



**UMETA GREASE FITTINGS** ACCORDING TO SAE J-534

**VERSIONS**

In general, our grease fittings according to SAE are made of steel, case hardened, zinc-plated, passivated and featured with a special surface treatment. For safety reasons and in order to avoid abrasion wear, the standard for SAE-grease fittings demands a specific surface hardness of 83 HR15 N minimum according to Rockwell hardness test procedure.

**SPECIAL INFORMATION**

For a better overview we added the international Alemite-reference numbers to our grease fittings. A general comparison of the relevant types you will find on page 78.

**UMETA HYDRAULIC-TYPE GREASE FITTINGS** ACCORDING TO SAE J-534

The SAE-standard for hydraulic-type grease fittings requires a tapered thread. The standard head-Ø is 6.6 (+/- 0.3) mm / 0.26" (+/- 0.012").

**OPERATING INSTRUCTIONS**

As suitable lubricating nozzle for our hydraulic-type fittings, we recommend our hydraulic couplers.

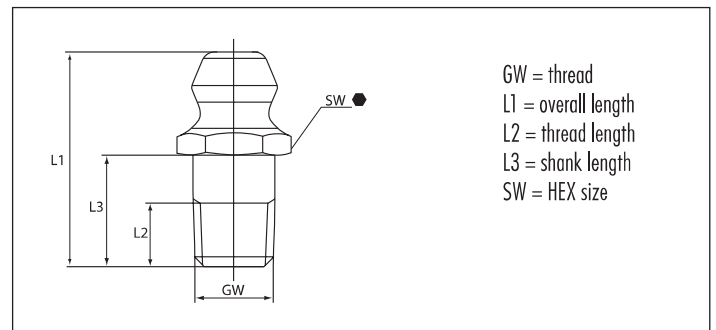


**Type H1**



**Hydraulic-Type Grease Fittings**

- according to SAE J-534
- straight version A/180°
- standard versions according to SAE are made of steel, hardened, zinc plated, passivated and top coated
- salt spray resistance > 72 hours



GW 1/8" PTF				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
11/16"	5/32"	19/64"	7/16"HEX	5546006		1610-BL
9/16"	5/32"	15/64"	7/16"HEX	5546008		1644-B
1 1/4"	5/16"	25/32"	7/16"HEX	5546010		1607-B
1 3/4"	5/16"	1 17/64"	7/16"HEX	5546012		1669-B
2 5/8"	5/16"	2 3/16"	3/8"HEX	5546014		1684-B
3/4"	3/16"	5/16"	7/16"HEX		5546086	1961-S
1"	9/32"	5/16"	1/2"HEX	*1) 5546016		1618-B

GW 1/4" - 28 UNF-2A				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
33/64"	5/64"	5/32"	9/32"HEX	5546106		1792-B

GW 3/8" - 18 NPTF				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
20 mm	8 mm		17 mm HEX	*2) 5547001		

GW 1/4" PTF				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
7/8"	15/64"	27/64"	9/16"HEX	5546028		1627-B
7/8"	25/64"	27/64"	15 mm HEX		5546154	-

GW 6/40" UNF-2A				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
1/2"	7/64"	1/8"	1/4"HEX	*3) 5546507		3018

GW 1/4" - 28 SAE-LT				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
35/64"	7/64"	3/16"	5/16"HEX	5546030		1641-B
11/16"	13/64"	23/64"	5/16"HEX	5546032		1652-B
31/32"	13/64"	5/8"	5/16"HEX	5546034		1680-B
1 1/8"	13/64"	25/32"	5/16"HEX	5546036		1698-B
1 5/8"	13/64"	1 9/32"	5/16"HEX	5546038		3014-B
17/32"	7/64"	3/16"	5/16"HEX		5546087	1966-S

GW 10/32" UNF-2A				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
1/2"	7/64"	1/8"	1/4"HEX	*3) 5546503		3016

**Type H1 Hydraulic-Type Grease Fitting with pin valve, leakproof**

GW 1/8" PTF				Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
3/4"	17/64"	5/16"	7/16"HEX	5546110		1650

\*1) female thread  
\*2) molybdenum-surface finish  
\*3) no ball check

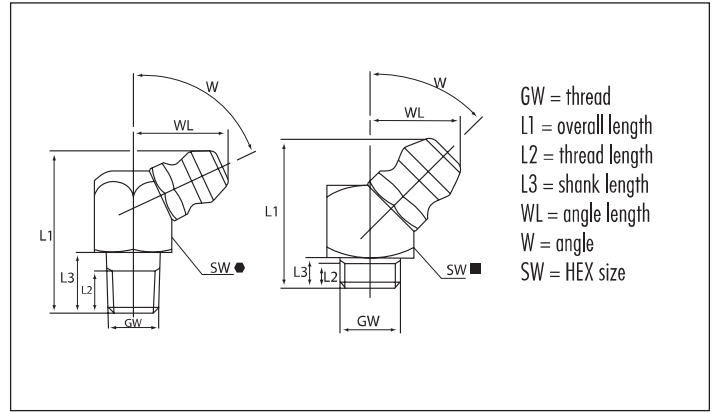


**Type H2**

**Hydraulic-Type Grease Fittings**



- according to SAE J-534
- elbow version B - 30°/45°/65°/67°
- optionally available with square or hexagonal body
- standard versions according to SAE are made of steel, zinc-plated, passivated and top coated, head hardened
- salt spray resistance > 72 hours



GW 1/8" PTF							Ref.- No.:		
L1	L2	L3	WL	W	SW	Steel	SST303	Alemite	
29/32"	19/64"	19/64"	11/32"	30°	7/16" HEX ●	5546152		1611-B	
29/32"	19/64"	19/64"	11/32"	30°	7/16" HEX ●		5546153	1921-S	
57/64"	3/16"	19/64"	29/46"	45°	7/16" HEX ●	5546017		1688-B	
27/32"	3/16"	19/64"	1/2"	65°	7/16" HEX ●	5546018		1612-B	
1 7/32"	3/16"	9/16"	1/2"	65°	7/16" HEX ●	5546020		1623-B	
2 3/4"	11/32"	2 1/4"	1/2"	65°	3/8" HEX ●	5546022		1649-B	
61/64"	7/32"	11/32"	1/2"	67°	7/16" HEX ●		5546090	1922-S	

GW 1/4" - 28 SAE-LT							Ref.- No.:		
L1	L2	L3	WL	W	SW	Steel	SST303	Alemite	
13/16"	7/64"	13/64"	13/32"	45°	3/8" HEX ●	5546040		1637-B1	
25/32"	13/64"	19/64"	15/32"	65°	3/8" HEX ●	5546042		3010-B1	
13/16"	13/64"	13/64"	19/32"	45°	3/8" HEX ●		5546085	1968-S	

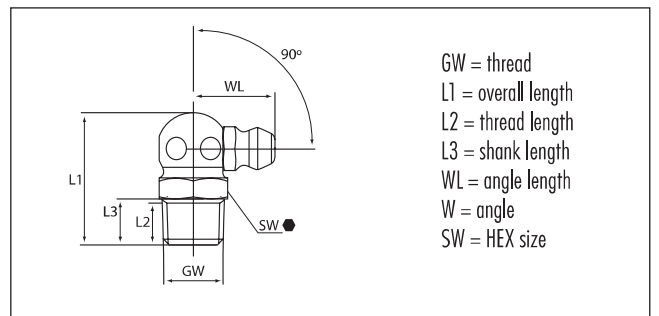
GW 1/4" - 28 UNF-2A							Ref.- No.:		
L1	L2	L3	WL	W	SW	Steel	SST303	Alemite	
39/64"	5/64"	1/8"	13/32"	45°	*9 mm SQ ■	5546108		1770-B1	

**Type H3**

**Hydraulic-Type Grease Fittings**



- according to SAE J-534
- elbow version C/90°
- standard versions according to SAE are made of steel, zinc-plated, passivated and top coated, head hardened
- salt spray resistance > 72 hours



GW 1/8" PTF							Ref.- No.:		
L1	L2	L3	WL	W	SW	Steel	SST303	Alemite	
27/32"	3/16"	19/64"	17/32"	90°	7/16" HEX ●	5546024		1613-B	
1 13/16"	5/16"	1 1/4"	17/32"	90°	7/16" HEX ●	5546026		1606-B	
7/8"	7/32"	11/32"	17/32"	90°	7/16" HEX ●		5546088	1923-S	

GW 1/4" - 28 SAE-LT							Ref.- No.:		
L1	L2	L3	WL	W	SW	Steel	SST303	Alemite	
3/4"	7/64"	13/64"	1/2"	90°	3/8" HEX ●	5546044		1911-B1	
3/4"	7/64"	13/64"	1/2"	90°	3/8" HEX ●		5546089	1969-S	

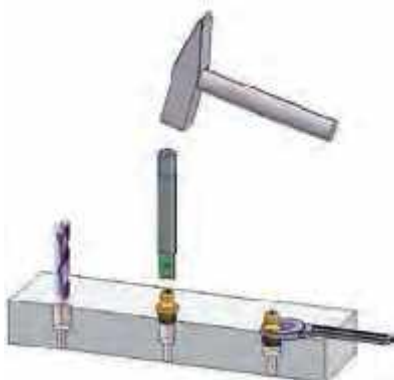
\*cylindrical



■ **HYDRAULIC GREASE FITTINGS WITH SELF-FORMING THREAD** ACCORDING TO SAE J-534

**VERSIONS**

For safety reasons and in order to avoid abrasion wear, the standard for SAE-grease fittings demands a specific surface hardness of 83 HR15 N minimum according to Rockwell hardness test procedure. Furthermore, a particularly wide flank angle of 90° at the thread is stipulated therein. For a better visual distinction, UMETA self-forming grease fittings are yellow passivated. Upon request, they are also available in another surface colour, e. g. blue passivated = silver coloured.



**Type H1/S**

**Hydraulic-Type Grease Fittings with Self-Forming Thread**



- according to SAE J-534
- straight version A/180°
- with self-forming thread, tapered
- standard version made of steel, according to SAE hardened, yellow passivated and top coated
- salt spray resistance > 72 hours

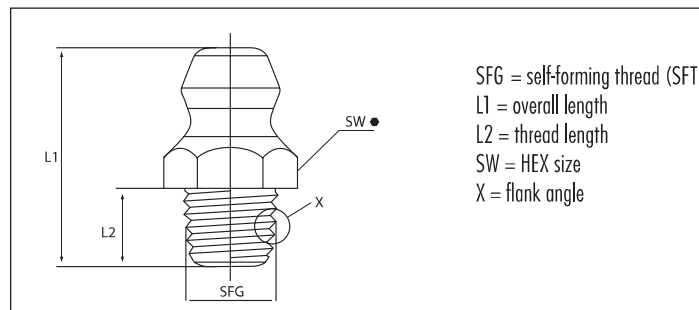
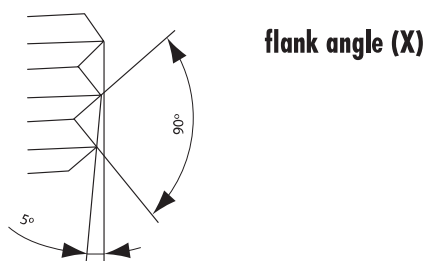
SFG 1/8" Special Taper Pipe Thread				Ref.- No.:	
L1	L2	for bore-Ø	SW	Steel	Alemite
5/8"	15/16"	0.373-0.380"	7/16" HEX	5546052	1720-B

**MOUNTING INSTRUCTIONS**

The exact size of the core hole depends on the material and must be determined by mounting tests. The consistency of the receiving material is decisive. The standard gauge for the installation bore diameter of 0.4-0.5 mm (0.02") below nominal width have proved in daily use. The recommended borehole Ø is listed with the part number.

**OPERATING INSTRUCTIONS**

As suitable lubricating nozzle, we recommend our hydraulic couplers.



SFG 1/4" - 28 Special Taper Thread				Ref.- No.:	
L1	L2	for bore-Ø	SW	Steel	Alemite
37/64"	13/64"	0.230"-0.235"	5/16" HEX	5546046	3038-B

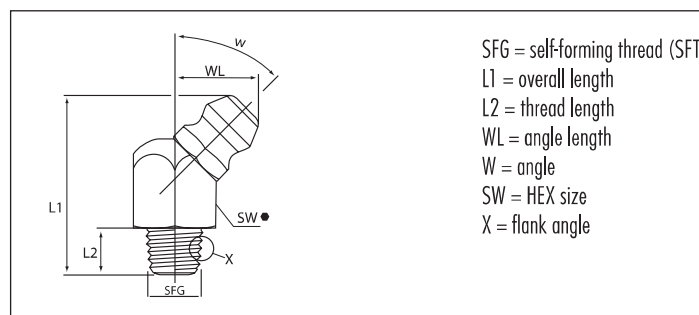
**Type H2/S**

**Hydraulic-Type Grease Fittings with Self-Forming Thread**



- according to SAE J-534
- elbow version B - 45°/65°
- with self-forming thread, tapered
- standard version made of steel, according to SAE hardened, yellow passivated and top coated
- salt spray resistance > 72 hours

SFG 1/8" Special Taper Pipe Thread						Ref.- No.:	
L1	L2	WL	W	for bore-Ø	SW	Steel	Alemite
3/4"	13/64"	1/2"	65°	0.373-0.380"	7/16" HEX	5546054	1722-B



SFG 1/4" - 28 Special Taper Thread						Ref.- No.:	
L1	L2	WL	W	for bore-Ø	SW	Steel	Alemite
13/16"	13/64"	25/64"	45°	0.230"-0.235"	3/8" HEX	5546048	3053-B

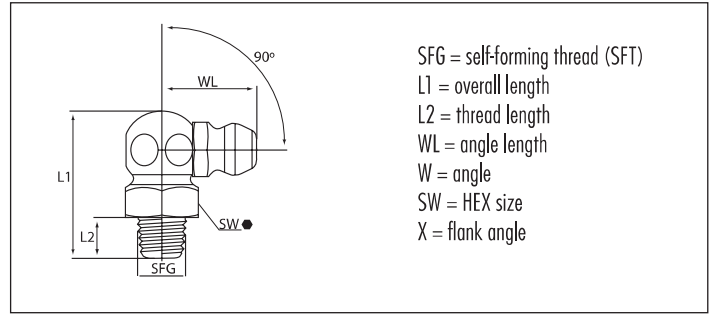


**Type H3/S**



**Hydraulic-Type Grease Fittings with Self-Forming Thread**

- according to SAE J-534
- elbow version C/90°
- with self-forming thread, tapered
- standard version made of steel, according to SAE hardened, yellow passivated and top coated
- salt spray resistance > 72 hours



SFG 1/8" Special Taper Pipe Thread						Ref.- No.:	
L1	L2	WL	W	for bore-Ø	SW	Steel	Alemite
49/64"	13/64"	17/32"	90°	0.373-0.380"	7/16" HEX	●	5546056 1723-B

SFG 1/4" - 28 Special Taper Thread						Ref.- No.:	
L1	L2	WL	W	for bore-Ø	SW	Steel	Alemite
3/4"	13/64"	1/2"	90°	0.230"-0.235"	3/8" HEX	●	5546050 3054-B

**UMETA HYDRAULIC-TYPE GREASE FITTINGS - DRIVE-IN VERSION (USA VERSION)**

**VERSIONS**

Drive-in fittings as standard version are made of steel, case-hardened, zinc-plated, passivated and top coated.

**MOUNTING INSTRUCTIONS**

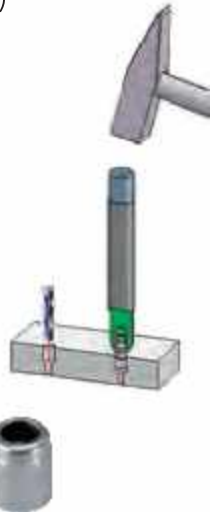
The exact size of the core hole depends on the material and must be determined by mounting tests. The standard gauge for the installation bore diameter corresponds to the nominal width of the serrated ridge-Ø.

**OPERATING INSTRUCTIONS**

Since this type of grease fitting is only driven in, it may get loose by

- strong vibrations
- high back-pressure when greasing with automatic guns
- pulling off the hydraulic coupler.

Drive-in type hydraulic grease fittings should only be lubricated by a hydraulic nozzle.

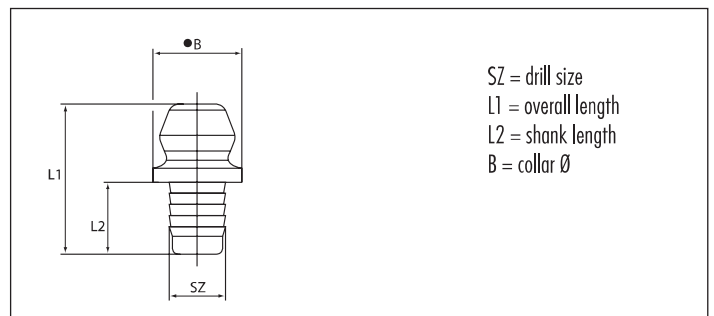


**Type H1a**



**Hydraulic-Type Grease Fittings - Drive-in Type**

- straight version A/180°
- with serrated ridge
- standard version made of steel, according to SAE hardened, zinc plated, passivated and top coated
- salt spray resistance > 72 hours



SZ 3/16"				Ref.- No.:	
L1	L2	SZ	B	Steel	Alemite
15/32"	11/64"	3/16"	5/16" Ø	●	*5546060 3005
31/64"	7/32"	3/16"	9/32" Ø	●	*5546062 3006
33/64"	1/4"	3/16"	5/16" Ø	●	5546064 1728-B
5/8"	1/4"	3/16"	5/16" Ø	●	*5546066 1633

SZ 5/16"				Ref.- No.:	
L1	L2	SZ	B	Steel	Alemite
35/64"	1/4"	5/16"	3/8" Ø	●	5546074 1608-B
5/8"	7/32"	5/16"	3/8" Ø	●	*5546076 1699

SZ 1/4"				Ref.- No.:	
L1	L2	SZ	B	Steel	Alemite
35/64"	1/4"	1/4"	11/32" Ø	●	5546068 1743-B
9/16"	17/64"	1/4"	11/32" Ø	●	*5546070 321381
15/32"	1/8"	1/4"	11/32" Ø	●	*5546072 1952

SZ 6.35 mm, 1/4" Ø				Ref.- No.:	
L1	L2	SZ	B	Steel	Alemite
15 mm	6.3 mm	6.35 mm, 1/4" Ø	8 mm Ø	●	5241043

SZ 3/8"				Ref.- No.:	
L1	L2	SZ	B	Steel	Alemite
37/64"	7/32"	3/8"	7/16" Ø	●	*5546078 1666

\*no ball check

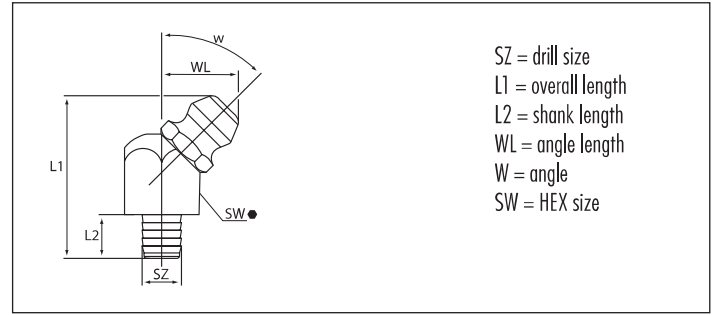


## Type H2a



### Hydraulic-Type Grease Fittings - Drive-in Type

- elbow version B/45°/67°
- with serrated ridge
- standard version made of steel, according to SAE zinc plated, passivated and top coated, head hardened
- salt spray resistance > 72 hours



**SZ 3/16"**

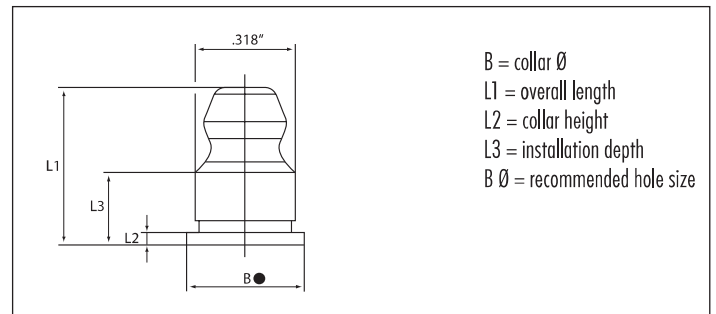
Ref.- No.:

L1	L2	WL	W	SZ	SW	Steel	Alemite
53/64"	7/32"	13/32"	45°	3/16"	3/8" HEX	●	5546080 1992-B1
45/64"	7/32"	1/2"	65°	3/16"	3/8" HEX	●	5546082 1646-B1



### Hydraulic-Type Grease Fittings - Rivet Type

- designed for mounting on the back side of thin-walled sheet metal
- standard version made of steel, according to SAE hardened, zinc plated, passivated and top coated
- salt spray resistance > 72 hours



**B Ø 5/16"**

Ref.- No.:

L1	L2	L3	for bore Ø	B	Steel	Alemite
1/2"	5/128"	15/64"	5/16"	3/8" Ø	●	5546122 1675-B

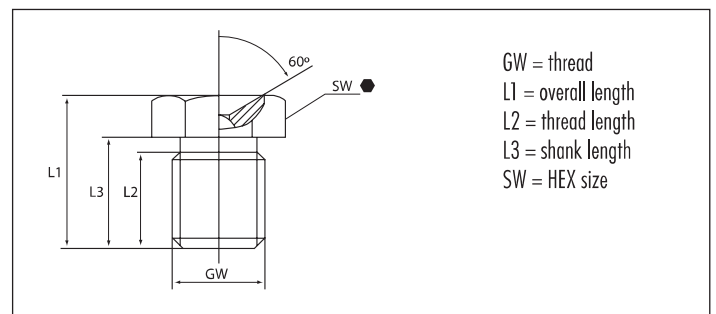
## UMETA FLUSH-TYPE GREASE FITTINGS (USA VERSION)

### Type D1



### Flush-Type Grease Fittings

- straight version A/180°
- made of steel, zinc plated, passivated and top coated
- salt spray resistance > 72 hours



**GW 1/4" - 28 NF**

Ref.- No.:

L1	L2	L3	SW	Steel	Alemite
13/32"	3/16"	19/64"	5/16" HEX	●	5546130 1851

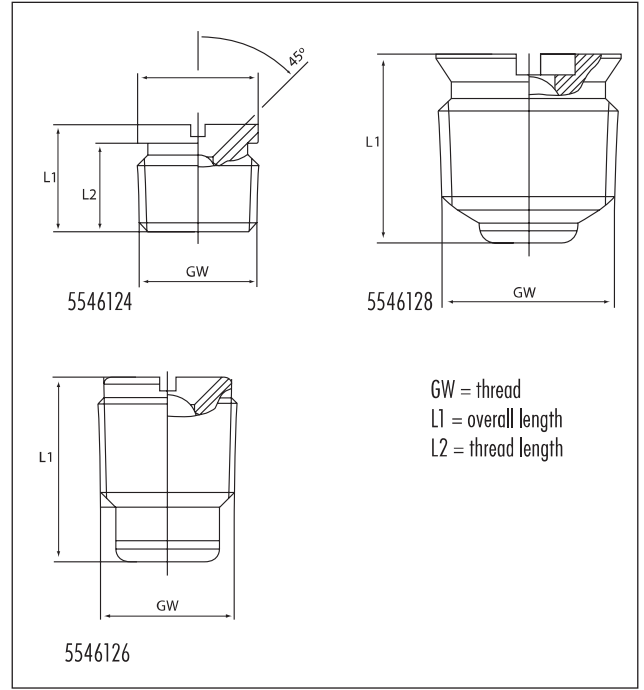


**Type DV1**

**Flush-Type Grease Fittings**



- without collar, with slot for screwdriver
- for even mounting without projection
- straight version A/180°
- made of steel, zinc-plated, passivated and top coated
- salt spray resistance > 72 hours



GW		1/8" NPTF		Ref.- No.:	
L1	L2	Steel	Alemite		
23/64"	19/64"	5546124	1815		
17/32"		5546126	1452		

GW		1/4" NPTF		Ref.- No.:	
L1	L2	Steel	Alemite		
9/16"		5546128	2741-A		

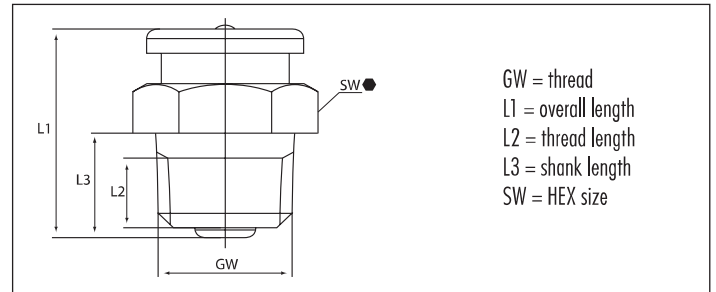
**UMETA BUTTON-HEAD GREASE FITTINGS ACCORDING TO SAE J-534**

**Type M1**

**Button-Head Grease Fittings**



- head Ø 15.5 mm (5/8")
- according to SAE J-534
- straight version A/180°
- standard versions according to SAE are made of steel, hardened, zinc plated, passivated and top coated
- salt spray resistance > 72 hours



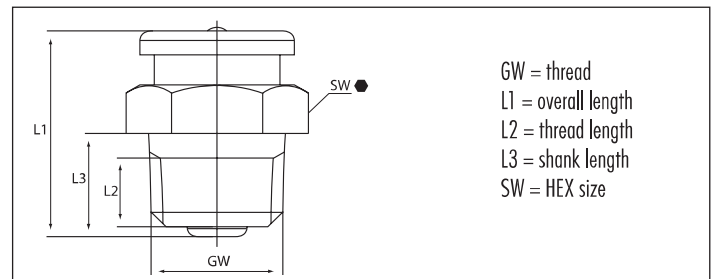
GW		1/8" PTF		Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
3/4"	3/16"	11/32"	5/8" HEX	5546112		1184-B

GW		1/4" NPTF		Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
53/64"	17/64"	27/64"	5/8" HEX	5546114		A1186
53/64"	17/64"	27/64"	5/8" HEX	5546116		1186-B

**Type M1 according to ISO 2768-m - stainless steel**

**Button-Head Grease Fittings**

- head Ø 15.5 mm (5/8")
- according to ISO 2768 - m
- straight version A/180°
- made of stainless steel 1.4305 ~ ASTM 303 (V2A)



GW		1/8" PTF		Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
18 mm	4.8 mm	7.5 mm	17 mm HEX	5547020		-

GW		3/8" NPTF		Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
23.5 mm	13 mm	13 mm	19 mm HEX	5547022		-

GW		1/4" - 18 NPTF		Ref.- No.:		
L1	L2	L3	SW	Steel	SST303	Alemite
21 mm	6.75 mm	10.7 mm	17 mm HEX	5547021		-

\*with plunger check

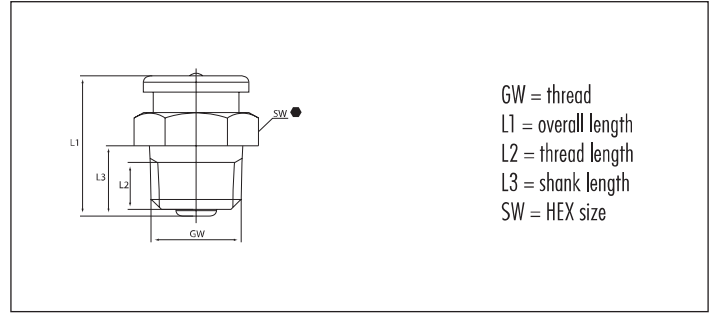


## Type M22



### UMeta Button-Head Grease Fittings with plunger check

- head Ø 21.9 mm (7/8")
- according to SAE J-534
- straight version A/180°
- standard versions according to SAE are made of steel, hardened, zinc plated, passivated and top coated
- salt spray resistance > 72 hours



GW 1/2" N.PTF				Ref.- No.:
L1	L2	L3	SW	Steel S5T303 Alemite
1 1/6"	25/64"	1/2"	7/8" HEX	● *5546120 1820-1

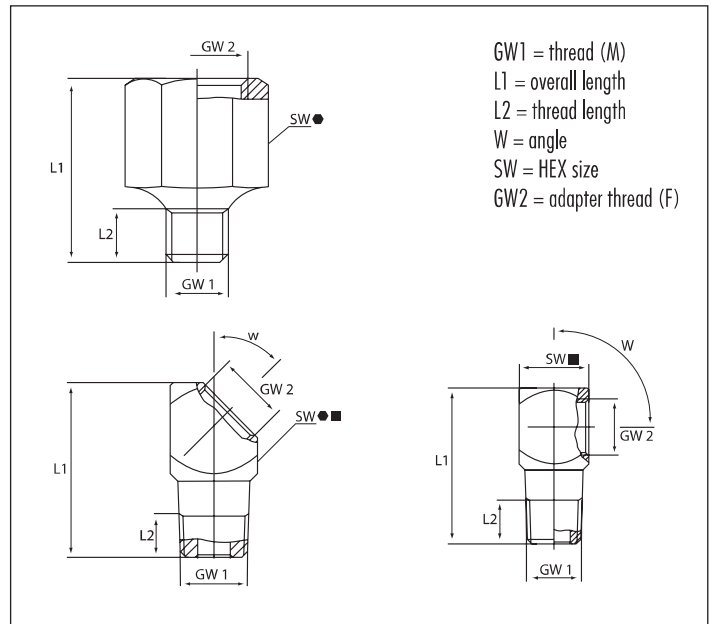
\*with plunger check

## UMETA ADAPTER (USA VERSION)

### Adapters / elbow bodies



- elbow version 180°/45°/90°
- optionally available with square or hexagonal body
- standard version made of steel, according to SAE zinc plated, passivated and top coated
- salt spray resistance > 72 hours



GW1 (M) 1/8" - 27 NPT/PTF					Ref.- No.:
L1	L2	W	GW2 (F)	SW	Steel Alemite
1"	7/32"	45°	1/8" - 27 NPT/PTF	1/2" SQ	■ 5546134 43716
1 1/8"	17/64"	90°	1/8" - 27 NPT/PTF	1/2" SQ	■ 5546132 43706

GW1 (M) 1/4" - 28 NF/UNF/SAE					Ref.- No.:
L1	L2	W	GW2 (F)	SW	Steel Alemite
3/4"	13/64"	180°	1/8"-NPTF	1/2" HEX	● 5546135 51942
13/16"	13/64"	45°	1/8"-NPTF	1/2" HEX	● 5546157 310912
1 1/32"	7/32"	90°	1/8"-NPTF	1/2" SQ	■ 5546159 51943

## UMETA GREASE FITTING ASSORTMENTS ACCORDING TO SAE J-534

UMETA's grease fitting assortments ensure you always have the right one available. The kits carry an assortment that should cover all application purposes.

### Sort 110



- standard version according to SAE, made of steel, hardened, zinc plated, passivated and top coated
- salt spray resistance > 72 hours

Sort 110 consisting of:			6110100
Ref.- No.:	UMETA-Type	Alemite-Type	Steel Quantity
5546006	H1, 1/8" PTF, 11/16"	1610-BL	25
5546040	H2, 1/4" - 28 SAE-LT, 13/16"	1637-B1	15
5546024	H3, 1/8" PTF, 27/32"	1613-B	15
5546030	H1, 1/4" - 28 SAE-LT, 35/64"	1641-B	25
5546017	H2, 1/8" PTF, 57/64"	1688-B	15
5546044	H3, 1/4" - 28 SAE-LT, 3/4"	1911-B1	15
Total number of pieces			110

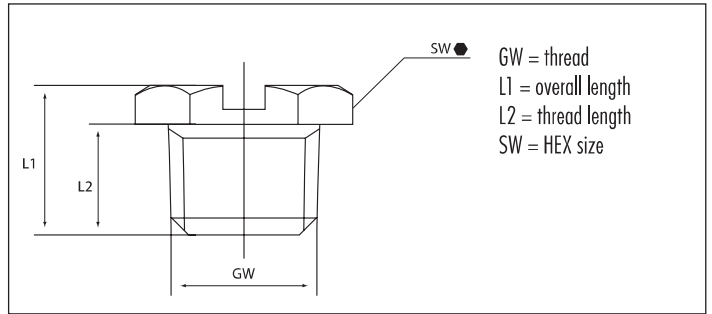


## UMETA TURNED PARTS ACCORDING TO SAE J-534

### Plugs



- according to SAE J-534
- for subsequent closing of boreholes
- made of steel, zinc-plated, passivated and top coated
- salt spray resistance > 72 hours

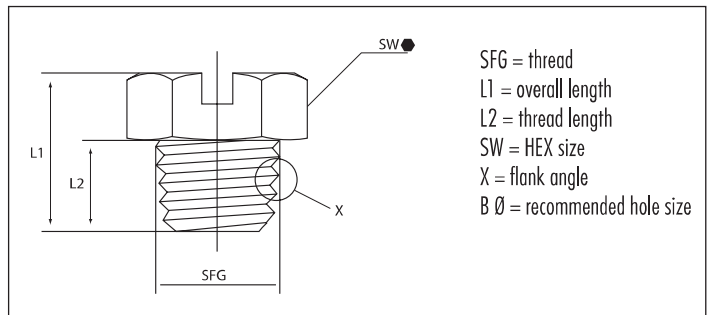


GW		1/4" - 28 UNF-2A		Ref.- No.:	
L1	L2	Thread	Steel	Alemite	
1/4"	3/16"	5/16" HEX ●	5546138	328224	

### Plugs with Self-Forming Thread



- according to SAE J-534
- with self-forming thread, tapered
- standard version made of steel, hardened according to SAE (650HV) and yellow passivated
- salt spray resistance > 72 hours
- recommended hole size = 0.02" below nominal width



SFG		1/4" - 28 Special Taper Thread		Ref.- No.:	
L1	L2	for bore-Ø	SW	Steel	Alemite
21/64"	3/16"	0.230"-0.235"	5/16" HEX ●	5546140	328435

## International Reference Chart

Ref.- No.:	Page	5546052	1720-B	73	5546120	1820-1	77	Ref.- No.:	Page	1618-B	5546016	71	1961-S	5546086	71		
UMETA	Alemite							Alemite	UMETA								
5241043	74	5546054	1722-B	73	5546122	1675-B	75	1452	5546126	76	1623-B	5546020	72	1966-S	5546087	71	
5546006	1610-BL	71	5546056	1723-B	74	5546124	1815	76	1633	5546066	74	1627-B	5546028	71	1968-S	5546085	72
5546008	1644-B	71	5546060	3005	74	5546126	1452	76	1650	5546110	71	1637-B1	5546040	72	1969-S	5546089	72
5546010	1607-B	71	5546062	3006	74	5546128	2741-A	76	1666	5546078	74	1641-B	5546030	71	1992-B1	5546080	75
5546012	1669-B	71	5546064	1728-B	74	5546130	1851	75	1699	5546076	74	1644-B	5546008	71	3010-B1	5546042	72
5546014	1684-B	71	5546066	1633	74	5546132	43706	77	1815	5546076	74	1646-B1	5546082	75	3014-B	5546038	71
5546016	1618-B	71	5546068	1743-B	74	5546134	43716	77	1851	5546124	76	1649-B	5546022	72	3038-B	5546046	73
5546017	1688-B	72	5546070	321381	74	5546135	51942	77	1952	5546072	74	1652-B	5546032	71	3053-B	5546048	73
5546018	1612-B	72	5546072	1952	74	5546138	328224	78	3005	5546072	74	1669-B	5546012	71	3054-B	5546050	74
5546020	1623-B	72	5546074	1608-B	74	5546140	328435	78	3006	5546062	74	1675-B	5546122	75	A1186	5546114	76
5546022	1649-B	72	5546076	1699	74	5546152	1611-B	72	3016	5546062	74	1680-B	5546034	71	Z741-A	5546128	76
5546024	1613-B	72	5546078	1666	74	5546153	1921-S	72	3016	5546503	71	1684-B	5546014	71	310912	5546157	77
5546026	1606-B	72	5546080	1992-B1	75	5546154		71	3018	5546507	71	1688-B	5546017	72	321381	5546070	74
5546028	1627-B	71	5546082	1646-B1	75	5546157	310912	77	43706	5546132	77	1698-B	5546036	71	328224	5546138	78
5546030	1641-B	71	5546085	1968-S	72	5546159	51943	77	43716	5546134	77	1720-B	5546052	73	328435	5546140	78
5546032	1652-B	71	5546086	1961-S	71	5546503	3016	71	51942	5546135	77	1722-B	5546054	73		5241043	74
5546034	1680-B	71	5546087	1966-S	71	5546507	3018	71	51943	5546159	77	1723-B	5546056	74		5546154	71
5546036	1698-B	71	5546088	1923-S	72	5547001		71	1184-B	5546112	76	1728-B	5546064	74		5547001	71
5546038	3014-B	71	5546089	1969-S	72	5547020		76	1186-B	5546116	76	1743-B	5546068	74		5547020	76
5546040	1637-B1	72	5546090	1922-S	72	5547021		76	1606-B	5546026	72	1770-B1	5546108	72		5547021	76
5546042	3010-B1	72	5546106	1792-B	71	5547022		76	1607-B	5546010	71	1792-B	5546106	71		5547022	76
5546044	1911-B1	72	5546108	1770-B1	72	6110100		77	1608-B	5546074	74	1820-1	5546120	77		6110100	77
5546046	3038-B	73	5546110	1650	71				1610-BL	5546006	71	1911-B1	5546044	72			
5546048	3053-B	73	5546112	1184-B	76				1611-B	5546152	72	1921-S	5546153	72			
5546050	3054-B	74	5546114	A1186	76				1612-B	5546018	72	1922-S	5546090	72			
			5546116	1186-B	76				1613-B	5546024	72	1923-S	5546088	72			