50.80 (2.00)	3.19 (7.04)
42	38	**DM80104*4238**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	107.95 (4.25)	54.61 (2.15)	3.67 (8.08)
50	38	**DM80104*5038**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	115.32 (4.54)	54.61 (2.15)	4.11 (9.06)
50	42	**DM80104*5042**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	115.32 (4.54)	60.45 (2.38)	3.98 (8.78)
60	38	**DM80104*6038**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	138.43 (5.45)	54.16 (2.15)	6.21 (13.69)
60	50	**DM80104*6050**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	138.43 (5.45)	63.50 (2.50)	6.23 (13.73)

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80101G0806

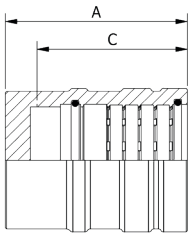
Other configurations available. Contact factory for details.

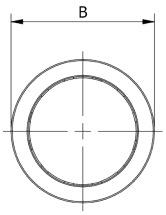
Reducer, Metric - DM80101

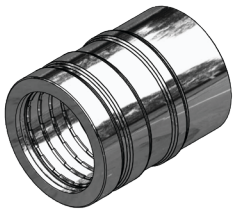
End 1 Size OD (mm)	End 2 Size OD (mm)	Part Number	Dimensions - mm (Inch)					*Weight K & G kg (lbs)
			A	B	C	D Insertion Depth	E Insertion Depth	
8	6	**DM80101*0806**	50.80 (2.00)	12.19 (0.48)	9.40 (0.37)	19.30 (0.76)	16.51 (0.65)	0.02 (0.04)
10	8	**DM80101*1008**	57.15 (2.25)	15.09 (0.59)	12.19 (0.48)	24.13 (0.95)	19.30 (0.76)	0.09 (0.20)
12	10	**DM80101*1210**	63.50 (2.50)	18.59 (0.73)	14.99 (0.59)	26.92 (1.06)	24.13 (0.95)	0.05 (0.11)
15	10	**DM80101*1510**	73.15 (2.88)	23.70 (0.93)	14.99 (0.59)	32.00 (1.26)	24.13 (0.95)	0.09 (0.19)
15	12	**DM80101*1512**	73.15 (2.88)	23.70 (0.93)	18.54 (0.73)	32.00 (1.26)	26.92 (1.06)	0.10 (0.21)
16	10	**DM80101*1610**	73.15 (2.88)	23.70 (0.93)	14.99 (0.59)	32.00 (1.26)	24.13 (0.95)	0.07 (0.17)
16	12	**DM80101*1612**	76.20 (3.00)	23.70 (0.93)	18.54 (0.73)	32.00 (1.26)	26.92 (1.06)	0.10 (0.22)
18	12	**DM80101*1812**	76.20 (3.00)	25.15 (0.99)	18.54 (0.73)	35.05 (1.38)	26.92 (1.06)	0.09 (0.20)
18	15	**DM80101*1815**	76.20 (3.00)	25.15 (0.99)	23.62 (0.93)	35.05 (1.38)	32.00 (1.26)	0.14 (0.30)
20	12	**DM80101*2012**	82.55 (3.25)	28.70 (1.13)	18.54 (0.73)	37.08 (1.46)	26.92 (1.06)	0.14 (0.30)
20	16	**DM80101*2016**	88.90 (3.50)	28.70 (1.13)	23.62 (0.93)	37.08 (1.46)	32.00 (1.26)	0.16 (0.36)
22	15	**DM80101*2215**	85.85 (3.38)	30.48 (1.20)	23.62 (0.93)	38.10 (1.50)	32.00 (1.26)	0.16 (0.36)
22	18	**DM80101*2218**	85.85 (3.38)	30.48 (1.20)	25.15 (0.99)	38.10 (1.50)	35.05 (1.38)	0.15 (0.33)
25	16	**DM80101*2516**	95.25 (3.75)	35.31 (1.39)	23.62 (0.93)	41.91 (1.65)	32.00 (1.26)	0.23 (0.50)
25	20	**DM80101*2520**	99.06 (3.90)	35.31 (1.39)	28.70 (1.13)	41.91 (1.65)	37.08 (1.46)	0.25 (0.55)
28	18	**DM80101*2818**	95.55 (3.88)	37.59 (1.48)	25.15 (0.99)	44.45 (1.75)	35.05 (1.38)	0.25 (0.55)
28	22	**DM80101*2822**	107.95 (4.25)	37.59 (1.48)	30.48 (1.20)	44.45 (1.75)	38.10 (1.50)	0.29 (0.65)
30	20	**DM80101*3020**	107.95 (4.25)	41.91 (1.65)	28.70 (1.13)	46.99 (1.85)	37.08 (1.46)	0.31 (0.68)
30	25	**DM80101*3025**	114.30 (4.50)	41.91 (1.65)	35.31 (1.39)	46.99 (1.85)	41.91 (1.65)	0.38 (0.84)
35	22	**DM80101*3522**	114.30 (4.50)	46.23 (1.82)	30.48 (1.20)	50.80 (2.00)	38.10 (1.50)	0.45 (1.00)
35	28	**DM80101*3528**	120.65 (4.75)	46.23 (1.82)	37.59 (1.48)	50.80 (2.00)	44.45 (1.75)	0.48 (1.06)
38	25	**DM80101*3825**	120.65 (4.75)	52.07 (2.05)	35.31 (1.39)	54.61 (2.15)	41.91 (1.65)	0.64 (1.40)
38	30	**DM80101*3830**	130.02 (5.13)	52.07 (2.05)	41.91 (1.65)	54.61 (2.15)	46.99 (1.85)	0.75 (1.65)
42	35	**DM80101*4235**	133.35 (5.25)	57.50 (2.26)	46.23 (1.82)	60.45 (2.38)	50.80 (2.00)	0.83 (1.83)
42	38	**DM80101*4238**	143.00 (5.63)	57.50 (2.26)	52.07 (2.05)	60.45 (2.38)	54.61 (2.15)	1.00 (2.20)
50	38	**DM80101*5038**	152.40 (6.00)	65.53 (2.58)	52.07 (2.05)	63.50 (2.50)	54.61 (2.15)	1.22 (2.69)
50	42	**DM80101*5042**	158.75 (6.25)	65.53 (2.58)	57.40 (2.26)	63.50 (2.50)	60.45 (2.38)	1.31 (2.88)
60	38	**DM80101*6038**	165.10 (6.50)	77.22 (3.04)	52.07 (2.05)	88.90 (3.50)	54.61 (2.15)	1.81 (3.99)
60	50	**DM80101*6050**	174.75 (6.88)	77.22 (3.04)	65.53 (2.58)	88.90 (3.50)	63.50 (2.50)	1.90 (4.19)

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80085G06

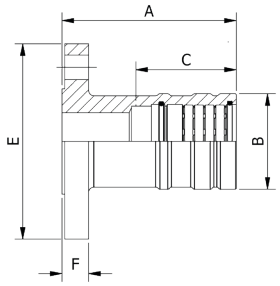
End Cap, Metric - DM80085

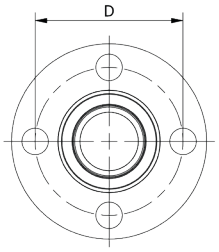
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
6	**DM80085*06**	23.11 (0.91)	9.80 (0.39)	16.51 (0.65)	0.01 (0.02)
8	**DM80085*08**	29.21 (1.15)	12.19 (0.48)	19.30 (0.76)	0.01 (0.02)
10	**DM80085*10**	33.78 (1.33)	15.09 (0.59)	24.13 (0.95)	0.02 (0.05)
12	**DM80085*12**	37.59 (1.48)	18.59 (0.73)	26.92 (1.06)	0.04 (0.08)
15	**DM80085*15**	45.72 (1.80)	23.70 (0.93)	32.00 (1.26)	0.09 (0.19)
16	**DM80085*16**	45.72 (1.80)	23.70 (0.93)	32.00 (1.26)	0.08 (0.17)
18	**DM80085*18**	51.82 (2.04)	25.15 (0.99)	35.05 (1.38)	0.10 (0.21)
20	**DM80085*20**	55.63 (2.19)	28.70 (1.13)	37.08 (1.46)	0.14 (0.31)
22	**DM80085*22**	56.64 (2.23)	30.48 (1.20)	38.10 (1.50)	0.15 (0.33)
25	**DM80085*25**	60.71 (2.39)	35.31 (1.39)	41.91 (1.65)	0.23 (0.50)
28	**DM80085*28**	62.99 (2.48)	37.59 (1.48)	44.45 (1.75)	0.24 (0.52)
30	**DM80085*30**	65.53 (2.58)	41.91 (1.65)	46.99 (1.85)	0.34 (0.76)
35	**DM80085*35**	69.34 (2.73)	46.23 (1.82)	50.80 (2.00)	0.39 (0.85)
38	**DM80085*38**	73.15 (2.88)	52.07 (2.05)	54.61 (2.15)	0.62 (1.36)
42	**DM20085*20**	73.15 (2.88)	57.40 (2.26)	60.45 (2.38)	0.65 (1.44)
50	**DM80085*50**	82.04 (3.23)	65.53 (2.58)	63.50 (2.50)	0.92 (2.03)
**60K	**DM20085K32**	104.90 (4.13)	77.22 (3.04)	88.90 (3.50)	1.42 (3.13)
60G	**DM80085G60**	104.90 (4.13)	77.22 (3.04)	88.90 (3.50)	1.42 (3.13)

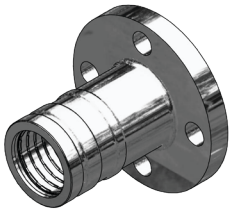
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







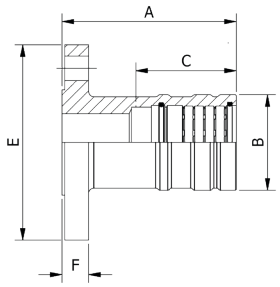
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

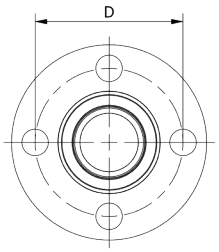
ORDER EXAMPLE:
DM80028G2015

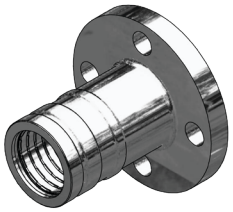
Flange – PN16, Metric - DM80028

Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)						Bolt Size	*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E	F		
20	DN15	**DM80028*2015**	80.01 (3.15)	28.70 (1.13)	37.08 (1.46)	65.02 (2.56)	95.00 (3.74)	14.00 (0.55)	M12	0.79 (1.75)
25	DN20	**DM80028*2520**	85.09 (3.35)	35.31 (1.39)	41.91 (1.65)	74.93 (2.95)	104.90 (4.13)	16.00 (0.63)	M12	1.15 (2.54)
30	DN25	**DM80028*3025**	95.00 (3.74)	41.91 (1.65)	46.99 (1.85)	85.09 (3.35)	115.06 (4.53)	16.00 (0.63)	M12	1.36 (3.00)
38	DN32	**DM80028*3832**	100.08 (3.94)	52.07 (2.05)	54.61 (2.15)	100.08 (3.94)	139.95 (5.51)	16.00 (0.63)	M16	2.24 (4.93)
42	DN32	**DM80028*4232**	115.06 (4.53)	57.40 (2.26)	60.45 (2.38)	100.08 (3.94)	139.95 (5.51)	16.00 (0.63)	M16	2.54 (5.59)
50	DN40	**DM80028*5040**	115.06 (4.53)	65.53 (2.58)	63.50 (2.50)	109.98 (4.33)	150.11 (5.91)	16.00 (0.63)	M16	2.83 (6.25)
60	DN50	**DM80028*6050**	145.03 (5.71)	77.22 (3.04)	88.90 (3.50)	124.97 (4.92)	165.10 (6.50)	18.03 (0.71)	M16	4.17 (9.19)

DM80028G60 is made from ASTM-A105/A350 LF2 material.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80029G2015

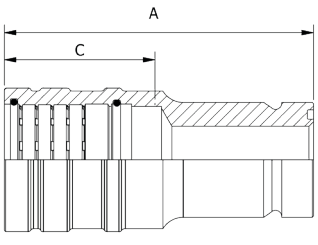
Flange – PN40, Metric - DM80029

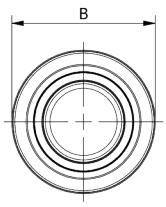
Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)						Bolt Size	*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E	F		
20	DN15	**DM80029*2015**	80.01 (3.15)	28.70 (1.13)	37.08 (1.46)	65.02 (2.56)	95.00 (3.74)	16.00 (0.63)	M12	0.89 (1.96)
25	DN20	**DM80029*2520**	85.09 (3.35)	35.31 (1.39)	41.91 (1.65)	74.93 (2.95)	104.90 (4.13)	18.03 (0.71)	M12	1.27 (2.79)
30	DN25	**DM80029*3025**	95.00 (3.74)	41.91 (1.65)	46.99 (1.85)	85.09 (3.35)	115.06 (4.53)	18.03 (0.71)	M12	1.48 (3.26)
38	DN32	**DM80029*3832**	100.08 (3.94)	52.07 (2.05)	54.61 (2.15)	100.08 (3.94)	139.95 (5.51)	18.03 (0.71)	M16	2.43 (5.36)
42	DN32	**DM80029*4232**	115.06 (4.53)	57.40 (2.26)	60.45 (2.38)	100.08 (3.94)	139.95 (5.51)	18.03 (0.71)	M16	2.73 (6.01)
50	DN40	**DM80029*5040**	118.36 (4.66)	65.53 (2.58)	63.50 (2.50)	109.98 (4.33)	150.11 (5.91)	18.03 (0.71)	M16	3.01 (6.63)
60	DN50	**DM80029*6050**	145.03 (5.71)	77.22 (3.04)	88.90 (3.50)	124.97 (4.92)	165.10 (6.50)	20.07 (0.79)	M16	4.42 (9.74)

DM80029G60 is made from ASTM-A105/A350 LF2 material.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80090G1608

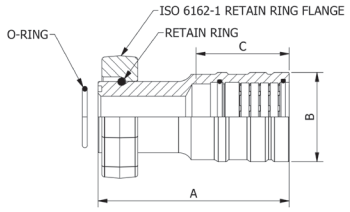
SAE Flange Body, Metric - DM80090

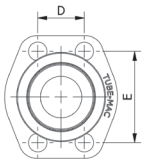
Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
			A	B	C Insertion Depth	
16	1/2"	**DM80090*1608**	82.80 (3.26)	23.70 (0.93)	32.00 (1.26)	0.20 (0.43)
18	1/2"	**DM80090*1808**	82.80 (3.26)	23.70 (0.93)	35.05 (1.38)	0.20 (0.44)
20	1/2”	**DM80090*2008**	84.84 (3.34)	28.70 (1.13)	37.08 (1.46)	0.19 (0.42)
22	1/2"	**DM80090*2208**	84.84 (3.34)	30.48 (1.20)	38.10 (1.50)	0.23 (0.51)
25	3/4"	**DM80090*2512**	92.71 (3.65)	35.31 (1.39)	41.91 (1.65)	0.41 (0.90)
28	3/4"	**DM80090*2812**	95.25 (3.75)	37.59 (1.48)	44.45 (1.75)	0.42 (0.93)
30	1”	**DM80090*3016**	97.79 (3.85)	41.91 (1.65)	46.99 (1.85)	0.52 (1.14)
35	1”	**DM80090*3516**	107.95 (4.25)	46.23 (1.82)	50.80 (2.00)	0.59 (1.29)
38	1-1/4”	**DM80090*3820**	118.11 (4.65)	52.07 (2.05)	54.61 (2.15)	0.82 (1.80)
42	1-1/4"	**DM20090*20**	123.95 (4.88)	57.40 (2.26)	60.45 (2.38)	0.97 (2.13)
50	1-1/2"	**DM80090*5024**	136.65 (5.38)	65.53 (2.58)	63.50 (2.50)	1.41 (3.10)
**60K	2”	**DM20090K32**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	2.01 (4.43)
60G	2”	**DM80090G6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	2.01 (4.43)

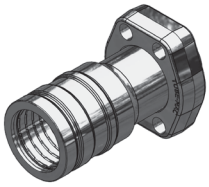
**2” DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







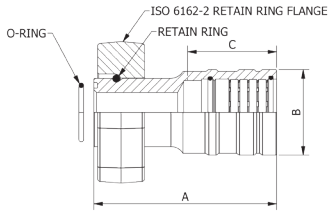
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

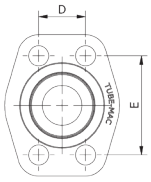
ORDER EXAMPLE:
DM80091G1608

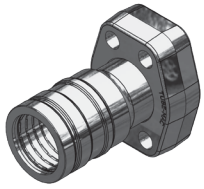
ISO 6162-1 Flange, Metric - DM80091

Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)					Bolt Size	*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E		
16	1/2"	**DM80091*1608**	82.80 (3.26)	23.70 (0.93)	32.00 (1.26)	17.53 (0.69)	38.10 (1.50)	M8	0.40 (0.89)
18	1/2"	**DM80091*1808**	82.80 (3.26)	25.15 (0.99)	35.05 (1.38)	17.53 (0.69)	38.10 (1.50)	M8	0.41 (0.90)
20	1/2"	**DM80091*2008**	84.84 (3.34)	28.70 (1.13)	37.08 (1.46)	17.53 (0.69)	38.10 (1.50)	M8	0.40 (0.88)
22	1/2"	**DM80091*2208**	84.84 (3.34)	30.48 (1.20)	38.10 (1.50)	17.53 (0.69)	38.10 (1.50)	M8	0.44 (0.97)
25	3/4"	**DM80091*2512**	92.71 (3.65)	35.31 (1.39)	41.91 (1.65)	22.35 (0.88)	47.75 (1.88)	M10	0.64 (1.40)
28	3/4"	**DM80091*2812**	95.25 (3.75)	37.59 (1.48)	44.45 (1.75)	22.35 (0.88)	47.75 (1.88)	M10	0.65 (1.43)
30	1"	**DM80091*3016**	97.79 (3.85)	41.91 (1.65)	46.99 (1.85)	26.16 (1.03)	52.32 (2.06)	M10	0.80 (1.77)
35	1"	**DM80091*3516**	107.95 (4.25)	46.23 (1.82)	50.80 (2.00)	26.16 (1.03)	52.32 (2.06)	M10	0.87 (1.92)
38	1-1/4"	**DM80091*3820**	118.11 (4.65)	52.07 (2.05)	54.61 (2.15)	30.23 (1.19)	58.67 (2.31)	M10	1.22 (2.70)
42	1-1/4"	**DM20091*20**	123.95 (4.88)	57.40 (2.26)	60.45 (2.38)	30.23 (1.19)	58.67 (2.31)	M10	1.37 (3.03)
50	1-1/2"	**DM80091*5024**	136.65 (5.38)	65.53 (2.58)	63.50 (2.50)	35.81 (1.41)	69.85 (2.75)	M12	2.02 (4.45)
**60K	2"	**DM20091K32**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	42.93 (1.69)	77.22 (3.06)	M12	2.93 (6.45)
60G	2"	**DM80091G6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	42.93 (1.69)	77.22 (3.06)	M12	2.93 (6.45)

**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80092G1608

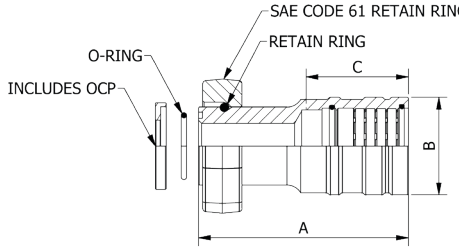
ISO 6162-2 Flange, Metric - DM80092

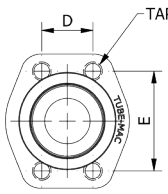
Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)					Bolt Size	*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E		
16	1/2"	**DM80092*1608**	82.80 (3.26)	23.70 (0.93)	32.00 (1.26)	18.29 (0.72)	40.39 (1.59)	M8	0.40 (0.89)
18	1/2"	**DM80092*1808**	82.80 (3.26)	25.15 (0.99)	35.05 (1.38)	18.29 (0.72)	40.39 (1.59)	M8	0.41 (0.90)
20	1/2"	**DM80092*2008**	84.84 (3.34)	28.70 (1.13)	37.08 (1.46)	18.29 (0.72)	40.39 (1.59)	M8	0.40 (0.88)
22	1/2"	**DM80092*2208**	84.84 (3.34)	30.48 (1.20)	38.10 (1.50)	18.29 (0.72)	40.39 (1.59)	M8	0.44 (0.97)
25	3/4"	**DM80092*2512**	92.71 (3.65)	35.31 (1.39)	41.91 (1.65)	23.88 (0.94)	50.80 (2.00)	M10	0.78 (1.71)
28	3/4"	**DM80092*2812**	95.25 (3.75)	37.59 (1.48)	44.45 (1.75)	23.88 (0.94)	50.80 (2.00)	M10	0.79 (1.74)
30	1"	**DM80092*3016**	97.79 (3.85)	41.91 (1.65)	46.99 (1.85)	27.69 (1.09)	57.15 (2.25)	M12	1.09 (2.40)
35	1"	**DM80092*3516**	107.95 (4.25)	46.23 (1.82)	50.80 (2.00)	27.69 (1.09)	57.15 (2.25)	M12	1.16 (2.55)
38	1-1/4"	**DM80092*3820**	118.11 (4.65)	52.07 (2.05)	54.61 (2.15)	31.75 (1.25)	66.80 (2.63)	M14	1.70 (3.75)
42	1-1/4"	**DM20092*20**	123.95 (4.88)	57.40 (2.26)	60.45 (2.38)	31.75 (1.25)	66.80 (2.63)	M14	1.85 (4.08)
50	1-1/2"	**DM80092*5024**	136.65 (5.38)	65.53 (2.58)	63.50 (2.50)	36.58 (1.44)	79.50 (3.13)	M16	2.71 (5.98)
**60K	2"	**DM20092K32**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	44.45 (1.75)	96.77 (3.81)	M20	4.46 (9.83)
60G	2"	**DM80092G6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	44.45 (1.75)	96.77 (3.81)	M20	4.46 (9.83)

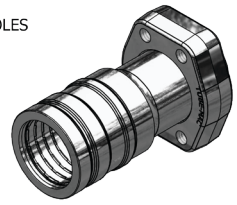
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







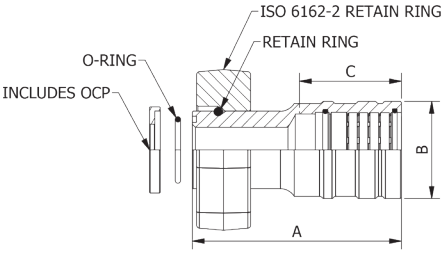
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

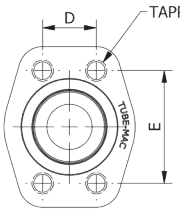
ORDER EXAMPLE:
DM80095G1608

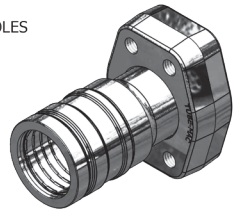
ISO 6162-1 Tapped Flange, Metric - DM80095

Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)					Metric Tap	*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E		
16	1/2"	**DM80095*1608**	82.80 (3.26)	23.70 (0.93)	32.00 (1.26)	17.53 (0.69)	38.10 (1.50)	M8	0.40 (0.89)
18	1/2"	**DM80095*1808**	82.80 (3.26)	25.15 (0.99)	35.05 (1.38)	17.53 (0.69)	38.10 (1.50)	M8	0.41 (0.90)
20	1/2"	**DM80095*2008**	84.84 (3.34)	28.70 (1.13)	37.08 (1.46)	17.53 (0.69)	38.10 (1.50)	M8	0.40 (0.88)
22	1/2"	**DM80095*2208**	84.84 (3.34)	30.48 (1.20)	38.10 (1.50)	17.53 (0.69)	38.10 (1.50)	M8	0.44 (0.97)
25	3/4"	**DM80095*2512**	92.71 (3.65)	35.31 (1.39)	41.91 (1.65)	22.35 (0.88)	47.75 (1.88)	M10	0.64 (1.40)
28	3/4"	**DM80095*2812**	95.25 (3.75)	37.59 (1.48)	44.45 (1.75)	22.35 (0.88)	47.75 (1.88)	M10	0.65 (1.43)
30	1"	**DM80095*3016**	97.79 (3.85)	41.91 (1.65)	46.99 (1.85)	26.16 (1.03)	52.32 (2.06)	M10	0.80 (1.77)
35	1"	**DM80095*3516**	107.95 (4.25)	46.23 (1.82)	50.80 (2.00)	26.16 (1.03)	52.32 (2.06)	M10	0.87 (1.92)
38	1-1/4"	**DM80095*3820**	118.11 (4.65)	52.07 (2.05)	54.61 (2.15)	30.23 (1.19)	58.67 (2.31)	M10	1.22 (2.70)
42	1-1/4"	**DM80095*4220**	123.95 (4.88)	57.40 (2.26)	60.45 (2.38)	30.23 (1.19)	58.67 (2.31)	M10	1.37 (3.03)
50	1-1/2"	**DM80095*5024**	136.65 (5.38)	65.53 (2.58)	63.50 (2.50)	35.81 (1.41)	69.85 (2.75)	M12	2.02 (4.45)
**60K	2"	**DM80095K6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	42.93 (1.69)	77.22 (3.06)	M12	2.93 (6.45)
60G	2"	**DM80095G6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	42.93 (1.69)	77.22 (3.06)	M12	2.93 (6.45)

**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80096G1608

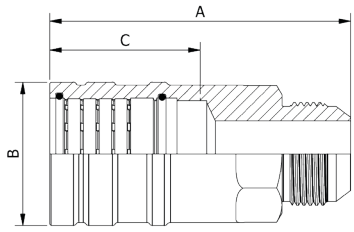
ISO 6162-2 Tapped Flange, Metric - DM80096

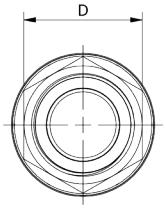
Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)					Metric Tap	*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	E		
16	1/2"	**DM80096*1608**	82.80 (3.26)	23.70 (0.93)	32.00 (1.26)	18.29 (0.72)	40.39 (1.59)	M8	0.40 (0.89)
18	1/2"	**DM80096*1808**	82.80 (3.26)	25.15 (0.99)	35.05 (1.38)	18.29 (0.72)	40.39 (1.59)	M8	0.41 (0.90)
20	1/2"	**DM80096*2008**	84.84 (3.34)	28.70 (1.13)	37.08 (1.46)	18.29 (0.72)	40.39 (1.59)	M8	0.40 (0.88)
22	1/2"	**DM80096*2208**	84.84 (3.34)	30.48 (1.20)	38.10 (1.50)	18.29 (0.72)	40.39 (1.59)	M8	0.44 (0.97)
25	3/4"	**DM80096*2512**	92.71 (3.65)	35.31 (1.39)	41.91 (1.65)	23.88 (0.94)	50.80 (2.00)	M10	0.78 (1.71)
28	3/4"	**DM80096*2812**	95.25 (3.75)	37.59 (1.48)	44.45 (1.75)	23.88 (0.94)	50.80 (2.00)	M10	0.79 (1.74)
30	1"	**DM80096*3016**	97.79 (3.85)	41.91 (1.65)	46.99 (1.85)	27.69 (1.09)	57.15 (2.25)	M12	1.09 (2.40)
35	1"	**DM80096*3516**	107.95 (4.25)	46.23 (1.82)	50.80 (2.00)	27.69 (1.09)	57.15 (2.25)	M12	1.16 (2.55)
38	1-1/4"	**DM80096*3820**	118.11 (4.65)	52.07 (2.05)	54.61 (2.15)	31.75 (1.25)	66.80 (2.63)	M14	1.70 (3.75)
42	1-1/4"	**DM80096*4220**	123.95 (4.88)	57.40 (2.26)	60.45 (2.38)	31.75 (1.25)	66.80 (2.63)	M14	1.85 (4.08)
50	1-1/2"	**DM80096*5024**	136.65 (5.38)	65.53 (2.58)	63.50 (2.50)	36.58 (1.44)	79.50 (3.13)	M16	2.71 (5.98)
**60K	2"	**DM80096K6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	44.45 (1.75)	96.77 (3.81)	M20	4.46 (9.83)
60G	2"	**DM80096G6032**	165.10 (6.50)	77.22 (3.04)	88.90 (3.50)	44.45 (1.75)	96.77 (3.81)	M20	4.46 (9.83)

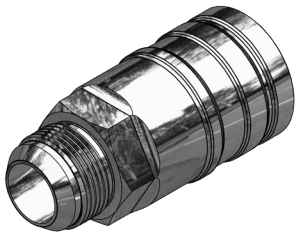
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube





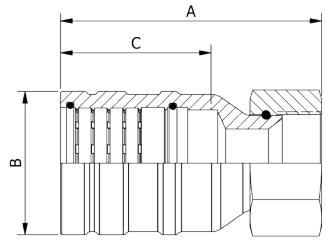


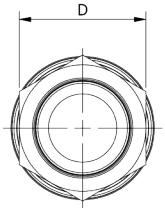
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80055G0604

JIC 37° Male, Metric - DM80055

Size OD (mm)	JIC Size	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
6	04	**DM80055*0604**	42.67 (1.68)	9.80 (0.39)	16.51 (0.65)	12.70 (0.50)	0.02 (0.04)
8	04	**DM80055*0804**	46.48 (1.83)	12.19 (0.48)	19.30 (0.76)	12.70 (0.50)	0.03 (0.05)
10	06	**DM80055*1006**	49.53 (1.95)	15.09 (0.59)	24.13 (0.95)	16.00 (0.63)	0.04 (0.08)
12	08	**DM80055*1208**	60.45 (2.38)	18.59 (0.73)	26.92 (1.06)	22.10 (0.87)	0.08 (0.18)
16	10	**DM80055*1610**	66.80 (2.63)	23.70 (0.93)	32.00 (1.26)	26.92 (1.06)	0.12 (0.27)
20	12	**DM80055*2012**	84.58 (3.33)	28.70 (1.13)	37.08 (1.46)	28.70 (1.13)	0.15 (0.33)
25	16	**DM80055*2516**	89.92 (3.54)	35.31 (1.39)	41.91 (1.65)	35.05 (1.38)	0.31 (0.69)
30	20	**DM80055*3020**	101.60 (4.00)	41.91 (1.65)	46.99 (1.85)	47.75 (1.88)	0.54 (1.18)
38	24	**DM80055*3824**	117.60 (4.63)	52.07 (2.05)	54.61 (2.15)	50.80 (2.00)	0.82 (1.81)
42	24	**DM80055*4224**	117.60 (4.63)	57.40 (2.26)	60.45 (2.38)	57.15 (2.25)	1.04 (2.29)
50	24	**DM80055*5024**	127.00 (5.00)	65.53 (2.58)	63.50 (2.50)	66.80 (2.63)	1.32 (2.91)







**MATERIAL CODE:*
K = STAINLESS STEEL
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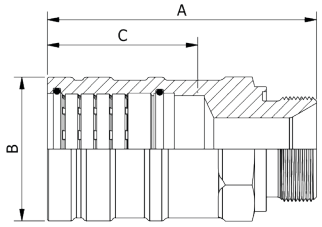
ORDER EXAMPLE:
DM80054G0604

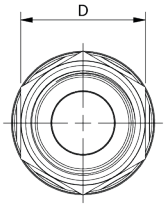
JIC 37° Female Swivel, Metric - DM80054

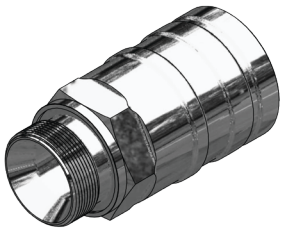
Size OD (mm)	JIC Size	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
6	04	**DM80054*0604**	42.42 (1.67)	9.80 (0.39)	16.51 (0.65)	14.22 (0.56)	0.02 (0.05)
8	04	**DM80054*0804**	42.42 (1.67)	12.19 (0.48)	19.30 (0.76)	14.22 (0.56)	0.03 (0.06)
10	06	**DM80054*1006**	48.01 (1.91)	15.09 (0.59)	24.13 (0.95)	17.53 (0.69)	0.04 (0.09)
12	08	**DM80054*1208**	57.65 (2.27)	18.59 (0.73)	26.92 (1.06)	22.35 (0.88)	0.07 (0.16)
16	10	**DM80054*1610**	62.74 (2.47)	23.70 (0.93)	32.00 (1.26)	25.40 (1.00)	0.11 (0.25)
20	12	**DM80054*2012**	78.74 (3.10)	28.70 (1.13)	37.08 (1.46)	31.75 (1.25)	0.22 (0.48)
25	16	**DM80054*2516**	81.28 (3.20)	35.31 (1.39)	41.91 (1.65)	38.10 (1.50)	0.29 (0.65)
30	20	**DM80054*3020**	92.20 (3.63)	41.91 (1.65)	46.99 (1.85)	50.80 (2.00)	0.56 (1.24)
38	24	**DM80054*3824**	114.30 (4.50)	52.07 (2.05)	54.61 (2.15)	57.15 (2.25)	0.95 (2.10)
42	24	**DM80054*4224**	123.95 (4.88)	57.40 (2.26)	60.45 (2.38)	57.15 (2.25)	1.13 (2.49)
50	24	**DM80054*5024**	128.02 (5.04)	65.53 (2.58)	63.50 (2.50)	83.82 (3.30)	1.59 (3.51)

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
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ORDER EXAMPLE:
DM80153G0604

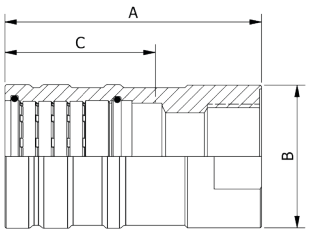
BSPP Male, Metric - DM80153

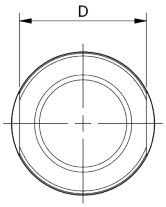
Size OD (mm)	BSPP Size	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
6	1/4"	**DM80153*0604**	43.43 (1.71)	9.80 (0.39)	16.51 (0.65)	19.05 (0.75)	0.03 (0.07)
8	1/4"	**DM80153*0804**	45.97 (1.81)	12.19 (0.48)	19.30 (0.76)	19.05 (0.75)	0.04 (0.08)
10	1/4"	**DM80153*1004**	51.05 (2.01)	15.09 (0.59)	24.13 (0.95)	19.05 (0.75)	0.05 (0.10)
12	1/4"	**DM80153*1204**	53.84 (2.12)	18.59 (0.73)	26.92 (1.06)	19.05 (0.75)	0.05 (0.12)
15	3/8”	**DM80153*1506**	58.93 (2.32)	23.70 (0.93)	32.00 (1.26)	22.10 (0.87)	0.10 (0.22)
16	3/8”	**DM80153*1606**	58.93 (2.32)	23.70 (0.93)	32.00 (1.26)	22.10 (0.87)	0.09 (0.20)
18	3/8”	**DM80153*1806**	61.98 (2.44)	25.15 (0.99)	35.05 (1.38)	22.10 (0.87)	0.12 (0.27)
20	1/2"	**DM80153*2008**	66.29 (2.61)	28.70 (1.13)	37.08 (1.46)	29.97 (1.18)	0.15 (0.34)
22	1/2"	**DM80153*2208**	72.14 (2.84)	30.48 (1.20)	38.10 (1.50)	32.00 (1.26)	0.18 (0.40)
25	3/4”	**DM80153*2512**	83.06 (3.27)	35.31 (1.39)	41.91 (1.65)	36.07 (1.42)	0.28 (0.62)
28	3/4”	**DM80153*2812**	85.60 (3.37)	37.59 (1.48)	44.45 (1.75)	36.07 (1.42)	0.33 (0.72)
30	1”	**DM80153*3016**	85.09 (3.35)	41.91 (1.65)	46.99 (1.85)	45.97 (1.80)	0.43 (0.94)
35	1”	**DM80153*3516**	88.90 (3.50)	46.23 (1.82)	50.80 (2.00)	50.04 (1.97)	0.50 (1.11)
38	1-1/4”	**DM80153*3820**	109.73 (4.32)	52.07 (2.05)	54.61 (2.15)	56.13 (2.21)	0.95 (2.10)
42	1-1/4”	**DM20153*20**	107.95 (4.25)	57.40 (2.26)	60.45 (2.38)	50.04 (1.97)	0.88 (1.95)
50	1-1/2”	**DM80153*5024**	115.57 (4.55)	65.53 (2.58)	63.50 (2.50)	55.12 (2.17)	1.15 (2.53)
**60K	2”	**DM20153K32**	136.65 (5.38)	77.22 (3.04)	88.90 (3.50)	74.93 (2.95)	1.58 (3.49)
60G	2”	**DM80153G6032**	136.65 (5.38)	77.22 (3.04)	88.90 (3.50)	74.93 (2.95)	1.58 (3.49)

**2” DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
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ORDER EXAMPLE:
DM80086G0604

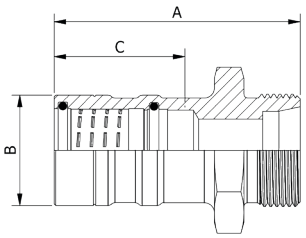
BSPP Female, Metric - DM80086

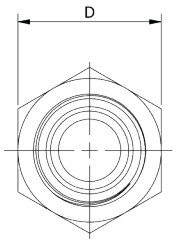
Size OD (mm)	BSPP Size	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
6	1/4"	**DM80086*0604**	42.16 (1.66)	23.88 (0.94)	16.51 (0.65)	20.07 (0.79)	0.05 (0.10)
8	1/4"	**DM80086*0804**	44.70 (1.76)	23.88 (0.94)	19.30 (0.76)	20.07 (0.79)	0.05 (0.11)
10	1/4"	**DM80086*1004**	49.78 (1.96)	23.88 (0.94)	24.13 (0.95)	20.07 (0.79)	0.06 (0.14)
12	1/4"	**DM80086*1204**	51.82 (2.04)	23.88 (0.94)	26.92 (1.06)	20.07 (0.79)	0.07 (0.16)
15	3/8"	**DM80086*1506**	57.40 (2.26)	26.92 (1.06)	32.00 (1.26)	22.10 (0.87)	0.06 (0.13)
16	3/8"	**DM80086*1606**	57.40 (2.26)	26.92 (1.06)	32.00 (1.26)	22.10 (0.87)	0.06 (0.13)
18	3/8"	**DM80086*1806**	57.40 (2.26)	26.92 (1.06)	35.05 (1.38)	22.10 (0.87)	0.11 (0.24)
20	1/2"	**DM80086*2008**	75.18 (2.96)	34.29 (1.35)	37.08 (1.46)	30.23 (1.19)	0.26 (0.57)
22	1/2"	**DM80086*2208**	73.15 (2.88)	34.29 (1.35)	38.10 (1.50)	30.23 (1.19)	0.23 (0.51)
25	3/4"	**DM80086*2512**	89.92 (3.54)	38.10 (1.50)	41.91 (1.65)	37.75 (1.25)	0.38 (0.83)
28	3/4"	**DM80086*2812**	89.92 (3.54)	38.10 (1.50)	41.91 (1.65)	37.75 (1.25)	0.38 (0.84)
30	1"	**DM80086*3016**	98.55 (3.88)	47.75 (1.88)	46.99 (1.85)	41.40 (1.63)	0.57 (1.25)
35	1"	**DM80086*3516**	98.55 (3.88)	47.75 (1.88)	50.80 (2.00)	41.40 (1.63)	0.60 (1.32)
38	1-1/4"	**DM80086*3820**	113.28 (4.46)	57.15 (2.25)	54.61 (2.15)	50.80 (2.00)	1.03 (2.27)
42	1-1/4"	**DM20086*20**	102.87 (4.05)	57.15 (2.25)	60.45 (2.38)	50.80 (2.00)	0.87 (1.91)
50	1-1/2"	**DM80086*5024**	114.30 (4.50)	69.85 (2.75)	63.50 (2.50)	63.50 (2.50)	1.36 (3.00)
**60K	2"	**DM20086K32**	146.05 (5.75)	88.90 (3.50)	88.90 (3.50)	76.20 (3.00)	2.33 (5.14)
60G	2"	**DM8008G6032**	146.05 (5.75)	88.90 (3.50)	88.90 (3.50)	76.20 (3.00)	2.33 (5.14)

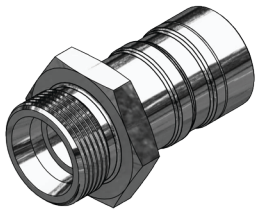
**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

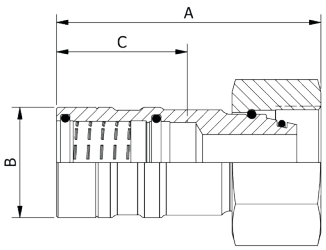
ORDER EXAMPLE:
DM80066G06S

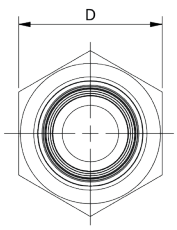
DIN 24° Male, Metric - DM80066

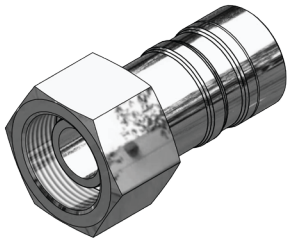
Size OD (mm)	DIN 2353/ISO 8434-1 L & S Series Thread	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
6	6L - M12 x 1.5	**DM80066*06L**	38.86 (1.53)	9.80 (0.39)	16.51 (0.65)	13.97 (0.55)	0.02 (0.05)
6	6S - M14 x 1.5	**DM80066*06S**	38.86 (1.53)	9.80 (0.39)	16.51 (0.65)	17.02 (0.67)	0.03 (0.06)
8	8L - M14 x 1.5	**DM80066*08L**	50.55 (1.99)	12.19 (0.48)	19.30 (0.76)	17.02 (0.67)	0.04 (0.09)
8	8S - M16 x 1.5	**DM80066*08S**	53.09 (2.09)	12.19 (0.48)	19.30 (0.76)	17.02 (0.67)	0.05 (0.10)
10	10L - M16 x 1.5	**DM80066*10L**	54.61 (2.15)	15.09 (0.59)	24.13 (0.95)	19.05 (0.75)	0.05 (0.12)
10	10S - M18 x 1.5	**DM80066*10S**	57.66 (2.27)	15.09 (0.59)	24.13 (0.95)	22.10 (0.87)	0.07 (0.16)
12	12L - M18 x 1.5	**DM80066*12L**	52.07 (2.05)	18.59 (0.73)	26.92 (1.06)	24.13 (0.95)	0.07 (0.17)
12	12S - M20 x 1.5	**DM80066*12S**	56.64 (2.23)	18.59 (0.73)	26.92 (1.06)	22.10 (0.87)	0.08 (0.18)
15	15L - M22 x 1.5	**DM80066*15L**	57.40 (2.26)	23.70 (0.93)	32.00 (1.26)	26.92 (1.06)	0.10 (0.27)
16	16S - M24 x 1.5	**DM80066*16S**	62.99 (2.48)	23.70 (0.93)	32.00 (1.26)	26.92 (1.06)	0.14 (0.31)
18	18L - M26 x 1.5	**DM80066*18L**	60.45 (2.38)	25.15 (0.99)	35.05 (1.38)	32.00 (1.26)	0.14 (0.31)
20	20S - M30 x 2.0	**DM80066*20S**	67.82 (2.67)	28.70 (1.13)	37.08 (1.46)	36.07 (1.42)	0.22 (0.48)
22	22L - M30 x 2.0	**DM80066*22L**	68.58 (2.70)	30.48 (1.20)	38.10 (1.50)	36.07 (1.42)	0.22 (0.48)
25	25S - M36 x 2.0	**DM80066*25S**	78.74 (3.10)	35.31 (1.39)	41.91 (1.65)	45.97 (1.81)	0.34 (0.76)
28	28L - M36 x 2.0	**DM80066*28L**	82.04 (3.23)	37.59 (1.48)	44.45 (1.75)	40.89 (1.61)	0.30 (0.67)
30	30S - M42 x 2.0	**DM80066*30S**	85.60 (3.37)	41.91 (1.65)	46.99 (1.85)	50.04 (1.97)	0.48 (1.05)
35	35L - M45 x 2.0	**DM80066*35L**	85.09 (3.35)	46.23 (1.82)	50.80 (2.00)	50.04 (1.97)	0.49 (1.09)
38	38S - M52 x 2.0	**DM80066*38S**	100.84 (3.97)	52.07 (2.05)	54.61 (2.15)	59.94 (2.36)	0.84 (1.85)
42	42L - M52 x 2.0	**DM80066*42L**	95.50 (3.76)	57.40 (2.26)	60.45 (2.38)	59.94 (2.36)	0.81 (1.79)

3D step models available upon request

DM 80 Series - Metric Tube







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G = CARBON STEEL
B = COPPER NICKEL 70/30

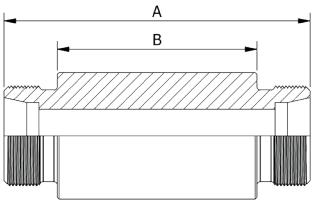
ORDER EXAMPLE:
DM80068G06S

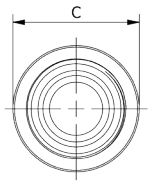
DIN 24° Female Swivel, Metric - DM80068

Size OD (mm)	DIN 2353/ISO 8434-1 L & S Series Thread	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
6	6L - M12 x 1.5	**DM80068*06L**	39.00 (1.54)	9.80 (0.39)	16.51 (0.65)	13.97 (0.55)	0.03 (0.06)
6	6S - M14 x 1.5	**DM80068*06S**	42.42 (1.67)	9.80 (0.39)	16.51 (0.65)	17.02 (0.67)	0.03 (0.07)
8	8L - M12 x 1.5	**DM80068*08L**	42.93 (1.69)	12.19 (0.48)	19.30 (0.76)	17.02 (0.67)	0.04 (0.08)
8	8S - M16 x 1.5	**DM80068*08S**	48.26 (1.90)	12.19 (0.48)	19.30 (0.76)	18.80 (0.74)	0.05 (0.10)
10	10L - M16 x 1.5	**DM80068*10L**	51.31 (2.02)	15.09 (0.59)	24.13 (0.95)	18.80 (0.74)	0.05 (0.11)
10	10S - M18 x 1.5	**DM80068*10S**	51.56 (2.03)	15.09 (0.59)	24.13 (0.95)	21.84 (0.86)	0.06 (0.14)
12	12L - M18 x 1.5	**DM80068*12L**	53.85 (2.12)	18.59 (0.73)	26.92 (1.06)	21.84 (0.86)	0.07 (0.16)
12	12S - M20 x 1.5	**DM80068*12S**	52.58 (2.07)	18.59 (0.73)	26.92 (1.06)	23.62 (0.93)	0.09 (0.19)
15	15L - M22 x 1.5	**DM80068*15L**	61.98 (2.44)	23.70 (0.93)	32.00 (1.26)	26.92 (1.06)	0.14 (0.30)
16	16S - M24 x 1.5	**DM80068*16S**	60.45 (2.38)	23.70 (0.93)	32.00 (1.26)	29.72 (1.17)	0.15 (0.32)
18	18L - M26 x 1.5	**DM80068*18L**	65.53 (2.58)	25.15 (0.99)	35.05 (1.38)	32.00 (1.26)	0.17 (0.37)
20	20S - M30 x 2.0	**DM80068*20S**	68.33 (2.69)	28.70 (1.13)	37.08 (1.46)	35.81 (1.41)	0.21 (0.47)
22	22L - M30 x 2.0	**DM80068*22L**	73.15 (2.88)	30.48 (1.20)	38.10 (1.50)	35.81 (1.41)	0.25 (0.56)
25	25S - M36 x 2.0	**DM80068*25S**	84.84 (3.34)	35.31 (1.39)	41.91 (1.65)	45.72 (1.80)	0.45 (1.00)
28	28L - M36 x 2.0	**DM80068*28L**	76.96 (3.03)	37.59 (1.48)	44.45 (1.75)	40.89 (1.61)	0.32 (0.70)
30	30S - M42 x 2.0	**DM80068*30S**	89.92 (3.54)	41.91 (1.65)	46.99 (1.85)	49.78 (1.96)	0.53 (1.17)
35	35L - M45 x 2.0	**DM80068*35L**	92.96 (3.66)	46.23 (1.82)	50.80 (2.00)	50.04 (1.97)	0.55 (1.22)
38	38S - M52 x 2.0	**DM80068*38S**	105.41 (4.15)	52.07 (2.05)	54.61 (2.15)	59.69 (2.35)	0.98 (2.16)
42	42L - M52 x 2.0	**DM80068*42L**	107.44 (4.23)	57.40 (2.26)	60.45 (2.38)	60.20 (2.37)	1.03 (2.27)

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

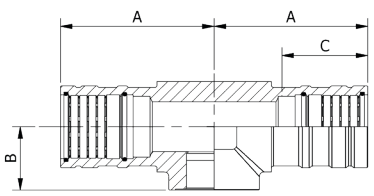
ORDER EXAMPLE:
DM80089G06S

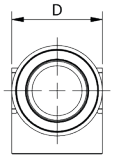
Weldable Bulkhead, Metric - DM80089

Size OD (mm)	DIN 2353/ISO 8434-1 L & S Series Thread	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
			A	B	C	
6	6L - M12 x 1.5	**DM80089*06L**	73.91 (2.91)	49.78 (1.96)	20.00 (0.79)	0.14 (0.30)
6	6S - M14 x 1.5	**DM80089*06S**	73.91 (2.91)	49.78 (1.96)	20.00 (0.79)	0.14 (0.30)
8	8L - M14 x 1.5	**DM80089*08L**	73.91 (2.91)	48.01 (1.89)	22.00 (0.87)	0.17 (0.37)
8	8S - M16 x 1.5	**DM80089*08S**	73.91 (2.91)	53.09 (2.09)	22.00 (0.87)	0.16 (0.36)
10	10L - M16 x 1.5	**DM80089*10L**	73.91 (2.91)	50.04 (1.97)	25.00 (0.98)	0.21 (0.46)
10	10S - M18 x 1.5	**DM80089*10S**	73.91 (2.91)	52.07 (2.05)	25.00 (0.98)	0.20 (0.45)
12	12L - M18 x 1.5	**DM80089*12L**	73.91 (2.91)	50.04 (1.97)	25.00 (0.98)	0.18 (0.40)
12	12S - M20 x 1.5	**DM80089*12S**	73.91 (2.91)	51.82 (2.04)	28.00 (1.10)	0.25 (0.56)
15	15L - M22 x 1.5	**DM80089*15L**	84.07 (3.31)	59.94 (2.36)	28.00 (1.10)	0.27 (0.59)
16	16S - M24 x 1.5	**DM80089*16S**	88.14 (3.47)	59.94 (2.36)	35.00 (1.38)	0.45 (0.99)
18	18L - M26 x 1.5	**DM80089*18L**	84.07 (3.31)	59.94 (2.36)	32.00 (1.26)	0.34 (0.75)
20	20S - M30 x 2.0	**DM80089*20S**	91.95 (3.62)	59.94 (2.36)	38.00 (1.50)	0.52 (1.15)
22	22L - M30 x 2.0	**DM80089*22L**	87.88 (3.46)	59.94 (2.36)	36.00 (1.42)	0.40 (0.89)
25	25S - M36 x 2.0	**DM80089*25S**	96.01 (3.78)	59.94 (2.36)	45.00 (1.77)	0.73 (1.61)
28	28L - M36 x 2.0	**DM80089*28L**	87.88 (3.46)	59.94 (2.36)	40.00 (1.58)	0.45 (1.00)
30	30S - M42 x 2.0	**DM80089*30S**	99.82 (3.93)	59.94 (2.36)	50.00 (1.97)	0.88 (1.95)
35	35L - M45 x 2.0	**DM80089*35L**	91.95 (3.62)	59.94 (2.36)	50.00 (1.97)	0.73 (1.62)
38	38S - M52 x 2.0	**DM80089*38S**	103.89 (4.09)	59.94 (2.36)	60.00 (2.36)	1.26 (2.77)
42	42L - M52 x 2.0	**DM80089*42L**	91.95 (3.62)	59.94 (2.36)	60.00 (2.36)	1.02 (2.24)

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80172G1004

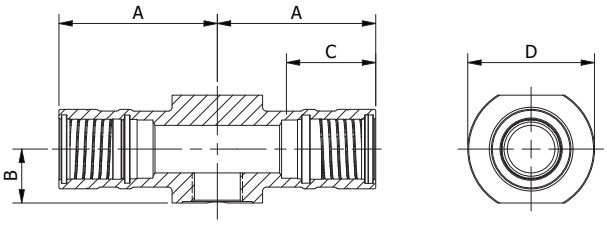
BSPP Female Branch Tee, Metric - DM80172

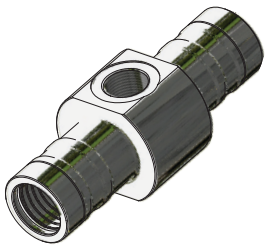
Size OD (mm)	BSPP Size	Part Number	Dimensions - mm (Inch)				*Weight K & G kg (lbs)
			A	B	C Insertion Depth	D	
10	1/4"	**DM80172*1004**	46.99 (1.85)	20.83 (0.82)	24.13 (0.95)	21.84 (0.86)	0.15 (0.33)
12	1/4"	**DM80172*1204**	47.75 (1.88)	20.83 (0.82)	26.92 (1.06)	26.92 (1.06)	0.14 (0.30)
15	3/8"	**DM80172*1506**	52.07 (2.05)	22.35 (0.88)	32.00 (1.26)	26.16 (1.03)	0.27 (0.60)
16	3/8"	**DM80172*1606**	52.07 (2.05)	22.35 (0.88)	32.00 (1.26)	26.16 (1.03)	0.25 (0.55)
18	3/8"	**DM80172*1806**	52.07 (2.05)	22.35 (0.88)	35.05 (1.38)	26.16 (1.03)	0.24 (0.52)
20	1/2"	**DM80172*2008**	73.15 (2.88)	25.40 (1.00)	37.08 (1.46)	33.02 (1.30)	0.38 (0.84)
22	1/2"	**DM80172*2208**	73.15 (2.88)	25.40 (1.00)	38.10 (1.50)	33.02 (1.30)	0.57 (1.25)
25	3/4"	**DM80172*2512**	76.92 (3.03)	28.70 (1.13)	41.91 (1.65)	40.13 (1.58)	0.75 (1.60)
28	3/4"	**DM80172*2812**	76.92 (3.03)	28.70 (1.13)	44.45 (1.75)	40.13 (1.58)	0.71 (1.57)
30	1"	**DM80172*3016**	85.60 (3.37)	38.10 (1.50)	46.99 (1.85)	50.04 (1.97)	1.22 (2.70)
35	1"	**DM80172*3516**	85.60 (3.37)	38.10 (1.50)	50.80 (2.00)	50.04 (1.97)	1.27 (2.80)
38	1-1/4"	**DM80172*3820**	107.95 (4.25)	41.40 (1.63)	54.61 (2.15)	63.50 (2.50)	2.51 (5.53)
42	1-1/4"	**DM20172*20**	107.95 (4.25)	44.45 (1.75)	60.45 (2.38)	63.50 (2.50)	2.67 (5.89)
50	1-1/2"	**DM80172*5024**	115.32 (4.54)	44.45 (1.75)	63.50 (2.50)	71.37 (2.81)	3.13 (6.90)
**60K	2"	**DM20172K32**	138.43 (5.45)	60.45 (2.38)	88.90 (3.50)	82.55 (3.25)	4.75 (10.48)
60G	2"	**DM80172G6032**	138.43 (5.45)	60.45 (2.38)	88.90 (3.50)	82.55 (3.25)	4.75 (10.48)

**2" DM 20 Series Stainless Steel fittings are also used for 60mm Stainless Steel applications.

3D step models available upon request

DM 80 Series - Metric Tube





**MATERIAL CODE:*
K = STAINLESS STEEL

ORDER EXAMPLE:
DM80211K2004

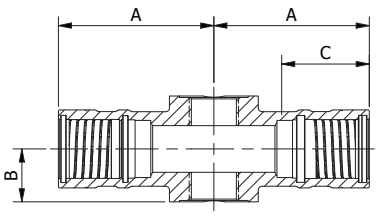
BSPP Female Branch Tee, Metric - DM80211

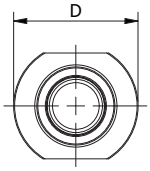
Size OD (mm)	BSPP Size	Part Number	Dimensions - mm (Inch)				Weight K kg (lbs)
			A	B	C Insertion Depth	D	
20	1/4"	**DM80211K2004**	63.50 (2.50)	20.02 (0.79)	37.08 (1.46)	44.45 (1.75)	0.46 (1.02)
20	3/8"	**DM80211K2006**	50.80 (2.20)	20.02 (0.79)	37.08 (1.46)	47.63 (1.88)	0.52 (1.14)
22	1/4"	**DM80211K2204**	63.50 (2.50)	20.02 (0.79)	38.10 (1.50)	44.45 (1.75)	0.46 (1.02)
22	3/8"	**DM80211K2206**	65.08 (2.56)	20.02 (0.79)	38.10 (1.50)	47.63 (1.88)	0.53 (1.16)
25	1/4"	**DM80211K2504**	63.50 (2.50)	20.02 (0.79)	41.91 (1.65)	44.45 (1.75)	0.55 (1.22)
25	3/8"	**DM80211K2506**	65.08 (2.56)	20.02 (0.79)	41.91 (1.65)	47.63 (1.88)	0.62 (1.36)
25	1/2"	**DM80211K2508**	66.68 (2.63)	23.01 (0.91)	41.91 (1.65)	53.98 (2.13)	0.76 (1.67)
28	1/4"	**DM80211K2804**	66.68 (2.63)	20.02 (0.79)	44.45 (1.75)	44.45 (1.75)	0.58 (1.27)
28	3/8"	**DM80211K2806**	68.25 (2.69)	21.08 (0.83)	44.45 (1.75)	47.63 (1.88)	0.63 (1.38)
28	1/2"	**DM80211K2808**	69.85 (2.75)	23.01 (0.91)	44.45 (1.75)	53.98 (2.13)	0.75 (1.66)
30	1/4"	**DM80211K3004**	71.44 (2.81)	21.44 (0.84)	46.99 (1.85)	47.63 (1.88)	0.78 (1.72)
30	3/8"	**DM80211K3006**	73.02 (2.88)	21.08 (0.83)	46.99 (1.85)	47.63 (1.88)	0.80 (1.77)
30	1/2"	**DM80211K3008**	74.63 (2.94)	23.01 (0.91)	46.99 (1.85)	53.98 (2.13)	0.93 (2.05)
35	1/4"	**DM80211K3504**	72.24 (2.84)	25.40 (1.00)	50.80 (2.00)	53.98 (2.13)	0.85 (1.87)
35	3/8"	**DM80211K3506**	73.81 (2.91)	24.61 (0.97)	50.80 (2.00)	53.98 (2.13)	0.88 (1.94)
35	1/2"	**DM80211K3508**	75.41 (2.97)	24.61 (0.97)	50.80 (2.00)	57.15 (2.25)	0.97 (2.13)
38	1/4"	**DM80211K3804**	80.98 (3.19)	26.19 (1.03)	54.61 (2.15)	57.15 (2.25)	1.32 (2.92)
38	3/8"	**DM80211K3806**	82.55 (3.25)	26.19 (1.03)	54.61 (2.15)	57.15 (2.25)	1.36 (3.00)
38	1/2"	**DM80211K3808**	84.15 (3.31)	27.79 (1.09)	54.61 (2.15)	63.50 (2.50)	1.52 (3.35)
42	3/8"	**DM20211K2006**	82.55 (3.25)	29.36 (1.16)	60.45 (2.38)	63.50 (2.50)	1.53 (3.38)
42	1/2"	**DM20211K2008**	84.15 (3.31)	28.58 (1.13)	60.45 (2.38)	63.50 (2.50)	1.56 (3.43)
60	3/8"	**DM20211K3206**	107.95 (4.25)	38.10 (1.50)	88.90 (3.50)	81.28 (3.20)	2.88 (6.35)
60	*1/2"*	**DM20211K3208**	139.47 (4.31)	38.10 (1.50)	88.90 (3.50)	81.28 (3.20)	2.95 (6.50)

Note: Only available in Stainless Steel.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL

ORDER EXAMPLE:
DM80221K2004

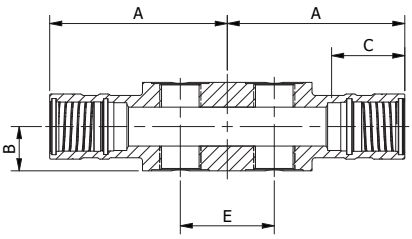
BSPP (2) Port Female Branch Cross, Metric - DM80221

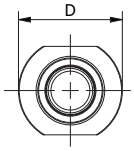
Size OD (mm)	BSPP Size	Part Number	Dimensions - mm (Inch)				Weight K kg (lbs)
			A	B	C Insertion Depth	D	
20	1/4"	**DM80221K2004**	63.50 (2.50)	20.02 (0.79)	37.08 (1.46)	44.45 (1.75)	0.45 (1.00)
20	3/8"	**DM80221K2006**	50.80 (2.20)	20.02 (0.79)	37.08 (1.46)	47.63 (1.88)	0.51 (1.12)
22	1/4"	**DM80221K2204**	63.50 (2.50)	20.02 (0.79)	38.10 (1.50)	44.45 (1.75)	0.45 (1.00)
22	3/8"	**DM80221K2206**	65.08 (2.56)	20.02 (0.79)	38.10 (1.50)	47.63 (1.88)	0.51 (1.12)
25	1/4"	**DM80221K2504**	63.50 (2.50)	20.02 (0.79)	41.91 (1.65)	44.45 (1.75)	0.54 (1.20)
25	3/8"	**DM80221K2506**	65.08 (2.56)	20.02 (0.79)	41.91 (1.65)	47.63 (1.88)	0.60 (1.32)
25	1/2"	**DM80221K2508**	66.68 (2.63)	23.01 (0.91)	41.91 (1.65)	53.98 (2.13)	0.72 (1.59)
28	1/4"	**DM80221K2804**	66.68 (2.63)	20.02 (0.79)	44.45 (1.75)	44.45 (1.75)	0.59 (1.29)
28	3/8"	**DM80221K2806**	68.25 (2.69)	21.08 (0.83)	44.45 (1.75)	47.63 (1.88)	0.61 (1.34)
28	1/2"	**DM80221K2808**	69.85 (2.75)	23.01 (0.91)	44.45 (1.75)	53.98 (2.13)	0.72 (1.59)
30	1/4"	**DM80221K3004**	71.44 (2.81)	21.44 (0.84)	46.99 (1.85)	47.63 (1.88)	0.77 (1.70)
30	3/8"	**DM80221K3006**	73.02 (2.88)	21.08 (0.83)	46.99 (1.85)	47.63 (1.88)	0.78 (1.73)
30	1/2"	**DM80221K3008**	74.63 (2.94)	23.01 (0.91)	46.99 (1.85)	53.98 (2.13)	0.90 (1.99)
35	1/4"	**DM80221K3504**	72.24 (2.84)	25.40 (1.00)	50.80 (2.00)	53.98 (2.13)	0.86 (1.89)
35	3/8"	**DM80221K3506**	73.81 (2.91)	24.61 (0.97)	50.80 (2.00)	53.98 (2.13)	0.87 (1.92)
35	1/2"	**DM80221K3508**	75.41 (2.97)	24.61 (0.97)	50.80 (2.00)	57.15 (2.25)	0.94 (2.07)
38	1/4"	**DM80221K3804**	80.98 (3.19)	26.19 (1.03)	54.61 (2.15)	57.15 (2.25)	1.31 (2.89)
38	3/8"	**DM80221K3806**	82.55 (3.25)	26.19 (1.03)	54.61 (2.15)	57.15 (2.25)	1.34 (2.96)
38	1/2"	**DM80221K3808**	84.15 (3.31)	27.79 (1.09)	54.61 (2.15)	63.50 (2.50)	1.49 (3.28)
42	3/8"	**DM20221K2006**	82.55 (3.25)	29.36 (1.16)	60.45 (2.38)	63.50 (2.50)	1.51 (3.33)
42	1/2"	**DM20221K2008**	84.15 (3.31)	28.58 (1.13)	60.45 (2.38)	63.50 (2.50)	1.54 (3.39)
60	*3/8"*	**DM20221K3206**	107.95 (4.25)	38.10 (1.50)	88.90 (3.50)	81.28 (3.20)	2.86 (6.30)
60	*1/2"*	**DM20221K3208**	139.47 (4.31)	38.10 (1.50)	88.90 (3.50)	81.28 (3.20)	2.92 (6.43)

Note: Only available in Stainless Steel.

3D step models available upon request

DM 80 Series - Metric Tube







**MATERIAL CODE:*
K = STAINLESS STEEL

ORDER EXAMPLE:
DM80241K2004

BSPP (4) Port Female Branch Cross, Metric - DM80241

Size OD (mm)	BSPP Size	Part Number	Dimensions - mm (Inch)					Weight K kg (lbs)
			A	B	C Insertion Depth	C	E	
20	1/4"	**DM80241K2004**	88.90 (3.50)	20.02 (0.79)	37.08 (1.46)	44.45 (1.75)	50.80 (2.00)	0.92 (2.02)
20	3/8”	**DM80241K2006**	92.08 (3.63)	20.02 (0.79)	37.08 (1.46)	47.63 (1.88)	53.97 (2.13)	1.13 (2.50)
22	1/4"	**DM80241K2204**	88.90 (3.50)	20.02 (0.79)	38.10 (1.50)	44.45 (1.75)	50.80 (2.00)	1.01 (2.24)
22	3/8”	**DM80241K2206**	92.08 (3.63)	20.02 (0.79)	38.10 (1.50)	47.63 (1.88)	53.97 (2.13)	1.06 (2.33)
25	1/4"	**DM80241K2504**	88.90 (3.50)	20.02 (0.79)	41.91 (1.65)	44.45 (1.75)	50.80 (2.00)	1.01 (2.24)
25	3/8”	**DM80241K2506**	92.08 (3.63)	20.02 (0.79)	41.91 (1.65)	47.63 (1.88)	53.97 (2.13)	1.15 (2.54)
25	1/2”	**DM80241K2508**	95.25 (3.75)	23.02 (0.91)	41.91 (1.65)	53.98 (2.13)	57.15 (2.25)	1.50 (3.30)
28	1/4"	**DM80241K2804**	92.08 (3.63)	20.02 (0.79)	44.45 (1.75)	44.45 (1.75)	50.80 (2.00)	1.04 (2.30)
28	3/8”	**DM80241K2806**	95.25 (3.75)	21.08 (0.83)	44.45 (1.75)	47.63 (1.88)	53.97 (2.13)	1.14 (2.51)
28	1/2”	**DM80241K2808**	98.43 (3.88)	23.01 (0.91)	44.45 (1.75)	53.98 (2.13)	57.15 (2.25)	1.46 (3.22)
30	1/4"	**DM80241K3004**	96.82 (3.81)	21.43 (0.84)	46.99 (1.85)	47.63 (1.88)	50.80 (2.00)	1.25 (2.75)
30	3/8”	**DM80241K3006**	100.02 (3.94)	21.08 (0.83)	46.99 (1.85)	47.63 (1.88)	53.97 (2.13)	1.28 (2.82)
30	1/2”	**DM80241K3008**	103.20 (4.06)	23.01 (0.91)	46.99 (1.85)	53.98 (2.13)	57.15 (2.25)	1.60 (3.52)
35	1/4"	**DM80241K3504**	97.64 (3.84)	25.40 (1.00)	50.80 (2.00)	53.98 (2.13)	50.80 (2.00)	1.48 (3.26)
35	3/8”	**DM80241K3506**	100.81 (3.97)	24.61 (0.97)	50.80 (2.00)	53.98 (2.13)	53.97 (2.13)	1.51 (3.34)
35	1/2”	**DM80241K3508**	103.99 (4.09)	24.61 (0.97)	50.80 (2.00)	57.15 (2.25)	57.15 (2.25)	1.69 (3.73)
38	1/4"	**DM80241K3804**	106.38 (4.19)	26.19 (1.03)	54.61 (2.15)	57.15 (2.25)	50.80 (2.00)	1.98 (4.37)
38	3/8”	**DM80241K3806**	109.55 (4.31)	26.19 (1.03)	54.61 (2.15)	57.15 (2.25)	53.97 (2.13)	2.06 (4.55)
38	1/2”	**DM80241K3808**	112.73 (4.44)	27.79 (1.09)	54.61 (2.15)	63.50 (2.50)	57.15 (2.25)	2.44 (5.38)
42	3/8”	**DM20241K2006**	109.55 (4.31)	29.36 (1.16)	60.45 (2.38)	63.50 (2.50)	53.97 (2.13)	2.39 (5.28)
42	1/2”	**DM20241K2008**	112.73 (4.44)	28.58 (1.13)	60.45 (2.38)	63.50 (2.50)	57.15 (2.25)	2.44 (5.37)
60	3/8”	**DM20241K3206**	134.95 (5.31)	38.10 (1.50)	88.90 (3.50)	81.28 (3.20)	53.97 (2.13)	4.21 (9.29)
60	1/2”	**DM20241K3208**	138.13 (5.44)	38.10 (1.50)	88.90 (3.50)	81.28 (3.20)	57.15 (2.25)	4.33 (9.55)

Note: Only available in Stainless Steel.

3D step models available upon request

Notes

Specialty Fitting Configuration Guide
DM 80 Series - Metric Tube

6mm to 60mm



JIC 37° 90° Elbow Male
DM80355



JIC 37° Branch Tee Male
DM80177



JIC 37° Run Tee Male
DM80178



JIC 37° 90° Elbow Female Swivel
DM80354



JIC 37° Branch Tee Female Swivel
DM80170



NPT 90° Elbow Male
DM80057



NPT Branch Tee Male
DM80176



NPT Run Tee Male
DM80181



NPT 90° Elbow Female
DM80061



ORFS 90° Elbow Male
DM80011



ORFS Branch Tee Male
DM80013



ORFS Run Tee Male
DM80014



ORFS 90° Elbow Female Swivel
DM80021



ORFS Branch Tee Female Swivel
DM80023



SAE 90° Elbow Male
DM80105



SAE Branch Tee Male
DM80174



SAE Run Tee Male
DM80179



SAE 90° Elbow Female
DM80387



BSPP 90° Elbow Male
DM80168



BSPP Branch Tee Male
DM80175



BSPP Run Tee Male
DM80180



BSPP 90° Elbow Female
DM80169



DIN 24° 90° Elbow Male
DM80073



DIN 24° Branch Tee Male
DM80182



DIN 24° Run Tee Male
DM80183



DIN 24° 90° Elbow Female Swivel
DM80069



DIN 24° Branch Tee Female Swivel
DM80184



Compact Elbow x Code 61 Flange
DM80231



Compact Elbow x Code 62 Flange
DM80232



90° PYPLOK® x SAE Code 61 Flange
DM80391

Specialty Fitting Configuration Guide
DM 80 Series - Metric Tube

6mm to 60mm



90° PYPLOK® x SAE Code 62 Flange
DM80392



NPS to Metric Tube Reducer
DM20801



Extra Long Coupling
DM80301

Notes

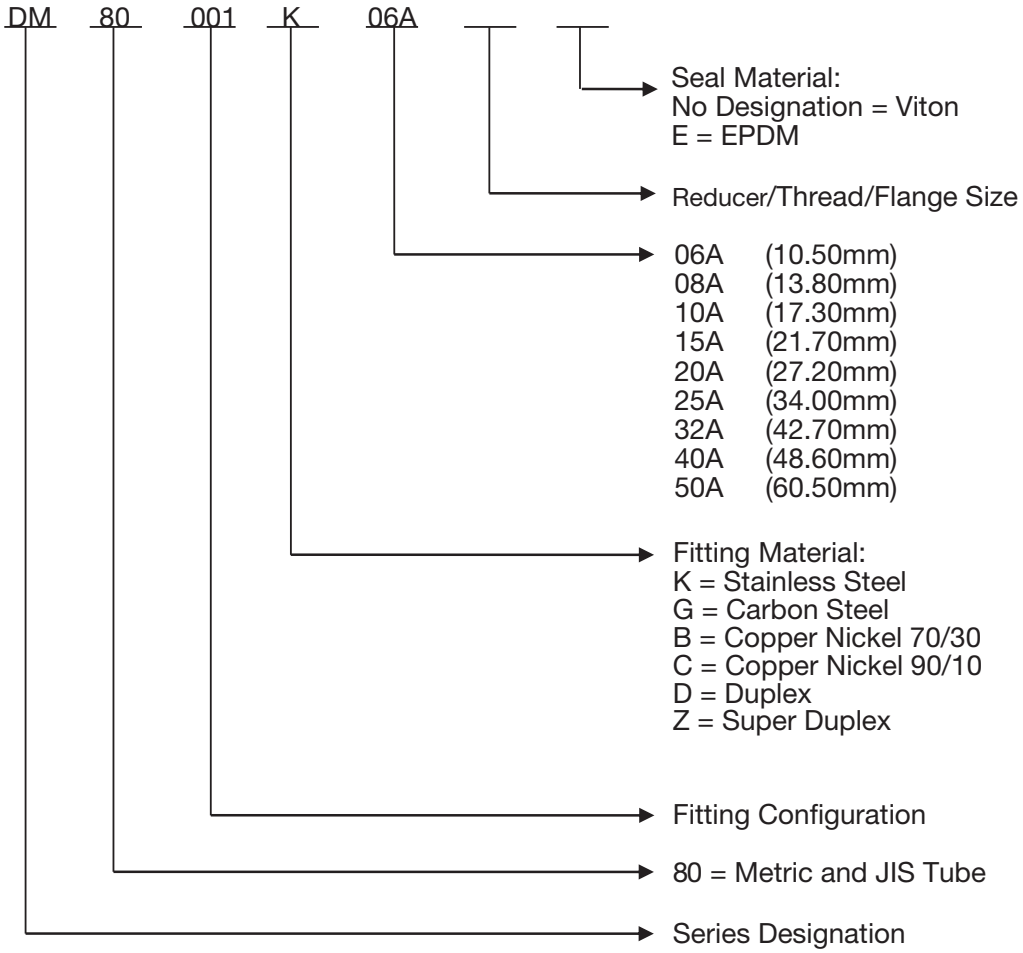
General Characteristics
DM 80 Series - JIS Metric Tube

Fitting Material Specifications	Material Specification
K = Stainless Steel	ASTM-A479/A182-316
G = Carbon Steel	ASTM-A105/A350 LF2
B = Copper Nickel 70/30	MIL-C71500
C = Copper Nickel 90/10	MIL-C70600
D = Duplex	ASTM-A479/A182-UNS31803
Z = Super Duplex	ASTM-A479/A182-UNS32750

O-Ring Material Specifications	O-Ring Temperature Limits
VITON (Brown Colour)	-15°F to 400°F (-26°C to 205°C)
EPDM (Black Colour)	-60°F to 400°F (-51°C to 205°C)

For seal compatibility and selection for each system consult factory. Other seal materials for specific applications of compatibility and temperature are available upon request.

Ordering Information



System design and safe application is the responsibility of the end-user. Consideration must be taken to confirm proper fitting selection is made to ensure proper compatibility, function and operation of the fitting within the piping system. The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® reserves the right to change technical data and product dimension, ratings and other aspects without notice.

Standard Fitting Configuration Guide
DM 80 Series - JIS Metric Tube

06A to 50A



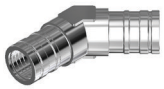
Coupling
DM80001
Page E27



Coupling with Inner Stop
DM80002
Page E27



90° Elbow
DM80003
Page E28



45° Elbow
DM80017
Page E28

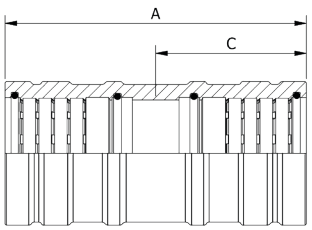


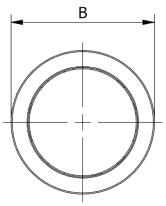
Tee
DM80004
Page E29



End Cap
DM80085
Page E29

DM 80 Series - JIS Metric Tube





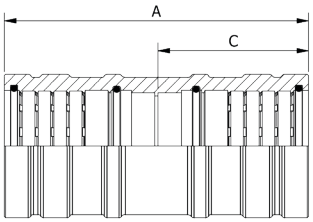


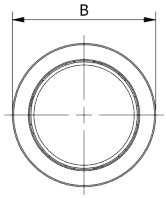
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80001G06A

Coupling, Metric, JIS - DM80001

JIS Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
06A	**DM80001*06A**	48.30 (1.90)	15.09 (0.59)	24.13 (0.95)	0.03 (0.06)
08A	**DM80001*08A**	54.00 (2.13)	18.59 (0.73)	27.00 (1.06)	0.05 (0.10)
10A	**DM80001*10A**	64.01 (2.52)	23.70 (0.93)	32.00 (1.26)	0.09 (0.19)
15A	**DM80001*15A**	74.17 (2.91)	28.70 (1.13)	37.08 (1.46)	0.15 (0.32)
20A	**DM80001*20A**	84.07 (3.31)	35.31 (1.39)	41.91 (1.65)	0.24 (0.53)
25A	**DM80001*25A**	93.98 (3.70)	41.91 (1.65)	46.99 (1.85)	0.39 (0.85)
32A	**DM80001*32A**	120.65 (4.75)	57.40 (2.26)	60.45 (2.38)	0.89 (1.96)
40A	**DM80001*40A**	127.00 (5.00)	65.53 (2.58)	63.50 (2.50)	1.26 (2.78)
50A	**DM80001*50A**	177.80 (7.00)	77.22 (3.04)	88.90 (3.50)	2.00 (4.40)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

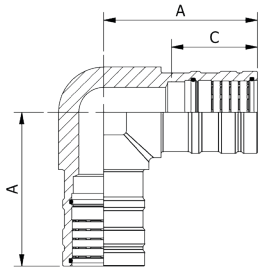
ORDER EXAMPLE:
DM80002G06A

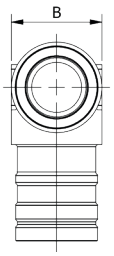
Coupling with Inner Stop, Metric, JIS - DM80002

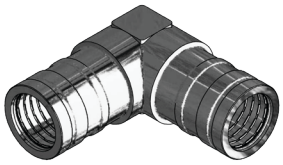
JIS Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
06A	**DM80002*06A**	49.53 (1.95)	15.09 (0.59)	24.13 (0.95)	0.06 (0.03)
08A	**DM80002*08A**	55.37 (2.18)	18.59 (0.73)	26.92 (1.06)	0.05 (0.10)
10A	**DM80002*10A**	65.28 (2.57)	23.70 (0.93)	32.00 (1.26)	0.09 (0.20)
15A	**DM80002*15A**	75.44 (2.97)	28.70 (1.13)	37.08 (1.46)	0.15 (0.32)
20A	**DM80002*20A**	85.34 (3.36)	35.31 (1.39)	41.91 (1.65)	0.24 (0.54)
25A	**DM80002*25A**	95.25 (3.75)	41.91 (1.65)	46.99 (1.85)	0.39 (0.85)
32A	**DM80002*32A**	121.92 (4.80)	57.40 (2.26)	60.45 (2.38)	0.89 (1.96)
40A	**DM80002*40A**	128.27 (5.05)	65.53 (2.58)	63.50 (2.50)	1.26 (2.78)
50A	**DM80002*50A**	179.07 (7.05)	77.22 (3.04)	88.90 (3.50)	2.00 (4.40)

3D step models available upon request

DM 80 Series - JIS Metric Tube





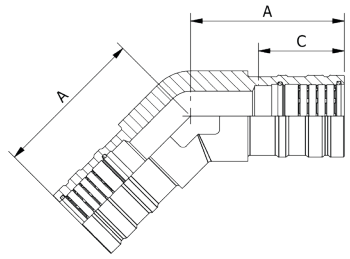


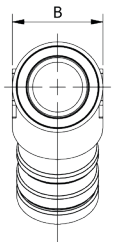
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

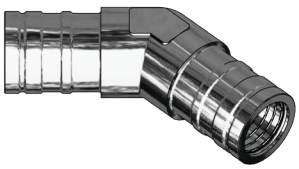
ORDER EXAMPLE:
DM80003G06A

90° Elbow, Metric, JIS - DM80003

JIS Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
06A	**DM80003*06A**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	0.08 (0.18)
08A	**DM80003*08A**	45.29 (1.78)	21.84 (0.86)	26.92 (1.06)	0.09 (0.20)
10A	**DM80003*10A**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.20 (0.43)
15A	**DM80003*15A**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	0.36 (0.80)
20A	**DM80003*20A**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	0.58 (1.27)
25A	**DM80003*25A**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	1.13 (2.50)
32A	**DM80003*32A**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	2.70 (5.95)
40A	**DM80003*40A**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	3.22 (7.10)
50A	**DM80003*50A**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	4.40 (9.70)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

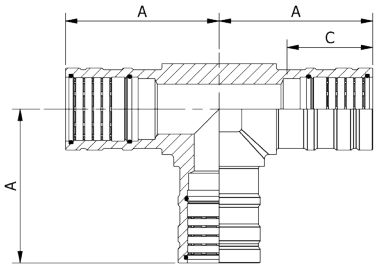
ORDER EXAMPLE:
DM80017G06A

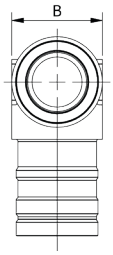
45° Elbow, Metric, JIS - DM80017

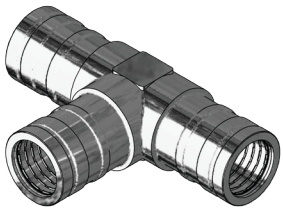
JIS Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
06A	**DM80017*06A**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	0.09 (0.19)
08A	**DM80017*08A**	45.21 (1.78)	21.84 (0.86)	26.92 (1.06)	0.13 (0.29)
10A	**DM80017*10A**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.23 (0.50)
15A	**DM80017*15A**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	0.46 (1.02)
20A	**DM80017*20A**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	0.72 (1.59)
25A	**DM80017*25A**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	1.22 (2.68)
32A	**DM80017*32A**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	2.54 (5.60)
40A	**DM80017*40A**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	3.36 (7.40)
50A	**DM80017*50A**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	4.35 (9.60)

3D step models available upon request

DM 80 Series - JIS Metric Tube





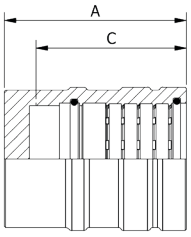


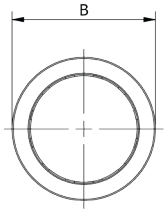
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G = CARBON STEEL
B = COPPER NICKEL 70/30

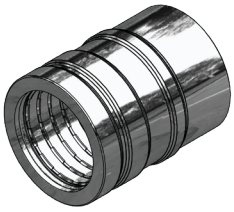
ORDER EXAMPLE:
DM80004G06A

Tee, Metric, JIS - DM80004

JIS Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
06A	**DM80004*06A**	42.67 (1.68)	21.84 (0.86)	24.13 (0.95)	0.09 (0.20)
08A	**DM80004*08A**	45.21 (1.78)	21.84 (0.86)	26.92 (1.06)	0.15 (0.34)
10A	**DM80004*10A**	52.07 (2.05)	26.92 (1.06)	32.00 (1.26)	0.29 (0.65)
15A	**DM80004*15A**	73.15 (2.88)	33.02 (1.30)	37.08 (1.46)	0.59 (1.30)
20A	**DM80004*20A**	76.96 (3.03)	40.13 (1.58)	41.91 (1.65)	0.91 (2.01)
25A	**DM80004*25A**	85.60 (3.37)	50.04 (1.97)	46.99 (1.85)	1.46 (3.22)
32A	**DM80004*32A**	107.95 (4.25)	63.50 (2.50)	60.45 (2.38)	3.22 (7.10)
40A	**DM80004*40A**	115.32 (4.54)	71.37 (2.81)	63.50 (2.50)	4.17 (9.20)
50A	**DM80004*50A**	138.43 (5.45)	82.55 (3.25)	88.90 (3.50)	5.55 (12.20)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DM80085G06A

End Cap, Metric, JIS - DM80085

JIS Size	Part Number	Dimensions - mm (Inch)			*Weight K & G kg (lbs)
		A	B	C Insertion Depth	
06A	**DM80085*06A**	33.78 (1.33)	15.09 (0.59)	24.13 (0.95)	0.02 (0.05)
08A	**DM80085*08A**	37.59 (1.48)	18.59 (0.73)	26.92 (1.06)	0.04 (0.08)
10A	**DM80085*10A**	45.72 (1.80)	23.70 (0.93)	32.00 (1.26)	0.08 (0.17)
15A	**DM80085*15A**	55.63 (2.19)	28.70 (1.13)	37.08 (1.46)	0.14 (0.31)
20A	**DM80085*20A**	60.71 (2.39)	35.31 (1.39)	41.91 (1.65)	0.23 (0.50)
25A	**DM80085*25A**	65.53 (2.58)	41.91 (1.65)	46.99 (1.85)	0.34 (0.76)
32A	**DM80085*32A**	73.15 (2.88)	57.40 (2.26)	60.45 (2.38)	0.65 (1.44)
40A	**DM80085*40A**	76.20 (3.00)	65.53 (2.58)	63.50 (2.50)	0.90 (1.20)
50A	**DM80085*50A**	104.90 (4.13)	77.22 (3.04)	88.90 (3.50)	1.42 (3.13)

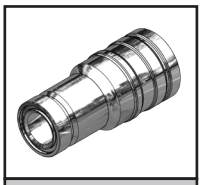
3D step models available upon request

Specialty Fitting Configuration Guide
DM 80 Series - JIS Metric Tube

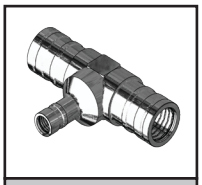
06A to 50A



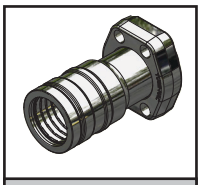
Reducer
DM80101



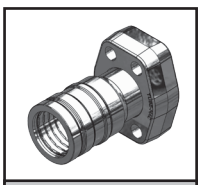
SAE Flange Body
DM80090



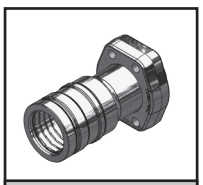
Reducing Tee
DM80104



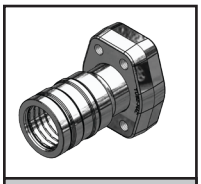
ISO 6162-1 Flange
DM80091



ISO 6162-2 Flange
DM80092



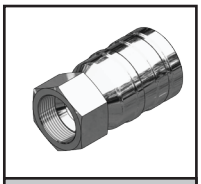
ISO 6162-1 Tapped Flange
DM80095



ISO 6162-2 Tapped Flange
DM80096



JIC 37° Male
DM80055



JIC 37° Female Swivel
DM80054



BSPP Male
DM80153



BSPP Female
DM80086



DIN 24° Male
DM80066



DIN 24° Female Swivel
DM80068



Weldable Bulkhead
DM80089



BSPP Female Branch Tee
DM80172

Notes

Notes

General Characteristics
DP 40N Series – NPS Low Pressure

Fitting Material Specifications	Material Specification
K = Stainless Steel	ASTM-A479/A182-316
G = Carbon Steel	ASTM-A105/A350 LF2
B = Copper Nickel 70/30	MIL-C71500
C = Copper Nickel 90/10	MIL-C70600

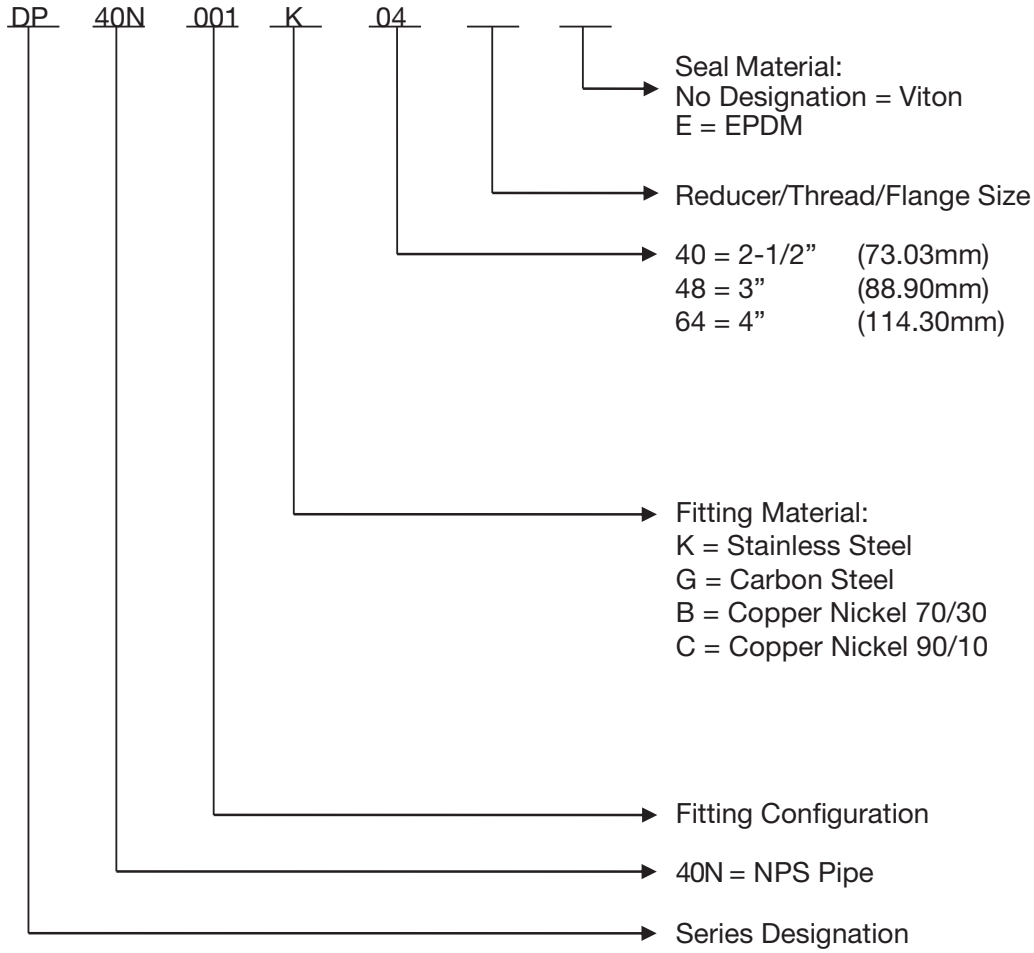
PYPLOK® DP 40 Series shapes such as Tees, Elbows and ANSI Flanged End are made as welded assemblies using ASME B16.9 SCH.40 Butt Weld Fitting with the following material specification:

K = Stainless Steel	ASTM-A312
G = Carbon Steel	ASTM-A105

O-Ring Material Specifications	O-Ring Temperature Limits
VITON (Brown Colour)	-15°F to 400°F (-26°C to 205°C)
EPDM (Black Colour)	-60°F to 400°F (-51°C to 205°C)

For seal compatibility and selection for each system consult factory. Other seal materials for specific applications of compatibility and temperature are available upon request.

Ordering Information



System design and safe application is the responsibility of the end-user. Consideration must be taken to confirm proper fitting selection is made to ensure proper compatibility, function and operation of the fitting within the piping system. The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® reserves the right to change technical data and product dimension, ratings and other aspects without notice.

Standard Fitting Configuration Guide
DP 40N Series - NPS Low Pressure

2-1/2” to 4”



Low Pressure Coupling
DP40N100
Page F3



Low Pressure 90° Elbow
DP40N300
Page F3



Low Pressure 45° Elbow
DP40N017
Page F4



Low Pressure Tee
DP40N400
Page F4



Low Pressure Reducing Tee
DP40N104
Page F5



Low Pressure Reducer
DP40N101
Page F5



Low Pressure End Cap
DP40N085
Page F6



Low Pressure Flange - 150#
DP40N018
Page F6

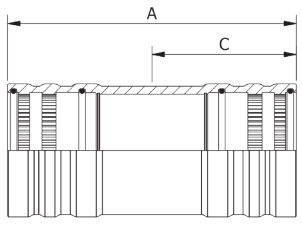


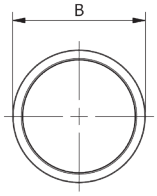
Low Pressure SAE Code 61 Flange
DP40N091
Page F7

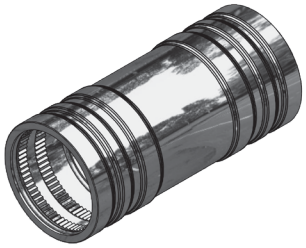


Low Pressure SAE Code 61 Tapped Flange
DP40N095
Page F7

DP 40N Series – NPS Low Pressure





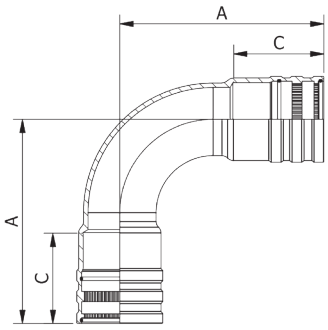


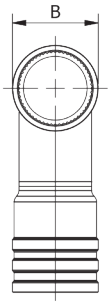
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40N100G40

Low Pressure Coupling, NPS - DP40N100

Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
2-1/2"	**DP40N100*40**	7.50 (190.50)	3.45 (87.63)	3.75 (95.25)	4.38 (1.99)
3"	**DP40N100*48**	8.70 (220.98)	4.14 (105.16)	4.35 (110.49)	6.68 (3.03)
4"	**DP40N100*64**	13.50 (342.90)	5.32 (135.13)	6.75 (171.45)	18.63 (8.45)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40N300G40

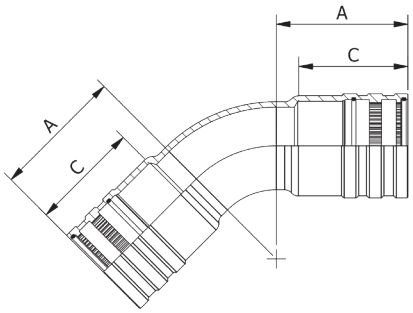
Low Pressure 90° Elbow, NPS - DP40N300

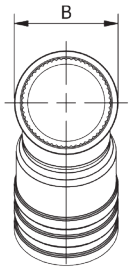
Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
2-1/2"	**DP40N300*40**	8.53 (216.66)	3.45 (87.63)	3.75 (95.25)	8.35 (3.79)
3"	**DP40N300*48**	9.71 (246.63)	4.14 (105.16)	4.35 (110.49)	12.57 (5.70)
4"	**DP40N300*64**	14.13 (358.90)	5.32 (135.13)	6.75 (171.45)	30.60 (13.88)

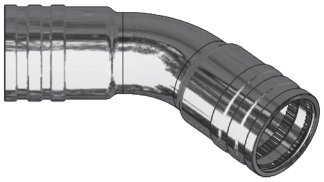
PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 SCH.40 Butt Weld Fittings.

3D step models available upon request

DP 40N Series – NPS Low Pressure







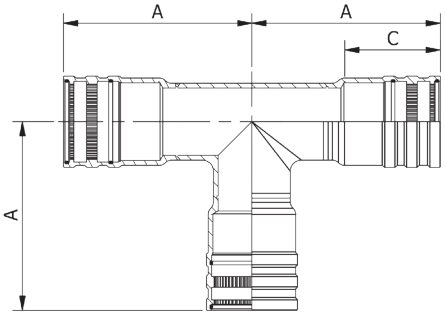
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

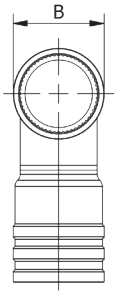
ORDER EXAMPLE:
DP40N017G40

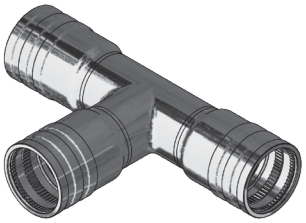
Low Pressure 45° Elbow, NPS - DP40N017

Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
2-1/2"	**DP40N017*40**	6.53 (165.86)	3.45 (87.63)	3.75 (95.25)	2.71 (1.23)
3"	**DP40N017*48**	7.20 (182.88)	4.14 (105.16)	4.35 (110.49)	10.10 (4.58)
4"	**DP40N017*64**	10.61 (269.49)	5.32 (135.13)	6.75 (171.45)	26.28 (11.92)

PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 SCH.40 Butt Weld Fittings.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40N400G40

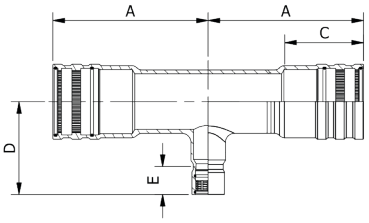
Low Pressure Tee, NPS - DP40N400

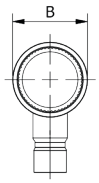
Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
2-1/2"	**DP40N400*40**	7.78 (197.61)	3.45 (87.63)	3.75 (95.25)	12.80 (5.81)
3"	**DP40N400*48**	8.58 (217.93)	4.14 (105.16)	4.35 (110.49)	18.10 (8.21)
4"	**DP40N400*64**	12.25 (311.15)	5.32 (135.13)	6.75 (171.45)	42.12 (19.11)

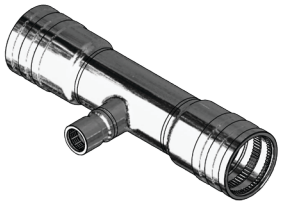
PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 SCH.40 Butt Weld Fittings.

3D step models available upon request

DP 40N Series – NPS Low Pressure







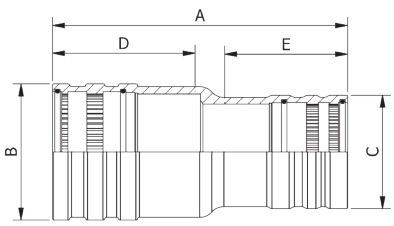
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B = COPPER NICKEL 70/30

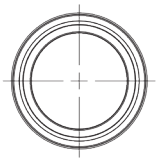
ORDER EXAMPLE:
DP40N104G4032

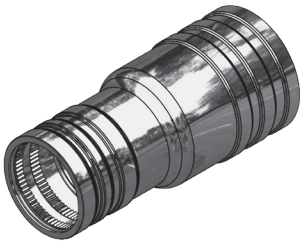
Low Pressure Reducing Tee, NPS - DP40N104

Port 1 Size NPS	Port 2 Size NPS	Part Number	Dimensions - Inch (mm)					*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E Insertion Depth	
2-1/2”	2"	**DP40N104*4032**	7.78 (197.61)	3.45 (87.63)	3.75 (95.25)	7.48 (189.99)	3.50 (88.90)	11.65 (5.28)
3”	2"	**DP40N104*4832**	8.58 (217.93)	4.14 (105.16)	4.35 (110.49)	7.76 (197.10)	3.50 (88.90)	15.57 (7.06)
3"	2-1/2"	**DP40N104*4840**	8.58 (217.93)	4.14 (105.16)	4.35 (110.49)	8.03 (203.96)	3.75 (95.25)	15.72 (7.13)
4"	3"	**DP40N104*6448**	12.25 (311.15)	5.32 (135.13)	6.75 (171.45)	9.09 (230.89)	4.35 (110.49)	34.60 (15.69)

PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 SCH.40 Butt Weld Fittings.







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40N101G4024

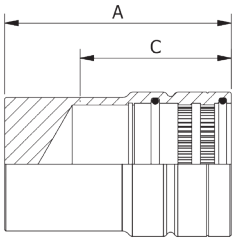
Other configurations available. Contact factory for details.

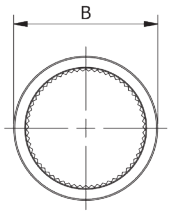
Low Pressure Reducer, NPS - DP40N101

End 1 Size NPS	End 2 Size NPS	Part Number	Dimensions - mm (Inch)					*Weight K & G lbs (kg)
			A	B	C	D Insertion Depth	E Insertion Depth	
2-1/2”	1-1/2"	**DP40N101*4024**	8.00 (203.20)	3.45 (87.63)	2.58 (65.53)	3.75 (95.25)	2.50 (63.50)	5.50 (2.49)
2-1/2”	2"	**DP40N101*4032**	8.25 (209.55)	3.45 (87.63)	3.04 (77.22)	3.75 (95.25)	3.50 (88.90)	5.42 (2.46)
3”	2"	**DP40N101*4832**	9.00 (228.60)	4.14 (105.16)	3.04 (77.22)	4.35 (110.49)	3.50 (88.90)	7.21 (3.27)
3"	2-1/2"	**DP40N101*4840**	9.00 (228.60)	4.14 (105.16)	3.45 (87.63)	4.35 (110.49)	3.75 (95.25)	6.48 (2.94)
4"	3"	**DP40N101*6448**	13.00 (330.20)	5.35 (135.13)	4.14 (105.16)	6.75 (171.45)	4.35 (110.49)	16.10 (7.30)

3D step models available upon request

DP 40N Series – NPS Low Pressure





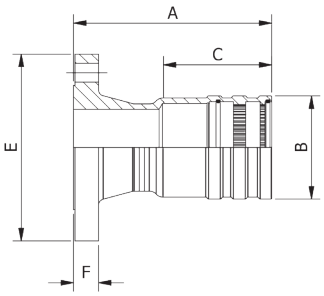


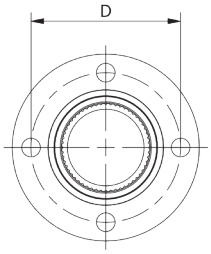
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

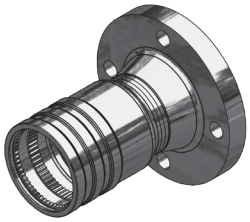
ORDER EXAMPLE:
DP40N085G40

Low Pressure End Cap, NPS - DP40N085

Size NPS	Part Number	Dimensions - Inch (mm)			*Weight K & G lbs (kg)
		A	B	C Insertion Depth	
2-1/2"	**DP40N085*40**	4.50 (114.30)	3.45 (87.63)	3.75 (95.25)	3.66 (1.66)
3"	**DP40N085*48**	5.23 (129.54)	4.14 (105.16)	4.35 (110.49)	5.49 (2.49)
4"	**DP40N085*64**	7.63 (190.50)	5.32 (135.13)	6.75 (171.45)	12.57 (5.70)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40N018G40

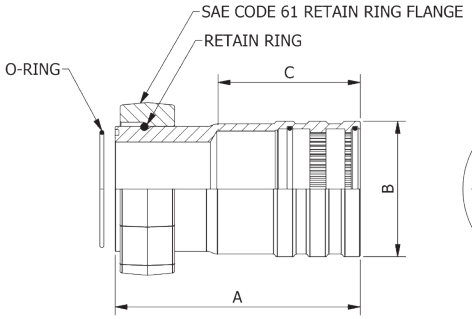
Low Pressure Flange – ANSI 150#, NPS - DP40N018

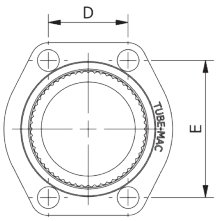
Size NPS	Flange Size	Part Number	Dimensions - mm (Inch)						Bolt Size	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E	F		
2-1/2"	2-1/2"	**DP40N018*40**	7.53 (191.26)	3.45 (87.63)	3.75 (95.25)	5.50 (139.70)	7.00 (177.80)	0.94 (23.88)	5/8" UNC	12.73 (5.77)
3"	3"	**DP40N018*48**	7.96 (202.18)	4.14 (105.16)	4.35 (110.49)	6.00 (152.40)	7.50 (190.50)	0.94 (23.88)	5/8" UNC	19.26 (8.74)
4"	4"	**DP40N018*64**	11.10 (281.94)	5.32 (135.13)	6.75 (171.45)	7.50 (190.50)	9.00 (228.60)	1.19 (30.23)	5/8" UNC	27.33 (12.40)

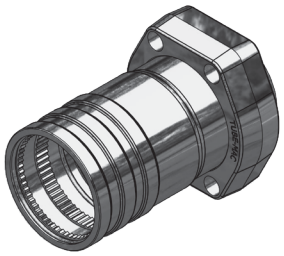
PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 SCH.40 Butt Weld Fittings.

3D step models available upon request

DP 40N Series – NPS Low Pressure





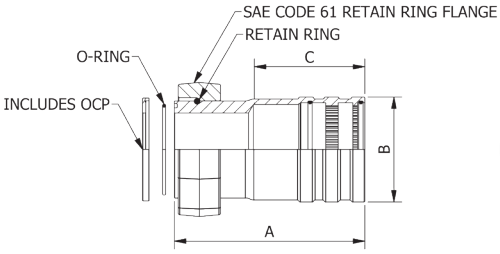


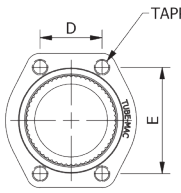
**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

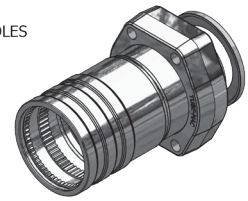
ORDER EXAMPLE:
DP40N091G40

Low Pressure SAE Code 61 Flange, NPS - DP40N091

Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)					Bolt Minimum Grade 8	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
2-1/2”	2-1/2”	**DP40N091*40**	7.00 (177.80)	3.45 (87.63)	3.75 (95.25)	2.00 (50.80)	3.49 (88.65)	1/2" UNC	8.41 (3.81)
3”	3”	**DP40N091*48**	7.50 (190.50)	4.14 (105.16)	4.35 (110.49)	2.44 (61.98)	4.19 (106.43)	5/8” UNC	12.40 (5.62)
4”	4”	**DP40N091*64**	11.00 (279.40)	5.32 (135.13)	6.75 (171.45)	3.06 (77.72)	5.13 (130.30)	5/8” UNC	22.65 (10.27)







**MATERIAL CODE:*
K = STAINLESS STEEL
G = CARBON STEEL
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40N095G40

Low Pressure SAE Code 61 Tapped Flange, NPS - DP40N095

Size NPS	Flange Size	Part Number	Dimensions - Inch (mm)					Tap UNC-2B	*Weight K & G lbs (kg)
			A	B	C Insertion Depth	D	E		
2-1/2”	2-1/2”	**DP40N095*40**	7.00 (177.80)	3.45 (87.63)	3.75 (95.25)	2.00 (50.80)	3.49 (88.65)	1/2"-13	8.41 (3.81)
3”	3”	**DP40N095*48**	7.50 (190.50)	4.14 (105.16)	4.35 (110.49)	2.44 (61.98)	4.19 (106.43)	5/8”-11	12.40 (5.62)
4”	4”	**DP40N095*64**	11.00 (279.40)	5.32 (135.13)	6.75 (171.45)	3.06 (77.72)	5.13 (130.30)	5/8”-11	22.65 (10.27)

3D step models available upon request

Notes

General Characteristics
DP 40M Series - Metric Low Pressure

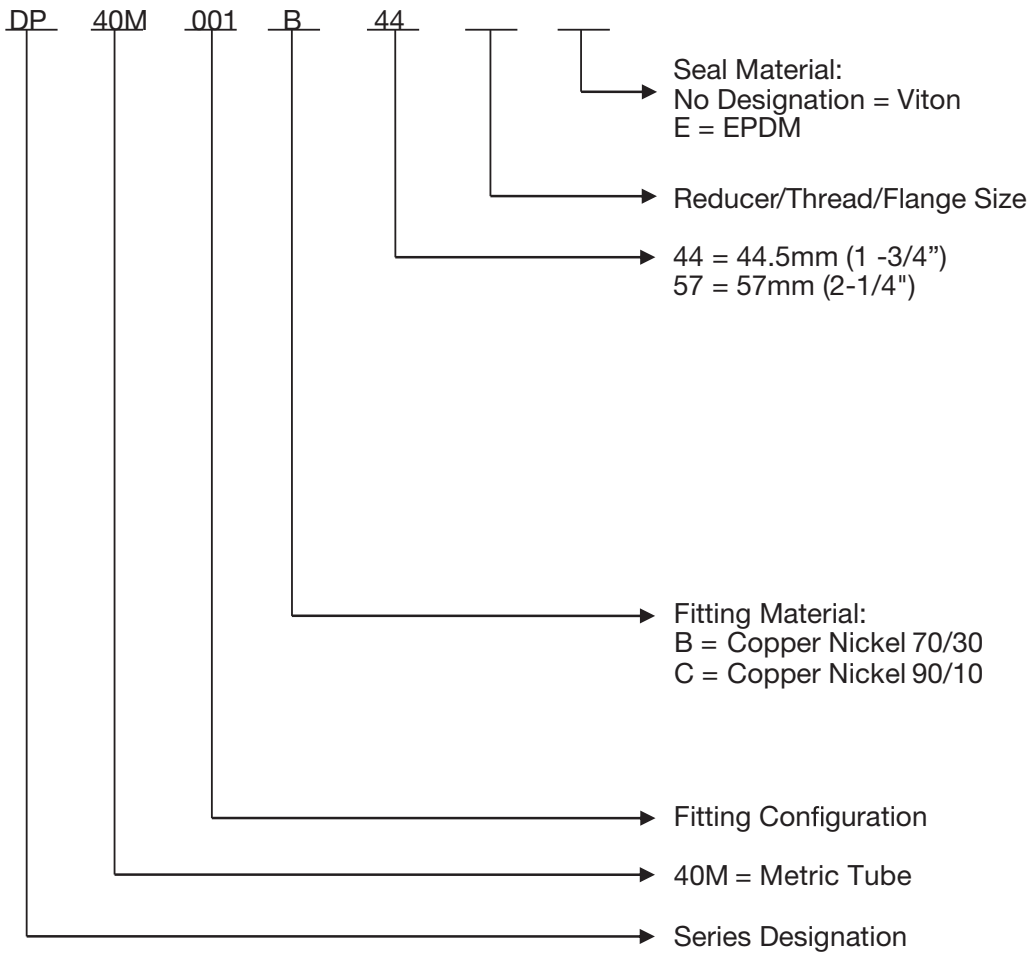
Fitting Material Specifications	Material Specification
B = Copper Nickel 70/30	MIL-C71500
C = Copper Nickel 90/10	MIL-C70600

PYPLOK® DP 40M Series shapes such as Tees, Elbows and ANSI Flanged End are made as welded assemblies using ASME B16.9 CL 200 Butt Weld Fitting.

O-Ring Material Specifications	O-Ring Temperature Limits
VITON (Brown Colour)	-15°F to 400°F (-26°C to 205°C)
EPDM (Black Colour)	-60°F to 400°F (-51°C to 205°C)

For seal compatibility and selection for each system consult factory. Other seal materials for specific applications of compatibility and temperature are available upon request.

Ordering Information



System design and safe application is the responsibility of the end-user. Consideration must be taken to confirm proper fitting selection is made to ensure proper compatibility, function and operation of the fitting within the piping system. The technical and performance information such as weights, dimensions and ratings in this catalogue supersede all previous published data. Tube-Mac® reserves the right to change technical data and product dimension, ratings and other aspects without notice.

Standard Fitting Configuration Guide
DP 40M Series - Metric Low Pressure

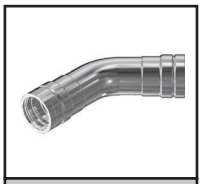
44mm to 57mm



Coupling
DP40M100
Page G3



90° Elbow
DP40M300
Page G3



45° Elbow
DP40M017
Page G4



Tee
DP40M400
Page G4

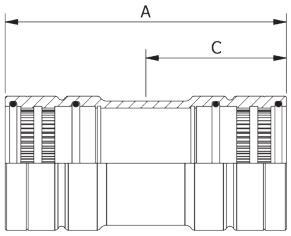


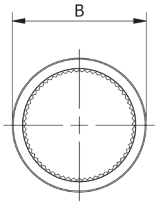
End Cap
DP40M085
Page G5

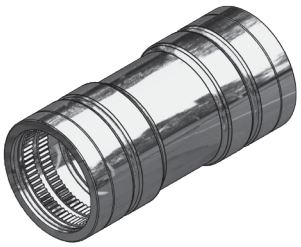


Flange - ANSI #150
DP40M018
Page G5

DP 40M Series - Metric Low Pressure





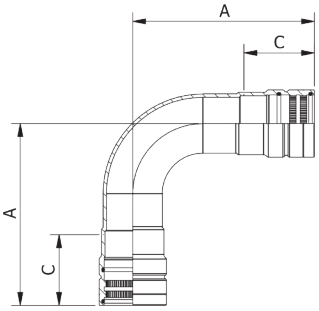


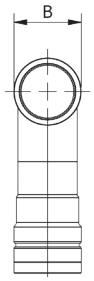
**MATERIAL CODE:*
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40M100B44

Coupling, Metric - DP40M100

Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight B kg (lbs)
		A	B	C Insertion Depth	
44.5	**DP40M100B44**	115.01 (4.53)	54.89 (2.16)	57.50 (2.26)	0.59 (1.31)
57	**DP40M100B57**	125.00 (4.92)	66.80 (2.63)	62.48 (2.46)	0.69 (1.52)







**MATERIAL CODE:*
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40M300B44

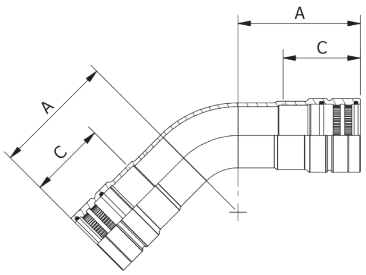
90° Elbow, Metric - DP40M300

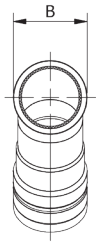
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight B kg (lbs)
		A	B	C Insertion Depth	
44.5	**DP40M300B44**	148.11 (5.83)	54.89 (2.16)	57.50 (2.26)	1.02 (2.24)
57	**DP40M300B57**	177.04 (6.97)	66.80 (2.63)	62.48 (2.46)	1.92 (4.23)

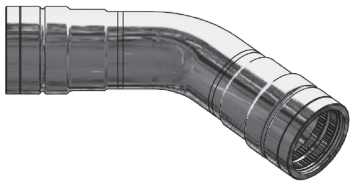
PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 CL200 Butt Weld Fittings.

3D step models available upon request

DP 40M Series - Metric Low Pressure







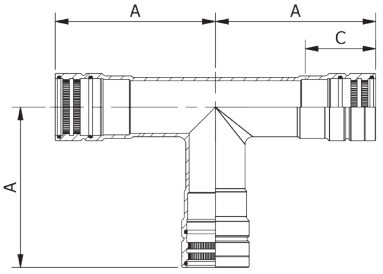
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B = COPPER NICKEL 70/30

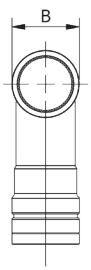
ORDER EXAMPLE:
DP40M017B44

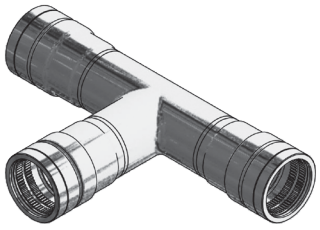
45° Elbow, Metric - DP40M017

Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight B kg (lbs)
		A	B	C Insertion Depth	
44.5	**DP40M017B44**	113.54 (4.47)	54.89 (2.16)	57.50 (2.26)	0.91 (2.01)
57	**DP40M017B57**	177.04 (6.97)	66.80 (2.63)	62.48 (2.46)	1.54 (3.40)

PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 CL200 Butt Weld Fittings.







**MATERIAL CODE:*
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40M400B44

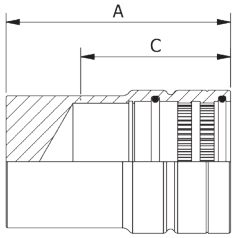
Tee, Metric - DP40M400

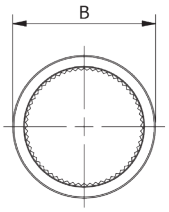
Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight B kg (lbs)
		A	B	C Insertion Depth	
44.5	**DP40M400B44**	130.56 (5.14)	54.89 (2.16)	57.50 (2.26)	1.39 (3.07)
57	**DP40M400B57**	146.05 (5.75)	66.80 (2.63)	62.48 (2.46)	2.39 (5.27)

PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 CL200 Butt Weld Fittings.

3D step models available upon request

DP 40M Series - Metric Low Pressure





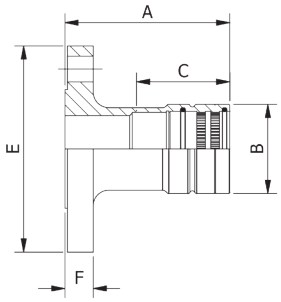


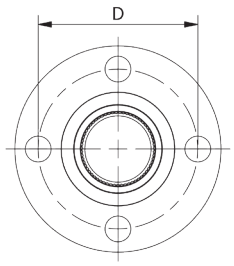
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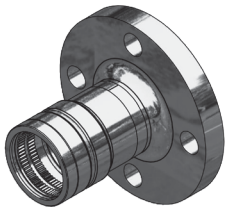
ORDER EXAMPLE:
DP40M085B44

End Cap, Metric - DP40M085

Size OD (mm)	Part Number	Dimensions - mm (Inch)			*Weight B kg (lbs)
		A	B	C Insertion Depth	
44.5	**DP40M085B44**	86.36 (3.40)	54.89 (2.16)	57.50 (2.26)	0.70 (1.55)
57	**DP40M085B57**	89.66 (3.53)	66.80 (2.63)	62.48 (2.46)	0.98 (2.16)







**MATERIAL CODE:*
B = COPPER NICKEL 70/30

ORDER EXAMPLE:
DP40M118B44

Flange – ANSI #150, Metric - DP40M018

Size OD (mm)	Flange Size	Part Number	Dimensions - mm (Inch)						*Weight B kg (lbs)
			A	B	C Insertion Depth	D	E	F	
44.5	1-1/2"	**DP40M018B4424**	104.78 (4.13)	54.89 (2.16)	57.50 (2.26)	98.55 (3.88)	127.00 (5.00)	17.53 (0.69)	1.98 (4.37)
57	2"	**DP40M018B5732**	114.30 (4.50)	66.80 (2.63)	62.48 (2.46)	120.65 (4.75)	152.40 (6.00)	19.05 (0.75)	3.01 (6.63)

PYPLOK® DP 40 Series shapes such Tees, Elbows and ANSI Flanged Ends are made as welded assemblies using ASME B16.9 CL200 Butt Weld Fittings.

3D step models available upon request

Notes

PYPLOK® Tooling

The PYPLOK® Tooling System Consists of the Following Items

- Tube-Mac® Swage Tooling
- 10,000 PSI/690 bar Hydraulic Power Supply
- Inspection/Marking Gauges

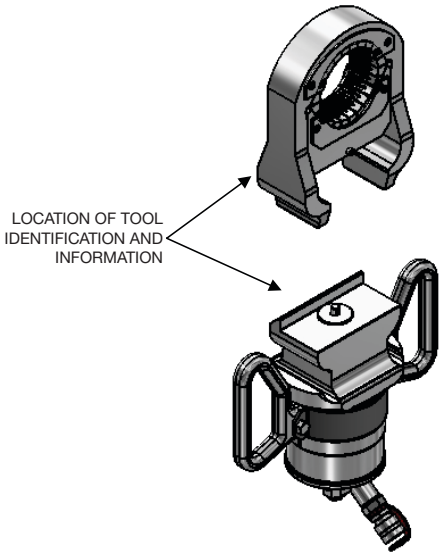
Swage Tooling

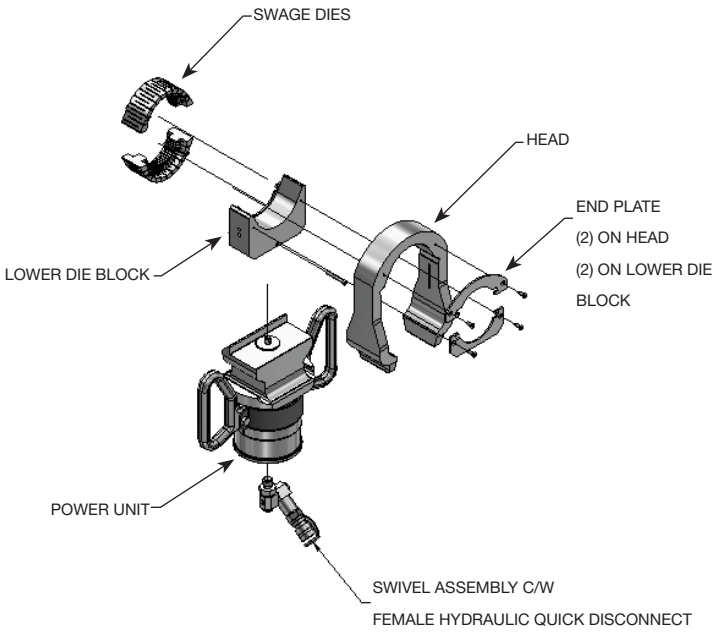
The tools are lightweight, portable and activated by 10,000 PSI/690 bar hydraulic pressure. The swage tools are identical in design. The only difference is the force generated by each model.

The following models are used to install the PYPLOK® fittings:
DLT10 – 1/4" OD and 6mm-8mm
DLT20 – 1/4"-3/8" NPS, 1/4"-5/8" OD and 6mm-16mm
DLT40 – 1/4"-3/4" NPS, 3/8"-1" OD and 8mm-30mm
DLT55 – 1/2"-1-1/2" NPS, 1"-2" OD and 22mm-57mm
DLT70 – 1"-3" NPS, 1-1/2"-2" OD and 35mm-76mm
DLT86 – 3"-4" NPS

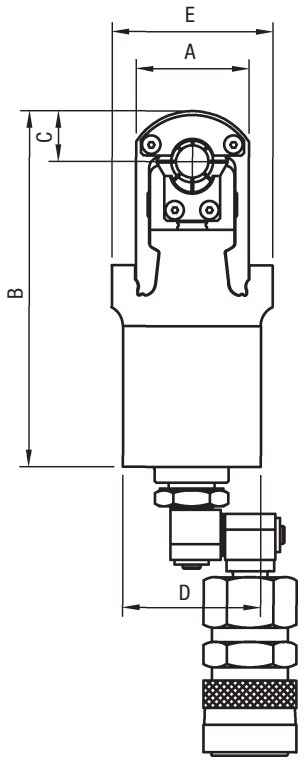
Swage Tooling Primary Components

The PYPLOK® swage tooling assembly has four main components:
- Power Unit
- Head Assembly
- Swage Dies
- Die Block Assembly





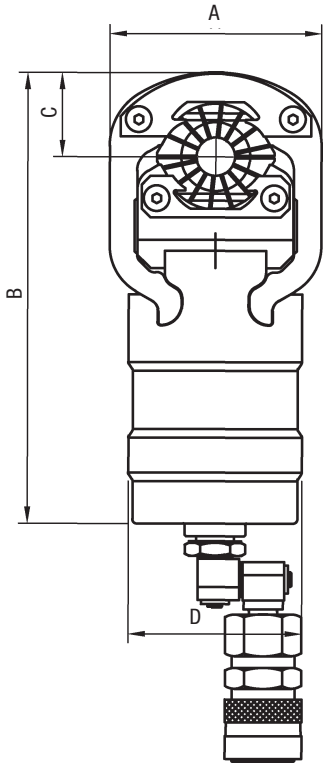
PYPLOK® Tooling Dimensions



Model 10

Head Size	Dimensions - Inch (mm)				
	A	B	C	D	E
01' Series	1.33 (33.86)	4.22 (107.21)	0.60 (15.24)	1.63 (41.40)	1.90 (48.26)

Head Size	Weight - lbs (kg)		
	Power Unit	Head Assembly	Complete Tool
01' Series	2.00 (0.90)	0.03 (0.20)	2.40 (1.10)

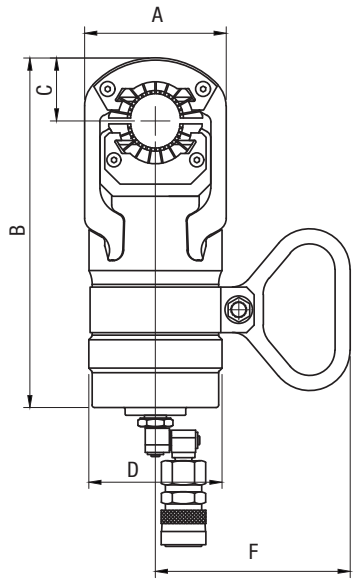


Model 20

Head Size	Dimensions - Inch (mm)			
	A	B	C	D
00' Series	3.04 (77.22)	6.48 (164.67)	1.21 (30.84)	2.49 (63.25)

Head Size	Weight - lbs (kg)		
	Power Unit	Head Assembly	Complete Tool
00' Series	4.40 (2.00)	3.10 (1.40)	7.50 (3.40)

PYPLOK® Tooling Dimensions

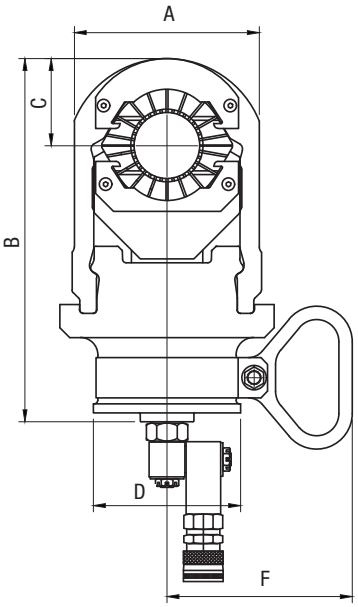


*Model 40

Head Size	Dimensions - Inch (mm)				
	A	B	C	D	F
00' Series	3.29 (83.57)	8.23 (209.12)	1.15 (29.26)	3.29 (83.59)	4.81 (122.23)
02' Series	3.50 (88.88)	8.63 (219.28)	1.55 (39.45)	3.29 (83.59)	4.81 (122.23)

Head Size	Weight - lbs (kg)		
	Power Unit	Head Assembly	Complete Tool
00' Series	9.20 (4.20)	4.20 (1.90)	13.40 (6.10)
02' Series	9.20 (4.20)	5.30 (2.40)	14.60 (6.60)

*Handle is an option. Not standard with model 40.



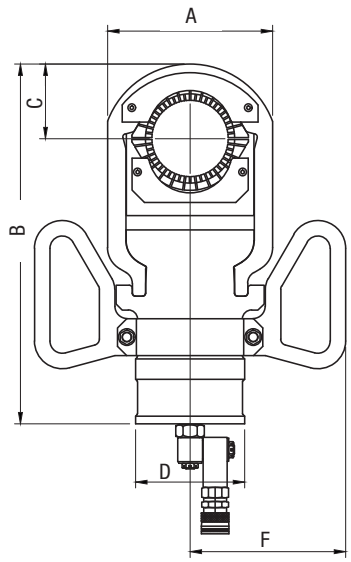
*Model 55

Head Size	Dimensions - Inch (mm)				
	A	B	C	D	F
01' Series	5.18 (131.57)	9.92 (251.92)	2.43 (61.70)	4.12 (104.65)	5.19 (131.78)

Head Size	Weight - lbs (kg)		
	Power Unit	Head Assembly	Complete Tool
01' Series	16.70 (7.60)	11.20 (5.10)	27.90 (12.70)

*Handle is an option. Not standard with model 55.

PYPLOK® Tooling Dimensions

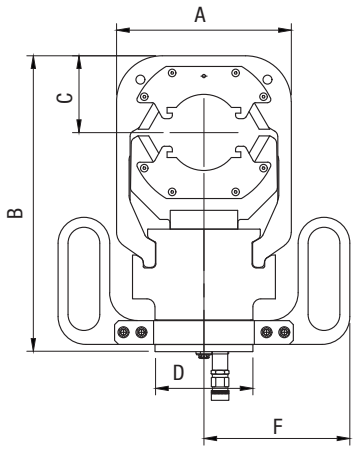


*Model 70

Head Size	Dimensions - Inch (mm)				
	A	B	C	D	F
01' Series	6.68 (169.70)	14.62 (371.45)	3.03 (76.99)	4.41 (112.07)	6.30 (159.97)
02' Series	7.55 (191.77)	15.23 (386.77)	3.62 (92.05)	4.41 (112.07)	6.30 (159.97)

Head Size	Weight - lbs (kg)		
	Power Unit	Head Assembly	Complete Tool
01' Series	30.80 (14.00)	17.60 (8.00)	48.40 (22.00)
02' Series	30.80 (14.00)	23.10 (10.50)	53.90 (24.50)

*Handle comes standard with model 70.



*Model 86

Head Size	Dimensions - Inch (mm)				
	A	B	C	D	F
00' Series	11.00 (279.40)	19.50 (495.30)	5.00 (127.00)	6.25 (158.75)	18.00 (457.20)

Head Size	Weight - lbs (kg)		
	Power Unit	Head Assembly	Complete Tool
00' Series	61.70 (28.00)	62.20 (28.20)	123.90 (56.20)

*Handle comes standard with model 86.

PYPLOK® Tooling Size Range Coverage

DM 20 Series - NPS Pipe

	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	3"
Model 20									
Model 40									
Model 55									
Model 70									
Model 86									

DM 60 Series - OD Tube

	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
Model 10									
Model 20									
Model 40									
Model 55									
Model 70									

DM 80 Series - Metric Tube

	6mm	8mm	10mm	12mm	15mm	16mm	18mm	20mm	22mm	25mm	28mm	30mm	35mm	38mm	42mm	50mm	60mm
Model 10																	
Model 20																	
Model 40																	
Model 55																	
Model 70																	

DP 40N Series - NPS Low Pressure

	2-1/2"	3"	4"
Model 70			
Model 86			

DP 40M Series - Metric Low Pressure

	44.5mm	57mm
Model 55		

PYPLOK® Tool Matrix
DM 20 Series - NPS Pipe

Model 40 Power Unit - DLT40MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 40-00' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1/4"	DM 20 Series	DLT40PYIG3804	DLT40PYDI3804	DLT40MADA0000	DLT40MAHD0000	DLT40PYEU0000	DLT40PYEL0000		DLT40PYHA3804
3/8"		DLT40PYIG3806	DLT40PYDI3806						DLT40PYHA3806
Model 40 - 02' Series									
1/2"	DM 20 Series	DLT40PYIG3808	DLT40PYDI3808	DLT40MADA0002	DLT40MAHD0002	DLT40PYEU0002	DLT40PYEL0002		DLT40PYHA3808
3/4"		DLT40PYIG3812	DLT40PYDI3812						DLT40PYHA3812

Model 55 Power Unit - DLT55MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 55 - 01' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1/2"	DM 20 Series	DLT40PYIG3808	DLT55PYDI3808	DLT55MADA0001	DLT55MAHD0001	DLT55PYEU0001	DLT55PYEL0001		DLT55PYHA3808
3/4"		DLT40PYIG3812	DLT55PYDI3812						DLT55PYHA3812
1"		DLT55PYIG3816	DLT55PYDI3816						DLT55PYHA3816
1-1/4"		DLT55PYIG3820	DLT55PYDI3820						DLT55PYHA3820
1-1/2"		DLT55PYIG3824	DLT55PYDI3824						DLT55PYHA3824

Model 70 Power Unit - DLT70MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 70 - 01' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1"	DM 20 Series	DLT55PYIG3816	DLT70PYDI3816	DLT70MADA0001	DLT70MAHD0001	DLT70PYEU0001	DLT70PYEL0001		DLT70PYHA3816
1-1/4"		DLT55PYIG3820	DLT70PYDI3820						DLT70PYHA3820
1-1/2"		DLT55PYIG3824	DLT70PYDI3824						DLT70PYHA3824
2"		DLT70PYIG3832	DLT70PYDI3832						DLT70PYHA3832

Model 86 Power Unit - DLT86MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 86 - 00' Series								1/4-28 x 1/2" Socket Cap	DLT86PYHA3848
3"	DM 20 Series	DLT86PYIG3848	DLT86PYDI3848	DLT86MADA0000	DLT86MAHD0000	DLT86PYEU0001	DLT86PYEL0001		

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

PYPLOK® Tool Matrix
DM 60 Series - OD Tube

Model 10 Power Unit - DLT10MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Inboard	Upper Outboard	Lower Inboard	Lower Outboard	*Head Assembly
Model 10 - 01' Series										
1/4"	DM 60 Series	DLT10PYIG3704	DLT10PYDI3704	DLT10MADA0001	DLT10MAHD0001	DLT10PSEU4006	DLT10PYFU704	DLT10PSEL4006	DLT10PSFL4006	DLT10PYHA3704

Model 20 Power Unit - DLT20MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 20 - 00' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
3/8"	DM 60 Series	DLT40PYIG3706	DLT20PYDI3706	DLT20MADA0001	DLT20MADA0000	DLT40PYEU0000	DLT40PYEL0000		DLT20PYHA3706
1/2"		DLT40PYIG3708	DLT20PYDI3708						DLT20PYHA3708
5/8"		DLT40PYIG3710	DLT20PYDI3916						DLT20PYHA3916

Model 40 Power Unit - DLT40MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 40 - 00' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
3/8"	DM 60 Series	DLT40PYIG3706	DLT40PYDI3706	DLT40MADA0000	DLT40MAHD0000	DLT40PYEU0000	DLT40PYEL0000		DLT40PYHA3706
1/2"		DLT40PYIG3708	DLT40PYDI3708						DLT40PYHA3708
5/8"		DLT40PYIG3710	DLT40PYDI3916						DLT40PYHA3916
Model 40 - 02' Series									
3/4"	DM 60 Series	DLT40PYIG3712	DLT40PYDI3712	DLT40MADA0002	DLT40MAHD0002	DLT40PYEU0002	DLT40PYEL0002		DLT40PYHA3712
1"		DLT40PYIG3716	DLT40PYDI3716						DLT40PYHA3716

Model 55 Power Unit - DLT55MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 55 - 01' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1"	DM 60 Series	DLT40PYIG3716	DLT55PYDI3716	DLT55MADA0001	DLT55MAHD0001	DLT55PYEU0001	DLT55PYEL0001		DLT55PYHA3716
1-1/4"		DLT55PYIG3720	DLT55PYDI3720						DLT55PYHA3720
1-1/2"		DLT55PYIG3938	DLT55PYDI3938						DLT55PYHA3938
2"		DLT55PYIG3732	DLT55PYDI3824						DLT55PYHA3824

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

PYPLOK® Tool Matrix
DM 80 Series - Metric Tube

Model 10 Power Unit - DLT10MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Inboard	Upper Outboard	Lower Inboard	Lower Outboard	*Head Assembly
Model 10 - 01' Series										
6mm	DM 80 Series	DLT10PYIG3906	DLT10PYDI3704	DLT10MADA0001	DLT10MAHD0001	DLT10PSEU4006	DLT10PYFU704	DLT10PSEL4006	DLT10PSFL4006	DLT10PYHA3704
8mm		DLT10PYIG3908	DLT10PYDI3908							DLT10PYHA3908

Model 20 Power Unit - DLT20MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 20 - 00' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
8mm	DM 80 Series	DLT40PYIG3908	DLT20PYDI3908	DLT20MADA0000	DLT20MAHD0000	DLT40PYEU0000	DLT40PYEL0000		DLT20PYHA3908
10mm		DLT40PYIG3910	DLT20PYDI3910						DLT20PYHA3910
12mm		DLT40PYIG3912	DLT20PYDI3912						DLT20PYHA3912
15mm		DLT40PYIG3915	DLT20PYDI3916						DLT20PYHA3916
16mm		DLT40PYIG3916	DLT20PYDI3916						DLT20PYHA3916

Model 40 Power Unit - DLT40MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 40 - 00' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
8mm	DM 80 Series	DLT40PYIG3908	DLT20PYDI3908	DLT40MADA0000	DLT40MAHD0000	DLT40PYEU0000	DLT40PYEL0000		DLT40PYHA3908
10mm		DLT40PYIG3910	DLT40PYDI3910						DLT40PYHA3910
12mm		DLT40PYIG3912	DLT40PYDI3912						DLT40PYHA3912
14mm		DLT40PYIG3914	DLT40PYDI3804						DLT40PYHA3804
15mm		DLT40PYIG3915	DLT40PYDI3916						DLT40PYHA3916
16mm		DLT40PYIG3916	DLT40PYDI3916						DLT40PYHA3916
18mm		DLT40PYIG3918	DLT40PYDI3806						DLT40PYHA3806
20mm		DLT40PYIG3920	DLT40PYDI3920						DLT40PYHA3920
Model 40 - 02' Series									
22mm	DM 80 Series	DLT40PYIG3922	DLT40PYDI3808	DLT40MADA0002	DLT40MAHD0002	DLT40PYEU0002	DLT40PYEL0002		DLT40PYHA3808
25mm		DLT40PYIG3925	DLT40PYDI3925						DLT40PYHA3925
28mm		DLT40PYIG3928	DLT40PYDI3812						DLT40PYHA3812
30mm		DLT40PYIG3930	DLT40PYDI3930						DLT40PYHA3930

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

PYPLOK® Tool Matrix
DM 80 Series - Metric Tube

Model 55 Power Unit -DLT55MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 55 - 01' Series									
22mm	DM 80 Series	DLT40PYIG3922	DLT55PYDI3808	DLT55MADA0001	DLT55MAHD0001	DLT55PYEU0001	DLT55PYEU0001	MS51595-61 10-24 x 3/8" Flat Socket Cap	DLT55PYHA3808
25mm		DLT40PYIG3925	DLT55PYDI3925						DLT55PYHA3925
28mm		DLT40PYIG3928	DLT55PYDI3812						DLT55PYHA3812
30mm		DLT40PYIG3930	DLT55PYDI3930						DLT55PYHA3930
35mm		DLT55PYIG3935	DLT55PYDI3816						DLT55PYHA3816
38mm		DLT55PYIG3938	DLT55PYDI3938						DLT55PYHA3938
42mm		DLT55PYIG3820	DLT55PYDI3820						DLT55PYHA3820
50mm		DLT55PYIG3950	DLT55PYDI3824						DLT55PYHA3824

Model 70 Power Unit - DLT70MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 70 - 01' Series									
35mm	DM 80 Series	DLT55PYIG3935	DLT70PYDI3816	DLT70MADA0001	DLT70MAHD0001	DLT70PYEU0001	DLT70PYEL0001	MS51595-61 10-24 x 3/8" Flat Socket Cap	DLT70PYHA3816
38mm		DLT55PYIG3938	DLT70PYDI3938						DLT70PYHA3938
42mm		DLT55PYIG3820	DLT70PYDI3820						DLT70PYHA3820
50mm		DLT55PYIG3950	DLT70PYDI3824						DLT70PYHA3824
60mm		DLT70PYIG3832	DLT70PYDI3832						DLT70PYHA3832

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

PYPLOK® Tool Matrix
DM 80 Series - JIS Metric Tube

Model 40 Power Unit - DLT40MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 40-00' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1/4"	**08A**	DLT40PYIG3908A	DLT40PYDI3804	DLT40MADA0000	DLT40MAHD0000	DLT40PYEU0000	DLT40PYEL0000		DLT40PYHA3804
3/8"	**10A**	DLT40PYIG3910A	DLT40PYDI3806						DLT40PYHA3806
Model 40 - 02' Series									
1/2"	**15A**	DLT40PYIG3915A	DLT40PYDI3808	DLT40MADA0002	DLT40MAHD0002	DLT40PYEU0002	DLT40PYEL0002		DLT40PYHA3808
3/4"	**20A**	DLT40PYIG3920A	DLT40PYDI3812						DLT40PYHA3812

Model 55 Power Unit - DLT55MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 55 - 01' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1/2"	**15A**	DLT40PYIG3915A	DLT55PYDI3808	DLT55MADA0001	DLT55MAHD0001	DLT55PYEU0001	DLT55PYEL0001		DLT55PYHA3808
3/4"	**20A**	DLT40PYIG3920A	DLT55PYDI3812						DLT55PYHA3812
1"	**25A**	DLT55PYIG3925A	DLT55PYDI3816						DLT55PYHA3816
1-1/4"	**32A**	DLT55PYIG3932A	DLT55PYDI3820						DLT55PYHA3820
1-1/2"	**40A**	DLT55PYIG3940A	DLT55PYDI3824						DLT55PYHA3824

Model 70 Power Unit - DLT70MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 70 - 01' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
1"	**25A**	DLT55PYIG3925A	DLT70PYDI3816	DLT70MADA0001	DLT70MAHD0001	DLT70PYEU0001	DLT70PYEL0001		DLT70PYHA3816
1-1/4"	**32A**	DLT55PYIG3932A	DLT70PYDI3820						DLT70PYHA3820
1-1/2"	**40A**	DLT55PYIG3940A	DLT70PYDI3824						DLT70PYHA3824
2"	**50A**	DLT70PYIG3950A	DLT70PYDI3832						DLT70PYHA3832

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

PYPLOK® Tool Matrix
DP 40N Series - NPS Low Pressure

Model 70 Power Unit - DLT70MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 70 - 02' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
2-1/2"	DP 40N Series	DLT70PYIG4040	DLT70PYDI4040	DLT70MADA0002	DLT70MAHD0002	DLT70PYEU0002	DLT70PYEL0002		DLT70PYHA4040
3"		DLT70PYIG4048	DLT70PYDI4048						DLT70PYHA4048

Model 86 Power Unit - DLT86MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 86 - 00' Series								1/4-28 x 1/2" Socket Cap	DLT86PYHA4064
4"	DP 40N Series	DLT86PYIG4064	DLT86PYDI4064	DLT86MADA0000	DLT86MAHD0000	DLT86PYEP0001	DLT86PYEP0001		

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

DP 40M Series - Metric Low Pressure

Model 55 Power Unit - DLT55MAPW0000

Size	Fitting Series	Inspection Gauge	Die Set	Die Block	Head	Upper Endplates	Lower Endplates	Endplate Bolts	*Head Assembly
Model 55 - 01' Series								MS51595-61 10-24 x 3/8" Flat Socket Cap	
44.5mm	DP 40M Series	DLT55PYIG4244	DLT55PYDI3944	DLT55MADA0001	DLT55MAHD0001	DLT55PYEU0001	DLT55PYEL0001		DLT55PYHA3944
57mm		DLT55PYIG4257	DLT55PYDI3957						DLT55PYHA3957

*Head Assembly Includes: Die Set, Die Block, Head, Endplates and Endplate Bolts

PYPLOK® Tooling

PYPLOK® Tooling CE Compliance

The PYPLOK® swage tooling assembly has four main components:

- Power Unit
- Head Assembly
- Swage Dies
- Die Block Assembly

PYPLOK® Swaging Tool Pump Requirements

1. Depending on application and environment the choice of Electric, Battery, Pneumatic or Hand Operated pumps can be used.
2. The hydraulic pumps used for operation of the PYPLOK® Tooling must be capable of producing up to but not exceeding 10,000 PSI/690 bar and have internal relief valve to prevent pump from producing more than 10,000 PSI/690 bar within the PYPLOK® Tools.
3. Power operated pumps must operate in hold-to-run mode (hydraulic supply only as long as push-button or pedal is activated, hydraulic Stop or Release when push-button or pedal are released). PYPLOK® has defined PL = c (EN ISO 13849) as requirement for the control circuit.
4. The hydraulic hose and quick connectors joining the pump to the PYPLOK® Tooling must be rated for use with a 10,000 PSI/690 bar Pump.

Pumps Offered by Tube-Mac® for Use with the PYPLOK® Tooling

Part Number	Description	Weight lbs (kg)
P392	Hand Pump	9.00 (4.10)
XA11G	Pneumatic Pump	19.40 (8.80)
PUD1100EU102	220 Volt Electric Pump	31.00 (14.05)
PUD1100BU112	110 Volt Electric Pump	31.00 (14.05)
B68M-P18	Battery Pump, 110V Charger	20.28 (9.20)
B68M-P18-220	Battery Pump, 220V Charger	20.28 (9.20)

Pump come complete with carrying case and a 10 ft., 10,000 PSI/690 bar, non-conductive hose









PYPLOK® Tooling Accessories

PYPLOK® Tooling Accessories

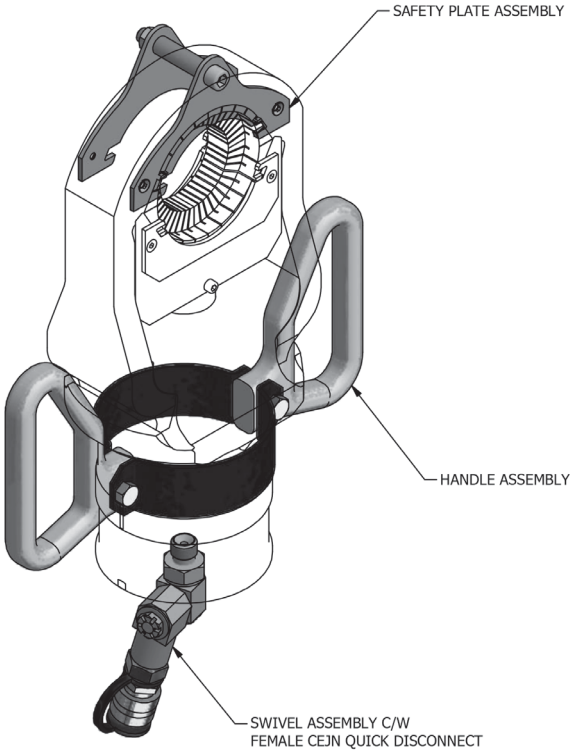
DLT10PYCC1200	Case for (1) Model 10 Power Unit and (2) Head Assemblies
DLT20PYCC1200	Case for (1) Model 20 Power Unit and (2) Head Assemblies
DLT40PYCC1501	Case for (1) Model 40 Power Unit and (6) Head Assemblies
DLT55PYCC1501	Case for (1) Model 55 Power Unit and (1) Head Assembly
DLT55PYCC1502	Case for (2) Model 55 Head Assemblies
DLT70PYCC1501	Case for (1) Model 70 Power Unit
DLT70PYCC1502	Case for (2) Model 70 Head Assemblies
DLT70PYCC1503	Case for (1) Model 70 3" Head Assembly
DLT86PYCC0001	Case for (1) Model 86 Power Unit
DLT86PYCC0002	Case for (1) Model 86 Head Assembly
DLTXXPYSL0000	Swage Lube
DLT00HOSE0010	10' Hose Assembly comes with Quick Disconnects
DLT00HOSE0015	15' Hose Assembly comes with Quick Disconnects
DLT00SABP1040	Quick Disconnect Swivel Assembly for Model 10/20/40
DLT00SABP5570	Quick Disconnect Swivel Asembly for Model 55/70

Spare Endplates and Bolts

DLT10PYFU3704	Model 10 - Upper Out Endplate
DLT10PSEU4006	Model 10 - Upper In Endplate
DLT10PSFL4006	Model 10 - Lower Out Endplate
DLT10PSEL4006	Model 10 - Lower In Endplate
DLT20PYEU0000	Model 20 - Upper Endplate
DLT20PYEL0000	Model 20 - Lower Endplate
DLT40PYEU0000	Model 40 - 00' Series Upper Endplate
DLT40PYEL0000	Model 40 - 00' Series Lower Endplate
DLT40PYEU0002	Model 40 - 02' Series Upper Endplate
DLT40PYEL0002	Model 40 - 02' Series Lower Endplate
DLT55PYEU0001	Model 55 - Upper Endplate
DLT55PYEL0001	Model 55 - Lower Endplate
DLT70PYEU0001	Model 70 - 01' Series Upper Endplate
DLT70PYEL0001	Model 70 - 01' Series Lower Endplate
DLT70PYEU0002	Model 70 - 02' Series Upper Endplate
DLT70PYEL0002	Model 70 - 02' Series Lower Endplate
DLT86PYEP0001	Model 86 - Upper/Lower Endplate
10-24 x 3/8"	Flat Socket Cap Bolts for Model 20/40/55/70 Endplates
1/4-28 x 1/2"	Socket Cap Bolts for Model 86 Endplates

Optional Safety Endplates and Handles

DLT40PSPA000	Model 40 - 00' Series Upper Safety Endplate Kit
DLT40PSPA0002	Model 40 - 02' Series Upper Safety Endplate Kit
DLT55PSPA0001	Model 55 - Series Upper Safety Endplate Kit
DLT70PSPA0001	Model 70 - 01' Series Upper Safety Endplate Kit
DLT70PSPA0002	Model 70 - 02' Series Upper Safety Endplate Kit
DLT00PHLA4055	Model 40/55 Handle Kit
DLT70PHLA0000	Model 70 Handle Kit
DLT40PHLA0000	Model 40 Handle K
DLT55PHLA0000	Model 55 Handle Kit
DLT70PHLA0000	Model 70 Handle Kit



Notes

Installation Procedures

PYPLOK® Swaging Tool Parts and Equipment

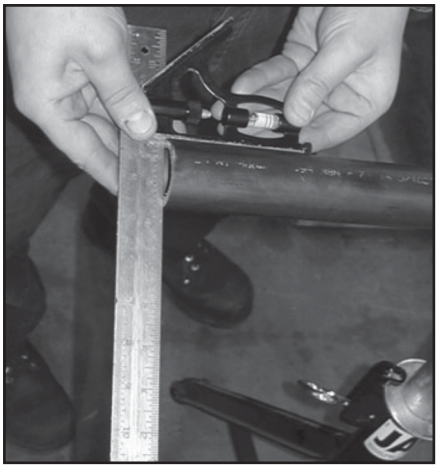
Please see PYPLOK® Installation Manual for more in-depth information on installation procedures.

WARNING TOOL TO BE OPERATED BY QUALIFIED TRAINED PERSONNEL ONLY. REFER TO PYPLOK INSTALLATION MANUAL FOR PROPER OPERATING METHODS AND SAFE PRACTICES. DUE TO HIGH SWAGING FORCES, HEAD AND UPPER SECTION OF POWER UNIT MUST BE FULLY ENGAGED AND FLUSH ON BOTH SIDES. PARTIAL ENGAGEMENT MAY CAUSE TOOL FAILURE. SWIVEL AND QUICK CONNECT ASSEMBLY MUST BE INSTALLED PROPERLY BEFORE OPERATION OF PUMP. MAXIMUM ALLOWABLE OPERATING PRESSURE MUST NOT EXCEED 10,000 PSI / 690 BAR. **WARNING**

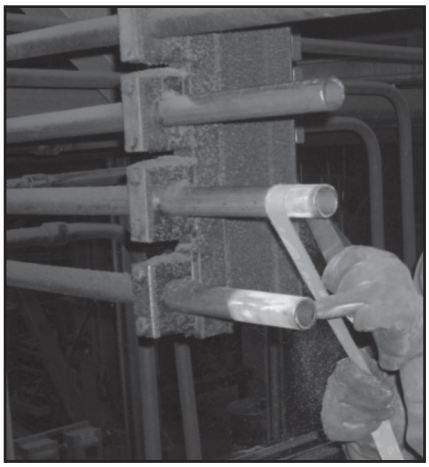
1. The PYPLOK® Tooling is intended for installing PYPLOK® Fittings in a safe and efficient manner. The operation of the tooling by means of an external hydraulic supply to crimp the PYPLOK® Fitting into place on matching tube or piping systems for a permanent, leak free, non-welded connection.
2. Select appropriate swage die set, apply swage lube to the bottom surface of the dies and landing areas of Lower Die Block and Head then insert (1) half of die set into lower die block and (1) half of die set into head. Attach endplates with bolts ensuring the tabs of the swage dies are located in the open slots of the endplates. Note that MSDS information for swage lube is available upon request and prolonged skin contact should be avoided although it is non-hazardous.
3. Check to ensure that the swage dies are located properly within the endplates and can move freely when pushed down.
4. Follow the above process when changing swage die sets for other sizes.
5. Used dies are to be inspected for debris and cleaned if required. Clean with pressurized air, soft brush or hand cloth removing all old swage lube and debris within the die slots and other surfaces.

Installation Procedures

Pipe Preparation



- Cut the pipe to desired length.
- Ensure that cut is square but up to 5° off square is acceptable.



- The pipe must be free of any scale, rust, paint, lacquer and any major scratches, gouges or weld seams.
- Use aluminum oxide cloth grit 80-400 or an abrasive wheel/tool to remove all debris from the pipe down to bare metal.
- It is important to note that all cleaning of the external pipe must only be done radially around the pipe and not longitudinally.
- Do not use a grinder or any other tool that will leave a rough, uneven or flat surface after cleaning.
- Do not use a wire wheel to attempt to remove lacquer.



- Deburr outside diameter of pipe with a file and the inside diameter with an internal deburring tool.
- It is critical to remove all sharp edges to prevent damage to the PYPLOK® fitting seals.

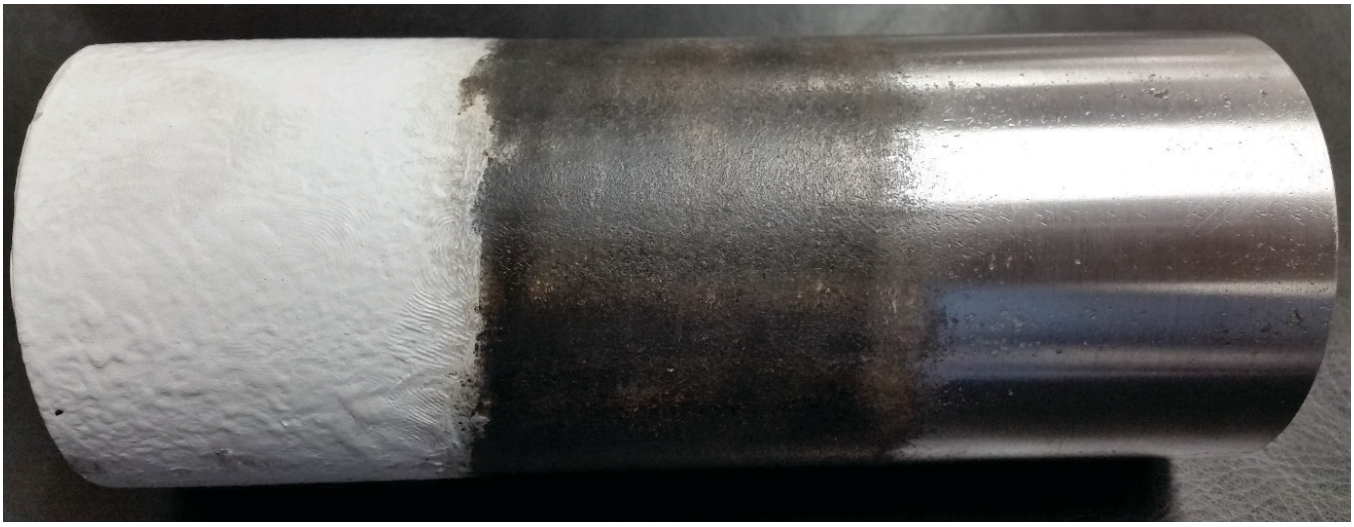
Installation Procedures

Pipe Preparation - Special Notice

Carbon Steel Pipe With Surface Treatment

Special attention must be taken when using Carbon pipe with surface applications including lacquer, paint, galvanizing and other treatments. All surface treatments must be completely removed as per Pipe Preparation methods listed so that the sealing surface of the pipe is bare metal. If the sealing area is not cleared down to bare, smooth metal proper sealing of the PYPLOK® Fitting will be limited. Examples of improper pipe surfaces are found below:

Surface Not Cleaned | **Lacquer Not Removed From Pipe** | **Surface Properly Cleaned/ Bare Metal Surface**

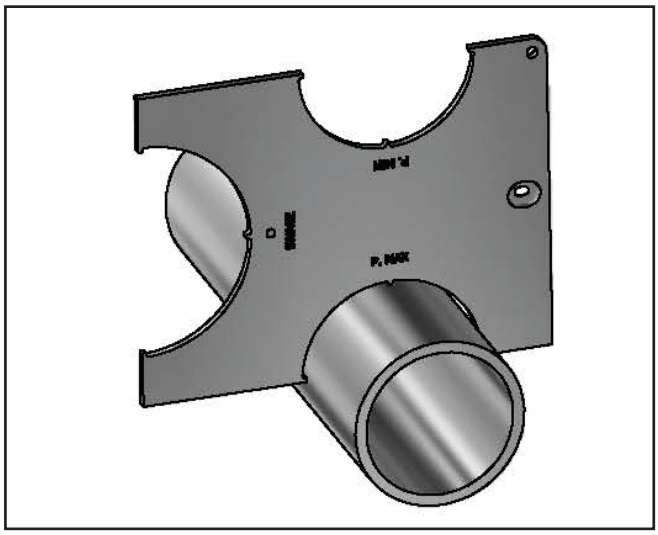


Gas Applications

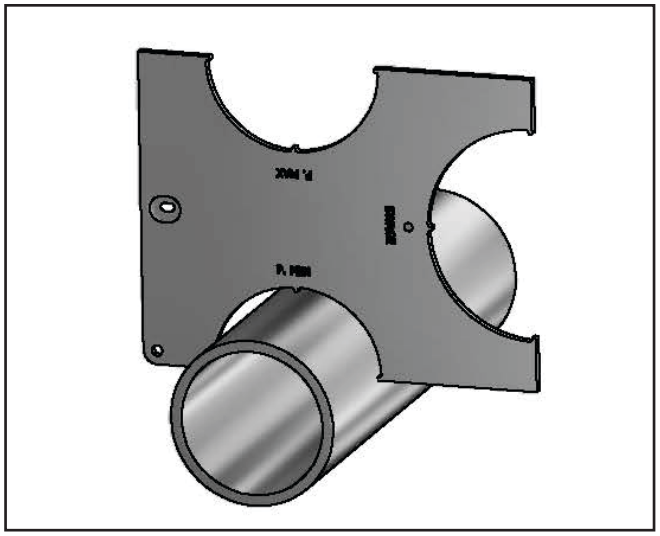
Gases such as nitrogen are made of tiny molecules able to go through the smallest leak paths on pipe surfaces. Any foreign debris including surface treatments and or gouges/scratches can cause leaks. The most reliable connection is achieved when proper installation instructions are followed including very specific pipe surface preparation. Whenever possible, heavier pipe wall thickness should be used to offer a more reliable seal as the heavier wall will offer more resistance to the compressed fitting compared to thin wall. It may be required to pressure test a gas system to a much greater level than the operational pressure required. This will help set the pipe against the compressed fitting. Therefore, it is acceptable to pressure test the system to the maximum design pressure of the fittings or pipe (whichever is the lower value) in accordance with national and local regulations.

Installation Procedures

Verify Diameter of the Pipe Using the Inspection Gauge



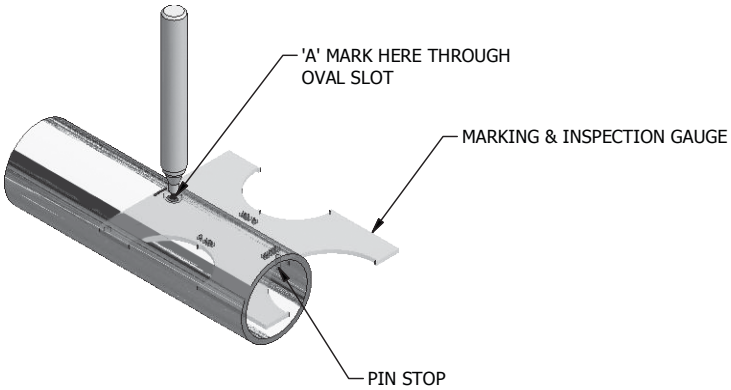
- P. Max gauge should fit 360° around the pipe. The area of the pipe to be inspected is the location where the fitting is intended to be installed.

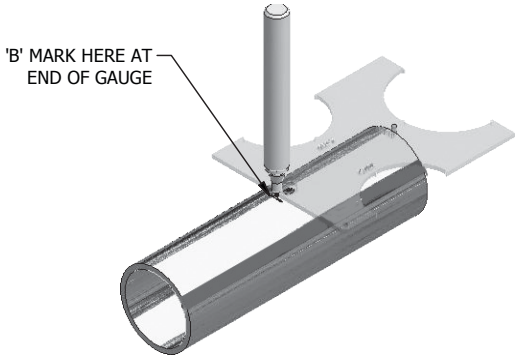


- P. Min gauge should not be able to fit at any point 360° around pipe. The area of the pipe to be inspected is the location where the fitting is intended to be installed.

Note: If these criteria are not met, then a new location on the existing line that is acceptable must be used or the pipe cannot be used and new material is required. Pipe that does not meet the required dimension may not properly operate after crimping.

Pipe Marking



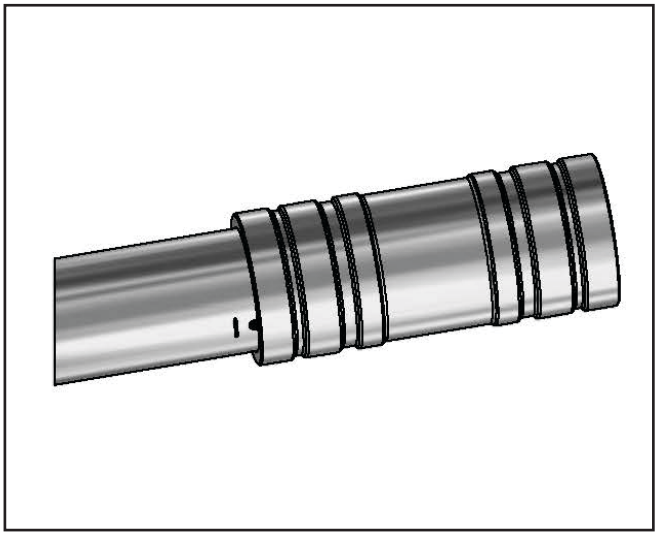


- Position the inspection gauge on the pipe with the pin stop pressed up against the pipe end as shown.
- Make the “A” oval mark on the pipe through the oval marking slot in gauge.
- Make the “B” line mark at the end of the gauge.

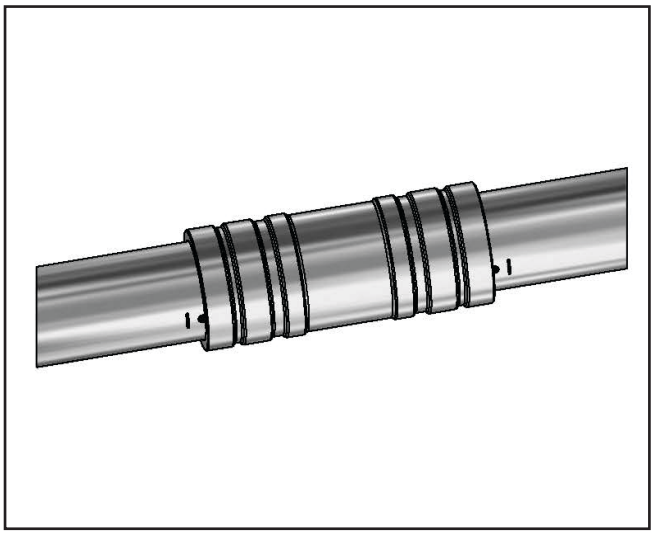
Note: The minimum space between two fittings is 2x Pipe/Tube Diameter. This allows for the inspection gauge to fit between two connections for inspection and proper operation of the fitting. It must also be noted that no fitting can be installed within the radius of a bend and only straight pipe section can be used.

Installation Procedures

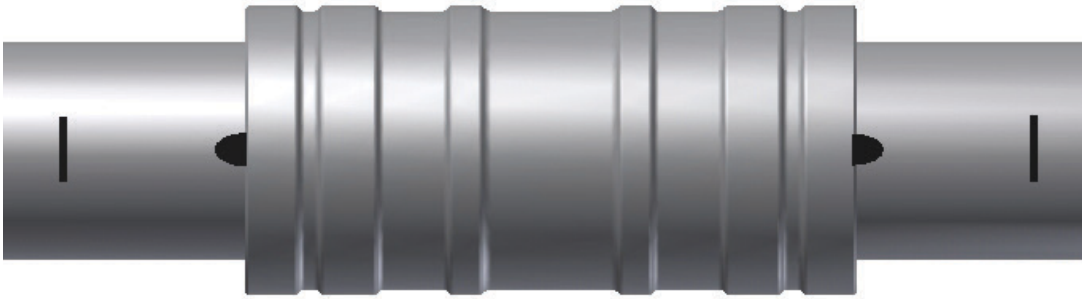
Coupling Position and Alignment



- Slide the coupling on to the end of pipe to first mark which is oval shaped.
- The edge of the coupling must touch any part of the oval mark.



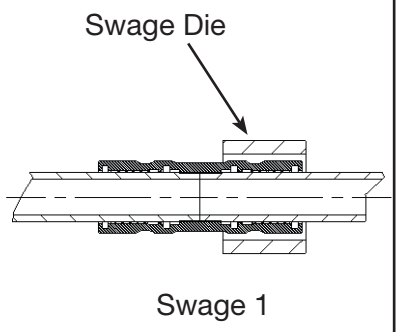
- Insert end of other pipe into coupling so the ends of pipe touch inside of the coupling.
- The markings should be visible as shown.



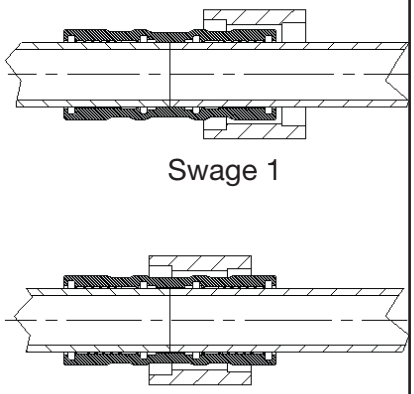
Installation Procedures

Swage Sequence

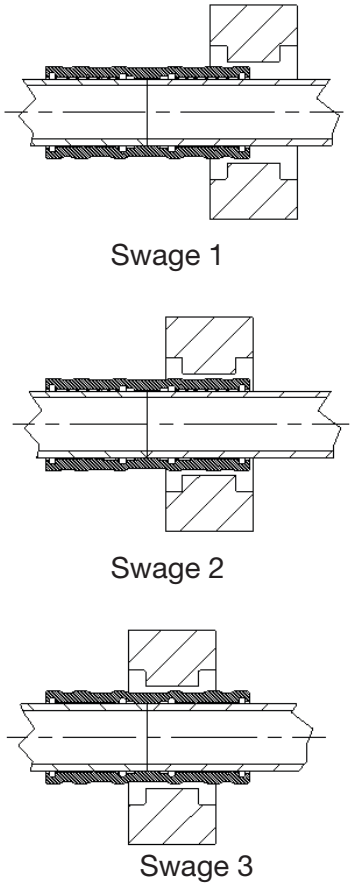
Single Swage Sequence



Two Swage Sequence



Three Swage Sequence

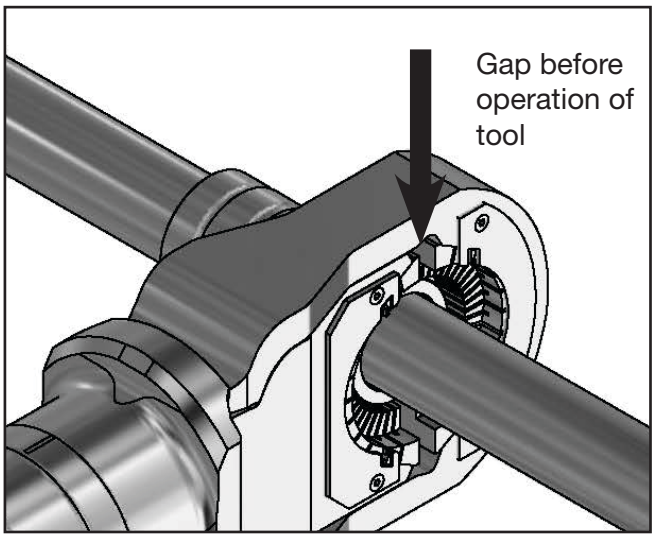


- All raised surfaces on coupling must be swaged.
- Swaging order is shown above for 1 swage, 2 swage and 3 swage configurations which varies by fitting size, series and tool model.
- Always start with the outside swage first and work towards the middle of the coupling.

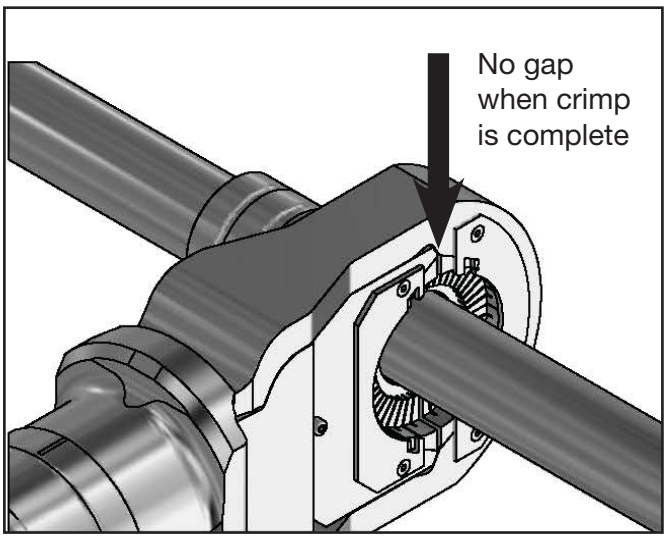
Note: For heavy wall pipe and duplex/super duplex fittings two swages maybe required per band. Swage at location, rotate PYPLOK® Tool 90° and swage again. This is only required if the inspection gauge does not pass over the swage band after original swage or for low pressure gas applications.

Installation Procedures

Tool Operation and Die Engagement



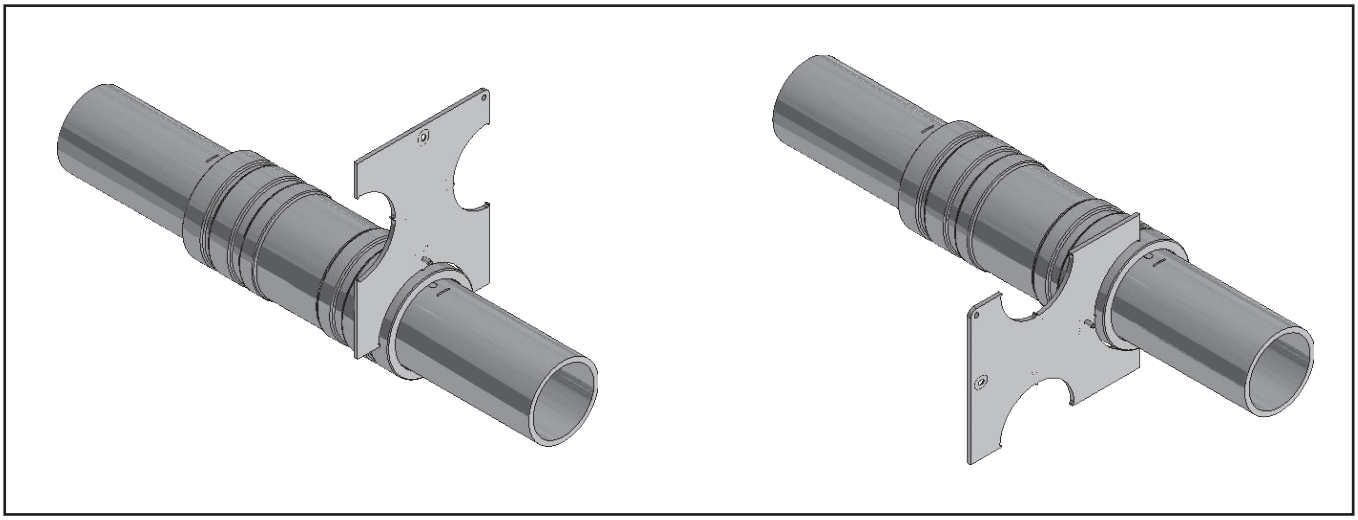
- Before swaging notice the gap between head assemblies.
  - The hydraulic power pack being electric, hand and or pneumatic are required to produce the required pressure and oil flow for the PYPLOK® Tool to operate.
  - Note that the PYPLOK® Tooling does not have noise emission >70dB(A).



- To swage; turn on the power pack. The pressure from the power unit forces the lower die block and upper head assembly together thus swaging the fitting on the pipe or tube.
- The swage is complete when the head bottoms out and the gap closes.
- In cases where a pump with a 10,000 PSI/ 690 bar relief is available, the tool will stop crimping and retract once 10,000 PSI/ 690 bar is achieved.

Installation Procedures

Swage Inspection and Assembly



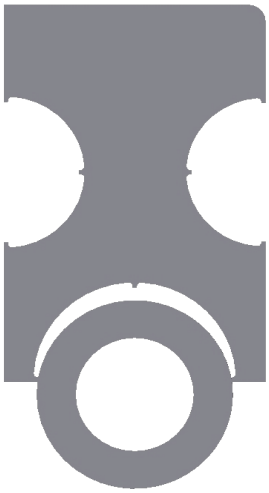
- Each swage band must be checked with the corresponding inspection gauge.
- The inspection gauge must fit freely around each swage band at two locations 90° from each other.

Acceptable Crimp



- 2 Point Contact, 90° Apart
- Acceptable Crimp

Unacceptable Crimp

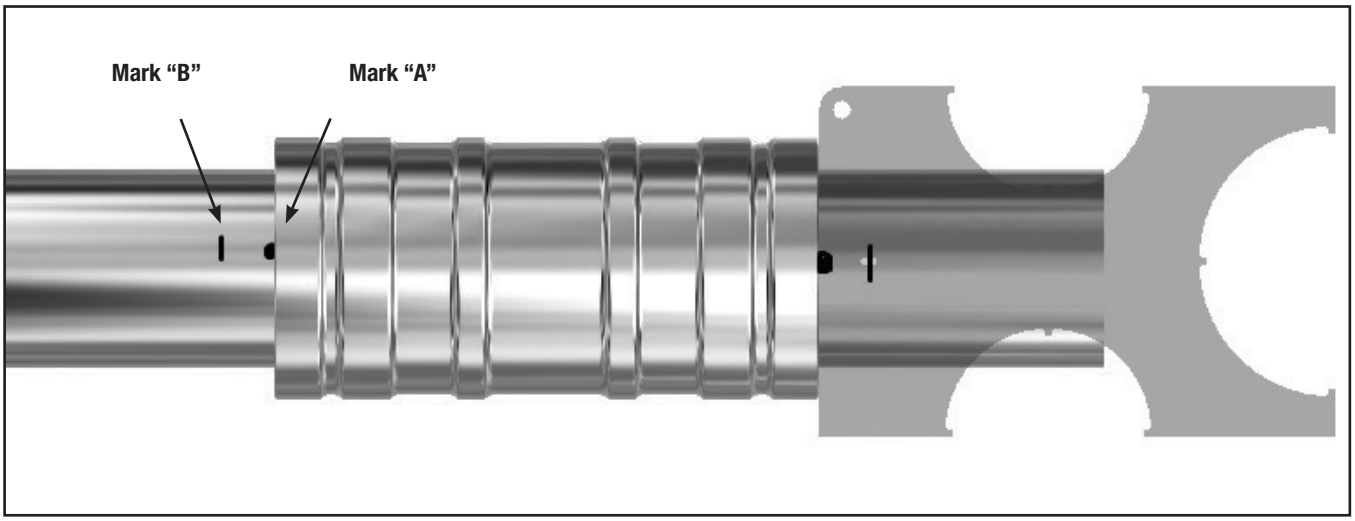


- 2 Point Contact, 180° Apart
- Indicates that diameter of fitting is over-sized and need re-crimping

- If any area of the swage bands does not pass the inspection gauge the fitting must be re-swaged.
- It may be required to re-swage and then rotate the tool 90° and re-swage in certain situations.
- After re-swaging the fitting must be checked with the inspection gauge as per the above process.

Installation Procedures

Swage and Installation Inspection



- Verify pipe insertion by observing that some portion of the pipe installation Mark “A” is beneath the fitting and that some portion of the mark is visible.
- In the event that the installation Mark “A” is not clearly visible, the inspection Mark “B” can be used to verify proper insertion.
- Position the marking tool against the fitting end, placing the side with the pin stop away from the pipe and verify that some portion of the inspection Mark “B” is visible in the gauge window or between the slot and the fitting end.

Notes

PYPLOK® Limited Warranty

TUBE-MAC® PIPING TECHNOLOGIES LTD. WARRANTS ITS PRODUCTS TO BE FREE FROM VISIBLE DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FOLLOWING THE DATE OF DELIVERY TO THE ORIGINAL BUYER. THE WARRANTY EXTENDS ONLY TO THE ORIGINAL BUYER.

TUBE-MAC® PIPING TECHNOLOGIES LTD. makes no warranty, express or implied, as to the merchantability or fitness for a particular purpose except as stated in this Warranty.

This Warranty shall be in lieu of any other Warranty, whether express or implied, by this Agreement or at law or in equity or by any statute or otherwise. The Buyer agrees that the foregoing shall be pleaded by TUBE-MAC® PIPING TECHNOLOGIES LTD. as an estoppel in any action brought by the Buyer against TUBE-MAC® PIPING TECHNOLOGIES LTD.

The Buyer agrees that porosity or pin holes in steel may not be commercially detectable. Therefore, TUBE-MAC® PIPING TECHNOLOGIES LTD. offers no warranty with respect to steel integrity and TUBE-MAC® PIPING TECHNOLOGIES LTD. shall not be liable for any damages, claims, injuries or otherwise caused by or in any way related to steel integrity.

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WARNING: Failure or improper selection or improper use of the products and/or systems described herein or related items can cause death, personal injury and property damage.

Notes

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