

# Parker Global Hand Valve Platform

DN15 - DN150 (1/2" to 6")

PS52 [bar]

Types: Shut-off, Regulating, Stop/Check, Check, and Strainer

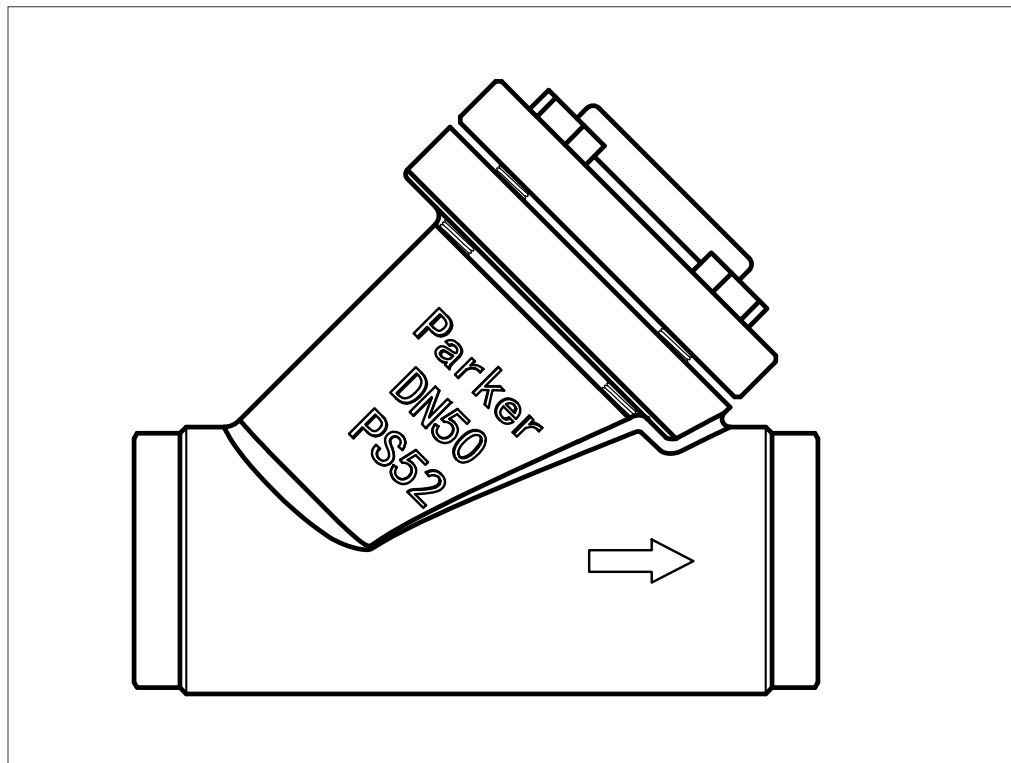


## Purpose:

The Parker Global Hand Valve platform is a high quality and economical solution for industrial refrigeration applications. Featuring a 52 bar (754 psi) pressure rating and plated steel construction, these valves offer superior performance and value for a variety of applications.

Available in the following configurations:

- Shut-off (DN15-150)
- Regulating (DN15-100)
- Stop/Check (DN15-80)
- Check (DN15-100)
- Strainer (DN15-150)



## Contact Information: Product Features:

Parker Hannifin Ltd  
Instrumentation Group  
**Refrigeration and Air  
Conditioning Europe**  
Manvers House - Office 21  
Pioneer Close  
Wath Upon Dearne  
Rotherham S63 7JZ  
United Kingdom

**Tel +44 (0) 1709 774600**

**Fax +44 (0) 1709 774601**

FCCE.RACE.Support@support.parker.com

- Suitable for Ammonia, CO<sub>2</sub>, and other common refrigerants
- ASTM A350 Forged Steel Body DN15 – DN 150 (1/2" - 6")
- Fluid Temperature Range: -50 °C to 150 °C (-58 °F to 302 °F)
- Stainless Steel Bolts
- Complete Line of Bolted Bonnets

- MAWP: 52 bar (754 psi)
- Conforms to PED 2014/68/EU
- Available in angle or globe-Y body styles
- DIN ISO Butt Weld, ANSI Butt Weld, Socket weld connections
- Plated steel construction for long life



ENGINEERING YOUR SUCCESS.

## Table of Contents

<b>Technical Data</b> .....	2	Check Valve .....	5
<b>Flow Coefficients and Weights</b>		Strainer .....	5
Shut-off Valve DN15-150 .....	2	<b>Dimensions</b>	
Stop/Check Valve DN15-80.....	2	Shut-off Valve and Regulating Valve.....	7
Regulating Valve DN15-80 .....	3	Stop/Check Valve.....	7
Check Valve DN15-80 .....	3	Check Valve / Strainer .....	8
Strainer DN15-150 .....	3	DIN End Connection .....	9
<b>Operation, Cross Section View, and Parts</b>		ANSI BW End Connection.....	9
Shut-off Valve .....	3	SW End Connection.....	9
Stop/Check Valve.....	4-5	<b>How To Order PGHV</b> .....	10
Regulating Valve.....	5		

## Technical Data

Temperature Range . . . . . -50°C to 150°C (-58°F to 302°F)

Maximum Rated Pressure (MRP) . . . . . 52 bar (754 psig)

## Flow Coefficients and Weights

### Shut-off Valve

Port Size		Globe				Angle			
DN	Inch	Kv	Weight [kg]	Cv	Weight [lb]	Kv	Weight [kg]	Cv	Weight [lb]
15	1/2	6.7	1.3	7.6	2.9	6.6	1.3	7.5	2.9
20	3/4	11.6	1.4	13.2	3.1	12.4	1.3	14.1	2.9
25	1	21.6	2.2	24.6	4.8	17.7	2.0	20.2	4.4
32	1¼	28.3	2.4	32.3	5.3	22.7	2.0	25.9	4.4
40	1½	62.4	4.2	71.1	9.2	62.9	2.4	71.7	5.3
50	2	62.4	4.8	71.1	10.6	62.9	4.0	71.7	8.8
65	2½	87.5	12.2	99.8	26.8	137	10.0	156	22.0
80	3	148	13.0	168	28.6	239	10.5	272	23.1
100	4	264	15.0	305	33.1	245	15.0	283	33.1
125	5		35.0		77.2		27.0		59.5
150	6		50.0		110		37.0		81.6

### Stop/Check Valve

Port Size		Globe				Angle			
DN	Inch	Kv	Weight [kg]	Cv	Weight [lb]	Kv	Weight [kg]	Cv	Weight [lb]
15	1/2	4	1.4	4.5	3.0	5.5	1.3	6.2	2.9
20	3/4	9.4	1.5	10.7	3.3	7	1.3	7.9	2.9
25	1	12.3	2.5	14.0	5.5	16.7	2.3	19.0	5.0
32	1¼	17.6	2.6	20.0	5.7	24	2.3	27.3	5.0
40	1½	52.3	4.8	59.6	10.5	40.7	4.0	46.3	8.8
50	2	58.4	5.2	66.5	11.4	46.4	4.5	52.8	9.9
65	2½	70.9	12.3	80.8	27.0	122.1	10.0	139.1	22
80	3	117.6	13.3	134.0	29.2	154.7	10.5	176.3	23.1

## Flow Coefficients and Weights

### Regulating Valve

Port Size		Globe				Angle			
DN	Inch	Kv	Weight [kg]	Cv	Weight [lb]	Kv	Weight [kg]	Cv	Weight [lb]
15	1/2	6.0	1.3	6.8	2.9	6.1	1.3	7.0	2.9
20	3/4	9.8	1.4	11.2	3.1	11.1	1.3	12.7	2.9
25	1	18.7	2.2	21.3	4.8	15.0	2.0	17.1	4.4
32	1¼	24.0	2.4	27.4	5.3	18.7	2.0	21.3	4.4
40	1½	31.6	4.4	36.0	9.7	60.2	3.6	68.6	7.9
50	2	56.7	4.8	64.6	10.6	54.3	4.0	61.9	8.8
65	2½	87.5	12.8	99.8	28.2	105.0	10.5	119.7	23.1
80	3	123.0	13.5	140.2	29.7	179.0	11.0	204.1	24.2

### Check Valve

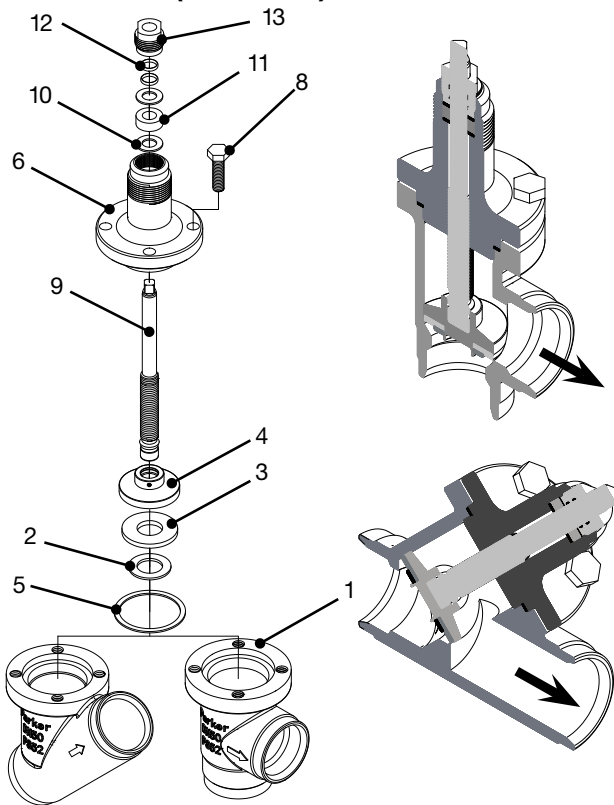
Port Size		Globe				Angle			
DN	Inch	Kv	Weight [kg]	Cv	Weight [lb]	Kv	Weight [kg]	Cv	Weight [lb]
15	1/2	4.0	1.0	4.6	2.2	4.0	1.4	4.6	3.0
20	3/4	7.0	1.2	8.0	2.5	6.9	1.4	7.9	3.0
25	1		1.8	17.1	3.9	13.2	2.3	15.0	5.1
32	1¼		1.9	12.7	4.1	13.5	2.3	15.4	5.1
40	1½	57.8	3.8	65.9	8.3	46.3	4.0	52.8	8.8
50	2	60.7	4.3	69.2	9.4	48.4	4.5	55.2	9.9
65	2½	90.7	10.5	103.4	23.1	119.6	10.0	136.3	22.0
80	3	111.5	11.0	127.1	24.2	126.3	10.5	144.0	23.1

### Strainer (mesh: 0.5mm)

Port Size		Globe				Angle			
DN	Inch	Kv	Weight [kg]	Cv	Weight [lb]	Kv	Weight [kg]	Cv	Weight [lb]
15	1/2	4.7	1	5.3	2.2	7.6	1.3	8.6	2.9
20	3/4	7.7	1.1	8.7	2.5	9.5	1.3	10.8	2.9
25	1	13.1	1.7	14.9	3.8	19.7	2.3	22.4	5.0
32	1¼	16.6	1.8	18.9	4.0	23.4	2.3	26.6	5.0
40	1½	24.8	3.7	28.2	8.2	39.0	4	44.4	8.8
50	2	35.3	4.2	40.2	9.3	45.1	4.5	51.4	9.9
65	2½	59.6	8.5	67.9	18.8	71.9	9.0	82.0	19.9
80	3	83.2	12.8	94.8	28.2	124	10.0	141	22.1
100	4	135	14.0	154	30.9	209	14.0	238	30.9
125	5		28.0		61.7		20.0		44.1
150	6		42.0		92.6		28.0		61.7

## Operation, Cross Section and Parts

### Shut-off Valve (DN15-150)



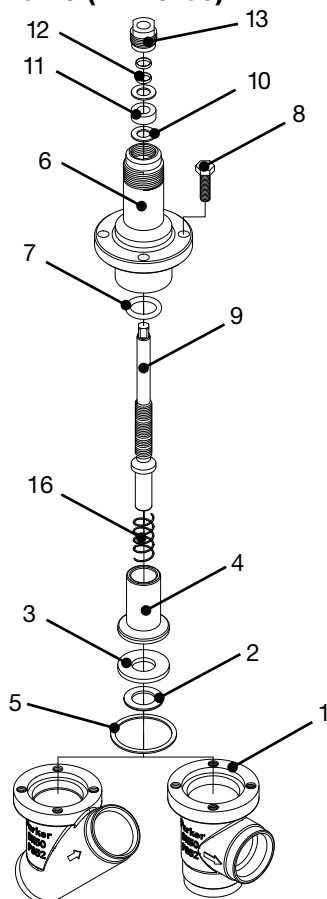
Shut-off Valve Parts List			
No.	Description	Material	Qty
1	Valve Seat (Body)	A350	1
2	Flat Washer	20# Steel	1
3	Sealing Gasket	PTFE	1
4	Valve Clack	20# Steel	1
5	Flange Gasket	AFM34	1
6	Bonnet	A350	1
8	Screw	A2-70	4
9	Stem	SUS 304 (1.4301)	1
10	Bottom Ring	1.0715	1
11	Packing (Compound Gasket)	Graphite + PTFE	1
12	O-Ring	CR (Neoprene)	1
13	Packing Nut	Aluminum Alloy	1

### Function and Design:

The hand shut-off valves are designed to stop the flow of refrigerant to allow for service or routine maintenance of the refrigeration system. These valves are meant to be operated in their full open or full closed position.

The hand shut-off valves are available in both angle and globe-Y body configurations and either standard or extended bonnet versions. The extended bonnet allows for additional insulation to be used.

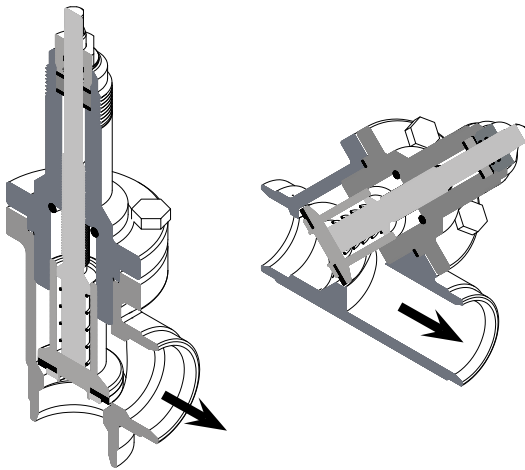
### Stop/Check Valve (DN15-80)



Stop/Check Valve Parts List			
No.	Description	Material	Qty
1	Valve Seat (Body)	A350	1
2	Flat Washer	20# Steel	1
3	Sealing Gasket	PTFE	1
4	Valve Clack	20# Steel	1
5	Flange Gasket	AFM34	1
6	Bonnet	A350	1
7	O-Ring	CR (Neoprene)	1
8	Screw	A2-70	4
9	Stem	SUS 304 (1.4301)	1
10	Bottom Ring	1.0715	1
11	Packing (Compound Gasket)	Graphite + PTFE	1
12	O-Ring	CR (Neoprene)	1
13	Packing Nut	Aluminum Alloy	1
16	Spring	Spring Steel	1

## Operation, Cross Section and Parts

### Stop/Check Valve (Cont'd)

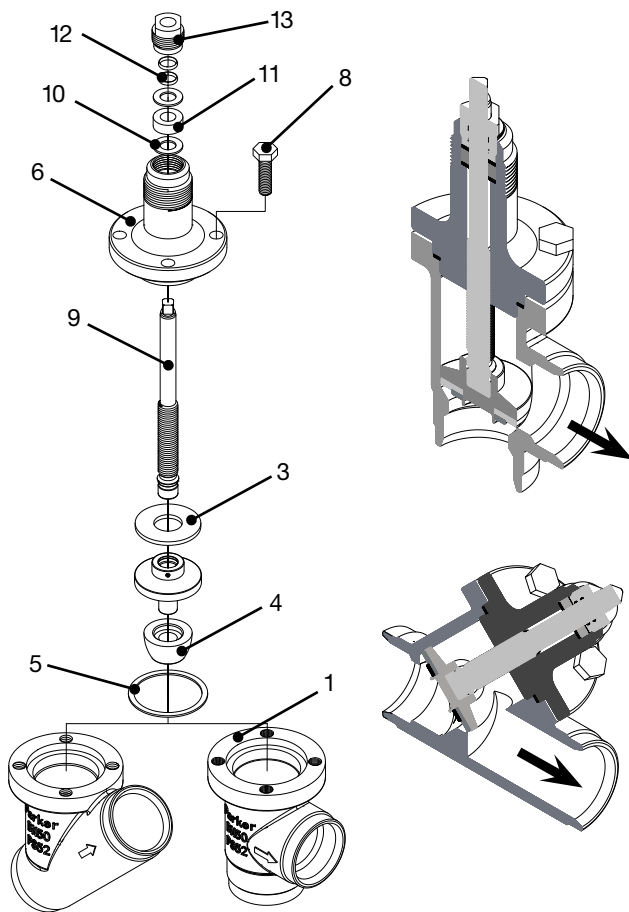


#### Function and Design:

The stop/check valves are designed to provide two functions: in the fully closed positions the valves will stop the flow of refrigerant to allow for service or routine maintenance of the refrigeration system; and in the full open position they will provide a check function which will prevent the flow of refrigerant in the reverse direction. These valves are meant to be operated in their full open or full closed position.

The stop/check valves are available in both angle and globe-Y body configurations and either standard or extended bonnet versions. The extended bonnet allows for additional insulation to be used.

### Regulating Valve with Shut-off Function (DN15-80)



Regulating Valve Parts List			
No.	Description	Material	Qty
1	Valve Seat (Body)	A350	1
3	Sealing Gasket	PTFE	1
4	Valve Clack	20# Steel	1
5	Flange Gasket	AFM34	1
6	Bonnet	A350	1
8	Screw	A2-70	4
9	Stem	SUS 304 (1.4301)	1
10	Bottom Ring	1.0715	1
11	Packing (Compound Gasket)	Graphite + PTFE	1
12	O-Ring	CR (Neoprene)	1
13	Packing Nut	Aluminum Alloy	1

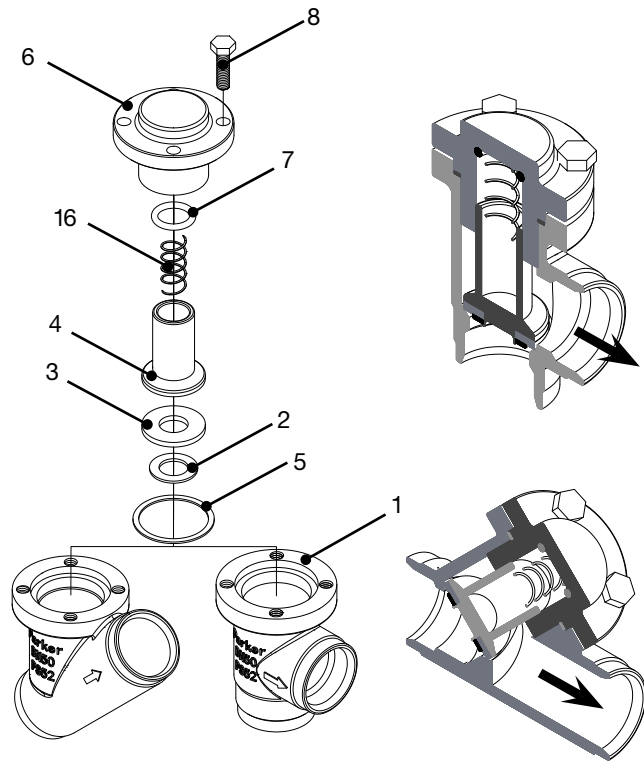
#### Function and Design:

The regulating valves are designed to modulate the flow of refrigerant for liquid feed or expansion applications. By varying the percent open the flow can be adjusted to suit a variety of operating conditions. **These valves also serve as shut-off valves in the full closed position.**

The shut-off / regulating valves are available in both angle and globe-Y body configurations and either standard or extended bonnet versions. The extended bonnet allows for additional insulation to be used.

## Operation, Cross Section and Parts

### Check Valve (DN15-80)



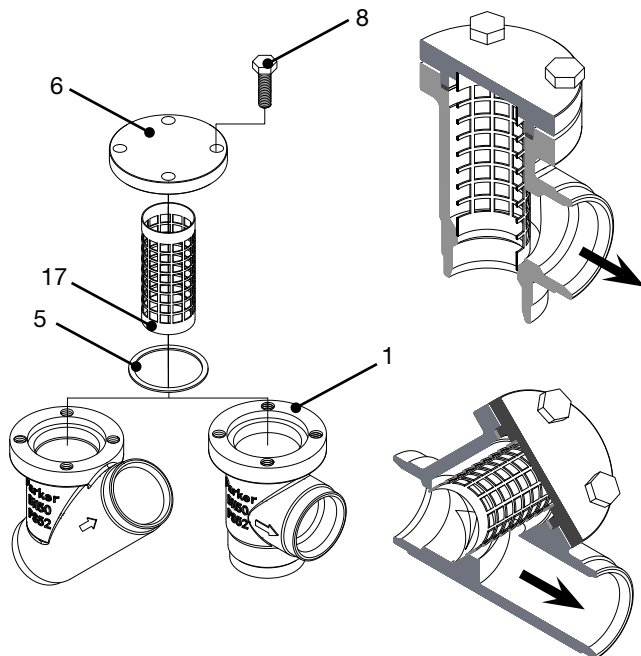
Check Valve Parts List			
No.	Description	Material	Qty
1	Valve Seat (Body)	A350	1
2	Flat Washer	20# Steel	1
3	Sealing Gasket	PTFE	1
4	Valve Clack	20# Steel	1
5	Flange Gasket	AFM34	1
6	Bonnet	A350	1
7	O-Ring	CR (Neoprene)	1
8	Screw	A2-70	4
16	Spring	Spring Steel	1

#### Function and Design:

The check valves are designed to prevent the flow of refrigerant in the reverse direction. These valves feature a soft seat and

The check valves are available in both angle and globe-Y body configurations.

### Strainer (DN15-150)



Strainer Parts List			
No.	Description	Material	Qty
1	Valve Seat (Body)	A350	1
5	Flange Gasket	AFM34	1
6	Bonnet	A350	1
8	Screw	A2-70	4
17	Filter Element	SUS 304 (1.4301)	1

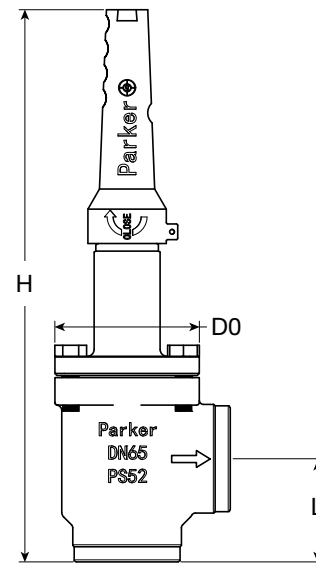
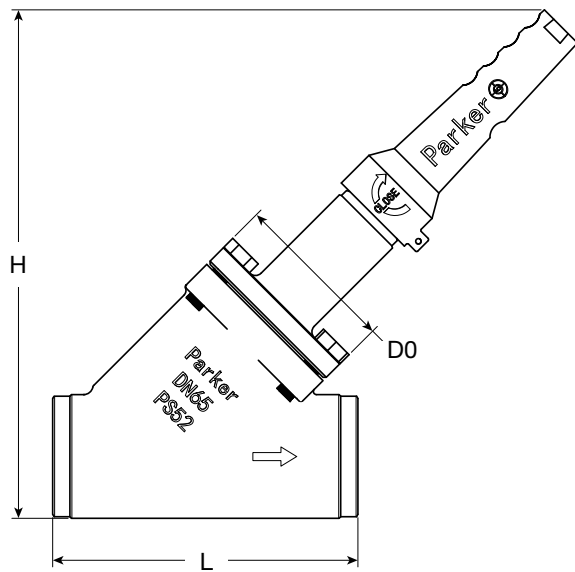
#### Function and Design:

The strainers are designed to reduce the amount of impurities present in the flow of refrigerant. The strainers are available in various mesh sizes (0.5 mm, 0.25mm and 0.1 mm) (35 mesh, 72 mesh, 140 mesh) and are offered in both angle and globe-Y body configurations which makes them suitable for various applications.

## Dimensions

### Shut-off Valve DN15-150 and Shut-off / Regulating Valve DN15-80

DN	Inch	ØD0		BW Angle				BW Globe				SW Angle				SW Globe			
				L		H		L		H		L		H		L		H	
		mm	Inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
15	1/2	65	2.56	40	1.57	194	7.64	106	4.17	143	5.63	40	1.57	194	7.64	110	4.33	148	5.83
20	3/4	65	2.56	40	1.57	194	7.64	106	4.17	143	5.63	41	1.61	195	7.68	117	4.61	148	5.83
25	1	75	2.95	51	2.01	245	9.65	128	5.04	186	7.32	51	2.01	245	9.65	135	5.31	191	7.52
32	1¼	75	2.95	51	2.01	245	9.65	128	5.04	186	7.32	51	2.01	245	9.65	138	5.43	191	7.52
40	1½	95	3.74	60	2.36	293	11.54	164	6.46	233	9.17	60	2.36	293	11.54	168	6.61	238	9.37
50	2	95	3.74	60	2.36	293	11.54	164	6.46	233	9.17	63	2.48	296	11.65	172	6.77	238	9.37
65	2½	105	4.13	75	2.95	405	15.94	195	7.68	328	12.9	82	3.23	409	16.10	202	7.95	333	13.1
80	3	115	4.53	80	3.15	429	16.89	212	8.35	352	13.9	—	—	—	—	—	—	—	—
100	4	155	6.10	106	4.17	421	16.57	264	10.4	353	14.0	—	—	—	—	—	—	—	—
125	5	193	7.60	128	5.06	—	—	322	12.7	—	—	—	—	—	—	—	—	—	—
150	6	219	8.66	145	5.73	—	—	370	14.6	—	—	—	—	—	—	—	—	—	—



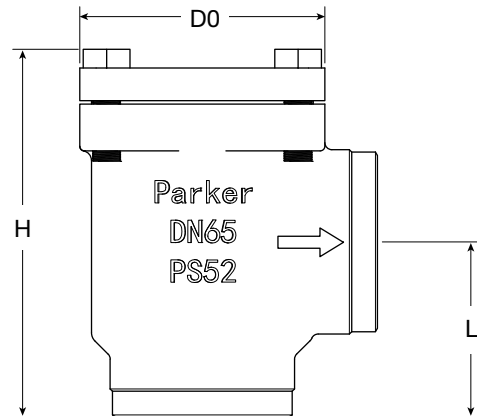
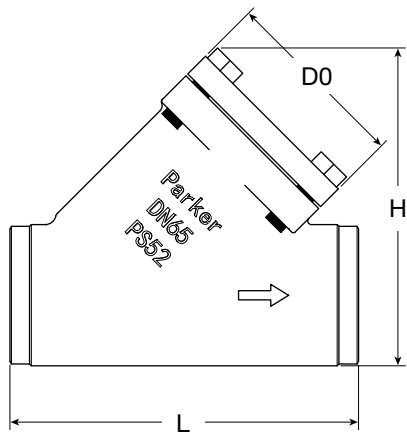
### Stop / Check Valve

DN	Inch	ØD0		BW Angle				BW Globe				SW Angle				SW Globe			
				L		H		L		H		L		H		L		H	
		mm	Inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
15	1/2	65	2.56	40	1.57	215	8.46	106	4.17	158	6.22	40	1.57	215	8.46	110	4.33	163	6.42
20	3/4	65	2.56	40	1.57	215	8.46	106	4.17	158	6.22	41	1.61	216	8.50	117	4.61	163	6.42
25	1	75	2.95	51	2.01	273	10.75	128	5.04	191	7.52	51	2.01	273	10.75	135	5.31	196	7.72
32	1¼	75	2.95	51	2.01	273	10.75	128	5.04	191	7.52	51	2.01	273	10.75	138	5.43	196	7.72
40	1½	95	3.74	60	2.36	321	12.64	164	6.46	253	9.96	60	2.36	321	12.64	168	6.61	258	10.16
50	2	95	3.74	60	2.36	321	12.64	164	6.46	253	9.96	63	2.48	324	12.76	172	6.77	258	10.16
65	2½	105	4.13	75	2.95	418	16.46	195	7.68	337	13.27	82	3.23	422	16.61	202	7.95	342	13.46
80	3	115	4.53	80	3.15	436	17.17	212	8.35	356	14.02	—	—	—	—	—	—	—	—

## Dimensions

### Check Valve (DN15-80) / Strainer (DN15-150)

DN	Inch	ØD0		BW Angle				BW Globe				SW Angle				SW Globe			
		L		H		L		H		L		H		L		H			
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
15	1/2	65	2.56	40	1.57	101	3.98	106	4.17	95	3.74	40	1.57	101	3.98	110	4.33	100	3.94
20	3/4	65	2.56	40	1.57	101	3.98	106	4.17	95	3.74	41	1.61	102	4.02	117	4.61	100	3.94
25	1	75	2.95	51	2.01	116	4.57	128	5.04	115	4.53	51	2.01	116	4.57	135	5.31	120	4.72
32	1¼	75	2.95	51	2.01	116	4.57	128	5.04	115	4.53	51	2.01	116	4.57	138	5.43	120	4.72
40	1½	95	3.74	60	2.36	150	5.91	164	6.46	150	5.91	60	2.36	150	5.91	168	6.61	155	6.10
50	2	95	3.74	60	2.36	150	5.91	164	6.46	150	5.91	63	2.48	153	6.02	172	6.77	155	6.10
65	2½	105	4.13	75	2.95	160	6.30	195	7.68	173	6.81	82	3.23	164	6.46	202	7.95	178	7.01
80	3	115	4.53	80	3.15	173	6.81	212	8.35	193	7.60	—	—	—	—	—	—	—	—
100	4	155	5.10	106	4.17	—	—	264	10.4	—	—	—	—	—	—	—	—	—	—
125	5	193	7.60	128	5.04	495	19.5	322	12.7	495	19.5	—	—	—	—	—	—	—	—
150	6	219	8.62	145	5.71	539	21.2	370	14.6	539	21.2	—	—	—	—	—	—	—	—

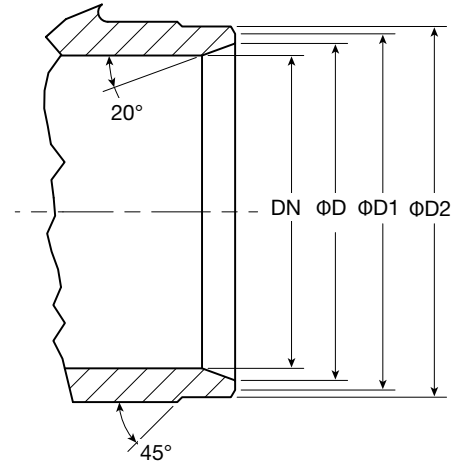




## Dimensions

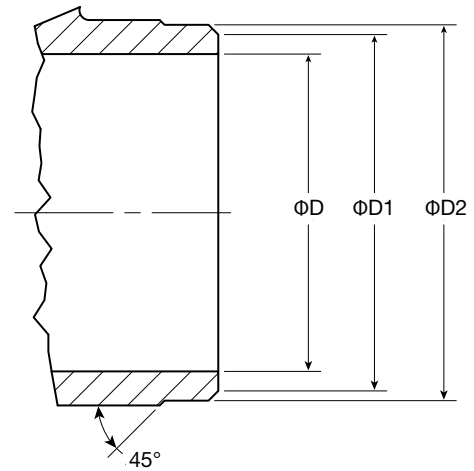
### DIN End Connection [mm]

DN	Inch	ΦD	ΦD1	ΦD2
15	1/2	17.0	21.0	22
20	3/4	22.0	26.0	28
25	1	28.5	32.5	34
32	1¼	37.0	41.0	43
40	1½	43.0	47.0	49
50	2	54.5	58.5	61
65	2½	70.0	74.0	77
80	3	82.0	86.0	90
100	4	106.5	110.5	115
125	5	131.7	135.0	141
150	6	159.3	162.5	170



### ANSI BW End Connection [mm]

DN	Inch	ΦD	ΦD1	ΦD2	Comments
15	1/2	13.9	17.1	21.3	Sch80
20	3/4	18.9	22.1	26.7	Sch80
25	1	24.3	27.5	33.4	Sch80
32	1¼	32.5	35.7	42.2	Sch80
40	1½	38.1	41.3	48.3	Sch80
50	2	52.5	55.7	60.3	Sch40
65	2½	62.7	65.9	73.0	Sch40
80	3	77.9	81.1	88.9	Sch40
100	4	102.3	105.5	114.3	Sch40
125	5	128.1	131.4	141.3	Sch40
150	6	154.1	157.3	168.3	Sch40



# How To Order PGHV

## Part Number

**7G . 025 . SO . L . S80 . C**

C = Cap  
H = Handwheel

blank = butt weld, DIN EN 12627  
S80 = butt weld 1/2" to 1-1/2", ASME-ANSI B16.25, Schedule 80  
S40 = butt weld 2" to 4", ASME-ANSI B16.25, Schedule 40  
SW = socket weld

blank = standard bonnet  
L = extended bonnet

SO = shut-off valve (DN15-150)  
RV.SO = shut-off / expansion valve (DN15-80)  
CV = check valve (DN15-80)  
CV.SO = stop / check valve (DN15-80)  
ST.5 = strainer mesh size 0.5mm (35 mesh) (DN15-150)  
ST.25 = strainer mesh size 0.25 (72 mesh) (DN15-150)  
ST.1 = strainer mesh size 0.1mm (140 mesh) (DN15-150)

connection size →

DN	Inch	
015	1/2	] SW
020	3/4	
025	1	
032	1¼	
040	1½	
050	2	
065	2½	
080	3	
100	4	
125	5	
150	6	

BW

7 = standard valve  
G = globe valve  
A = angle valve



## Safety Information

Failure to follow installation instructions, improper selection or improper use of Parker Industrial Refrigeration valves and related accessories ("products") can cause death, personal injury and property damage. Possible consequences of failure, improper selection or improper use of these products include but are not limited to:

- Injuries or damage resulting from inhalation or exposure to conveyed fluids
- Injuries from lifting or supporting a heavy item
- Explosion

Before selecting or using any of these products, it is important that you read and follow the installation instructions.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors. To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems. For safety information see the Safety Guide at [www.parker.com/safety](http://www.parker.com/safety) or call +1 800 2727537.



DOWNLOAD THE OPERATING INSTRUCTIONS HERE  
LADEN SIE HIER DIE BEDIENUNGSANLEITUNG HERUNTER  
TÉLÉCHARGEZ LES INSTRUCTIONS D'EXPLOITATION ICI  
SCARICA LE ISTRUZIONI OPERATIVE QUI  
DESCARGUE LAS INSTRUCCIONES DE FUNCIONAMIENTO AQUÍ



Parker Hannifin Corporation  
Instrumentation Group  
**Refrigeration and Air Conditioning Europe**  
Via Enrico Fermi, 5  
20060 Gessate (Milano) - Italy  
**Tel: +39 02 95125.1 - [www.parker.com/race](http://www.parker.com/race)**

