

True Union Ball Valves

Physical shut-off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, Nutrigation™ systems, water conveyance systems.



Superb
quality



High
durability



Maximum
reliability

/ Benefits & Features

→ Saves
operation
costs

A quarter turn shut-off valve, threaded or glued socket, user-friendly design allowing smooth handle operation

Corrosion-resistant and UV-stabilized

A true union ball valve, specifically designed for water application and for safe pipeline operation

→ Saves labor
costs and
multiple
investments in
maintenance

In the closed position, the pipeline can be disconnected downstream from the valve without any leakage

The valve is removable from the pipeline, allowing quick maintenance

Highly reliable operation and durable over time

/ Specifications & Recommendations

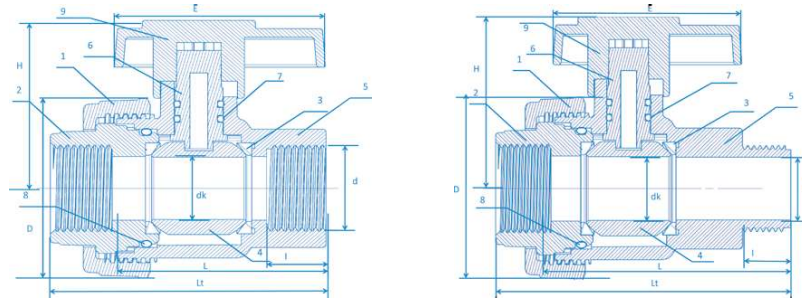
- Ideal for application in temperature range of -5°C and 50°C, guaranteeing optimal performance in terms of mechanical resistance, good rigidity, low coefficients of thermal expansion and optimal safety factors in service
- Operational up to 10 bar
- Low head losses
- Wide range of connections: threaded (BSP or NPT standards) or SG, socket glued (ISO/DIN, ASTM, BS)

→ Packaging Data

Model	Quantity P/Box (Unit)	Box Sizes (cm x cm x cm)	Female-Female Threaded Connection Box Weight (kg)	Male-Female Threaded Connection Box Weight (kg)	Socket Glued Connection Box Weight (kg)	Boxes P/Pallet
½" - 20mm	150	43.0 x 33.0 x 39.0	24.55	26.00	24.70	12
¾" - 25mm	150		22.11	23.83	22.33	
1" - 32mm	75		17.03	17.74	16.84	
1¼" - 40mm	50		17.54	18.09	17.34	
1½" - 50mm	16		10.91	10.58	10.53	
2" - 63mm	8		8.68	8.90	8.52	
2½" - 75 Mm	8		12.08	12.04	11.86	
3" - 90mm	4		15.93	13.09	12.85	
4" - 110mm	2		9.84	9.64	9.84	

→ Technical Dimensions

True Union Ball Valves ½", ¾", 1", 1¼"



Inlet Connector - Threaded Male / Outlet Connector - Threaded Female

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
½"	14.00	14.00	20.00	60.00	16.00	80.20	99.15	60.80	56.50
¾"	14.00	14.00	20.00	60.00	18.00	80.20	99.15	60.80	56.50
1"	11.00	11.50	24.50	69.00	17.70	89.00	110.40	71.00	66.45
1¼"	11.00	11.50	31.80	79.50	25.70	88.00	122.80	105.00	70.30

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
½"	14.00	14.00	20.00	60.00	16.00	63.50	82.60	60.80	56.50
¾"	14.00	14.00	20.00	60.00	18.00	63.50	82.60	60.80	55.50
1"	11.00	11.50	24.50	69.00	19.55	70.50	93.00	71.00	66.45
1¼"	11.00	11.50	31.80	79.50	27.40	88.00	122.80	105.00	70.30

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
20mm	20.20	20.20	20.00	60.00	16.00	63.50	82.60	60.80	56.60
25mm	25.00	25.00	20.00	60.00	18.00	63.50	82.60	60.80	55.60
32mm	32.00	32.00	24.50	69.00	19.55	70.50	93.00	71.00	66.45
40mm	40.00	40.00	31.80	79.50	27.40	88.00	122.80	105.00	70.30

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
½"	21.20	21.40	20.00	60.00	18.00	63.50	82.60	60.80	55.60
¾"	26.67	26.00	20.00	60.00	18.00	63.50	82.60	60.80	55.60
1"	33.40	34.00	24.50	69.00	19.55	70.50	93.00	71.00	66.45
1¼"	42.16	42.00	31.80	79.50	27.40	88.00	122.80	105.00	70.30

→ Material Specifications

PVC Ball Valves ½", ¾", 1", 1¼"

#	Part Name	Material	Qty.
1	Ring	UPVC	1
2	Bush**	UPVC	1
3	Seal	TPE	2
4	Ball	UPVC	1
5	Body	UPVC	1
6	Shaft	UPVC	1
7	Shaft o-ring	HNBR	2
8	Main o-ring**	HNBR	1
9	Handle	ABS	1
10	Threaded bush*	UPVC	1
11	Bush big o-ring*	HNBR	1
12	Bush small o-ring*	HNBR	1
13	Socket*	UPVC	1

* 1¼" Ball Valve

** ¾" Ball Valve

→ Material Specifications

Polypropylene Ball Valves ½", ¾", 1", 1¼"

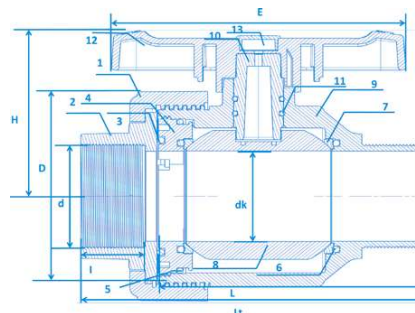
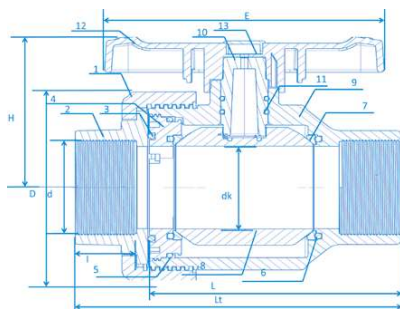
#	Part Name	Material	Qty.
1	Ring	UPVC	1
2	Bush**	UPVC	1
3	Seal	TPE	2
4	Ball	UPVC	1
5	Body	UPVC	1
6	Shaft	UPVC	1
7	Shaft o-ring	HNBR	2
8	Main o-ring**	HNBR	1
9	Handle	ABS	1

* 1¼" Ball valve

** ¾" Ball valve

→ Technical Dimensions

True Union Ball Valves 1½", 2", 2½", 3"



Inlet - Threaded Male / Outlet Connector - Threaded Female

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
1½"	11.00	11.50	39.40	94.40	32.00	98.50	136.60	121.00	90.80
2"	11.00	11.50	49.50	116.00	35.40	119.00	164.80	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	139.50	197.20	162.00	110.00
3"	11.00	8.00	76.00	178.80	42.80	180.00	230.40	200.40	139.00

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
1½"	11.00	11.50	39.40	94.40	32.00	76.60	148.80	121.00	88.30
2"	11.00	11.50	49.50	116.00	35.40	119.00	164.80	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
3"	11.00	8.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
50mm	50.00	50.00	39.40	94.40	32.00	76.60	148.80	121.00	88.30
63mm	63.00	63.00	49.50	116.00	35.40	88.00	175.40	150.00	97.00
75mm	75.00	75.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
90mm	90.00	90.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
1½"	48.26	48.00	39.40	94.40	32.00	76.60	148.80	121.00	88.30
2"	60.33	60.00	49.50	116.00	35.40	88.00	175.40	150.00	97.00
2½"	73.03	75.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
3"	88.90	89.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

→ Material Specifications

PVC Ball Valves 1½", 2", 2½", 3"

#	Part Name	Material	Qty.
1	Ring	UPVC	1
2	Socket	UPVC	1
3	Bush small o-ring	HNBR	1
4	Bush	UPVC	1
5	Bush big o-ring	HNBR	1
6	Seal washer*	HNBR	2
7	Seal	TPE	2
8	Ball	UPVC	1
9	Body	UPVC	1
10	Shaft	UPVC	1
11	Shaft o-ring**	HNBR	1
12	Handle	ABS	1
13	Handle logo	ABS	1

* 3" Ball valve

** 2" Model

→ Material Specifications

Polypropylene Ball Valves 1½", 2", 2½", 3"

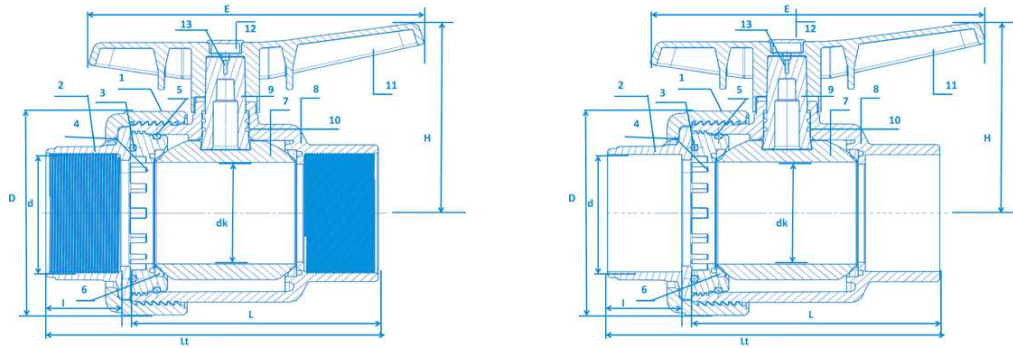
#	Part Name	Material	Qty.
1	Ring	PPGF	1
2	Socket	***UPVC /PPGF	1
3	Bush small o-ring	HNBR	1
4	Bush	UPVC	1
5	Bush big o-ring	HNBR	1
6	*Seal washer	HNBR	2
7	Seal	TPE	2
8	Ball	UPVC	1
9	Body	PPGF	1
10	Shaft	UPVC	1
11	Shaft o-ring	HNBR	**2
12	Handle	PPGF	1
13	Handle logo	PPGF	1

* Only in 3" Ball valve, ** one in 2" Model

*** UPVC for solvent socket and PPGF for Threaded socket

→ Technical Dimensions

True Union Ball Valves 4"



Inlet Connector - Threaded Male / Outlet Connector - Threaded Female

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
4"	11.00	8.00	98.30	197.00	60.00	200.00	268.00	270.10	186.00

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
4"	11.00	8.00	98.30	197.00	60.00	200.00	268.00	270.10	186.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
110mm	110.00	110.00	98.30	196.50	60.00	200.00	268.00	270.10	186.00

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

nom size	BSP (TPI)	NPT (TPI)	DK (mm)	D (mm)	I (mm)	L (mm)	LT (mm)	E (mm)	H (mm)
4"	114.30	114.00	98.30	196.50	60.00	200.00	268.00	270.10	186.00

→ Material Specifications

PVC Ball Valves 4"

#	Part Name	Material	Qty.
1	Ring	UPVC	1
2	Socket	UPVC	1
3	Bush small o-ring	HNBR	1
4	Bush	UPVC	1
5	Bush big o-ring	HNBR	1
6	Seal	TPE	2
7	Ball	UPVC	1
8	Body	UPVC	1
9	Shaft	UPVC	1
10	Shaft o-ring	HNBR	3
11	Handle	ABS	1
12	Handle logo	ABS	1

→ Material Specifications

Polypropylene Ball Valves 4"

#	Part Name	Material	Qty.
1	Ring	PPGF	1
2	Socket	***UPVC /PPGF	1
3	Bush small o-ring	NBR	1
4	Bush	UPVC	1
5	Bush big o-ring	NBR	1
6	Seal	TPE	2
7	Ball	UPVC	1
8	Body	PPGF	1
9	Shaft	UPVC	1
10	Shaft o-ring	NBR	3
11	Handle	PPGF	1
12	Handle logo	PPGF	1
13	Handle screw	SS	1

*** UPVC for solvent socket and PPGF for Threaded socket

→ Catalog Numbers

True Union Ball Valves

Description	Cat. Number
NMV PVC BALL VLV 1 UNION ½" FFT BSP	77450-000216
NMV PVC BALL VLV 1 UNION ¾" FFT BSP	77450-000100
NMV PVC BALL VLV 1 UNION 1" FFT BSP	77450-000101
NMV PVC BALL VLV 1 UNION 1¼" FFT BSP	77450-000102
NMV PVC BALL VLV 1 UNION 1½" FFT BSP	77450-000103
NMV PVC BALL VLV 1 UNION 2" FFT BSP	77450-000104
NMV PVC BALL VLV 1 UNION 2½" FFT BSP	77450-000105
NMV PVC BALL VLV 1 UNION 3" FFT BSP	77450-000106
NMV PVC BALL VLV 1 UNION 4" FFT BSP	77450-000107
NMV PVC BALL VLV 1 UNION ½" FFT NPT	77450-000217
NMV PVC BALL VLV 1 UNION ¾" FFT NPT	77450-000208
NMV PVC BALL VLV 1 UNION 1" FFT NPT	77450-000209
NMV PVC BALL VLV 1 UNION 1¼" FFT NPT	77450-000210
NMV PVC BALL VLV 1 UNION 1½" FFT NPT	77450-000211
NMV PVC BALL VLV 1 UNION 2" FFT NPT	77450-000212
NMV PVC BALL VLV 1 UNION 2½" FFT NPT	77450-000213
NMV PVC BALL VLV 1 UNION 3" FFT NPT	77450-000214
NMV PVC BALL VLV 1 UNION 4" FFT NPT	77450-000215
NMV PVC BALL VLV 1 UNION ½" FMT BSP	77450-000218
NMV PVC BALL VLV 1 UNION ¾" FMT BSP	77450-000120
NMV PVC BALL VLV 1 UNION 1" FMT BSP	77450-000121
NMV PVC BALL VLV 1 UNION 1¼" FMT BSP	77450-000122
NMV PVC BALL VLV 1 UNION 1½" FMT BSP	77450-000123
NMV PVC BALL VLV 1 UNION 2" FMT BSP	77450-000124
NMV PVC BALL VLV 1 UNION 2½" FMT BSP	77450-000125
NMV PVC BALL VLV 1 UNION 3" FMT BSP	77450-000126
NMV PVC BALL VLV 1 UNION 4" FMT BSP	77450-000127
NMV PVC BALL VLV 1 UNION ½" FMT NPT	77450-000219
NMV PVC BALL VLV 1 UNION ¾" FMT NPT	77450-000149
NMV PVC BALL VLV 1 UNION 1" FMT NPT	77450-000150
NMV PVC BALL VLV 1 UNION 1¼" FMT NPT	77450-000152
NMV PVC BALL VLV 1 UNION 1½" FMT NPT	77450-000153
NMV PVC BALL VLV 1 UNION 2" FMT NPT	77450-000151
NMV PVC BALL VLV 1 UNION 2½" FMT NPT	77450-000154
NMV PVC BALL VLV 1 UNION 3" FMT NPT	77450-000155
NMV PVC BALL VLV 1 UNION 4" FMT NPT	77450-000156

Description	Cat. Number
NMV PVC BALL VLV 1 UNION 20MM SG ISO/D	77450-000220
NMV PVC BALL VLV 1 UNION 25MM SG ISO/D	77450-000200
NMV PVC BALL VLV 1 UNION 32MM SG ISO/D	77450-000201
NMV PVC BALL VLV 1 UNION 40MM SG ISO/D	77450-000202
NMV PVC BALL VLV 1 UNION 50MM SG ISO/D	77450-000203
NMV PVC BALL VLV 1 UNION 63MM SG ISO/D	77450-000204
NMV PVC BALL VLV 1 UNION 75MM SG ISO/D	77450-000205
NMV PVC BALL VLV 1 UNION 90MM SG ISO/D	77450-000206
NMV PVC BALL VLV 1 UNION 110MM SG ISO/D	77450-000207
NMV PVC BALL VLV 1 UNION ½" SG BS	77450-000221
NMV PVC BALL VLV 1 UNION ¾" SG BS	77450-000360
NMV PVC BALL VLV 1 UNION 1" SG BS	77450-000361
NMV PVC BALL VLV 1 UNION 1¼" SG BS	77450-000362
NMV PVC BALL VLV 1 UNION 1½" SG BS	77450-000108
NMV PVC BALL VLV 1 UNION 2" SG BS	77450-000350
NMV PVC BALL VLV 1 UNION 2½" SG BS	77450-000109
NMV PVC BALL VLV 1 UNION 3" SG BS	77450-000110
NMV PVC BALL VLV 1 UNION 4" SG BS	77450-000367
NMV PVC BALL VLV 1 UNION ½" SG ASTM	77450-000380
NMV PVC BALL VLV 1 UNION ¾" SG ASTM	77450-000381
NMV PVC BALL VLV 1 UNION 1" SG ASTM	77450-000382
NMV PVC BALL VLV 1 UNION 1¼" SG ASTM	77450-000383
NMV PVC BALL VLV 1 UNION 1½" SG ASTM	77450-000384
NMV PVC BALL VLV 1 UNION 2" SG ASTM	77450-000385
NMV PVC BALL VLV 1 UNION 2½" SG ASTM	77450-000386
NMV PVC BALL VLV 1 UNION 3" SG ASTM	77450-000387
NMV PVC BALL VLV 1 UNION 4" SG ASTM	77450-000388

→ Catalog Numbers

Polypropylene True Union Ball Valves

Description	Cat. Number
NMV PP BALL VLV 1 UNION ¾" FFT BSP	77449-000101
NMV PP BALL VLV 1 UNION 1" FFT BSP	77449-000102
NMV PP BALL VLV 1 UNION 1¼" FFT BSP	77449-000103
NMV PP BALL VLV 1 UNION 1½" FFT BSP	77449-000104
NMV PP BALL VLV 1 UNION 2" FFT BSP	77449-000105
NMV PP BALL VLV 1 UNION 2½" FFT BSP	77449-000106
NMV PP BALL VLV 1 UNION 3" FFT BSP	77449-000107
NMV PP BALL VLV 1 UNION 4" FFT BSP	77449-000108
NMV PP BALL VLV 1 UNION ¾" FFT NPT	77449-000131
NMV PP BALL VLV 1 UNION 1" FFT NPT	77449-000132
NMV PP BALL VLV 1 UNION 1¼" FFT NPT	77449-000133
NMV PP BALL VLV 1 UNION 1½" FFT NPT	77449-000134
NMV PP BALL VLV 1 UNION 2" FFT NPT	77449-000135
NMV PP BALL VLV 1 UNION 2½" FFT NPT	77449-000136
NMV PP BALL VLV 1 UNION 3" FFT NPT	77449-000137
NMV PP BALL VLV 1 UNION 4" FFT NPT	77449-000138
NMV PP BALL VLV 1 UNION ¾" FMT BSP	77449-000151
NMV PP BALL VLV 1 UNION 1" FMT BSP	77449-000152
NMV PP BALL VLV 1 UNION 1¼" FMT BSP	77449-000153
NMV PP BALL VLV 1 UNION 1½" FMT BSP	77449-000154
NMV PP BALL VLV 1 UNION 2" FMT BSP	77449-000155
NMV PP BALL VLV 1 UNION 2½" FMT BSP	77449-000156
NMV PP BALL VLV 1 UNION 3" FMT BSP	77449-000157
NMV PP BALL VLV 1 UNION 4" FMT BSP	77449-000158
NMV PP BALL VLV 1 UNION ¾" FMT NPT	77449-000171
NMV PP BALL VLV 1 UNION 1" FMT NPT	77449-000172
NMV PP BALL VLV 1 UNION 1¼" FMT NPT	77449-000173
NMV PP BALL VLV 1 UNION 1½" FMT NPT	77449-000174
NMV PP BALL VLV 1 UNION 2" FMT NPT	77449-000175
NMV PP BALL VLV 1 UNION 2½" FMT NPT	77449-000176
NMV PP BALL VLV 1 UNION 3" FMT NPT	77449-000177
NMV PP BALL VLV 1 UNION 4" FMT NPT	77449-000178

Description	Cat. Number
NMV PP BALL VLV 1 UNION 25MM SG ISO/D	77449-000201
NMV PP BALL VLV 1 UNION 32MM SG ISO/D	77449-000202
NMV PP BALL VLV 1 UNION 40MM SG ISO/D	77449-000203
NMV PP BALL VLV 1 UNION 50MM SG ISO/D	77449-000204
NMV PP BALL VLV 1 UNION 63MM SG ISO/D	77449-000205
NMV PP BALL VLV 1 UNION 75MM SG ISO/D	77449-000206
NMV PP BALL VLV 1 UNION 90MM SG ISO/D	77449-000207
NMV PP BALL VLV 1 UNION 110MM SG ISO/D	77449-000208
NMV PP BALL VLV 1 UNION ¾" SG ASTM	77449-000221
NMV PP BALL VLV 1 UNION 1" SG ASTM	77449-000222
NMV PP BALL VLV 1 UNION 1¼" SG ASTM	77449-000223
NMV PP BALL VLV 1 UNION 1½" SG ASTM	77449-000224
NMV PP BALL VLV 1 UNION 2" SG ASTM	77449-000225
NMV PP BALL VLV 1 UNION 2½" SG ASTM	77449-000226
NMV PP BALL VLV 1 UNION 3" SG ASTM	77449-000227
NMV PP BALL VLV 1 UNION 4" SG ASTM	77449-000228
NMV PP BALL VLV 1 UNION ¾" SG BS	77449-000241
NMV PP BALL VLV 1 UNION 1" SG BS	77449-000242
NMV PP BALL VLV 1 UNION 1¼" SG BS	77449-000243
NMV PP BALL VLV 1 UNION 1½" SG BS	77449-000244
NMV PP BALL VLV 1 UNION 2" SG BS	77449-000245
NMV PP BALL VLV 1 UNION 2½" SG BS	77449-000246
NMV PP BALL VLV 1 UNION 3" SG BS	77449-000247
NMV PP BALL VLV 1 UNION 4" SG BS	77449-000248

→ Head Loss

