NORGREN®

Incorporating HERION®

80400 Series, 3/2 Pilot Actuated Poppet Valve

- **Port size: ½"...1¼" (ISO G or NPT)**
- **Main application; Booster for large single acting actuators**
- **Offers SIL 2 performance as 1oo1, SIL 3 as 1oo2**
- **Wide temperature range -60°C ... +80°C**
- **Suitable for installation in extreme low temperature, outdoor and off shore applications**
- **High flow rates**
- **NAMUR pilot valve mounting interface**
- **ATEX Approval: Ex II 2 G D Ex h IIC T6 Gb Ex h IIIC T85°C Db**

Technical features

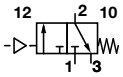
Medium:
Filtered, non-lubricated compressed air, instrument air, nitrogen or other nonflammable, neutral dry fluids
Operating pressure:
0 ... 10 bar (0 ... 145 psi)
Pilot pressure:
2 ... 10 bar (≥ operating pressure) (29 ... 145 psi)

Orifice
15 ... 25 mm
Port size:
½...1¼ NPT or G½...G1¼
(For larger port sizes, please contact Norgren)
Pilot size ¼ NPT or G¼
Interface according to VDI/VDE 3845, NAMUR valve flange

Fluid/Ambient temperature:
-60 ... 80°C (-76 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C. (35°F)
For outdoor installation please protect all connections against the penetration of moisture!
Please contact Norgren for operational conditions below -55°C. (-67°F)

Material:
Housing, flange and inner parts: stainless steel 1.4404 (316 L) *
Dynamic seals: PUR
Static seals: PUR and NBR
* Suitable for use in H2S-contaminated environments (NACE MR0175/ISO15156).
Flow conversion:
Cv US Gallon/min (water) = l/min (air) x 0,001
Kv m³/h (water) = l/min (air) x 0,000906

Technical data

Symbol	Port size 1 & 2	3	Orifice (mm)	Flow *1) 1 » 2 (l/min)	2 » 3 (l/min)	Flow *2) 1 » 2 (l/min)	2 » 3 (l/min)	Operating pressure (bar)	(psi)	Pilot pressure (bar)	(psi)	Weight (kg)	Model
	1/2 NPT	3/4 NPT	15	6700	7600	17200	19800	0 ... 10	0 ... 145	2 ... 10	29 ... 145	3,5	8040005
	3/4 NPT	1 NPT	20	11500	14000	29000	35000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	6,6	8040015
	1 NPT	1 1/4 NPT	25	13900	14700	32300	39600	0 ... 10	0 ... 145	2 ... 10	29 ... 145	6,6	8040025
	G1/2	G3/4	15	6700	7600	17200	19800	0 ... 10	0 ... 145	2 ... 10	29 ... 145	3,5	8040055
	G3/4	G1	20	11500	14000	29000	35000	0 ... 10	0 ... 145	2 ... 10	29 ... 145	6,6	8040065
	G1	G1 1/4	25	13900	14700	32300	39600	0 ... 10	0 ... 145	2 ... 10	29 ... 145	6,6	8040075

Flow conducted according to ISO 6358
In order to ensure full flow and proper function make sure that sufficient pressure supply with feed pipe diameters according to the port size is available.
*1) Inlet pressure 6 bar (87 psi), outlet pressure 5 bar (72 psi)
*2) Inlet pressure 10 bar (145 psi), outlet pressure 0 bar (0 psi)

Option selector

804★0★5

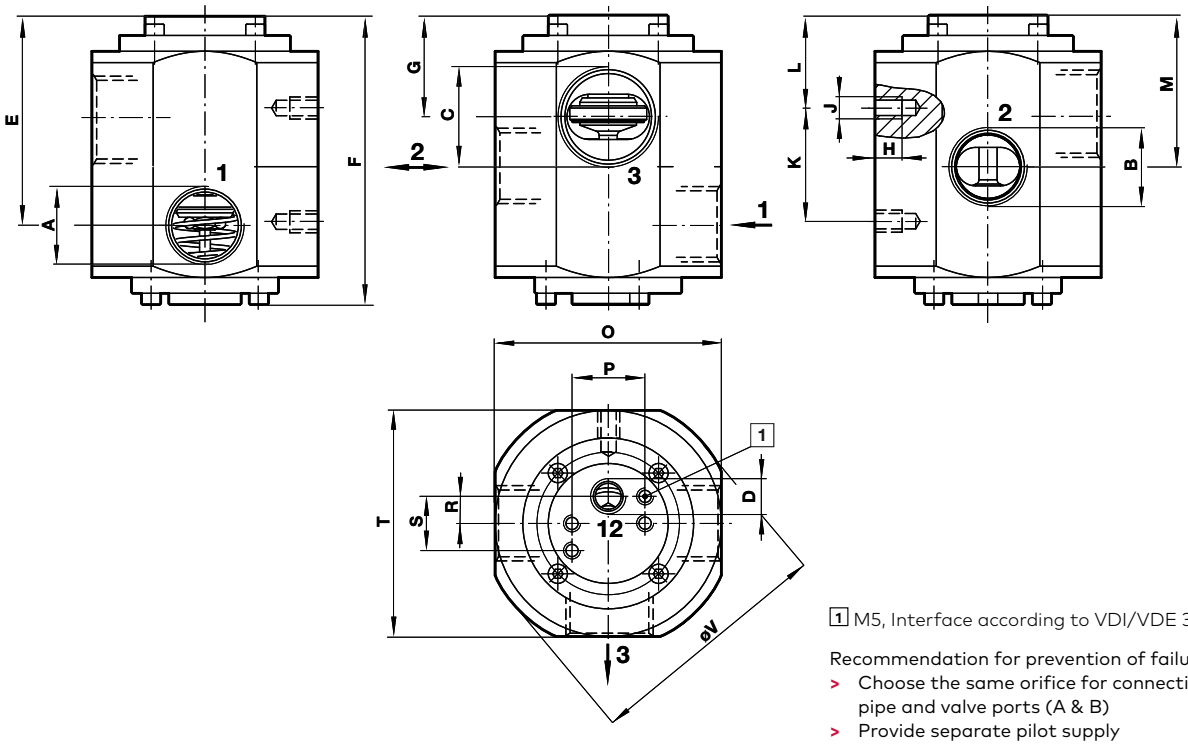
Function	Substitute
3/2 way valve, pneumatic actuated	**0**
3/2 way valve, solenoid actuated	**On request**

Ports 1 & 2	3	Substitute
1/2 NPT	3/4 NPT	**0**
3/4 NPT	1 NPT	**1**
1 NPT	1 1/4 NPT	**2**
G1/2	G3/4	**5**
G3/4	G1	**6**
G1	G1 1/4	**7**

IMI

Drawing

Dimensions in mm
Projection/First angle



1 M5, Interface according to VDI/VDE 3845, NAMUR

Recommendation for prevention of failure malfunction:
- Choose the same orifice for connecting pipe and valve ports (A & B)
- Provide separate pilot supply

A	B	C	D	E	F	G	H	J	K	L	M	O	P	R	S	T	V	Model
1/2 NPT	1/2 NPT	3/4 NPT	1/4 NPT	78,5	110,5	41,5	12	M8	42	36	60,2	80	32	12	24	80	85	8040005
3/4 NPT	3/4 NPT	1 NPT	1/4 NPT	93	128,5	45,5	12	M8	50	41	67	100	32	12	24	100	110	8040015
1 NPT	1 NPT	1 1/4 NPT	1/4 NPT	93	128,5	45,5	12	M8	50	41	67	100	32	12	24	100	110	8040025
G1/2	G1/2	G3/4	G1/4	78,5	110,5	41,5	12	M8	42	36	60,2	84	32	12	24	84	90	8040055
G3/4	G3/4	G1	G1/4	93	128,5	45,5	12	M8	50	41	67	100	32	12	24	100	110	8040065
G1	G1	G1 1/4	G1/4	93	128,5	45,5	12	M8	50	41	67	102	32	12	24	102	115	8040075

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 features/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.