



PMP Precision Ind. Co., Ltd.

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Phone (+86) 769 8331 5531
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Exceeding Your Expectations !

PMP Series 202 Pneumatic Actuator Stainless Steel

Rack & Pinion, Double acting & Spring return



ISO-9001, QS-9000



PED 97/23/EC



ATEX



AD2000 W0

Made by PMP, a partner of great reputation you can count on
PMP Quality System is accredited to QS-9000, ISO-9001, AD 2000 W0 and PED 97/23/EC

We reserve the right to change at any time without prior notice

Please read the instruction manual carefully and keep for future reference.
Only properly instructed persons disassemble or assemble the actuator.

FEATURES:

- Investment cast stainless steel 316SS body and cap and pinion
Most of our competitors use 304SS for less material cost but the user get less corrosion resistance property.
- Rack & pinion design
- Double acting or spring return
- Direct mounting for NAMUR solenoid
- Adjustable stroke control, both inward & outward
- Zero internal leakage
- All stainless steel fasteners
- Top side manual override connection
- Comply with ISO 5211, DIN 3337, VDI/VDE 3845, NAMUR
- Various pinion and mounting dimensions upon request
- Special design and/or material upon request
- PMP Quality System is accredited to QS-9000, ISO-9001, AD 2000 W0 and PED 97/23/EC (CE mark)

For technical data not listed in this data sheet referred to Series 201

GENERAL DESCRIPTION:

The PMP Series 202 actuator is a pneumatic operator for remote actuation control of valves etc. The standard rotation is clockwise to close.

PMP Series 202 actuators are rack and pinion, available in two versions: both double acting (air to operate in both directions) and spring return (air to operate in one direction, springs to operate in other direction) for rotation of 90°. They are ideally suitable for actuating ball valves, plug valves and butterfly valves for on/off applications & other devices in need of 90° rotation.

PMP Series 202 actuators are designed for general pneumatic operating pressure from 3 to 10 bar (43.5 to 145 psi) and for temperature ranges of -25°C to +100°C, using clean, dry air as operating media.

PMP has its own production line for actuators and a professional engineering team. With perfect design, the PMP series 202 actuators are very easy to be disassembled and assembled in safety and can achieve a long life. They are also protected against normal environmental corrosion by using appropriate material and certain surface treatment.

All PMP Series 202 actuators are lubricated during assembly process in the factory to achieve optimum cycle life. No further lubrication is needed under normal operating conditions. The actuator has been tested before delivery to ensure proper operation and are constructed for indoor or outdoor installation.

The features of PMP actuators - high reliability, economical, high strength, long lasting, compactness and simplicity have made PMP actuators the most competitive actuators on the market today.

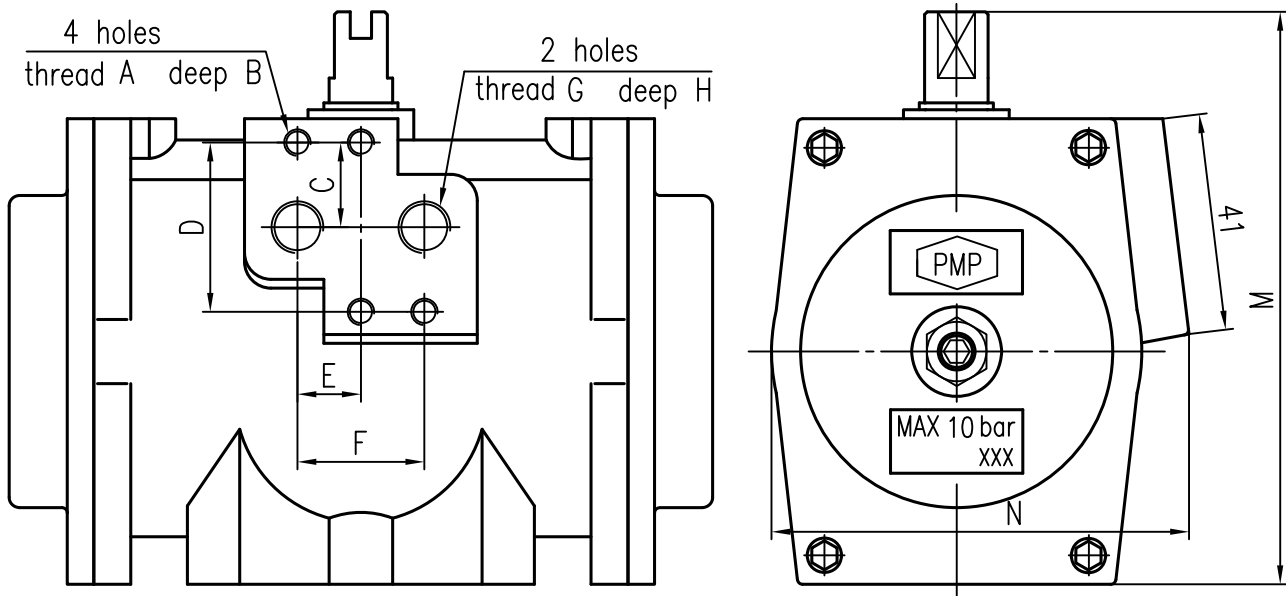
PMP Actuator Material List

Pos.	Part name	Material	Usage
1	Body	Stainless steel ASTM A351 CF8M	1
2	Cap	Stainless steel ASTM A351 CF8M	2
3	Pinion	Stainless steel ASTM A351 CF8M	1
4	Piston	Alu. A 380 (*)	2
5	Piston guide	POM	2
6	Piston O-ring	NBR	2
7	Piston band	POM	2
8	Cover gasket	NBR	2
9	Nut	SS304	2
10	Nut O-ring	NBR	2
11	Stroke adjusting	SS304	2
12	Thread cap	PE	2
13	Pinion O-ring L	NBR	1
14	Pinion bearing L	POM	1
15	Pinion bearing U	POM	1
16	Pinion O-ring U	NBR	1
17	C circlip	Tool St + Ni plating	1
18	Washer	POM	1
19	Cap screw	SS304	8
20	Spring cartridge	Piano St + Phosphated	N (*)

*1) Engineered Plastic for size 055.

*2) Depends on practical application.

- The BODY (1) is precision cast and CNC machined per ASTM A351 grade CF8M (316 SS) for best corrosion resistance.
- The CAP (2) is precision cast and CNC machined per ASTM A351 grade CF8M for best corrosion resistance.
- The PINION (3) is made of stainless steel 316 for corrosion resistance, precision machined as one-piece for output driving shaft and gear. Pinion gear features an international standard.
- The PISTONS (4) are die-cast Aluminum A380 designed to withstand extreme service. Wide piston rack gear teeth provide optimum engagement with pinion, minimizing backlash and maximizing actuator life.
- PISTON GUIDES (5) and BAND (7) is made of wear resisting POM material. They are fully self-lubricated and have a very low friction and absorb the side impacts of the pistons.
The body & piston are well protected by them from abrasion.
The piston cylinder walls are with fine finish to reduce friction as well.
All of this extend the life of the actuator and achieve high efficiency as well.
- PISTON O-RINGS (6) are permanently lubricated seals.
- The STROKE ADJUSTING (11) together with NUT (9) adjust the travel of the actuator to specific degrees of rotation.
Adjustment of the counterclockwise and clockwise rotation limits are accomplished by turning the left / right stroke adjusting to reduce or increase output rotation, use the NUT (9) to fix the degrees after adjusting.
- The LOWER PINION BEARING (14) and UPPER PINION BEARING (15) are made of low-friction POM.
- The C CIRCLIP (17) and PINION WASHER (18) are designed to protect the body from abrasion and to extend the life of the actuator.
- The SPRING CARTRIDGES (20) are Self contained spring cartridges allows a simplified and safe conversion from double acting to spring return.
With phosphate coating which provides excellent corrosion resistance.
Spring return actuators are used mainly in a fail-safe operation in the event of air pressure loss.
- The two air inlet and outlet ports are 1/8" or 1/4" with NPT or ISO-228 G thread in option.



Dimensional data

Unit: mm

Size	A thread characteristic		B	C	D	E	F	G thread characteristic		H	M	N
	G Series	NPT Series						G Series	NPT Series			
055	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	9.0	94	68.5
065	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	9.0	108	79
075	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	12.0	119	91
085	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	12.0	128	99.5
095	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	12.0	138	106
105	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	12.0	161	120
125	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	12.0	180	139.5
165	M5	UNF 10-32	6.0	16.0	32.0	12.0	24.0	G 1/4	NPT 1/4	12.0	222	176

Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

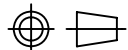
unit : mm

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:

Scale:

none



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Part name.

Pneumatic Actuator

Part No.

NAMUR Solenoid Mounting

Sheet 1

Series 202

of 8

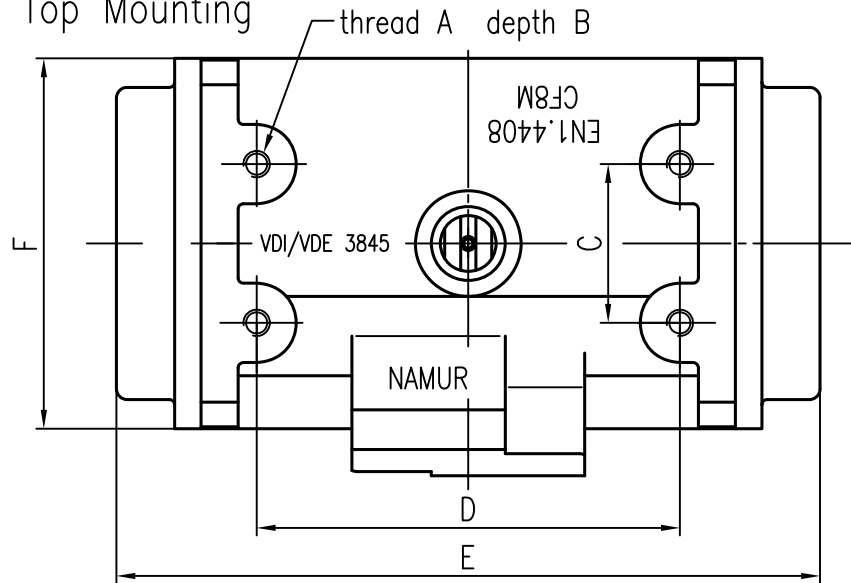
Drawing No.

202-NAMUR Dimension A

REVISIONS	DATE	NAME

	DATE	NAME
DWN	21.10.2003	he
CKD		
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VDI / VDE Top Mounting



Dimensional data

Unit: mm

Size	A thread characteristic		B	C	D	E	F
	G Series	NPT Series					
055	M5	UNF 10-32	5.0	30.0	80.0	127	59
065	M5	UNF 10-32	6.0	30.0	80.0	133	70.0
075	M5	UNF 10-32	6.0	30.0	80.0	156	82.6
085	M5	UNF 10-32	6.0	30.0	80.0	177	91.8
095	M5	UNF 10-32	6.0	30.0	80.0	203	103
105	M5	UNF 10-32	6.0	30.0	80.0	214	120
125	M5	UNF 10-32	6.0	30.0	80.0	290	139.5
165	M5	UNF 10-32	6.0	30.0	130	365	176

Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

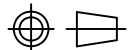
unit : mm

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:

Scale:

none



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	DATE	NAME
DWN	21.10.2003	he
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Part name.

Pneumatic Actuator

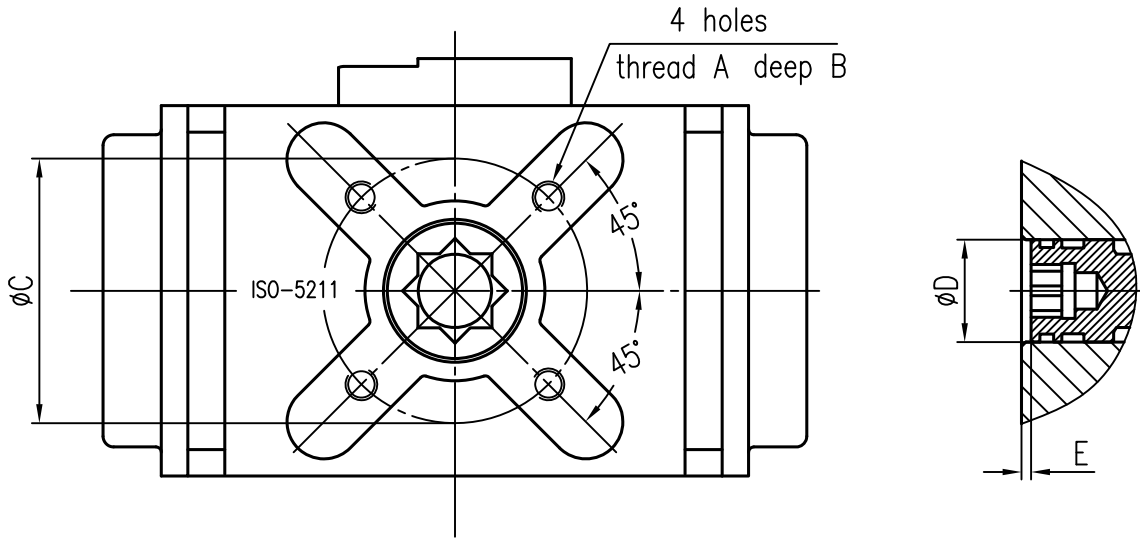
Drawing No.
202-NAMUR Dimension B

Part No. VDI / VDE 3845
Series 202

Sheet 2
of 8

REVISIONS DATE NAME

View from bottom



Dimensional data

Unit: mm

ISO 5211	øC	A thread characteristic		B thread depth
		G Series	NPT Series	
F03	36.0	M5	UNF 10-32	6.0
F04	42.0	M5	UNF 10-32	6.0
F05	50.0	M6	UNC 1/4-20	7.0
F07	70.0	M8	UNC 5/16-18	9.5
F10	102	M10	UNC 3/8-16	12.0
F12	125	M12	UNC 1/2-13	14.5

Size	ISO-5211	øD	E
055	F03/05	23.8	1.5
065	F04/07	27.0	2.0
075	F05/07	32.3	2.0
085	F05/07	32.3	2.0
095	F05/07	37.6	2.5
105	F07/10	37.6	2.2
125	F07/10	53.3	2.8
165	F10/12	66.3	4.3

Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

unit : mm

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:

Scale:

none

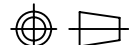


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	DATE	NAME
DWN	21.10.2003	he
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APP	26.10.2003	Shen

Part name.

Pneumatic Actuator

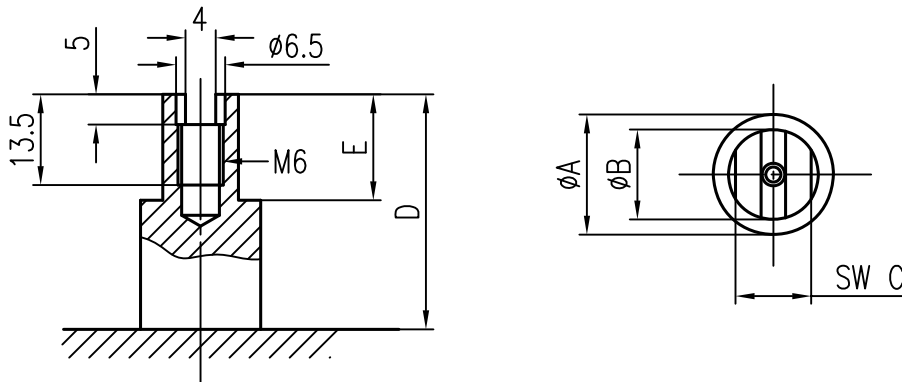
Drawing No.
202-NAMUR Dimension C

Part No. ISO-5211 Bottom Mounting
Series 202

Sheet 3
of 8

REVISIONS	DATE	NAME

VDI / VDE Pinion Top



Dimensional data

Unit: mm

Size	ϕA	ϕB	C	D	E
055	/	12.0	10.0	20.0	12.5
065		11.9	10.0	20.0	12.5
075	17.9	14.0	10.0	20.0	12.5
085	17.9	14.0	10.0	20.0	12.5
095	25.0	19.5	14.0	20.0	12.5
105	25.0	19.5	14.0	20.0	12.5
125	39.8	28.0	20.0	20.0	12.5
165	45.0	36.0	28.0	20.0	14.0

Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

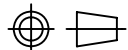
unit : mm

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:

Scale:

none



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	DATE	NAME
DWN	21.10.2003	he
CKD		
APP	26.10.2003	Shen

Part name.

Pneumatic Actuator

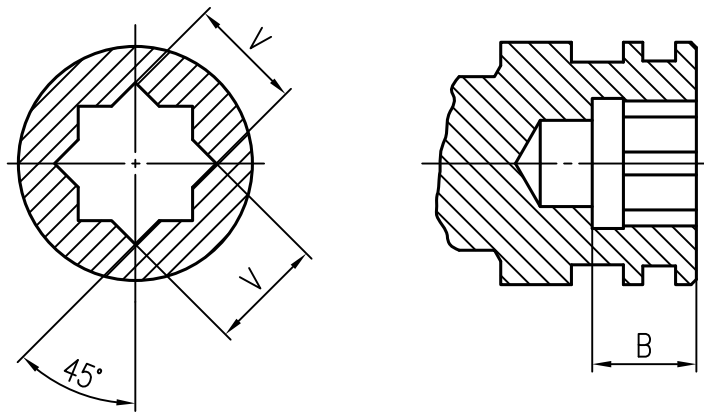
Drawing No.
202-NAMUR Dimension D

Part No.

Pinion Drive
Series 202

Sheet 4
of 8

REVISIONS DATE NAME



Dimensional data Unit: mm

Size	B	V
055	17.0	11.0
065	17.0	14.0
075	17.0	17.0
085	17.0	17.0
095	20.0	17.0
105	20.0	17.0
125	30.0	22.0
165	33.0	27.0

Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

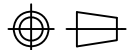
unit : mm

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:

Scale:

none



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DATE NAME

Part name.

DWN 21.10.2003 he

Pneumatic Actuator

CKD

APP 26.10.2003 Shen

Drawing No.

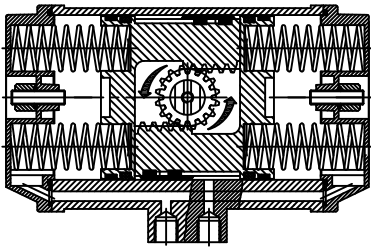
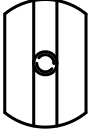
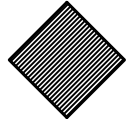
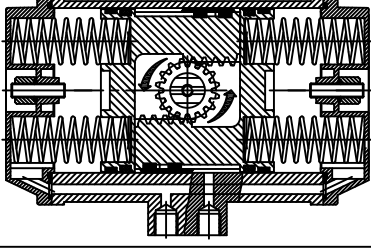


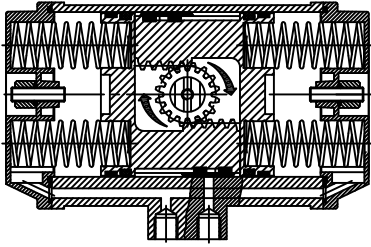
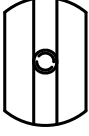
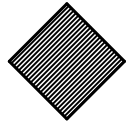
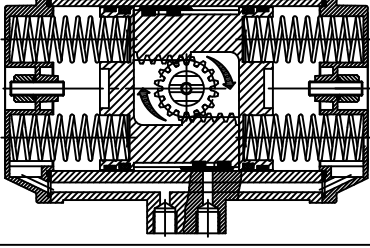


Part No.

Pinion Drive
Series 202


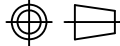
Sheet 5
of 8

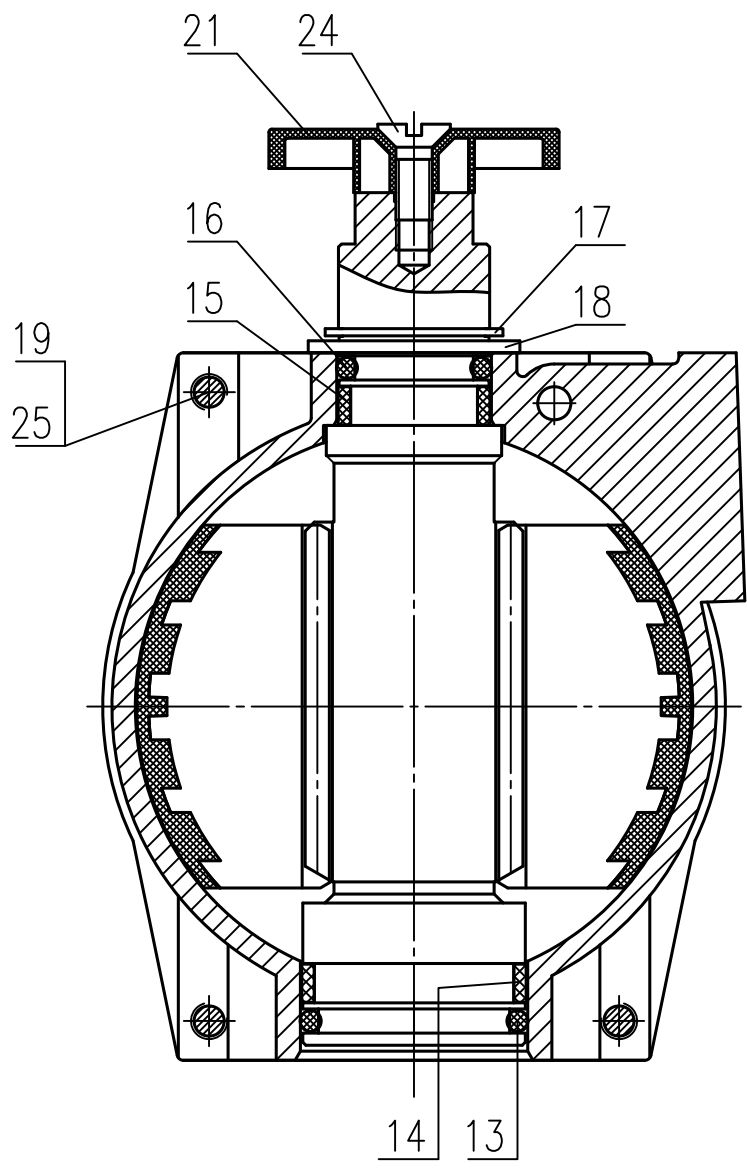
202-NAMUR Dimension E


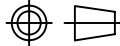
REVISIONS DATE NAME

Top View				
Symbol	Rotation Direction	Piston Position	Pinion position	
			Top	Bottom
A	CCW			
B	CCW			
C	CW			
D	CW			

說明: 1. 202型起動器根據活塞及齒軸裝配方向的不同有A.B.C.D四種型號,客戶未指定時按A型裝配。
 2. 起動器在全關的位置出廠。(如上圖所示位置)

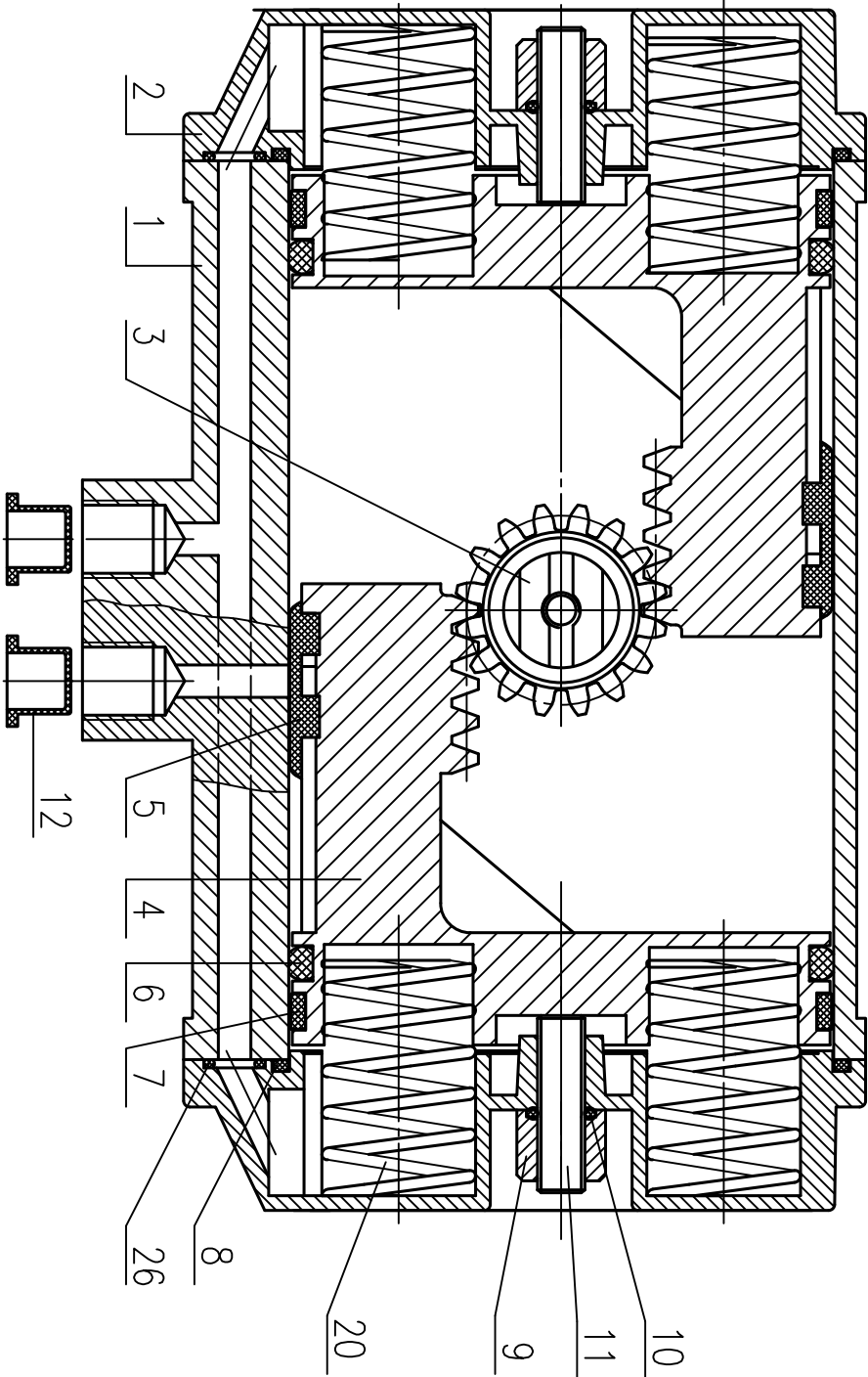
Unless otherwise Tolerance acc to ISO-2768m Surface acc to ISO-1302				Material: See list	Scale: None	 PMP Precision Ind Co Ltd Fax: (+86) 769 83315532 E-mail: shen@pmp-controls.com www.pmp-controls.com									
unit : mm					<table border="1"> <tr> <td>Range</td> <td>0.5-6</td> <td>6-30</td> <td>30-120</td> <td>120-400</td> </tr> <tr> <td>Tolerance</td> <td>± 0.1</td> <td>± 0.2</td> <td>± 0.3</td> <td>± 0.5</td> </tr> </table>		Range	0.5-6	6-30	30-120	120-400	Tolerance	± 0.1	± 0.2	± 0.3
Range	0.5-6	6-30	30-120			120-400									
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5											
			DATE	NAME	Part name.										
			DWN	18.08.2004	Deng	Pneumatic Actuator									
			CKD												
			APP	26.10.2003	Shen										
			Drawing No.		Part No.	Series 202									
			202-NAMUR Dimension H												
REVISIONS	DATE	NAME				Sheet 6 of 8									



Unless otherwise Tolerance acc to ISO-2768m Surface acc to ISO-1302					Material:	Scale: 1:1.25	 PMP Precision Ind Co Ltd Fax: (+86) 769 83315532 E-mail: shen@pmp-controls.com www.pmp-controls.com	
unit : mm								
Range	0.5-6	6-30	30-120	120-400				
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5				
					DATE	NAME	Part name. Pneumatic Actuator	
					DWN	21.10.2003		he
					CKD			
					APP	26.10.2003	Shen	
					Drawing No.		Part No. Series 202	
					202-NAMUR Dimension F			
REVISIONS	DATE	NAME					Sheet 7 of 8	

Material list

Pos	Part name	Q'ty	Material
1	Body	1	1.4408
2	Cap	2	1.4408
3	Pinion	1	316 F
4	Piston	2	A380 Epoxy coatg
5	Piston Guide	2	POM (Delrin)
6	Piston O-Ring	2	NBR
7	Piston Band	2	POM (Delrin)
8	Cover Gasket	2	NBR
9	Nut	2	SS 303
10	Nut O-Ring	2	NBR
11	Adjusting Blot	2	SS 304
12	Thread Cap	2	PE
13	Pinion O-Ring	1	NBR
14	Pinion Bearing	1	POM (Delrin)
15	Pinion Bearing	1	POM (Delrin)
16	Pinion O-Ring	1	NBR
17	C-Circlip	1	Tool ST + Ni Plating
18	Washer	1	POM (Delrin)
19	Cap Screw	8	SS 304
20	Spring Cartridge	N	Piano ST + Phosphated
21	Indicator	1	POM (Delrin)
24	Indicator Screw	1	SS 304
25	Washer	8	SS 304
26	O-Ring	2	NBR

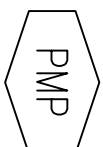


Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

unit : mm

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:	Scale:
1:1.25	



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Part name:
Pneumatic Actuator

Part No.

Series 202

Sheet 8
 of 8

REVISIONS	DATE	NAME

Drawing No.
 202-NAMUR Dimension G



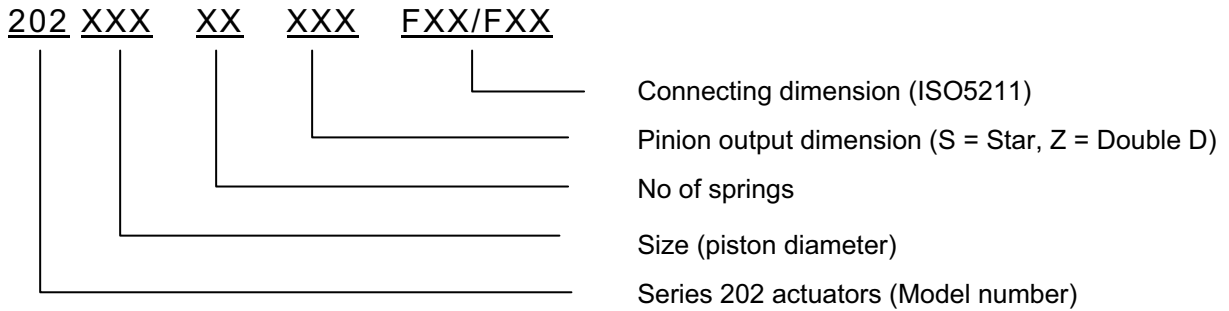
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Phone (+86) 769 8331 5531
Fax (+86) 769 8331 5532

Exceeding Your Expectations !

ORDERING CODE

PMP coding method is based on piston diameter (the approximate value):



(Threads: Imperil or Metric thread be specified upon ordering.)

Coding example 1:

PMP actuators # **202.075.00.S17 F05/F07** means:

Series **202** quarter turn pneumatic actuator.

Piston diameter = **075** mm.

No of spring = **00** (double acting).

Pinion output dimension: **S14** (star 14 mm)

Connecting dimension: **F05/F07**

Coding example 2:

PMP actuators # **202.125.12.Z20 F07/F10** means:

Series **202** quarter turn pneumatic actuator.

Piston diameter = **125** mm.

No of spring = **12** (spring return, 6 springs per piston).

Pinion output dimension: **Z20** (double D, across two flats 20 mm)

Connecting dimension: **F07/F10**

** : Buyer can specify your own marking on both end caps at free if order quantity of that size over 500 pcs.



ISO-9001, QS-9000



PED 97/23/EC



ATEX



AD2000 W0

Made by PMP, a partner of great reputation you can count on

PMP Quality System is accredited to QS-9000, ISO-9001, AD 2000 W0 and PED 97/23/EC

We reserve the right to change at any time without prior notice



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Exceeding Your Expectations !

Series 203 Angle Seat Valve



PMP series 203 is a stainless steel 2/2-way pneumatically actuated piston valve for liquids, gases, steam and some aggressive fluids.

The superior design of the piston is unique to the market, enabling the plug to retract farther from the flow path, ensuring the highest flow capacity.

The dual packing design, and a large diameter self aligning stem insures the highest cycle life.

Product Features

- Sizes available from 3/8" to 3" (DN10-DN80)
- Self aligning stem seal, premium fine machining on all sealing surface.
- 316 Stainless steel connector between actuator and valve body
- High cycle life, Maintenance free actuator
- Compact assembly. The angle seat valve can be installed in any attitude, upright, inverted, flat or angled.
- The actuator rotates 360° allowing for the selective positioning of the pneumatic Inlet port.



Exceeding Your Expectations !

Actuator Specifications

- 316 SS pilot cylinder, internal parts
- Pilot connections : Female thread 1/8" (ISO-228, NPT, BSP)
- Pilot pressure : Max. 150 PSI (10 bar)
- Pilot media : Air, neutral gaseous fluids
- Media temperature: Max. 140 °F (60 °C)

Valve Configurations

- Spring Return (SR) normally closed (NC), Bi-directional Flow
- Spring Return (SR) normally closed (NC), Flow from Above Seat
(recommended for steam & gas applications)
- Spring Return (SR) normally opened (NO), Flow from below Seat
(recommended for liquid applications)
- Double Acting (DA), Bi-directional Flow

Valve Specifications

- 316 SS body, stem & plug
- PTFE seats & seals
- Fluoroelastomer stem O-ring, Live loading stem seal
- Temperature Range : 14 to 356 °F (-10 to 180 °C)
- Pressure Rating : Neutral gases, liquids and aggressive fluids up to 230 PSI (16 bar)
Steam up to 150 PSI, Max 356 °F (10 bar/180 °C)
PN40 upon requested.
- Max Viscosity 600 cSt, 80°E (mm²/s)
- Flow Leakage : Meets ANSI Class VI
- Connections: Female thread (ISO-228, NPT, BSP)
Butt weld (ANSI B16.25, DIN-3239, ISO-4200, ISO-11850-R2)
Flange (ANSI Class 150, DIN 2501 RF/DIN 2526 Type C PN16)
Sanitary clamp (ISO-2582, Tri-clamp 3A)
Socket weld or specified connections upon requested

Typical Applications

- Steam Applications
- Air Drying Equipment
- Sterilizers & Disinfection
- Autoclaves
- Pollution Control Equipment
- Process Control Applications
- Laundry Equipment
- Textile Dyeing & Drying
- Bottling & Dispensing Equipment
- Beer & Drinks Filling Machinery
- Pharmacy & Medical Equipment
- Ink & Paint Dispensing
- Industrial Compressors



PMP Precision Ind. Co., Ltd.

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Exceeding Your Expectations !

Ordering Number System

2	0	3	Actuator		Connection		Valve Size		Valve Configurations	
			050	Piston Ø50	N	Internal thread	010	3/8"	1	Spring Return normally closed
			080	Piston Ø80		NPT	015	1/2"		
			125	Piston Ø125	G	Internal thread acc. ISO-228	020	3/4"		Bi-directional Flow
					B	Internal thread BSP	025	1"	2	Spring Return normally closed
					W	Butt-Weld acc. ANSI B16.25	040	1-1/2"		Flow from Above Seat
					A	Butt-Weld acc. DIN-3239	050	2"	3	Spring Return normally opened
					T	Butt-Weld acc. ISO-4200	065	2-1/2"		Flow from below Seat
					R	Butt-Weld acc. ISO-11850-R2	080	3"	4	Double Acting Bi-directional Flow
					F					



ISO-9001, QS-9000



PED 97/23/EC



ATEX

II 2 G/D

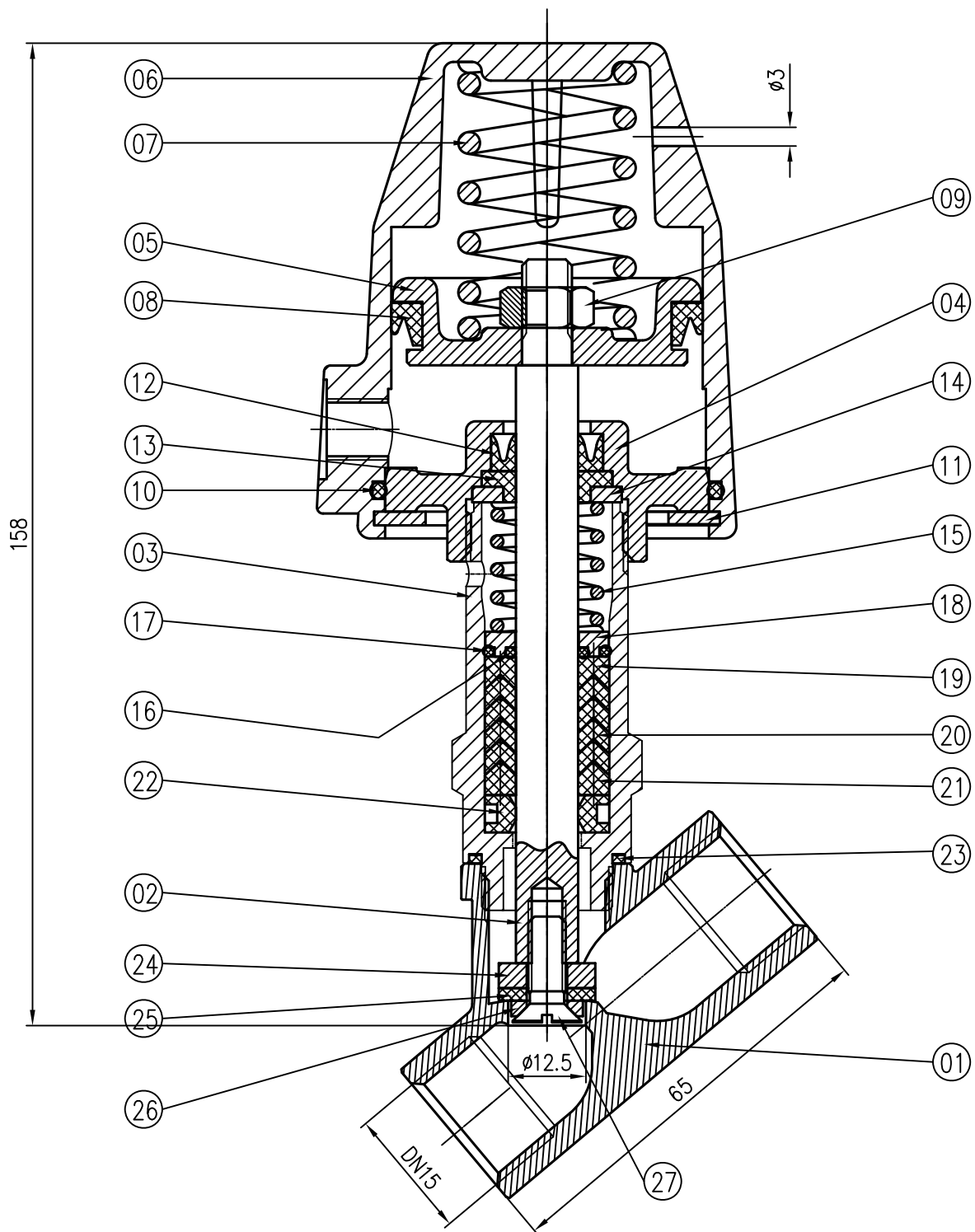


AD2000 W0

Made by PMP, a partner of great reputation you can count on

PMP Quality System is accredited to QS-9000, ISO-9001, AD 2000 W0 and PED 97/23/EC

We reserve the right to change at any time without prior notice



Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

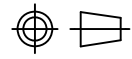
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Scale:



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unit : mm			
Range	0.5-6	6-30	30-120
Tolerance	± 0.1	± 0.2	± 0.3



1:1

REVISIONS	DATE	NAME

DATE	NAME
DWN 01.08.2006	Lee
CKD	
APP	

Part name.

Angle Seat Valve, 2/2 Way

Drawing No.

203-015-A

Part No.

203-015

Sheet 1
of 2

位置	品名	用量	材質	料號
1	本體	1	1.4408	203-15-1
2	中軸	1	SS 316	203-15-2
3	接頭	1	1.4408	203-15-3
4	蓋	1	1.4408	203-25-4
5	活塞	1	1.4408	203-25-5
6	氣缸體	1	1.4408	203-25-6
7	氣缸彈簧	1	琴鋼絲	203-25-7
8	活塞封	1	HNBR	203-25-8
9	螺母	1	SS 304	203-25-9
10	O環	1	FKM	203-25-10
11	扣環	1	SK7	203-25-11
12	拉桿封	1	HNBR	203-25-12
13	軸承	1	PTFE	203-25-13
14	墊塊	1	SS 304	203-25-14
15	中迫彈簧	1	琴鋼絲	203-25-15
16	O環	1	FKM	203-25-16
17	O環	1	FKM	203-25-17
18	墊塊	1	SS 304	203-25-18
19	中軸迫緊上	1	PTFE	203-25-19
20	中軸迫緊中	4	PTFE	203-25-20
21	中軸迫緊下	1	PTFE	203-25-21
22	軸承	1	PTFE+60%BR	203-25-22
23	大薄片	1	PTFE	203-15-23
24	墊塊	1	SS 316	203-15-24
25	密封墊	1	PTFE	203-15-25
26	墊塊	1	SS 316	203-15-26
27	螺釘	1	SS 304	203-15-27

Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

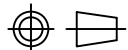
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Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5

Material:

Scale:

1:1



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	DATE	NAME
DWN	07.31.2006	Lee
CKD		
APP		

Part name.

Angle Seat Valve, 2/2 Way

Drawing No.

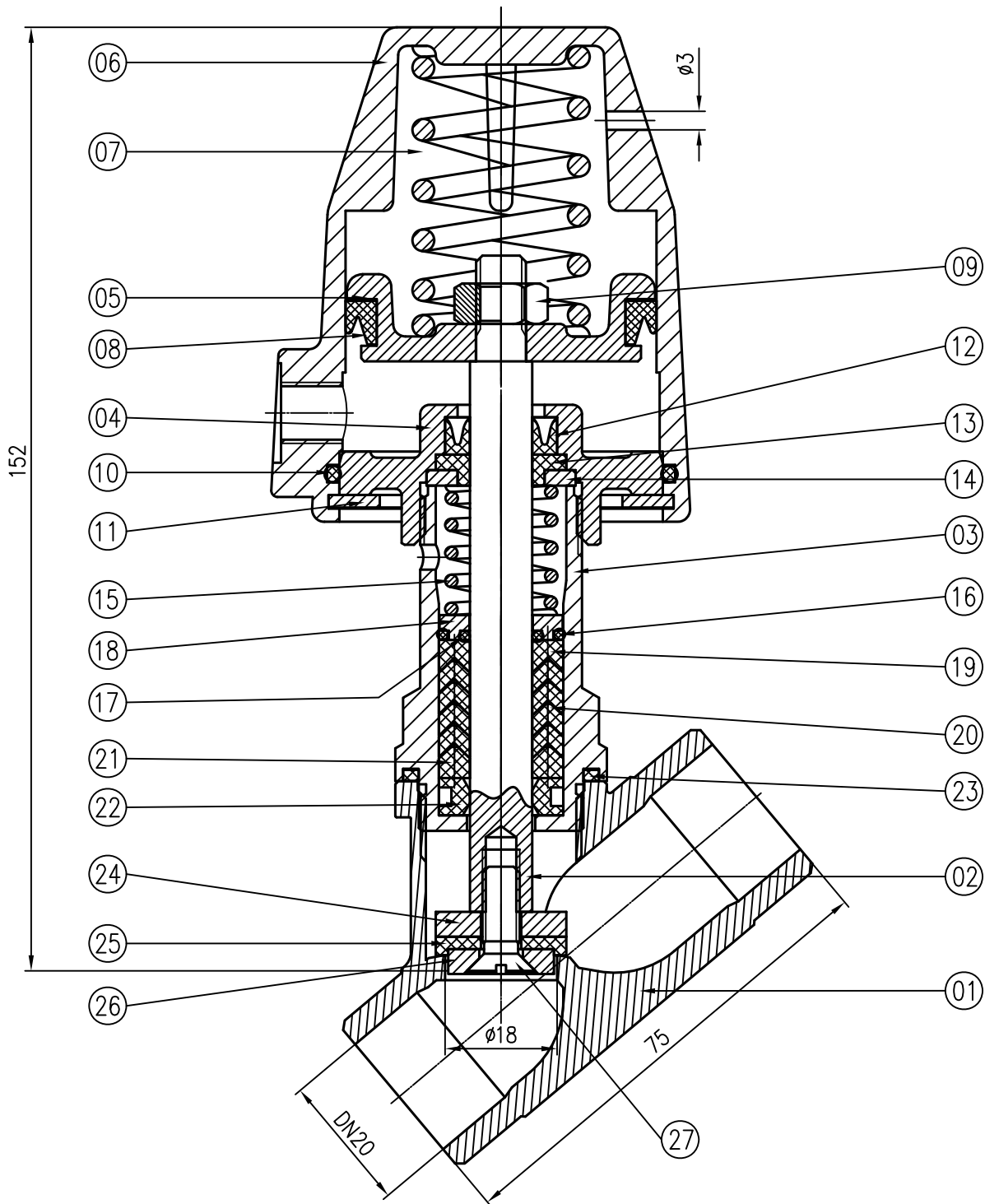
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Part No.

203-015

Sheet 2
of 2

REVISIONS	DATE	NAME



Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

Material:

Scale:

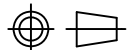


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unit : mm

1:1

Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5



	DATE	NAME
DWN	01.08.2006	Lee
CKD		
APP		

Part name.

Angle Seat Valve, 2/2 Way

Drawing No.

Part No.


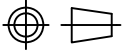
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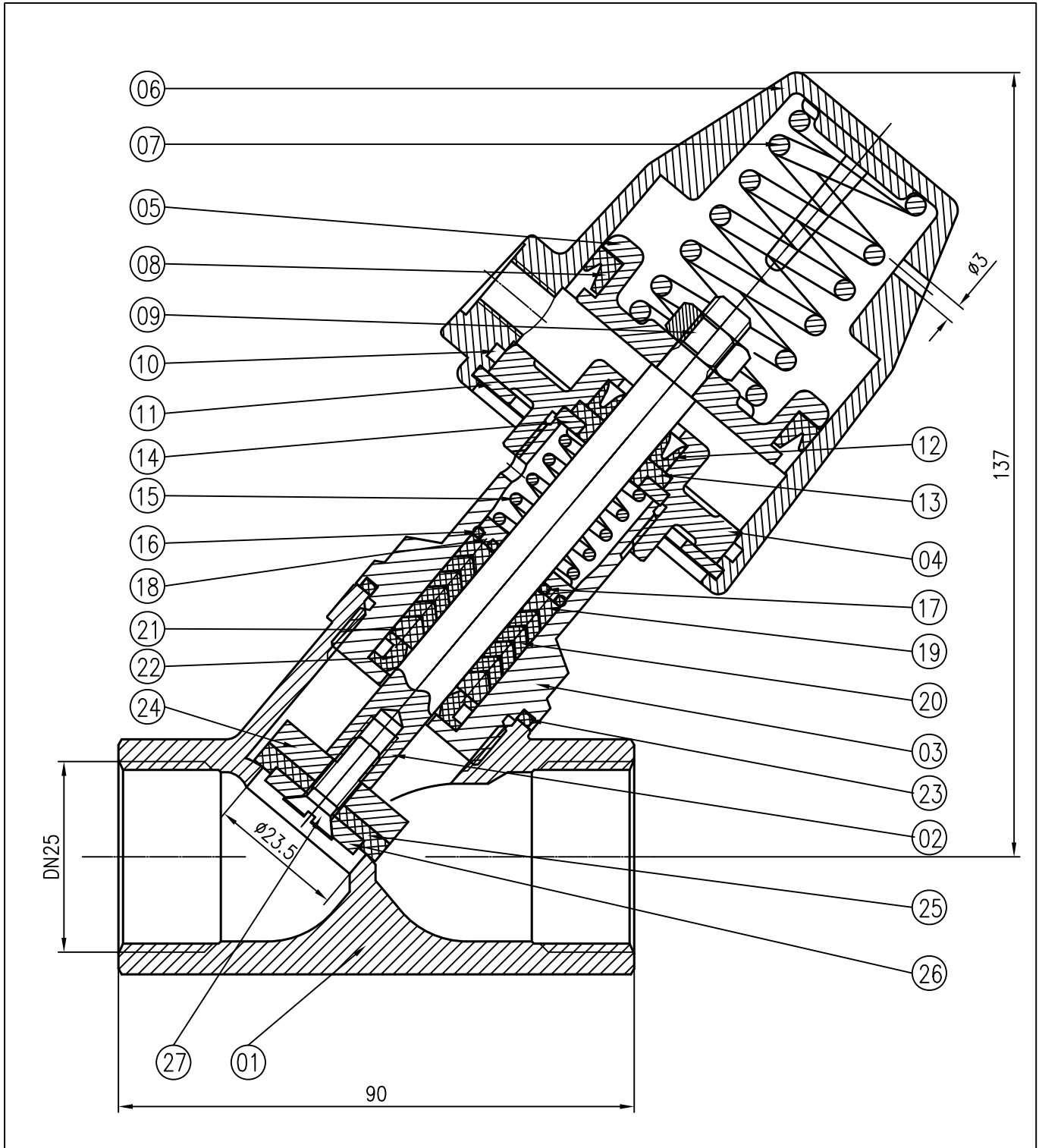
203-020

Sheet 1
of 2

REVISIONS	DATE	NAME

位置	品名	用量	材質	料號
1	本體	1	1.4408	203-20-1
2	中軸	1	SS 316	203-25-2
3	接頭	1	1.4408	203-20-3
4	蓋	1	1.4408	203-25-4
5	活塞	1	1.4408	203-25-5
6	氣缸體	1	1.4408	203-25-6
7	氣缸彈簧	1	琴鋼絲	203-25-7
8	活塞封	1	HNBR	203-25-8
9	螺母	1	SS 304	203-25-9
10	O環	1	FKM	203-25-10
11	扣環	1	SK7	203-25-11
12	拉桿封	1	HNBR	203-25-12
13	軸承	1	PTFE	203-25-13
14	墊塊	1	SS 304	203-25-14
15	中迫彈簧	1	琴鋼絲	203-25-15
16	O環	1	FKM	203-25-16
17	O環	1	FKM	203-25-17
18	墊塊	1	SS 304	203-25-18
19	中軸迫緊上	1	PTFE	203-25-19
20	中軸迫緊中	4	PTFE	203-25-20
21	中軸迫緊下	1	PTFE	203-25-21
22	軸承	1	PTFE+60%BR	203-25-22
23	大薄片	1	PTFE	203-20-23
24	墊塊	1	SS 316	203-20-24
25	密封墊	1	PTFE	203-20-25
26	墊塊	1	SS 316	203-20-26
27	螺釘	1	SS 304	203-25-27

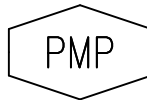
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Range	0.5-6	6-30	30-120	120-400		1:1	Part name. <h2 style="text-align: center;">Angle Seat Valve, 2/2 Way</h2>					
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5								
					DATE	NAME				Part No. <h2 style="text-align: center;">203-020</h2>		
					DWN	07.31.2006						
					CKD							
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REVISIONS	DATE	NAME										



Unless otherwise
Tolerance acc to ISO-2768m
Surface acc to ISO-1302

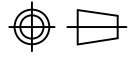
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Scale:



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<http://www.pmp.com.tw>

unit : mm				
Range	0.5-6	6-30	30-120	120-400
Tolerance	± 0.1	± 0.2	± 0.3	± 0.5



1:1

Part name.

Angle Seat Valve, 2/2 Way

	DATE	NAME
DWN	07.31.2006	Lee
CKD		
APP		

Drawing No.

Part No.


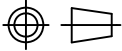
203-025-A

203-025

Sheet 1
of 2

REVISIONS	DATE	NAME

位置	品名	用量	材質	料號
1	本體	1	1.4408	203-25-1
2	中軸	1	SS 316	203-25-2
3	接頭	1	1.4408	203-25-3
4	蓋	1	1.4408	203-25-4
5	活塞	1	1.4408	203-25-5
6	氣缸體	1	1.4408	203-25-6
7	氣缸彈簧	1	琴鋼絲	203-25-7
8	活塞封	1	HNBR	203-25-8
9	螺母	1	SS 304	203-25-9
10	O環	1	NBR	203-25-10
11	扣環	1	SK7	203-25-11
12	拉桿封	1	HNBR	203-25-12
13	軸承	1	PTFE	203-25-13
14	墊塊	1	SS 304	203-25-14
15	中迫彈簧	1	琴鋼絲	203-25-15
16	O環	1	NBR	203-25-16
17	O環	1	NBR	203-25-17
18	墊塊	1	SS 304	203-25-18
19	中軸迫緊上	1	PTFE	203-25-19
20	中軸迫緊中	4	PTFE	203-25-20
21	中軸迫緊下	1	PTFE	203-25-21
22	軸承	1	PTFE+60%bronze	203-25-22
23	大薄片	1	PTFE	203-25-23
24	墊塊	1	SS 316	203-25-24
25	密封墊	1	PTFE	203-25-25
26	墊塊	1	SS 316	203-25-26
27	螺釘	1	SS 304	203-25-27

Unless otherwise Tolerance acc to ISO-2768m Surface acc to ISO-1302 unit : mm					Material:	Scale:	 PMP Precision Ind Co Ltd Fax: (+86) 769 8331 5532 E-mail: szpmp@pub.dgnet.gd.cn http://www.pmp.com.tw					
Range	0.5-6	6-30	30-120	120-400		1:1	Part name. Angle Seat Valve, 2/2 Way					
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					DATE	NAME				Part No. 203-025		
					DWN	07.31.2006						
					CKD							
					APP			Sheet 2 of 2				
Drawing No. 203-025-B												
REVISIONS		DATE	NAME									