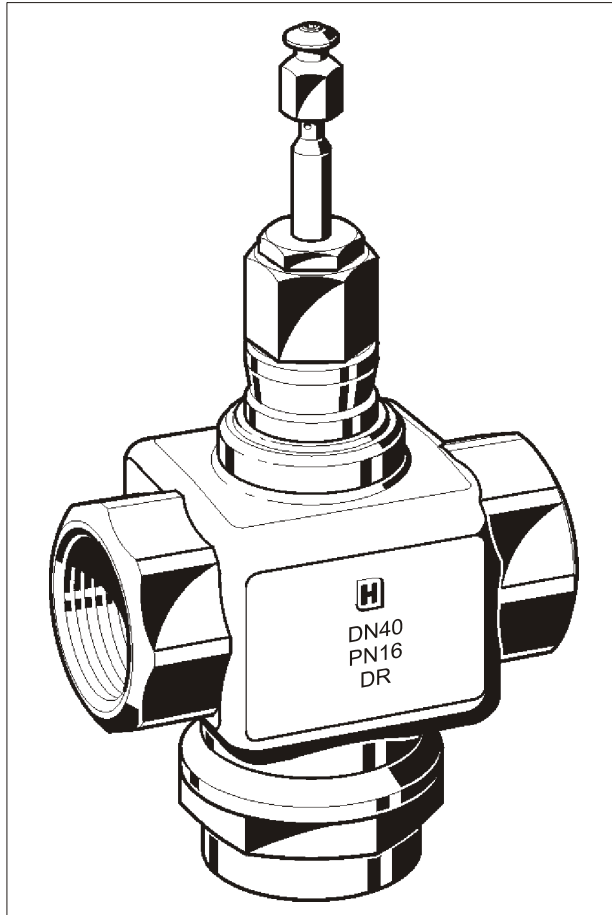


V5013R

INTERNAL THREADED END-CONNECTION LINEAR VALVE PN16

PRODUCT DATA



FEATURES

- Brass body with internal threaded end connections
- Low seat leakage rate
- Self-adjusting packing
- Accurate positioning to ensure state-of-the-art temperature control
- Directly-coupled electric and pneumatic actuators for easy mounting

SPECIFICATIONS

Action:	Stem up to close port A-AB
Nominal pressure rating:	PN16
Flow characteristic:	equal percentage: port A-AB linear: port B-AB
Rangeability:	50:1
Leakage rate:	≤0.05% of k_{vs}
Stroke:	20 mm
Valve body:	
Pipe connections:	Internal threading as per ISO228
Material:	Brass
Dimensions:	See Fig. 1 on page 3
Trim:	
Seat:	DN15: stainless steel DN20...50: body integrated
Plug:	Brass
Stem:	Stainless steel
Packing:	Spring-loaded carbon fiber reinforced PTFE V-rings
Medium temperature and pressure:	
Water	2 to 120 °C max. 1600 kPa 120 to 170 °C max. 1490 kPa
Max. temperature differential in alternating hot/cold water use:	60 K

APPLICATION

Single seated control or shut-off valve for:

- hot water and
 - chilled water
- in heating, ventilation, air conditioning systems, and open circuits.

Operated by

- electric linear actuators (e.g., ML6420/25, ML7420/25, ML6421, and ML7421) and
- pneumatic actuators (e.g., MP953).

SIZES AND FLOW CAPACITIES

Table 1. Size and flow capacity (in m³/h)

order number	valve size	kvs m³/h
V5013R1032	DN15	2.5
V5013R1040	DN15	4
V5013R1057	DN20	6.3
V5013R1065	DN25	10
V5013R1073	DN32	16
V5013R1081	DN40	25
V5013R1099	DN50	40

INSTALLATION

Water should meet VDI2035 requirements.

Do not install valve with stem below the horizontal.

Fluid flow must correspond with the arrow direction on the valve body.

The installation of a strainer is strongly recommended.

SPARE PARTS

Repair packing kit for red-brass models (old) – RG5

DN15...32: Order number R43176754001

DN40...50: Order number R43176754002

Repair packing kit for yellow-brass models (new) – DR

DN15...50: Order number R43176754002

CLOSE-OFF PRESSURE RATINGS

Electric Actuators

Table 2. Close-off pressure ratings (in kPa) of electric actuators

actuator		valve size					
type	force	DN15	DN20	DN25	DN32	DN40	DN50
ML6420 / ML6425 ML7420 / ML7425	600 N	1600	1600	1000	700	460	260
ML6421 / ML7421	1800 N	-	-	1600	1600	1500	850

Pneumatic Actuators MP953

Table 3. Close-off pressure ratings (in kPa) of pneumatic actuators MP953

actuator				valve size					
type	spring range	air pressure	closed seat	DN15	DN20	DN25	DN32	DN40	DN50
MP953C5001	14...48 kPa	0 kPa 115 kPa	upper lower	150 1600	-- --	-- --	-- --	-- --	-- --
MP953C5027 MP953A5005	27...76 kPa			800 1150	310 530	180 350	90 200	30 100	-- --
MP953C5019	55...83 kPa			1600 860	950 380	620 240	370 130	220 60	-- --
MP953C5068	14...48 kPa			1550 1600	650 1600	420 1600	240 1600	130 1130	50 630
MP953C5084 MP953A5039	27...76 kPa			1600 1600	1550 1600	1030 1500	630 950	400 600	200 320
MP953C5076	55...83 kPa			1600 1600	1600 1600	1600 1190	1470 750	970 460	520 250
MP953D5025	27...76 kPa		lower upper	1600 1600	840 1480	570 990	340 600	200 370	90 190
MP953D5009 MP953B5003	55...83 kPa			1600 1600	1050 1490	720 1490	440 920	260 600	130 320

DIMENSIONS

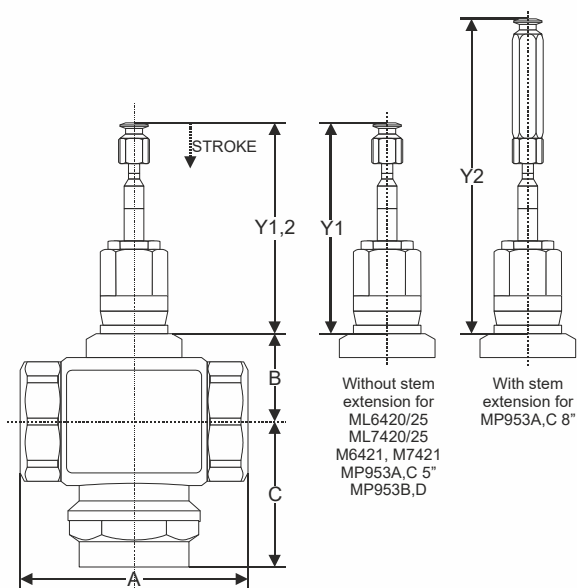


Fig. 1. Dimensions

Table 4. Dimensions (in mm)

valve size	A	B	C	Y ₁	Y ₂ *
				stem up	
DN15	83	39.5	65	107	151
DN20	83	39.5	65		
DN25	103	39.5	66.5		
DN32	106	39.5	72.5		
DN40	120	46.5	77		
DN50	134	46.5	83.5		

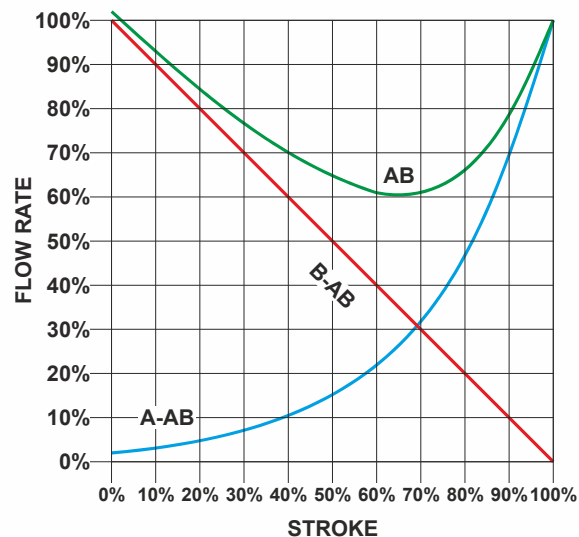


Fig. 2. Characteristic curve of V5013R

For actuator dimensions, please refer to:

ML6420A3072.....	EN0B-0411GE51
ML6420A / ML6425A,B	EN0B-0351GE51
ML7420A / ML7425A,B	EN0B-0261GE51
ML7420A6025.....	EN0B-0481GE51
ML6421A,B	EN0B-0414GE51
ML7421A,B	EN0B-0416GE51
MP953A,B,C,D.....	EN0B-0522GE51

Honeywell

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