

**3 Way Proportional Pressure
Control Valve**
Nominal diameter 4, 6 and 8
Direct operated poppet valve
Port sizes G 1/8 - G 3/8, 1/8 NPT - 3/8 NPT

- **Low hysteresis**
- **Good repeatability**
- **High flow capacity at exhaust port**
- **High response sensitivity**
- **Fast response time**

Technical Data

Medium:

Filtered air, lubricated or unlubricated,
Filter 40 µm

Operation:

Proportional solenoid

Port Size:

G 1/8 - G 3/8, 1/8 NPT - 3/8 NPT
Female thread

Flow direction:

Fixed

Operating pressure p₁:

20 bar max.

Pressure setting p₂:

0 to 20 bar

Ambient temperature:

-10 to +40 °C

Hysteresis: *

< 3 % (I_{N max}, p_{2 max})

Repeatability: *

< 1 % (p_{2 max})

Linearity: *

See characteristic curve

Response sensitivity: *

< 1 % (I_{N max}, p_{2 max})

Degree of protection:

IP 65 with connector

Mounting:

Any, preferably vertical

Material:

Body aluminium alloy
Seals NBR (Perbunan)



Ordering Information

3 way proportional pressure control valve, ND 4,
pressure setting 0 to 10 bar,
port size G 1/4

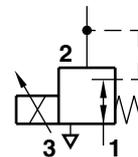
Type: 4088110.7053.012.00

Alternative Models

With thread connection NPT

Connectors

See data sheet 7503364



* Values referred to 20 °C with dither 20% I_N, 50 Hz



General Information

Type	Nominal diameter	Port size	Pressure Setting p ₂ (bar)	Max. Operating Pressure p ₁ (bar)	Rated Current I _N (mA)	Drive Electronics	Weight (kg)
4088110.7053.012.00	4	G 1/8	0 to 10	10	0 to 1600 (1800)	pQ11, pQ12, pQ04 see data sheets 7502961, 7503109, 7503188	0,8
4088218.7071.012.00	4	G 1/8	0 to 20	20			0,8
4088200.7053.012.00	6	G 1/4	0 to 2,1	7			1,0
4088210.7053.012.00	6	G 1/4	0 to 10	12			1,0
4088310.7071.012.00	8	G 3/8	0 to 7	10			1,2

Proportional Solenoids

Voltage	12 V DC
Limiting current I _N	1840 mA
Rated power P _N	22 W
Resistance R ₂₀	6,5 Ω ±3%
Duty cycle	100 %

Accessories

Type	Description	Specification
0570275	Connector	DIN 43650 Form A

Drive Electronics

pQ11

Data sheet 6.6.030	Type	Rated Current (mA)	Electrical connection	Remarks	Description
	5980081	0 to 2400	Connector acc. to DIN 43651	Suitable for valves 4088XXX.XXXX	Plug-in type amplifier with constant current regulator PDM. Degree of Protection: IP 65. Power supply: 18 to 32 V DC Residual ripple: ≤10 %. Ambient temperature: 0 to +50 °C. Mounting: Any position
	5980085	0 to 2400	2 m Cable		

pQ12

Data sheet 6.6.031	Type	Rated Current (mA)	Remarks	Description
	5980126	0 to 2400	Suitable for valves 4088XXX.XXXX	Amplifier module with constant current regulator PDM. Degree of Protection: IP 20. Power supply: 18 to 32 V DC Residual ripple: ≤10 %. Ambient temperature: 0 to +50 °C. Mounting: Any position. For attachment on mounting rail acc. to EN 50022

pQ04

Data sheet 7503188	Type	Rated Current (mA)	Setpoint Input	Ramps	PID-controller for closed loop contr.	Remarks	Description
	5988020	0 to 2400	0 to ±10 V	4	no	Suitable for valves 4090XXX, 4088XXX	Digital amplifier module with constant current regulator PDM. Power supply: 18 to 32 V DC Residual ripple: ≤10 %. Ambient temperature: 0 to +50 °C. Weight: 0,4 kg
	5988022	0 to 2400	0 to ±10 V	4	yes	Suitable for valves 4090XXX, 4088XXX	

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of

all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

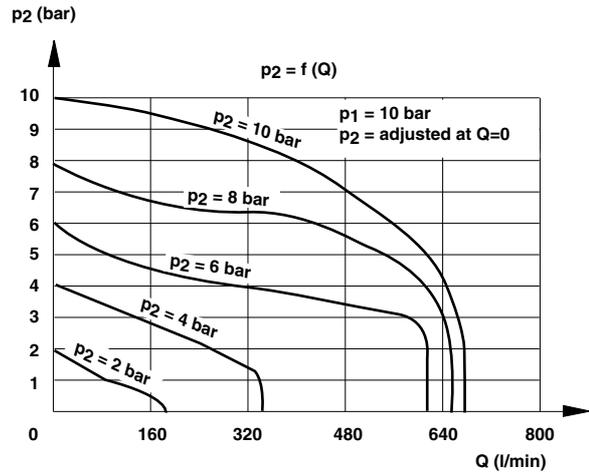
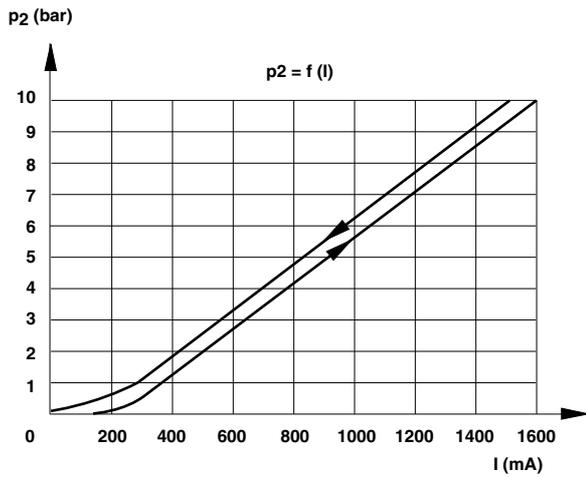
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products where applicable.

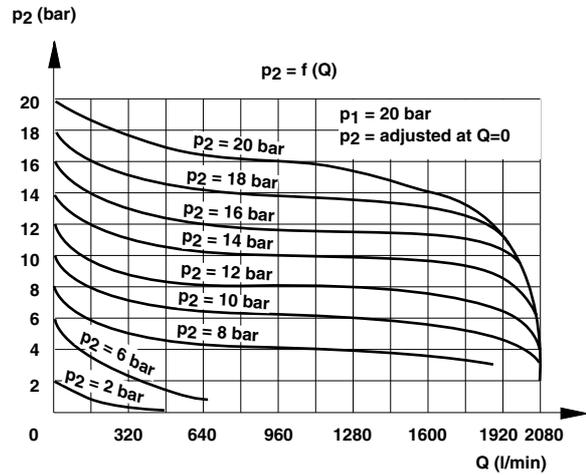
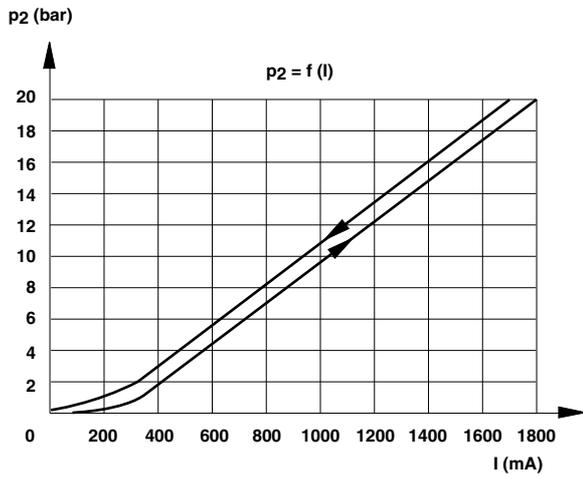


Characteristic curves

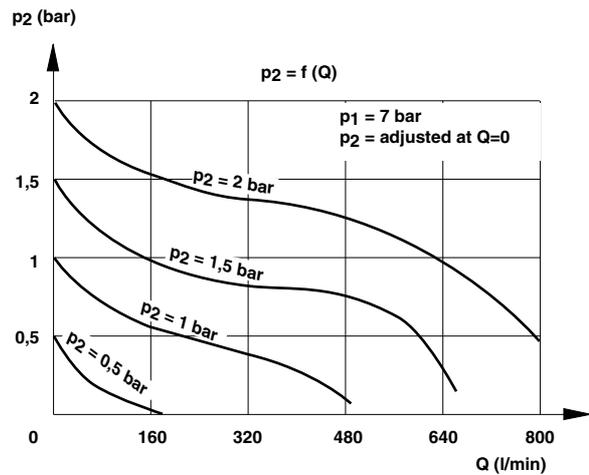
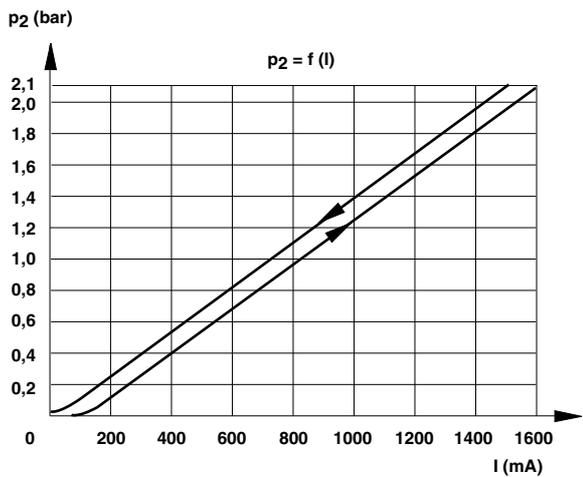
Type: 4088110



Type: 4088218

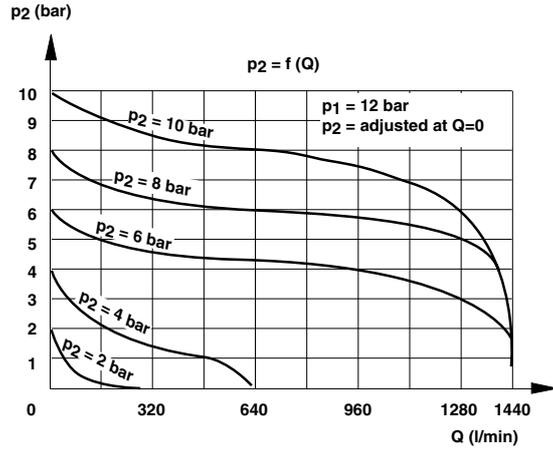
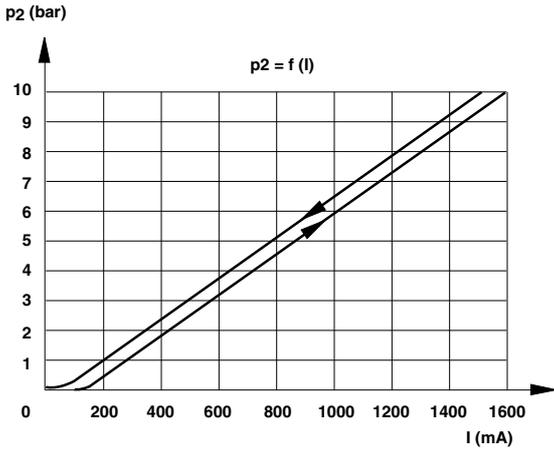


Type: 4088200

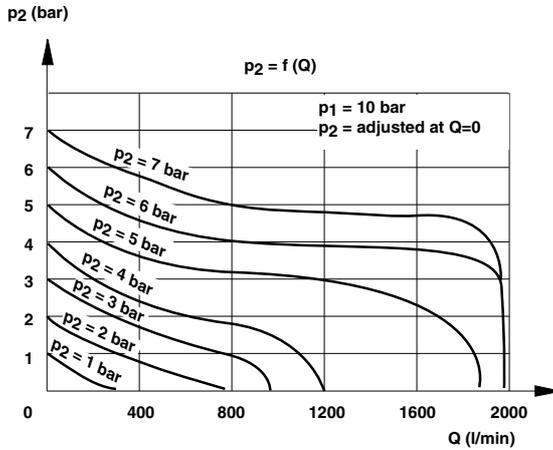
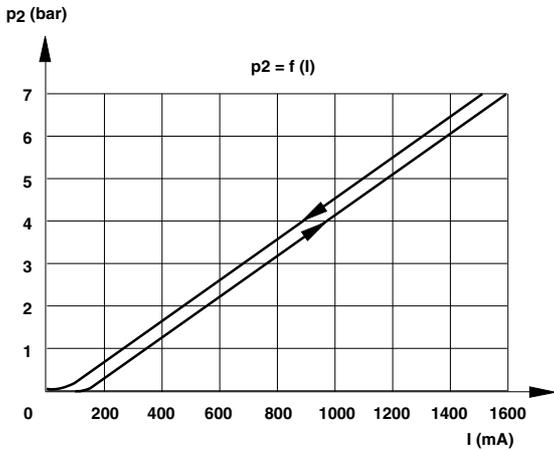




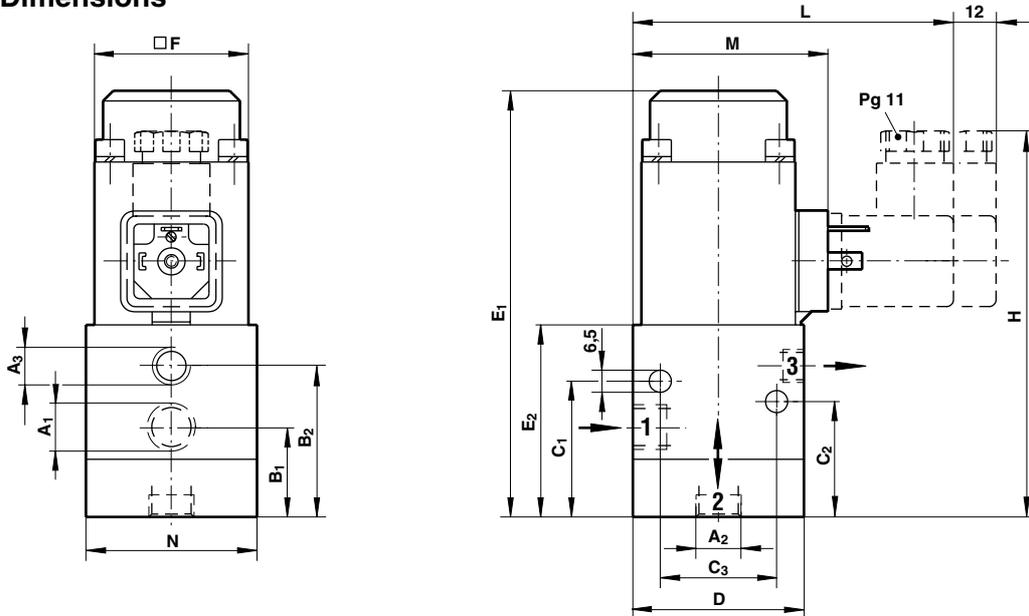
Type: 4088210



Type: 4088310



General Dimensions



Type	A1	A2	A3	B1	B2	C1	C2	C3	D	E1	E2	□ F	H	L	M	N
4088110	1/8	1/8	1/8	23	50,5	36	36	34	50	121	62,5	35	131	89	52,5	50
4088218	1/4	1/4	1/8	26,5	44,5	40	34	34	50	121	56,5	45	128	94	57	50
4088200	1/4	1/4	1/4	30	50	43	38	49	60	117	58,5	35	127	94	57,5	40
4088210	1/4	1/4	1/8	26,5	44,5	40	34	34	50	115	56,5	35	125	89	52,5	50
4088310	3/8	3/8	3/8	36,5	67	52	52	50	70	142	77,5	45	149,5	104	67	55