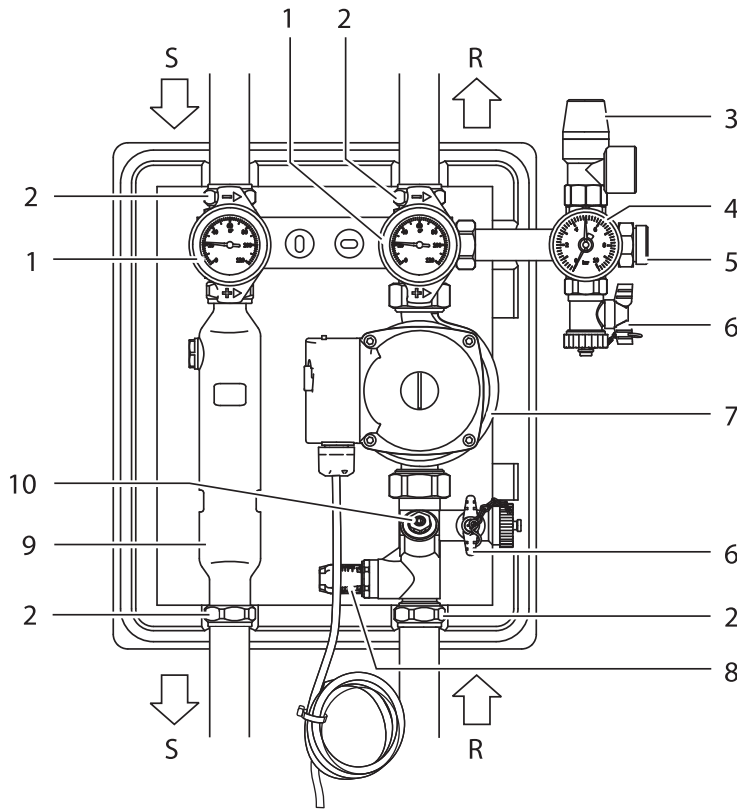




Installation Sets for Collectors



Layout legend

- S Supply from collector to storage
- R Return from storage to collector
- 1 Ball valve with thermometer and integrated gravity break
Position 0° = gravity brake ready for operation, ball valve open
Position 45° = gravity brake manually open
Position 90° = ball valve closed
- 2 Compression ring fitting (all flow and return connections)
- 3 Safety relief valve
- 4 Pressure gauge
- 5 Connection for diaphragm expansion vessel
- 6 Fill & drain valve
- 7 Solar circuit pump
- 8 Flow volume indicator
- 9 Air separator

Engineering Specifications

The following shall be the specifications for the solar pump station. The solar pump station shall be a KS0105, KS0110, KS0120, or KS0150. The station shall have a rear and a front insulation with the following dimensions: Height 14", Width 11-1/2", Depth 9-1/4".

The pump station shall be equipped with a 120V 60Hz Grundfos solar pump 15-58 (KS0105 and KS0110), Grundfos UPS 25-99 (KS0120), and UPS 25-120 (KS0150).

The pump station shall be equipped with a supply and a return shutoff ball valve with thermometer integrated into the handle. Furthermore it shall have a manual air separator, a flow check/gravity brake, flow setter with volume flow indicator, 87 psi rated safety relief valve, and 3/4" expansion vessel connection (KS0150: 1").

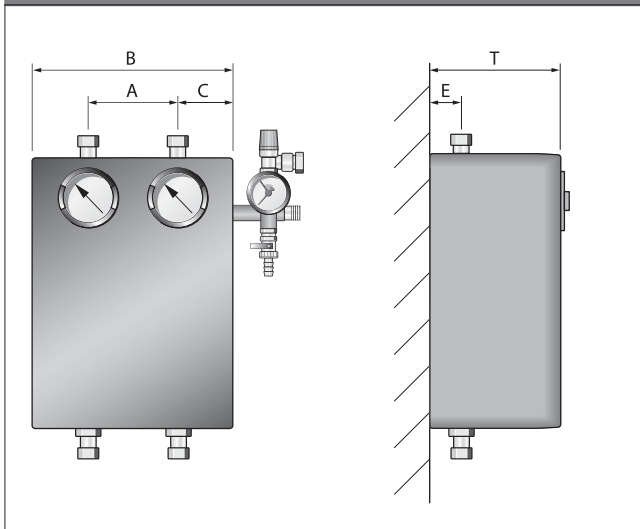


KS Pump Stations

KS Pump Station Specifications

Technical Specifications	KS0105	KS0110	KS0120	KS0150
Part number	7747021981	7747021982	7747021983	8718530311
Max. recommended # of collectors	5	10	20	50
Copper pipe connection size (compression fitting) Supply/Return	½"	¾"	1"	1"
Expansion tank connection	¾"	¾"	¾"	1"
Safety relief valve (bar)	87 psi (6)	87 psi (6)	87 psi (6)	87 psi (6)
Circulation pump type	Grundfos Solar 15-58	Grundfos Solar 15-58	Grundfos UPS 25-99	Grundfos UPS 26-120
Circulation pump finished length (mm)	5 ⅞" (130)	5 ⅞" (130)	7 ⅛" (180)	7 ⅛" (180)
Electrical power supply	120 V AC	120 V AC	120 V AC	120 V AC
Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Max. power consumption	60 W	125 W	195 W	215 W
Max. current load	0.25 A	0.54 A	0.85 A	2.15 A
Throughput limiter adjusting range (L/min)	⅓ - 1½ gpm (0.5-6)	½ - 4¼ gpm (2-16)	2 - 7 gpm (8-26)	5 - 11 gpm (20-42.5)
Weight (kg)	16 lbs. (7.1)	16 lbs. (7.1)	21 lbs. (9.3)	22 lbs. (10.0)

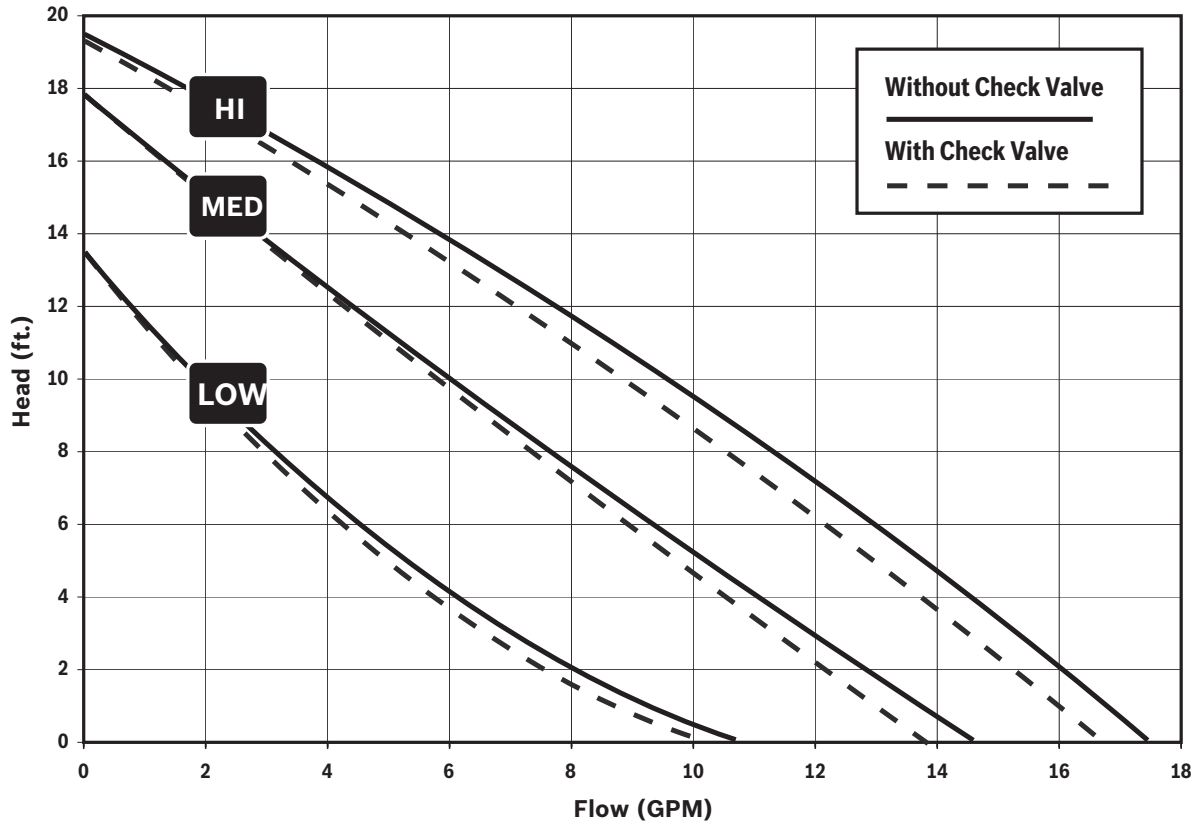
KS Pump Station Dimensions



KS Pump Station Dimensions

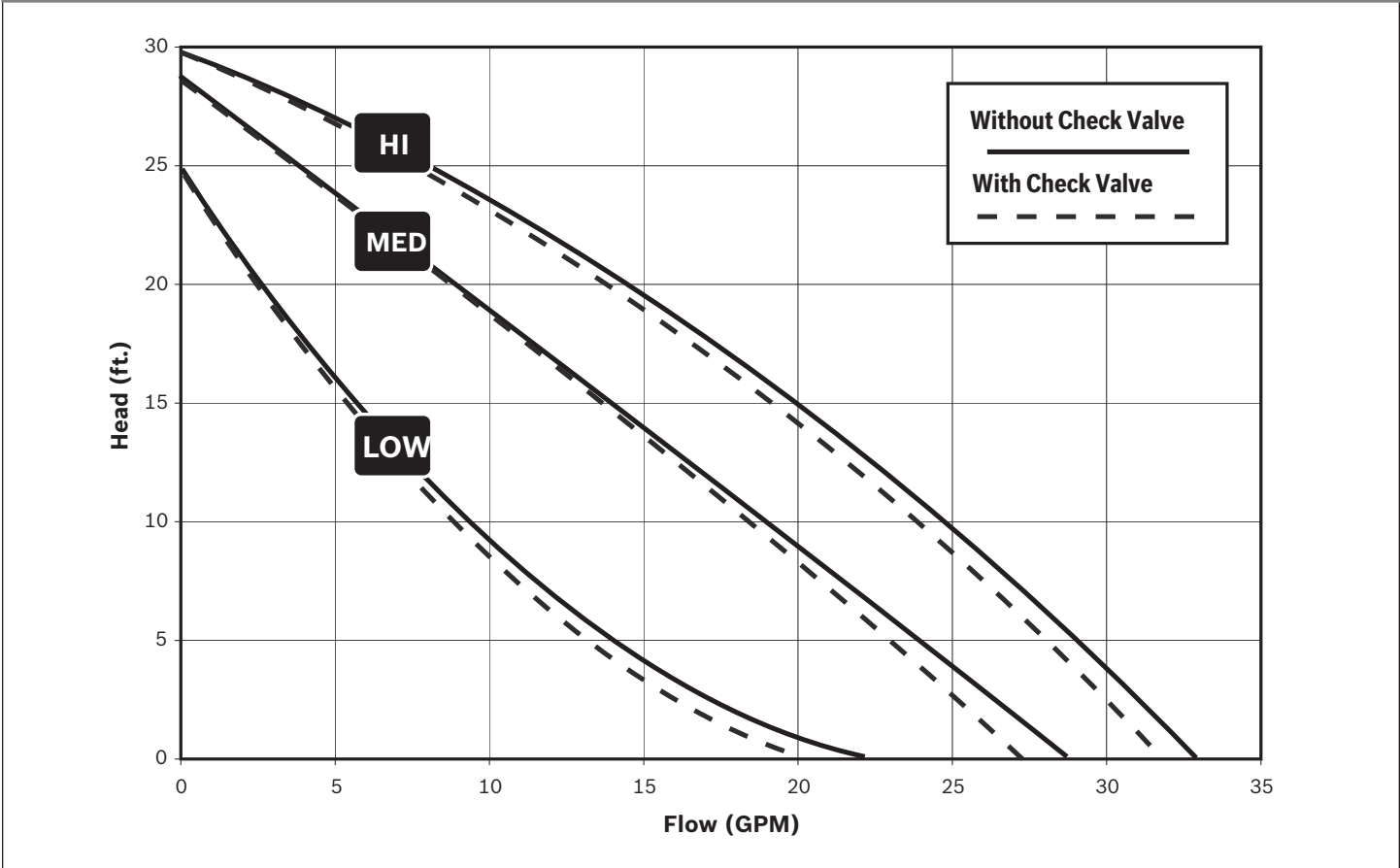
Dimension (mm)	KS0105	KS0110	KS0120	KS0150
Height	14" (355)	14" (355)	14" (355)	14" (355)
Width (B)	11½" (290)	11½" (290)	11½" (290)	11½" (290)
Depth (T)	9 ¼" (235)	9 ¼" (235)	9 ¼" (235)	9 ¼" (235)
(A)	5 ⅞" (130)	5 ⅞" (130)	5 ⅞" (130)	5 ⅞" (130)
(C)	3 ⅞" (80)	3 ⅞" (80)	3 ⅞" (80)	3 ⅞" (80)
(E)	2" (50)	2" (50)	2" (50)	2" (50)

KS 105 and KS 110 Pump Curve



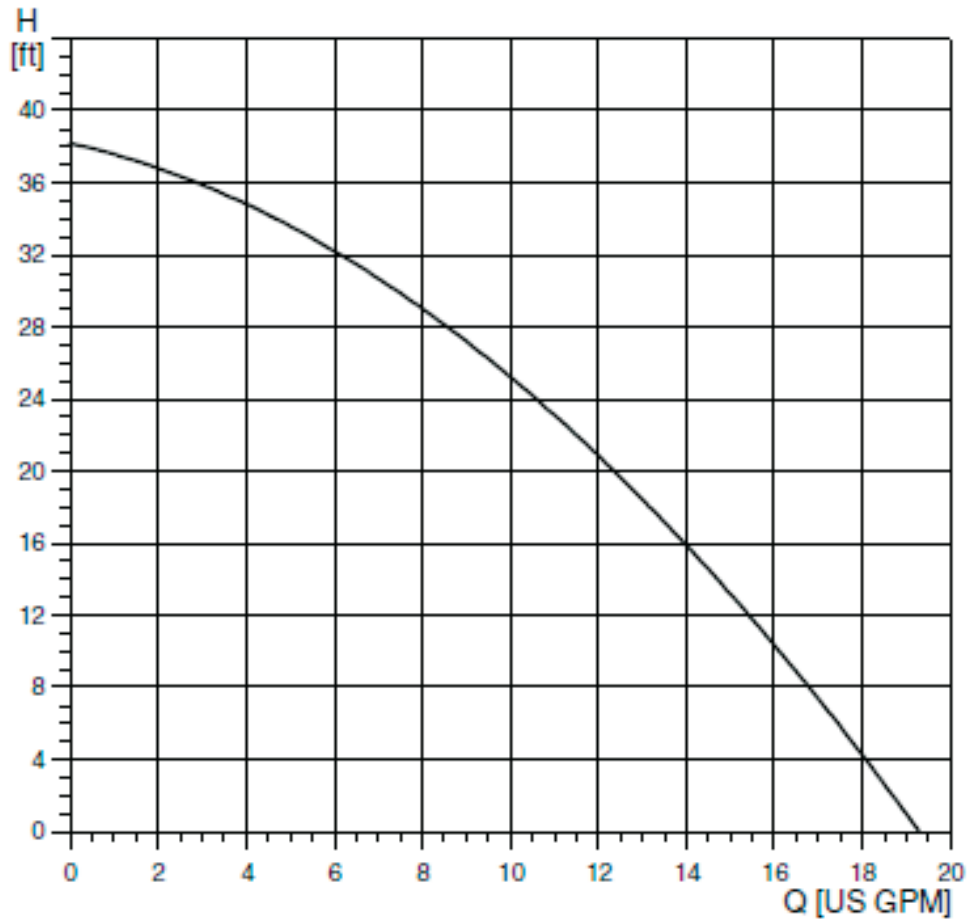
KS 105 and KS 110 Technical Data	
Flow range	0–17.5 gpm
Head range	0–19'
Motors	2 pole, single phase
Maximum fluid temperature (°C)	230°F (110)
Minimum fluid temperature (°C)	36°F (2)
Maximum working pressure	145 psi

KS 120 Pump Curve



KS 120 Technical Data	
Flow range	0-34 gpm
Head range	0-32'
Motors	2 pole, single phase
Maximum fluid temperature (°C)	230°F (110)
Minimum fluid temperature (°C)	36°F (2)
Maximum working pressure	145 psi

KS 150 Pump Curve



KS 150 Technical Data	
Flow range	0–19 gpm
Head range	0–38'
Motors	2 pole, single phase
Maximum fluid temperature (°C)	230°F (110)
Minimum fluid temperature (°C)	36°F (2)
Maximum working pressure	145 psi

Pressure Drop Curve for n-Collectors

