

For over 30 years, the ROCKY products have been marketed by AIRTEC and employed worldwide. Modern precision manufacturing methods and the very best materials guarantee ROCKY valves to be of the highest quality and reliability. TPC valves and accessories were primarily developed for the rationalization and automation of processes used in the tire, plastic and rubber manufacturing industries.

### Key features

- Stainless steel body, seats, stem and flanges
- Teflon® piston ring
- Carbon Teflon® disc rings
- Teflon® and Carbon Teflon® gland packings
- 2 or 3 way function by adding or removing a plug in port 3
- Normally open or normally closed function

### Technische Daten

#### Technical data

Operating pressure	max. 580 psi
Back pressure	max. 362 psi
Pilot pressure	36 - 51 psi
Nominal pressure	PN 40
Temperature range	- 22°F to + 446°F
Connections	Thread <b>BSPT, NPT, PT</b> Flange <b>DIN, ANSI, JIS</b>
Media	Steam, nitrogen and other inert gases, hot or cold water, air



Order Code

TPC-2\*\*\*-\*\*\*\*

Series

TPC-2	Standard
TPC-4	High frequency valve
TPC-5	2/2-way valve

Version

2	2/2-way
3	3/2-way

Function

1	Normally closed (NC)
2	Normally open (NO)

Connection

1	Thread
2	Flange / thread
3	Flange

Nominal size / thread

08	8 mm	1/4"
10	10 mm	3/8"
15	15 mm	1/2"
20	20 mm	3/4"
25	25 mm	1"
32	32 mm	1 1/4"
40	40 mm	1 1/2"
50*	50 mm	-

Material gland packing

	Teflon® and Carbon Teflon®
H	Carbon Teflon® (up to + 482°F)

Material

X	Lower seat stainless steel
Y	Flange stainless steel

Type of thread lower seat

B	BSPT thread
N*	NPT thread
P*	PT thread

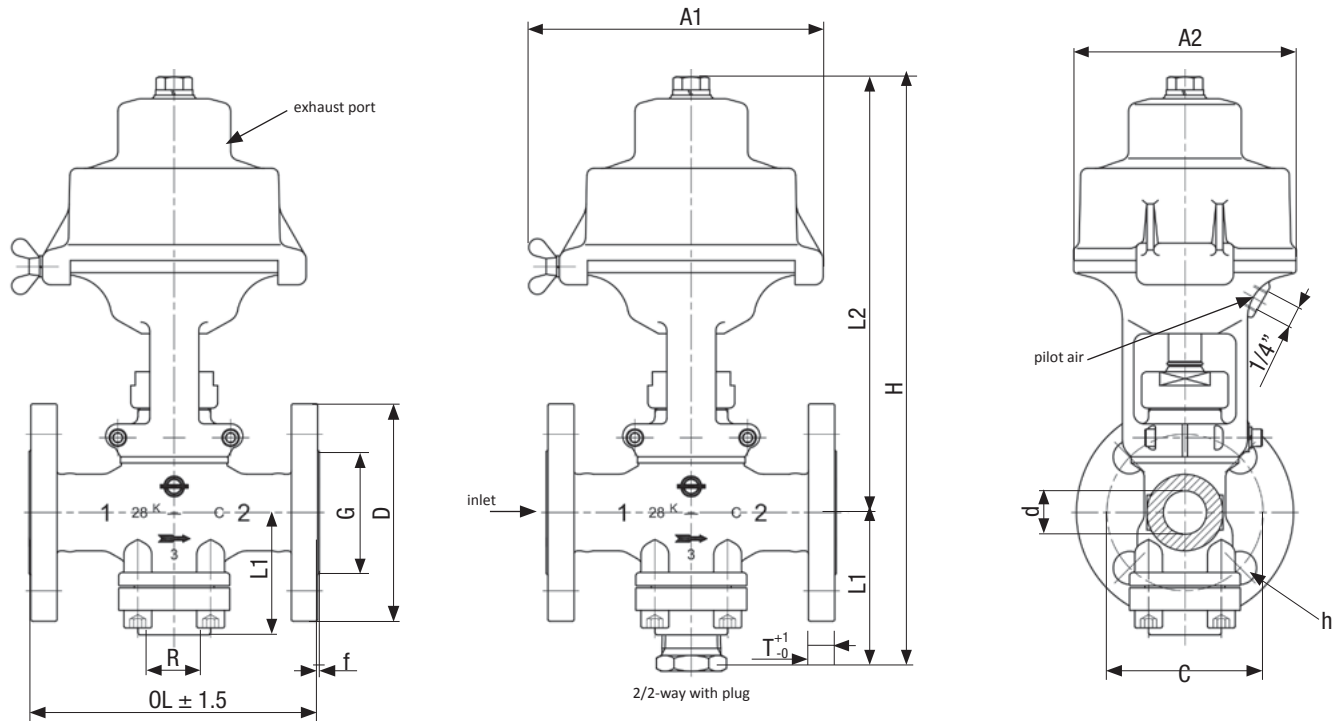
Type of thread / flange

B	BSPT thread
N*	NPT thread
P*	PT thread
D	DIN flange
A*	ANSI flange
J*	JIS flange

\* Available on request. No stock item.



**Abmessungen / Dimensions (mm)**



**TPC valve, with flange, 2/2-way, NO**

Model No.	DN	R	d	OL (DIN)	OL (ANSI)	OL (JIS)	L1	L2	H	A1	A2	Stroke	Weight (lbs)
TPC-2222-15D*B**XY	15	1/2"	13	130	140	146	65.1	186	251.1	120	82	9.3	9
TPC-2222-20D*B**XY	20	3/4"	19	150	150	146	84.8	220	304.8	139	100	12	13.2
TPC-2222-25D*B**XY	25	1"	25	160	170	167	90.9	249	339.9	169	128	18	21.4
TPC-2222-40D*B**XY	40	1 1/2"	40	200	200	190	115.6	330	445.6	211	170	23	41.4

**TPC valve, with flange, 3/2-way, NO**

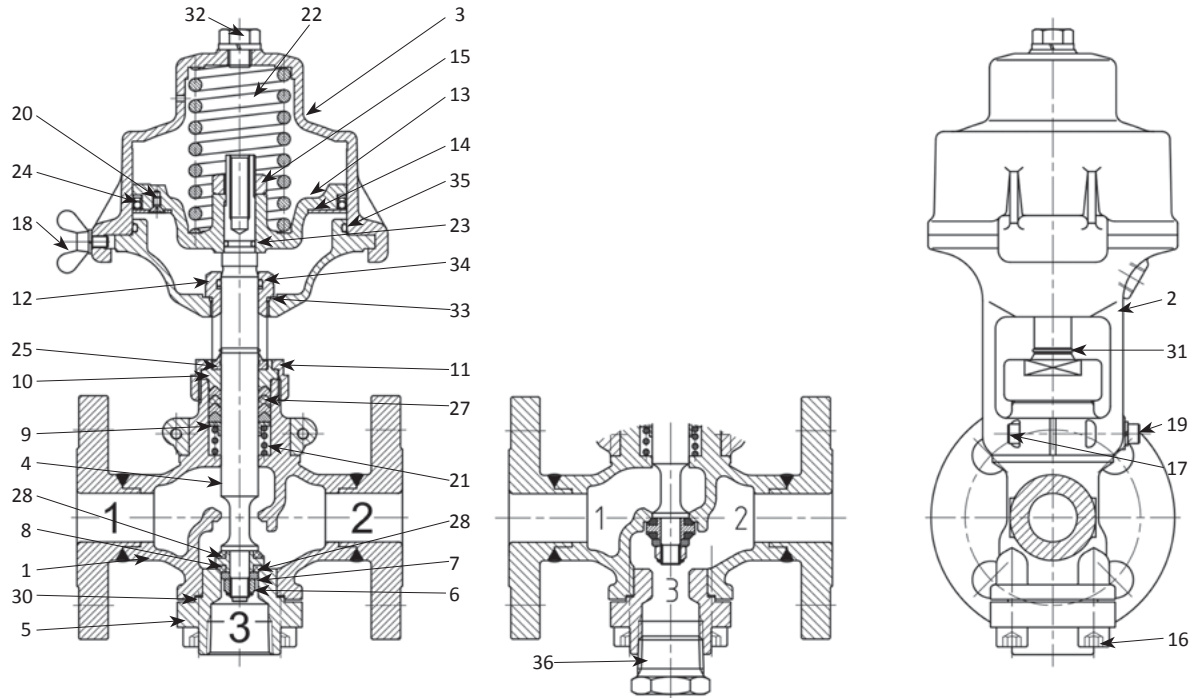
Model No.	DN	R	d	OL (DIN)	OL (ANSI)	OL (JIS)	L1	L2	H	A1	A2	Stroke	Weight (lbs)
TPC-2322-15D*B**XY	15	1/2"	13	130	140	146	48.3	186	234.3	120	82	9.3	9
TPC-2322-20D*B**XY	20	3/4"	19	150	150	146	66.3	220	286.3	139	100	12	13.2
TPC-2322-25D*B**XY	25	1"	25	160	170	167	71.3	249	320.3	169	128	18	21.4
TPC-2322-40D*B**XY	40	1 1/2"	40	200	200	190	91.3	330	421.3	211	170	23	41.4

\* Also available as version A with ANSI flange or J with JIS flange. \*\* Also available as version N with NPT thread or P with PT thread. (on request, no stock item)

**Dimensions for DIN flange**

DN	D	C	G	T	f	N	h	Bolt
15	95	65	45	16	2	4	14	M12
20	105	75	58	18	2	4	14	M12
25	115	85	68	18	2	4	14	M12
40	150	110	88	18	3	4	18	M16

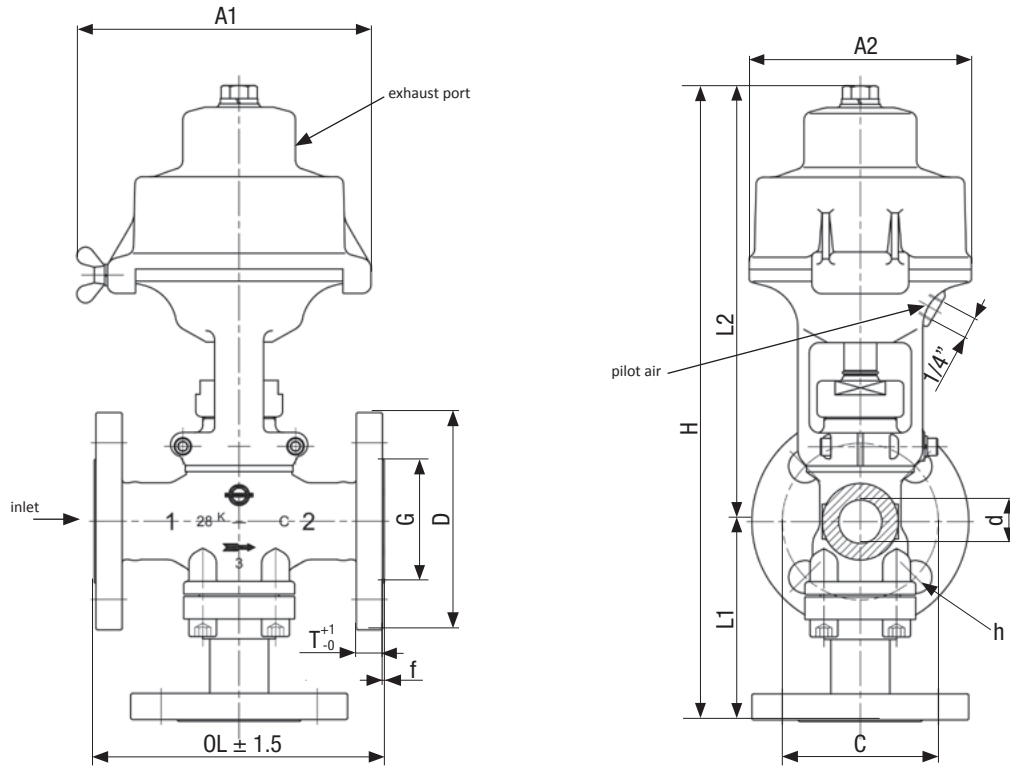
Spare parts



No.	Name	Valve	TPC-2222-15#*XY			TPC-2222-20#*XY			TPC-2222-25#*XY			TPC-2222-40#*XY		
			TPC-2322-15#*XY			TPC-2322-20#*XY			TPC-2322-25#*XY			TPC-2322-40#*XY		
1	Body		C-21215	- 01	#Y	C-21220	- 01	#Y	C-21225	- 01	#Y	C-21240	- 01	#Y
2	Yoke		C-22115	- 02	*	C-22120	- 02	*	C-22125	- 02	*	C-22140	- 02	*
3	Cylinder		C-22115	- 03		C-22120	- 03		C-22125	- 03		C-22140	- 03	
4	Stem		C-22115	- 04		C-22120	- 04		C-22125	- 04		C-22140	- 04	
5	Lower seat		C-21115	- 05	*X	C-21120	- 05	*X	C-21125	- 05	*X	C-21140	- 05	*X
6	U-nut		C-21115	- 06		C-21120	- 06		C-21125	- 06		C-21140	- 06	
7	Guide washer		C-21115	- 07		C-21120	- 07		C-21125	- 07		C-21140	- 07	
8	Disc adapter		C-21115	- 08		C-21120	- 08		C-21125	- 08		C-21140	- 08	
9	Ring washer		C-21115	- 09		C-21120	- 09		C-21125	- 09		C-21140	- 09	
10	Gland		C-21115	- 10		C-21120	- 10		C-21125	- 10		C-21140	- 10	
11	Gland nut		C-21115	- 11		C-21120	- 11		C-21125	- 11		C-21140	- 11	
12	Guide bushing		C-21115	- 12		C-21120	- 12		C-21125	- 12		C-21140	- 12	
13	Piston		C-21115	- 13		C-21120	- 13		C-21125	- 13		C-21140	- 13	
14	Ring plate		C-21115	- 14		C-21120	- 14		C-21125	- 14		C-21140	- 14	
15	Tension bolt		C-21115	- 15		C-21120	- 15		C-21125	- 15		C-21140	- 15	
16	Socket cap screw		C-21115	- 16		C-21120	- 16		C-21125	- 16		C-21140	- 16	
17	Socket cap screw		C-21115	- 17		C-21120	- 17		C-21125	- 17		C-21140	- 17	
18	Wing bolt		C-21115	- 18		C-21120	- 18		C-21125	- 18		C-21140	- 18	
19	Socket cap screw		C-21115	- 19		C-21120	- 19		C-21125	- 19		C-21140	- 19	
20	Flat head screw		C-21115	- 20		C-21120	- 20		C-21125	- 20		C-21140	- 20	
21	Packing spring		C-21115	- 21		C-21120	- 21		C-21125	- 21		C-21140	- 21	
22	Piston Spring		C-21115	- 22		C-21120	- 22		C-21125	- 22		C-21140	- 22	
23	O-ring		C-21115	- 23		C-21120	- 23		C-21125	- 23		C-21140	- 23	
24	Piston ring		C-21115	- 24		C-21120	- 24		C-21125	- 24		C-21140	- 24	
25	Dust seal		C-21115	- 25		C-21120	- 25		C-21125	- 25		C-21140	- 25	
27	Gland packing		C-21115	- 27		C-21120	- 27		C-21125	- 27		C-21140	- 27	
28	Disc ring (2x)		C-21115	- 28		C-21120	- 28		C-21125	- 28		C-21140	- 28	
30	Lower seat gasket		C-21115	- 30		C-21120	- 30		C-21125	- 30		C-21140	- 30	
31	Lift pin gauge		C-21115	- 31		C-21120	- 31		C-21125	- 31		C-21140	- 31	
32	Plug		C-22115	- 32		C-22120	- 32		C-22125	- 32		C-22140	- 32	
33	O-ring		C-22115	- 33		C-22120	- 33		C-22125	- 33		C-22140	- 33	
34	O-ring with back up ring		C-22115	- 34		C-22120	- 34		C-22125	- 34		C-22140	- 34	
35	O-ring		C-22115	- 35		C-22120	- 35		C-22125	- 35		C-22140	- 35	
36	Plug		C-21115	- 36	*X	C-21120	- 36	*X	C-21125	- 36	*X	C-21140	- 36	*X

# please complete: D = DIN flange, A = ANSI flange, J = JIS flange / \* please complete: B = BSPT thread, N = NPT thread, P = PT thread

Dimensions (mm)



TPC valve, with flange, 3/2-way, NO

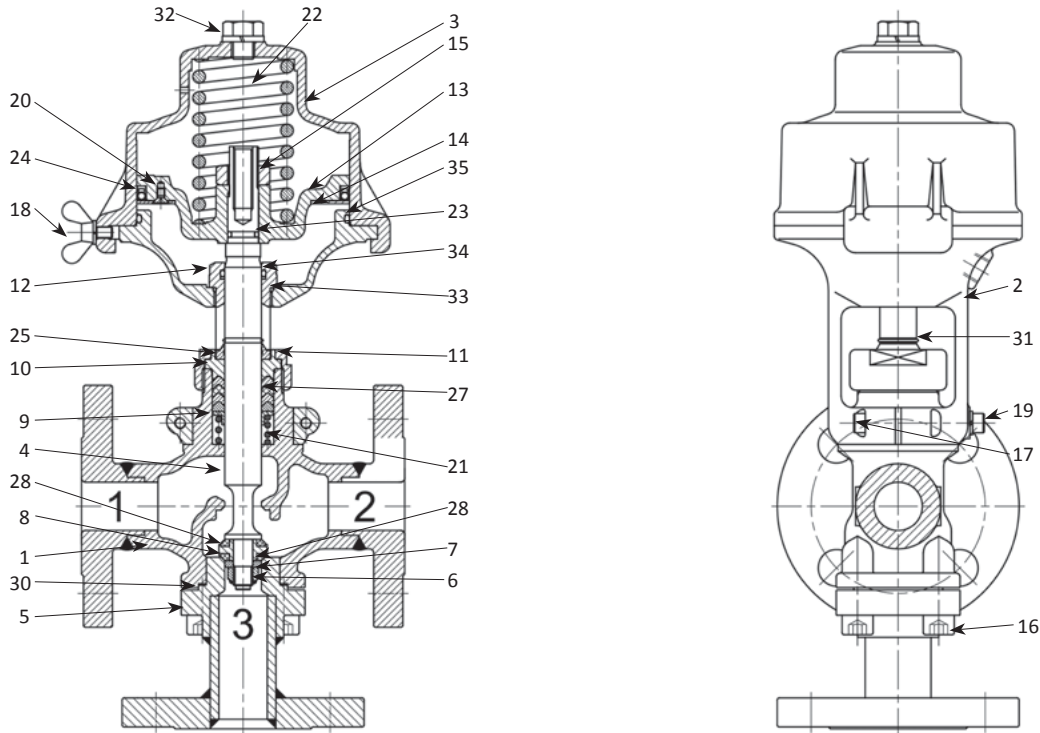
Model No.	DN	R	d	OL (DIN)	OL (ANSI)	OL (JIS)	L1	L2	H	A1	A2	Stroke	Weight (lbs)
TPC-2323-15D*B**XY	15	1/2"	13	130	140	146	140	186	326	120	82	9.3	11.0
TPC-2323-20D*B**XY	20	3/4"	19	150	150	146	140	220	360	139	100	12	15.4
TPC-2323-25D*B**XY	25	1"	25	160	170	167	140	249	389	169	128	18	21.4
TPC-2323-40D*B**XY	40	1 1/2"	40	200	200	190	175	330	505	211	170	23	48.5

\* Also available as version A with ANSI flange or J with JIS flange. \*\* Also available as version N with NPT thread or P with PT thread. (on request, no stock item)

Dimensions for DIN flange

DN	D	C	G	T	f	N	h	Bolt
15	95	65	45	16	2	4	14	M12
20	105	75	58	18	2	4	14	M12
25	115	85	68	18	2	4	14	M12
40	150	110	88	18	3	4	18	M16

Spare parts



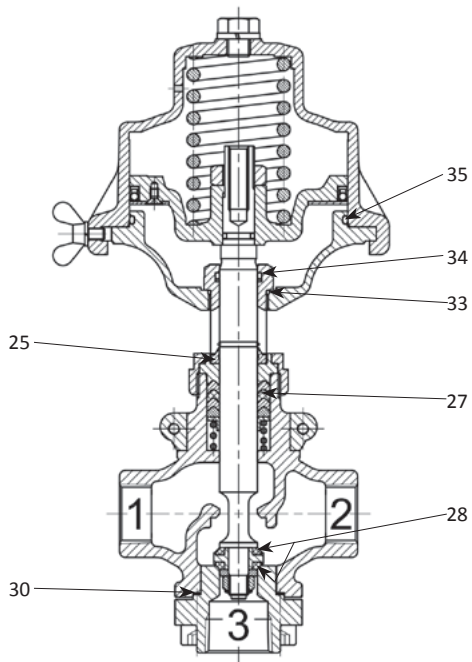
No.	Name	Valve	TPC-2323-15#*XY	TPC-2323-20#*XY	TPC-2323-25#*XY	TPC-2323-40#*XY
1	Body		C-21215 - 01 #Y	C-21220 - 01 #Y	C-21225 - 01 #Y	C-21240 - 01 #Y
2	Yoke		C-22115 - 02 *	C-22120 - 02 *	C-22125 - 02 *	C-22140 - 02 *
3	Cylinder		C-22115 - 03	C-22120 - 03	C-22125 - 03	C-22140 - 03
4	Stem		C-22115 - 04	C-22120 - 04	C-22125 - 04	C-22140 - 04
5	Lower seat		C-31315 - 05 #XY	C-31320 - 05 #XY	C-31325 - 05 #XY	C-31340 - 05 #XY
6	U-nut		C-21115 - 06	C-21120 - 06	C-21125 - 06	C-21140 - 06
7	Guide washer		C-21115 - 07	C-21120 - 07	C-21125 - 07	C-21140 - 07
8	Disc adapter		C-21115 - 08	C-21120 - 08	C-21125 - 08	C-21140 - 08
9	Ring washer		C-21115 - 09	C-21120 - 09	C-21125 - 09	C-21140 - 09
10	Gland		C-21115 - 10	C-21120 - 10	C-21125 - 10	C-21140 - 10
11	Gland nut		C-21115 - 11	C-21120 - 11	C-21125 - 11	C-21140 - 11
12	Guide bushing		C-21115 - 12	C-21120 - 12	C-21125 - 12	C-21140 - 12
13	Piston		C-21115 - 13	C-21120 - 13	C-21125 - 13	C-21140 - 13
14	Ring plate		C-21115 - 14	C-21120 - 14	C-21125 - 14	C-21140 - 14
15	Tension bolt		C-21115 - 15	C-21120 - 15	C-21125 - 15	C-21140 - 15
16	Socket cap screw		C-21115 - 16	C-21120 - 16	C-21125 - 16	C-21140 - 16
17	Socket cap screw		C-21115 - 17	C-21120 - 17	C-21125 - 17	C-21140 - 17
18	Wing bolt		C-21115 - 18	C-21120 - 18	C-21125 - 18	C-21140 - 18
19	Socket cap screw		C-21115 - 19	C-21120 - 19	C-21125 - 19	C-21140 - 19
20	Flat head screw		C-21115 - 20	C-21120 - 20	C-21125 - 20	C-21140 - 20
21	Packing spring		C-21115 - 21	C-21120 - 21	C-21125 - 21	C-21140 - 21
22	Piston Spring		C-21115 - 22	C-21120 - 22	C-21125 - 22	C-21140 - 22
23	O-ring		C-21115 - 23	C-21120 - 23	C-21125 - 23	C-21140 - 23
24	Piston ring		C-21115 - 24	C-21120 - 24	C-21125 - 24	C-21140 - 24
25	Dust seal		C-21115 - 25	C-21120 - 25	C-21125 - 25	C-21140 - 25
27	Gland packing		C-21115 - 27	C-21120 - 27	C-21125 - 27	C-21140 - 27
28	Disc ring (2x)		C-21115 - 28	C-21120 - 28	C-21125 - 28	C-21140 - 28
30	Lower seat gasket		C-21115 - 30	C-21120 - 30	C-21125 - 30	C-21140 - 30
31	Lift pin gauge		C-21115 - 31	C-21120 - 31	C-21125 - 31	C-21140 - 31
32	Plug		C-22115 - 32	C-22120 - 32	C-22125 - 32	C-22140 - 32
33	O-ring		C-22115 - 33	C-22120 - 33	C-22125 - 33	C-22140 - 33
34	O-ring with back up ring		C-22115 - 34	C-22120 - 34	C-22125 - 34	C-22140 - 34
35	O-ring		C-22115 - 35	C-22120 - 35	C-22125 - 35	C-22140 - 35

# please complete: D = DIN flange, A = ANSI flange, J = JIS flange / \* please complete: B = BSPT thread, N = NPT thread, P = PT thread

## Repair kit

DN	Model no.:
08, 10, 15	RK-22115
20	RK-22120
25	RK-22125
40	RK-22140

## Content

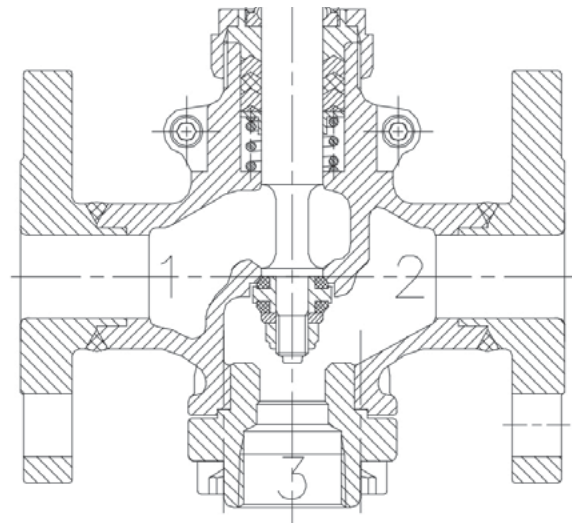


No.	Name	
25	Dust seal	
27	Gland packing	
28	Disc ring (2x)	
30	Lower seat gasket	
33	O-ring	
34	O-ring with back up ring	
35	O-ring	

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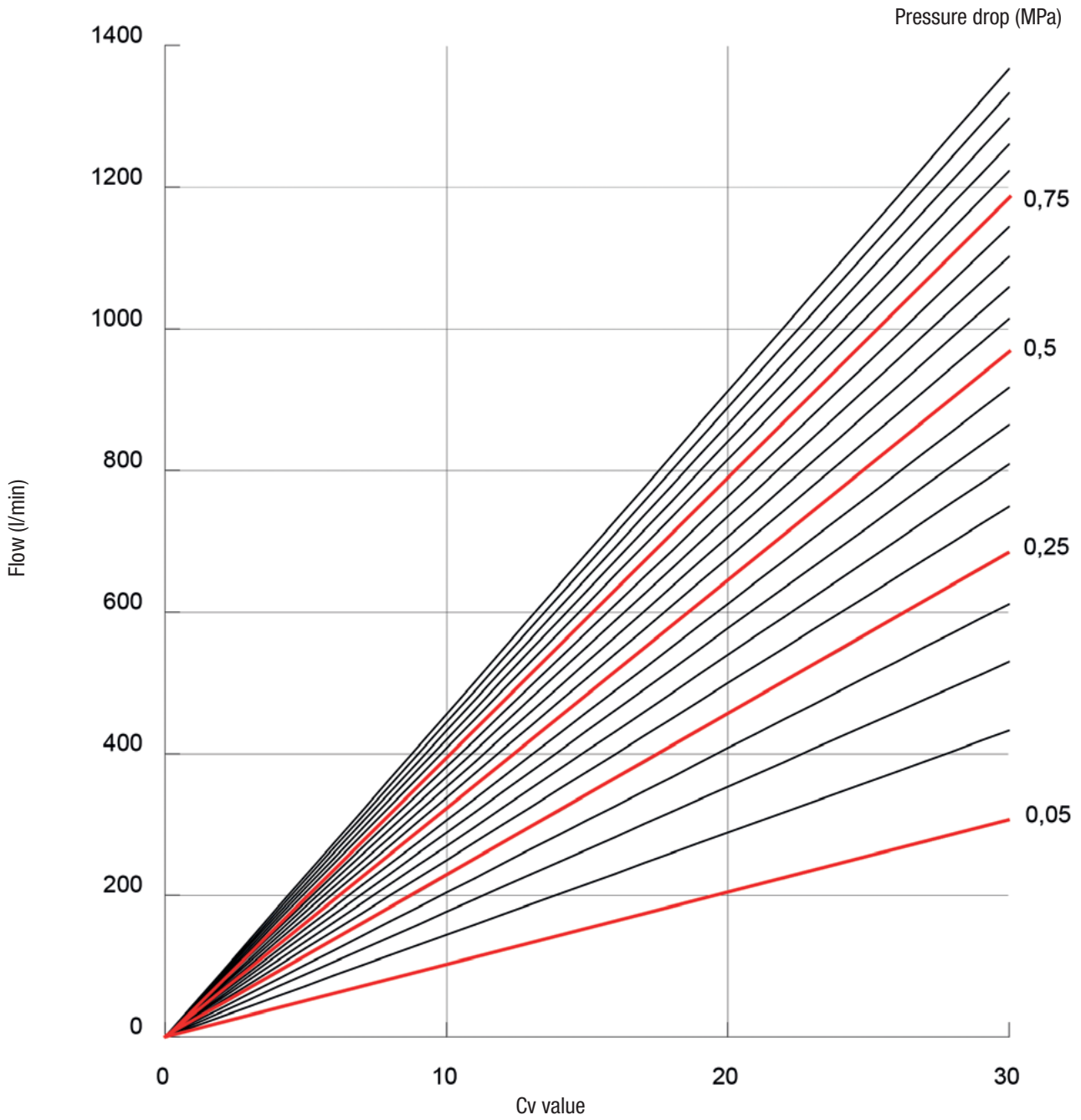
DN	Flow direction	Kv Value	Cv Value	Pressure drop (MPa)	Flow (l/min)
15	1⇒2	2.6	2.9	0.1	42
				0.2	59
				0.3	72
	2⇒1	2.6	2.9	0.1	42
				0.2	59
				0.3	72
	2⇒3	2.5	2.8	0.1	40
				0.2	57
				0.3	70
	3⇒2	2.15	2.4	0.1	35
				0.2	49
				0.3	60
20	1⇒2	4.8	5.4	0.1	78
				0.2	110
				0.3	135
	2⇒1	5.0	5.6	0.1	81
				0.2	114
				0.3	140
	2⇒3	5.4	6	0.1	86
				0.2	122
				0.3	150
	3⇒2	4.5	5	0.1	72
				0.2	102
				0.3	125
25	1⇒2	7.7	8.6	0.1	124
				0.2	175
				0.3	215
	2⇒1	8.0	8.9	0.1	128
				0.2	181
				0.3	222
	2⇒3	10.5	11.7	0.1	169
				0.2	238
				0.3	292
	3⇒2	9.6	10.7	0.1	154
				0.2	218
				0.3	267

DN	Flow direction	Kv Value	Cv Value	Pressure drop (MPa)	Flow (l/min)
32	1⇒2	11.8	13.2	0.1	190
				0.2	269
				0.3	330
	2⇒1	13.1	14.6	0.1	210
				0.2	298
				0.3	364
	2⇒3	14.1	15.8	0.1	228
				0.2	322
				0.3	394
3⇒2	16.4	18.3	0.1	264	
			0.2	373	
			0.3	457	
40	1⇒2	19.8	22.1	0.1	319
				0.2	450
				0.3	552
	2⇒1	19.1	21.4	0.1	308
				0.2	436
				0.3	534
	2⇒3	24.7	27.6	0.1	398
				0.2	563
				0.3	689
3⇒2	25.2	28.2	0.1	406	
			0.2	575	
			0.3	704	





Flow chart of Cv value / pressure drop



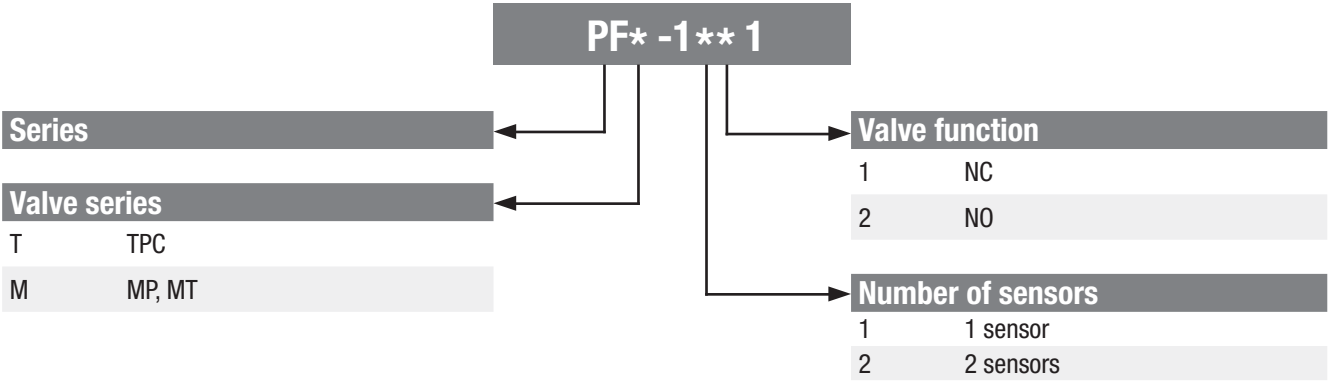
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### Electrical valve feedback sensor series PF

Valve position feedback for all types of ROCKY PISTON VALVES.  
Sturdy and robust the cylinder contains contactless magnetic sensors and monitors the valve stem position.  
Top and bottom guided for smooth trouble free operation. Easy to retro fit to existing valves.

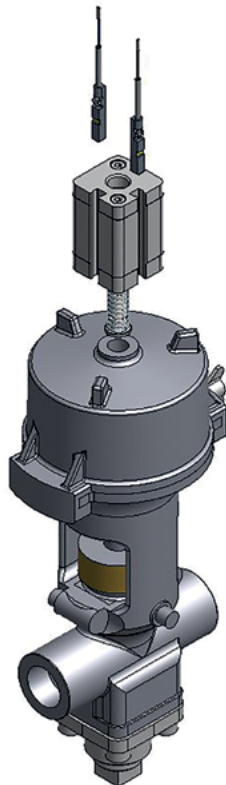


Order Code

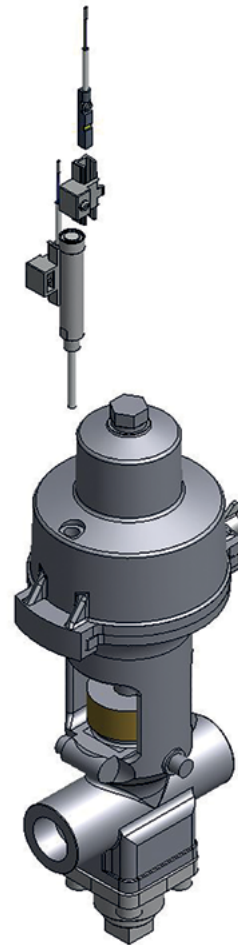


Installation

normally closed



normally open



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