

16

316 Stainless Steel Fittings & Flanges

Vale® Grade 316 Stainless Steel Fittings BS 1740





316 Stainless Steel Fittings & Flanges

- Grade 316 stainless steel manufactured generally in accordance with BS 1740
- Male BSPT Taper Threads: to BS 21 ISO 7.1
- Female BSPP Taper Threads: to BS 2279

Tolerances for Stainless Steel Fittings:



Temperature Range:
-20°C to +400°C



Working Pressure:
10 bar (150 psi)
with a 4:1
Safety Factor

Flanges

Slip on Flange PN 16/3

To BS 4504



PGC: 155	Size (")	Price
FL8-PN16/3-SS	1/2	£79.69
FL12-PN16/3-SS	3/4	£112.71
FL16-PN16/3-SS	1	£115.89
FL20-PN16/3-SS	1 1/4	£147.52
FL24-PN16/3-SS	1 1/2	£187.54
FL32-PN16/3-SS	2	£251.91
FL40-PN16/3-SS	2 1/2	£305.82
FL48-PN16/3-SS	3	£371.44
FL64-PN16/3-SS	4	£376.37

Bossed & Screwed Flange PN 16/4

BSP Thread



PGC: 155	BSP	Price
FL8-PN16/4-SS	1/2	£101.65
FL12-PN16/4-SS	3/4	£141.50
FL16-PN16/4-SS	1	£146.33
FL20-PN16/4-SS	1 1/4	£160.34
FL24-PN16/4-SS	1 1/2	£224.00
FL32-PN16/4-SS	2	£302.29

Screwed Flange Table E

To BS 10



PGC: 155	BSP	Price
FL8-E-SS	1/2	£42.56
FL12-E-SS	3/4	£44.74
FL16-E-SS	1	£49.59
FL20-E-SS	1 1/4	£56.62
FL24-E-SS	1 1/2	£66.34
FL32-E-SS	2	£91.46
FL40-E-SS	2 1/2	£126.72
FL48-E-SS	3	£167.25
FL64-E-SS	4	£212.35

Slip on Flange Table D

To BS 10



PGC: 155	Size (")	Price
FL8-DW-SS	1/2	£20.95
FL12-DW-SS	3/4	£26.22
FL16-DW-SS	1	£36.78
FL20-DW-SS	1 1/4	£42.56
FL24-DW-SS	1 1/2	£47.92
FL32-DW-SS	2	£59.48
FL40-DW-SS	2 1/2	£92.97
FL48-DW-SS	3	£123.06
FL64-DW-SS	4	£128.17

Screwed Flange Table D

To BS 10



PGC: 155	BSP	Price
FL8-D-SS	1/2	£24.30
FL12-D-SS	3/4	£29.58
FL16-D-SS	1	£39.20
FL20-D-SS	1 1/4	£47.41
FL24-D-SS	1 1/2	£52.28
FL32-D-SS	2	£134.25
FL40-D-SS	2 1/2	£159.25
FL48-D-SS	3	£209.62
FL64-D-SS	4	£310.96

Blind Flange PN 16/8

To BS4504



PGC: 155	Size (")	Price
FL8-PN16/8-SS	1/2	£57.88
FL12-PN16/8-SS	3/4	£81.12
FL16-PN16/8-SS	1	£85.65
FL20-PN16/8-SS	1 1/4	£144.25
FL24-PN16/8-SS	1 1/2	£180.70
FL32-PN16/8-SS	2	£230.88
FL40-PN16/8-SS	2 1/2	£281.48
FL48-PN16/8-SS	3	£297.33
FL64-PN16/8-SS	4	£358.37

Slip on Flange Table E

To BS 10



PGC: 155	Size (")	Price
FL8-EW-SS	1/2	£39.45
FL12-EW-SS	3/4	£48.09
FL16-EW-SS	1	£46.40
FL20-EW-SS	1 1/4	£78.80
FL24-EW-SS	1 1/2	£93.04
FL32-EW-SS	2	£117.20
FL40-EW-SS	2 1/2	£161.06
FL48-EW-SS	3	£165.76
FL64-EW-SS	4	£309.23

Screwed Flange PN 10

To BS 4504



PGC: 155	Size (")	Price
FL8-PN10-SS	1/2	£59.64
FL12-PN10-SS	3/4	£70.87
FL16-PN10-SS	1	£81.59
FL20-PN10-SS	1 1/4	£91.30
FL24-PN10-SS	1 1/2	£116.59
FL32-PN10-SS	2	£141.46

Unions

Male Female Union

Male Thread BSPT
Female Thread BSPP



PGC: 280	BSPT	BSPP	Price
U2MFSS	1/8	1/8	£13.27
U4MFSS	1/4	1/4	£13.42
U6MFSS	3/8	3/8	£14.26
U8MFSS	1/2	1/2	£17.67
U12MFSS	3/4	3/4	£21.37
U16MFSS	1	1	£28.88
U20MFSS	1 1/4	1 1/4	£43.11
U24MFSS	1 1/2	1 1/2	£61.37
U32MFSS	2	2	£87.07
U40MFSS	2 1/2	2 1/2	£123.75
U48MFSS	3	3	£187.41
U64MFSS	4	4	£277.53

Female Union

Female Thread BSPP



PGC: 280	BSPP	Price
U2SS	1/8	£9.04
U4SS	1/4	£9.19
U6SS	3/8	£9.76
U8SS	1/2	£11.53
U12SS	3/4	£13.96
U16SS	1	£22.23
U20SS	1 1/4	£30.41
U24SS	1 1/2	£39.21
U32SS	2	£54.52
U40SS	2 1/2	£128.10
U48SS	3	£156.99
U64SS	4	£228.07

Crosses

Equal Cross

Female Thread BSPP



PGC: 280	BSPP	Price
X4SS	1/4	£10.04
X6SS	3/8	£13.18
X8SS	1/2	£14.04
X12SS	3/4	£15.42
X16SS	1	£22.95
X20SS	1 1/4	£35.37
X24SS	1 1/2	£41.68
X32SS	2	£63.70
X40SS	2 1/2	£120.67
X48SS	3	£141.98
X64SS	4	£210.23

Elbows

Male Female Elbow

Male Thread BSPT
Female Thread BSPP



PGC: 280	BSPT	BSPP	Price
E2MFSS	1/8	1/8	£4.22
E4MFSS	1/4	1/4	£4.34
E6MFSS	3/8	3/8	£4.91
E8MFSS	1/2	1/2	£5.67
E12MFSS	3/4	3/4	£7.61
E16MFSS	1	1	£11.58
E20MFSS	1 1/4	1 1/4	£19.03
E24MFSS	1 1/2	1 1/2	£20.75
E32MFSS	2	2	£36.48
E40MFSS	2 1/2	2 1/2	£54.10
E48MFSS	3	3	£106.57
E64MFSS	4	4	£181.46

Female Elbow 45°

Female Thread BSPP



PGC: 280	BSPP	Price
E2-45SS	1/8	£3.88
E4-45SS	1/4	£4.34
E6-45SS	3/8	£4.55
E8-45SS	1/2	£5.29
E12-45SS	3/4	£7.14
E16-45SS	1	£10.42
E20-45SS	1 1/4	£14.28
E24-45SS	1 1/2	£19.21
E32-45SS	2	£26.72
E40-45SS	2 1/2	£63.28
E48-45SS	3	£82.80
E64-45SS	4	£142.42

Female Elbow 90°

Female Thread BSPP



PGC: 280	BSPP	Price
E2SS	1/8	£3.38
E4SS	1/4	£3.38
E6SS	3/8	£3.66
E8SS	1/2	£4.32
E12SS	3/4	£6.39
E16SS	1	£9.08
E20SS	1 1/4	£14.98
E24SS	1 1/2	£16.73
E32SS	2	£30.03
E40SS	2 1/2	£70.77
E48SS	3	£93.11
E64SS	4	£170.27

Tees

Equal Tee

Female Thread BSPP



PGC: 280	BSPP	Price
T2SS	1/8	£4.32
T4SS	1/4	£4.28
T6SS	3/8	£4.86
T8SS	1/2	£6.21
T12SS	3/4	£8.41
T16SS	1	£13.64
T20SS	1 1/4	£17.67
T24SS	1 1/2	£26.36
T32SS	2	£37.60
T40SS	2 1/2	£95.53
T48SS	3	£142.52
T64SS	4	£189.03

Reducing Tees

Reducing Tee

Female Thread BSPP



PGC: 280	BSPP 1	BSPP 2	Price
T4-2SS	1/4	1/8	£17.54
T6-2SS	3/8	1/8	£21.73
T6-4SS	3/8	1/4	£21.73
T8-2SS	1/2	1/8	£23.62
T8-4SS	1/2	1/4	£23.62
T8-6SS	1/2	3/8	£23.62
T12-4SS	3/4	1/4	£10.69
T12-6SS	3/4	3/8	£10.69
T12-8SS	3/4	1/2	£10.57
T16-8SS	1	1/2	£40.80
T16-12SS	1	3/4	£40.80
T20-8SS	1 1/4	1/2	£58.68
T20-12SS	1 1/4	3/4	£58.68
T20-16SS	1 1/4	1	£58.68
T24-8SS	1 1/2	1/2	£67.17
T24-12SS	1 1/2	3/4	£67.17
T24-16SS	1 1/2	1	£67.17
T24-20SS	1 1/2	1 1/4	£67.17
T32-8SS	2	1/2	£85.66
T32-12SS	2	3/4	£85.66
T32-16SS	2	1	£85.66
T32-20SS	2	1 1/4	£85.66
T32-24SS	2	1 1/2	£85.66

Reducing Nipples, Sockets & Bushes

Hexagon Reducing Nipple

Male Thread BSPT



PGC: 280	BSPT	BSPT	Price
HN4-2SS	1/4	1/8	£4.27
HN6-2SS	3/8	1/8	£4.40
HN6-4SS	3/8	1/4	£4.40
HN8-2SS	1/2	1/8	£4.91
HN8-4SS	1/2	1/4	£4.91
HN8-6SS	1/2	3/8	£4.91
HN12-2SS	3/4	1/8	£5.77
HN12-4SS	3/4	1/4	£5.77
HN12-6SS	3/4	3/8	£5.77
HN12-8SS	3/4	1/2	£5.77
HN16-4SS	1	1/4	£8.33
HN16-6SS	1	3/8	£8.33
HN16-8SS	1	1/2	£8.33
HN16-12SS	1	3/4	£8.33
HN20-6SS	1 1/4	3/8	£13.77
HN20-8SS	1 1/4	1/2	£13.77
HN20-12SS	1 1/4	3/4	£13.77
HN20-16SS	1 1/4	1	£13.77
HN24-8SS	1 1/2	1/2	£15.76
HN24-12SS	1 1/2	3/4	£15.76
HN24-16SS	1 1/2	1	£15.76
HN24-20SS	1 1/2	1 1/4	£15.76
HN32-8SS	2	1/2	£22.82
HN32-12SS	2	3/4	£22.82
HN32-16SS	2	1	£22.82
HN32-20SS	2	1 1/4	£22.82
HN32-24SS	2	1 1/2	£22.82
HN40-16SS	2 1/2	1	£44.06
HN40-20SS	2 1/2	1 1/4	£44.06
HN40-24SS	2 1/2	1 1/2	£44.06
HN40-32SS	2 1/2	2	£44.06
HN48-16SS	3	1	£58.36
HN48-20SS	3	1 1/4	£58.36
HN48-24SS	3	1 1/2	£58.36
HN48-32SS	3	2	£58.36
HN48-40SS	3	2 1/2	£58.36

Reducing Socket

Female Thread BSPP



PGC: 280	BSP1	BSP2	Price
S4-2SS	1/4	1/8	£3.53
S6-2SS	3/8	1/8	£4.32
S6-4SS	3/8	1/4	£4.32
S8-2SS	1/2	1/8	£4.79
S8-4SS	1/2	1/4	£4.79
S8-6SS	1/2	3/8	£4.79
S12-2SS	3/4	1/8	£5.77
S12-4SS	3/4	1/4	£5.77
S12-6SS	3/4	3/8	£5.77
S12-8SS	3/4	1/2	£5.77
S16-4SS	1	1/4	£9.00
S16-6SS	1	3/8	£9.00
S16-8SS	1	1/2	£9.00
S16-12SS	1	3/4	£9.00
S20-8SS	1 1/4	1/2	£15.63
S20-12SS	1 1/4	3/4	£15.63
S20-16SS	1 1/4	1	£15.63
S24-8SS	1 1/2	1/2	£19.16
S24-12SS	1 1/2	3/4	£19.16
S24-16SS	1 1/2	1	£19.16
S24-20SS	1 1/2	1 1/4	£19.16
S32-8SS	2	1/2	£23.81
S32-12SS	2	3/4	£29.91
S32-16SS	2	1	£29.91
S32-20SS	2	1 1/4	£29.91
S32-24SS	2	1 1/2	£29.91
S40-16SS	2 1/2	1	£51.11
S40-20SS	2 1/2	1 1/4	£51.11
S40-24SS	2 1/2	1 1/2	£51.11
S40-32SS	2 1/2	2	£51.11
S48-16SS	3	1	£66.55
S48-20SS	3	1 1/4	£66.55
S48-24SS	3	1 1/2	£66.55
S48-32SS	3	2	£66.55
S48-40SS	3	2 1/2	£66.55
S64-24SS	4	1 1/2	£109.18
S64-32SS	4	2	£109.18
S64-40SS	4	2 1/2	£109.18
S64-48SS	4	3	£109.18

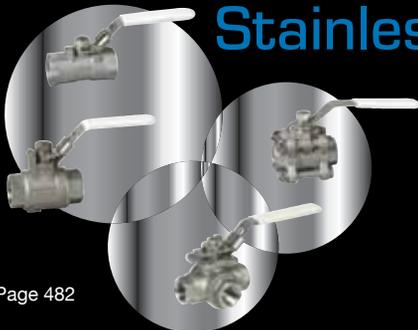
Hexagon Reducing Bush

Male Thread BSPT
Female Thread BSPP



PGC: 280	BSPT	BSP	Price
RB4-2SS	1/4	1/8	£2.37
RB6-2SS	3/8	1/8	£2.79
RB6-4SS	3/8	1/4	£2.79
RB8-2SS	1/2	1/8	£3.33
RB8-4SS	1/2	1/4	£3.33
RB8-6SS	1/2	3/8	£3.33
RB12-2SS	3/4	1/8	£4.47
RB12-4SS	3/4	1/4	£4.47
RB12-6SS	3/4	3/8	£4.47
RB12-8SS	3/4	1/2	£4.47
RB16-4SS	1	1/4	£5.97
RB16-6SS	1	3/8	£5.97
RB16-8SS	1	1/2	£5.97
RB16-12SS	1	3/4	£5.97
RB20-6SS	1 1/4	3/8	£10.07
RB20-8SS	1 1/4	1/2	£10.07
RB20-12SS	1 1/4	3/4	£10.07
RB20-16SS	1 1/4	1	£10.07
RB24-8SS	1 1/2	1/2	£14.80
RB24-12SS	1 1/2	3/4	£14.80
RB24-16SS	1 1/2	1	£14.80
RB24-20SS	1 1/2	1 1/4	£14.80
RB32-8SS	2	1/2	£21.35
RB32-12SS	2	3/4	£21.35
RB32-16SS	2	1	£21.35
RB32-20SS	2	1 1/4	£21.35
RB32-24SS	2	1 1/2	£21.35
RB40-12SS	2 1/2	3/4	£46.41
RB40-16SS	2 1/2	1	£46.41
RB40-20SS	2 1/2	1 1/4	£46.41
RB40-24SS	2 1/2	1 1/2	£46.41
RB40-32SS	2 1/2	2	£46.41
RB48-16SS	3	1	£56.21
RB48-20SS	3	1 1/4	£56.21
RB48-24SS	3	1 1/2	£56.21
RB48-32SS	3	2	£56.21
RB48-40SS	3	2 1/2	£56.21
RB64-16SS	4	1	£91.39
RB64-20SS	4	1 1/4	£91.39
RB64-24SS	4	1 1/2	£91.39
RB64-32SS	4	2	£91.39
RB64-40SS	4	2 1/2	£91.39
RB64-48SS	4	3	£91.39

16



Stainless Steel Ball Valves

- Body: ASTM 351-CF8M
- Seat: PTFE

See Page 482

Nipples

Hexagon Nipple

Male Thread BSPT



PGC: 280	BSPT	Price
HN2SS	1/8	£2.69
HN4SS	1/4	£2.69
HN6SS	3/8	£2.73
HN8SS	1/2	£3.30
HN12SS	3/4	£4.58
HN16SS	1	£6.87
HN20SS	1 1/4	£10.69
HN24SS	1 1/2	£14.38
HN32SS	2	£19.41
HN40SS	2 1/2	£35.93
HN48SS	3	£61.15
HN64SS	4	£98.12

Close Taper Nipple

Male Thread BSPT



PGC: 280	BSPT	Price
CTN4SS	1/4	£9.04
CTN6SS	3/8	£9.41
CTN8SS	1/2	£9.94
CTN12SS	3/4	£11.07
CTN16SS	1	£11.88
CTN20SS	1 1/4	£17.22
CTN24SS	1 1/2	£21.36
CTN32SS	2	£35.47

Blanking Caps & Plugs

Round Blanking Cap

Female Thread BSPP



PGC: 280	BSPP	Price
CAP2SS	1/8	£2.62
CAP4SS	1/4	£2.62
CAP6SS	3/8	£3.06
CAP8SS	1/2	£3.28
CAP12SS	3/4	£4.53
CAP16SS	1	£6.82
CAP20SS	1 1/4	£11.19
CAP24SS	1 1/2	£13.89
CAP32SS	2	£19.64
CAP40SS	2 1/2	£38.51
CAP48SS	3	£53.86
CAP64SS	4	£87.53

Sockets

Weld Nipple

Male Thread BSPT



PGC: 280	BSPT	Price
WN2SS	1/8	£4.02
WN4SS	1/4	£4.02
WN6SS	3/8	£4.64
WN8SS	1/2	£6.17
WN12SS	3/4	£5.66
WN16SS	1	£7.10
WN20SS	1 1/4	£11.19
WN24SS	1 1/2	£13.16
WN32SS	2	£18.27
WN40SS	2 1/2	£60.41
WN48SS	3	£86.67
WN64SS	4	£117.41

Half Socket

Female Thread BSPP



PGC: 280	BSPP	Price
HS2SS	1/8	£1.60
HS4SS	1/4	£1.67
HS6SS	3/8	£2.08
HS8SS	1/2	£2.73
HS12SS	3/4	£4.19
HS16SS	1	£6.23
HS20SS	1 1/4	£8.26
HS24SS	1 1/2	£9.50
HS32SS	2	£13.50
HS40SS	2 1/2	£26.37
HS48SS	3	£37.90
HS64SS	4	£60.92

Hexagon Blanking Cap

Female Thread BSPP



PGC: 280	BSPP	Price
CAP2HHSS	1/8	£4.13
CAP4HHSS	1/4	£2.92
CAP6HHSS	3/8	£2.92
CAP8HHSS	1/2	£3.95
CAP12HHSS	3/4	£5.16
CAP16HHSS	1	£8.33
CAP20HHSS	1 1/4	£13.86
CAP24HHSS	1 1/2	£17.41
CAP32HHSS	2	£22.30
CAP40HHSS	2 1/2	£50.49
CAP48HHSS	3	£58.01
CAP64HHSS	4	£102.52

Barrel Nipple

Male Thread BSPT



PGC: 280	BSPT	Price
BN2SS	1/8	£5.56
BN4SS	1/4	£5.56
BN6SS	3/8	£5.68
BN8SS	1/2	£5.81
BN12SS	3/4	£7.09
BN16SS	1	£9.65
BN20SS	1 1/4	£14.89
BN24SS	1 1/2	£17.85
BN32SS	2	£26.15
BN40SS	2 1/2	£82.76
BN48SS	3	£86.34
BN64SS	4	£121.72

Full Socket

Female Thread BSPP



PGC: 280	BSPP	Price
S2SS	1/8	£2.77
S4SS	1/4	£2.83
S6SS	3/8	£3.05
S8SS	1/2	£4.98
S12SS	3/4	£7.02
S16SS	1	£11.30
S20SS	1 1/4	£17.95
S24SS	1 1/2	£18.22
S32SS	2	£25.14
S40SS	2 1/2	£42.13
S48SS	3	£67.80
S64SS	4	£114.17

Hexagon Blanking Plug

Male Thread BSPT



PGC: 280	BSPT	Price
HP2SS	1/8	£2.07
HP4SS	1/4	£2.18
HP6SS	3/8	£2.49
HP8SS	1/2	£3.09
HP12SS	3/4	£4.19
HP16SS	1	£6.23
HP20SS	1 1/4	£8.26
HP24SS	1 1/2	£9.50
HP32SS	2	£18.59
HP40SS	2 1/2	£37.90
HP48SS	3	£49.94
HP64SS	4	£92.87

Square Head Blanking Plug

Male Thread BSPT



PGC: 280	BSPT	Price
SHP2TSS	1/8	£1.79
SHP4TSS	1/4	£1.88
SHP6TSS	3/8	£2.08
SHP8TSS	1/2	£2.68
SHP12TSS	3/4	£3.46
SHP16TSS	1	£4.96
SHP20TSS	1 1/4	£8.02
SHP24TSS	1 1/2	£10.79
SHP32TSS	2	£15.37
SHP40TSS	2 1/2	£29.38
SHP48TSS	3	£38.90
SHP64TSS	4	£72.09

Lock Nuts

Hexagon Lock Nut

Female Thread BSPP



PGC: 280	BSPP	Price
LN2SS	1/8	£2.29
LN4SS	1/4	£2.29
LN6SS	3/8	£2.73
LN8SS	1/2	£3.06
LN12SS	3/4	£4.34
LN16SS	1	£4.88
LN20SS	1 1/4	£5.84
LN24SS	1 1/2	£7.31
LN32SS	2	£11.23
LN40SS	2 1/2	£22.27
LN48SS	3	£28.07
LN64SS	4	£46.52

Hose Tails

Hose Tail

Male Thread BSPT



PGC: 280	ID (")	BSPT	Price
HT4-4TSS	1/4	1/4	£5.62
HT6-6TSS	3/8	3/8	£8.70
HT8-8TSS	1/2	1/2	£11.19
HT12-12TSS	3/4	3/4	£11.02
HT16-16TSS	1	1	£14.80
HT20-20TSS	1 1/4	1 1/4	£22.50
HT24-24TSS	1 1/2	1 1/2	£30.30
HT32-32TSS	2	2	£38.57
HT40-40TSS	2 1/2	2 1/2	£82.27
HT48-48TSS	3	3	£125.34
HT64-64TSS	4	4	£201.37



ZENTGRAF



High pressure stainless steel ball valves

See Page
466



BKH RANGE

- Secure Operation
- Reliable Sealing in Shut-off Position
- Reliable Sealing to the outside

- ▶ High Pressure : Up to 500 bar (7252 psi)
- ▶ Nominal Size : 1/8" to G2"
- ▶ Working Temperature for Body Material:
-10°C to +100°C



Certified according to the Pressure Equipment Directive (CE) and DIN EN ISO 9001 : 2000.

Galvanic Chrome-VI free surface plating — 'MHA-Protect'.