

**SERIES 100
METERS AND
ACCESSORIES**

**PROPELLER METER
TUBES AND SADDLES**

PDS-110

Issue Date: February 1996
Supersedes: August 1995

DESCRIPTION

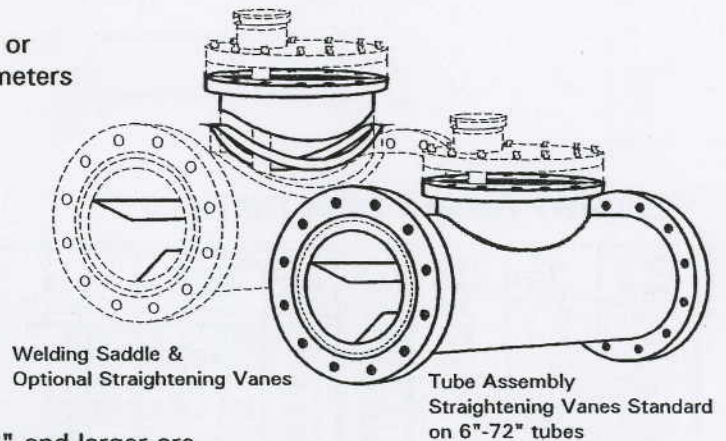
Sparling MainLine™ direct or magnetic drive propeller meters may be furnished with a flanged tube or with a saddle for field welding onto the customers pipe.

Tubes

Small tubes through 3" are provided in heavy duty cast iron. Larger tubes are epoxy polyamide lined and coated fabricated steel. Meters 6" and larger are equipped with three integrally mounted straightening vanes. Flanges are 150# or 250# AWWA as required.

Saddles

Saddles for meterheads from 6" - 14" are provided in heavy duty cast steel with the Sparling standard bolt pattern. Saddles for meterheads from 16" - 72" are fabricated



SPECIFICATIONS

Materials of Construction

Tubes

| | |
|--------------------------------|--|
| Tube | Cast Iron (2-3") Fabricated Steel (4" +) |
| Flanges | 150 or 250# AWWA as required |
| Bolt Pattern (meterhead) | Sparling standard bolt pattern (2" - 14") AWWA flange compliant (16" - 36") |
| Straightening Vanes | 2" to 4" not included 6" to 36" integrally welded in tube |

Saddles

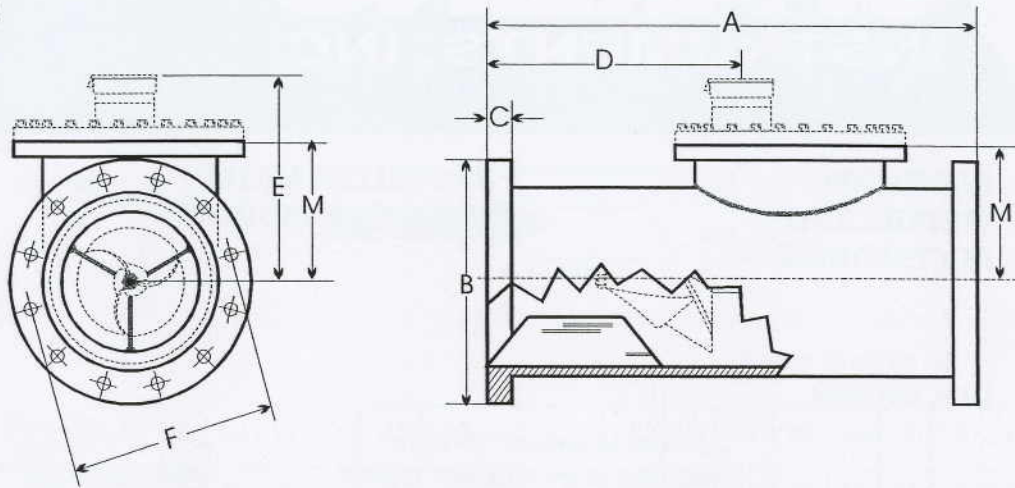
| | |
|--------------------|--|
| Saddle | Cast Steel (6" - 14") Fabricated Steel (16" - 72") |
| Bolt Pattern | Sparling standard bolt pattern (6" - 14") AWWA flange compliant (16" - 72") |

Straightening Vanes Fabricated Carbon Steel

Sparling Instruments, Inc.

4097 N. Temple City Blvd. • El Monte, CA 91731-1089 USA
Phone (626) 444-0571 • Fax (626) 444-2314

Basic Meter Tube



150 MWP Flanged Tubes, Flat Faced

| Size | Wt. (LBS.) | | A | B | C | D | E | F | M | Bolt Size | # of Bolts |
|------|-------------|-----------|--------|--------|--------|----------|---------|--------|--------|-----------|------------|
| | Fabr. Steel | Cast Iron | | | | | | | | | |
| 2 | - | 20 | 13-1/4 | 6 | 5/8 | 6-1/8 | 6-1/2 | 4-3/4 | 1-3/4 | 5/8 | 4 |
| 3 | - | 25 | 12-3/4 | 7-1/2 | 3/4 | 5-7/16 | 7-7/16 | 6 | 2-3/4 | 5/8 | 4 |
| 4 | 40 | - | 18 | 9 | 1 | 10-3/16 | 8-1/8 | 7-1/2 | 3-7/16 | 5/8 | 8 |
| 6 | 95 | - | 22 | 11 | 11/16 | 12 | 9-1/4 | 9-1/2 | 4-1/4 | 3/4 | 8 |
| 8 | 155 | - | 24 | 13-1/2 | 11/16 | 14-1/2 | 10-5/16 | 11-3/4 | 5-5/16 | 3/4 | 8 |
| 10 | 260 | - | 26 | 16 | 11/16 | 15-1/2 | 11-5/16 | 14-1/4 | 6-5/16 | 7/8 | 12 |
| 12 | 310 | - | 28 | 19 | 13/16 | 17-1/4 | 12-5/16 | 17 | 7-5/16 | 7/8 | 12 |
| 14 | 325 | - | 32 | 21 | 15/16 | 21-1/4 | 12-5/16 | 18-3/4 | 8 | 1 | 12 |
| 16 | 410 | - | 46 | 23-1/2 | 1 | 25-7/16 | 17-3/4 | 21-1/4 | 12-1/4 | 1 | 16 |
| 18 | 480 | - | 48 | 25 | 1-1/16 | 26-15/16 | 18-3/4 | 22-3/4 | 13-1/2 | 1-1/8 | 16 |
| 20 | 540 | - | 50 | 27-1/2 | 1-1/8 | 28-7/16 | 19-3/4 | 25 | 14-1/2 | 1-1/8 | 20 |
| 24 | 695 | - | 54 | 32 | 1-1/4 | 31-15/16 | 21-3/4 | 29-1/2 | 16-1/4 | 1-1/4 | 20 |
| 30 | 860 | - | 60 | 38-3/4 | 1-3/8 | 36-15/16 | 24-3/4 | 36 | 19-1/4 | 1-1/4 | 28 |
| 36 | 1180 | - | 80 | 46 | 1-5/8 | 49-11/16 | 28-7/8 | 42-3/4 | 23 | 1-1/2 | 32 |

250 MWP Flanged Tubes, Raised Faced

| Size | Wt. (LBS.) | | A | B | C | D | E | F | M | Bolt Size | # of Bolts |
|------|-------------|-----------|--------|--------|--------|----------|----------|--------|--------|-----------|------------|
| | Fabr. Steel | Cast Iron | | | | | | | | | |
| 2 | - | 35 | 13-1/4 | 6-1/2 | 7/8 | 6-1/8 | 6-1/2 | 5 | 1-3/4 | 5/8 | 8 |
| 3 | - | 40 | 12-3/4 | 8-1/4 | 1-1/8 | 5-7/16 | 7-7/16 | 6-5/8 | 2-3/4 | 3/4 | 8 |
| 4 | 60 | - | 20-5/8 | 10 | 1-1/4 | 12-13/16 | 8-1/4 | 7-7/8 | 3-7/16 | 3/4 | 8 |
| 6 | 130 | - | 22 | 12-1/2 | 1-7/16 | 12 | 9-1/4 | 10-5/8 | 4-1/4 | 3/4 | 12 |
| 8 | 285 | - | 24 | 15 | 1-5/8 | 14-1/2 | 10-5/16 | 13 | 5-5/16 | 7/8 | 12 |
| 10 | 290 | - | 26 | 17-1/2 | 1-7/8 | 15-1/2 | 11-5/16 | 15-1/4 | 6-5/16 | 1 | 16 |
| 12 | 360 | - | 28 | 20-1/2 | 2 | 17-1/4 | 12-5/16 | 17-3/4 | 7-5/16 | 1-1/8 | 16 |
| 14 | 420 | - | 32 | 23 | 2-1/8 | 21-1/4 | 12-15/16 | 20-1/4 | 8 | 1-1/8 | 20 |
| 16 | 530 | - | 46 | 25-1/2 | 2-1/4 | 25-7/16 | 18-9/16 | 22-1/2 | 12-1/4 | 1-1/4 | 20 |
| 18 | 600 | - | 48 | 28 | 2-3/8 | 26-15/16 | 19-9/16 | 24-3/4 | 13-1/2 | 1-1/4 | 24 |
| 20 | 680 | - | 50 | 30-1/2 | 2-1/2 | 28-7/16 | 20-9/16 | 27 | 14-1/2 | 1-1/4 | 24 |
| 24 | 825 | - | 54 | 36 | 2-3/4 | 31-15/16 | 22-9/16 | 32 | 16-1/4 | 1-1/2 | 24 |
| 30 | 990 | - | 60 | 43 | 3 | 36-15/16 | 25-9/16 | 39-1/4 | 19-1/4 | 1-3/4 | 28 |
| 36 | 1480 | - | 80 | 50 | 3-3/8 | 49-11/16 | 29-3/4 | 46 | 23 | 2 | 32 |

