



# Technical Details

## Installation Guidelines

- **Building Regulations** require that all points of discharge into a drainage system should be fitted with a trap (e.g. a water seal trap) to prevent foul air from the system entering the building. Under working and test conditions traps should retain a minimum seal of 25mm of water

## Installation Requirements

All traps, waste pipe, waste fittings and soil fittings when installed in buildings should be installed in compliance with:

- Building Regulations 2000 (2002 edition) Approved Document H England and Wales
- The Building Standards (Scotland) Regulations 1990 (as amended)
- The Building Regulations (Northern Ireland) 2000 Alternatively the relevant recommendations of BS EN 12056-2:2000 should be followed

All traps should be accessible and provided with an adequate facility for cleansing, for example, traps are capable of being readily removed or dismantled. In general a trap which is not an integral part of an appliance should be attached to, and be immediately beneath, its outlet. However, traps that are not connected to the appliance should be as close as possible. There should be no more than one trap on the discharge pipework from any appliance.

## Trap Seals

- Traps with outlets for pipes up to and including DN50 should have a minimum water seal of 50mm on baths and showers, provided they are fitted with flush-grated wastes without plugs on spray-tap basins; 75mm trap seals should be used with all other appliances
- Traps with outlets for pipes over DN50 should have a minimum water seal of 50mm
- Traps used on appliances with flat bottoms (trailing waste discharge) and discharging to a gully with a grating may have a reduced water seal of not less than 38mm

M<sup>c</sup>Alpine manufacture 19mm water seal traps to meet market demand for replacement traps or for situations where space is limited. These traps should **not** be used in situations where a minimum 50mm water seal trap is required or where the waste pipe is connected to a soil stack.

- **The table opposite is an extract for BS EN 12056-2:2000 Gravity Drainage Systems Inside Buildings**

## Notes relating to table opposite

- (1) Steeper gradients permitted if pipe is less than maximum permitted length
- (2) If length is greater than 3m noisy discharge may result with an increased risk of blockage
- (3) Should be as short as possible to limit problems with deposition
- (4) Sharp throated bends should be avoided
- (5) For slab urinal for up to 7 persons. Longer slabs to have more than one outlet
- (6) Swept - entry branches serving WC's
- (7) Includes small potato-peeling machines
- (8) Tubular not bottle or resealing traps
- (9) Spray tap basin shall have flush-grated wastes without plugs



Appliance	Diameter (DN)	Min. Trap Seal Depth (mm)	Max. Length (L) of Pipe from Trap Outlet to Stack (m)	Pipe Gradient (%)	Max. Number of Bends (no)	Max. Drop (m)
Washbasin, Bidet (30mm diameter trap)	30	75	1.7	2.2 <sup>(1)</sup>	0	0
Washbasin, Bidet (30mm diameter trap)	30	75	1.1	4.4 <sup>(1)</sup>	0	0
Washbasin, Bidet (30mm diameter trap)	30	75	0.7	8.7 <sup>(1)</sup>	0	0
Washbasin, Bidet (30mm diameter trap)	40	75	3.0	1.8 to 4.4	2	0
Shower, Bath	40	50	No Limit <sup>(2)</sup>	1.8 to 9.0	No Limit	1.5
Bowl Urinal	40	75	3.0 <sup>(3)</sup>	1.8 to 9.0	No Limit <sup>(4)</sup>	1.5
Trough Urinal	50	75	3.0 <sup>(3)</sup>	1.8 to 9.0	No Limit <sup>(4)</sup>	1.5
Slab Urinal <sup>(5)</sup>	60	50	3.0 <sup>(3)</sup>	1.8 to 9.0	No Limit <sup>(4)</sup>	1.5
Kitchen Sink (40mm diameter trap)	40	75	No Limit <sup>(2)</sup>	1.8 to 9.0	No Limit	1.5
Household Dishwasher or Washing Machine	40	75	3.0	1.8 to 4.4	No Limit	1.5
WC with Outlet up to 80mm <sup>(6)</sup>	75	50	No Limit	1.8 Min.	No Limit <sup>(4)</sup>	1.5
WC with Outlet greater than 80mm <sup>(6)</sup>	100	50	No Limit	1.8 Min.	No Limit <sup>(4)</sup>	1.5
Food Waste Disposal <sup>(7)</sup>	40 Min.	75 <sup>(8)</sup>	3.0 <sup>(3)</sup>	13.5 Min.	No Limit <sup>(4)</sup>	1.5
Sanitary Towel Disposal Unit	40 Min.	75 <sup>(8)</sup>	3.0 <sup>(3)</sup>	5.4 Min.	No Limit <sup>(4)</sup>	1.5
Floor Drain	50	50	No Limit <sup>(3)</sup>	1.8 Min.	No Limit	1.5
Floor Drain	70	50	No Limit <sup>(3)</sup>	1.8 Min.	No Limit	1.5
Floor Drain	100	50	No Limit <sup>(3)</sup>	1.8 Min.	No Limit	1.5
4 Basins	50	75	4.0	1.8 to 4.4	0	0
Bowl Urinals <sup>(8)</sup>	50	75	No Limit <sup>(3)</sup>	1.8 to 9.0	No Limit <sup>(4)</sup>	1.5
Maximum of 8 WC's <sup>(6)</sup>	100	50	15.0	0.9 to 9.0	2	1.5
Up to 5 Spray Tap Basins <sup>(9)</sup>	30 Max.	50	4.5 <sup>(3)</sup>	1.8 to 4.4	No Limit <sup>(4)</sup>	0



# Technical Details

## Installation Information

Most individual products are supplied with detailed installation instructions. The following is general information.

### Trap Inlets

When connecting the trap Inlet to the waste outlet, it is important to ensure that a proper 'seating' is obtained and it is therefore recommended that the waste outlet used be to British Standard or equivalent, otherwise difficulty may be experienced in obtaining a water tight joint. All traps are supplied complete with inlet washers.

### Trap Outlets and Multifit Fittings see Page 2

For use with plastic pipes to BS EN 1451-1:2000 and BS EN 1329-1:2000, copper pipe (metric or imperial) and lead pipe. Fit as follows:

- Chamfer inside of pipe, if required to remove any burr or to enable plastic pipe to be eased over internal sleeve
- Remove nut, plastic friction washer and rubber olive from trap or fitting
- Push nut, plastic friction washer and rubber olive over pipe
- Push pipe over internal sleeve and into trap or fitting
- Connect nut and hand tighten

If a plastic pipe is undersize, or out of shape, the end may require to be warmed to enable it to be pushed over the internal sleeve and into the trap or fitting.

### Universal Trap Outlets and Fittings

Fit as Multifit but internal sleeve not applicable

### Surefit Fittings see Page 59

To BS EN 1329-1:2000

For use with M<sup>C</sup>Alpine HDPE waste pipe only. Fit as follows:

- Chamfer inside of pipe, if required to remove burr
- Remove nut and rubber washer from fitting
- Push nut and rubber washer over pipe

- Push pipe into socket
- Connect nut and hand tighten

### Pushfit Fittings see Page 67

For use with M<sup>C</sup>Alpine overflow pipe. Fit as follows:

- Gently warm end of pipe - say 25mm
- Push Fitting inside or outside of pipe dependent on type of fitting

### Pipe Clipping

It is of the utmost importance that plastic pipe be properly supported as recommended below:

		Waste (m)	Overflow (m)
Horizontal:	Every	0.5	0.5
Vertical:	Every	1.2	1.2



**Product Information****Traps and Waste Outlet Fittings see Sections 1 and 7**

All traps, waste outlets and overflows for kitchen sinks, shower trays, wash basins, bidets and baths meet the dimensional, performance, materials and marking requirements of EN 274-1:2002.

**Bath Fillers see Page 20**

M<sup>C</sup>Alpine bath fillers have the following flow rates:

0.5 bar pressure produces 33 litres per minute

1.0 bar pressure produces 44 litres per minute

2.0 bar pressure produces 57 litres per minute

**Condensate Products see Pages 16-17**

M<sup>C</sup>Alpine traps and fittings for connecting condensate discharge from condensing boilers to sanitary pipework meet the requirements of BS 6798:2009 and Building Regulations Approved Document H.

**Shower and Floor Gullies see Section 2**

Shower and floor gullies are manufactured to comply with EN 1253-2:2003.

**Surefit Waste System see Page 59**

Surefit waste system is manufactured to comply with BS EN 1329-1:2000.

**MACFIT WC Connectors see Pages 74-75**

MACFIT WC connectors are manufactured to comply with BS 5627:1984.

**Flexible WC Connectors see Pages 76-78**

Flexible WC connectors are manufactured to comply with German Standard DIN 1389:2001-05 and have LGA Approval, certificate number 7311072.

**Rigid WC Connectors see Pages 79-81**

Rigid WC connectors are manufactured to comply with BS 5627:1984 and German Standard DIN 1389-2.

**Air Admittance Valves (Ventapipe) see Section 6**

Air admittance valves (Ventapipe) are manufactured to comply with BS EN 12380:2002 and have LGA Approval.

Code WC-CON8F18



Code VP50P

# Index (Code Number in Alphabetical and Numerical Order)

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
<b>Numerical</b>		ASE10	10	BOSSCONN82-GR		BSW3P	96	CD1000-O-B	46
228532	13/15	ASE10V	10		63	BSW3PC	96	CD1000-O-P	46
32A-CB	60			BOSSCONN82T-BL		BSW45P	96	CD1000-P	45
32G-CB	60	<b>B</b>			63	BSW6CP2H	96	CD1000-SQ	45
35A-CB	60	BATHTRAP25-CPB		BOSSCONN82T-GR		BSW6P	96	CD1200-B	45
35B-CB	60		22		63	BSW6PC	96	CD1200-O-B	46
35G-CB	60	BATHTRAP50-CPB		BOSSCONN82Z-BL		BSW6PR	96	CD1200-O-P	46
40K-CB	60		22		63	BSW9P	93	CD1200-P	45
42A-CB	60	BL30-3/4	69	BOSSCONN82Z-GR		BSW9P-F	100	CD1200-SQ	45
42B-CB	60	BN1	104		63	BSW9PC	93	CD600-B	45
42E-CB	60	BN2	104	BP1-CAP	104	BSWCLS	98	CD600-O-B	46
42G-CB	60	BN3	104	BP2-CAP	104	BSWCLS-OFSS	98	CD600-O-P	46
		BN5	104	BP2H	104	BSWPVD	98	CD600-P	45
<b>A</b>		BOSS110CAST-BL		BP3	104	BT1	11	CD600-SQ	45
A10	6		17/63	BP3H	104	BT2	11	CD700-B	45
A10A	6	BOSS110TCAST-BL		BP3T	104	BT3	10	CD700-O-B	46
A10AR	5/6		17/63	BP4	104	BT4	10	CD700-O-P	46
A10AR-CP	5/7	BOSS82CAST-BL		BP4H	104	BW1	91	CD700-P	45
A10AV	6		17/63	BP4T	104	BW1A	91	CD700-SQ	45
A10AV-SV	7	BOSS82TCAST-BL		BP5	104	BW5	93	CD800-B	45
A10R	5/6		17/63	BRASSTRAP-25-CP		BW60SPH-CB	90	CD800-O-B	46
A10V	6	BOSS90CAST-BL			22	BWSTOFRS	98	CD800-O-P	46
A32UK-CB	8		17/63	BRASSTRAP-50-CP		BWSTOFSS	98	CD800-P	45
A32UK-CP	8	BOSS90TCAST-BL			22	BWSTSS	98	CD800-SQ	45
AA10	6		17/63	BSKTOP	99	BWSTSS-TOP	99	CD900-B	45
AA10W	6	BOSSCONN-22MM		BSW-BR-CP	98	BWU60SPH-CB90		CD900-O-B	46
ABS32/35A-CB	61		17/63	BSW1	92			CD900-O-P	46
ABS32/35A-CB-L	61	BOSSCONN1.25BL		BSW10	93	<b>C</b>		CD900-P	45
	61		17/63	BSW10P	93	C10	6	CD900-SQ	45
ABS32/35G-CB	61	BOSSCONN1.25GR		BSW10P-F	100	C10A	6	CE31A	7
ABSCON-32X1.25	60		17/63	BSW10PC	93	C10AR	5/6	CH10	104
	60	BOSSCONN110-BL		BSW10PR	96	C10AR-CP	5/7	CH4	104
ABSCON-35X1.25	60		17/63	BSW11P	91	C10AV	6	CH4-18	104
	60	BOSSCONN110-GR		BSW11PC	91	C10AV-SV	7	CH5	104
ABSCON-42X1.5	60		17/63	BSW12	92	C10R	5/6	CLAMP1GR	17
	60	BOSSCONN110T-BL		BSW12C	92	C10V	6	CLAMP1WH	17
ARB-1	82		17/63	BSW12T	92	CA32MINI-CB	8	CONFLEX-200	16
ARW10	30	BOSSCONN110T-GR		BSW15P	93	CA32SQUK-CB	8	CONFLEX-300	16
ASA10	10		17/63	BSW15PC	93	CA32UK-CB	8	CONFLEX-KIT1	16
ASA10-SP	10/16	BOSSCONN110Z-BL		BSW1P	91	CAA10	7	CONTRAP1	23
ASA10V	10		63	BSW1PC	91	CAP100	62	CONTRAP2	23
ASA10W	10	BOSSCONN110Z-GR		BSW2	92	CBW70-CB	93	CONVALVE	17
ASC10	10		63	BSW21P	96	CBW70-CLK	93	CONVALVE-125	70
ASC10-CO	12/16	BOSSCONN82-BL		BSW21PC	96	CBW70-SW	93	CONVALVE-125P	
ASC10-SP	10/16		63	BSW2P	91	CBWF70CB	93		70
ASC10V	10			BSW2PC	91	CD1000-B	45	CP1	104

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
CP1H	104	FBW1PC	95	FSW2PC-70	97	<b>M</b>		MZ18E	54
CP2	104	FBW2P	95	FSW2PP	97	MA15	13	MZ20	54
CP2H	104	FBW2PC	95	FSW2PP-70	97	MAC-1	75	MZ20L	54
CPTSG	50	FBW2PW	95	FSW2PR	97	MAC-1-BTW	75	MZ4	54/69
CRW10	30	FBW2R-C	95	FSW2PR-70	97	MAC-3	75	MZ4-ISO	54
CSWU3P	100	FBW2R-W	95	FSW45P	97	MAC-3C	75	MZ4-TANK	55
CTW1	103	FD90-T6SS	43	FTC1AWH	66	MAC-4	75	MZ4L	54/69
CW1	91	FD90-T6WH	43	FVW1P	92	MAC-4A	75	<b>N</b>	
CW5	93	FGT150-SV-110		FVW1PC	92	MAC-7A	75	NUT-BLANK-WH	
CW60-CB	90		42	FVW1PW	92	MAC-8	75		58
CW60SP-CB	90	FGT150-SV-110S				MAC-8L	75	NUT-WMVALVE	
CW60SQ-CB	90		42	<b>G</b>		MAC-EXTA	75		58
CWP60-SS	91	FGT150TOP	42	G10	6	MAC-EXTB	75		
CWP60-SSP	91	FGTOP6SS	42/50	GWAL-CB	90	MAC-EXTC	75	<b>O</b>	
CWS5	100	FGTR118TOP	50	GWU20	103	MACLINK	75	O/FSTOP-BL	104
CWS70-CB	93	FGTR118TOP-50				MACVALVE-1	9	OBT1	11
CWU1A	103		50	<b>H</b>		MACVALVE-2	9	OBT1-CO	16
CWU1S	103	FGTR125TOP	42	H11M	68	MACVALVE-3	9	OBT1V	11
CWU60-CB	90	FJ10	19	H28	68	MBS85PVD	98	OBT2-CO	16
CWU60SP-CB	90	FJ10V	19	HANDIPAK CARDS		MBSWSS85	98		
CWU60SQ-CB	90	FJ10WC	19		105	MD100	43	<b>P</b>	
		FJWF1	21	HANDITRAP-B	6	MD100-3	43	P-OR-SHOWERTRP	
<b>D</b>		FLEX-JKS	57	HANDITRAP-T	11	MD200	43		30
DC1-BL	62	FLEXCON1	56	HC2650-EXT-KIT		MD400	43	P-RW-STW90	30
DC1-BL-BO	62	FLEXCON2	56		30	MDTOP-WH	42	P10	18
DC1-GR	62	FLEXCON2-LN	56	HC2650UK	18	MDTOP20-WH	42	PIPE32-1000-CB	
DC1-GR-BO	62	FLEXCON3	56	HC2650UK-FIL	20	MESH-1	51		60
DC1BL-OS	62	FLEXCON4	56	HC2650UK-FIL-1M		MS18E	54	PIPE35-1000-CB	
DC1GR-OS	62	FLEXCON5	56		20	MS18L	54		60
DC2-BL	62	FLEXCON6	56	HCN3165UK	20	MS20	54	PIPE42-1000-CB	
DC2BL-OS	62	FLEXCON7	56	HCN3165UK-1M		MS20L	54		60
DC3-BL	62	FLEXCON8	56		20	MS4	54/69	PUB-CP	94
DC3BL-OS	62	FLEXCON9	57	HCN3365UK	20	MS4-32MM	54/61	PUB-CPB	94
DC4-BL	62	FLEXKIT1	14	HCN3365UK-1M		MS4-32SOLVENT		PUB-CPX	94
DC90-BL	62	FMBSWSS85	98		20		54/61	PUB-PB-1M	94
DC90-GR	62	FPKIT-3	82	HCUP50UK	23	MS4-ISO	54	PUB-PB-575	94
DWU60-CB	90	FSK10	19	HCUS50UK	23	MS4-TANK	55	PUB-PB-700	94
		FSK10E	19	HD1-3M	59/67	MS4L	54/69	PUB-WH	94
<b>E</b>		FSK10V	19	HD2-3M	59/67	MT18E	54	PUBX-SP	94
E10	6	FSKWf1	21	HD3-3M	59	MT18L	54	PUFS113-CP	99
EXTA-F	77	FST1WP	10	HWILF	69	MT20	54	PUFS70-CP	99
EXTB-F	77	FSW1P	97			MT20L	54	PUS113-CP	99
		FSW1PC	97	<b>L</b>		MT4	54/69	PUS70-CP	99
<b>F</b>		FSW1PP	97	L10	18	MT4-ISO	54	PUWF2-CP	21
FBSWPVD	98	FSW2P	97	L10PLUG	30	MT4-TANK	55	PUWF3-CP	21
FBW1P	95	FSW2PC	97	L10V	18	MT4L	54/69		

# Index (Code Number in Alphabetical and Numerical Order)

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
PWM1	30	R5M	66	S28M	54	SP10V	10	STW10-R	27
PWM2	30	R6	66	S29	55	SP10W	10	STW10-RB	27
PWM3	30	R6A	66	S29-LN	55	SR10	11	STW11-M	28
		R7	66	S30	59/67	SS10	11	STW11-R	26
<b>Q</b>		R8A	66	S31M	55	SSINLET1	9/14	STW12-M	28
Q10	18	RS1	64	S31U	9	SSINLET2	9/14	STW12-R	27
		RS2	64	S32-CP	60	SSK1	14	STW12-RB	27
<b>R</b>		RS3	64	S35-CP	60	SSK2	14	STW19-TUBE	30
R-3M	66	RS4	64	S4A	67	SSK3	14	STW2-95	26
R/SEAL-35X32	60	RS7	64	S4E	67	ST28L-ISO	54	STW2-M	28
R/SEAL-42X32	60	RW1	30	S4L	59	ST28M	54	STW2-R	26
R/SEAL-42X35	60	RW2	30	S4U	9	ST70SS85	29	STW2M-95	28
R1	66	RW3	30	S5	67/69	ST90-70B	47	STW3-M	28
R11	22	RWILF	69	S5M	55	ST90-HP2B	47	STW3-R	27
R12	22	RWM1	30	S5M-A	55	ST90-HPB	47	STW3-RB	27
R13	22/66	RWM2	30	S7	67	ST90-OUT	55	STW4-95	27
R14	22	RWM3	30	S8A	58/67	ST90CB10-70	24	STW4-M	28
R15	22			S8B	58	ST90CB10-HP	24	STW4-R	27
R16	55/66	<b>S</b>		S8M	55	ST90CB10-HP2	24	STW4-RB	5/27
R16-BL	17/63	S1	58	S9	67	ST90CB10-V	24	STW4B-95	27
R16-GR	17/63	S11M	55/68	SA10	10	ST90CP10-70	24	STW4M-95	28
R17	55/66	S12A-1	58	SA10V	10	ST90CP10-HP	24	STW5-M	28
R1M	66	S12A-2	58	SB10	10	ST90CP10-HP2	24	STW5-R	26
R1M-CO	17/66	S12A-3	58	SC10	10	ST90CP10-V	24	STW50-TUBE	30
R2	66	S12A-F	58	SC10V	10	ST90CPB-P-70	24	STW6-95	26
R23U	66	S12C	58	SD10	10	ST90CPB-P-HP	24	STW6-M	28
R28-NRV	70	S12D	58	SE10	10	ST90CPB-P-HP2		STW6-R	26
R29-NRV	70	S13-ISON	58	SE10V	10		24	STW6M-95	28
R2A	66	S16	58	SF10	10	ST90CPB-P-V	24	STW7-M	28
R2AM	66	S17	59	SG10	11	ST90CPB-S-70	25	STW7-R	27
R2M	66	S18	67	SH10	11	ST90CPB-S-HP	25	STW7-RB	27
R3	66	S18-ABS	55	SK1	15	ST90CPB-S-HP2		STW70CP	29
R30	68	S18L	59	SK1A	15		25	STW70CPB	29
R30E	68	S18M	59	SK2	15	ST90CPB-S-V	25	STW70CPL	29
R31	68	S1M	6	SK3	15	ST90CPTOP+TUBE		STW70GP	29
R32	68	S21A	55	SM10	18		30	STW70LN	29
R33	68	S22L	58	SM10E	18	ST90W/BODY-L		STW70LNL	29
R34	68	S23	58	SM10EPLUG	30		30	STW70SSM	29
R3M	66	S23L	59	SM10EV	18	ST90WH10-70	25	STW70WH	29
R4	66	S23M	55	SM10PLUG	30	ST90WH10-HP	25	STW70WHL	29
R40	68	S23MR	62	SM10V	18	ST90WH10-HP2		STW70WHM	29
R40E	68	S23U	55	SMP10	18		25	STW8-95	27
R45	68	S25	58	SMP10V	18	ST90WH10-V	25	STW8-M	28
R45E	68	S26L	59	SOAK1GR	17	STW1-M	28	STW8-R	27
R4M	66/68	S28L	59	SOAP-CP	104	STW1-R	26	STW8-RB	27
R5	66	S28L-ISO	54	SP10	10	STW10-M	28	STW80-TUBE	30



Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
STW85CP	29	T12H	58	T9	67	TSG3-R125SS	37	TUN5-CL	70
STW85CPB	29	T12L	59	TA32UK-CB	8	TSG3-T150SS	37	TUNKIT-1	71
STW85CPL	29	T12M	54	TA32VUK-CB	8	TSG3-WH	35	TUNKIT-3	71
STW85GP	29	T12R	55	TAPSTOP-SS	104	TSG3SS	35	TUNVALVE	70
STW85LN	29	T12S	59	TAPSTOP-SS40		TSG3SS-SL-NSC35		TV1	13
STW85LNL	29	T13-ISON	58		104	TSG3SS-SL-SC	35	TV2	13
STW85SSM	29	T16	58	TAPSTOP-WH	104	TSG3T6SS	37	TWILF	69
STW85WH	29	T17	59	TILE-PLAIN-B	47	TSG3T6WH	37	TWL-18	67
STW85WHL	29	T18	67	TILE-PLAIN-P	47	TSG50-ANTI/LIG		TWLFBR	68
STW85WHM	29	T18-ABS	55	TP10	10		40	TWLFCV	69
STW8B-95	27	T18L	59	TP10V	10	TSG50-R125SS	36	TWS-18	67
STW8M-95	28	T18M	59	TR10	11	TSG50-T150SS	36		
STW9-M	28	T1M	6	TRSH10	11	TSG50SS	34	<b>U</b>	
STW9-R	26	T21A	55	TS10	11	TSG50SS-SL-NSC		UPSW-1	102
STWGR-CP	29	T22L	58	TSG1-ANTI/LIG	40		34	UPSW-2	102
STWGR-WH	29	T23	58	TSG1-R125SS	36	TSG50SS-SL-SC	34	UPSW-2-22MM	
SW45P	96	T23L	59	TSG1-T150SS	36	TSG50T6SS	36		102
SWHF1-WH	100	T23M	55	TSG1-WH	34	TSG50T6WH	36	UPSW-3	102
SWHF2-WH	100	T23MR	62	TSG1SS	34	TSG50WH	34	UPSW-3-22MM	
SWHF3-CP	101	T23U	55	TSG1SS-SL-NSC	34	TSG50WH-NSC			102
SWHF3-WH	101	T25	58	TSG1SS-SL-SC	34		34	UPSW-4-22MM	
SWHF4-CP	101	T26L	59	TSG1T6SS	36	TSG52-ANTI/LIG			102
SWHF4-WH	101	T28L	59	TSG1T6SS+STW1-			40	USG1-T150SS	37
SWHF5-CP	101	T28L-ISO	54	R	41	TSG52-R125SS	36	USG1SS	35
SWHF5-WH	101	T28M	54	TSG1T6SS-STW2R		TSG52-T150SS	36	USG1SS-SL-NSC35	
SWHF6-CP	101	T28M-FIL	55		41	TSG52SS	34	USG1SS-SL-SC	35
SWHF6-WH	101	T28M-NRV	57	TSG1T6SSSTW295		TSG52SS-SL-NSC		USG1T6SS	37
SWILF	69	T29	55		41		34	USG1WH	35
SWL-18	67	T29-LN	55	TSG1T6WH	36	TSG52SS-SL-SC	34	USG1WH-NSC	35
SWLFBR	68	T30	59/67	TSG1WH-NSC	34	TSG52T6SS	36	USG2-T150SS	37
SWLFCV	69	T30-CLAMP	58	TSG1WH-STW1R		TSG52T6WH	36	USG2SS	35
SWS-18	67	T30-SPACER	58		41	TSG52WH	34	USG2SS-SL-NSC	
		T31M	55	TSG1WH-STW2R		TSG52WH-NSC	34		35
<b>T</b>		T31U	9		41	TSGCONTV	50	USG2SS-SL-SC	35
T1	58	T42-CP	60	TSG1WHSTW295		TSGCONTVSS	50	USG2T6SS	37
T11M	55/68	T4A	67		41	TSGCONV	50	USG2WH	35
T12	58	T4E	67	TSG2-ANTI/LIG	40	TSGCONVSS	50	USG3-T150SS	37
T12A-1	58	T4L	59	TSG2-R125SS	36	TSGSTOP	51	USG3SS	35
T12A-2	58	T4U	9	TSG2-T150SS	36	TT10	11	USG3SS-SL-NSC	
T12A-3	58	T5	67/69	TSG2SS	34	TUN-1	70		35
T12A-F	58	T5M	55	TSG2SS-SL-NSC	34	TUN-2	17/54/70	USG3SS-SL-SC	35
T12B	58	T5M-A	55	TSG2SS-SL-SC	34	TUN-3	70	USG3T6SS	37
T12C	58	T7	67	TSG2T6SS	36	TUN-3CP	70	USG3WH	35
T12D	58	T8A	58/67	TSG2T6WH	36	TUN-4	70	USGLEG1	51
T12E	58	T8B	58	TSG2WH	34	TUN-4CP	70		
T12F	58	T8M	55	TSG2WH-NSC	34	TUN-6	70		

# Index (Code Number in Alphabetical and Numerical Order)

Code	Page	Code	Page	Code	Page	Code	Page	Code	Page
<b>V</b>		W11	67	WC-CONQ	80	WP2T	104	ZS26L	54
V1	67	W1A	92	WC-CONQP	80	WP3	104	ZS31M	63
V15M	54	W20	67	WC-EXTA	80	WP3T	104	ZT26L	54
V1L	59	W21	67	WC-EXTB	80	WP4	104	ZT31M	63
V1M	54	W3	96	WC-EXTC	80	WP4T	104	ZWILF	69
V1MX	54	W4	93	WC-EXTD	80	WS3	100	ZWLFBR	68
V1MX-CO	17	W5	93	WC-F18R	76	WS5	100		
V21L	59	WALLFLANGE-CP32		WC-F18S	76	WU10	103		
V23L	59		60	WC-F21R	78	WU11	103		
V24L	59	WALLFLANGE-CP35		WC-F21S	78	WU1A	103		
V33L	13/59		60	WC-F23P	77	WU1S	103		
V33S	13/59	WALLFLANGE-CP42		WC-F23PV	77	WU20	103		
V33S-22	71		60	WC-F23R	76				
V33T	71	WC-BP1	81	WC-F23RV	76	<b>X</b>			
V33T-FP	71	WC-CON-EXT	81	WC-F23S	76	X10	11		
V33WM	12	WC-CON1	79	WC-F23SV	76	X10A	11		
V34L	13/59	WC-CON16	79	WC-F26P	77	X10V	11		
V8	67	WC-CON1V	79	WC-F26PV	77				
V8L	59	WC-CON2	79	WC-F26R	76	<b>Y</b>			
V8M	54	WC-CON2B	79	WC-F26RV	76	Y10	11		
VP1	87	WC-CON3	79	WC-F26S	76				
VP100	86	WC-CON4	79	WC-F26SV	76	<b>Z</b>			
VP100N	86	WC-CON4A	79	WC17-90	82	Z1	58		
VP15M	87	WC-CON4B	79	WC17-110	82	Z11M	55/68		
VP1W	87	WC-CON5	79	WC17-114	82	Z18L	59		
VP2	87	WC-CON5B	79	WCTRAP4P	23	Z18M	59		
VP2W	87	WC-CON6	79	WCTRAP4S	23	Z21A	55		
VP3	87	WC-CON7	79	WF1	21	Z23	58		
VP4	87	WC-CON7A	79	WF21	21	Z23L	59		
VP50	86	WC-CON7B	79	WF21-SP	22	Z23M	55		
VP50-100	86	WC-CON8	80	WM1	12	Z23MR	62		
VP50P	86	WC-CON8E	80	WM11	12	Z23U	55		
VPSF-40/50	86	WC-CON8F	77	WM12	12	Z28L	59		
VSG1T6SS	39	WC-CON8F-BTW		WM14	12	Z28L-ISO	54		
VSG1T6WH	39		78	WM15	12	Z28M	54		
VSG1WH	39	WC-CON8F-S-BTW		WM2	12	Z28M-NRV	57		
VSG1WH-NSC	39		78	WM2V	12	Z28M-NRVS	57		
VSG52T6SS	40	WC-CON8F18	77	WM3	12	Z29	55		
VSG52T6WH	40	WC-CON8F18-BTW		WM3-CAP	12	Z30	59		
VSG52WH	39		78	WM4	13	Z31M	63		
VSG52WH-NSC		WC-CON8F18-S-		WMF3	13	Z4L	59		
	39	BTW	78	WMF4	13	Z5M	55		
		WC-CON8FV	77	WP1	104	Z8A	58		
<b>W</b>		WC-CON8V	80	WP1T	104	Z8B	58		
W1	92	WC-CON9	80	WP2	104	Z8M	55		
W10	67	WC-CON9V	80	WP2H	104	ZP10	10		

