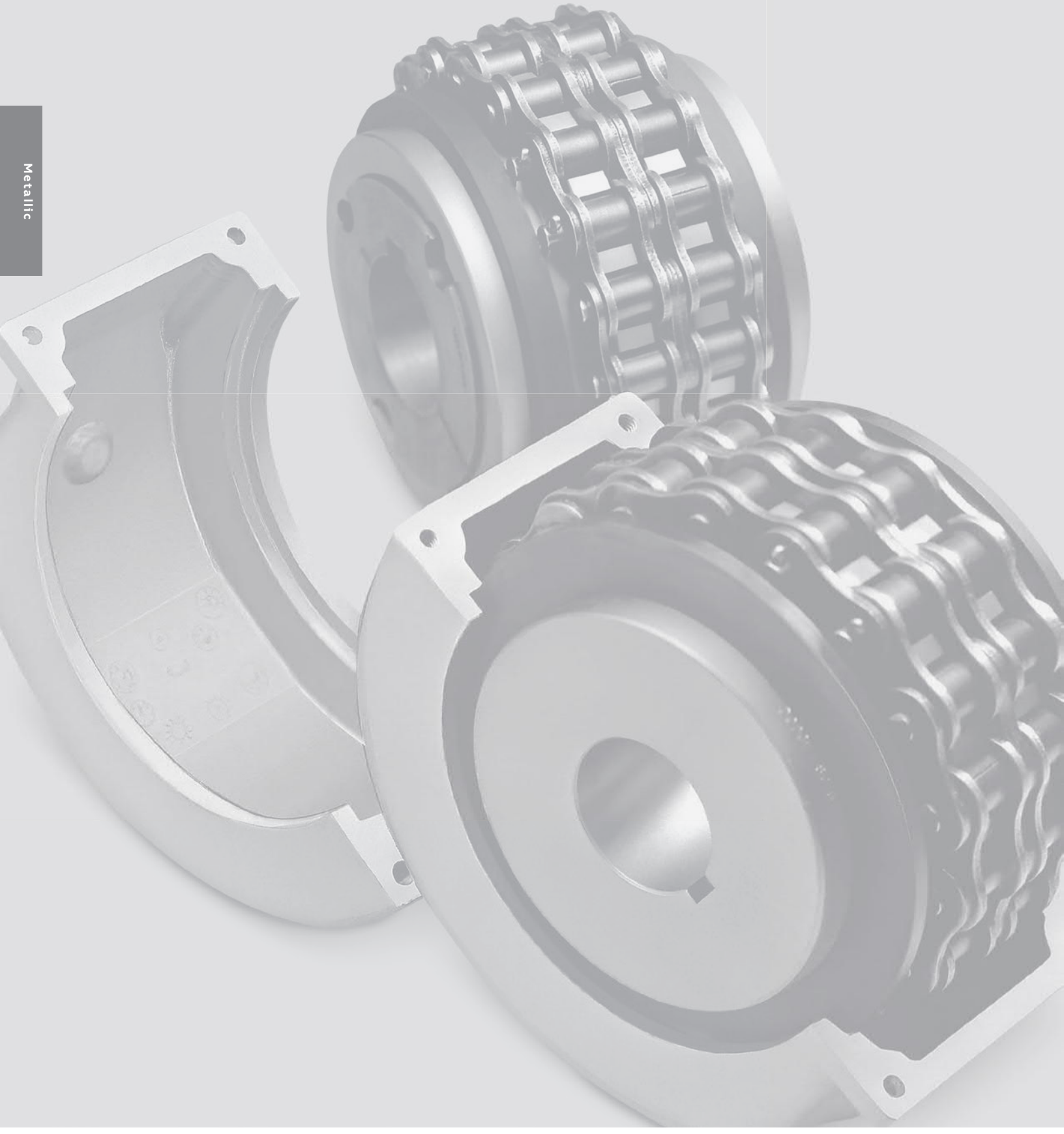


—  
METALLIC  
**Chain**

Metalllic



## Metallic - Chain

### Features/benefits

Dodge chain couplings offer a simple, widely accepted and inexpensive way to couple two shafts. They are interchangeable with industry standard dimensions. Dodge chain couplings can be provided with Taper-Lock bushed hubs, finished bore or reborable flanges. Chain coupling covers and chain assemblies are also available from stock.

#### Low operating cost

- Long service life
- Inexpensive initial investment
- Economical replacement costs

#### Broad product line

- Six popular Taper-Lock coupling sizes
- Eleven popular straight bore sizes
- Stocked covers available for higher speeds

#### Shaft attachment flexibility

- Taper-Lock bushings
- Clearance fit with setscrews
- Interference fit

#### High torque capability

- Hardened tooth sprockets
- ANSI standard double width roller chain

#### Compact design

- All metallic components
- Excellent torque to bore compatibility



## Metallic - Chain

### Specification/how to order/nomenclature

#### Specification

Chain couplings transmit torque through two hubs with hardened sprocket teeth and a double width roller chain. The chain is wrapped around the sprocket and connected with a link or pin for easy installation or removal. The chain coupling allows for misalignment through the clearances between chain and sprocket teeth. The coupling allows 2° angular misalignment, .015" parallel misalignment and up to .300" shaft end float. The temperature range is -30°F to +225°F.

The coupling hubs have optional methods of attachment to the shaft including but not limited to: clearance fit, interference fit or Taper-Lock bushings. Clearance fits and interference fits are supplied with an industry standard keyway. Clearance fits are supplied with one set screw over the keyway.

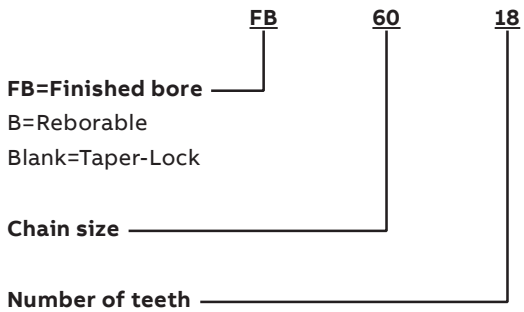
Aluminum covers with elastomeric seals contain lubricant and protect the chain and teeth in an abrasive or corrosive atmosphere.

#### How to order

Standard couplings consist of:

- (2) Flanges
- (1) Chain assembly
- (1) Cover (check RPM requirements on page 103)

#### Nomenclature:



# Metallic - Chain

## Selection/dimensions

### Easy selection

Coupling size	Max. bore			Max. RPM		*Hp ratings at various RPM 1.0 service factor									
	Taper-Lock	Finished bore	Reborable	Without covers	With covers	10	20	40	60	80	100	150	200	250	300
4012	-	3/4	7/8	875	5000	0.22	0.43	0.86	1.29	1.72	2.15	2.83	3.43	4.03	4.57
4016	1-1/8	1-1/8	1-5/16	875	5000	0.38	0.77	1.53	2.30	3.06	3.83	5.02	6.06	7.14	8.08
5012	-	1-1/8	1-1/8	875	-	40	0.81	1.61	2.42	3.23	4.03	5.30	6.39	7.57	8.57
5016	-	1-5/8	1-11/16	800	4000	0.73	1.46	2.93	4.39	5.86	7.32	9.60	11.7	13.7	15.5
5018	1-11/16	-	2	800	4000	0.95	1.89	3.79	5.68	7.57	9.47	12.4	15.0	17.7	20.0
6018	-	2-7/16	2-7/16	675	3000	1.73	3.46	6.92	10.4	13.8	17.3	22.9	27.6	32.5	36.8
6020	2-1/8	-	2-3/4	675	3000	2.25	4.50	9.01	13.5	18.0	22.5	29.6	35.6	42.0	47.6
8018	-	2-7/8	3-1/8	500	2000	3.86	7.72	15.4	23.2	30.9	38.6	50.8	61.4	72.3	81.5
8020	3-1/4	-	3-9/16	500	2000	5.03	10.1	20.1	30.2	40.3	50.3	66.1	79.7	94.0	106.0
10020	3-15/16	-	4-5/8	450	1800	8.68	17.4	34.7	52.1	69.4	86.8	115.0	139.0	162.0	184.0
12018	-	-	4-11/16	400	-	13.7	27.3	54.6	82.0	109.0	137.0	178.0	217.0	253.0	288.0
12020	4-7/16	-	-	400	1600	16.8	33.6	67.2	101.0	134.0	168.0	218.0	264.0	308.0	350.0

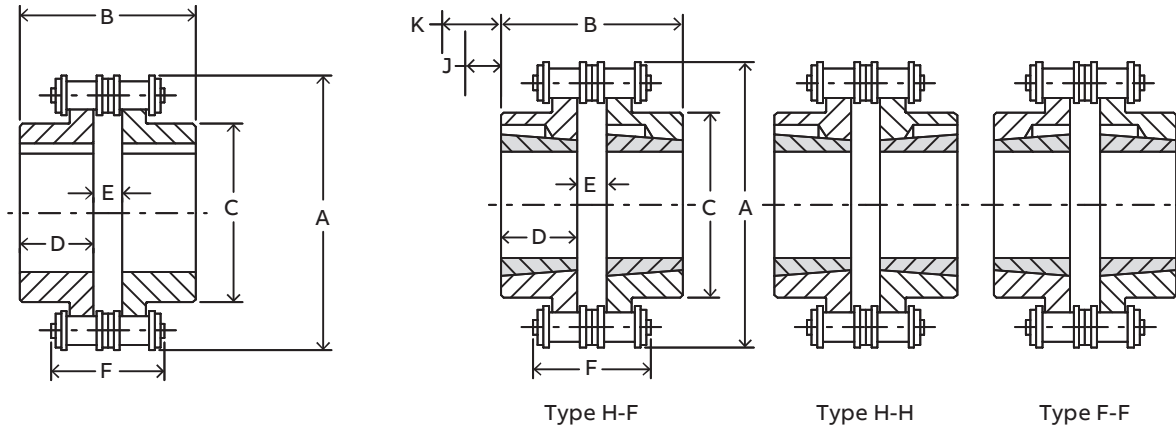
\* Taper-Lock bushings are not recommended below 250 RPM

Coupling size	Max. bore			Max. RPM		Hp ratings at various RPM 1.0 service factor									
	Taper-Lock	Finished bore	Reborable	Without covers	With covers	350	400	500	600	800	1000	1200	1400	1600	1800
4012	-	3/4	7/8	875	5000	5.10	5.57	6.55	7.56	9.42	11.3	13.1	14.9	16.6	18.2
4016	1-1/8	1-1/8	1-5/16	875	5000	9.04	9.89	11.6	13.4	16.7	20.1	23.0	26.3	29.3	32.7
5012	-	1-1/8	1-1/8	875	-	9.41	10.42	12.2	14.1	17.5	21.0	-	-	-	-
5016	-	1-5/8	1-11/16	800	4000	17.3	18.9	22.3	25.7	32.0	38.3	44.5	50.4	56.2	61.9
5018	1-11/16	-	2	800	4000	22.4	24.5	28.8	33.1	41.4	49.7	56.8	65.1	72.6	80.9
6018	-	2-7/16	2-7/16	675	3000	41.2	44.9	53.0	60.9	75.9	90.7	105.0	120.0	134.0	147.0
6020	2-1/8	-	2-3/4	675	3000	53.2	58.2	68.5	78.8	98.5	118.0	135.0	155.0	173.0	192.0
8018	-	2-7/8	3-1/8	500	2000	91.5	99.8	118.0	135.0	169.0	202.0	234.0	266.0	297.0	326.0
8020	3-1/4	-	3-9/16	500	2000	119.0	130.0	153.0	176.0	220.0	264.0	302.0	346.0	386.0	430.0
10020	3-15/16	-	4-5/8	450	1800	205.0	225.0	265.0	305.0	380.0	454.0	527.0	598.0	667.0	734.0
12018	-	-	4-11/16	400	-	322.0	355.0	-	-	-	-	-	-	-	-
12020	4-7/16	-	-	400	1600	391.0	432.0	510.0	585.0	708.0	877.0	1003.0	1135.0	1273.0	-

## Metallic - Chain

Selection/dimensions

### Straight bore and Taper-Lock - flanges dimensions, ratings



Straight bore chain coupling

Taper-Lock chain coupling

#### Ratings

Coupling size	Straight bore		Taper-Lock		Max. RPM		Weight <sup>(1)</sup> (lbs.)	
	Min.	Max.	Min.	Max.	Without cover	With cover	Str.	T-L
4012	1/2	7/8	-	-	875	5000	2.20	-
4016	5/8	1-5/16	1/2	1-1/8	875	5000	3.80	2.70
5012	5/8	1-1/8	-	-	875	-	3.10	-
5016	5/8	1-11/16	-	-	800	4000	5.00	-
5018	3/4	2	1/2	1-11/16	800	4000	6.00	6.00
6018	1	2-7/16	-	-	675	3000	9.90	-
6020	1-1/8	2-3/4	1/2	2-1/8	675	3000	12.25	12.70
8018	1-1/8	3-1/8	-	-	500	2000	31.10	-
8020	1-1/2	3-9/16	7/8	3-1/4	500	2000	33.50	31.10
10020	1-1/2	4-5/8	1-3/16	3-15/16	450	1800	80.00	77.90
12018	2	4-11/16	-	-	400	-	110.00	-
12020	-	-	1-7/16	4-7/16	400	1600	-	135.00

#### Dimensions (in.)

Coupling size	A		B		C		D		E		K <sup>(2)</sup>	J <sup>(3)</sup>
	Str.	T-L	Str.	T-L	Str.	T-L	Str.	T-L				
4012	2.41	2.53	-	1.41	1.13	-	0.28	-	-	-	-	-
4016	3.03	2.53	2.04	1.97	1.13	0.88	0.28	0.28	0.75	0.63	-	-
5012	3.00	2.88	-	1.75	1.25	-	0.38	-	-	-	-	-
5016	3.91	3.25	-	2.50	1.44	-	0.38	-	-	-	-	-
5018	4.19	3.75	2.38	2.97	1.69	1.00	0.38	0.38	1.06	0.81	-	-
6018	5.00	4.23	-	3.50	1.88	-	0.47	-	-	-	-	-
6020	5.50	4.47	2.94	3.88	2.00	1.25	0.47	0.47	1.38	0.94	-	-
8018	6.60	5.35	-	4.56	2.38	-	0.59	-	-	-	-	-
8020	7.30	5.85	4.59	5.38	2.63	2.00	0.59	0.59	2.06	1.19	-	-
10020	9.13	6.97	7.63	6.72	3.13	3.50	0.72	0.72	2.34	1.31	-	-
12018	10.00	7.88	-	6.75	3.50	-	0.86	-	-	-	-	-
12020	10.94	-	8.75	7.75	-	4.00	-	0.86	3.38	1.63	-	-

(1) Weight of complete coupling with cover at maximum bore (5012 & 12018 are without cover).

(2) Space required to loosen bushing with shortened hex key.

**Metallic - Chain**

Selection/dimensions

**Taper-Lock, reborable, finished bore flanges - part number**

Bore (in.)	Coupling size											
	4012	4016	5012	5016	5018	6018	6020	8018	8020	10020	12018	12020
Chain assembly	100480	100490	100489	100481	100491	100482	100492	100483	100493	100495	100497	100496
TL-H	-	•099049	-	-	•099053	-	•099055	-	•099057	•099061	-	•099063
TL-F	-	•099048	-	-	•099052	-	•099054	-	•099056	•099060	-	•099062
Bushing	-	1108	-	-	1610	-	2012	-	3020	3535	-	4040
Reborable	•099190	•099151	•099150	•099152	•099161	•099153	•099162	•099154	•099163	•099164	•099226	-
Finished bore hubs												
1/2"	•099100	-	-	-	-	-	-	-	-	-	-	-
5/8"	•099101	•099138	-	-	-	-	-	-	-	-	-	-
3/4"	•099102	•099103	•099132	•099141	•099193	-	-	-	-	-	-	-
7/8"	-	•099104	•099133	•099107	•099194	-	-	-	-	-	-	-
15/16"	-	•099139	•099134	-	-	-	-	-	-	-	-	-
1"	-	•099105	•099135	•099108	•099195	•099142	-	-	-	-	-	-
1-1/8"	-	•099106	•099136	•099109	•099196	•099143	•099209	•099146	-	-	-	-
1-3/16"	-	•099191	-	•099192	•099197	•099206	-	-	-	-	-	-
1-1/4"	-	•099140	-	•099110	•099198	•099115	•099210	-	-	-	-	-
1-3/8"	-	-	-	•099111	•099199	•099116	-	-	-	-	-	-
1-7/16"	-	-	-	•099112	•099200	•099117	-	-	-	-	-	-
1-1/2"	-	-	-	•099113	•099201	•099118	•099211	-	•099219	-	-	-
1-5/8"	-	-	-	•099114	•099202	•099119	-	-	-	-	-	-
1-3/4"	-	-	-	-	•099203	•099120	•099212	•099147	-	-	-	-
1-7/8"	-	-	-	-	•099204	•099121	-	-	-	-	-	-
1-15/16"	-	-	-	-	•099205	•099122	•099213	•099125	-	-	-	-
2"	-	-	-	-	-	•099123	-	•099126	-	-	-	-
2-1/8"	-	-	-	-	-	•099124	•099214	•099127	-	-	-	-
2-3/16"	-	-	-	-	-	•099207	-	-	•099220	-	-	-
2-1/4"	-	-	-	-	-	•099208	-	-	-	-	-	-
2-3/8"	-	-	-	-	-	•099144	•099215	•099128	-	-	-	-
2-7/16"	-	-	-	-	-	•099145	•099216	•099129	•099221	-	-	-
2-5/8"	-	-	-	-	-	-	•099217	•099130	-	-	-	-
2-11/16"	-	-	-	-	-	-	-	-	•099222	-	-	-
2-7/8"	-	-	-	-	-	-	-	•099131	-	-	-	-
2-15/16"	-	-	-	-	-	-	-	•099218	•099223	-	-	-
3-1/8	-	-	-	-	-	-	-	-	-	-	-	-
3-3/8	-	-	-	-	-	-	-	-	•099224	-	-	-
3-7/16	-	-	-	-	-	-	-	-	•099225	-	-	-

• Stock sizes

Complete coupling consists of:

(2) Hubs, Taper-Lock, straight bore, or reborable

(1) Chain assembly

(1) Cover assembly (if required)

Note: For Taper-Lock designs, Taper-Lock bushings must be ordered separately.

## Metallic - Chain

Selection/dimensions

### Chain coupling covers

Chain coupling covers are recommended for use when couplings are operating under abrasive or moist conditions, or when coupling speeds exceed the RPM listed in the table below.

Cover should be filled with a roller bearing grease of soft or medium consistency. This provides excellent lubrication and substantially increases coupling life.



### Chain coupling cover recommendation

Coupling size	Cover required when coupling RPM exceeds this figure
4012	875
4016	875
5016	800
5018	800
6018	675
6020	675
8018	500
8020	500
10020	450
12020	400

### Chain coupling cover assemblies ▲

For coupling size	Cover size	Part no.	Wt. (lbs.)	A	B
4012	40	099026	1.0	4.00	2.00
4016	40	099026	1.0	4.00	2.00
5016	50	099027	1.3	5.13	2.38
5018	50	099027	1.3	5.13	2.38
6018	60	099028	2.6	6.38	2.94
6020	60	099028	2.6	6.38	2.94
8018	80	099029	5.1	8.19	4.00
8020	80	099029	5.1	8.19	4.00
10020	100	099024	12.2	10.13	5.25
12020	120	099025	19.5	12.25	6.13

▲ Consists of (2) cover halves and screws; (4) seals for cover sizes 4012/4016 - 8012/8020; (2) seals for cover sizes 10020 and 12020; and (2) cover gaskets.

Note: 5012 and 12018 covers are not available

Note: Pipe plug is size 1/8-27

