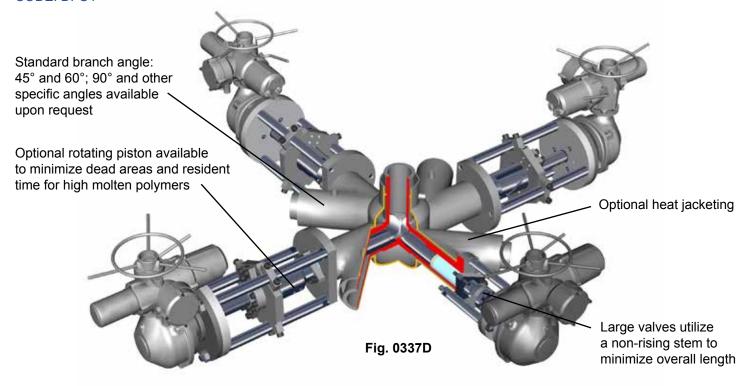
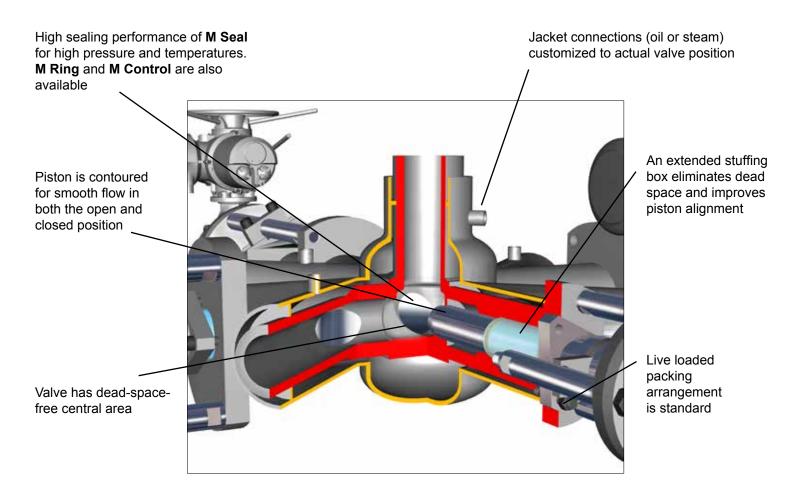
PISTON DIVERTER VALVES



CODE: DPS4

**PISTON DIVERTER VALVES** 





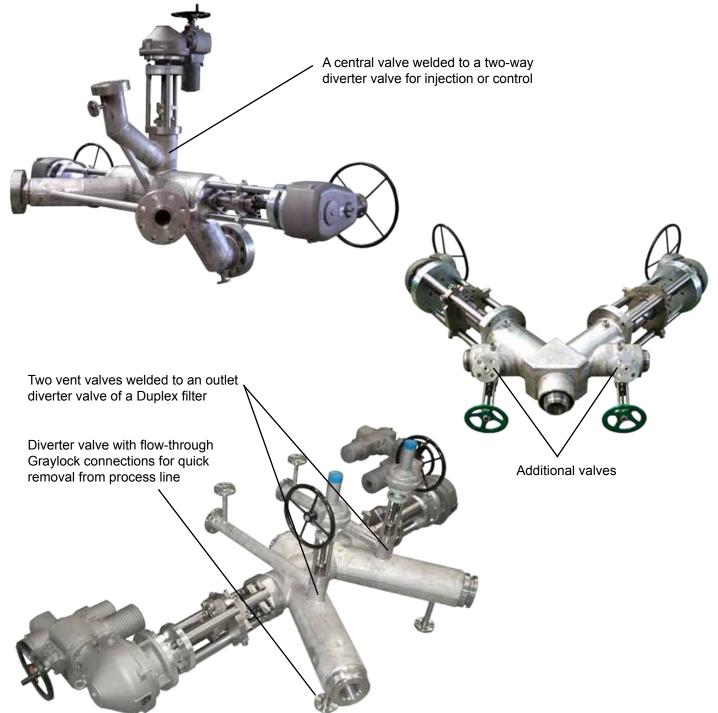
the flow of high viscosity products like polymers and slurries. Our full piston design avoids product build-up and clogging in the valve. Strahman offers a full range of Piston Diverter valves specially designed for this purpose. With Strahman's modular component (MCD) system, valves can be customized to match with any piping layout.

The valves are available with a wide selection of options including materials of construction, actuators, and customized or standard connections to piping. Other options include rotating pistons for smooth flow, high viscosity flow control and additional drain, injection or vent valves.

Typical applications: Flow management of slurry type and molten polymer processes.

## ADDITIONAL VALVES FOR VENT, DRAIN AND INJECTION APPLICATIONS

For process reasons, it can be advantageous to have additional valves installed on the main diverter valve. These valves are typically used to vent or drain process lines or to inject additives. Some examples are shown below:

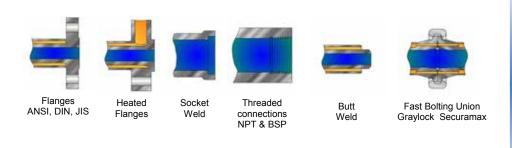


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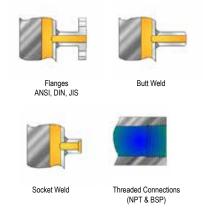
Strahman diverter valves provide a smooth changeover from one polymer filter to another.



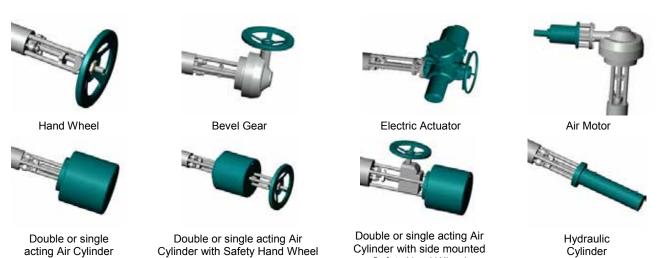
## **LINE AND BRANCH OPTIONS**



#### **JACKET CONNECTIONS**



## **ACTUATION OPTIONS**



#### **DESIGN CODE AND CONSTRUCTION**

- Design standard compliant with ASME B16.34
- International standards include ANSI, DIN, JIS, API etc.
- Wide range of material selections including carbon steel / stainless steel / Titanium / Hastelloy / Duplex / Monel / Tantalum / Zirconium
- Fabricated, cast, forged and bar stock designs
- · Combinations of fabricated, sand and investment castings, and bar stock available

#### SURFACE FINISH

• For polymer applications, Strahman recommends a surface finish of 300 (Ra 0.4) for all parts are in contact with the medium

#### QUALITY ASSURANCE AND TESTING

ISO 9001 compliant

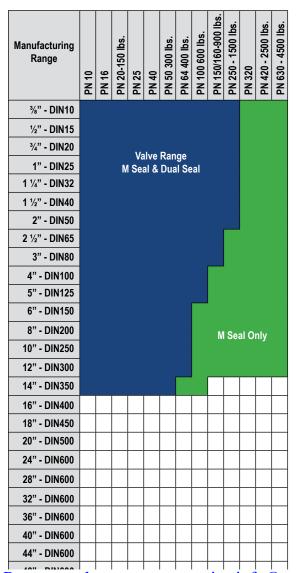
- CU TR 010
- PED / ATEX / CE marking

• CU TR 032

- TUV / HPO / TA Luft
- Standard testing procedures

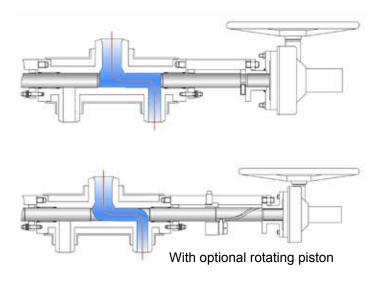
#### **RANGE DEFINITION**

Manufacturing Range	PN 10	PN 16	PN 20-150 lbs.	PN 25	PN 40	PN 50 300 lbs.	PN 64 400 lbs.	PN 100 600 lbs.	PN 150/160-900 lbs.	PN 250 - 1500 lbs.	PN 320	PN 420 - 2500 lbs.	PN 630 - 4500 lbs.	
3/8" - DIN10														
½" - DIN15														
3/4" - DIN20														
1" - DIN25	Inlet Range													
1 1/4" - DIN32														
1 ½" - DIN40														
2" - DIN50														
2 ½" - DIN65														
3" - DIN80														
4" - DIN100														
5" - DIN125														
6" - DIN150														
8" - DIN200														
10" - DIN250														
12" - DIN300														
14" - DIN350														
16" - DIN400														
16" - DIN400 18" - DIN450														
18" - DIN450														
18" - DIN450 20" - DIN500														
18" - DIN450 20" - DIN500 24" - DIN600														
18" - DIN450 20" - DIN500 24" - DIN600 28" - DIN600														
18" - DIN450 20" - DIN500 24" - DIN600 28" - DIN600 32" - DIN600														



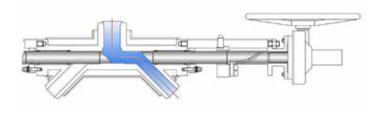
#### STRAIGHT DESIGN

CODE: DPS2



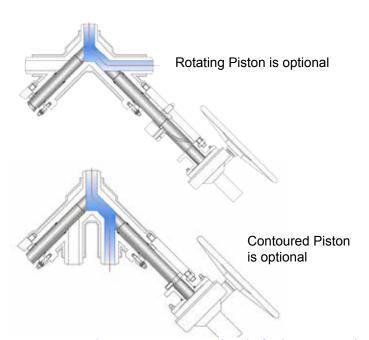
### **T DESIGN**

CODE: DPT2



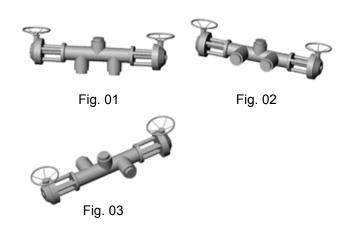
#### Y DESIGN

CODE: DPY2



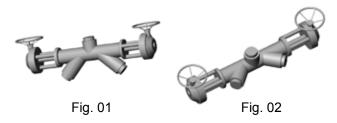
## **POSSIBLE BODY ARRANGEMENTS**

S2



#### **POSSIBLE BODY ARRANGEMENTS**

T2



#### POSSIBLE BODY ARRANGEMENTS

Y2

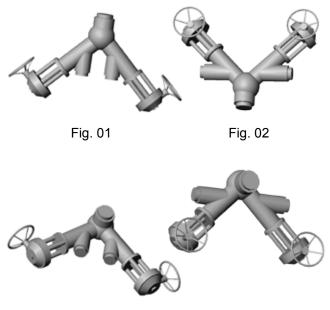
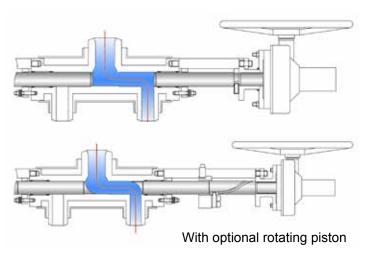


Fig. 03 Fig. 04

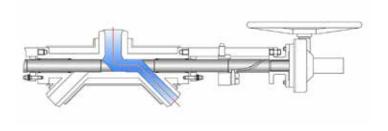
#### STRAIGHT DESIGN

CODE: DPS3



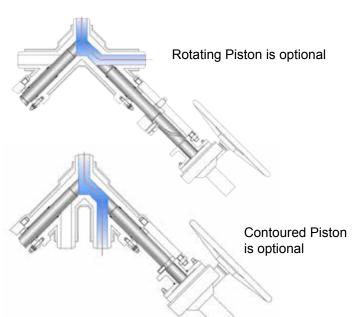
#### T DESIGN

CODE: DPT3



## Y DESIGN

CODE: DPY3



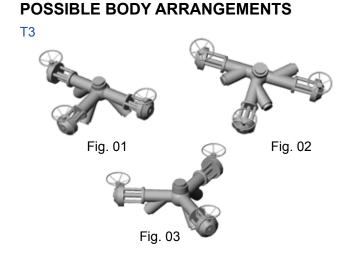
# **POSSIBLE BODY ARRANGEMENTS**

Fig. 01 Fig. 02



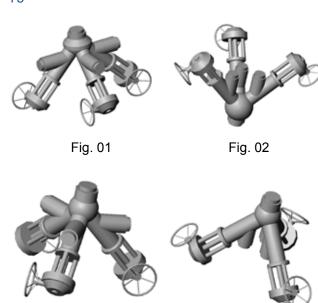
Fig. 04

Fig. 03



## **POSSIBLE BODY ARRANGEMENTS**

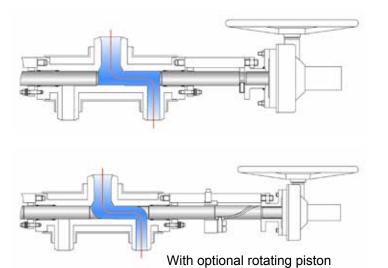
**Y**3



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## STRAIGHT DESIGN

CODE: DPS4



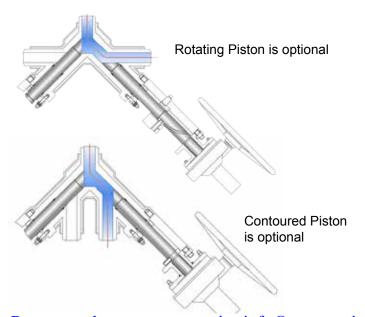
## **T DESIGN**

CODE: DPT4



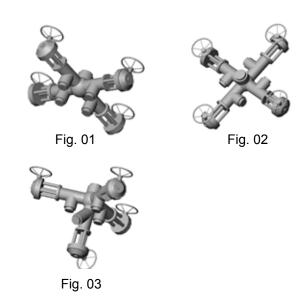
#### Y DESIGN

CODE: DPY4

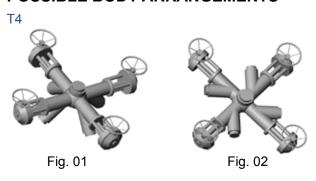


## POSSIBLE BODY ARRANGEMENTS

S4

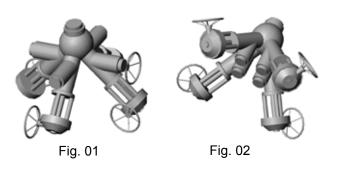


## **POSSIBLE BODY ARRANGEMENTS**



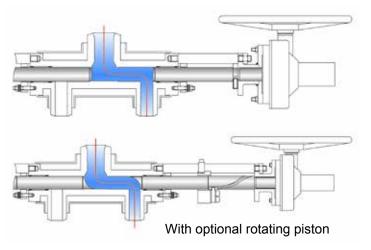
## POSSIBLE BODY ARRANGEMENTS

**Y4** 



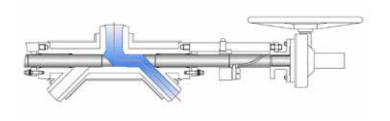
#### STRAIGHT DESIGN

CODE: DPS5-DPS6



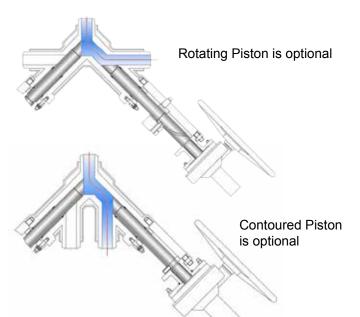
#### **T DESIGN**

CODE: DPT5-DPT6



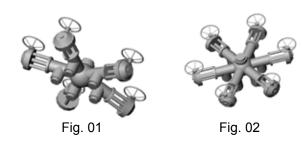
#### Y DESIGN

CODE: DPY5-DPY6



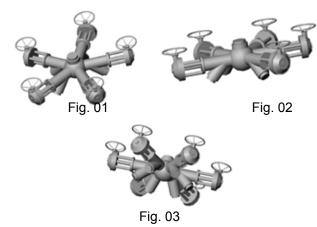
## POSSIBLE BODY ARRANGEMENTS

S5, S6



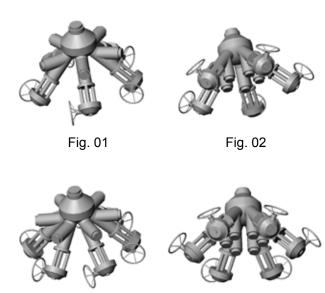
#### POSSIBLE BODY ARRANGEMENTS

T5, T6



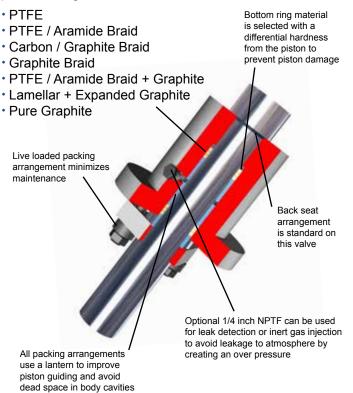
#### **POSSIBLE BODY ARRANGEMENTS**

Y5, Y6

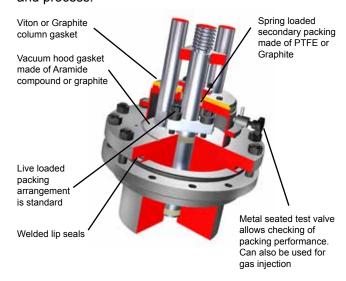


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Typical Packing Materials:



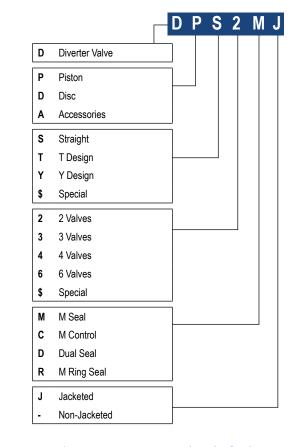
For valves on full vacuum service, Strahman offers a special **vacuum package** that maintains tightness to atmosphere. Valves with this package are usually equipped with an **M Ring Seal** design as process sealing. The system uses a replaceable aluminum or nickel seal ring and provides high vacuum performance. This special **vacuum package** provides zero leakage between atmosphere and process.



#### STANDARD BODY GASKET RANGE

- PTFE
- · Aramide / Nitrile
- · Carbon / Nitrile
- Laminated Graphite
- · Laminated Graphite / 316
- Spiral Wound 316L / PTFE
- Spiral Wound 316L / Graphite
- Spiral Wound 321 / Graphite
- Spiral Wound Inconel / Graphite
- · Spiral Wound Titanium / Graphite
- · Welded Lip Seals

#### **VALVE CODING SYSTEM**

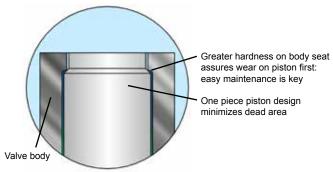


#### M SEAL

This sealing system offers a wide range of material combinations selected to create a differential hardness between body and plunger seat. The maintenance friendly design of the **M Seal** system provides long and reliable valve performance and is suitable for almost all process conditions.

• Temperature: Min.: -200°C / -330°F Max.: 815°C / 1500°F

• Pressure: 630 bar / 9000 PSIG



#### M-CONTROL

The **M-Control** system provides customized flow characteristics to regulate a specific laminar flow with high viscosity. The system uses a piston with a specific shape to control flow and/or pressure. The **M-Control** uses the specific sealing features of the **M Seal** system.

• Temperature: Min.: -200°C / -330°F

Max.: 815°C / 1500°F

• Pressure: 630 bar / 9000 PSIG

# S. Valve body

Strahman's experience with high viscosity control valves combined with our calculation software provides a smooth and high performing control valve

Greater hardness on body seat assures that wear occurs on piston first

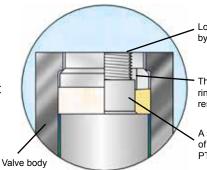
#### **DUAL SEAL**

The **Dual Seal** is a unique double sealing system that works as a piston operating within a cylindrical seat. Unlike other designs, the secondary resilient seal ring is mounted on the piston and will expand after metal to metal contact of the primary seat ring. The design provides a true metal to metal seal in case of resilient seat failure.

• Temperature: Min.: -50°C / -60°F

Max.: 200°C / 390°F

• Pressure: 250 bar / 3550 PSIG & full vacuum



Locking nut is secured by a tack weld

 The primary metal to metal seal ring compresses the secondary resilient seal ring

A secondary seal ring is made of resilient material like PTFE, PTFE glass filled

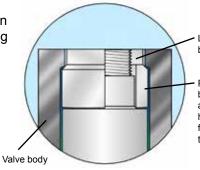
#### M RING SEAL

The **M Ring Seal** is also based on a differential hardness between the body and the piston surface. The replaceable metallic seal ring made of aluminum, nickel or titanium provides excellent sealing performance especially in applications that combine full vacuum and temperatures above 200°C.

• Temperature: Min.: -200°C / -330°F

Max.: 450°C / 840°F

• Pressure: 250 bar / 3550 PSIG & full vacuum



 Locking nut is secured by a tack weld

 Resilient metal ring seals between the body seat and disc and provides high performance sealing for vacuum and high temperature applications

#### SAMPLING VALVES

Strahman has a full line of sampling valves that produce live samples without exception. Our sampling valves unique designs prevent failure caused by sediment or clogging.

#### DRAIN VALVES

Strahman Drain Valves are designed to prevent clogging. They are ideal for use in liquid and gas service or with slurries, polymers, and high viscosity fluids that tend to solidify at room temperature.

#### LINE BLINDS

Strahman Line Blinds provide zero leakage down stream and total isolation on process pipelines, vessels and maritime applications. No pipeline movement is required when blind position is changed.

#### **AUTOMATED VALVES & FIRE SAFE PRODUCTS**

Strahman automated valve packages with floating ball valves and resilient seated butterfly valves come complete with electric or pneumatic actuators for a wide array of industrial applications. Additionally, a full suite of API 607 fire safe valve products are offered as actuated units or to be used in conjunction with our FM approved thermal shut-off assemblies. Resettable Emergency Block Valves (R-EBV) are also available for the oil & gas and chemical industries.

#### WASH DOWN EQUIPMENT

Strahman offers a full line of mixing units, hose stations, hoses, nozzles and wash down accessories. Our wash down line is designed for industrial use and is used in a wide variety of industries including food, beverage, pharmaceutical, chemical and other applications.

Please contact your local Strahman representative for further details or visit our website: www.strahmanvalves.com



Established 1921 www.strahmanvalves.com

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